ECLIC 7

EU AND COMPARATIVE LAW
ISSUES AND CHALLENGES SERIES

International Scientific
Conference

“Digitalization and Green Transformation of the EU“

EDITORS:
Dunja Duić
Tunjica Petrašević

EXECUTIVE EDITOR:
Ante Novokmet

CONFERENCE BOOK
OF PROCEEDINGS

PRAVOS

JOSIP JURAJ STROSSMAYER UNIVERSITY OF OSIJEK

Hanns Seidel Stiftung

Europska komisija

EU AND COMPARATIVE LAW ISSUES AND CHALLENGES SERIES (ECLIC) – ISSUE 7
ISSN (Online): 2459-9425

Publishers:
Josip Juraj Strossmayer University of Osijek, Faculty of Law Osijek

EU AND COMPARATIVE LAW ISSUES AND CHALLENGES SERIES (ECLIC) – ISSUE 7

International Scientific Conference

"Digitalization and Green Transformation of the EU"

Editors:
Dunja Duić, Tunjica Petrašević

Executive Editor:
Ante Novokmet

CONFERENCE BOOK OF PROCEEDINGS

In Osijek, 7-8th September 2023

Publishers
University Josip Juraj Strossmayer of Osijek
Faculty of Law Osijek

For the publishers
Dunja Duić, PhD, Associate Professor
Tunjica Petrašević, PhD, Full Professor

Editors
Dunja Duić, PhD, Associate Professor
Tunjica Petrašević, PhD, Full Professor

Executive Editor
Ante Novokmet, PhD, Associate Professor

Print
Krešendo

ISBN 978-953-8109-54-6

International Scientific Conference

"Digitalization and Green Transformation of the EU"

TABLE OF CONTENT

FOREWORD

Digitalization and Green Transformation of the EU

21st century life in Europe is more challenging than ever: digital transformation has touched every pore of our private and professional lives, paralleled with sensory evidence in every corner of our continent of how pressing it is to stop climate change and ensure a sustainable future for the generations who come after us.

With progress comes great responsibility — there is no alternative for the EU in preserving the environment and providing a just green and digital transition. These two, as we intuitively know, go hand in hand and it is of utmost importance that this is reflected overarchingly through all EU policies and priorities.

The Digital Economy and Society Index shows that 4 out of 10 adults and every third person who works in Europe lack basic digital skills. The focus of the European Year of Skills 2023 is to help Europe reach its 2030 Digital Compass goal of at least 80% of adults possessing basic digital skills. According to the 2021 Eurostat survey, 54% of all individuals and 52% of all women in the EU had basic or above basic digital skills. Croatia is impressively successful in this area, being the second EU Member State with the highest share of girls aged 16 to 19 with basic or above basic digital skills, amounting to 93%. A promising piece of information, especially looking at all the jobs of the future for which STEAM presence of women and girls is essential for a more propulsive and promising EU labor market.

The European Commission recognizes all the challenges that come with the digital transition of the economy, in every town and region of every Member State. It is thus laudable that more than 6 billion HRK have so far been contracted for projects boosting the labor market in Osijek Baranja County. One of the projects financed from the European Social Fund+ is the Make a Wish – Women's Employment Programme, through which great efforts were invested in reducing the unemployment and social exclusion of women by training them and making them more competitive on the labour market.

When strategizing and acting towards achieving a successful transition to a greener and more sustainable Europe, the core initiative is this Commission's European Green Deal whose goal is to strengthen the EU as a modern, resource-efficient and competitive economy. The necessary step in this direction is to ensure there are at least 55% less net greenhouse gas emissions by 2030 compared to 1990

levels — and, as prosaic as it may seem — by planting at least 3 billion new trees in the EU by 2030. ,,Amazing Amazon of Europe" is one of the projects driving Croatia closer to this goal, with the project partner Zeleni Osijek Association providing integrated solutions for sustainable tourism by combining social and technological innovations.

To reach the goal of becoming the first climate neutral continent by 2050, the European Commission is boosting innovation across Europe at a record pace, particularly within complex technological systems, by focusing on the development and mastering of artificial intelligence, Internet of things, 5G and blockchain and next-generation computing technologies. A prime example of combining the two transitions is the energy system, where solar and wind energy are accessible only if there are reliable and interoperable technologies available. For a truly climate-neutral and socially sensitive economy, the European Commission developed the Just Transition Mechanism that will ensure the fairness and transparency of the green transition. The Mechanism is to mobilize around €55 billion from 2021 until 2027, with the main aim of the Mechanism to ease the socio-economic impact of the transition.

Reinforcing synergies between the green and digital transitions means being open to change - and to creativity even in policy-making, meaning that every EU citizen's voice and every idea counts. Now is the time to promote inclusive debates, raise awareness, and, in the end, collectively contribute to positive changes whose roots must be planted bottom-up. European Commission warmly welcomes Osijek and Slavonia's blossoming into those ideas hubs for a greener, digitally competitive, fair and just European Union.

Andrea Čović Vidović
Acting Head of Representation
European Commission Representation in Croatia

Topic 1

Green transformation legal perspectives

UDK 341.43:349.6
Original scientific paper

IN SUPPORT OF THE DEBATE ON THE TERMINOLOGY RELATED TO THE TERMS CLIMATE REFUGEES, CLIMATE MIGRANTS, ENVIRONMENTALLY DISPLACED PERSONS AND SIMILAR TERMS*

Mira Lulić, PhD, Full Professor
Josip Juraj Strossmayer University of Osijek, Faculty of Law
Stjepana Radića 13, Osijek, Croatia
mira.lulic@pravos.hr

Davor Muhvić, PhD, Associate Professor
Josip Juraj Strossmayer University of Osijek, Faculty of Law
Stjepana Radića 13, Osijek, Croatia
dmuhvic@pravos.hr

Ivana Rešetar Čulo, PhD
Josip Juraj Strossmayer University of Osijek, Faculty of Law
Stjepana Radića 13, Osijek, Croatia
iresetarc@pravos.hr

ABSTRACT

The paper deals with the terminological issues concerning the growing phenomenon of people fleeing their homes and states because they can no longer live normal lives or any lives at all due to the impact of climate change. This is particularly the case in poor coastal and small island states due to rising sea levels. To date, various terms are used in the scientific literature to describe these people, such as climate refugees, climate migrants, environmentally displaced persons, ecological migrants or eco-migrants, climate induced migrants, seasonal migrants, low-lying peoples, forced climate migrants, climate change-related migrants, survival refugees, etc. These terms are also often used in reports by international governmental and non-gov-

* This paper is a product of work that has been fully supported by the Faculty of Law Osijek, Josip Juraj Strossmayer University of Osijek, under the project No. IP-PRAVOS-23 „Contemporary Issues and Problems to the Protection and Promotion of Human Rights".

ernmental organisations, in political speeches and texts, in the media, on social networks, by activists, etc. Since there is no academic and political consensus on the appropriate term, there is also no generally accepted consensus on what exactly constitutes this category of vulnerable people. The paper provides an analysis of existing (proposed) terms and concepts and warns that some of them are ill-suited, misleading, inaccurate, and/or do not comply with (international) law and official legal terminology. This is particularly true for the term climate refugees, as the term refugee under the 1951 Refugee Convention and its 1967 Protocol does not include displacement caused by environmental factors. Without uniform terms, definitions of concepts and clearly stated rights in international and national legal systems, these multi-million groups of people cannot benefit from appropriate and effective legal protection. Based on a critical analysis of the elements of the most commonly used terms and concepts, the paper proposes to discard some of them and advocates for the legally and politically most acceptable solution.

Keywords: *climate refugees, climate migrants, environmentally displaced persons, legal terminology, international law*

1. INTRODUCTION

The issue of climate change and its impact on people's lives and society in general has become increasingly relevant in the last few decades. Numerous papers have been written in recent years, including those on people who have left or had to leave their homes due to climate change. Although climate change itself does not trigger the movement of persons, some of its effects, such as natural disasters, environmental degradation, sea level rise, or conflicts over resources have the potential to do so.[1] Some authors, however, challenge the factual evidence showing that environmental degradation causes large human migrations.[2] For this reason, some scholars believe that the key problem is perhaps not environmental change itself, but the ability of different communities and countries to cope with it.[3] Some authors also think that migration is an individual, family or community measure of adaptation and that it should be looked at positively by states and that such migration needs to be managed.[4] However, this type of displacement or migration is usually neither seen positively nor managed by states. The reality is that figures over the years show that there are more people displaced by environment-related disasters than by armed conflicts.[5]

---

1 Kälin, W.; Schrepfer, N., *Protecting People Crossing Borders in the Context of Climate Change: Normative Gaps and Possible Approaches,* United Nations High Commissioner for Refugees, Division of International Protection, Geneva, 2012, p. 6.

2 For more details, see: Lopez, A., *The Protection of Environmentally-Displaced Persons in International Law,* Environmental Law, Vol. 37, No. 2, 2007, pp. 365-410, p. 376.

3 *Ibid.*

4 Kälin; Schrepfer, *op. cit.*, note 1, p. 60.

5 Borges, I. M., *Environmental Change, Forced Displacement and International Law - From Legal Protection Gaps to Protection Solutions,* Routledge, New York, 2019, p. 17.

Relocation of people due to climate change is not a new phenomenon. People have been moving for thousands of years. In the past, both sudden-onset climate events (such as extreme storms and floods) and more gradual conditions of change (such as protracted droughts) are known to have led to population displacements and distress migration.[6] Migration can occur individually (at a family level) or in groups (involves larger numbers of people). In addition to climate change and natural disasters, some also flee from armed conflict and violence. In some cases, natural disasters have already occurred or are expected to occur in the near future. Some have already been seriously threatened by climate change. Many Pacific island states, which are on average only one or two meters above sea level, will become uninhabited before they disappear entirely under the sea.[7] Migrations are often a combination of a number of threats - floods, droughts, rising sea levels, destructive winds and the like, global warming in general, difficult economic conditions, and possibly armed conflict, violence, and instability. Thus, migrations are often motivated not by a single cause, but by a combination of them.

For example, the aforementioned Pacific island states and the peoples inhabiting them are particularly at risk. Some theorists propose that, invoking the right of the peoples to self-determination, these people should be provided with a different, dislocated space, appropriate and similar to their natural environment. Thus, for example, the peoples of the Pacific island states such as Tuvalu, the Marshall Islands and Kiribati are suggested to find their future in the territory of e.g. Australia and New Zealand. In this context, "planned relocation" is alluded to in the sense that, presumably, the state or states, and international organisations, organise large-scale migrations of a group of people from one location to another. We find such proposals distasteful, almost bizarre. Not only is it hard to imagine that states will give up parts of their territory or sovereignty, but even if they do so, it is profoundly unethical and cold-hearted to propose such solutions without taking into account the centuries-old history that these peoples have had in the areas they inhabit. It seems much easier for those who advocate such a solution to relocate the entire population and think that they have solved the problem than to invest a great deal of time and energy to stop massive pollution and climate change caused by only a few countries, albeit major world powers. A considerable number of inhabitants of these Pacific islands have already moved. It is a combination of economic reasons, the search for a better life, but also the fact that the future on these archipelagos is very uncertain.

---

6 McLeman, R., *Climate Change Migration, Refugee Protection, and Adaptive Capacity-Building,* McGill International Journal of Sustainable Development Law and Policy, Vol. 4, No. 1, pp. 1-18, p. 7.

7 Ross, N. J., *Low-Lying States, Climate Change-Induced Relocation, and the Collective Right to Self-Determination,* Faculty of Law, University of Wellington, Wellington, 2019, p. 1.

Law, especially international law, usually lags behind social phenomena, and difficulties and controversies arise over terminology, conceptualisation and operationalisation of new social phenomena, leading to gaps in legal protection. This is also the case with displacement of persons caused by climate change. Borges notes that human mobility, which is forced and exacerbated by environmental factors, blurs the traditional distinctions between refugees, internally displaced people, and international immigrants.[8] In reading the relevant literature, one notices that the terminology related to the concept of persons or peoples leaving or being forced to leave their homes due to climate change or other environmental factors is used in a rather convoluted manner. Most of the papers are limited to repeating some previous terms and definitions and do not offer any new conceptual or operational solutions. This paper will provide an overview of the most important terms and concepts given in the relevant literature, critically analyse them and determine more adequate terminological solutions. In the second section of the paper, we will address the relationship between climate change and human migration. In the third section, we will show how positive international law deals with the challenges of climate change. In the fourth section, we will present the problem of inconsistent terminology. In the fifth chapter, we will critically analyse the elements of the most commonly used terms and finally, we will make a terminological proposal that seems to us to be the most adequate at the moment.

2. CLIMATE CHANGE AND MIGRATION

Climate change, environmental events and displacement/migration are interrelated phenomena whose mutual relationship is extremely complex. It is well known that, as a result of the rise in temperature, mainly due to the burning of fossil fuels (coal, oil and gas) and the production of greenhouse gases, there are systematic and dramatic climate changes that negatively generate new issues and problems. Climate change has caused substantial damages, and increasingly irreversible losses, in terrestrial, freshwater, cryospheric, and coastal and open ocean ecosystems.[9] Coral reefs are being massively destroyed. On the one hand, deserts are spreading, and on the other, massive flooding occurs in some other parts of the world. Water salinisation, drought, melting of polar ice, rising tide levels, dying ocean currents, deforestation and forest destruction, and fearsome winds and storms are just some examples of the consequences of catastrophic climate change and man's careless treatment of the nature around us. Plant and animal species are dying out and biodiversity is decreasing. And all this because, according to the World Meteorolog-

[8] Borges, *op. cit.,* note 5, p. 17.

[9] *The Synthesis Report: The Intergovernmental Panel on Climate Change*, IPCC AR6 SYR, 2023, p. 5.

ical Organisation, the Earth is "only" 1.1°C warmer than it was at the end of the 19th century.[10] Most of the warming occurred in the past 40 years, with the seven most recent years being the warmest.[11] Global warming will continue to increase in the near term (2021-2040), mainly due to increased cumulative CO2 emissions in almost all scenarios and modelled pathways considered.[12]

Of the 186 countries assessed in a recent survey on climate vulnerability, Chad was rated as facing the greatest peril. The fact that this country has one of the fastest-growing populations in the world only compounds the problem. In the future, environmental changes could have enormous effects on many populations, especially those in coastal and low-lying areas such as Vietnam, the Netherlands and certain parts of the US. According to Justin Ginnetti from the Internal Displacement Monitoring Centre (IDMC), people are already "now twice as likely to be displaced than they were in the 1970s". This is due to the combined effect of rapid population growth, urbanisation and exposure to natural disasters.[13]

Climate and weather extremes are increasingly driving displacement in Africa, Asia, North America (high confidence), and Central and South America (medium confidence), with small island states in the Caribbean and South Pacific being disproportionately affected relative to their small population size (high confidence).[14]According to statistics published by the IDMC, every year since 2008, an average of 26.4 million persons around the world have been forcibly displaced by floods, windstorms, earthquakes or droughts.[15] This is equivalent to one person being displaced every second. The number of international migrants worldwide has continued to grow rapidly in recent years, reaching 258 million in 2017, up from 220 million in 2010 and 173 million in 2000.[16] An estimated 200,000 Bangladeshis, who become homeless each year due to river bank erosion, cannot easily apply for resettlement in another country.[17] It also means that the residents of the small islands of Kiribati, Nauru and Tuvalu, where one in ten persons has migrat-

---

10 Official web pages of the World Meteorological Organisation, [https://public.wmo.int/en/media/press-release/2020-was-one-of-three-warmest-years-record], Accessed 25 May 2023.

11 *2020 Tied for Warmest Year on Record,* NASA Analysis Shows, official web pages of NASA, [https://www.nasa.gov/press-release/2020-tied-for-warmest-year-on-record-nasa-analysis-shows], Accessed 25 May 2023.

12 *The Synthesis Report - The Intergovernmental Panel on Climate Change*, *op. cit.,* note 9, p. 12.

13 Apap, J., *The concept of 'climate refugee': towards a possible definition,* European Parliamentary Research Service, PE 621.893 – February 2019, p. 1 [https://www.europarl.europa.eu/RegData/etudes/BRIE/2018/621893/EPRS_BRI(2018)621893_EN.pdf], Accessed 25 May 2023.

14 *The Synthesis Report - The Intergovernmental Panel on Climate Change*, *op. cit.,* note 9, p. 5.

15 Apap, *op. cit.,* note 13, p. 1.

16 *Ibid.*, p. 2.

17 *Ibid.*

ed within the last decade, cannot be classified as refugees, even though those who remain are "trapped" in deteriorating environmental conditions.[18]

The number of storms, droughts and floods has tripled over the last 30 years with devastating effects on vulnerable communities, particularly in the developing world.[19] In 2008, 20 million persons were displaced by extreme weather events, compared with 4.6 million internally displaced by conflict and violence in the same period.[20] Gradual changes in the environment tend to have an even greater impact on the movement of people than extreme events.[21] For instance, over the last thirty years, twice as many people have been affected by droughts as by storms (1.6 billion compared with approx. 718 million).[22] Future forecasts vary from 25 million to 1 billion environmental migrants by 2050, moving either within their countries or across borders, on a permanent or temporary basis, with 200 million being the most widely cited estimate.[23]

It is safe to say that (1) the number of persons is significant and likely to increase, and (2) most of the movement will take place inside countries.[24] Kälin and Schrepfer have recognised the following five key scenarios that can trigger adaptive migration and/or displacement: (1) sudden-onset hydro-meteorological disasters, (2) slow-onset environmental degradation, (3) small island states being destroyed in large parts or as a whole by rising sea levels, (4) areas becoming unfit for human habitation either as a consequence of mitigation or adaptation measures (e.g., planting forests to serve as carbon sinks) or because they have been identified as high risk zones in case of hydro-meteorological disasters, and (5) violence and armed conflict caused by shrinking natural resources.[25]

It is difficult to distinguish between environmental/climate change reasons and other reasons, especially humanitarian, political, social or economic reasons. There are many migration management solutions that can be used to respond to the challenges posed by climate change, environmental degradation and disasters related to international migration movements, and that can provide status to people migrating in the context of climate change impacts, such as humanitarian visas,

---

18 *Ibid.*

19 *A Complex Nexus,* Official web pages of the International Organisation for Migration, [https://www.iom.int/complex-nexus], Accessed 25 May 2023.

20 *Ibid.*

21 *Ibid.*

22 *Ibid.*

23 This figure equals the current estimate of international migrants worldwide. *Ibid.*

24 Kälin; Schrepfer, *op. cit.,* note 1, p. 77.

25 *Ibid,* pp. 77-78.

temporary protection, residence permits, regional and bilateral free movement agreements, and the like.[26]

3. CLIMATE CHANGE AND INTERNATIONAL LAW

Climate change itself is a complex and multifaceted phenomenon. It raises physical, scientific, economic, social, political and cultural issues along with legal ones.[27] All these problems and challenges brought by climate change have led to the need to adopt international treaties and other documents that regulate this matter. In the context of climate change, states, according to present international law, have three types of obligations, i.e., mitigation, adaptation and protection.[28] Mitigation-related obligations include the task of mitigating the degree of climate change, in particular by reducing greenhouse gas emissions.[29] Adaptation implies finding the best ways to adapt to the challenges and threats that climate change brings, while protection is understood as the obligation to secure the rights and address the (humanitarian) needs of people affected by negative effects of climate change.[30] The obligation to reduce climate change and adapt to the challenges they bring still fails to enable people to stay in threatened areas. In this context, the issue of state obligations in the area of protection of the rights of people affected by negative effects of climate change becomes particularly important.

Given that the climate change, desertification and biodiversity loss are interlinked, the result of the 1992 Earth Summit in Rio de Janeiro, Brazil, are three sister "Rio Conventions": the 1992 United Nations Framework Convention on Climate Change (UNFCCC)[31], the 1992 Convention on Biological Diversity (CBD)[32] and the 1994 United Nations Convention to Combat Desertification (UNCCD)[33]. All three of them embrace the concept of sustainable development. Since

---

26 Ionesco, D., *Let's Talk about Climate Migrants, Not Climate Refugees,* 2019. [https://www.un.org/sustainabledevelopment/blog/2019/06/lets-talk-about-climate-migrants-not-climate-refugees/], Accessed 25 May 2023.

27 Brunée, J. *et al.*, *Introduction,* in: Lord, R. *et al.* (eds.), Climate Change Liability – Transnational Law and Practice, Cambridge University Press, Cambridge, 2012, pp. 3-7, p. 3.

28 Kälin; Schrepfer, *op. cit.*, note 1, p. 17.

29 *Ibid.*

30 *Ibid.*

31 United Nations Framework Convention on Climate Change (UNFCCC), *United Nations Treaty Series*, Vol. 1771, p. 107.

32 Convention on Biological Diversity (CBD), *United Nations Treaty Series*, Vol. 1760, p. 79.

33 United Nations Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa, *United Nations Treaty Series*, Vol. 1954, p. 3.

then, that concept has been accepted as a policy principle in many states and it appears in most international statements on the environment and development.[34]

The ultimate objective of the UNFCCC and any related legal instrument is to achieve, in accordance with the relevant provisions of the UNFCCC, stabilisation of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. This level should be achieved within a period of time sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner (Art. 2 of the UNFCCC). Article 7 of the UNFCCC established the Conference of the Parties (COP), a supreme decision-making body of the UNFCCC. All states that are Parties to the UNFCCC are represented at the COP, at which they review the implementation of the UNFCCC and any other legal instruments that the COP adopts and take decisions necessary to promote the effective implementation of the UNFCCC.[35]

However, as its name suggests, the UNFCCC is a framework convention, which means that it was created as a result of a compromise between the conflicting interests of states, that "its purpose is to set the general tone for the future climate change discussions"[36] and that it does not contain firm and clearly defined obligations of the state parties. Therefore, the Kyoto Protocol[37] was adopted in 1997, which operationalises the UNFCCC. The Kyoto Protocol set specific targets and timetables for reducing emissions of six greenhouse gases. This Protocol binds industrialised countries and economies in transition to limit and reduce greenhouse gases emissions in accordance with agreed individual targets. The Kyoto Protocol was amended in 2012 by the adoption of the Doha Amendment[38].

The Paris Agreement[39] was adopted at the UN Climate Change Conference (COP21) held in Paris on 12 December 2015. The Paris Agreement is a legally binding international treaty on climate change that aims to strengthen the global

---

34 Verheyen, R., *Climate Change Damage and International Law – Prevention Duties and State Responsibility,* Martinus Nijhoff Publishers, Leiden/Boston, 2005, p. 77.

35 For more details, see official pages of the Conference of the Parties (COP), [https://unfccc.int/process/bodies/supreme-bodies/conference-of-the-parties-cop], Accessed 25 May 2023.

36 Johnsson, A., *Climate Change in International Environmental Law,* Eastern and Central Europe Journal on Environmental Law, Vol. 17, No. 2, 2013, pp. 1-36, p. 11.

37 Kyoto Protocol to the United Nations Framework Convention on Climate Change, *United Nations Treaty Series*, Vol. 2303, p. 162.

38 Doha Amendment to the Kyoto Protocol, 8 December 2012, United Nations, C.N.718.2012.TREATIES-XXVII.7.c.

39 Paris Agreement, 12 December 2015, *United Nations Treaty Series*, Vol. 3156.

response to the threat of climate change in the context of sustainable development and efforts to eradicate poverty, including by: (a) holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognising that this would significantly reduce the risks and impacts of climate change, (b) increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development, in a manner that does not threaten food production, and (c) making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development (Art. 2 of the Paris Agreement).

In the context of climate change, the following global agreements should also be mentioned: the Sendai Framework for Disaster Risk Reduction (2015-2030)[40], the Addis Ababa Action Agenda (2015)[41], the New Urban Agenda (2016)[42], the Kigali Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer (2016)[43], and the 2030 Agenda for Sustainable Development (2015)[44]. If achieved, these agreements would reduce climate change and its impacts on health, wellbeing, migration and conflict.[45]

Although Article 4(4) of the UNFCCC obliges developed state parties and other developed parties listed in Annex 11 to assist developing state parties that are particularly vulnerable to the adverse effects of climate change in meeting the costs of adapting to those adverse effects, the issues related to the protection obligation, "and with it, the issue of displacement triggered by the effects of climate change has been largely neglected in international discussions thus far".[46] These international documents are mostly concerned with mitigating and adapting to climate change and are focused on reducing greenhouse gas emissions, rather than protecting people or nations already affected by climate change.

---

40 General Assembly Resolution: Sendai Framework for Disaster Risk Reduction 2015-2030, 3 June 2015, A/RES/69/283.

41 General Assembly Resolution: Addis Ababa Action Agenda of the Third International Conference on Financing for Development (Addis Ababa Action Agenda), 27 July 2015, A/RES/69/313.

42 General Assembly draft resolution: New Urban Agenda, 21 November 2016, A/71/L.23.

43 Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer, 15 October 2016, United Nations, C.N.872.2016.TREATIES-XXVII.2. f.

44 General Assembly Resolution: Transforming our world: the 2030 Agenda for Sustainable Development, 25 September 2015, A/RES/70/1.

45 *Synthesis Report on the IPCC Sixth Assessment Report (AR 6), Longer Report,* Intergovernmental Panel on Climate Change, 2023, p. 18.

46 Kälin; Schrepfer, *op. cit.*, note 1, p. 21.

4. THE PROBLEM OF NON-UNIFORM TERMINOLOGY

In the last decade or so, various terms have been used in the media, on social networks, in political speeches, but also in scientific papers and official documents of states and international organisations to refer to individuals and groups of people leaving their homes and places of residence due to catastrophic climate events that have already occurred or are imminent. These various terms include "climate refugees"[47], "climate migrants"[48], "environmental refugees"[49], "environmental migrants" ("eco-migrants")[50], "survival migrants"[51], or compound words such as "climate-change refugees"[52], "climate induced migration" (or "climate induced

---

47 See e.g.: Balesh, R., *Submerging Islands: Tuvalu and Karibati as Case Studies Illustrating the Need for a Climate Refugee Treaty,* Environmental and Earth Law Journal, Vol. 5, 2015, pp. 78-112; Dutta, S., *A Tale of Climate Refugee Vis-A-Vis Responsibility Shifting and Responsibility Sharing,* Indian Journal of Law and Justice, Vol. 11, No. 1, 2020, pp. 183-201; Popescu, A., *The First Acknowledged Climate Change Refugee?,* Romanian Journal of International Law, Vol. 23, 2020, pp. 96-116; Haris, A., How *a Universal Definition May Shape the Looming Climate Refugee Crisis,* Human Rights Brief, Vol. 24, No. 3, 2021, pp. 194-197; Zink, I., *Storm Warning: New Zealand's Treatment of "Climate Refugee" Claims as a Violation of International Law,* American University International Law Review, Vol. 37, No. 2, 2022, pp. 441-482; Kent, A.; Behrman, S., *Facilitating the Resettlement and Rights of Climate Refugees - An Argument for Developing Existing Principles and Practices,* Routledge, New York, 2018, p. 5.

48 See e.g.: Marinică, C. E., *The European Union Climate Neutrality and Climate Migrants,* Law Review, Vol. XI, No. 2, 2021, pp. 2-13; de Salles Cavedon-Capdeville, F.; Andreola Serraglio, D., *Lives on the Move: Human Rights Protection Systems as Justice Spaces for Climate Migrants,* Brazilian Journal of International Law, Vol. 19, No. 1, 2022, pp. 105-126; Corti Varela, J., *Regional Protection of Climate Migrants in Latin America,* Revista Espanola de Derecho Internacional, Vol. 73, No. 2, 2021, pp. 409-416; Felipe Perez, B., *The European Climate Visa as a Legal Instrument for the Protection of Climate Migrants,* Revista Espanola de Derecho Internacional, Vol. 74, No. 1, 2022, pp. 193-200.

49 See e.g.: Myers, N., *Environmental Refugees: a Growing Phenomenon of the 21st Century,* Philosophical Transactions: Biological Sciences, No. 357, 2002, pp. 609-613, p. 609; Collyer, M., *Geographies of Forced Migration*, *in Transition,* in: Fiddian-Qasmiyeh, E. *et al.* (eds.), The Oxford Handbook of Refugee and Forced Migration Studies, Oxford University Press, 2014, pp. 112-124, p. 1 and the following pages; Joseph, S.; McBeth, A., *Research Handbook on International Human Rights Law,* Edward Elgar, 2010, p. 226.

50 Compton, B., *The Rising Tide of Environmental Migrants: Our National Responsibilities,* Colorado Natural Resources, Energy & Environmental Law Review, Vol. 25, No. 2, 2014, pp. 357-386; Murray, S., *Environmental Migrants and Canada's Refugee Policy,* Refuge: Canada's Journal on Refugees, Vol. 27, No. 1, 2010, pp. 89-102; Koubi, V. *et al.*, *The Determinants of Environmental Migrants' Conflict Perception,* International Organisation, Vol. 72, No. 4, 2018, pp. 905-936; Caligiuri, A., *Possible Basis for Granting Humanitarian Protection to "Environmental Migrants" in Italy?,* The Italian Yearbook of International Law, Vol. 30, 2020, pp. 458-462; Passarini, F., *Protection of Environmental Migrants in Italy in Light of the Latest Jurisprudential Developments,* The Italian Yearbook of International Law, Vol. 31, pp. 446-452.

51 Betts, A., *Survival Migration: A New Protection Framework,* Global Governance, Vol. 16, No. 3, 2010, pp. 361-382.

52 McLeman, *op. cit.,* note 6, p. 12.

migrants")[53], "climate change-related migration"[54], "environmentally displaced persons"[55] (or "environmentally related displacement"[56]), "victims of environmental harm"[57], and even terms like "persons displaced by climate change"[58], "persons displaced by the environment"[59], "people displaced by climate change"[60], "trapped populations"[61] and "forced climate migrants"[62].

Some terms place emphasis on the area affected by the climate threat, such as "low-lying people"[63], "disappearing states or sinking states"[64]. Some compound terms place emphasis on law, so there are terms like "forced climate migrant's law".[65] What they all have in common is that they recognise people threatened by climate/environmental change in general or by a specific catastrophic climate/environmental event, with some focusing on these individuals or groups (which

---

53 See e.g.: Francis, R. A., *Migrants Can Make International Law,* Harvard Environmental Law Review, Vol. 45, No. 1, 2021, pp. 99-150; Fiddian-Qasmiyeh, E. *et al.*, *Introduction: Refugee and Forced Migration Studies in Transition,* in: Fiddian-Qasmiyeh, E. *et al.* (eds.), The Oxford Handbook of Refugee and Forced Migration Studies, Oxford University Press, Oxford, 2014, pp. 1-20, p. 6.

54 McLeman, *op cit.,* note 6, p. 17.

55 See e.g.: Balesh, *op. cit.,* note 47, p. 80, McCormack, C. B., *America's Next Refugee Crisis: Environmentally Displaced Persons,* Natural Resources & Environment, Vol. 32, No. 4, 2018, pp. 8-12; Lopez, *op. cit.,* note 2, pp. 365-410; Pelzer, M., *Environmentally Displaced Persons Not Protected - Further Agreement Required,* Environmental Policy and Law, Vol. 39, No. 2, 2009, pp. 90-91; Prieur, M., *Draft Convention on the International Status of Environmentally-Displaced Persons,* Urban Lawyer, Vol. 42, No. 1/4, pp. 247-258; Mileski, T.; Malish-Sazdovska, M., *Environmentally Displaced Persons,* Environmental Policy and Law, Vol. 48, No. 2, 2018, pp. 133-137; Moberg, K. K., *Extending Refugee Definitions to Cover Environmentally Displaced Persons Displaces Necessary Protection,* Iowa Law Review, Vol. 94, No. 3, 2009, pp. 1107-1136.

56 Collyer, *op. cit.,* note 49, p. 5.

57 Docherty, B.; Giannini, T., *Confronting a Rising Tide: a Proposal for a Convention on Climate Refugees,* Harvard Environmental Law Review, Vol. 33, 2009, pp. 350-403, p. 361.

58 Hodgkinson, D. *et al.*, *"The hour when the ship comes in": A Convention for Persons Displaced by Climate Change,* Monash University Law Review, Vol. 36, No. 1, 2010, pp. 69-120.

59 Moberg, *op. cit.,* note 55, p. 1114.

60 McLeman, *op. cit.,* note 6, pp. 1-18.

61 Gemenne, F. *et al., How climate extremes are affecting the movement of populations in the Asia Pacific region,* in: Price, S.; Singer, J. (eds.), Global Implications of Development, Disasters and Climate Change Responses to Displacement from Asia Pacific, Routledge, New York, 2016, pp. 21-40, p. 30.

62 Brown, O., *Migration and Climate Change,* International Organisation for Migration, Geneva, 2008, p. 15.

63 Ross, *op. cit.,* note 7, p. 5.

64 Salaj, Z., *Međunarodno pravo i izazovi održivog razvoja: Klimatske promjene, države koje tonu i migracije,* Zagrebačka pravna revija, Vol. 6, No. 2, 2017, pp. 203-227, Wong, D., *Sovereignty Sunk - The Position of Sinking States at International Law,* Melbourne Journal of International Law, Vol. 14, No. 2, 2013, pp. 346-391.

65 Sciaccaluga, G., *International Law and Protection of "Climate Refugees",* Palgrave Macmillan, 2020, p. 139.

may or may not be peoples), and others focusing on the area affected by climate change and catastrophic natural disasters.

In some papers, several different terms are used in parallel. For example, McLeman uses the terms "people displaced by climate change", "climate-change refugees" and "climate change-related migration", referring to the same category of persons.[66] Balesh also uses the terms "climate refugees" and "environmentally displaced persons" as synonyms.[67] All this creates a confusing atmosphere and makes it difficult to recognise, and thus protect and meet the humanitarian needs of persons/groups of persons or peoples displaced by climate/environmental change, and exercise their (human) rights. According to Brown, these persons are almost invisible in the international system: no institution is responsible for collecting data on their numbers and providing them with basic services.[68] Getting the terminology right is especially important because "the choice of terminology is not a neutral one".[69] The selected and generally accepted definition will have very real implications for the obligations of the international community under international law.[70] However, most papers still contain different terms, there is no agreement on the terminology and definition of the terms, and most disagree on the key elements in defining the term – persons/peoples, climate-related/environmental, a refugee/migrant/displaced person, suddenly/gradually, within the state/cross-border.

The term "environmental refugee" or "climatic refugee" was coined as early as 1970 by Lester Brown of the World Watch Institute.[71] The first official use of the term climate refugee was in 1985 by El-Hinnawi, published in the United Nations Environment Programme (UNEP) report, which defined "environmental refugees" as "those people who have been forced to move or leave their traditional habitat, temporarily or permanently, because of a marked or conspicuous environmental disruption (natural and/or triggered by people) that jeopardised and imperilled their existence and/or seriously affected the quality of their life."[72] Myers broadly defined the term "environmental refugees" in 2002 as "people who can no longer get or gain a secure livelihood (or living) in their homelands because of soil erosion, drought, deforestation, desertification and other environmental problems, together with associated and incidental problems of population pressures

66 McLeman, *op. cit.,* note 6, p. 1 and 12.

67 Balesh, *op. cit.,* note 47, p. 80.

68 Brown, *op. cit.*, note 62, p. 15.

69 Francis, *op. cit,* note 53, p. 107.

70 Brown, *op. cit.*, note 62, p. 13.

71 Dutta, *op. cit.*, note 47, p. 185.

72 *Ibid.*

and profound poverty. In their desperation or despair, these people feel they have no alternative or option but to seek sanctuary elsewhere, however, hazardous the attempt. Not all of them have fled or left their countries, many being internally displaced. But all have abandoned their homelands on a semi-permanent if not permanent basis, with no or little hope of a foreseeable return."[73]

Some authors reject the terms "climate refugee", "environmental refugee", and similar terms because of their negative connotations describing them as "passive victims" and aiming at disempowering them.[74] As a result, they favour terms such as "low-lying peoples", "low-lying islanders", "disappearing states" or "sinking island states". But, as noted by Ross, this kind of language is far from being unproblematic. The negative connotation of such terminology "may have political appeal, but may also create a sense of fatalism that limits international support" and also "risks exacerbating a sense of disempowerment already present in low-lying states from climate change itself."[75]

The elements of the terms most commonly used in this context will be critically analysed in the next section and some suggestions will be offered.

5. ANALYSIS OF THE ELEMENTS OF THE MOST COMMONLY USED TERMS

Given the complexity of the concept, the previously mentioned terms used in the literature and in practice suggest several key issues and distinctions that should be considered when choosing an appropriate term and defining it. We have identified the following key issues:

A. Who are the victims – persons, groups of persons or peoples/population?

B. Which phenomenological term should be used - climate/climate change-related or environmental?

C. Which term related to leaving the territory (residence or home/centuries-old hearths) should be used – migration, relocation or displacement, and in relation to that, which terms should be used for persons in need of protection – (forced) migrants, refugees or displaced/relocated persons?

---

73 *Ibid.*

74 See Rayfuse, R., *International Law and Disappearing States - Maritime Zones and the Criteria for Statehood,* Environmental Policy and Law, Vol. 41, No. 6, 2011, pp. 281-287, p. 284; Ross, *op. cit.*, note 7, p. 22.

75 Ross, *op. cit.*, note 7, p. 23.

D. Should the term refer exclusively to cross-border migration/relocation/displacement or should it also include migration/relocation/displacement within one's own country?

E. Can migrants/relocated/displaced persons return to the area they came from or has it been permanently destroyed - is it a forced or voluntary departure?

F. Who has the obligation to help - the country of which they are citizens, the country to which they migrated/relocated/displaced, or international organisations?

In the context of the above key issues, in this paper we will focus on the most commonly used terms and analyse their meaning and suitability for this phenomenon. First of all, we will deal with the terms "climate/climate change related" and "environmental". Second, we will analyse the suitability of the terms "migration", "displacement" and "relocation". Third, we will analyse the adequacy of the terms "refugees", "migrants" and "displaced/relocated persons". Finally, we will recapitulate and make a terminological proposal that seems most appropriate at the moment.

5.1. Climate change related or environmental?

The terms "climate refugee" and "environmental refugee" are often used interchangeably, although they sometimes refer to different concepts. Some authors, such as Compton, believe that the term "environmental refugee" is broader than the term "climate refugee". She explains that the definition of the broader term "environmental refugees" comes from the United Nations Environment Programme and that the narrower term "climate refugees" has emerged more recently in an effort to define a particular subset of "environmental refugees" relocating specifically due to climate change.[76]

Francis notes that demonstrating that climate change causes migration requires two causal links, i.e., a link between climate change and a particular environmental event, and a link between an environmental event and the decision to migrate.[77] However, the question arises as to what is meant by the terms "climate" and "environmental" and in which situations one can assume that relocation is precisely due to climate or environmental change. Is it climate change, environmental degradation or natural disasters, and does it make a difference whether

[76] Compton, *op. cit.,* note 50, pp. 363-364.

[77] Francis, *op. cit.,* note 53, p. 107.

such changes occur quickly and suddenly (floods, storms), or whether it is a slow, long-term process (e.g., desertification, droughts, coastal erosion)?

Climate is the regular pattern of weather conditions of a particular place. The environment is one's surroundings; it includes water, air, and land and their interrelationships, as well as the relationships between them and humans.[78] The latter relates to the impact of human activity on the environment in a particular time and space.[79] There are many reasons for the deterioration of the environment. Some are the result of natural causes (storms, tornados, volcanic eruptions, earthquakes), while others are caused by humans (environmental pollution, the construction of river dams, the logging of tropical forests, chemical warfare).[80] Human-caused climate change is a consequence of more than a century of net greenhouse gas emissions from energy use, land use and land use change, lifestyle and consumption patterns, and manufacturing.[81] Some authors point out that the main difference between climate and environmental change is that climate change is caused by humans, whereas environmental change includes natural changes such as earthquakes.[82] It is also said that climate change can also cause environmental change.[83] However, the question arises in which situations such changes lead to migration/displacement/relocation.

McLeman divides the factors or drivers of forced migration into two distinct groups: climate drivers, which can be climate processes (slow-onset changes such as sea-level rise, salinization of agricultural land, desertification, growing water scarcity and food insecurity) and climate events (sudden and dramatic hazards such as monsoon floods, glacial lake outburst floods, storms, hurricanes and typhoons), and non-climate drivers.[84] Non-climate drivers would refer to the vulnerability of certain areas to such external influences, i.e., the community's adaptive capacity. Namely, non-climate drivers will depend on whether a natural disaster in an area will trigger the need to leave that area, or whether the community has adaptive measures to prevent a natural disaster or mitigate its consequences. On the other hand, in the context of advocating for the term "environmentally displaced persons", Borges states that it would encompass "individuals of a country who for

---

78 U.N. General Assembly (1972) "United Nations Conference on the Human Environment" (Stockholm 15 December) U.N. Doc. A/RES/2994 (1972), para. 1, citation according to Borges, *op. cit.,* note 5, p. 17.

79 *Ibid.*

80 Borges, *op. cit.,* note 5, pp. 19-20.

81 *The Synthesis Report - The Intergovernmental Panel on Climate Change*, *op. cit.,* note 9, p. 10.

82 Dutta, *op. cit.,* note 47, p. 189.

83 *Ibid.*

84 McLeman, *op. cit.,* note 6, pp. 6-7.

compelling reasons of sudden disasters (in particular cyclones, storms surges and floods) or progressive environmental degradation (in particular drought, desertification, deforestation, soil erosion, water shortages and other climate change related conditions), natural and/or human-made, impacting in their lives or livelihoods are obliged to leave their country of origin temporarily or permanently to a third state".[85]

Based on all the above, we tend to use the term "environmental" rather than "climate/climate-change related" because it is more inclusive and therefore can cover a broader range of reasons for leaving homes or countries. Indeed, we see no justification for excluding from appropriate legal protection persons who flee their places of residence due to, for example, a natural environmental disaster unrelated to climate change.

5.2. Migration, displacement or relocation?

When selecting and defining terms, it is important to determine which categories of people fall within the scope of the selected definition. With regard to the reasons and circumstances of leaving the territory, do we refer to "(forced) migration", "displacement" or "relocation"? According to the International Organisation for Migration (IOM), "environmental migrants" are "persons or groups of persons who, predominantly for reasons of sudden or progressive change in the environment that adversely affects their lives or living conditions, are obliged to leave their habitual homes, or choose to do so, either temporarily or permanently, and who move either within their country or abroad".[86] Similarly, the term climate-induced migration encompasses movement that is temporary or permanent, voluntary or forced, internal or cross-border; but it describes movement that occurs in response to climate-related events.[87] As stated by Ross, the word "migration" is an umbrella term that refers to movement away from one's habitual residence. Migration can be internal, i.e., within a state, or cross-border, voluntary or involuntary, permanent or temporary, and the reasons for moving or a migrant's legal status are irrelevant. In this broad sense, migration in response to climate change impacts is a recognised strategy for adapting to climate change impacts.[88] However, the term "migration" or "migrant" contains an element of volition. Some authors advocate the term "forced climate migration" or "forced

85 Borges, *op. cit.,* note 5, p. 40.

86 International Organisation for Migration, *Migration and the Environment*, discussion note, MC/INF/288, 1 November 2007, para. 6.

87 Francis, *op. cit.,* note 53, p. 106.

88 Ross, *op. cit.,* note 7, p. 3.

climate migrant"[89] to reflect its non-voluntary nature.[90] Ross also states that it is appropriate to view migration in these circumstances as a form of forced relocation, which, unlike voluntary migration, poses a number of human rights risks to those affected.[91] The term "relocation" avoids confusion with the term "migration", which connotes voluntary cross-border movement, since climate migration is a form of forced relocation.[92] The term "relocation" means "the physical process of moving people, either temporarily or permanently, whether forced or with their consent, whereas "resettlement" in its fullest form means the replacement of assets lost and the improvement, or at least restoration, of living standards, together with development opportunity."[93]

The United Nations adopted another term, "environmentally displaced persons", to describe people "who are displaced from or who feel obligated to leave their usual place of residence, because their lives, livelihoods and welfare have been placed at serious risk as a result of adverse environmental, ecological or climatic processes and events".[94] It is important to stress that a "displaced person" is not the same as a "relocated person". Smith gives an example of a village that "may be relocated to enable flooding for a hydroelectric project."[95] Accordingly, relocation implies people leaving their homes in the context of regular circumstances in a functioning legal system. For all of the reasons mentioned above, we believe that the term "displaced person" is in this moment most appropriate in the context of people fleeing their homes for environmental reasons.

5.3. Refugees, migrants or displaced/relocated persons?

From the beginning, UNHCR has refused to use the term "environmental refugees" to avoid confusion with the existing legally recognised definition of "refugees". The term used by UNHCR was "environmentally displaced persons", while the International Organisation for Migration used the term "environmental migration". The terms "migrants" and "refugees" are used interchangeably in the literature, although these two terms obviously have different meanings. Anoth-

89 Brown, *op. cit.,* note 62, p. 15.

90 *Ibid.*

91 Ross, *op. cit.,* note 7, p. 3.

92 *Ibid,* p. 23.

93 Price, S., *Introduction,* in: Price, S.; Singer, J., Global Implications of Development, Disasters and Climate Change Responses to Displacement from Asia Pacific, Routledge, New York, 2016, pp. 1-18, p. 4.

94 Compton, *op. cit.,* note 50, p. 365.

95 Smith, R.K.M., *International Human Rights Law*, 10th edition, Oxford University Press, Oxford, 2022, p. 227.

er term used to refer to the people of concern is "internally displaced persons" (IDPs).[96] IDPs refer to people who are forced to flee but remain within the borders of their country. These are important differences because migrants, refugees and IDPs have different rights under international law. The UN should have a consensus on the discourse before making policy, otherwise the same policy could lead to different rights just because of terminology.[97]

Some scholars have insisted on the use of the term "climate refugees", implicitly arguing that the protective framework provided by international refugee law should also apply to those moving in the climate context.[98] Pursuant to the 1951 Convention Relating to the Status of Refugees (Art. 1, A)[99] and its 1967 Protocol (Art. I)[100], which are still the key legal instruments for defining refugees,[101] a refugee is "any person who […] owing to well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country; or who, not having a nationality and being outside the country of his former habitual residence, is unable or, owing to such fear, is unwilling to return to it". According to this definition, the 1951 Convention, together with its Protocol, clearly aims to protect people fleeing their state for political reasons (political refugees).[102] Thus, persons "fleeing from natural disasters […] or economic crisis do not fall within the scope of the Refugee Convention".[103]

When addressing UNHCR with specific tasks, the General Assembly uses a somewhat broader definition of refugees based on a definition from the 1969 OAU Convention Governing the Specific Aspects of Refugee Problems in Africa,[104]

---

96 Joseph; McBeth, *op. cit,* note 49, p. 228.

97 Dutta, *op. cit,* note 47, pp. 189-190.

98 Francis, *op. cit,* note 53, p. 107.

99 Convention relating to the Status of Refugees of 1951, *United Nations Treaty Series*, Vol. 189, p. 137.

100 Protocol relating to the Status of Refugees of 1967, *United Nations Treaty Series*, Vol. 606, p. 267.

101 See Smith, *op. cit.,* note 95, pp. 222-223; Edwards, A., *International Refugee Law*, in: Moeckli, D.; Shah, S.; Sivakumaran, S. (eds.), International Human Rights Law, 3rd edition, Oxford University Press, Oxford, 2018, pp. 539-540; Bantekas, I.; Oette, L., *International Human Rights Law and Practice*, 2nd edition, Cambridge University Press, Cambridge, 2018, p. 824; Kugelmann, D., *Refugees*, Max Planck Encyclopedias of International Law, Oxford University Press, [https://opil.ouplaw.com/home/mpil], Accessed with subscription 24 April 2023, para. 2.

102 See Andrassy, J. *et al.*, *Međunarodno pravo*, 1. dio, 2. izdanje, Školska knjiga, Zagreb, 2010, p. 367.

103 Kugelmann, *op. cit.*, note 101, para 4.

104 *United Nations Treaty Series*, Vol. 1001, p. 45. See Andrassy *et al.*, *op. cit.*, note 102, p. 369; Lapaš, D., *Međunarodnopravna zaštita izbjeglica,* Hrvatski pravni centar, Zagreb, 2008, p. 5.

which is intended as a regional complement to the 1951 Refugee Convention.[105] Pursuant to Article 1 of this Convention, in addition to persons who fall into this category under the 1951 Refugee Convention definition, a refugee is also "every person who, owing to external aggression, occupation, foreign domination or events seriously disturbing public order in either part or the whole of his country of origin or nationality, is compelled to leave his place of habitual residence in order to seek refuge in another place outside his country of origin or nationality". Similar reasoning regarding the expansion of the original refugee definition can be seen in the 1984 Cartagena Declaration on Refugees,[106] a non-binding American regional document. This declaration recommends that, in addition to persons covered by the core definition of the 1951 Refugee Convention, the concept of refugee should also include "persons who have fled their country because their lives, safety or freedom have been threatened by generalized violence, foreign aggression, internal conflicts, massive violation of human rights or other circumstances which have seriously disturbed public order". These expansions of the definition of refugee do not go much further than the original concept of protecting a person fleeing their state for political reasons.[107]

Therefore, populations displaced by the impacts of climate change would not meet the definition of refugee for two key reasons. First, most displacement and migration would likely occur within national borders, and these people would automatically not qualify for refugee protection under the first criterion. Second, those who might be forced to move across international boundaries would also not qualify for protection, as persecution is purely a human act.[108] The United Nations Office of the High Commissioner for Refugees (UNHCR) has generally opposed the widespread use of the phrase "environmental refugee", fearing that it would lead to a systematic misapplication of the word "refugee" to groups of people migrating within the borders of their own countries, seeking protection not from persecution for reasons of race, religion, nationality, membership of a particular social group or political opinion, but from climate change caused by homelessness as a result of natural disasters such as hurricanes and wildfires.[109]

It is therefore quite clear that persons leaving their states for environmental/climate change related reasons are excluded from an even broader definition of ref-

---

105 Smith, *op. cit.,* note 95, p. 225.

106 Cartagena Declaration on Refugees, Colloquium on the International Protection of Refugees in Central America, Mexico and Panama, 22 November 1984, [https://www.refworld.org/docid/3ae6b36ec.html], Accessed 23 April 2023.

107 See also Lapaš, D., *op. cit.,* note 104, p. 5.

108 McLeman, *op. cit.*, note 6, pp. 1 and 14.

109 McCormack, *op. cit.,* note 55, p. 9.

ugee. For this reason, it is proposed "to either come up with a new stand-alone international law instrument", or to adopt "a protocol on climate refugees within the UNFCCC framework".[110] Since there are no incentives to expand the existing definition(s) and notion of refugee, and the relevant protection of international refugee law, terms such as "climate refugees" or "environmental refugees" that are widely used in the literature are fundamentally incorrect. Although most other authors also agree that people displaced by climate change do not belong to the category of refugees as defined by the 1951 Refugee Convention, the term climate refugee is still used in the literature today.[111]

Unlike the term "refugee", the term "migrant" is not, or at least has not yet been formally defined by international law,[112] and no specific rights derive from this general term, apart from the general rules of alien protection[113] and international human rights law[114]. The only legally recognised category of migrants are "migrant workers", although the specific term is not relevant to this particular discourse.[115] According to the International Organisation for Migration, "migrant" is an "umbrella term, not defined under international law, reflecting the common lay understanding of a person who moves away from his or her place of usual residence, whether within a country or across an international border, temporarily or permanently, and for a variety of reasons".[116] Unlike refugees, migrants "traverse international frontiers while lacking the element of persecution".[117]

It has to be said that "climate change-related migration" and "climate migration" are preferred alternatives to the term "refugee".[118] This is because "migration" is an umbrella term that refers to any type of human mobility: internal or cross-bor-

---

110 Vershuuren, J., *Legal Aspects of Climate Change Adaptation,* in: Hollo, E. J.; Kulovesi, K.; Mehling, M. (eds.), Climate Change and the Law, Springer, 2012, p. 261. See also Docherty; Giannini, *op. cit.,* note 57, p. 349 and further; Gogarty, B., *Climate-change Displacement: Current Legal Solutions to Future Global Problems,* Journal of Law, Information and Science, Vol. 21, No. 1, 2011, pp. 167-188, p. 1 and further.

111 See *supra* chapter 4.

112 Kugelmann, *op. cit,* note 101, para. 3.

113 See *ibid,* paras. 21-22.

114 See *ibid,* para. 23.

115 The 1990 International Convention on the Protection of the Rights of All Migrant Workers and Members of their Families defines "migrant worker" as "a person who is to be engaged, is engaged or has been engaged in a remunerated activity in a State of which he or she is not a national" (Art. 2(1)). *United Nations Treaty Series*, Vol. 2220, p. 3.

116 *International Migration Law: Glossary on Migration*, International Organisation for Migration, Geneva, 2019, [https://publications.iom.int/system/files/pdf/iml_34_glossary.pdf], Accessed 25 May 2023, p. 132.

117 Bantekas; Oette, *op. cit.,* note 101, p. 822.

118 Ross, *op. cit.*, note 7, p. 22.

der movement; temporary, circular or permanent movement; voluntary or involuntary relocation; regarding individuals or communities; and irrespective of the drivers of movement.[119] Thus, the term "climate migration" clarifies the driver but remains intentionally open in all other respects.[120] We must note, however, that while the use of the term "migrants" in the context of the persons fleeing their states for environmentally related reasons is not incorrect *per se*, as is the case with the term "refugees", it is too broad. It includes equally reasons of persecution and various natural or man-made threats, economic necessities, but also purely voluntary and unforced reasons.

As noted above, since 1977, the General Assembly has used the term "internally displaced persons" (IDPs) in addition to the term "refugee".[121] This was intended to entrust UNHCR with the care of persons excluded from the definition of refugees only because they have fled their homes to another part of their state, but not abroad.[122] This is because the number of "internally displaced persons" significantly exceeds the number of refugees in the world.[123] Although UNHCR rejects the use of the term climate refugee for people who are in fact IDPs, it does acknowledge the underlying problems faced by IDPs and has pointed to the ongoing need for further study of this phenomenon. UNHCR has even called for the development of an independent UN legal framework that deals exclusively with IDPs displaced by climate-related events, such as increasing natural disasters and the scarcity of critical natural resources.[124]

According to the 1998 non-binding UN Guiding Principles on Internal Displacement,[125] "internally displaced persons are persons or groups of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, situations of generalised violence, violations of human rights or natural or human-made disasters, and who have not crossed an internationally recognised State border" (Introduction, para. 2). There is also a regional (binding) treaty on the protection of internally displaced persons – the 2009 Kampala Convention, the African Union Convention for the Protection and Assistance of Internally Dis-

119 *Ibid.*

120 *Ibid.*

121 Andrassy *et al.*, *op. cit.,* note 102, p. 369.

122 *Ibid,* p. 369; Smith, *op. cit.,* note 95, p. 227; Kugelmann, *op. cit.,* note 101, para. 15.

123 See *Global trends*, official web pages of the OHCHR, [https://www.unhcr.org/global-trends], Accessed 24 April 2023.

124 McCormack, *op. cit.*, note 55, p. 9.

125 UN Guiding Principles on Internal Displacement, E/CN.4/1998/53/Add.2.

placed Persons in Africa.[126] This convention defines internally displaced persons in the same way as the 1998 UN Guiding Principles (Art. 1, k.). Thus, international law refers to those who are forced to move as "displaced persons" or "refugees", and guarantees them more legal protection than those who move voluntarily, or "migrants".[127]

The most important feature of the definition of an "internally displaced person" as compared to the definition(s) of a "refugee", apart from its internal character, is the notion of natural or man-made disasters. As Bantekas and Oette note, where "flight is the result of a man-made or a natural disaster and the person is not fleeing abroad for fear of persecution he or she is characterised as an internally displaced person". The same authors note that, on the other hand, "the status of a person fleeing abroad from the effects of any of the aforementioned disasters is unclear and indeterminate".[128] Thus, it is only a small step to delete the word "internally" to obtain the term relevant to cross-border cases of persons fleeing their homes for environmentally related reasons. Unlike the term "migrant", the term "displaced person" (without the adverb "internally") is more specific and refers to persons leaving their states for environmental/climate change related reasons. Prieur, in our view, therefore rightly argues for the use of the term "environmentally displaced persons", noting that they are not refugees, even if they cross a border, but ordinary citizens displaced within their own country or in another.[129] In both cases, their vulnerability stems from the fact that the disaster exposes them in particular to the risk that their essential rights will not be recognised because there is currently no legal basis for that.[130] Borges also advocates the term "environmentally displaced persons", which is most appropriate when "discussing issues of legal protection and obligations of states under international human rights law for people forced to move due to environmentally triggered conditions".[131] Based on the above, and not least because UNHCR also prefers this term, it seems to us that the term "environmentally displaced persons" is most adequate at this moment. However, it should be borne in mind that the term "environmentally displaced persons", although it may sound official in the context of its use by UNHCR, does not imply any legal rights in the realm of international refugee law.[132]

---

126 Available at the official web pages of the African Union [https://au.int/en/treaties/african-union-convention protection-and-assistance-internally-displaced-persons-africa], Accessed 24 April 2023.

127 Francis, *op. cit.,* note 53, p. 107.

128 Bantekas; Oette, *op. cit.,* note 101, p. 823.

129 Prieur, *op. cit.*, note 55, p. 253.

130 *Ibid.*

131 Borges, *op. cit.,* note 5, p. 40.

132 Compton, *op. cit.,* note 50, p. 365.

5.4. Recapitulation and suggestions

Back in 2011, the Nansen Conference noted that there was no standard terminology and stressed that misleading and inaccurate terms such as "climate refugee" or "environmental refugee" should be avoided.[133] However, the conference recognised the need to clarify terminology.[134] This terminology has been challenged by, *inter alia*, UNHCR, which has expressed serious reservations, arguing that it has no basis in international refugee law and could potentially undermine that legal regime.[135] Even more problematic is a more recent term "environmental migrant", which refers to "persons or groups of persons who, predominantly for reasons of sudden or progressive changes in the environment that adversely affect their lives or living conditions, are obliged to leave their homes or choose to do so, either temporarily or permanently, and who move either within their country or abroad", as offered by the International Organisation of Migration (IOM).[136] This term risks undermining the existing protection mechanisms, particularly for internally displaced persons, because it does not distinguish between internal and cross-border movements of persons. It also blurs the distinction between forced and voluntary movements, which is important from a legal protection perspective.[137] As Borges notes, there is "a general and legal scholarly argument that international law is currently ill-equipped to provide protection to displaced people stemming from environmental factors".[138]

Some authors, such as Balesh, who are in favour of the use of the term "climate refugee" and the adoption of a new comprehensive treaty on climate change refugees, state that it has been advocated that the definition of climate refugee should include forced migration, temporary or permanent relocation, movement across borders, disruption consistent with climate change, sudden or gradual environmental disruption, and a more than likely standard for human contribution to the disruption.[139] Although we do not consider the term "climate refugee" appropriate, parts of the definition proposed by Balesh should definitely be discussed.

---

133 Kälin; Schrepfer, *op. cit.*, note 1, p. 28.

134 *Ibidem*.

135 UNHCR, Climate change, natural disasters and human displacement: A UNHCR perspective, 23 October 2009, p. 3.

136 IOM, Discussion Note: 'Migration and the Environment', 94th Session of the IOM Council, Doc. No. MC/INF/288, 2007, para. 6. Citation according to Kälin; Schrepfer, *op. cit.*, note 1, p. 28.

137 *Ibid.*

138 Borges, *op. cit.*, note 5, p. 16.

139 Balesh, *op. cit.,* note 47, pp. 11-102.

Based on the concept proposed by the IOM, Renaud proposes three subcategories. The term "environmental emergency migrant" refers to persons displaced by an environmental event if they remain within state borders, as well as persons displaced across borders. An "environmentally forced migrant" is a person who has to leave his or her home "in order to avoid the worst of environmental deterioration" or a person with no option to return to his or her former home. The urge to leave is weaker in this category than in the first category, but still exists to an extent that justifies qualifying such movement as forced. This category also seems to cover at least certain persons migrating as a form of adaptation. The third category consists of "environmentally motivated migrants", who still have the option of leaving their home in the context of deteriorating environments, or who were initially qualified as environmental emergency migrants but have a real return option.[140] These subcategories may be helpful, but we are not inclined to accept the term "migrant" in this context for the reasons stated above.

It is quite clear that the term "refugee", despite its catchiness and its suitability for public mobilisation, is unsuitable, and it is necessary to advocate strongly for its banishment from the theoretical and practical discourse. The term "migrant", although not inaccurate in itself, is too broad and, legally speaking, does not do much for environmental migrants. We believe that the term "displaced person" is most appropriate and adequate in this context. As already explained, we believe that the term "environmental" is better than the term "climate/climate-related", and therefore we advocate the use of the term "environmentally displaced persons".

6. CONCLUSION

To date, there has been limited national and international response to the challenge of persons/people fleeing their homes for environmental reasons, and their legal protection remains inadequate. The collapse of the Earth's biosystem and the degradation of the environment are not sufficiently prevented, nor are harmful climate changes sufficiently reduced. There is a lack of responsibility for either the states or the involved corporations. No effective compensation system for the most affected victims of climate change has been established. Despite the fact that different areas of international law, such as international environmental law, international refugee law or international human rights law, touch upon this subject, none of them in their current form and practice provides (adequate and/or sufficient) legal solutions to this problem.

[140] Renaud, F. G. *et al.*, J., *A Decision Framework for Environmentally Induced Migration,* International Migration, Vol. 49, 2011, pp. 14-15, citation according to Kälin; Schrepfer, *op. cit.*, note 1, p. 29.

The gap in legal protection is already evident from the fact that there is no clearly accepted term or definition for this category of persons or people. There is no lack of proposals for various terms and definitions. However, a good part of these terms, especially the most commonly used ones ("climate refugees" or "climate migrants"), are imprecise and misleading (e.g. "climate migrants"), i.e., they are not in line with positive international law and official (international) legal terminology (e.g. "climate refugees"). The international community still does not recognise the importance of relevant legal regulation. Apart from detecting the problem (dramatic climate changes causing migration) and identifying vulnerable groups of people (nations or citizens of certain areas), it is still doing too little to stop the course of our civilisation toward even more brutal pollution of the earth, to punish those responsible and to ensure compensation for those whose rights to survival are threatened. If the country whose citizens are threatened by climate change cannot provide adequate legal and other protection, international governmental and non-governmental organisations must provide targeted assistance to these peoples and groups of people.

Without uniform terms, their clear definitions and regulated rights, hundreds of millions of people threatened by climate change are unlikely to achieve their legal protection. The ideal solution would be the adoption of a specialised international treaty with the appropriate universally accepted terminology and definition and specific legal norms tailored to these persons. However, since there is probably no time to adopt a new specialised international treaty, there is an urgent need to adopt and organise the existing legal norms and mechanisms within the existing network of international law, primarily in the field of general protection of human rights. As it is shown, international refugee law is not applicable to environmentally displaced persons because of its strict definition of refugee. There are currently no incentives to change its long established concept of a political refugee and it is not realistic to expect this would happen anytime soon, if ever. On the other hand, international environmental law is currently concentrated mainly on the mitigating and adapting to climate change and not on providing protection to the persons or people affected by climate change. International human rights law, with its well-established mechanisms available to victims of human rights violations (e.g. the individual right to complaint to Human Rights Committee or European Court of Human Rights), is currently the most potent field of international law to provide protection to environmentally displaced persons. The acceptance of appropriate terminology and definition of the persons concerned is a necessary basis for the recognition of their specific situation and needs in the application of existing international treaties on the protection of human rights.

REFERENCES

BOOKS AND ARTICLES

1. Andrassy, J. *et al.*, *Međunarodno pravo*, 1. dio, 2. izdanje, Školska knjiga, Zagreb, 2010
2. Balesh, R., *Submerging Islands: Tuvalu and Karibati as Case Studies Illustrating the Need for a Climate Refugee Treaty,* Environmental and Earth Law Journal, Vol. 5, 2015, pp. 78-112
3. Bantekas, I.; Oette, L., *International Human Rights Law and Practice*, 2nd edition, Cambridge University Press, Cambridge, 2018
4. Betts, A., *Survival Migration: A New Protection Framework,* Global Governance, Vol. 16, No. 3, 2010, pp. 361-382
5. Borges, I. M., *Environmental Change, Forced Displacement and International Law From Legal Protection Gaps to Protection Solutions,* Routledge, New York, 2019
6. Brunée, J. *et al.*, *Introduction,* in: Lord, R. *et al.* (eds.), Climate Change Liability – Transnational Law and Practice, Cambridge University Press, Cambridge, 2012, pp. 3-7
7. Caligiuri, A., *Possible Basis for Granting Humanitarian Protection to "Environmental Migrants" in Italy?,* The Italian Yearbook of International Law, Vol. 30, 2020, pp. 458-462
8. Collyer, M., *Geographies of Forced Migration*, *in Transition,* in: Fiddian-Qasmiyeh, E; Loescher, G., Long, K.; Sigona, N. (eds.), The Oxford Handbook of Refugee and Forced Migration Studies, Oxford University Press, 2014, pp. 112-124
9. Compton, B., *The Rising Tide of Environmental Migrants: Our National Responsibilities,* Colorado Natural Resources, Energy & Environmental Law Review, Vol. 25, No. 2, 2014, pp. 357-386
10. Corti Varela, J., *Regional Protection of Climate Migrants in Latin America,* Revista Espanola de Derecho Internacional, Vol. 73, No. 2, 2021, pp. 409-416
11. de Salles Cavedon-Capdeville, F.; Andreola Serraglio, D., *Lives on the Move: Human Rights Protection Systems as Justice Spacesfor Climate Migrants,* Brazilian Journal of International Law, Vol. 19, No. 1, 2022, pp. 105-126
12. Docherty, B.; Giannini, T., *Confronting a Rising Tide: a Proposal for a Convention on Climate Refugees,* Harvard Environmental Law Review, Vol. 33, 2009, pp. 350-403
13. Dutta, S., *A Tale of Climate Refugee Vis-A-Vis Responsibility Shifting and Responsibility Sharing,* Indian Journal of Law and Justice, Vol. 11, No. 1, 2020, pp. 183-201
14. Edwards, A., *International Refugee Law*, in: Moeckli, D.; Shah, S.; Sivakumaran, S. (eds.), International Human Rights Law, 3rd edition, Oxford University Press, Oxford, 2018
15. Felipe Perez, B., *The European Climate Visa as a Legal Instrument for the Protection of Climate Migrants,* Revista Espanola de Derecho Internacional, Vol. 74, No. 1, 2022, pp. 193-200
16. Fiddian-Qasmiyeh, E. *et al.*, *Introduction: Refugee and Forced Migration Studies in Transition,* in: Fiddian-Qasmiyeh, E. *et al.* (eds.), The Oxford Handbook of Refugee and Forced Migration Studies, Oxford University Press, Oxford, 2014, pp. 1-20
17. Francis, R. A., *Migrants Can Make International Law,* Harvard Environmental Law Review, Vol. 45, No. 1, 2021, pp. 99-150
18. Gemenne, F. *et al., How climate extremes are affecting the movement of populations in the Asia Pacific region,* in: Price, S.; Singer, J., Global Implications of Development, Disasters and

Climate Change Responses to Displacement from Asia Pacific, Routledge, New York, 2016, pp. 21-40.

19. Gogarty, B., *Climate-change Displacement: Current Legal Solutions to Future Global Problems,* Journal of Law, Information and Science, Vol. 21, No. 1, 2011, pp. 167-188
20. Haris, A., How *a Universal Definition May Shape the Looming Climate Refugee Crisis,* Human Rights Brief, Vol. 24, No. 3, 2021, pp. 194-197
21. Hodgkinson, D. *et al.*, *"The hour when the ship comes in": A Convention for Persons Displaced by Climate Change,* Monash University Law Review, Vol. 36, No. 1, 2010, pp. 69-120
22. Johnsson, A., *Climate Change in International Environmental Law,* Eastern and Central Europe Journal on Environmental Law, Vol. 17, No. 2, 2013, pp. 1-36
23. Joseph, S.; McBeth, A., *Research Handbook on International Human Rights Law,* Edward Elgar, 2010
24. Kälin, W.; Schrepfer, N., *Protecting People Crossing Borders in the Context of Climate Change: Normative Gaps and Possible Approaches,* United Nations High Commissioner for Refugees, Division of International Protection, Geneva, 2012
25. Kent, A.; Behrman, S., *Facilitating the Resettlement and Rights of Climate Refugees An Argument for Developing Existing Principles and Practices,* Routledge, New York, 2018
26. Koubi, V. *et al.*, *The Determinants of Environmental Migrants' Conflict Perception,* International Organisation, Vol. 72, No. 4, 2018, pp. 905-936
27. Lapaš, D., *Međunarodnopravna zaštita izbjeglica,* Hrvatski pravni centar, Zagreb, 2008
28. Lopez, A., The *Protection of Environmentally-Displaced Persons in International Law,* Environmental Law, Vol. 37, No. 2, 2007, pp. 365-410
29. Marinică, C. E., *TheEuropean Union Climate Neutrality and Climate Migrants,* Law Review, Vol. XI, No. 2, 2021, pp. 2-13
30. McAdam, J., *'Disappearing States', Statelessness and the Boundaries of International Law*, UNSW Law Research Paper, No. 2, 2010, pp. 1-23
31. McCormack, C. B., *America's Next Refugee Crisis: Environmentally Displaced Persons,* Natural Resources & Environment, Vol. 32, No. 4, 2018, pp. 8-12
32. McLeman, R., *Climate Change Migration, Refugee Protection, and Adaptive Capacity-Building,* McGill International Journal of Sustainable Development Law and Policy, Vol. 4, No. 1, pp. 1-18
33. Mileski, T.; Malish-Sazdovska, M., *Environmentally Displaced Persons,* Environmental Policy and Law, Vol. 48, No. 2, 2018, pp. 133-137
34. Moberg, K. K., *Extending Refugee Definitions to Cover Environmentally Displaced Persons Displaces Necessary Protection,* Iowa Law Review, Vol. 94, No. 3, 2009, pp. 1107-1136
35. Murray, S., *Environmental Migrants and Canada's Refugee Policy,* Refuge: Canada's Journal on Refugees, Vol. 27, No. 1, Spring 2010, pp. 89-102
36. Myers, N., *Environmental Refugees: a Growing Phenomenon of the 21st Century,* Philosophical Transactions: Biological Sciences, No. 357, 2002, pp. 609-613
37. Passarini, F., *Protection of Environmental Migrants in Italy in Light of the Latest Jurisprudential Developments,* The Italian Yearbook of International Law, Vol. 31, pp. 446-452

38. Pelzer, M., *Environmentally Displaced Persons Not Protected - Further Agreement Required,* Environmental Policy and Law, Vol. 39, No. 2, 2009, pp. 90-91
39. Popescu, A., *The First Acknowledged Climate Change Refugee?,* Romanian Journal of International Law, Vol. 23, 2020, pp. 96-116
40. Price, S., *Introduction,* in: Price, S.; Singer, J., Global Implications of Development, Disasters and Climate Change Responses to Displacement from Asia Pacific, Routledge, New York, 2016, pp. 1-18
41. Prieur, M., *Draft Convention on the International Status of Environmentally-Displaced Persons,* Urban Lawyer, Vol. 42, No. 1/4, 2011, pp. 247-258
42. Rayfuse, R., *International Law and Disappearing States - Maritime Zones and the Criteria for Statehood,* Environmental Policy and Law, Vol. 41, No. 6, 2011, pp. 281-287
43. Ross, N. J., *Low-Lying States, Climate Change-Induced Relocation, and the Collective Right to Self-Determination,* Faculty of Law, University of Wellington, Wellington, 2019
44. Salaj, Z., *Međunarodno pravo i izazovi održivog razvoja: Klimatske promjene, države koje tonu i migracije,* Zagrebačka pravna revija, Vol. 6, No. 2, 2017, pp. 203-227
45. Sciaccaluga, G., *International Law and Protection of "Climate Refugees",* Palgrave Macmillan, 2020
46. Smith, R.K.M., *International Human Rights Law*, 10th edition, Oxford University Press, Oxford, 2022
47. Verheyen, R., *Climate Change Damage and International Law – Prevention Duties and State Responsibility,* Martinus Nijhoff Publishers, Leiden/Boston, 2005
48. Vershuuren, J., *Legal Aspects of Climate Change Adaptation,* in: Hollo, E. J.; Kulovesi, K.; Mehling, M. (eds.), Climate Change and the Law, Springer, 2012
49. Wong, D., *Sovereignty Sunk - The Position of Sinking States at International Law,* Melbourne Journal of International Law, Vol. 14, No. 2, 2013, pp. 346-391
50. Zink, I., *Storm Warning: New Zealand's Treatment of "Climate Refugee" Claims as a Violation of International Law*, American University International Law Review, Vol. 37, No. 2, 2022, pp. 441-482

INTERNATIONAL DOCUMENTS

1. African Union Convention for the Protection and Assistance of Internally Displaced Persons in Africa (Kampala Convention) of 2009, available at the official web pages of the African Union, [https://au.int/en/treaties/african-union-convention-protection-and-assistance-internally-displaced-persons-africa], Accessed 24 April 2023
2. Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer, 15 October 2016, United Nations, C.N.872.2016.TREATIES-XXVII.2.f
3. Cartagena Declaration on Refugees, Colloquium on the International Protection of Refugees in Central America, Mexico and Panama, 22 November 1984, [https://www.refworld.org/docid/3ae6b36ec.html], Accessed 23 April 2023
4. Convention on Biological Diversity (CBD), *United Nations Treaty Series* , Vol. 1760, p. 79

5. Convention relating to the Status of Refugees of 1951, *United Nations Treaty Series*, Vol. 189, p. 137
6. Doha Amendment to the Kyoto Protocol, 8 December 2012, United Nations, C.N.718.2012. TREATIES-XXVII.7.c
7. General Assembly draft resolution: New Urban Agenda, 21 November 2016, A/71/L.23
8. General Assembly Resolution: Addis Ababa Action Agenda of the Third International Conference on Financing for Development (Addis Ababa Action Agenda), 27 July 2015, A/RES/69/313
9. General Assembly Resolution: Sendai Framework for Disaster Risk Reduction 2015–2030, 3 June 2015, A/RES/69/283
10. General Assembly Resolution: Transforming our world: the 2030 Agenda for Sustainable Development, 25 September 2015, A/RES/70/1
11. International Convention on the Protection of the Rights of All Migrant Workers and Members of their Families of 1990, *United Nations Treaty Series*, Vol. 2220, p. 3
12. International Organisation for Migration, *Migration and the Environment*, discussion note, MC/INF/288, 1 November 2007
13. Kyoto Protocol to the United Nations Framework Convention on Climate Change, *United Nations Treaty Series*, Vol. 2303, p. 162
14. OAU Convention Governing the Specific Aspects of Refugee Problems in Africa of 1969, *United Nations Treaty Series*, Vol. 1001, p. 45
15. Paris Agreement, 12 December 2015, *United Nations Treaty Series*, Vol. 3156
16. Protocol relating to the Status of Refugees of 1967, *United Nations Treaty Series*, Vol. 606, p. 267
17. UN Guiding Principles on Internal Displacement of 1998, E/CN.4/1998/53/Add.2
18. UNHCR, Climate change, natural disasters and human displacement: A UNHCR perspective, 23 October 2009
19. United Nations Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa, *United Nations Treaty Series*, Vol. 1954, p. 3
20. United Nations Framework Convention on Climate Change (UNFCCC), *United Nations Treaty Series*, Vol. 1771, p. 107

REPORTS

1. Brown, O., *Migration and Climate Change,* International Organisation for Migration, Geneva, 2008
2. *Synthesis Report on the IPCC Sixth Assessment Report (AR 6), Longer Report,* Intergovernmental Panel on Climate Change, 2023
3. *The Synthesis Report: The Intergovernmental Panel on Climate Change*, IPCC AR6 SYR, 2023

WEBSITE REFERENCES

1. *2020 Tied for Warmest Year on Record,* NASA Analysis Shows, official web pages of NASA, [https://www.nasa.gov/press-release/2020-tied-for-warmest-year-on-record-nasa-analysis-shows], Accessed 25 May 2023
2. *A Complex Nexus*, Official web pages of the International Organisation for Migration, [https://www.iom.int/complex-nexus], Accessed 25 May 2023
3. Apap, J., *The concept of 'climate refugee': towards a possible definition,* European Parliamentary Research Service, PE 621.893 – February 2019, p. 1 [https://www.europarl.europa.eu/RegData/etudes/BRIE/2018/621893/EPRS_BRI(2018)621893_EN.pdf], Accessed 25 May 2023
4. *Global trends*, official web pages of the OHCHR, [https://www.unhcr.org/global-trends], Accessed 24 April 2023
5. *International Migration Law: Glossary on Migration*, International Organisation for Migration, Geneva, 2019, [https://publications.iom.int/system/files/pdf/iml_34_glossary.pdf], Accessed 25 May 2023
6. Ionesco, D., *Let's Talk About Climate Migrants, Not Climate Refugees,* 2019. [https://www.un-.org/sustainabledevelopment/blog/2019/06/lets-talk-about-climate-migrants-not-climate-refugees/], Accessed 25 May 2023
7. Kugelmann, D., *Refugees*, Max Planck Encyclopedias of International Law, Oxford University Press, [https://opil.ouplaw.com/home/mpil], Accessed with subscription 24 April 2023
8. Official pages of the Conference of the Parties (COP), [https://unfccc.int/process/bodies/supreme-bodies/conference-of-the-parties-cop], Accessed 25 May 2023
9. Official web pages of the World Meteorological Organisation, [https://public.wmo.int/en/media/press-release/2020-was-one-of-three-warmest-years-record], Accessed 25 May 2023

UDK 342.7:502]:342.565.2(497.5)
Review article

THE ''GREEN" CONSTITUTION OF THE REPUBLIC OF CROATIA AND THE CONSTITUTIONAL COURT AS A PROTECTOR OF THE RIGHT TO A HEALTHY ENVIRONMENT

Anita Blagojević, PhD, Full Professor
Josip Juray Strossmayer University of Osijek, Faculty of Law
Stjepana Radića 13, Osijek, Croatia
ablagoje@pravos.hr

Marijana Majnarić, PhD candidate
Constitutional Court of the Republic of Croatia
Trg Svetog Marka 4, Zagreb, Croatia
marijana_majnaric@usud.hr

ABSTRACT

Unlike the "pioneer" constitutions, which contained guarantees of personal and political rights in their provisions, newer constitutions, or constitutions of the 20th century, began to guarantee social and economic rights in their provisions, and among them soon appeared the right to a healthy environment. Similar to the constitutions of other new democracies, the Constitution of the Republic of Croatia belongs to the ranks of environmentally conscious constitutions. The right to a healthy environment was part of the Constitution of the Socialist Republic of Croatia from 1974, and after the establishment of the independent and sovereign Republic of Croatia, it became part of the Constitution of 1990. In Croatia, since the very beginning of independence, the conservation of nature and the human environment have been included in the category of the highest values of the constitutional order (Article 3), which represent the foundation for the interpretation of the Constitution. In the part of the Constitution that refers to human rights and fundamental freedoms, we find provisions on restrictions of entrepreneurial freedom and property rights in order to protect nature, the environment and human health, then on special protection of the state to all things and goods of special ecological significance. It is also clearly prescribed that everyone has the right to a healthy life, and that the state has a certain responsibility for environmental protection. The Constitutional Court takes care of the protection of constitutionality and the protection of environmental rights. The aim of this paper is to analyze how the constitutions of the new democracies relate to environmental pro-

tection, whether the Constitution of the Republic of Croatia is really a "green" Constitution, and based on the analysis of the previous practice of the Constitutional Court in environmental cases, reach a conclusion about the approach and the role of the Constitutional Court of the Republic of Croatia as a protector of the right to healthy environment.

Keywords: *Constitution of the Republic of Croatia, Constitutional Court, green constitution, right to a healthy environment*

1. INTRODUCTION

Although environmental law and environmental rights started to develop as late as the second half of the 20th century, it is apparent that this particular intersection of constitutional and international law, human rights, and environmental rights[1] has since become one of the liveliest and most dynamic areas of dialogue in contemporary constitutional politics. The landmark moment in the process of constitutionalizing environmental rights is considered to be the 1972 United Nations Conference on the Human Environment with the respective Stockholm Declaration on the Human Environment, which "famously recognized the human right to healthy environment."[2] From this moment on, we have witnessed a "dramatic increase"[3] in the number of countries that demonstrated their dedication to environmental protection by "greening" their constitutions, as well as an increase in the number of various documents in the domain of environmental protection, making up the architecture of human rights on international and regional levels,[4] notably recent resolutions of the United Nations Human Rights Council (8 October 2021) and of the General Assembly (28 July 2022), which could prove to be powerful catalysts towards formal recognition of the human right to clean, healthy and sustainable environment on the global scale[5]. Another influential example contributing to this trend is the position of the European Parliament in its resolu-

---

1 Daly, E., May, J. R., *Global environmental constitutionalism: a right-based primer for effective strategies*, Jindal Global Law Review, 6(1), 2015, p. 21.

2 Collins, L., *The Ecological Constitution; Reframing Environmental Law,* Routledge, London and New York, 2021, p. 4.

3 Gellers, J., *Greening Constitutions with Environmental Rights: Testing the Isomorphism Thesis*, Review of Policy Research, Vol. 29, No. 4, 2012, p. 527.

4 Here we have in mind the Rio Declaration on Environment and Development (1992), the Aarhus Convention (1998), the African Charter on Human and People's Rights (1981), the Additional Protocol to the American Convention on Human Rights (1999).

5 See: SDG Knowledge Hub, *UNGA Recognizes Human Right to Clean, Healthy, and Sustainable Environment*, 3 August 2022 [https://sdg.iisd.org/news/unga-recognizes-human-right-to-clean-healthy-and-sustainable-environment/#:~:text=The%20UN%20General%20Assembly%20(UNGA,and%20sustainable%20environment%20for%20all.], Accessed 20 March 2023.

tion Biodiversity strategy for 2030, from June 2021, advocating recognition of the right to a healthy environment in the EU Charter.[6]

The environment and its protection are a fairly new element in the so-called *materiae constitutionis*.[7] Unlike the "pioneer" constitutions, which contained guarantees of personal and political rights in their provisions, newer constitutions, or constitutions of the 20th century, began to guarantee social and economic rights in their provisions, and among them soon appeared the right to a healthy environment. Similar to the constitutions of other new democracies, the Constitution of the Republic of Croatia belongs to the ranks of environmentally conscious constitutions. The right to a healthy environment was part of the Constitution of the Socialist Republic of Croatia from 1974, and after the establishment of the independent and sovereign Republic of Croatia, it became part of the Constitution of 1990. In Croatia, since the very beginning of independence, the conservation of nature and the human environment have been included in the category of the highest values of the constitutional order (Article 3), which represent the foundation for the interpretation of the Constitution. In the part of the Constitution that refers to human rights and fundamental freedoms, we find provisions on restrictions of entrepreneurial freedom and property rights in order to protect nature, the environment and human health, then on special protection of the state to all things and goods of special ecological significance. It is also clearly prescribed that everyone has the right to a healthy life, and that the state has a certain responsibility for environmental protection. The Constitutional Court takes care of the protection of constitutionality and the protection of environmental rights. The aim of this paper is to analyze how the constitutions of the new democracies relate to environmental protection, whether the Constitution of the Republic of Croatia is really a "green" Constitution, and based on the analysis of the previous practice of the Constitutional Court in environmental cases, reach a conclusion about the approach and the role of the Constitutional Court of the Republic of Croatia as a protector of the right to a healthy environment.

2. "GREENING" THE CONSTITUTION

Around fifty years ago, the concept of human right to a healthy environment probably seemed like a pretty radical idea. Since then, however, such progress has been

---

6 See: European Parliament Research Service, *A universal right to a healthy environment*, 14 December 2021 [https://epthinktank.eu/2021/12/14/a-universal-right-to-a-healthy-environment/], Accessed 20 March 2023

7 Bačić, A., *Ustavni temelji i problemi zaštite okoliša u hrvatskom i europskom pravu*, Zbornik radova Pravnog fakulteta u Splitu, Vol. 45, No. 4, 2008, p. 730.

made in this respect, we can now safely say it was the most rapid expansion of any right in the last five decades.[8] As one of the so-called solidarity rights, also known as the third generation of human rights, the right to a healthy environment began to develop in the second half of the 20th century, more precisely after the above-mentioned Stockholm Declaration from 1972. Therefore, it is not found in any of the pioneering international human rights documents (the Universal Declaration of Human Rights, the International Covenant on Civil and Political Rights, and the International Covenant on Economic, Social and Cultural Rights), nor in any of the pioneer constitutions. The world's oldest constitution, the United States Constitution (1787), does not mention the concept of "environment," although the specific nature of this country's constitutional development allowed the development of environmental rights in the second half of the 20th century to proceed notwithstanding, largely owing to the Congress' intensive legislative work and the activist approach of the Supreme Court.[9] Another classic constitutionalist country, France, approached constitutional environmental rights in a unique way, by incorporating in its 1958 Constitution the Charter for the Environment (2005)[10], a document strongly proclaiming and affirming rights and obligations concerning the environment and sustainable development.

The rapid spread of the constitutionalization of environmental rights can be traced back to the mid-1970s, when Portugal (1976) and Spain (1978) were the first two countries in the world to incorporate the right to a healthy environment in their constitutions.[11] By mid-1990s, this right was constitutionalized in around fifty countries, by mid 2000s in around sixty,[12] and today the environment is granted constitutional protection in more than 100 countries,[13] 90 of which explicitly guarantee the right to healthy environment in their constitutions, while another 12 or more do so implicitly,[14] through interpretations of constitutional provisions

---

8 Boyd, R. D., *The Constitutional Right to a Healthy Environment*, Environmental Magazine, Vol. 54, No. 4, p. 5.

9 Bačić, A., *op. cit.*, note 7, p. 731.

10 Charter for the Environment, 2005 [https://www.conseil-constitutionnel.fr/sites/default/files/as/root/bank_mm/anglais/charter_environnement.pdf], Accessed 20 March 2023.

11 Boyd, D. R., *op. cit.*, note 7, p. 5.

12 May, J. R., *The Case for Environmenatl Human Rights: Recognition, Implementation, and Outcomes*, Cardozzo Law Review, Vol. 42:3, 2021, p. 993.

13 Human Rights Council, *Good practices of States at the national and regional levels with regards to human rights obligations relating to the environment*, 23 January 2020 [https://digitallibrary.un.org/record/3872337], Accessed 20 March 2023.

14 Boyd, D. R., *The Implicit Constitutional Right to Live in a Healthy Environment*, Review of European Community & International Environmental Law, Vol. 20, No. 1, 2011, p. 171.

by competent supreme or constitutional courts.[15] We should add to these numbers the countries incorporating the right to healthy environment in environmental legislation (more than 100 countries) and regional agreements (more than 125 countries).[16]

Most of the countries that have constitutionalized the right to healthy environment are in Europe, Central Asia, Latin America, and Sub-Saharan Africa.[17] The reasons for such an uneven distribution of constitutional protection of environmental rights in different parts of the world lie in a combination of domestic and international circumstances, whereas these rights have been observed to enjoy better protection in countries whose constitutions contain a wide range of economic, social and cultural rights.[18] The rapid "greening" of constitutions, and the ensuing adoption of executive environmental legislation, was prompted by various factors. Apart from the mentioned influence of the Stockholm Declaration, there is an effect of migration of constitutional ideas, not only in constitutional documents, but also in the case-law of national courts. For example, the provision from the Portuguese Constitution, "right to a healthy and ecologically balanced environment" is found today in 21 other constitutions.[19] Regional influences should also be noted, i.e. regional documents and case-law of regional courts and commissions, notably the European Court of Human Rights (hereinafter: ECHR), which has, in the absence of an explicit provision on environmental protection in the Convention for the Protection of Human Rights and Fundamental Freedoms, acknowledged environmental rights in its case-law[20], as has the European Court of Justice. The EU accession process and the related requirement to harmonize all legislation with the *acquis communitaire* of the European Union has had a considerable influence on environmental legislation, especially in Eastern Europe.

The constitutionalization of environmental rights involves a lot of variety in terms of terminology, definitions, and procedural elements of exercising these rights. In general, it can be said that constitutions recognize two forms of articulating

---

15 Boyd includes the following 12 countries in this list: Bangladesh, Estonia, Guatemala, India, Israel, Italy, Malaysia, Nigeria, Pakistan, Sri Lanka, Tanzania and Uruguay. Ibid., p. 172.

16 Human Rights Council, *op. cit.*, note 13, p. 3.

17 Gellers, J., *op. cit.*, note 3, p. 529.

18 *Ibid.,* p. 993.

19 Boyd, D. R., *op. cit.*, note 14, p. 178.

20 Bačić, P., *O značaju prava na informaciju u upravljanju okolišem i zaštiti ljudskih prava*, Zbornik radova Pravnog fakulteta u Splitu, Vol. 45, No. 4, 2008, p. 814 Environmetal cases have been examined by the Court in large number of cases concerning rights such as the right to life, the right to respect for private and family life, the right to fair trial. See, for example: Council of Europe, *The Execution of Judgements of the European Court of Human Rights. Environment*, October 2020 [https://rm.coe.int/thematic-factsheet-environment-eng/1680a00c09], Accessed 21 March 2023.

environmental rights, and these are "fundamental rights or statements of public policy".[21] It is also important to note that constitutional protection of the right to healthy environment occurs in two ways: by legislators, i.e. by way of constitutional provisions, and via courts and their interpretations of existing fundamental rights.[22] In their global overview of environmental constitutionalism, Daly and May state that at least 76 countries guarantee the rights to "quality", "clean", "healthy", "adequate", "harmonious", "productive", and "sustainable" environment in their constitutions, while more than 120 constitutions worldwide guarantee the protection of natural resources, including water, flora and fauna, land, minerals, soil, air, forest, nature, and energy.[23] They also mention that some constitutions contain provisions tailored towards ameliorating the harmful effects of certain activities on the environment, such as disposal of chemical or radioactive materials, while others are aimed towards long-term interests of future generations.[24] Constitutions of many countries contain provisions on reciprocal obligations between the government and citizens in the area of environmental protection, and three thirds of constitutions establish special procedural rights pertaining to the environment, such as right to information, participation and access to justice.[25] In countries without explicit constitutional provisions on environmental rights, such rights are protected through competent courts' interpretation of existing fundamental rights such as the right to life, dignity and health.[26] Still, we should note that even though general constitutional provisions exist on the responsibility of governments and individuals for the environment, such provisions are not enforceable and can only be viewed as a statement of the ethics of common responsibility to nature and the environment.[27]

Constitutions of new democracies are not only well-equipped with a variety of social and economic rights, but can also be considered "green". The Constitution of Bulgaria, for example, contains a provision on "the right to a healthy and favourable environment" (Art. 55); the Constitution of Czechia guarantees "the right to a favourable environment", as well as "the right to timely and complete information about the state of the environment and natural resources" (Art. 35), while the Constitution of Romania lays down "the right of every person to a healthy and

21 Gellers, J., *op. cit.*, note 3, p. 527.

22 Boyd, D. R., *op. cit.*, note 14, p. 171.

23 Daly, E., May, J. R., *op. cit*, note 1, p. 24.

24 *Ibid.*, p. 25.

25 *Ibid.*

26 *Ibid.*

27 Bačić, P., *op. cit.*, note 20, p. 818.

ecologically balanced environment" (Art. 35).[28] Reasons for the environmental awareness of Eastern European constitutions should be sought in circumstances such as the influence of old socialist constitutions and their provisions on environmental social rights, decades of disregard for these and other human rights, but also in the "pursuit of legitimacy in the eyes of the international community".[29] The process of Europeanisation has also played a significant role in strengthening environmental legislation in these countries.

3. THE "GREEN" CONSTITUTION OF THE REPUBLIC OF CROATIA

At the time of adopting their constitutions, the constitution makers of Eastern European new democracies were already familiar with other countries' constitutional templates, which regularly contained provisions on social-economic rights, including the right to a healthy environment.[30] This was also the case in Croatia, which, additionally, had to honor the fact its old Constitution of the Socialist Republic of Croatia from 1974 contained a provision on "the right to a healthy living environment".[31]

A distinctive feature of the Croatian constitution maker in adopting the Constitution of 22 December 1990 was the formulation of constitutional values, which included "preservation of nature and human environment". This, and other constitutional values listed in Art. 3 of the Constitution, represent not "merely" "constitutional fundamentals"[32] and the basis for interpreting the Constitution, but also a defining structural element of the Croatian constitutional state – its con-

---

28 UN General Assembly, *Recognition of the Right to a Healthy Environment in Constitutions, Legislation and Treaties: Eastern European Region*, 14 February 2020 [https://www.ohchr.org/en/special-procedures/sr-environment/good-practices-right-healthy-environment], Accessed 21 March 2023.

29 Gellers, J., *op. cit.*, note 3, p. 529.

30 Bačić, A., *op. cit.*, note 7, p. 741.

31 The respective Article of the 1974 Constitution prescribed the following: ''Human beings have the right to a healthy environment. The community provides the conditions for exercising this right. Everyone who uses land, water or other natural resources is obliged to do so in a way that ensures the conditions for work and life of humans in a healthy environment. Everyone is obliged to preserve nature and its goods, natural sights and rarities and cultural monuments. Misuse of natural resources and introduction of toxic and other harmful materials into water, sea, soil, air, food and objects of general use are punishable." Article 276 of the 1974 Constitution, translated by Lana Ofak, cited in: Ofak, L., *The Approach of the Constitutional Court of the Republic of Croatia towards the protection of the right to a healthy environment*, Journal of Agricultural and Environmental Law, 31, 2001, p. 85.

32 Bačić, A., *Ustav Republike Hrvatske i najviše vrednote ustavnog poretka*, Zbornik radova Pravnog fakulteta u Splitu, Vol. 49, No. 1, 2012, p. 19.

stitutional identity, so to speak – as confirmed by the Constitutional Court in its case-law since 2013.[33]

Environmental laws are integral to the Constitution's architecture pertaining to guarantees of economic, social and cultural rights. The 1990 Croatian Constitution originally guaranteed the right to healthy environment in its Art. 69 by complementing the right to a healthy life with an obligation of the state to "ensure the right of citizens to a healthy environment", and the duty "of citizens, government, public and economic bodies and associations to pay special attention to the protection of human health, nature and the human environment, within the scope of their powers and activities".[34] The change of the constitution from 2001 affected the above provision, now stating in Art. 70 that the state is no longer required to guarantee citizens' "right" to healthy environment, but "conditions" for healthy environment, while the words "citizens, government, public and economic bodies and associations" were replaced with the word "everybody".[35] Even though the constitutional change from guaranteeing the "right to" to guaranteeing the "conditions for" healthy life can be considered a step backwards in terms of environmental rights, systematic interpretation of the Constitution confirms without doubt its continued protection of the right to a healthy environment.

Alongside Art. 3 and Art. 70 as core constitutional articles, Art. 50 is another "green" provision, based on which free enterprise and proprietary rights can be exceptionally curtailed for the purpose of, *inter alia*, the protection of nature, human environment and human health. Art. 52, in a similar vein, establishes special protection of certain things and goods, including natural resources and parts of nature, while Art. 135, paragraph 1 states that units of local self-government are obliged to, *inter alia*, protection and improvement of the natural environment.

On the one hand, apart from constitutional provisions, the legal framework for environmental protection includes the Environmental Protection Act as an umbrella environmental act, and a series of special environment acts, such as Air Protection Act, Forest Act, Act on Protection from Noise, Act on Protection against Light Pollution, etc. The Criminal Act assures the protection of the environment through a special section on crimes against the environment.[36] On the other hand,

---

33 See, for example: Gardašević, Đ., *Popular initiatives, populism and the Croatian Constitutional Court*, in: Populist Challenges to Constitutional Interpretation in Europe and Beyond, Routledge, 2021, p. 109-125.

34 The Constitution of the Republic of Croatia, Official Gazette, No. 56/1990.

35 The Change of the Constitution of the Republic of Croatia, Official Gazette, No. 28/2001.

36 For more on the legal environmental framework see, for example: Staničić. F., *Constitutional Protection of the Right to a Healthy Life – Do We Need More to Safeguard the Environment and Future Generations?,*

the institutional framework of environmental protection consists of competent state and public authorities, notably the Ministry of Economy and Sustainable Development, courts, the Ombudsman, and the State Inspectorate. Finally, the Constitutional Court of the Republic of Croatia plays a key role in the protection of environmental rights.

4. CONSTITUTIONAL PROTECTION OF THE RIGHT TO A HEALTHY ENVIRONMENT: A SELECTION OF THE CONSTITUTIONAL COURT'S CASE-LAW

The science and practice of law have recognized the environment as an object needing legal protection, which is achieved in nearly all traditional branches of law. Environmental protection laws, like any other laws, must be in accordance with the Constitution, while other regulations must be in accordance with the Constitution and the law. Although the Republic of Croatia has laws aimed towards reducing pollution, protection of biodiversity and limiting climate change, their provisions are not always implemented. It is up to competent state and public authorities and courts to recognize the values required and provided by the Constitution, so that, in the future, the Constitution's prescriptions could be normatively worked out in more detail, and also to allow holders of the right to a healthy environment (people, nation, citizens, community) to refer to provisions that guarantee this right. As human rights are rarely absolute and unlimited, in most cases they need to be balanced with other rights. According to Ofak, "the aim of the constitutional right to healthy environment is to achieve a better balance between conflicting interests, i.e. to give due attention to environmental protection as opposed to entrepreneurial freedoms that traditionally took precedence. The principle of proportionality, normally applied by courts when handling conflicts between rights and interests protected by the constitution, is just as applicable in resolving disputes in matters of environmental protection."[37]

In this sense, the Constitutional Court has made a great step forward in upholding European democratic standards and balancing conflicting interests in its decisions in which it effectively implemented and strengthened the normative framework relevant to environmental protection as one of the core values of our constitutional order. In general, cases related to the protection of the right to healthy environment can appear in the context of reviewing the constitutionality of laws

in: Constitutional Protection of the Environment and Future Generations, Miskolc-Budapest, Central European Academic Publishing, 2002, p. 127-160.

37 Ofak, L., *op. cit.,* note 31, p. 203 .

and the constitutionality and legality of other regulations[38], and in the context of deciding on constitutional complaints[39].

4.1. Regulation on service areas[40]

Upon request by five applicants, the Constitutional Court instituted proceedings to review the constitutionality and legality of a piece of secondary legislation – the Regulation on service areas. By the Constitutional Court's decision the Regulation on service areas was repealed – in its entirety.[41] The Regulation established water areas as geographical units in which existing public providers of water services, managed and owned by municipal authorities in the respective areas, are merged with companies newly founded in order to provide water services in these specific areas. The disputed Regulation that was repealed by the Decision regulated the establishment of 41 service areas for the provision of water services, defined their borders, and named 41 acquiring companies. In these Constitutional Court proceedings for review of the constitutionality and legality of the above Regulation five service areas were disputed with an essentially equivalent claim that existing providers of water services meet the criteria for their own independent service area and should therefore be exempted from the obligation to merge. The applicants claimed that every attempt at merging would be questionable from the viewpoint of business efficiency and effectiveness of the future public water service provider, and that there are no obstacles preventing the applicants from continuing to do business independently as public water service providers. They claim they were not given the opportunity to make comments and objections to the content of the disputed Regulation, and cite this fact as a violation of procedure in its adoption process. Upon evaluating the applicants' claims, the Constitutional Court found

---

38 Art. 38, paragraph 1 of The Constitutional Act on the Constitutional Court of the Republic of Croatia, Official Gazette No. 99/1999, 29/2002 and 49/2002 – consolidated text; hereinafter: the Constitutional Act states: "Every individual or legal person has the right to propose the institution of proceedings to review the constitutionality of the law and the legality and constitutionality of other regulations". Article 44, paragraphs 1 and 2 of the Constitutional Act read: "The proceedings to review the constitutionality of the law or the constitutionality and legality of other regulations shall be considered instituted on the day the request was received by the Constitutional Court; the proceedings to review the constitutionality of the law and the constitutionality and legality of other regulations upon the proposal shall be considered instituted on the day the ruling to institute the proceedings was brought.".

39 Art. 62, paragraph 1 of the Constitutional Act states: "Everyone may lodge a constitutional complaint with the Constitutional Court if he deems that the individual act of a state body … which decided about his/her rights and obligations, or about suspicion or accusation for a criminal act, has violated his/her human rights or fundamental freedoms guaranteed by the Constitution … ".

40 Regulation on service areas, Official Gazette No. 147/2021.

41 Constitutional Court Decision No. U-II-627/2022 and others from 7 February 2023.

that, in the Regulation, the Government failed to cite reasons and arguments to support the claim that establishing service areas in the way it proposed would fulfil the requirements prescribed by the Water Services Act[42], nor did it substantiate whether the Regulation would achieve the primary legitimate aim intended by this law.

The Constitutional Court decided that the primary legitimate aim sought by the WSA 66/19 – which is to secure an affordable price of water for citizens and businesses, the availability of water in sufficient quantity and quality, as well as drainage services, while respecting the principles laid down in Article 5 of the WSA 66/19 (continuous, effective, efficient, and purposeful performance of water services) – does not at all follow from the Regulation's contents. According to Kušan and Selanec,[43] "in the absence of clear, concrete, and convincing reasons indicating that establishing new service providers in specific water service areas will ensure: 1) improved sanitary quality of supplied water; 2) greater accessibility of such water to a greater number of people, and 3) better social accessibility of the service (socially sensitive pricing); we are left with the unacceptable possibility of some kind of water 'gerrymandering' in which water service areas will be arbitrarily or single-handedly tailored and redrawn based on political allegiance and opportunism, instead of the positive obligation to protect public health and environment prescribed by Article 69 of the Constitution. This kind of political arbitrariness would constitute not only a violation of fundamental rights from Article 69 of the Constitution, but also – by eroding the constitutional guarantee of the democratically-based right to local self-government from Article 128 – a violation of the principle of limited government guaranteed by Article 4 of the Constitution."

4.2. Regulation on municipal waste management[44]

Based on 62 applications, the Constitutional Court instituted proceedings to review the constitutionality and legality of a piece of secondary legislation, namely the contested articles of the Regulation on municipal waste management and Regulation on amendments to Regulation on municipal waste management.[45] The applicants claimed that the contested Regulation created the conditions for unequal calculation of prices for services of mixed municipal waste disposal, which lead to

---

42 Hereinafter: WSA 66/2019.

43 Concurring opinion of judges Lovorka Kušan and Goran Selanec regarding Decision No. U-II-627/2023 and others from 7 February 2023.

44 Regulation on municipal waste management, Official Gazette No. 50/2017 and 84/2019.

45 Constitutional Court Decision No. U-II-2492/2017 from 23 March 2021.

discrimination of users in terms of amount and price for the same waste category, which should be equal for all.

They claimed that calculating the minimum price of services should be done by the service provider, not the municipal authority, and that users who have significantly less waste are placed at a disadvantage compared to those who generate significantly more. They claimed the contested articles violated the provisions of the Consumer Protection Act, and allowed a situation in which a co-owner could be punished for the actions of third parties. Finally, they claimed that the cited contested articles of the Regulation placed excess burden on individuals, which makes such provisions incompatible with the principle of proportionality prescribed by Article 16 of the Constitution.

The Constitutional Court decided that Regulation 84/19 amending Regulation 50/17 had put additional burden (unequally and disproportionately) on natural and legal persons in terms of prices of waste disposal and management in that it increased the fines in case of non-compliance with this additional burden. The Court decided that such provisions imply the established model of waste disposal and management is unable to achieve its primary goal – protection of the environment, nature and health as fundamental constitutional values – without serious and disproportionate restriction of the rights and interests of natural and legal persons.

Taking into account the importance of waste disposal and management for the protection of human health, nature, and the environment, the Constitutional Court, in evaluating the justification for the decision, cited the constitutional guarantee prescribed in Article 69 of the Constitution, in light of the fact that, pursuant to Article 3 of the Constitution, protection of nature and the human environment is cited among the fundamental values of the constitutional order of the Republic of Croatia. The Constitutional Court decided that the applicants' arguments were sufficient to conclude that implementing Regulation 84/19 amending Regulation 50/17 would have harmful consequences for both the interests of citizens and the development of the waste disposal system, which is instrumental in fulfilling the constitutional obligation of particular attention to protection of human health, nature and the environment. All the more so because, with time, not only would the potential cost of correcting the resulting damage increase, in terms of additional cost of eventually changing this method of waste disposal, but its potential inability to achieve its goal would be detrimental in the sense of non-compliance with the constitutional obligation of special attention to the constitutional value of environmental protection (Article 69 of the Constitution).

4.3. Law on short-rotation woody crop cultures[46]

The Constitutional Court rejected the applicant's request to institute proceedings to review the constitutionality of the law, namely, individual articles of the Law on short-rotation woody crop cultures.[47] In these Constitutional Court proceedings to review the constitutionality of the LSRWCC, the applicant claims the legislator opted for the most restrictive approach (prohibiting cultivation of short-rotation crop cultures on all categories of agricultural land), despite the availability of less stringent measures, which would be less onerous for agricultural land owners. He cites the practice in other European Union member states of growing short-rotation crop cultures on all, including the highest-quality categories of agricultural land. He claims the legislator failed to specify and substantiate a legitimate aim that would justify constraining citizens to certain practices, i.e. restricting the cultivation of crop cultures to only certain categories of land. The Constitutional Court decided there were no legitimate grounds for instituting proceedings to review the constitutionality of contested articles of the LSRWCC.

The Constitutional Court reminded that the Republic of Croatia, in accordance with Article 52 of the Constitution, is obliged to accord particular attention to preserving nature and its values. The Constitutional Court found that the legislator, within the scope of its powers and obligations arising from the Constitution, took appropriate legislative measures in the contested articles of the LSRWCC, with the legitimate aim of producing biomass from short-rotation crop cultures, as a renewable and environmentally acceptable energy source on agricultural land of lower quality, while preserving higher quality agricultural land for cultivating food crops, and imposed fines for non-compliance (i.e. for cultivating short-rotation crop cultures on land where such cultivation is prohibited, and for cultivation outside the prescribed time period from crop establishment). The Constitutional Court found that the disputed articles of the LSRWCC achieved a legitimate aim – creating conditions for the production of biomass from short-rotation crop cultures as a renewable and environmentally acceptable energy source, while preserving higher quality agricultural land for cultivating food crops.

---

46 Law on short-rotation woody crop cultures, Official Gazette No. 15/2018 and 111/2018; hereinafter LSRWCC.

47 Constitutional Court Decision U-I-1859/2020 from 8 June 2021.

4.4. The Energy Efficiency Act[48]

Following the applicant's proposal, the Constitutional Court instituted proceedings to review the constitutionality of the Energy Efficiency Act,[49] and repealed Article 29, paragraph 1, and Article 30, paragraph 2 therein.

The applicant claimed the EEA regulated co-owners rights in the process of decision-making in affairs of regular or extraordinary management in a fundamentally different way than the organic Law on Ownership and other Real Property Rights. The Constitutional Court stated that Article 3 of the EEA prescribed the purpose of the law, which is also the interest of the Republic of Croatia, and which includes achieving the goals of sustainable energy development. These goals are: reducing the negative environmental impact of the energy sector, improving the safety of energy supply, meeting the needs of energy consumers, and fulfilling international obligations of the Republic of Croatia in terms of reducing greenhouse gas emissions by encouraging measures of energy efficiency in all sectors of energy consumption. It also prescribes that efficient use of energy is in the interest of the Republic of Croatia. In the instant case, contested provisions stipulated that, for multi-residential buildings, the decision on entering into energy performance contracts and contracts on energy efficient renovation is made by co-owners by a majority vote calculated according to ownership shares and number of co-owners. The Constitutional Court decided that the legislator predicted two criteria for deciding on entering into contracts, whereas the two criteria may be in mutual conflict. The Constitutional Court concluded it was unclear how majority vote would be achieved by counting according to two criteria, and whether one of them had priority. Such a provision is therefore subject to different interpretations, which could lead to problems in its implementation.

4.5. Law on genetically modified organisms[50]

The Constitutional Court rejected the applicant's request to institute proceedings to review the constitutionality of the law, namely, article 52, paragraph 8 of the LGMO.[51] The applicant claimed that Article 52c[52] of the Law on genetically modified organisms derogates from and violates constitutional rights and obli-

---

48 The Energy Efficiency Act, Official Gazette No. 127/2014, 116/2018; hereinafter EEA.

49 Constitutional Court Decision No. U-I-663/2020 from 23 March 2021.

50 Law on genetically modified organisms, Official Gazette No. 70/2005, 46/2007, 137/2009, 28/2013, 47/2014, 15/2018, and 115/2018; hereinafter LGMO.

51 Constitutional Court Decision No. U-I-2535/2018 from 26 February 2019.

52 Article 52c prescribes restriction or prohibition of cultivation of GMO crops, goals of environmental and agricultural policies, development of resistance, use of land, etc.

gations of municipal authorities. The Constitutional Court found that reasons stated in Article 52, paragraph 2, points a), c), d), e), f), and g) of the LGMO, for which Article 52c, paragraph 8 of this law prescribes the Croatian Government's authority to decree the restriction or prohibition of the cultivation of GMO crops in part of or all the territory of the Republic of Croatia, fall within the state's obligation to ensure conditions for a healthy environment prescribed by Article 69, paragraph 2 of the Constitution. The Constitutional Court decided that the prescription of the Government's authority did not conflict with the right of municipal authorities to perform activities from their local scope which directly meet citizens' needs and which concern spatial and urban planning and protection and improvement of the natural environment, guaranteed by Article 129a, paragraph 1 of the Constitution.

4.6. Regulation on commercial sea fishing with coastal seine nets[53]

The Constitutional Court rejected the applicant's request to institute proceedings to review the constitutionality of a piece of secondary legislation – the Regulation on commercial sea fishing with coastal seine nets.[54] The applicant claims that fishing with "migavica" seine nets was forbidden in an unconstitutional way, because no study was done to show these nets do not damage Neptune grass. The Constitutional Court found that goals of fishing policies are determined at the state level, as are methods of management and protection of renewable biological resources and other issues relevant to sea fishing. The disputed Regulation was adopted with the express purpose of harmonizing fishing policies with those of the European Union, a goal consistent with public interest – to ensure sustainability of biological resources caught by coastal seine nets within safe biological limits, and according to conducted scientific studies and analyses. It follows that restricting fishing in specific zones, periods, or with specific tools is proportional to the legitimate aim sought by the Regulation.

4.7. Water Services Act[55]

The Constitutional Court rejected the request of 4 applicants to institute proceedings to review the constitutionality of disputed articles of the Water Services Act.[56] The applicants claimed that disputed articles of the WSA prescribed an obligation

53 Regulation on commercial sea fishing with coastal seine nets, Official Gazette No. 30/2018, 49/2018, 78/2018, 54/2019, 27/2021.

54 Constitutional Court Decision No. U-II-6841/2021 from 7 March 2023.

55 Water Services Act, Official Gazette No. 66/2019; hereinafter WSA.

56 Constitutional Court Decision No. U-I-3379/2019 and others from 8 June 2021.

to merge all existing public water service providers with a public provider that will be determined by the Regulation on service areas, and that citizens and their representative bodies were prevented from independent, free and self-governing decision-making on the arrangement and performance of communal services of water supply and drainage – activities of immediate interest to the local community, which were also defined by the Constitution as activities of local scope. They believe the WSA has no legitimate aim, and that any statement of such is based on vague, indeterminable, and unverifiable information. They also claim the concept of "water affordability" belongs to the category of fundamental human rights. The Constitutional Court reminded that the legislator has a right and an obligation to regulate ways in which waters, as an asset of interest to the Republic of Croatia (Article 52, paragraph 1 of the Constitution), can be used and exploited, especially when such use and exploitation regards public water supply (especially in the aspect of ensuring its sanitation) and public drainage (especially in the aspect of purifying waste water to an environmentally safe level). The Constitutional Court decided that the contested provisions of the WSA do not derogate from the right to local self-government in the water services sector, placing a restriction only on the right to choose the institutional framework and geographical area for providing services (service area) for the sake of common and public interest. In conclusion, the Constitutional Court found the applicants' claims of non-compliance of the disputed articles with Article 3 of the Constitution unfounded, and rejected the rest of the proponents' claims on the grounds of no conditions for examining the merits of the case.

4.8. Constitutional Court Decision No. U-III-1114/2014 from 27 April 2016[57]

The Constitutional Court ruled in the proceedings instituted via constitutional complaint by the Croatian Society for the Protection of Birds and Nature from Osijek. The constitutional complaint was lodged against the High Administrative Court's decision No. Us-9789/2011-5 from 26 September 2013 dismissing the applicant's complaint against a decision by the Ministry of Environmental Protection, Physical Planning and Construction in a case regarding assessment of the environmental impact of irrigation works in the Lower Neretva – Koševo-Vrbovci subsystem. The case preceding the constitutional court proceedings was instituted on proposal by the project owner, the institution Hrvatske vode d.o.o., to assess the environmental impact of irrigation works in Lower Neretva – Koševo-Vrbovci subsystem, from 26 July 2010. According to the report on the public hearing

[57] Published on [www.usud.hr.

held on 25 January 2011, during the session opinions, comments and statements from the public and interested parties were recorded, among them the applicant's comments – Croatian Society for the Protection of Birds and Nature – claiming that the Study was poorly done and scientifically unfounded; that the solutions it proposes do not solve any problems related to the use and maintenance of water quality in the Lower Neretva, deterioration of hydrological conditions, loss of water from the system, the system's inefficiency; that the Study completely ignores the fact that the Lower Neretva area is considered a wetland of international importance; that it fails to properly address the problem of intensive agricultural production with respect to sustainable use of natural resources; that it fails to provide alternative solutions; that the study derogates from provisions of national legislation, conservation objectives of the Ecological Network, and international obligations. The proponent claims in her constitutional complaint that the High Administrative Court violated her economic, social and cultural right guaranteed by Article 52 of the Constitution. The Constitutional Court found that the proponent had the opportunity to participate in the process of adopting the disputed decision; that she had the opportunity to make comments on the conducted study and the planned works, which she did, and that the Ministry gave reasoned answers to her objections. The fundamental conclusion of the Constitutional Court is that all the proponent's comments and objections were responded to during the public hearing and in supplements to the Study, and that both the Study and the decision from 27 May 2011 were made by professionals qualified for conducting such studies.The High Administrative Court emphasized that the Government initiated the National program of irrigation and management of agricultural land and waters, and that four national pilot irrigation projects were set up, one of which is the Lower Neretva irrigation system. Therefore, relevant expert bodies performed checks and found that the pilot irrigation project of Lower Neretva will not harm the delta of the Neretva River as a wetland of international importance. The Constitutional Court concluded that the proponent's constitutional right to fair trial, guaranteed by Article 29, paragraph 1 of the Constitution was not violated, and decided her objections with respect to Articles 18, 19 (1), 118 (3), 141 and 145 of the Constitution were unfounded.

4.9. Environmental pollution as a violation of the right to private and family life

At the time of this writing, the Constitutional Court has not yet been presented with a case related to violation of the right to privacy, family life and home in the sense of environmental pollution reaching a level that affects conditions for enjoying privacy, family life and home, which would, according to the ECHR, consti-

tute a violation of said right. The ECHR has, however, initiated proceedings following a complaint by applicants Tolić and others[58] and declared their application inadmissible. The applicants claimed that domestic authorities did not adequately and effectively respond to their allegations and that they were exposed to a serious health risk for several years due to water pollution in their residential building.[59]

The applicants cited a violation of Articles 8[60] and 13[61] of the Convention,[62] however, the Court assessed that their complaints should be examined under Article 8 of the Convention. The applicants were owners of flats in residential buildings in Zagreb (Vrbani III), built in 2005 and 2006. In May 2006, a sanitary inspection found that the water in the flats did not meet sanitary and health standards. However, the competent office of the City of Zagreb issued a permit for use of the building (occupancy permit), effective from 26 February 2007. In September 2007, the applicants received a notice from the Sanitary Inspectorate not to use the water in their flats because it was contaminated with mineral oils, and that it should only be used for flushing. Subsequent expert reports, ordered in the civil and criminal proceedings, confirmed the presence of mineral oils in the water supply system of the residential buildings in question. The ECHR decided that the applicants did not exhaust all domestic legal remedies available to them in procedures of obtaining and revoking the occupancy permit for the building at issue, and it found their complaint inadmissible in this respect, because it is manifestly ill-founded. The ECHR concluded the Republic of Croatia has taken all reasonable measures[63] to secure the protection of the applicants' rights and that their application is inadmissible.

Although the Constitutional Court did not rule in the above case, it is worth noting that there is an extensive case-law of the ECHR on the issue, which will

58 Tolić and others v. Croatia, Application No. 13482/2015, Decision from 4 June 2019.

59 The "Vrbani water" case.

60 Article 8 of the Convention guarantees, inter alia, the right to respect for private life, and corresponds to Article 35 of the Constitution.

61 Right to an effective remedy.

62 Convention for the Protection of Human Rights and Fundamental Freedoms Official Gazette – International Agreements No. 18/1997, 6/1999 - consolidated text, 8/1999 - correction, 14/2002, 1/2006 and 13/2017.

63 Allegations of environmental harm in the instant case did not, as such, concern the State's involvement in industrial pollution. The water pollution was caused by private companies, not the State. In such a situation, the ECHR's task was to assess whether the State undertook all reasonable measures to ensure the protection of the applicants' rights in accordance with Article 8 of the Convention.

undoubtedly be applicable in future decisions on violations of the right to healthy environment.[64]

5. CONCLUSION

Despite unquestionable and continuous progress achieved in the last few decades in terms of constitutionalizing the right to a healthy environment, debates about the importance of constitutional provisions on environmental protection continue on two fronts. The first consists of those who see potential benefits of constitutionalizing this right in the increased difficulty involved in changing constitutional provisions as opposed to laws, in better implementation, and greater participation, but also greater responsibility of citizens in decisions concerning the environment.[65] On the other front are the critics who think that, despite its constitutionalization, this right is too vague and general to be successfully protected, that it is unactionable, unenforceable, and most often ineffective, and even represents a threat to democracy due to shifting the balance of power from the (elected) legislator to the judges.[66] Both of them are partly right, because, at first glance, constitutional provisions on environmental protection are lacking and insufficient to achieve real results in the movement towards environmental protection. Still, a closer look makes clear the importance of the constitutional right to a healthy environment. The place of this right in the architecture of human rights provisions in the constitution shows not only the constitution's environmental awareness and the constitutional commitment to sustainable growth, but also a clear roadmap for politicians to design their environmentally aware policies without turning a blind eye to holders of this right and to reality which is anything but optimistic when it comes to the environment.

As one of the environmentally conscious Constitutions, the Croatian Constitution contains a number of "green" provisions, notably Article 3 and the constitutional value of "conservation of nature and the environment". This, and other

---

64 See for example Di Sarno and Others v. Italy, Application no. 30765/08, Judgment from 10 January 2012; Guerra and Others v. Italy, Application No. 116/1996/735/932, Judgment from 19 February 1998; Otgon v. The Republic of Moldova, Application No. 22743/2007, Judgment from 25 January 2017; X and Y v. The Netherlands, Application No. 8978/1980, Judgment from 26 March 1985; Pretty v. The United Kingdom, Application No. 2346/2002, Judgment from 29 April 2002; G.B. and R.B. v. The Republic of Moldova, Application No. 16761/2009, Judgment from 18 December 2012; Powell and Rayner v. The United Kingdom, Application No. 9310/1981, Judgment from 21 February 1990; Hatton and Others v. The United Kingdom, Application No. 36022/97, Judgment from 8 July 2000 [https://hudoc.echr.coe.int/eng#{%22appno%22:[%2236022/97%22]}], Accessed 25 March 2023.

65 Boyd, D. R., *op. cit.,* note 8, p. 5.

66 *Ibid.*

constitutional values represent not "merely" "constitutional fundamentals" and the basis for interpreting the Constitution, but also a defining structural element of the Croatian constitutional state – its constitutional identity, so to speak. From this perspective, the selected examples of the Constitutional Court's case-law show an awareness of the importance and scope of the State's obligation to ensure conditions for a healthy environment prescribed by Article 69, paragraphs 2 and 3 of the Constitution, while respecting the values from Article 3 of the Constitution, particularly the principle of the rule of law. Although the Constitutional Court's case-law is currently focused on monitoring constitutionality and legality, it is quite certain that the near future will "tip the scales" towards deciding on constitutional complaints, as is the case in other European countries.[67]

Finally, it would be worthwhile to consider suggestions to upgrade provisions on environmental protection in future amendments to the Constitution. Some suggestions have already been made. Barić, for example, suggests that sustained development, right to water, ban on privatization of drinking water sources, and socially responsible management be added to the Constitution, and that the provision on the state's responsibility for ensuring conditions for a healthy environment be supplemented with the obligation to "encourage comprehensive management of environmental protection and achieving sustainable development and ensuring education and informing of citizens in the area of environmental protection."[68]

Stanišić also suggests constitutionalizing sustainable development and the right to water, as well as restoring the original constitutional provision on the right to a healthy environment, as well as institutionally strengthening environmental protection by establishing a dedicated ombudsman.[69] We cannot but agree with these suggestions, especially those that concern constitutionalizing sustainable development and the right to water.

REFERENCES

BOOKS AND ARTICLES

1. Bačić, A., *Ustav Republike Hrvatske i najviše vrednote ustavnog poretka*, Zbornik radova Pravnog fakulteta u Splitu, Vol. 49, No. 1, 2012

67 Ofak, L., *op. cit.*, note 31, p. 97.

68 Barić, S., *Ustav, ali najljepši. Premise kvalitete funkcioniranja ustavnog poretka i potrebe tekstualnih izmjena Ustava Republike Hrvatske*, in: Ustavne promjene i političke nagodbe. Republika Hrvatska između ustavne demokracije i populizma, HAZU, Zagreb, 2021, p. 197.

69 Stanišić, F., *op. cit.*, note 36, p. 156-157.

2. Bačić, A., *Ustavni temelji i problemi zaštite okoliša u hrvatskom i europskom pravu*, Zbornik radova Pravnog fakulteta u Splitu, Vol. 45, No. 4, 2008
3. Bačić, P., *O značaju prava na informaciju u upravljanju okolišem i zaštiti ljudskih prava*, Zbornik radova Pravnog fakulteta u Splitu, Vol. 45, No. 4, 2008
4. Barić, S., *Ustav, ali najljepši. Premise kvalitete funkcioniranja ustavnog poretka i potrebe tekstualnih izmjena Ustava Republike Hrvatske, u: Ustavne promjene i političke nagodbe. Republika Hrvatska između ustavne demokracije i populizma*, HAZU, Zagreb, 2021
5. Boyd, D. R., *The Implicit Constitutional Right to Live in a Healthy Environment*, Review of European Community & International Environmental Law, Vol. 20, No. 1, 2011, p. 171
6. Boyd, R. D., *The Constitutional Right to a Healthy Environment*, Environmental Magazine, Vol. 54
7. Collins, L., *The Ecological Constitution; Reframing Environmental Law,* Routledge, London and New York, 2021
8. Daly, E.; May, J. R., *Global environmental constitutionalism: a right-based primer for effective strategies*, Jindal Global Law Review, Vol. 6, No. 1, 2015
9. Gardašvić, Đ., *Popular initiatives, populism and the Croatian Constitutional Court*, in: Populist Challenges to Constitutional Interpretation in Europe and Beyond, Routledge, 2021
10. Gellers, J., *Greening Constitutions with Environmental Rights: Testing the Isomorphism Thesis*, Review of Policy Research, Vol. 29, No. 4, 2012
11. May, J. R., *The Case for Environmenatl Human Rights: Recognition, Implementation, and Outcomes*, Cardozzo Law Review, Vol. 42, No. 3, 2021
12. Ofak, L., *The Approach of the Constitutional Court of the Republic of Croatia towards the protection of the right to a healthy environment*, Journal of Agricultural and Environmental Law, 31, 2001
13. Staničić. F., *Constitutional Protection of the Right to a Healthy Life – Do We Need More to Safeguard the Environment and Future Generations?,* in: Constitutional Protection of the Environment and Future Generations, Miskolc-Budapest, Central European Academic Publishing, 2002

ECHR

1. *Di Sarno and others v. Italy*, Application no. 30765/2008, Judgment, 10 January 2012
2. *G.B. and R.B. v. The Republic of Moldova*, Application no. 16761/2009, Judgment, 18 December 2012,
3. *Guerra and others v. Italy*, Application no 116/1996/735/932, Judgment, 19 February 1998,
4. *Hatton and others v. The United Kingdom*, Application no. 36022/1997, Judgment, 8 July 2000
5. *Otgon v. The Republic of Moldova*, Application no. 22743/2007, Judgment, 25 January 2017,
6. *Powell and Rayner v. The United Kingdom*, Application no. 9310/1981, Judgment, 21 February 1990,
7. *Pretty v. The United Kingdom*, Application no. 2346/2002, Judgment, 29 April 2002,

8. *Tolić and others v. Croatia*, Application No. 13482/2015, Decision from 4 June 2019
9. *X and Y v. The Netherlands*, Application no. 8978/1980, Judgment, 26 March 1985,

EU LAW

1. Charter for the Environment, 2005
2. Convention for the Protection of Human Rights and Fundamental Freedoms, Official Gazette – International Agreements No. 18/1997, 6/1999 - consolidated text, 8/1999 - correction, 14/2002, 1/2006 and 13/2017
3. European Parliament Research Service, *A universal right to a healthy environment*, 14 December 2021
4. Human Rights Council, *Good practices of States at the national and regional levels with regards to human rights obligations relating to the environment*, 23 January 2020
5. Rio Declaration on Environment and Development (1992), the Aarhus Convention (1998)
6. The African Charter on Human and People's Rights (1981),
7. The Additional Protocol to the American Convention on Human Rights (1999)… etc.
8. UN General Assembly, *Recognition of the Right to a Healthy Environment in Constitutions, Legislation adn Treaties: Eastern European Region*, 14 February 2020

LIST OF NATIONAL REGULATIONS, ACTS AND COURT DECISIONS

1. Concurring opinion of judges Lovorka Kušan and Goran Selanec regarding Decision No. U-II-627/2023 and others from 7 February 2023
2. Constitutional Court Decision, No. U-I-1859/2020 from 8 June 2021
3. Constitutional Court Decision, No. U-I-2535/2018 from 26 February 2019
4. Constitutional Court Decision, No. U-I-3379/2019 and others from 8 June 2021
5. Constitutional Court Decision, No. U-I-663/2020 from 23 March 2021
6. Constitutional Court Decision, No. U-II-2492/2017 from 23 March 2021
7. Constitutional Court Decision, No. U-II-627/2022 and others from 7 February 2023
8. Constitutional Court Decision, No. U-II-6841/2021 from 7 March 2023
9. Constitutional Court Decision, No. U-III-1114/2014 from 27 April 2016
10. Law on genetically modified organisms, Official Gazette No. 70/2005, 46/2007, 137/2009, 28/2013, 47/2014, 15/2018, and 115/2018
11. Law on short-rotation woody crop cultures, Official Gazette No. 15/2018 and 111/2018
12. Regulation on commercial sea fishing with coastal seine nets, Official Gazette No. 30/2018, 49/2018, 78/2018, 54/2019, 27/2021
13. Regulation on municipal waste management, Official Gazette No. 50/2017 and 84/2019
14. Regulation on service areas, Official Gazette No. 147/2021
15. The Change of the Constitution of the Republic of Croatia, Official Gazette No. 28/2001
16. The Constitution of the Republic of Croatia, Official Gazette No. 56/1990

17. The Constitutional Act on the Constitutional Court of the Republic of Croatia, Official Gazette No. 99/1999, 29/2002 and 49/2002
18. The Energy Efficiency Act, Official Gazette No. 127/2014, 116/2018
19. Water Services Act, Official Gazette No. 66/2019

WEBSITE REFERENCES

1. IISD, https://sdg.iisd.org/news/unga-recognizes-human-right-to-clean-healthy-and-sustainableenvironment/#:~:text=The%20UN%20General%20Assembly%20(UNGA,and%20sustainable%20environment%20for%20all.], Accessed 20 March 2023
2. European Parliamentary Research Service, *A universal right to a healthy environment*, [https://epthinktank.eu/2021/12/14/a-universal-right-to-a-healthy-environment/], Accessed 20 March 2023
3. CHARTER FOR THE ENVIRONMENT [https://www.conseilconstitutionnel.fr/sites/default/files/as/root/bank_mm/anglais/charter_environnement.pdf], Accessed 20 March 2023
4. United Nations, [https://digitallibrary.un.org/record/3872337], Accessed: 20 March 2023
5. Environment, Environment Department for the Execution of Judgments of the European Court of Human Rights [https://rm.coe.int/thematic-factsheet-environment-eng/1680a00c09], Accessed 21 March 2023
6. United Nations, [https://www.ohchr.org/en/special-procedures/sr-environment/good-practices-right healthy-environment], Accessed 21 March 2023
7. Constitutional Court, [www.usud.hr], Accessed 25 March 2023
8. European Court of Human Rights, [https://hudoc.echr.coe.int/eng#{%22appno%22:[%2236022/97%22]}], Accessed, 25 March 2023

UDK 37.014:504
502.14:061(4-67EU)
Review article

EDUCATION FOR SUSTAINABLE DEVELOPMENT AND GREEN TRANSFORMATION OF THE EU

Ranka Jeknić, PhD, Assistant Professor
Faculty of Law, Sociology Department, University of Split,
Domovinskog rata 8, Split, Croatia
ranka.jeknic@pravst.hr

ABSTRACT

Based on a review of professional literature and documents (UN and UNESCO international documents, strategic documents of the Republic of Croatia), scientific literature (social ecology, interdisciplinary literature) and using a hermeneutic approach as well as analysis and comparison of available secondary data, this paper first presents and analyses the concept of EDS and then examines the issue of its implementation and representation at different levels of formal education in Croatia (first in the pre-school and school system and then in the higher education system). Finally, the results of the analysis are presented and the discrepancy between policy recommendations and strategies and practise, i.e. the implementation of CE, EDC and ESD in the Croatian educational context, is highlighted, as well as the need for changes in teacher training and the need to change or harmonise the existing educational programmes with the goals of the European "green transition".

Keywords: *European „green transition", education for sustainable development, higher education system, pre-school and school system, sustainable development*

1. INTRODUCTION

When Jeremy Rifkin wrote about "the European Dream" in 2004, he pointed out that "the European Union is the first governing institution in history to emphasize human responsibilities to the global environment as a centre piece of its political vision"[1], as well as "the first political unit to seriously entertain the new vision of the Earth as an indivisible living community deserving of respect".[2] Rifkin sees this

[1] Rifkin, J., *The European Dream: How European's Vision of the Future Is Quietly Eclipsing the American Dream*, Jeremy P. Tarcher/Penguin, New York, 2004, p. 325.

[2] *Ibid.,* pp. 340-341.

commitment to "global environmental responsibility", as "the emergence of a new frame of mind, for which there is no historical precedent".[3] Furthermore, Rifkin believes that a "new science" and "new Enlightenment" was being created, and sees this as fundamental to understanding of "the European Dream, with its emphasis on inclusivity, diversity, quality of life, sustainability, deep play, universal human rights and the rights of nature, and peace".[4] According to Rifkin, during 2004, the EU has already demonstrated its "commitment to sustainable development" (SD) and "global environmental stewardship" by promoting a series of "global environmental treaties and accords and institutionalizing the precautionary principle into its regulatory policies".[5] This commitment to SD is even more open and noticeable today, when we are talking about the "European Green Deal", adopted in 2019, and according to which "all 27 EU Member States committed to turning the EU into the first climate neutral continent by 2050".[6]

The fight against climate change, as well as the entire planned "green transition", includes a whole series of planned activities and transformations: the plan to transform the EU economy and societies, to encourage the sustainable use of natural resources, to create greener mobility and make transport sustainable, to use clean technologies and products, to reduce the energy consumption of buildings, to increase the energy savings, etc.[7]Moreover, the fight against climate change is recognised not only as a major challenge, but also as an opportunity to create a new economic model, which in turn "creates new opportunities for innovation, investment and jobs".[8] For example, "the green transition" predicts creation "around 1 million jobs in the EU by 2030, and 2 million jobs by 2050", and those are particularly "green jobs" in the construction sector and manufacturing[9], and in "growing green sectors such as renewable energy and energy efficiency", but this is conditional and depends "on the availability of relevant skills and training".[10]

---

3 *Ibid.,* p. 325.

4 *Ibid.,* p. 358.

5 *Ibid.,* p. 341.

6 European Commission, *European Green Deal: delivering on ourtargets*, 2021, available at: [https://ec.europa.eu/commission/presscorner/api/files/attachment/869807/EGD_brochure_EN.pdf.pdf], Accessed 13 June 2023.

7 *Ibid.*

8 *Ibid.*

9 European Commission, *A Socially Fair Transition*, 2021, available at: [https://op.europa.eu/en/publication-detail/-/publication/e355c630-00e6-11ec-8f47-01aa75ed71a1/language-en], Accessed 13 June 2023.

10 UN Environment Programme, *Global Guidance for Education on Green Jobs,* 2021, p. 2, 15, available at: [https://wedocs. unep.org/20.500.11822/35070], Accessed 10 February 2022.

In the implementation of the European Green Plan, EU citizens have a special role to play, as they are expected to participate equally and actively in the different areas of the Plan's implementation, in the green and "socially fair transition" of the EU towards a sustainable society.[11] In addition to the changes in transport, industry and the economy aimed at achieving climate neutrality in the EU, the green transition confronts the Union's population with a number of different challenges and changes. For example, citizens are expected to participate more in decision-making processes to strengthen "active green citizenship" and deliberative democracy; to create a "greener lifestyle" and change their consumption habits (by choosing sustainable products and developing responsible consumption as opposed to unsustainable production and consumption patterns); to acquire new knowledge and skills as workers, to meet the demands of green jobs (in construction, energy, transport and other industries, eco-innovation), and to pursue relatively new professions such as "environmental manager", "environmental consultant", "sustainable development expert", etc. Namely, for the SD of the EU and the green and socially fair transition of the EU towards a sustainable society, which includes the active participation of citizens, different forms of functional literacy are important (e.g. political, legal, digital, environmental, climate literacy, etc.), which implies not only the acquisition of different knowledge and skills, but also their understanding, linking, critical approach and application in everyday life and society.

In this sense, we can highlight the importance of environmental and climate literacy as one of the main prerequisites or assumptions and tools for understanding the fight against climate change, mastering the issue of SD and sustainability, as well as for the general understanding and active participation in the whole EU green transition. The term "ecological literacy" refers to the "knowledge of the codes for communication between humans and nature that correspond to the respective level of development".[12] Furthermore, "ecological literacy" can be explained by referring to questions such as: "What and how much do people know about the environmental problem, how is this knowledge socially distributed, how is this knowledge used in shaping everyday life and structuring public power",[13] etc. Another term is "climate literacy" or "climate change literacy". A climate literate person: "understands the basic principles of the planetary climate system"; "knows how to obtain scientifically reliable information about climate change", and is "able to make informed and responsible decisions regarding actions that

11 European Commission, *op. cit.* note 9.

12 Cifrić, I., *Leksikon socijalne ekologije*, Školska knjiga, Zagreb, 2012, p. 96.

13 Kalanj, R., *Pismenost i djelovanje*. Socijalna ekologija, Vol. 5, No. 3, 1996, p. 398.

may affect the climate".[14] In other words, climate literate people are those people who "can improve the quality of life in a given area with information, knowledge and actions related to climate and climate change".[15] In addition, one can speak even more broadly of the need to develop "literacy for sustainability".[16] In short, this is all forms of functional literacy that encompass knowledge, skills, understanding, feelings, attitudes, values, and decision-making and action competence, which, together with other forms of literacy, can be considered as a prerequisite for active participation in the green transition in the EU.

Furthermore, it is important to accept and develop the societal values of sustainability (values of ecological, social, economic and political sustainability)[17], as well as the European values (such as freedom, solidarity, equality, justice, human rights, etc.). Therefore, the issue of "Education for Sustainable Development" (ESD), which encompasses these different but interrelated knowledge, skills and values, has been revisited over the last thirty years both in the implementation of the European Green Plan and in various international documents and strategic programmes, as well as in the interdisciplinary scientific literature. The aim of this paper is to analyse the issue of its representation and implementation at different levels of formal education in Croatia, first in the pre-school and school system, and then in the higher education system.

2. "EDUCATION FOR SUSTAINABLE DEVELOPMENT" (ESD)

In the scientific-theoretical and normative-political, international and global context, the term SD "has been used for fifty years, and by the mid-nineties of the last century, "more than sixty definitions, interpretations and visions" could be found in the literature.[18] It was firstly mentioned in the early seventies of the last century in the context of the "Club of Rome" founded in 1968 with the 1972 thesis "on the limits to growth", then at the "Stockholm Conference" in 1972, etc.[19] However, one of the most commonly used definitions is the following definition ofSD given by the WCED in its 1987 report "Our Common Future": "SD is development that meets the needs of the present without compromising the ability of

---

14 Lay, V., Klimatska pismenost: analiza osnovnih prepreka razvoju i širenju klimatske pismenosti. *Socijalna ekologija*, Vol. 25, No. 1-2, 2016, p. 45.

15 *Ibid.*

16 Cifrić, *op. cit.* note 12, p. 273.

17 Lay, V.; Puđak, J., Sociološke dimenzije odgoja i obrazovanja za održivi razvoj, in: Uzelac, V; Vujčić, L. (eds.), *Cjeloživotno učenje za održivi razvoj, Svezak 1*, Sveučilište u Rijeci, Učiteljski fakultet u Rijeci, Rijeka, 2008, p. 99.

18 Cifrić, *op. cit.* note 12, p. 279.

19 *Ibid*., p. 271.

future generations to meet their own needs", and "it contains within it two key concepts: the concept of 'needs', in particular the essential needs of the world's poor, to which overriding priority should be given", as well as "idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs".[20] The above-mentioned concept of SD was later adopted at the UN "Conference on Environment and SD"in Rio de Janeiro in 1992, and since "Agenda 21" as a action programme for the 21st century, one can speak about of an evolution of the concept of ESD.[21] Namely, Chapter 36 "Promoting Education, Public Awareness and Training" clearly states for the first time that education is "crucial to promoting SD and enhancing people's capacity to address environment and development issues" and emphasises that the implementation of formal and non-formal education is a necessary condition for, "changing people's attitudes so that they are able to evaluate and address their concerns with a view to SD", but also "crucial for achieving environmental and ethical awareness, values and attitudes, skills and behaviour compatible with SD, and for effective public participation in decision-making processes".[22] "Agenda 21" also emphasises the need for a "reorientation of education towards SD" and its integration "in all disciplines", as well as the inclusion of "formal and non-formal methods and effective means of communication".[23]

Since then, ESD has become almost a first-class topic in contemporary discussions on SD, with a growing body of literature on various aspects, implementation guidelines, contents, goals, challenges its implementation causes, but also the opportunities it offers for education. Thus, the "Decade of Education for Sustainable Development" (DESD) (2005-2015) was proclaimed on UN, during which a number of "global initiatives for design and implementation" ESD were launched "as a key contribution to promoting SD in societies around the world"[24], and then "Sustainable Development Goals" (SDGs) of "The 2030 Agenda for Sustainable Development" were also established.[25] In short, the need for implementation of

---

20 WCED, *Our Common Future. Report of the World Commission on Environment and Development,* 1987, available at: [https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf], Accessed 8 March 2023.

21 Cifrić, *op. cit.* note 12, p. 271.

22 WCED, *op. cit.* note 20, p. 320.

23 *Ibid*.

24 Michelsen, G.; Welles, P. J. (ed.), *A Decade of Progress on Education for Sustainable Development. Reflectionsfrom the UNESCO Chairs Programme*. UNESCO, 2017, p. 8.

25 The SDGs were adopted by all members of UN in 2015, and the 17 SDGs are as follows: 1. "No Poverty"; 2. "Zero Hunger"; 3. "Good Health and Well-being"; 4. "Quality Education"; 5. "Gender Equality"; 6. "Clean Water and Sanitation"; 7. "Affordable and Clean Energy"; 8. "Decent Work and Economic Growth"; 9. "Industry, Innovation and Infrastructure"; 10. "Reduced Inequalities"; 11.

EDS at three different but interrelated levels is recognised worldwide: first, the need for implementation within the framework of formal education in educational institutions; second, implementation within the framework of non-formal education, i.e. "outside the usual educational institutions, for example through the activities of non-governmental organisations", and third, "through the media (newspapers, television, radio)", so that EDS becomes "an integral part of daily life" for all of us.[26] In the following part of the paper, we will focus only on the analysis of the first level of implementation, i.e. the implementation of EDS in formal education in Croatia.

3. "EDUCATION FOR SUSTAINABLE DEVELOPMENT" (ESD) IN CROATIA: ANALYSIS OF THE DIFFERENT LEVELS OF EDUCATION

3.1. "Education for Sustainable Development" (ESD) in the Strategic Development Documents of the Republic of Croatia

The review of the strategic development documents of the Republic of Croatia suggests that Croatia opted for SD at the declarative level as early as 1992, when the "Declaration on Environmental Protection" was adopted, shortly before "the World Summit on Environment and Development in Rio de Janeiro".[27] In the aforementioned declaration, Croatia committed itself to SD "based on sustainable agriculture, forestry, maritime economy and tourism, as well as an economy and industry based on environmentally clean technologies"[28]. Nevertheless, the 2009 "National Strategy for Sustainable Development" should be highlighted as the most strategically important or fundamental document for Croatia's orientation towards SD.[29] For the topic of this paper, it is particularly important to emphasise that this strategy, as a prerequisite for Croatia's SD, highlights the importance and necessity of rapid and comprehensive changes in the education system, and that

"Sustainable Cities and Communities"; 12. "Responsible Consumption and Production"; 13. "Climate Action"; 14. "Life Below Water"; 15. "Life on Land"; 16. "Peace, Justice and Strong Institutions"; 17. "Partnerships for the goals". UN, *Transforming Our World: The 2030 Agenda for Sustainable Development*, 2015, available at: [https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf], Accessed 9 March 2023.

[26] Mićanović, M. (ed.), *Obrazovanje za održivi razvoj: Priručnik za osnovne i srednje škole.* Agencija za odgoj i obrazovanje, Zagreb, 2011, p. 26.

[27] Matešić, M., *Principi održivog razvoja u strateškim dokumentima Republike Hrvatske*, Socijalna ekologija, Vol. 18, No. 3-4, 2009, p. 324.

[28] *Ibid.*

[29] *Strategija održivog razvitka Republike Hrvatske*, Narodne novine br. 30/2009, available at: [https://narodne-novine.nn.hr/clanci/sluzbeni/2009_03_30_658.html], Accessed 9 March 2023.

education is highlighted as a prerequisite for "achieving SD because it contributes to greater social cohesion and well-being by investing in social capital, creating equal opportunities, especially for those in a less favourable position, and involving the public".[30] Furthermore, the above-mentioned strategy, and in line with the UN's DESD identifies different themes of EDS and refers to the importance of changing and adapting "existing curricula at all levels of formal education" to include, to a greater extent, "principles and values of sustainability and the interdisciplinary interpenetration of its three components"(that is, social, economic and ecological component).[31] Then, the document "Strategic Framework for Development 2006-2013" is worth highlighting, in which SD is emphasised as a priority to be fulfilled, and people, knowledge and education, along with other strategic areas, are highlighted as integral and indispensable to its realisation[32]. However, despite this strategic documents there were no intention "to include SD in education programmes" for the same period in the document "Development Plan for the Education System for 2005-2010", which should follow them in terms of implementation.[33]

Then, the "National Development Strategy of the Republic of Croatia until 2030" should be highlighted as the currently relevant, basic strategic document for Croatia's orientation towards SD.[34] This strategy defines "priorities for the long-term SD of the country", sets goals that are in line with the "European Green Plan" and highlights "investment in people" as a strategic development factor.[35] It also highlights four development directions of Croatia until 2030: firstly, "sustainable economy and society", secondly, "strengthening crisis resilience", thirdly, "green and digital transition" and fourthly, "balanced regional development".[36] In contrast to the 2009 Strategy, the 2021 Strategy does not mention ESD, but emphasises the importance of education, and "educated and employed people" are seen as key prerequisites for achieving SD in Croatia.[37] The importance of education at

30 *Ibid.*

31 *Ibid.*

32 Vlada Republike Hrvatske, *Strateški okvir za razvoj 2006-2013*, 2006, available at: [https://razvoj.gov.hr/UserDocsImages//arhiva/Publikacije//Strateski_okvir_za_razvoj_2006_2013.pdf], Accessed 9 March 2023.

33 Ministarstvo znanosti, obrazovanja i športa, *Plan razvoja sustava odgoja i obrazovanja*, 2005, available at: [https://vlada.gov.hr/UserDocsImages/2016/Sjednice/Arhiva/85-05a.pdf], Accessed 10 March 2023.

34 *Nacionalna razvojna strategija Republike Hrvatske do 2030. godine,* Narodne novine NN 13/2021, available at: [https://narodne-novine.nn.hr/clanci/sluzbeni/2021_02_13_230.html], Accessed 9 March 2023.

35 *Ibid.*

36 *Ibid.*

37 *Ibid.*

all levels and the promotion of lifelong learning are emphasised, as well as the acquisition of basic and vocational competences, with a focus on the development of entrepreneurial and digital competences.[38] Unfortunately, unlike the 2009 Strategy, this strategy does not mention the importance of ESD nor does it highlight climate and environmental literacy as important forms of functional competence, which can be seen as a potential shortcoming, given that the green and digital transformation has been identified as a development direction and education is expected to "achieve greater alignment of workers' competences with labour market needs" in line with its realisation and the achievement of a sustainable economy and society[39]. The implementation of the above strategy in the education sector is defined in the "National Plan for the Development of the Education System for the Period up to 2027".[40] It clearly states that "the transition to a new digital and green economy requires exceptional investment in people" so that they can be the agents of various changes and social and economic programmes; they should acquire "adequate competences (knowledge, skills and educated attitudes)" and that "education and training" are key "for personal, civic and professional development, social cohesion, economic growth and innovation, and the basis for a more sustainable future".[41] The "National Plan" also contains measures that contribute to the SDGs, including Goal 4, which is to "ensure inclusive, quality and equitable education and promote lifelong learning opportunities for all", and Sub-Goal 4.7, which is to ensure that by the end of 2030 "all learners acquire the knowledge and skills needed to promote SD, including, among others, ESD and sustainable lifestyles, human rights, gender equality, the promotion of a culture of peace and non-violence, global citizenship and respect for cultural diversity, and the contribution of culture to SD.[42] After this brief overview of strategically important documents in which Croatia has opted for SD as well as for ESD, we can therefore only conclude that we cannot allow the focus on sustainability to remain only at the declarative level and that it is necessary to continuously monitor their implementation and their application in practise.

---

38 *Ibid.*

39 *Ibid.*

40 Ministarstvo znanosti i obrazovanja, *Nacionalni plan razvoja sustava obrazovanja za razdoblje od 2021. Do 2027. godine*, 2023, available at: [https://mzo.gov.hr/UserDocsImages/dokumenti/Obrazovanje/AkcijskiINacionalniPlan/Nacionalni-plan-razvoja-sustava-obrazovanja-za-razdoblje-do-2027.pdf], Accessed 10 March 2023.

41 *Ibid.*

42 *Ibid.*

3.2. Implementation of "Education for Sustainable Development" (ESD) in the pre-school and school system

Although the above-mentioned strategic development documents of the Republic of Croatia recognised the importance of ESD as early as 1992, based on a literature review it can be argued that ESD is not systematically implemented in Croatia, i.e. its contents are implemented, but only partially and inconsistently. The implementation of ESD in pre-school and school education in Croatia in the last decades can be placed in the framework of the implementation of "Civic Education" (CE) as well as "Education for Democratic Citizenship" (EDC), therefore the following pages of the paper will first present and analyse some research results and conclusions on their implementation. It must be emphasised, however, that this is not peculiar to Croatia, as many education systems in the world address the topic of "environmental protection or education for ecological sustainability", within the framework of CE.[43]

The importance and necessity of implementing CE and EDC in Croatia has been emphasised in public debates since the mid-1990s of the 20th century, and the "National Programme for Human Rights Education" was adopted in 1999, which included "pre-school education, classroom teaching and subject teaching" in primary and secondary schools. Still, this programme was "never systematically implemented", while some activities were partial, inconsistent and carried out "by different actors"[44]. Since then, various laws, strategies and plans in the field of primary and secondary education have been amended and adopted, such as the 2012 "Decision on the experimental implementation of the Civic Education Curriculum in 12 Primary and Secondary Schools in the Republic of Croatia" (after two years this decision was abandoned), and instead of introducing CE as a separate subject, "interdisciplinary teaching and a new curriculum were introduced" in 2014.[45]

Namely, in 2011, the "National Framework Curriculum" was developed, focusing on student achievement (learning outcomes) and the development of basic student competencies such as communication in mother tongue and foreign languages, mathematical, digital and entrepreneurial competences, social and civic

---

[43] Schulz, W.; Ainley, J.; Losito, J. F. B.; Agrusti, G.; Friedman, T., *Postati građani svijeta koji se mijenja* Springer Open, Amsterdam, 2018, p. 5, available at: [https://www.ncvvo.hr/medunarodna-istrazivanja/iccs/], Accessed 01 April 2023.

[44] Baketa, N.; Ćulum, B., *Građanski odgoj i obrazovanje u kontekstu visokoškolskog obrazovanja.* Centar za mirovne studije, Kuća ljudskih prava, Zagreb, 2015, p. 8.

[45] *Ibid.*

competences, "learning how to learn", etc.[46] That Curriculum also pays special attention to the following educational values: "knowledge, solidarity, identity and responsibility".[47] These educational values are also of great importance for ESD. Thus, the values of "knowledge, education and lifelong learning" are recognised as "fundamental driving forces for the development of Croatian society and each individual"; the value of solidarity refers to the "systematic education of children and young people in sensitivity towards others, the family, the weak, the poor and the disadvantaged, care between generations, their environment and the whole living environment"; the value of building the "personal, cultural and national identity of the individual" implies respect for the identity of others and respect for diversity, while the value of responsibility implies the promotion of the active participation of "children and young people in the life of society" and the promotion of their "responsibility towards the general social welfare, nature, environment, and work, as well as towards themselves and others".[48] In addition, the following cross-curricular themes are defined as "compulsory in all subjects and all educational activities in school are obliged to implement them": "Personal and social development; health, safety and environmental protection; learning how to learn; entrepreneurship; use of information and communication technology" and CE.[49] From the aforementioned list of cross-curricular themes, it is clear that CE is becoming a cross-curricular theme, but also that ESD can be identified in each of the themes mentioned, which is relevant to its implementation and enables its realisation in all areas of education.[50]

However, as an example of good practices in the implementation of CE as a separate subject, the city of Rijeka can be mentioned, where since the 2016/2017 school year it has been possible for pupils in grades 5 to 8 of primary school to attend CE as a separate subject, i.e. as an extracurricular activity.[51] For this purpose, two handbooks for pupils were prepared and this "Rijeka model" was adopted by some other cities and counties. To illustrate the importance of implementing CE in the context of the ESD, we can note that in the 5th and 6th grade handbook, the concepts of ecology and SD are discussed, as well as the issue of separating

---

46 Ministarstvo znanosti, obrazovanja i športa, *Nacionalni okvirni kurikulum za predškolski odgoj i obrazovanje, te opće obvezno i srednjoškolsko obrazovanje*, Zagreb, 2011, available at: [http://mzos.hr/datoteke/Nacionalni_okvirni_kurikulum.pdf], Accessed 11 March 2023.

47 *Ibid.*, p. 22.

48 *Ibid.*

49 *Ibid*., p. 42.

50 Mićanović, *op. cit.* note 26, p. 27.

51 Jeknić, R.; Čop, B., The youth (un)employment in the era of greeneconomy - some aspects of the problem, In: Kopal, R., Samodol, A.; Buccella, D. (eds.), *Economic and Social Development: Book of Proceedings*, Zagreb, 2022, pp. 279-280.

and classifying waste.[52] In addition, the 7th and 8th grade handbook discusses the concepts of SD and environmental protection, as well as the green entrepreneurship, socially responsible entrepreneurship, etc.[53]

Based on the literature presented in this part of the paper,it can be argued that there has been no systematic inclusion of content related to EDC and human rights as mandatory in primary and secondary schools in Croatia in the last decades[54], but some activities, contents and topics related to EDChave been implemented in a cross-curricular, partial and inconsistent way.Following the adoption of the 1999 "National Programme for Human Rights Education", human rights education "became a compulsory subject in pre-school, while in primary and secondary education it was" not enshrined as a separate subject" but was implemented through "a range of subjects and projects"[55]. The public discussion then focused on the inclusion of the content of EDC as an integrative component of all subjects, and the inclusion of the content of EDC as an integral part of the subject that would be called CE.[56] However, it should be emphasised that EDC contains elements of CE, but it is a broader, so-called "umbrella concept" and the term covering many areas ("civic education, political education, education for peace, education for the environment, education for human rights and education for life in the community")[57], and pays particular attention to the different types of education in the context of lifelong learning, as well as different forms of education (formal and informal education and activities of individuals)[58]. In addition, the EDC includes a number of "concepts/values", among which, some of the most important are: human rights and freedoms, democracy, citizens, civil society, globalisation, sustainable development, as well as the development of various basic and socially important skills and competencies such as "adherence to the principle of sustainable human development in terms of a balance between social development, environmental protection and economic growth".[59]

---

52 Golub, L. (ed.), *Učenik građanin: Priručnik za Građanski odgoj i obrazovanje za 5. i 6. razrede.* Grad Rijeka, 2017, pp. 62-65.

53 Golub, L.; Pašić, M. (eds.), *Učenici građani: informirani, aktivni i odgovorni. Priručnik za Građanski odgoj i obrazovanje za 7. i 8. razrede.* Grad Rijeka, 2018, pp. 26-27, 34-35.

54 Batarelo, I.; Čulig, B.; Novak, J.; Reškovac, T.; Spajić Vrkaš, V., *Demokracija i ljudska prava u osnovnim školama,* Centar za ljudska prava, Zagreb, 2010, p. 17.

55 *Ibid.*

56 Dürr, K.; Spajić-Vrkaš, V.; Ferreira Martins, I., *Učenje za demokratsko građanstvo u Europi*, Centar za istraživanje, izobrazbu i dokumentaciju u obrazovanju za ljudska prava i demokratsko građanstvo, Filozofski fakultet, Zagreb, 2002.

57 *Ibid.,* pp. 28-29.

58 *Ibid.,* p. 24.

59 *Ibid.,* pp. 84-86.

In addition, some of the conclusions of the 2009 research conducted with the aim of examining "the methods and effects of implementing democratic citizenship education in primary schools at the national level" are presented.[60] In particular, the conclusion that textbooks "insufficiently promote civic activism and action for the common good (local community, school)", which is considered "a basic prerequisite for the development of responsible and active citizens"[61], as well as the conclusion that "the contents of democratic citizenship education" are implemented, but in a "sporadic and optional manner", and that their implementation depends on the affinities and personal engagement of individual teachers and principals.[62]

Although educational policies regarding the implementation of CE and EDC at different levels of education in Croatia were constantly changing, considerable progress has been made in this long period of time, and the scientific research and literature on these topics in the context of Croatian society has increased in number. Therefore, we will highlight only one segment from that literature related to the importance and implementation of the environmental component of civic competences.

According to the 2012 "Civic Education Curriculum" (CEC), civic competence refers to "a particular type of knowledge, skills, attitudes, values and behaviour that ensure the successful fulfilment of a civic role for an individual", and refers to competences which are generally developed "through school and extracurricular activities and, in particular, through civic education and training"[63]. Civic competences are divided into "functional and structural dimensions", where "the functional dimension consists of three interrelated and interdependent components: civic knowledge and understanding, civic skills and abilities, civic values and attitudes", while the structural dimension consists of the following six components: "human-legal, political, social, (inter)cultural, economic and environmental".[64] The "environmental component" refers to "the promotion of SD, the rational and responsible use of natural resources at all levels, the understanding of global interdependence in preserving the planet, and adherence to a holistic approach to SD".[65]

---

60 Batarelo *et al., op. cit*. note 54, p. 17.

61 *Ibid*., p. 39.

62 *Ibid*., p. 95.

63 Spajić-Vrkaš, V., *(Ne)Moć građanskog odgoja i obrazovanja*, Nacionalni centar za vanjsko vrednovanje obrazovanja, Zagreb, 2015, p. 28.

64 *Ibid.,* pp. 28-29.

65 *Ibid.,* p. 29.

In the following, some findings and conclusions are presented on the results of the implementation of the above-mentioned CEC in 12 primary and secondary schools in the school year 2012/2013. In particular, it is interesting to underline that according to the data collected on the degree of achievement of the results of the different components of the "structural dimension" of the CEC, teachers paid most attention to the environmental component (57% of teachers estimated that they had achieved "a lot and very much" while they paid significantly less attention to the economic dimension (19.8% of teachers estimated that they had achieved "a lot and very much") and the political dimension (17% of teachers estimated that they had achieved "a lot and very much").[66] In summary, it can be concluded that the results in the ecological component were achieved more than in the other components of the "structural dimension", while the results in the "skills and abilities" component were achieved more than in the other components of the "functional dimension".[67]

Then, from the 2019/2020 school year, an experimental programme called "School for Life" will be introduced and implemented. A total of 74 schools from all counties in Croatia have participated in that programme, which corresponds to a sample of 5% of schools out of a total of 1,311 schools in Croatia.[68] The experimental programme included seven of the following cross-curricular themes: "Civic education; sustainable development; health; personal and social development; learning how to learn; use of information and communication technologies; entrepreneurship".[69] The report on the implementation of that programme shows that when listing the cross-curricular themes most likely to be included in the curriculum, "the theme most frequently mentioned as a first choice and priority by school principals and teachers" isCE for 35.3% of respondents, while "cross-curricular themes such as entrepreneurship (2.2%) and the use of information and communication technology (4.3%) were the least represented as first choices".[70] The results of the "International Civic and Citizenship Education Study" (ICCS) of the "International Association for the Evaluation of Educational Achievement", can also be interpreted in this sense.[71]

---

66 *Ibid.*, p. 197.

67 *Ibid.*, p. 240.

68 Karajić, N.; Ivanec, D.; Geld, R.; Spajić – Vrkaš, V., *Vrednovanje eksperimentalnoga programa Škola za život u školskoj godini 2018./2019. Objedinjeno izvješće*, Filozofski fakultet u Zagrebu, Zagreb, 2019, p. 45.

69 *Ibid.,* p. 90.

70 *Ibid.*

71 Schulz *et al.*, *op. cit.* note 43.

The ICCS study examines pupils' knowledge and understanding of CE concepts and topics, as well as their perceptions, attitudes and beliefs about some current issues and problems in society. These data are supplemented by data collected from their teachers and principals. The 2016 survey was conducted on nationally representative samples in 24 countries, i.e. on a total sample "of 94 000 eighth year school pupils, 37 000 eighth year school teachers and their principals from a total of 3 800 schools"[72], while in Croatia "about 4 000 eighth year school pupils, about 3 000 eighth year school teachers, and 176 principals of primary schools" participated in the survey.[73] In the ICCS study, pupils' knowledge is measured by using a "civic knowledge scale" that reflects the range of knowledge at four levels of complexity, from "simplest to most complex", i.e. from D as the simplest level to A as the most complex and highest level of knowledge.[74] According to the average ICCS 2016 results, "3% of pupils showed knowledge below level D, 10% of pupils reached level D, 21% of pupils reached level C, 32% reached level B", while 35% of pupils reached level A, indicating an increase in the average score of pupils' civic knowledge compared to the same survey conducted in 2009.[75] The average results for Croatia are as follows: "0% of students had knowledge below level D, 4% of students had knowledge at level D, 20% of students reached level C, 40% reached level B", while 36% of students reached level A.[76] In other words, with an average score on the scale (531), students in Croatia achieved a significantly higher average of correct answers than the international average of the ICCS 2016 (517), which is undoubtedly encouraging data.[77] Furthermore, the next ICCS survey was conducted in 2022, but the results of this survey are not yet publicly available.

ing to note that among the topics they "learned a lot or very much at school" in CE, the highest percentage of pupils, according to the ICCS 2016 average results, 81%, chose the topic "how to protect the environment (e.g. by saving energy or recycling)", while pupils in Croatia are statistically significantly above this average, with as many as 91% of them choosing this topic.[78] The other topics show greater differences which indicates that different topics are considered important in learning CE at school in different countries.[79]In addition, "pupils' perceptions

---

72 *Ibid.*, p. 9.

73 Elezović, I, *Provedba i metodologija ICCS-a 2016. u Republici Hrvatskoj,* available at: [https://www.ncvvo.hr/wp-content/uploads/2017/11/1_ICCS2016_InesElezovic_Metodologija_7-11-2017.pdf], Accessed 03 April 2023.

74 Schulz *et al.*, *op. cit.* note 43, p. 21.

75 *Ibid.,* p. 21.

76 *Ibid.*, p. 63.

77 *Ibid.*, p. 61.

78 *Ibid.*, p. 174.

79 *Ibid.*, p. 173.

and awareness of problems related to global citizenship and SD" were examined, with pupils being presented with various problems whose severity they rated from as "very serious" to "not a serious problem".[80] According to the ICCS 2016 average results, the majority of pupils consider "environmental pollution" (76%), "terrorism" (66%), "water scarcity" (65%), "food scarcity" (62%), "infectious diseases" (59%), "climate change" (55%) and "poverty" (53%) to be very serious threats to the future of the world.[81] The majority of Croatian pupils, in addition to the problems mentioned above, also mention "unemployment" (57%), "the global financial crisis" (55%) and "crime" (53%), while "climate change" is mentioned by 47% of pupils.[82]

For comparison, the assessment of "climate change" is significantly higher than the average recognized in some countries such as Belgium, Norway, Sweden, Denmark and Finland, as is the assessment of "environmental pollution" (with the exception of Finland), while in these countries, for example, "infectious diseases", "poverty", "unemployment", "world financial crisis", "crime", "violent conflicts" and "energy shortage" are recognised as problems significantly lower than the ICSS 2016 average. This finding undoubtedly confirms the "influence of local context" on pupils' perceptions of threats to the future of the world, as well as the conclusion that students in "more developed European countries" identify "climate change and pollution" as the biggest global problems and threats, while in "developing countries" they identify "poverty and violent conflict" as the biggest global problems and threats.[83]

3.3. Implementation of "Education for Sustainable Development" (ESD) in the higher education system

In professional and scientific literature on ESD, teachers are highlighted as key actors for the necessary changes both in education systems and more generally for achieving the global SDGs and transforming the whole world towards global sustainability. For example, according to UNESCO "education is at the heart of our efforts to adapt to change and transform the world in which we live".[84] Furthermore, education is recognised as "both a goal in itself and a means to achieve all the other" SDGs, and "it is not only an integral part of sustainable development,

---

80 *Ibid.,* p. 133.

81 *Ibid.,* p. 135.

82 *Ibid.,* pp. 135, 137.

83 *Ibid.,* pp. 133, 135, 137.

84 UNESCO, Rethinking Education. Towards a global common good?, Paris, 2015, p. 3, available at: [https://unevoc. unesco.org/e-forum/RethinkingEducation.pdf], Accessed 9 March 2023.

but also an important enabler of it".[85] Finally, as stated earlier in the paper, education is explicitly articulated as a SDG 4, and a sub-goal 4.7.

In this sense, we can refer to the fact that at the time of the previously presented ICSS 2016, CE was not a compulsory part of the basic studies for teachers in Croatia, but it was possible to choose CE as part of the professional development programmes for teachers.[86] Regarding the possibility of choosing such programs for teachers before or during the teaching of CE, according to the ICSS 2016, the highest percentages are recorded "for the topics of peaceful conflict resolution" (65%), "responsible use of the Internet" (61%), "critical and independent thinking" (61%), "citizens' rights and responsibilities" (59%), "environment and environmental sustainability" (58%) and "human rights" (58%).[87] Nevertheless, in Croatia "less than half of teachers reported that they had not participated in professional development activities that included the topics mentioned".[88] It is interesting to emphasize that according to the average results of the ICCS 2016 survey, "the majority of teachers felt excellent or well prepared for teaching almost all the topics and skills included in this question", which cannot be said for teachers in Croatia, as they felt this way only for three teaching topics ("responsible use of the internet, critical and independent thinking and peaceful conflict resolution"), while on all other topics, teachers expressed such a feeling of excellent preparedness well below the international average of the ICSS 2016, including the topic "environment and environmental sustainability".[89] At the same time, it is not unimportant to highlight the fact that according to the international average results of the ICSS 2016, the three goals that "teachers consider most important in relation to the implementation of CE" are: "promoting students' critical and independent thinking (61%), promoting knowledge of citizens' rights and duties (55%) and promoting concern for the environment and its protection (51%)", and the same goals were recognised as the most important by teachers in Croatia.[90]

In this context, this part of the paper examined the curricula of Croatian universities for the academic year 2022/ 2023 in order to determine the extent to which CE as well as EDC is studied as part of the basic curriculum for teachers in Croatia. The analysis of the curricula for teacher studies at the six Croatian universities (University of Rijeka, Pula, Zagreb, Osijek, Zadar and Split), which can be found

---

85 UNESCO, *Education for Sustainable Development: Learning Objectives*, 2017, p. 1, available at: [http://unesdoc.unesco. org /images/0024/002474/247444e.pdf], Accessed 8 March 2023.

86 Schulz *et al*., *op. cit*. note 43, p. 39.

87 *Ibid*., p. 39.

88 *Ibid.*

89 *Ibid.,* p. 178.

90 *Ibid.,* p. 38.

on the websites of these universities, indicates that CE is still not a compulsory part of the basic curriculum for all teachers in Croatia. For example, CE is taught as a compulsory course at the Faculty of Teacher Studies in Gospić, at the Integrated Undergraduate and Postgraduate Teacher Studies Programme entitled "Civic Competence"[91]; in the Integrated Undergraduate and Postgraduate Teacher Studies Programme with Lifelong and Adult Education at the Faculty in Čakovec, the compulsory course is "Human Rights Education"[92]; at the Faculty of Education in Pula, there are two compulsory courses: "Civic Education"[93] and "Civic Education in the Croatian and European Context"[94]. In addition, CE is offered as an elective course entitled "Introduction to Civic Education"[95] as part of the Integrated Undergraduate and Postgraduate Teacher Education Programme at the University of Split. At other teacher education programmes we did not find courses that corresponded to the CE in the title of the course or in their curricula. On the one hand, this information shows that in relation to teacher education ten years ago, the need to teach future teachers for the implementation of CE was recognised, but on the other hand, this information also warns us that there is still a need to systematically point out the obligation of this content in formal teacher education (where it is optional) and the need to introduce such courses (where it is still not taught).

This part of the paper presents some more data on the representation of the content and learning outcomes of ESD in teacher education programmes in Croatia. For this purpose, a qualitative analysis of the content of all teacher education programmes at all six above-mentioned universities in Croatia was conducted in 2021.[96] According to this study, the contents of ESD are present in a total of 21

---

91 Učiteljski studij u Gospiću, Sveučilište u Zadru, available at: [https://nstgospic.unizd.hr/studijski-program/uciteljski-studij-2022-2023/2-semestar], Accessed 8 April 2023.

92 Učiteljski studij u Čakovcu, Sveučilište u Zagrebu, available at: [https://www.ufzg.unizg.hr/wp-content/uploads/2023/01/Integrirani-sveučilišni-preddiplomski-i-diplomski-učiteljski-studji-scjelozivotnoim-obrazovanjem-i-obrazovanjem-odraslih.pdf], Accessed 8 April 2023.

93 Fakultet za odgojne i obrazovne znanosti u Puli, available at: [https://fooz.unipu.hr/fooz/predmet/goo], Accessed 8 April 2023.

94 Fakultet za odgojne i obrazovne znanosti u Puli, available at: [https://fooz.unipu.hr/fooz/predmet/npo02], Accessed 8 April 2023.

95 Učiteljski studij na Filozofskom fakultetu, Sveučilište u Splitu, available at: [https://www.ffst.unist.hr/studiji/integrirani_preddiplomski_i_diplomski_uciteljski_studij], Accessed 8 April 2023.

96 Vukelić, N.; Čekolj, N.; Gregorović Belaić, Z., Zastupljenost održivog razvoja u studijskim programima učiteljskih studija u Hrvatskoj, In: Kovač, V.; Rončević, N.; Gregorović Belaić, Z. (eds.), *U mreži paradigmi: Pogled prema horizontu istraživanja u odgoju i obrazovanju,* Filozofski fakultet Sveučilišta u Rijeci, Rijeka, 2021, p. 153.

courses in all the study programmes examined.[97] However, when "analysing the content, objectives and outcomes of the courses in terms of the dimensions of SD" (the environmental, social and economic dimensions), the researchers conclude that the "environmental and social dimensions dominate".[98] Most courses, namely 8, are "exclusively focused on the social dimension of SD" (which includes courses related to CE); 6 courses are focused on the "environmental dimension" of SD; none are focused only on the "economic dimension" of SD and 2 courses include the environmental and social dimensions of SD.[99] Furthermore, only 5 courses include all dimensions, and only in them, the economic dimension of SD is represented.[100] As an example of good practise, the researchers point to the teacher training programme at the University of Split, as it offers the largest total number of courses in which SD is taught (11 courses in total) compared to the other faculties studied.[101] The above should be interpreted in the context of the fact that only at the Integrated Undergraduate and Graduate University Teacher Study, at the University of Split, there is a special module entitled ESD[102], which brings together a group of different courses in this field, and this simply means that students who master this module are qualified to teach the subject of ESD in higher classes of primary school after completing their studies. Based on their analysis, the researchers also conclude that most courses "focus exclusively on raising students' awareness and acquiring knowledge" regarding sustainability and SD, while the focus on "preparing (future) teachers" to implement ESD, on the other hand, is completely left out, which is why they conclude that existing formal education does not sufficiently prepare the future teachers in Croatia for the challenging role of implementing ESD while working in schools.[103]

The researchers came to the same conclusion by conducting a survey of 335 students of the programme "Early and Preschool Education at the Faculty of Teacher Education, University of Zagreb" to investigate their views on SD.[104] According to the results of the aforementioned survey, students have mostly positive attitudes towards SD, with the social dimension being the most positive, followed by the educational dimension, while attitudes towards the environmental and economic

---

97 *Ibid.,* p. 158.

98 *Ibid.*

99 *Ibid.*

100 *Ibid.*

101 *Ibid.*

102 Učiteljski studij, *op. cit*. note 95.

103 Vukelić, *et al., op. cit*. note 96, p. 163.

104 Hadela, J.; Nemet, B.; Jurčević Lozančić, A., Stavovi studenata Ranog i predškolskog odgoja i obrazovanja o održivom razvoju, In: Kovač, V.; Rončević, N.; Gregorović Belaić, Z. (eds.),*U mreži paradigmi: Pogled prema horizontu istraživanja u odgoju i obrazovanju,* Filozofski fakultet Sveučilišta u Rijeci, Rijeka, 2021. p. 169.

dimensions are still positive, but lower, compared to the first two dimensions.[105] Furthermore, the researchers point out the lower agreement of the students to the statement that "they have knowledge and skills to work with children in the field of environmental education" and conclude that the students surveyed, "do not feel adequately prepared for the implementation of SD during their initial training", as well as for issues related to the environmental dimension of SD, which undoubtedly points to the next conclusion that urgent changes need to be made in their formal education.[106]

The next important theme for ESD relates to the competences that teachers "and all those who teach about SD should develop" in order to communicate knowledge about SD more effectively[107]. These are: "1. knowledge of the subject and understanding of the complexity of the concept: environment, society, economy" and "clear definition of goals as competences that should be developed in students"; "2. empathy"; "3. willingness to cooperate and work in teams"; "4. creativity"; "5. motivation" and "6. organisational skills"[108]. Following the "social learning theory" which states that "people learn by observing the consequences of the behaviour of role models"[109], teachers who teach about SD can be seen as "models of social learning for their students" and are expected to have "attitudes and values that lead them to act sustainably"[110]. In this sense, it is interesting to highlight the results of the research whose main objective was to test "the sustainable behaviour model on a sample of student teachers" in Croatia.[111] The research was conducted "on a total of 496 Croatian student teachers enrolled in initial teacher education" at the Universities of Rijeka, Pula and Split.[112] This research used "a sustainable behaviour scale", according to which the following eight factors were constructed: "1. pro-ecological behaviour", which includes "purposeful and effective actions that lead to the conservation of natural resources"; "2. altruistic behaviour" as an integral part of "pro-ecological action", since our actions "have an impact on the integrity and well-being of others"; "3. frugal behaviour", the behaviour as an antithesis "to consumerism"; "4. equitable behaviour" including "intra - and intergenerational equity" and "the assessment of social, racial, economic, age and gender equity"; "5. indignation due to environmental damage"; "6. intention to

105 *Ibid.,* p. 177.

106 *Ibid.,* pp. 169-170, 182.

107 Mićanović, M. *op. cit.* note 26, p. 59.

108 *Ibid.,* pp. 59-60.

109 Pennington, D. C., *Osnove socijalne psihologije*, Naklada Slap, Jastrebarsko, 2008, p. 81.

110 Vukelić, N.; Rončević, N. Student Teachers' Sustainable Behavior. *Education Sciences*, 11, 2021, p. 8.

111 *Ibid.,* p. 1.

112 *Ibid.,* p. 5.

act"which includes "actions such as reuse, recycling, energy conservation, etc."; "7. affinity toward diversity" as "a tendency to prefer diversity and variations in the biophysical and socio-cultural scenarios of human life" and "8. happiness" as "an expected consequence of SD ".[113] In short, the results of this study in Croatia "suggest that student teachers' sustainable behaviour is directly predicted by their intention to act" and that it is "both positively and significantly influenced by indignation and affinitytowardsdiversity".[114] Therefore, the researchers conclude that it is necessary to "promote pro-social and pro-ecological action" and "the development of sustainable behaviours" during teacher education if we want future teachers to become positive role models for their students and pupils.[115]

Furthermore, it is interesting to highlight the conclusions of the study on students' attitudes towards ESD conducted in 2010 (N = 1001) and 2016 (N = 1347) on a representative sample of students at the University of Rijeka.[116] According to the 2016 survey, as many as "70% of the students estimated that young people in the earlier, lower levels of education do not acquire enough knowledge about SD".[117] Moreover, it can be pointed to the fact that in the same survey "as many as 53.7% of students" stated that "they did not hear and process SD issues during their studies".[118] In other words, 45.3% of the students "heard some course in which the mentioned topics were dealt with" during their studies.[119] With regard to the results of the 2016 survey, the fact that "almost half of the students (46.1%)" believe that study programmes "should also include sustainable development content" can be highlighted as positive.[120] According to the same study, however, even "every second student believes that SD is just another additional content" that needs to be learned and mastered.[121] Based on their studies, the researchers therefore conclude that ESD is not systematically implemented in Croatia, but depends on "motivation and training" as well as the personal commitment of the teachers themselves.[122]

---

113 Tapia-Fonllem et. al, Assessing Sustainable Behavior and its Correlates: A Measure of Pro-Ecological, Frugal, Altruistic and Equitable Actions. *Sustainability,* No. *5*, 2013, pp. 712–716; Vukelić, N.; Rončević, N. *op. cit.* note 110, p. 7.

114 Vukelić, N.; Rončević, N. *op. cit.* note 110, p.1.

115 *Ibid.,* p. 10.

116 Buzov, I.; Cvitković, E.; Rončević, N., *Prema mogućnostima implementacije obrazovanja za održivi razvoj na sveučilištu*, Socijalna ekologija*,* Vol. 29, No. 1, 2020, p. 16.

117 *Ibid*., p. 16.

118 *Ibid*., p. 9.

119 *Ibid*., p. 19.

120 *Ibid*., pp. 15-16.

121 *Ibid*., p. 14.

122 *Ibid*., p. 16.

At the end of this chapter, we will point out that based on a review of the literature and websites available at the time of writing, it can be claimed that there are several study programmes in Croatia that focus exclusively on SD. These are the following programmes: (1) the Međimurje Polytechnic in Čakovec offers a Bachelor's degree programme in "Sustainable Development", which focuses on the technical aspects of SD[123]; (2) the Dag Hammarskjold University of International Relations and Diplomacy offers a programme entitled "Sustainable Development and International Relations"[124]; (3) the Bachelor's degree programme in "Sustainable Development Management" is offered at the Faculty of Tourism and Hotel Management in Opatija[125]; (4) the online degree programme "Sustainable Tourism Development"[126] is offered at the same faculty; (5) at the University VERN it is possible to enrol in a professional graduate programme entitled "Sustainable Tourism Development Management"[127]; (6) at the University of Zadar it is possible to enrol in a graduate programme entitled "Sustainable Tourism Development".[128] In addition, the Croatian higher education system offers different optional and compulsory courses in the field of SD. It is also worth highlighting the orientation of various higher education institutions in Croatia towards monitoring and measuring the implementation of the SDGs.[129]

4. CONCLUSION

ESD is a complex and challenging topic, both because of the high range of content that encompasses the concept of SD and the concept of sustainability in general, and because of the interdisciplinarity that is necessary due to their interrelated components (society, culture, economy, politics, natural environment) and the fact that there are no universal solutions and ideas for achieving SD, nor for im-

123 Raditya-Ležaić, A.; Boromisa A.; Tišma S., Komparativni pregled obrazovanja za održivi razvoj i istraživanje potreba za stručnjacima u Hrvatskoj. *Socijalna ekologija*, Vol. 27, No. 2, 2018, p. 171.

124 *Ibid.*

125 Fakultet za menadžment u turizmu i ugostiteljstvu u Opatiji, available at: [https://fthm.uniri.hr/studiji/sveucilisni-prijediplomski-studij/menadzment-odrzivog-razvoja/], Accessed 2 April 2023.

126 Fakultet za menadžment u turizmu i ugostiteljstvu u Opatiji, available at: [https://fthm.uniri.hr/studiji/sveucilisni-diplomski-studij/odrzivi-razvoj-turizma-online-studij/], Accessed 2 April 2023.

127 Sveučilište VERN' u Zagrebu, available at: [https://vern.hr/studiji/diplomska-razina/menadzment-odrzivog-razvoja-turizma/informacije-o-studiju/], Accessed 2 April 2023.

128 Odjel za turizam i komunikacijske znanosti, Sveučilište u Zadru, available at: [https://tikz.unizd.hr/studijski-programi/diplomski-studiji/odrzivi-razvoj-turizma/], Accessed 2 April 2023.

129 ImpactRankingsMethodologyGuide 2023, 2023, available at: [http://www.osm.kmitl.ac.th/osm2020/file/SDG/คู่มือTHE.ImpactRankings.METHODOLOGY.2023.pdf], Accessed 22 February 2023.

plementing ESD as a global issue that is influenced by the local context in which it is applied. Furthermore, ESD is education for the present, i.e. for the critique of current unsustainable development paths, but also education for the future and for change, as it involves the search of the direction of SD in the future.[130] At the same time, the knowledge and values encompassed by ESD are constantly being created and multiplied, and everything is "new, complex, demanding, interconnected, interdependent", while education is expected to "offer, transmit and disseminate" answers to new developmental questions.[131] All this, of course, requires active and critical, sustainability literate and competent citizens, who will direct their knowledge, skills, but also their values and attitudes towards responsible action towards sustainability in all areas of human activity.

This paper analysed the implementation of ESD at different levels of formal education in Croatia, as institutional education is primarily responsible for the development of various forms of competence and literacy, while educational policy is responsible for the implementation of strategically important directives and documents by which Croatia hoped-for SD, as well as for ESD. In this sense, the paper points out the discrepancy between policy recommendations and strategies and practise, i.e. the implementation of CE, EDC and ESD at different levels of education in Croatia. It is therefore important to reiterate that it is not so important whether they are implemented as separate subjects or cross-curricular, as it is to implement them systematically and interdisciplinarily in order to link all these issues together, and that changes in educational policies do not question their implementation or make them dependent on the enthusiasm or training of individual teachers. Namely, the findings of different researches presented in this paper point to the need for changes in teacher training as they are not sufficiently trained, and do not feel competent enough to implement CE, EDC and ESD in our educational context which is in complete contrast to the policies that recognise them as one of the most important promoters of SD and key actors for achieving the SDGs.

With regard to the implementation of ESD in higher education of other faculties (not only teachers), it can be concluded that in addition to the orientation of various higher education institutions in Croatia towards monitoring and measuring the implementation of the SDGs, there is also a need to expand existing activities, continuously promote the principles of SD and open new higher education programmes and courses, as well as to include SD content in existing programmes and courses, so that education can successfully follow the changes and needs of the

130 Mićanović, *op. cit.* note 26, p. 29.

131 Lay, V.; Puđak, J., *op. cit.* note 17, p. 103.

changing labour market and the challenges of the new green jobs and new professions, as well as to prepare students for their active participation in various other areas of the EU's "green transition" towards a sustainable society.

REFERENCES

BOOKS AND ARTICLES

1. Baketa, N., Ćulum, B., *Građanski odgoj i obrazovanje u kontekstu visokoškolskog obrazovanja.* Centar za mirovne studije, Kuća ljudskih prava, Zagreb, 2015
2. Batarelo, I., Čulig, B., Novak, J., Reškovac, T., Spajić Vrkaš, V., *Demokracija i ljudska prava u osnovnim školama,* Centar za ljudska prava, Zagreb, 2010
3. Buzov, I., Cvitković, E., Rončević, N., Prema mogućnostima implementacije obrazovanja za održivi razvoj na sveučilištu. *Socijalna ekologija,* Vol. 29, No. 1, 2020, pp. 3 - 25
4. Cifrić, I., *Leksikon socijalne ekologije*, Školska knjiga, Zagreb, 2012
5. Dürr, K., Spajić-Vrkaš, V., Ferreira Martins, I., *Učenje za demokratsko građanstvo u Europi*, Centar za istraživanje, izobrazbu i dokumentaciju u obrazovanju za ljudska prava i demokratsko građanstvo, Filozofski fakultet, Zagreb, 2002
6. Golub, L. (ed.), *Učenik građanin: Priručnik za Građanski odgoj i obrazovanje za 5. i 6. razrede.* Grad Rijeka, 2017
7. Golub, L., Pašić, M. (eds.), *Učenici građani: informirani, aktivni i odgovorni. Priručnik za Građanski odgoj i obrazovanje za 7. i 8. razrede.* Grad Rijeka, 2018
8. Hadela, J., Nemet, B., Jurčević Lozančić, A., Stavovi studenata Ranog i predškolskog odgoja i obrazovanja o održivom razvoju, In: Kovač, V., Rončević, N., Gregorović Belaić, Z. (eds.),*U mreži paradigmi: Pogled prema horizontu istraživanja u odgoju i obrazovanju,* Filozofski fakultet Sveučilišta u Rijeci, Rijeka, 2021. pp. 169-189
9. Jeknić, R., Čop, B., The youth (un)employment in the era of greeneconomy - some aspects of the problem. in: Kopal, R., Samodol, A., Buccella, D. (eds.), *Economic and Social Development: Book of Proceedings*, Zagreb, 2022, pp. 273-284
10. Kalanj, R., Pismenost i djelovanje. *Socijalna ekologija,* Vol. 5, No. 3, 1996, pp. 357-402
11. Karajić, N., Ivanec, D., Geld, R., Spajić – Vrkaš, V., *Vrednovanje eksperimentalnoga programa Škola za život u školskoj godini 2018./2019. Objedinjeno izvješće*, Filozofski fakultet Sveučilišta u Zagrebu, Zagreb, 2019
12. Lay, V., Puđak, J. Sociološke dimenzije odgoja i obrazovanja za održivi razvoj, in: Uzelac, V., Vujčić, L. (eds.), *Cjeloživotno učenje za održivi razvoj, Svezak 1*, Sveučilište u Rijeci, Učiteljski fakultet u Rijeci, Rijeka, 2008, pp. 95-105
13. Lay, V., Klimatska pismenost: analiza osnovnih prepreka razvoju i širenju klimatske pismenosti. *Socijalna ekologija*, Vol. 25, No. 1-2, 2016, pp. 39 - 52
14. Matešić, M., Principi održivog razvoja u strateškim dokumentima Republike Hrvatske, *Socijalna ekologija*, Vol. 18, No. 3-4, 2009, pp. 323 - 339
15. Michelsen, G., Welles, P. J. (ed.), *A Decade of Progress on Education for Sustainable Development. Reflectionsfrom the UNESCO Chairs Programme*. UNESCO, 2017

16. Mićanović, M. (ed.), *Obrazovanje za održivi razvoj: Priručnik za osnovne i srednje škole.* Agencija za odgoj i obrazovanje, Zagreb, 2011
17. Pennington, D. C., *Osnove socijalne psihologije*, Naklada Slap, Jastrebarsko, 2008
18. Raditya-Ležaić, A., Boromisa A., Tišma S., Komparativni pregled obrazovanja za održivi razvoj i istraživanje potreba za stručnjacima u Hrvatskoj. *Socijalna ekologija*, Vol. 27, No. 2, 2018, pp. 165-180
19. Rifkin, J., *The European Dream: How European's Vision of the Future Is Quietly Eclipsing the American Dream*, Jeremy P. Tarcher/ Penguin, New York, 2004
20. Spajić-Vrkaš, V., *(Ne)Moć građanskog odgoja i obrazovanja*, Nacionalni centar za vanjsko vrednovanje obrazovanja, Zagreb, 2015
21. Tapia-Fonllem, C., Corral-Verdugo, V., Fraijo-Sing, B., Durón-Ramos, M. F. Assessing Sustainable Behavior and its Correlates: A Measure of Pro-Ecological, Frugal, Altruistic and EquitableActions, *Sustainability*, No. *5*, pp. 711–723, 2013
22. Vukelić, N., Rončević, N., Student Teachers' Sustainable Behavior. *Education Sciences*, Vol. 11, No. 12: 789, 2021, pp. 1-14
23. Vukelić, N., Čekolj, N., Gregorović Belaić, Z., Zastupljenost održivog razvoja u studijskim. programima učiteljskih studija u Hrvatskoj, In: Kovač, V., Rončević, N., Gregorović Belaić, Z. (eds.),*U mreži paradigmi: Pogled prema horizontu istraživanja u odgoju i obrazovanju*, Filozofski fakultet Sveučilišta u Rijeci, Rijeka, 2021. pp. 147-168

WEBSITE REFERENCES

1. Elezović, I, *Provedba i metodologija ICCS-a 2016. u Republici Hrvatskoj,* available at: [https://www.ncvvo.hr/wp-content/uploads/2017/11/1_ICCS2016_InesElezovic_Metodologija_7-11-2017.pdf], Accessed 03 April 2023
2. European Commission, *European Green Deal: delivering on our targets*, 2021, available at: [https://ec.europa.eu/commission/presscorner/api/files/attachment/869807/EGD_brochure_EN.pdf.pdf], Accessed 13 June 2023.
3. European Commission, *A Socially Fair Transition*, 2021, available at: [https://op.europa.eu/en/publication-detail/-/publication/e355c630-00e6-11ec-8f47-01aa75ed71a1/language-en], Accessed 13 June 2023.
4. Fakultet za odgojne i obrazovne znanosti u Puli, available at: [https://fooz.unipu.hr/fooz/predmet/goo], Accessed 8 April 2023
5. Fakultet za odgojne i obrazovne znanosti u Puli, available at: [https://fooz.unipu.hr/fooz/predmet/ npo02], Accessed 8 April 2023
6. Fakultet za menadžment u turizmu i ugostiteljstvu u Opatiji, available at: [https://fthm.uniri.hr/studiji/sveucilisni-prijediplomski-studij/menadzment-odrzivog-razvoja/], Accessed 2 April 2023
7. Fakultet za menadžment u turizmu i ugostiteljstvu u Opatiji, available at: [https://fthm.uniri.hr/studiji/sveucilisni-diplomski-studij/odrzivi-razvoj-turizma-online-studij/], Accessed 2 April 2023

8. *ImpactRankingsMethodologyGuide 2023, 2023,* available at: [http://www.osm.kmitl.ac.th/osm2020/file/SDG/คู่มือTH.ImpactRankings.METHODOLOGY.2023.pdf], Accessed 22 February 2023
9. Ministarstvo znanosti i obrazovanja*, Nacionalni plan razvoja sustava obrazovanja za razdoblje od 2021. do 2027. godine*, 2023, available at: [https://mzo.gov.hr/UserDocsImages/dokumenti/Obrazovanje/AkcijskiINacionalniPlan/Nacionalni-plan- razvoja-sustava-obrazovanja-za-razdoblje-do-2027.pdf], Accessed 10 March 2023
10. Ministarstvo znanosti, obrazovanja i športa, *Plan razvoja sustava odgoja i obrazovanja*, 2005, available at: [https://vlada.gov.hr/UserDocsImages/2016/Sjednice/Arhiva/85-05a.pdf], Accessed 10 March 2023
11. Ministarstvo znanosti, obrazovanja i športa, *Nacionalni okvirni kurikulum za predškolski odgoj i obrazovanje, te opće obvezno i srednjoškolsko obrazovanje*, Zagreb, 2011, available at: [http://mzos.hr/datoteke/Nacionalni_okvirni_kurikulum.pdf], Accessed 11 March 2023.
12. Nacionalna razvojna strategija Republike Hrvatske do 2030. godine, Narodne novine NN 13/ 2021, available at: [https://narodne-novine.nn.hr/clanci/sluzbeni/2021_02_13_230.html], Accessed 9 March 2023
13. Odjel za turizam i komunikacijske znanosti, Sveučilište u Zadru,available at: [https://tikz.unizd.hr/studijski-programi/diplomski-studiji/odrzivi-razvoj-turizma/], Accessed 2 April 2023
14. Schulz, W.; Ainley, J.; Losito, J. F. B.; Agrusti, G.; Friedman, T., *Postati građani svijeta koji se mijenja,* Springer Open, Amsterdam, 2018,available at: [https://www.ncvvo.hr/medunarodna-istrazivanja/iccs/], Accessed 01 April 2023
15. *Strategija održivog razvitka Republike Hrvatske*, Narodne novine NN 30/2009, available at: [https://narodne-novine.nn.hr/clanci/sluzbeni/2009_03_30_658.html], Accessed 9 March 2023
16. Sveučilište VERN' u Zagrebu, available at: [https://vern.hr/studiji/diplomska-razina/menadzment-odrzivog-razvoja turizma/informacije-o-studiju/], Accessed 2 April 2023
17. Učiteljski studij u Gospiću, Sveučilište u Zadru, available at: [https://nstgospic.unizd.hr/studijski-program/uciteljski-studij-2022-2023/2-semestar], Accessed 8 April 2023
18. Učiteljski studij u Čakovcu, Sveučilište u Zagrebu, available at: [https://www.ufzg.unizg.hr/wp-content/uploads/2023/01/Integrirani-sveučilišni-preddiplomski-i-diplomski-učiteljski-studji-s-cjelozivotnoim-obrazovanjem-i-obrazovanjem-odraslih.pdf], Accessed 8 April 2023
19. Učiteljski studij, Sveučilište u Splitu, available at: [https://www.ffst.unist.hr/studiji/integrirani_preddiplomski_i_diplomski_uciteljski_studij], Accessed 8 April 2023
20. UN Environment Programme, *Global Guidance for Education on Green Jobs,* 2021, available at: [https://wedocs.unep.org/20.500.11822/35070], Accessed 10 February 2022
21. UN, *TransformingOur World: The 2030 Agenda for Sustainable Development*, 2015, available at: [https://sustainabledevelopment.un.org/content/documents/21252030% 20Agenda%20for%20Sustainable%20Development%20web.pdf], Accessed 9 March 2023
22. UNCED, *Agenda 21*. United Nations Conference on Environment and Development, 1992, available at: [https://sdgs.un.org/publications/agenda21], Accessed 8 March 2023

23. UNESCO, *Education for Sustainable Development: Learning Objectives*, 2017, available at: [http:// unesdoc.unesco.org/images/0024/002474/247444e.pdf], Accessed 8 March 2023
24. UNESCO, *Rethinking Education. Towards a global common good?*, Paris, 2015, available at: [https://unevoc.unesco.org/e-forum/RethinkingEducation.pdf], Accessed 9 March 2023
25. Vlada Republike Hrvatske, Strateški okvir za razvoj 2006-2013, 2006, available at: [https://razvoj.gov.hr/UserDocsImages//arhiva/Publikacije//Strateski_okvir_za_razvoj_2006_2013.pdf], Accessed 9 March 2023
26. WCED, *Our Common Future. Report of the World Commission on Environment and Development,* 1987, available at: [https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf], Accessed 8 March 2023

UDK 342.721:502.14(4-67EU)
Original scientific paper

THE RIGHT TO RESPECT FOR PRIVATE AND FAMILY LIFE AS A MEANS OF ENVIRONMENTAL PROTECTION

Ana Radina, PhD, Assistant Professor
Faculty of Law, University of Split
Domovinskog rata 8, Split, Croatia
aradina@pravst.hr

ABSTRACT

Environmental degradation has a significant impact on a number of fundamental human rights; it alters the way individuals lead their lives, threatens their well-being and can prevent them, among other things, from peacefully enjoying their private and family life. Just like the environmental protection is crucial for the enjoyment of human rights, the effective exercise of human rights is essential for safeguarding the environment. Although this reciprocal relationship has long been widely acknowledged, the human right to a clean and healthy environment still awaits international and European human rights law recognition in the form of a binding document.

Since the right to respect for private and family life is one of the fundamental human rights most affected by harmful effects of environmental pollution, it is often used as a means of addressing environmental issues. Besides reflecting on the European Union's approach to environmental protection, this paper will focus on the examining of the specifics and the extent of the protection afforded to the environment through the right to private and family life as guaranteed by Article 8 of the Convention for the Protection of Human Rights and Fundamental Freedoms, and how this process in turn contributes to the development of the 'green' dimension of the right to private and family life. Naturally, the aim of the paper is also to consider the existing possibilities for advancing the protection of the human right to a healthy environment by means of the right to private and family life and vice versa.

Keywords*: European Court of Human Rights, European Union, environmental protection, right to respect for private and family life, right to a safe and healthy environment*

1. INTRODUCTION

Notwithstanding the fact the notion of "environmental rights" has been used in the international environmental and human rights context since 1972, when the Stockholm Declaration[1] recognised the link between human rights and the environment, and despite the proliferation of policies, programmes and non-binding instruments reiterating the awareness of that interrelatedness, such as the recent United Nations' Resolution recognizing the right the right to a clean, healthy and sustainable environment as a human right,[2] the most important action has not been taken so far – legal recognition of the right to a safe and healthy environment in a binding document. As growing environmental destruction is seriously threatening basically all fundamental human rights, the past few decades have seen an increase in pressure, or at least incentive, on the human rights protection systems,[3] especially the European Court of Human Rights (hereinafter: Court).

Over the last 50 years, the development of European integration was paralleled by the 'greening' of the European Union (hereinafter: EU) law[4], the result of which is an elaborate environmental policy[5] and an ample body of legislation covering different areas (air, water, soil, biodiversity, plastics, forests etc.[6]). The EU aspires to establish itself as a reliable partner on the international stage by implementing legislative framework which incorporates a comprehensive, human rights-based approach to climate and environmental action.[7] Yet, while observing "the emergence of a new human right – the right to a healthy, safe and sustainable environ-

---

1 Declaration of the United Nations Conference on the Human Environment, A/CONF.48/14/Rev.1, 16 June 1972.

2 United Nations General Assembly, Resolution: The human right to a clean, healthy and sustainable environment, A/RES/76/300, 28 July 2022.

3 For a discussion on *pro et contra* of utilization of human rights approach to environmental issues see: Atapattu, S; Schapper, A., *Human Rights and the Environment: Key Issues*, Routledge, London and New York, 2019, especially pp. 63-84.

4 Lombardo, M., *The Charter of Fundamental Rights and the Environmental Policy Integration Principle*, in: Di Federico, G. (ed.), The EU Charter of Fundamental Rights: From Declaration to Binding Instrument, Springer Dordrecht, 2011, p. 218.

5 Generally about the development of the EU environmental policy, its main features and perspectives see, e.g., Jordan, A.; Gravey, V. (eds.), *Environmental Policy in the EU: Actors, Institutions and Processes*, Routledge, London and New York, 2021.

6 European Commission, *Environment*, [https://environment.ec.europa.eu/index_en], Accessed 15 April 2023.

7 Yildirim, O., *Environmental protection as a prerequisite for respect for fundamental rights (information report - SDO)*, 2021, paras. 1.7, 2.8.2, [https://www.eesc.europa.eu/en/our-work/opinions-information-reports/information-reports/environmental-protection-prerequisite-respect-fundamental-rights-information-report-sdo], Accessed 15 April 2023.

ment" and "a new right to a safe climate"[8], the EU law lacks explicit recognition of both rights.

Adopting and coming into force of the Charter of Fundamental Rights of the European Union[9] (hereinafter: Charter) raised some hopes with regard to filling the gap due to a lack of explicit guarantee of the right to safe environment in international law. When compared to the Council of Europe's Convention for the Protection of Human Rights and Fundamental Freedoms (hereinafter: ECHR)[10], the Charter may have seemed like the more appropriate instrument for addressing environmental rights issues[11] as it includes explicit reference to environmental protection. Moreover, the Convention on access to information, public participation in decision-making and access to justice in environmental matters[12] (hereinafter: Aarhus Convention) binds both the EU and its Member States[13] which is especially important in the context of public participation and access to justice in environmental matters. However, the fundamental rights culture within the EU institutions is still developing,[14] so it is not surprising that the individuals affected by environmental pollution or related risks have been increasingly turning to the Court in search of protection.

Regardless of the fact that the ECHR does not even mention the environment, by employing the "living instrument doctrine"[15] and the doctrine of positive obligations the Court has been playing the role of surrogate protector of the environment by proxy of civil and political rights, the scope of which is continuously

---

8 *Ibid.*, paras. 1.3-1.4, 2.4, 3.2.1.

9 Charter of Fundamental Rights of the European Union [2012] OJ C326/391 (Charter).

10 Convention for the Protection of Human Rights and Fundamental Freedoms (Konvencija za zaštitu ljudskih prava i temeljnih sloboda), Official Gazette, International Agreements No. 18/1997, 6/1999, 8/1999, 14/2002, 13/2003, 9/2005, 1/2006, 2/2010, 13/2017 (ECHR).

11 Antonopoulos, I., *The day after: Protecting the human rights affected by environmental challenges after the EU accession to the European Convention on Human Rights*, Environmental Law Review, Vol. 20, No. 4, 2014, p. 218.

12 Convention on access to information, public participation in decision-making and access to justice in environmental matters (Konvencija o pristupu informacijama, sudjelovanju javnosti u odlučivanju i pristupu pravosuđu u pitanjima okoliša), Official Gazette, International Agreements No. 1/2007, 7/2008. (Aarhus Convention).

13 Council Decision of 17 February 2005 on the conclusion, on behalf of the European Community, of the Convention on access to information, public participation in decision-making and access to justice in environmental matters [2005] OJ L124/1.

14 Woerdman, E.; Roggenkamp, M.; Holwerda, M. (eds.), *Essential EU Climate Law*, Edward Elgar Publishing, Cheltenham, 2021, p. 291.

15 See *Tyrer v. the United Kingdom*, no. 5856/72, 25 April 1978, para. 31, where the Court stated that "the Convention is a living instrument which, … must be interpreted in the light of present-day conditions".

evolving.[16] So far the Court has produced an extensive body of jurisprudence that "all but in name provides for a right to a healthy environment"[17], most notably by virtue of Article 8 of the ECHR which protects the right to respect for private and family life.[18] By doing so, the Court simultaneously extends the protection of the 'green' side of the right to private and family life. In general, the Court has defined the scope of Article 8 broadly, even when a specific right is not set out in the Article,[19] and it has been following this same path in environmental case-law.

After briefly reflecting on the environmental protection in the EU's human rights protection system, this paper will focus on the protection provided to environment by means of Article 8 of the ECHR in the Court's jurisprudence. The aim is to determine what requirements have to be met in order for a certain form of environmental harm to raise an issue under the right to respect for private and family life in the sense of Article 8, what constitutes a disproportionate interference with the individual's peaceful enjoyment of this right, and what steps are the national authorities expected to take in order to fulfil their obligations in this area. Naturally, this research also aims to examine the existing possibilities for advancing the protection of the human right to a healthy environment through the right to respect for private and family life, which, in turn, would also promote the further 'greening' of the right to respect for private and family life.

2. ENVIRONMENTAL PROTECTION IN THE EU'S HUMAN RIGHTS PROTECTION SYSTEM

The human rights protection system of the EU is based on its treaties and the Charter, and it includes the right of access of the EU citizens to the Court of Justice of

---

16 Kobylarz, N., *The European Court of Human Rights: An underrated forum for environmental litigation*, in: Tegner Anker, H.; Egelund Olsen, B. (eds.), Sustainable Management of Natural Resources – Legal Instruments and Approaches, Intersentia, Cambridge-Antwerp-Portland, 2018, pp. 99, 101.

17 Pedersen, O. W., *The European Court of Human Rights and International Environmental Law*, in: Knox, J.; Pejan, R. (eds.), The Human Right to a Healthy Environment, Cambridge University Press, New York, 2018, p. 87.

18 ECHR, *op. cit.* note 10. Article 8 provides: 1. Everyone has the right to respect for his private and family life, his home and his correspondence. 2. There shall be no interference by a public authority with the exercise of this right except such as is in accordance with the law and is necessary in a democratic society in the interests of national security, public safety or the economic well-being of the country, for the prevention of disorder or crime, for the protection of health or morals, or for the protection of the rights and freedoms of others.

19 Private life is a broad concept incapable of exhaustive definition. Similarly, family life is considered as an autonomous concept. For an overview of the interpretation and application of rights covered by Article 8 in the Court's jurisprudence in: European Court of Human Rights, *Guide on Article 8 of the European Convention on Human Rights - Right to respect for private and family life*, 31 August 2020, [https://www.echr.coe.int/Documents/Guide_Art_8_ENG.pdf], Accessed 15 April 2023.

the European Union (hereinafter: CJEU) as an independent judicial authority.[20] In a way, the Charter is a revolutionary text in the sense that there is no equivalent document in Europe. Besides civil and political rights as well as economic and social rights, it covers also rights of a third generation which include environmental protection.[21] Its Article 37 provides that a high level of environmental protection and the improvement of the quality of the environment must be integrated into the policies of the Union.[22] Evidently, Article 37[23] omits the word "right", therefore it does not guarantee a human right to protection of its environment.

Generally, the inclusion of environmental protection in the Charter as a catalogue of fundamental rights should have had important legal effects in the sense of reinforcing procedural rights in the environmental context, one of them being access to justice, as well as preventing the adoption of EU acts and national implementation measures without having regard to their environmental impact.[24] In this connection, it is worth noting that since 2000 the EU institutions have been implementing a so-called Better Regulation Agenda which requires that a comprehensive Impact Assessment be carried out before proposing new policy initiatives that might have significant economic, environmental or social impacts. However, the scholars' analyses show that so far these procedures have not fulfilled their purpose.[25]

While Article 37 does not establish individually justiciable right to safe and healthy environment,[26] by means of Article 42 and Article 47 the Charter does provide for the right of access to documents, and the right to an effective remedy and to a fair trial. At this point Article 52(3) of the Charter[27] should also come into play as it is intended to ensure equivalent protection of rights under the ECHR and EU

---

20 Romaniszyn, A., *Human rights climate litigation against governments: a comparative overview of current cases and the potential for regional approaches*, McGill Journal of Sustainable Development Law, Vol. 16, No. 2, 2020, p. 263.

21 Groussot, X.; Gill-Pedro, E., *Old and new human rights in Europe – The scope of EU rights versus that of ECHR rights*, in: Brems, E.; Gerards, J. (eds.), Shaping Rights in the ECHR - The Role of the European Court of Human Rights in Determining the Scope of Human Rights, Cambridge University Press, 2014, p. 234.

22 Charter, *op. cit.*, note 9.

23 For a detailed analysis of Article 37 of the Charter see: Morgera, E.; Marin-Duran, G., *Commentary to Article 37: Environmental Protection*, in: Peers, S.; Hervey, T.; Kenner, J.; Ward, A. (eds.), The EU Charter of Fundamental Rights: A Commentary, Hart Publishing, 2021, pp. 1041-1064.

24 Lombardo, *op. cit.* note 4, p. 224.

25 More details in: Woerdman; Roggenkamp; Holwerda, *op. cit.* note 14, pp. 274-281.

26 Morgera; Marin-Duran, *op. cit.* note 23, pp. 1042, 1053.

27 Charter, *op. cit.*, note 9. Article 52(3) states: In so far as this Charter contains rights which correspond to rights guaranteed by the Convention for the Protection of Human Rights and Fundamental Freedoms, the meaning and scope of those rights shall be the same as those laid down by the said Convention.

system.[28] Consequentially, Article 47 should be interpreted in the same meaning and scope as Articles 6(1)[29] and 13[30] of the ECHR. This point of view is supported by the Aarhus Convention.[31] Regardless of misconceptions, the Aarhus Convention did not introduce an *actio popularis* in environmental matters; instead, it has strengthened the position of environmental NGO's by attributing the status of "concerned public" to them, thus aiming for a compromise solution and mitigating the strictness of approach which limits the access to justice to those directly concerned.[32] The CJEU's jurisprudence, however, does not seem to adhere to the same approach.

On the one hand, the CJEU has held that domestic courts need to interpret national law in a manner which as far as possible ensures effective judicial protection in the field of EU environmental law, which includes standards set in the Aarhus Convention. On the other hand, both the EU rules on *locus standi*[33] and their application in the CJEU's jurisprudence have been criticised as overly restrictive. Namely, the application of the "*Plaumann* test"[34] results in excluding any direct access of NGO's or individuals to the CJEU[35] for the purposes of challenging the legality of EU legislative acts.[36]

Non-regression clause found in Article 53 of the Charter[37] is intended to maintain the current level of protection afforded by EU law, national constitutions and

---

28 Groussot, X.; Gill-Pedro, E., *op. cit.*, note 21, p. 246.

29 ECHR, *op. cit*. note 10. Article 6(1) provides, *inter alia*, that "everyone is entitled to a fair and public hearing within a reasonable time by an independent and impartial tribunal established by law".

30 *Ibid*. Article 13 states: Everyone whose rights and freedoms as set forth in this Convention are violated shall have an effective remedy before a national authority notwithstanding that the violation has been committed by persons acting in an official capacity.

31 Morgera; Marin-Duran, *op. cit*. note 23, p. 1058.

32 Pánovics, A., *The missing link: Access to justice in environmental matters*, EU 2020 – lessons from the past and solutions for the future, in: Duić, D.; Petrašević, T. (eds.), EU and comparative law issues and challenges series (ECLIC 4), Josip Juraj Strossmayer University of Osijek, Faculty of Law Osijek, 2020, p. 114.

33 See Article 11 of the Regulation (EC) No 1367/2006 of the European Parliament and of the Council of 6 September 2006 on the application of the provisions of the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters to Community institutions and bodies [2006] OJ L264/13.

34 Case 25/62 *Plaumann & Co. v. Commission of the European Economic Community*, 15 July 1963.

35 More on the origin of this strict approach in: Peiffert, O., *European Union Court System and the Protection of the Environment*, in: Sobenes, E.; Mead, S.; Samson, B. (eds.), The Environment Through the Lens of International Courts and Tribunals, T.M.C. Asser Press, The Hague, 2022, pp. 228-231.

36 Garben, S., *Article 191 TFEU*, in: Kellerbauer; M.; Klamert, M.; Tomkin, J. (eds.), The EU Treaties and the Charter of Fundamental Rights: A Commentary, Oxford University Press, New York, 2019, pp. 1524-1525.

37 Charter, *op. cit*. note 9. Article 53 reads: Nothing in this Charter shall be interpreted as restricting or adversely affecting human rights and fundamental freedoms as recognised, in their respective fields of

international law, particularly the ECHR.[38] In connection to this, one peculiarity catches the eye - the environmental rights have not been the subject of otherwise long-standing dynamic judicial exchange between the CJEU and the Court.[39] Their significantly divergent approaches to environmental protection[40] inevitably reduce the possibility of finding common points of view in this area and seem to leave little room for achieving equivalent protection of human rights, including the right to private and family life.

The EU had been repeatedly criticised because the insistence on highly restrictive interpretation of the *locus standi* conditions does not comply with the requirements of the Aarhus Convention.[41] In 2021 the EU adopted legislative amendments[42] by means of which, besides the NGO's, other members of the public are also entitled to request reviews of the EU's environmental acts without having to demonstrate that they are directly and individually concerned, as required by the CJEU. They do, however, have to demonstrate that they are directly affected in comparison with the public at large. Furthermore, other members of the public may challenge EU's acts by demonstrating sufficient public interest, on condition that they collectively demonstrate both the existence of a public interest in preserving the quality of the environment, protecting human health, or in combating climate change, and that their request for review is supported by a sufficient number of natural or legal persons across the Union.[43] The CJEU had been following its 'orthodox approach' to the conditions for admissibility consistently since before

application, by Union law and international law and by international agreements to which the Union or all the Member States are party, including the European Convention for the Protection of Human Rights and Fundamental Freedoms, and by the Member States' constitutions.

38 Groussot, X.; Gill-Pedro, E., *op. cit.* note 21, p. 246.

39 Cenevska, I., *A Thundering Silence: Environmental Rights in the Dialogue between the EU Court of Justice and the European Court of Human Rights*, Journal of Environmental Law, Vol. 28, No. 2, 2016, pp. 303-307, 322-324.

40 As the case law of the CJEU does not offer protection for the right to private and family life in the context of environmental issues it would not be convenient to analyse it in details. Interested readers are suggested to see e.g., Cenevska, I., *ibid.*, pp. 316-322; Peiffert, O., *op. cit.* note 35, pp. 219-248; Woerdman, E.; Roggenkamp, M.; Holwerda, M., *op. cit.* note 14, pp. 282-285.

41 See more in: Marshall, F., *Participatory rights under the Aarhus Convention – more important than ever*, in: Council of Europe, Human Rights for the Planet, Proceedings of the High-level International Conference on Human Rights and Environmental Protection, Strasbourg, 5 October 2020, 2021, pp. 47-48.

42 Regulation (EU) 2021/1767 of the European Parliament and of the Council of 6 October 2021 amending Regulation (EC) No 1367/2006 on the application of the provisions of the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters to Community institutions and bodies [2021] OJ L356/1.

43 *Ibid.*, Recitals 19, 20, Article 3.

the ratification of the Aarhus Convention,[44] so now it remains to be seen to what extent it will change its position.

3. PROTECTION OF THE ENVIRONMENT BY MEANS OF THE RIGHT TO RESPECT FOR PRIVATE AND FAMILY LIFE UNDER ARTICLE 8 OF THE ECHR

3.1. A few introductory remarks

Although the Court has dealt with applications concerning harmful effects of environmental pollution since the 1960s,[45] it was not until 1991 that it expressly recognised that in today's society the protection of the environment is an increasingly important consideration.[46] Three years later, in the landmark judgment *López Ostra v Spain*,[47] the Court held that "[N]aturally, severe environmental pollution may affect individuals' well-being and prevent them from enjoying their homes in such a way as to affect their private and family life adversely, without, however, seriously endangering their health".[48] This case was examined under Article 8 like most of the Court's environmental case-law, and has set the general principle which the Court has been consistently reiterating ever since, namely, that even though there is no explicit right to a safe and healthy environment in the ECHR, an issue may arise under Article 8 where an individual is directly and seriously affected by some sort of environmental nuisance or pollution.

The following examination of the Court's environmental case-law within the framework of Article 8 will be based primarily, although not exclusively, on cases in which the Court ruled on the merits, finding (no) violation of the right to private and family life. Inevitably, the right to respect for home, also covered by Article 8, has to be included in our analysis because home is usually a place where private and family life goes on. The right to respect for home in the sense of Article 8 of the ECHR is more than just the right to the actual physical area; it is also the right to the quiet enjoyment of that area. Infringements of this right include those that are not concrete or physical, such as noise, emissions, smells or other forms of interference.[49] Taking into consideration that private life covers generally the

---

44 Peiffert, *op. cit.* note 35, pp. 233-234.

45 *Schmidt v. Federal Republic of Germany (dec.)*, no. 715/60, 5 August 1960.

46 *Fredin v. Sweden (no. 1)*, no. 12033/86, 18 February 1991, para. 48. The applicant complained of the revocation of a permit granted to exploit gravel, but the Court found no violation of his rights.

47 *López Ostra v Spain*, no. 16798/90, 9 December 1994.

48 *Ibid.*, para. 51.

49 E.g., *Kapa and Others v Poland*, nos. 75031/13, 75282/13, 75286/13, and 75292/13, 14 October 2021, para. 148.

physical and psychological integrity of a person, and that the essential ingredient of family life is the right to live together so that family relationships may develop normally and members of the family may enjoy each other's company,[50] it is clear how and why those three rights are interconnected and often overlap, as well as how and why they can all at the same time be adversely affected by the environmental degradation.

3.2. Applicability of Article 8 in environmental cases

Even though, as stated earlier, the Court acknowledges the protection of the environment is an increasingly important consideration, it does not accept that Article 8 is engaged in case of any environmental nuisance. Wider environmental context is considered relevant, but the general deterioration of the environment will not be sufficient.[51] For Article 8[52] to be applicable it has to be demonstrated that the environmental situation complained of represents an actual interference with the applicant's rights embedded in that Article and that the interference attained a minimum level of severity. In other words, environmental pollution must have had a direct and immediate effect on the right to respect for the applicant's home, private life and family life.[53]

The applicant's allegations in case *López Ostra v Spain*[54] pertained to pollution (smells, noise, fumes) caused by a privately-owned waste treatment facility built on municipal land, without a license required by law, and only 12 metres away from her house. After groundbreakingly establishing that severe environmental pollution may constitute direct and immediate effect on the right to respect for home, private and family life even without the actual damage to one's health, thus triggering the applicability of Article 8, the Court observed the authorities' contribution to prolonging the situation, and the fact that after more than three years the applicant and her family moved house because it became apparent that the situation could continue indefinitely and the applicant's daughter's paediatrician

50 European Court of Human Rights, *op. cit.* note 19, pp. 25, 77.

51 E.g., *Dzemyuk v Ukraine*, no. 42488/02, 4 September 2014, para. 78; *Kyrtatos v Greece,* no. 41666/98, 22 May 2003, paras. 52-53.

52 It is not uncommon in environmental cases that the applicant relies on other ECHR provisions besides Article 8, e.g., Articles 2, 3, 6 or 13. The same applies to some of the cases analysed in this paper, however, due to thematic and spatial limitations, we will deal only with the applicants' complaints based on Article 8.

53 For example, *Hardy and Maile v the United Kingdom*, no. 31965/07, 14 February 2012, paras. 187-188; *Yevgeniy Dmitriyev v. Russia*, no. 17840/06, 1 December 2020, para. 32; *Tolić and Others v Croatia (dec.)*, no. 13482/15, 4 June 2019, para. 91.

54 *López Ostra v Spain*, *op. cit*. note 47.

recommended that they do so. In the end, the Court found that the applicant's right to respect for her home and her private and family life was violated.[55]

Another fine example of a set of circumstances which represents a direct effect of environmental nuisance may be found in *Guerra and Others v. Italy*,[56] case involving the applicants complaining that the authorities failed to provide them with relevant information about risk factors and how to proceed in the event of an accident at the chemical factory sited about a kilometre away from their homes. The Court found that experts confirmed, and the Government did not dispute, that the factory released large quantities of inflammable gas and toxic substances in the air, and serious accidents have already occurred in the past. This was sufficient for establishing the existence of the direct effect of the toxic emissions on the applicants' right to respect for their private and family life, i.e. the applicability of Article 8.[57]

It follows from the aforementioned that the adverse environmental effects have to be both direct and severe enough in order for Article 8 to be applicable. Regrettably, this means that lesser violations of human rights arising from environmental pollution will remain outside the Court's review. An important safeguard in this context is the fact that, when assessing the minimum threshold,[58] the Court takes into account all the circumstances of the case,[59] including the intensity and duration of the nuisance, its physical or mental effects.[60] Obviously, establishing that the severity threshold has been reached is simpler if the pollution had already affected human health. Over time, however, the Court has gradually been broadening the interpretation of this "minimum" by establishing applicability of Article 8 in cases were a person's health was not manifestly affected or threatened,[61] as well as in cases where the dangerous effects of an activity to which the individuals

---

55 *Ibid*., paras. 51, 53, 56-58.

56 *Guerra and Others v Italy*, no. 14967/89, 19 February 1998.

57 *Ibid*., paras. 56-58. See, by contrast, Çiçek and Others v Turkey (dec.), no. 44837/07, 4 February 2020, paras. 30-32.

58 Kobylarz, *op. cit.* note 16, pp. 112-113.

59 See, e.g., *Zammit Maempel v Malta*, no. 24202/10, 22 November 2011, paras. 37-38, where the Court found that the severity threshold was reached even though the noise from fireworks complained of was only occasional.

60 *Inter alia*, *Cordella and Others v Italy*, nos. 54414/13 and 54264/15, 24 January 2019, paras. 157, 172; *Fadeyeva v Russia*, no. 55723/00, 9 June 2005, para 69. See also para. 138 of the latter judgment where the Court, calculating the amount of the non-pecuniary damage, took into account "various relevant factors, such as the age and state of health of the applicant and the duration of the situation complained of", and accepted "that the applicant's prolonged exposure to industrial pollution caused her much inconvenience, mental distress and even a degree of physical suffering".

61 E.g., *Solyanik v Russia*, no. 47987/15, 10 May 2022, para. 41; *Yevgeniy Dmitriyev v Russia*, *op. cit*., note 53, paras 32-33.

concerned are likely to be exposed have been determined under an environmental impact study, even where the hazardous activity is still in the planning stages.[62] Still, the applicants will not succeed with their claims if the detriment complained of is negligible in comparison to the environmental pollution inherent in life in every modern city.[63]

3.3. Respondent State's obligations in the context of protecting the environment by virtue of the right to private and family life

So far the Court's scrutiny in environmental cases has determined both negative and positive obligations of the respondent States. The Court applies broadly similar principles no matter whether a case is analysed in terms of a positive duty of the State to take appropriate measures to secure the applicants' rights provided in paragraph 1, or in terms of interference by a public authority which has to be justified in accordance with paragraph 2 or Article 8. The essential question is the same - whether the respondent State has struck a fair balance between the interests of persons affected by pollution and the competing interests of society as a whole.[64] Even if a case is examined from the point of view of the positive obligations, in the context of the balancing exercise, which the national authorities are required to take, the legitimate aims as stated in paragraph 2 of Article 8 may be of certain relevance. An interesting feature of the balancing exercise in environmental cases is the fact that the environment, which undoubtedly is a public interest, appears on the individual's side of the case, standing against another interest of the community as a whole.[65]

3.3.1. Negative obligations

3.3.1.1. Determining whether the interference was in accordance with the law

In cases concerning negative obligations, i.e. the authorities' interference with the individual's right to respect for private and family life, the Court is called to deter-

---

62 For example, *Taşkın and Others v Turkey*, 46117/99, 10 November 2004, paras. 112-113; *Thibaut v. France (dec.)*, nos. 41892/19 and 41893/19, 14 June 2022, para. 38.

63 E.g., *Kotov and Others v Russia*, nos. 6142/18 and 13 others, 11 October 2022, para. 109; *Jugheli and Others v Georgia*, no. 38342/05, 13 July 2017, para. 62.

64 E.g., *Giacomelli v Italy*, no. 59909/00, 2 November 2006, para. 78; *Kapa and Others v Poland*, *op. cit.*, note 49, para. 150.

65 Since the Court provides only for indirect protection of the environment through the ECHR, it does not assess the environmental values separately. Müllerová, H., *Environment Playing Short-handed: Margin of Appreciation in Environmental Jurisprudence of the European Court of Human Rights*, Review of European Community & International Environmental Law, Vol. 24, No. 1, 2015, pp. 89, 91.

mine whether the interference was prescribed by law, pursued a legitimate aim and was necessary in a democratic society. Cases *Dzemyuk v Ukraine*[66] and *Solyanik v Russia*[67] both involve complaints of the unlawful construction and use by the municipal authorities of a cemetery in close proximity to the applicant's house which led to the contamination of drinking water, exposing him and his family to a risk. Considering that the Government did not dispute the breach of the domestic environmental health regulations, that both the conclusions of the environmental authorities and the judicial decisions ordering closure of the cemetery were disregarded, the Court came to a conclusion that the interference with the applicants' right to respect for their home and private and family life was not in accordance with the law within the meaning of Article 8 of the ECHR.[68]

3.3.1.2. Legitimate aims and the margin of appreciation

In environmental cases, the interference with the individual's right to respect for private and family life is usually based on the economic interest of the country or a local area,[69] occasionally on "the interest of the local community in benefiting from the protection of public peace and security by the police force".[70] The issue of legitimate aim can be observed in connection with the margin of appreciation allowed to States due to the fact that this margin involves the Court's determining whether a fair balance was struck between conflicting interests at stake.

Namely, one of the well-established general principles that the Court consistently applies in cases pertaining to the right to private and family life, thus including the cases concerning the 'green' aspect of the realisation of those rights, is that the national authorities, who are in principle better placed than an international court to evaluate local needs and conditions, enjoy wide margin of appreciation in determining the steps to be taken to ensure compliance with the ECHR as well as making the initial assessment of the necessity for an interference.[71] The margin of appreciation doctrine has been criticised for leaving autonomy to respondent States thus making it easier for the Court to refrain from reviewing certain issues,[72]

---

66 *Dzemyuk v Ukraine*, *op. cit.* note 51.

67 *Solyanik v Russia*, *op. cit.* note 61.

68 *Ibid.*, paras. 51-54; *Dzemyuk v Ukraine*, *op. cit.* note 51, paras. 91-92.

69 *Inter alia, Fadeyeva v. Russia*, *op. cit.* note 60, para. 101; *Powell and Rayner v United Kingdom*, no. 9310/81, 21 February 1990, para. 42.

70 *Yevgeniy Dmitriyev v Russia*, *op. cit.* note 53, para. 57.

71 E.g., *Hudorovič and Others v Slovenia*, nos. 24816/14 and 25140/14, 10 March 2020, para. 140; *Grimkovskaya v Ukraine*, no. 38182/03, 21 July 2011, para. 65; *Strand Lobben and Others v. Norway*, no. 37283/13, 10 September 2019, paras. 210-211.

72 Müllerová, *op. cit.* note 65, pp. 83-84.

while the proof of overstepping the margin of appreciation is generally on the applicant.[73]

The aforementioned is reflected, e.g., in *Hatton and Others v the United Kingdom,*[74] case concerning the applicants complaining that the government policy on night flights at nearby airport violated their rights under Article 8 of the ECHR because the noise pollution caused considerable sleep disturbance to them and their children. The Court found that in balancing the applicants' individual interest against the public interest - the economic interests of the country, the authorities had not overstepped their margin of appreciation.[75] This case was subject to criticism[76] as it represented a regression from the Court's otherwise evolving, environmentally friendly case law.[77] Affording wide margin of appreciation to the respondent State meant allowing the economic interests to prevail[78] over the individual ones.

3.3.2. Positive obligations

Positive obligations of the States arising from the application of Article 8 in environmental context involve taking all the reasonable and appropriate measures necessary[79] for ensuring protection of the rights covered by that Article. Those responsibilities extend to the sphere of the relations between private individuals, which includes situations where the environmental pollution was the result of the actions of private actors.[80] For example, the breach of the State's obligations may be found as a result of a failure to regulate private industry, or to adopt measures to protect the rights of individuals exposed to pollution and to accompanying health risk. Due to a fairly wide margin of appreciation being allowed, the choice of means of fulfilling their obligations belongs to the respondent State.[81]

---

73 Peters, B., *The European Court of Human Rights and the Environment*, in: Sobenes, E.; Mead, S.; Samson, B. (eds.), The Environment Through the Lens of International Courts and Tribunals, T.M.C. Asser Press, The Hague, 2022, pp. 211.

74 *Hatton and Others v the United Kingdom*, no. 36022/97, 8 July 2003.

75 *Ibid*., paras. 121, 126, 128-130.

76 The Grand Chamber's decision in this case was not unanimous and five judges joined in expressing their dissenting opinion. *Ibid*.

77 Zahradnikova, E., *European Court of Human Rights: Giving the Green Light to Environmental Protection*, Queen Mary Law Journal, Vol. 8, 2017, p. 18.

78 See, by contrast, *Băcilă v Romania*, no. 19234/04, 30 March 2010, paras. 70-72.

79 For example, *Cordella and Others v Italy*, *op. cit*. note 60, para. 173; *Guerra and Others v Italy*, *op. cit*. note 56, para. 58.

80 E.g., *Oluić v Croatia*, no. 61260/08, 20 May 2010; *K.U. v Finland,* no. 2872/02, 2 December 2008, para. 43.

81 See, e.g., *Apanasewicz v Poland*, no. 6854/07, 3 May 2011, paras. 84, 103-104, case concerning the failure to enforce a decision ordering the closure of a concrete production plant built unlawfully by the

In *Mileva and Others v Bulgaria*[82] the applicants, who lived on the first floor of the residential building, complained about the noise and other nuisance from a computer gaming club unlawfully operating on the ground floor of the same building. The authorities received a number of complaints, yet they failed to take effective steps to determine the effect of the club's operating on the well-being of the building residents. Notwithstanding the fact it is not tasked with determining what exactly should have been done to put an end to or reduce the disturbance, the Court can, however, assess whether the authorities approached the matter with due diligence and took all the competing interests into consideration.[83] In this case the Court found that the authorities failed to discharge their positive obligation to ensure the applicants' right to respect for their homes and their private and family lives.[84]

Cases involving complex environmental and economic policy issues, and especially dangerous activities, engage a number of specific positive obligations[85] serving the purpose of effectively respecting one's right to private and family life. Among others, this includes obligations related to effective prevention of damage to the environment and human health, which is significant as the human rights approach to environmental issues is often criticised as being exclusively reactive.[86]

Environmental considerations in the Court's reasoning reveal that procedural elements are used both as means for evaluating the applicability of Article 8 and for establishing violation of positive obligations.[87] Procedural safeguards available to the individual will be especially relevant for the Court when determining whether the State has stepped out of its margin of appreciation.[88] In *Taşkın and Others v*

---

applicant's neighbour. The Court found that the measures adopted by the authorities were insufficient and wholly ineffective, which amounts to breach of the applicant's right to private and family life as guaranteed by Article 8.

82 *Mileva and Others v Bulgaria,* nos. 43449/02 and 21475/04, 25 November 2010.

83 *Inter alia*, *Kotov and Others v. Russia*, *op. cit*. note 63, para. 134. Also, the Court almost never orders consequential measures in environmental cases on the basis of Article 46 of the ECHR. One of the exceptions is case *Cordella v. Italy, op. cit.*, note 60. More details in: Keller, H.; Heri, C.; Piskóty, R., *Something Ventured, Nothing Gained? – Remedies before the ECtHR and Their Potential for Climate Change Cases*, Human Rights Law, Review, Vol. 22, No. 1, 2022, pp. 17-19.

84 *Mileva and Others v. Bulgaria, op. cit*. note 82, paras. 99-102.

85 E.g., *Di Sarno and Others v. Italy*, no. 30765/08, 10 January 2012, 106-107; Öneryıldız v. Turkey, no. 48939/99, 30 November 2004, paras. 89-90.

86 Pedersen, *op. cit*. note 17, p. 89.

87 More in: Krstić, I.; Čučković, B., *Procedural aspect of Article 8 of the ECHR in environmental cases - the greening of human rights law*, Annals FLB - Belgrade Law Review, Year LXIII, 2015, No. 3, pp. 186-187.

88 For example, *Dubetska and Others v. Ukraine*, no. 30499/03, 10 February 2011, paras. 143-144; *Buckley v. the United Kingdom*, no. 20348/92, 25 September 1996, para. 76.

Turkey[89] the Court emphasised that the decision-making process must involve appropriate investigations and studies; this enables the authorities to evaluate in advance the effects of the activities with the potential to damage the environment and infringe individuals' rights. Besides the public access to information allowing them to assess the risk to which they are exposed being "beyond question", the individuals concerned must also have access to courts if they consider that their interests have not been given due weight in the decision-making process.[90] At the same time, "allowing applicants to assess the risk" suggests that the applicants are left on their own in this regard, even though they usually do not possess expert knowledge on the issues at stake.[91]

The dispute in this case involved the operation of a gold mine using a dangerous process of cyanidation. After the domestic court revoked the permit it took ten more months until the closure of the mine had been ordered. Later, in a decision which was not made public, the authorities granted the continuation of the gold mine's operation. The Court held that the procedural safeguards were available to the applicants, but the authorities had deprived them of any useful effect, which led to conclusion that the applicants' right to respect for their private and family life vas violated.[92] The significance of this judgment lies also in the fact that it is the first time the Court cited the Aarhus Convention as the relevant international standard concerning procedural environmental rights. Moreover, the Court did so despite the fact Turkey had not ratified the Aarhus Convention.[93]

Within this context, case *Tătar v Romania*[94] also stands out. Considering that several official reports and studies established serious environmental damage and a threat to human health as consequences of the accident in a gold mine, the Court stated that the population of the town, including the applicants, must have lived in a state of anxiety and uncertainty exacerbated by the passivity of the national authorities. The latter failed in their obligation to assess in advance the possible risks of the activity in question, and to take adequate measures capable of protect-

---

89 *Taşkın and Others v. Turkey*, *op. cit*. note 62.

90 *Ibid*., para. 119.

91 Krstić; Čučković, *op. cit*. note 87, pp. 183-184.

92 *Taşkın and Others v Turkey*, *op. cit*. note 62, paras. 120-126. Subsequently, the Court delivered other judgments concerning the operation of the same polluter, also establishing violations of the applicants' right to private and family life. See: Öçkan and Others v Turkey, no. 46771/99, 28 March 2006; *Lemke v Turkey*, no. 17381/02, 5 June 2007; *Genç and Demirgan v Turkey*, nos. 34327/06 and 45165/06, 10 October 2017.

93 For more details on the subsequent case-law mentioning the Aarhus Convention see: Peters, *op. cit*. note 73, p. 10.

94 *Tătar v Romania*, no. 67021/01, 27 January 2009.

ing the rights of the persons concerned to respect for their private and family life,[95] and "more generally, the enjoyment of a healthy and protected environment".[96]

This is so far the only environmental case in which the Court's ruling relied on the precautionary principle.[97] Further, the Court made discernible shift in its language, opening the way for the concept of a right to a safe and healthy environment to influence its subsequent case-law.[98] Regrettably, the Court has been reluctant towards developing the precautionary principle further,[99] even though it has been giving hints of willingness to abandon the mainly procedural approach to environmental rights and to engage in the further evolution of their substantive perspective.[100] Namely, the statement about the right to live in a safe and healthy environment has been repeated since. For example, in Băcilă v Romania[101] the applicant complained that the pollution generated by the plant built near her home had severe detrimental effects on her health, in particular poisoning by lead and sulphur dioxide. The Court held that the economic stability of the town cannot prevail over "the right of the persons concerned to enjoy a balanced and healthy environment",[102] and ruled that by failing to strike a fair balance between the interests at stake, the authorities violated the applicant's right to respect for her home and for her private and family life.[103]

Furthermore, the States' positive obligations include not only the duty to provide information when asked, which requires establishing appropriate procedure for

---

95 *Ibid*., paras. 104, 122-125.

96 *Ibid*., paras. 107, 112.

97 *Ibid*., paras. 109, 120. The precautionary principle suggests that scientific uncertainty should not be used as an excuse to postpone effective and proportionate measures aimed at preventing the irreparable damage to the environment. More about this principle in international law: Atapattu, S., *Emergence of International Environmental Law: A Brief History from the Stockholm Conference to Agenda 2030*, in: Sobenes, E.; Mead, S.; Samson, B. (eds.), The Environment Through the Lens of International Courts and Tribunals, T.M.C. Asser Press, The Hague, 2022, pp. 15-18. More about the interpretation of this principle in the context of the EU law: Garben, S., *op. cit*. note 36, pp. 1519-1520.

98 Cenevska, *op. cit*. note 39, pp. 312-313.

99 See: Pedersen, *op. cit*. note 17, pp. 89-90. It should be noted that the principle itself was mentioned again, e.g., in *Di Sarno and Others v. Italy*, *op. cit*. note 85, para. 75, but only in the context of citing the relevant EU law, not as a part of the Court's reasoning.

100 Cenevska, *op. cit*. note 39, pp. 312-314.

101 *Băcilă v Romania*, *op. cit*. note 78.

102 See also: *Di Sarno and Others v. Italy*, *op. cit*. note 85, para. 110, reiterating "the right of the people concerned to live in a safe and healthy environment"; *Kotov and Others v Russia*, *op. cit.*, note 63, para. 135, mentioning "applicant's individual interest in living in favourable environmental conditions"; *Pavlov and Others v. Russia*, no. 31612/09, 11 October 2022, para. 85, pointing to "the applicants' interest in living in a safe environment".

103 *Băcilă v. Romania*, *op. cit*. note 78, paras. 71-73.

acquiring environmental information, but also an obligation to actively inform about the risks[104] those persons who are facing a health hazard. The Court expressed this view already in *Guerra and Others* by ruling that the State failed to provide the applicants with essential information about the risks they and their families might face if they continued to live in the close proximity of the chemical factory.[105] One of the reasons for finding a violation of Article 8 in Tătar was that the respondent state did not provide the applicants with sufficient information on the past, present and future consequences of the gold mine accident on their health and the environment, and on the preventive measures in case of similar events in the future.[106]

4. THE PLACE FOR "THE RIGHT TO RESPECT FOR FAMILY LIFE" IN ENVIRONMENTAL CASE-LAW

The Court's views regarding the specific circumstances which trigger the applicability of the right to family life in addition to the right to private life (and often the right to home) have not been analysed up until this point. The reason why is that the Court's environmental case-law within the framework of Article 8 of the ECHR simply lacks of any elaboration on that matter specifically. It is possible, however, to discern some guidelines from the cases themselves.[107]

When rejecting as inadmissible the applications in which the applicants claimed concretely that their right to respect for family life was violated, the Court usually simply declares, for example, that it has not been proven that a particular activity or nuisance would expose applicants to an environmental hazard in such a way that "their ability to enjoy their private and family life or their home would be directly and seriously affected"[108]. Similar style is used in cases where the Court finds no violation of the right to private and family life. For example, in *Martínez Martínez and Pino Manzano v Spain,*[109] after observing that the expert's report showed that the levels of noise and pollution complained of were equal to or slightly above the norm, and that the applicants had deliberately placed them-

---

104 Krstić; Čučković, *op. cit*. note 87, p. 181.

105 *Guerra and Others v Italy, op. cit*. note 56, paras. 58-60.

106 *Tătar v. Romania*, *op. cit*. note 94, paras. 122-125.

107 Inevitably, the analysis in this section has to be focused on environmental cases in which the applicants themselves explicitly invoked their right to family life, besides their right to private life and home, or they generally relied on Article 8 without singling out any of the interests protected by that Article.

108 *Thibaut v France (dec.)*, *op. cit.* note 62, para. 47. See also, *inter alia*: *Fieroiu and Others v Romania (dec.)*, no. 65175/10, para. 28; *Calancea and Others v the Republic of Moldova (dec.)*, no. 23225/05, 1 March 2018, para. 32.

109 *Martínez Martínez and Pino Manzano v Spain*, no. 61654/08, 3 July 2012.

selves in an unlawful situation by settling in an industrial zone which was not meant for residential use, the Court ruled that there was no interference with the applicants' right to respect for their home and their private and family life, thus there is no violation of those rights.[110]

It is understandable why in those two categories the Court would consider it unnecessary to discuss in detail what specific circumstances turn an environmental situation into a violation of the right to family life. However, judgments in which the Court found the violation of the right to private and the right to family life also provide no explanation on that issue. Certain conclusions might be drawn from those cases in which both the applicants complained of their right to private and family life being violated and the Court established the violation to the same extent. For example, the aforementioned cases *López Ostra*,[111] *Guerra and Others*,[112] *Taşkın and Others*,[113] Băcilă[114] or *Mileva and Others*[115] suggest that, besides the existence of the adverse direct and serious effect on the applicant and his/her family's health and overall well-being which had already been materialised, or of the high level of risk, the close proximity of the source of pollution or the source of risk is also a relevant factor.[116] This observation is further supported by, e.g., *Giacomelli*,[117] case concerning the issuing of an operating licence to the waste treatment plant, located only 30 metres away from the applicant's house, without any prior study. The Court ruled that the State failed to ensure the applicant's effective enjoyment of her right to respect for her home and her private and family life.[118]

The State is under an obligation to protect family life and enable the normal development of family relationships. It is not difficult to imagine how environmental pollution may have a negative effect on the mutual enjoyment by parent and

---

110 *Ibid.*, paras. 49-51. See also *Kyrtatos v Greece*, *op. cit.*, note 50, paras. 53-55.

111 *López Ostra v Spain*, *op. cit.*, note 47.

112 *Guerra and Others v. Italy*, *op. cit*. note 56.

113 *Taşkın and Other v Turkey, op. cit*. note 62.

114 *Băcilă v Romania*, *op. cit*. note 78.

115 *Mileva and Others v Bulgaria*, *op. cit*. note 82.

116 See, by contrast, *Kotov and Others v Russia*, *op. cit.*, note 63, paras. 81, 101-109, where the distance between the applicants' homes and the source of pollution varied from 5.8 to 13 kilometres. See also *Pavlov and Others v Russia*, *op. cit.*, note 102, paras. 68-71. In both cases the applicants also provided no medical evidence which could point to any conditions that they had allegedly developed. Considerable distance from the sources of pollution is presumably the reason why the right to respect for home was also excluded from the examination of the merits in these cases.

117 *Giacomelli v Italy*, *op. cit.* note 64.

118 *Ibid.*, paras. 86-88, 92-94, 97.

child of each other's company,[119] or on the relationships between family members in general. At the same time, it appears that the applicant's allegations about the adverse effects of environmental nuisance on the members of his/her family are not decisive for the violation of the right to family life to be established, as follows from, e.g., *Apanasewicz v Poland*[120] or Băcilă v Romania[121]. In neither of those cases did the applicant make arguments with regard to her family members.

The applicants in *Dubetska and Others v Ukraine*[122] asserted that they suffered chronic health problems and damage to their living environment as a result of a coal mine and a factory operating nearby. Interestingly enough, the applicants submitted that "their frustration with environmental factors affected communication between family members. In particular, lack of clean water for washing reportedly caused difficulties in relations between spouses. Younger family members sought to break away from the older ones in search of better conditions for their growing children."[123] The Court expressly noted the applicants' accounts of their daily routine and communications, and stated that they "appear to be palpably affected by environmental considerations".[124] Since the Government has failed to adduce sufficient explanation for their failure in finding some kind of effective solution for more than 12 years, the Court found there has been a breach of Article 8 in this case.[125]

Besides the lack of expressly stated principles in this context, judgments themselves sometimes lack clarity. Namely, there are cases in which the applicants explicitly relied on their right to private and family life, but in the end the Court's ruling pertained only to right to home and/or private life. In the latter category of cases, the concept of family life is always at least mentioned in the Court's deliberations on the applicability of Article 8, however, after that, the right to family life 'disappears' from the Court's examination of the merits.

For example, in *Grimkovskaya v Ukraine*[126] the applicant complained about a motorway being rerouted right next to her house, relying on her right to respect for home, private and family life. The Court, when giving its ruling, did not explicitly

---

119 It is well established in the Court's case-law that the mutual enjoyment by parent and child of each other's company constitutes a fundamental element of family life. See, e.g., *Strand Lobben and Others v. Norway*, *op. cit.*, note 71, paras. 202-203.

120 *Apanasewicz v Poland*, *op. cit.* note 81.

121 *Băcilă v Romania*, *op. cit.* note 78.

122 *Dubetska and Others v Ukraine*, *op. cit.* note 88.

123 *Ibid.*, para. 29.

124 *Ibid.*, para. 112.

125 *Ibid.*, paras. 73, 119.

126 *Grimkovskaya v Ukraine, op. cit.,* note 71.

refer to any particular interest protected by this provision, stating just that Article 8 was infringed.[127] It is safe to assume, though, that the scope of the established violation corresponds to the applicant's complaints. However, sometimes the exact scope of the violation found or not found by the Court is not obvious at first. In *Hatton and Others*[128] the applicants relied generally on Article 8 of the ECHR. The Court ruled that the applicant's right to respect for home and private life was not violated. After that, when it discussed the issue of damage suffered by the applicants, the Court stated that it found "no violation of the substantive right to respect for private life, family life, home and correspondence under Article 8".[129]

Similarly, in *Di Sarno and Others v Italy*[130] the applicants relied generally on Article 8 and complained about the authorities' failure to take appropriate measures to guarantee the proper functioning of the public waste disposal service. Reiterating that it is master of the characterisation to be given in law to the facts of the case,[131] the Court considered that the applicants' complaints should be examined from the standpoint of the right to respect for private life and home.[132] In so doing, the Court offered no explicit explanation as to why the right to family life could not be considered a suitable basis for considering the applicant's grievances. Recalling the Court's previous case-law, the answer may be found in the fact that the applicants had not claimed to have had any health problems linked to their exposure to the waste.[133]

In *Kapa and Others v Poland*[134] the applicants argued that by rerouting of traffic by their house during the construction of a motorway, which exposed them to pollution (noise, vibrations, exhaust fumes), the authorities had violated their right to the peaceful enjoyment of their private and family life and their home. The Court held that "the applicants' right to the peaceful enjoyment of their homes

---

127 *Ibid*., paras. 41, 73. The same approach was applied in, for example, *Dubetska and Others v Ukraine*, *op. cit*., note 88, paras. 73, 156.

128 *Hatton and Others v the United Kingdom*, *op. cit*., note 74.

129 *Ibid*., paras. 84, 129, 147. See also para. 13 of the dissenting opinion annexed to this judgment, where five judges state that, in their opinion, "the problem of noise, when it seriously disturbs sleep, does interfere with the right to respect for private and, under specific circumstances, family life, as guaranteed by Article 8, and may therefore constitute a violation of said Article, depending in particular on its intensity and duration". Unfortunately, the judges did not elaborate further on that thought.

130 *Di Sarno and Others v Italy*, *op. cit*. note 85.

131 *Ibid*., para. 96. See also: *Hardy and Maile v the United Kingdom*, *op. cit.* note 53, para. 184.

132 *Ibid*., *Di Sarno and Others v Italy*, paras. 94, 96.

133 See also, e.g., *Jugheli and Others v Georgia*, *op. cit*. note 63, para. 71, referring to the lack of proof of any quantifiable harm to the applicants' health.

134 *Kapa and Others v Poland*, *op. cit.* note 49.

was breached", thus there has been "a violation of Article 8".[135] Besides the scope of this ruling departing from that of the applicants' claims, as soon as the Court, for the purposes of examining the merits of the case, started reiterating general principles applicable to this case, it immediately focused on the right to home. As the facts of this case are similar to those in *Grimkovskaya*,[136] the explanation for the difference in the Court's conclusions, presumably, lies in the fact that in *Kapa and Others* the domestic court already found that the applicants' right to health and the peaceful enjoyment of their home had been infringed.[137]

When comparing *Dzemyuk v Ukraine*[138] and *Solyanik v Russia*[139] one finds that in both cases: the applicant complains of a violation of Article 8, arguing that the construction and use of a cemetery near his house had contaminated his supply of drinking water, preventing him from making normal use of his home and its amenities; the cemetery was located near the applicant's house (38 metres in *Dzemyuk*; 77.1 metres in *Solyanik*); the applicant alleged his own and his wife's mental health was affected, however no evidence of actual damage to their health was submitted; the Court concluded that the nuisance complained of constituted an interference with the applicant's right to respect for his home and private and family life; the Court ruled that the interference with the applicant's right to respect for his home and private and family life was not in accordance with the law and held that there has been a violation of Article 8 of the ECHR.[140] However, it was not until the Court considered "that the effects that the environmental nuisance had on the applicant's right to respect for his private life and his home cannot be compensated for by the mere finding of a violation"[141] that we find out that the extent of the violation found is, apparently, narrower in *Solyanik*. The reasoning behind this difference in the Court's conclusions on such similar cases is not clear as the only obvious differences seem to be twice the distance between the cemetery and the applicant's house in *Solyanik* in comparison to *Dzemyuk,* and the applicant's complaint in *Solyanik* about his grandchildren being afraid to visit him because he had *de facto* lived in the cemetery.[142] Certainly, there is also possibility that this was just an oversight.

---

135 *Ibid*., paras. 119, 174-175.

136 *Grimkovskaya v Ukraine, op. cit.* note 71.

137 *Kapa and Others v Poland*, *op. cit*. note 49, paras. 88, 153.

138 *Dzemyuk v Ukraine*, *op. cit*. note 51.

139 *Solyanik v Russia*, *op. cit*. note 61.

140 *Dzemyuk, v Ukraine*, *op. cit.* note 51, paras. 33, 73, 82-84, 92; *Solyanik v Russia*, *op. cit*. note 61, paras. 14, 37, 41, 43, 45, 54.

141 *Ibid*., *Solyanik v Russia*, para. 58.

142 *Ibid.,* para. 48. For relevant principles relating to the meaning and scope of family life between grandchildren and grandparents see, e.g., *Q and R v Slovenia*, no. 19938/20, 8 February 2022, para. 94.

Finally, it should be mentioned that what also contributes to the lack of clarity on this issue is the fact that it is not uncommon that the press releases[143] on judgments incorrectly report on the violations (not) found. For example, press releases on *Kapa and Others* and *Di Sarno and Others* state that the violation of private and family life was found even though the violation of the right to respect for home and the right to respect for home and private life was found respectively.[144] On the other hand, the press release on *Apanasewicz* states that the Court unanimously held that there had been "a violation of Article 8 (right to respect for the home)" even though the judgment established violation of the applicant's right to private and family life.[145] Press release on *Mileva and Others* omits the violation of the applicants' right to home which was established in the judgment besides the violation of the right to private and family life.[146]

It would be useful if the Court would elaborate specifically on the question of what constitutes a violation f the right to family life in environmental cases. Even if protection afforded to the right to respect for home and private life inevitably has favourable effects to the family life as well, clarification on this point would be convenient. If nothing else, it would be easier on the applicants if there were more guidance from the Court pertaining to the right to family life in particular.

5. THE PERSPECTIVE OF FURTHER DEVELOPMENT OF THE ENVIRONMENTAL PROTECTION BY MEANS OF THE RIGHT TO LIVE PRIVATE AND FAMILY LIFE IN A SAFE AND HEALTHY ENVIRONMENT

It is safe to say that there is potential for further evolution of the scope of protection afforded to the environment through the right to respect for private and family life embedded in Article 8 of the ECHR, if not for explicit recognition of the human right to live in a healthy environment. That, at the same time, means broadening the scope of protection of the individual's right to live his/her private and family life in a favourable environment. After the *Tătar* judgment it seemed like the Court is retreating from its precautionary tone which caused concerns that its case-law might be at a standstill. However, it seems that the Court has not yet reached the end point of how far it is willing to expand the ECHR to cover

143 All press releases issued by the Registry of the Court since 1 January 1999 are available at [http://hudoc.echr.coe.int/sites/eng-press], Accessed 15 April 2023.

144 *Kapa and Others v. Poland, op. cit*. note 49, para. 174; *Di Sarno and Others v. Italy*, *op. cit*. note 84, para. 112.

145 *Apanasewicz v Poland*, *op. cit*. note 81, paras. 84, 103, 108.

146 *Mileva and Others v. Bulgaria*, *op. cit*. note 82, para. 101. See also: *Martínez Martínez and Pino Manzano, op. cit*. note 110, para. 50.

environmental issues.[147] The Court recently widened the substantive aspect of environmental protection, thus raising the bar of expectations for the future.

Before turning to the Court, the applicants in *Pavlov and Others v Russia*[148] unsuccessfully brought proceedings against 14 national agencies relying on, *inter alia*, their right to private and family life under Article 8 of the ECHR. In particular, they complain about the respondent State's failure to take appropriate measures in order to improve the environmental situation and to reduce effects of long-standing pollution which was the result of industrial facilities operating around the city they lived in. Unlike in earlier cases, where the close proximity of the source of pollution to the applicant's home was an important factor, 2 to 15 kilometres of distance from industrial facilities in this case was considered by the Court as only one of the relevant factors to be taken into account.[149] Reiterating once again that the applicants have an "interest in living in a safe environment",[150] the Court found that despite certain targeted measures and programmes being implemented, the air pollution in the city where the applicants lived had not been curbed sufficiently to prevent the exposure of the residents to related health risks. Therefore, the Russian authorities had failed to secure the applicants' right to respect for their private life.[151]

The Court departed from its previous conservative approach towards reviewing and giving opinion on domestic environmental policies and measures, which it had employed in 2009 in *Greenpeace E.V. and Others v Germany,*[152] and has downplayed his subsidiary role a bit. This stepping forward was not welcomed by all,[153] as could be expected. However, 14 years have passed since the *Greenpeace E.V.* and the "present-day conditions"[154] to which interpretation and application of the ECHR rights should be adapted, especially of the right to private and family life, have significantly changed. Serious consequences of environmental destruction, and particularly of climate change crisis, are visible all over the globe. Abundance of scientific evidence is publicly available and the approach taken in *Pavlov and*

147 See: Pedersen, *op. cit*. note 17, p. 90.

148 *Pavlov and Others v. Russia*, *op. cit*. note 102.

149 *Ibid.*, paras. 63-64.

150 *Ibid*., para. 85.

151 *Ibid*., paras. 92-93.

152 *Greenpeace E.V. and Others v. Germany (dec.)*, no. 18215/06, 12 May 2009.

153 Respected reader is referred to four separate opinions annexed to *Pavlov and others*, *op. cit.*, note 101, as they are all raising important issues to be considered in the context of dealing with environmental issues by means of human rights.

154 *Tyrer v the United Kingdom*, *op. cit*. note 15, para 31.

Others may be suggesting the Court's willingness to tackle evidentiary problems[155] in the environmental context more actively, thus to assume more responsibility for the protection of environment and the protection of human rights which are seriously undermined by environmental degradation.

It will be known relatively soon whether the case-law concerning the relationship and mutual influence of environmental pollution and the right to private and family life will continue to evolve on the path the Court set out in *Pavlov and Others*. Namely, several climate cases are currently pending before the Grand Chamber.

Case *Verein KlimaSeniorinnen Schweiz and Others v Switzerland*[156] is brought before the Court by a group of elderly women[157] complaining of adverse effects of climate change on their health and private and family life. They argue that Switzerland has failed in fulfilling its duties under the Article 8 by not doing everything in its powers to reduce the global temperature rise.[158] In *Carême v France*[159] the applicant alleges that the authorities have not taken all appropriate measures in order to comply with the maximum levels of greenhouse gas emissions, and that this failure constitutes a disregard for his right to a normal private and family life.[160] The applicants in *Duarte Agostinho and Others v Portugal and Others*[161] complain about the failure by the 33 Signatory States[162] to the 2015 Paris Agreement[163] to

---

155 There are different possibilities to that end, and the expertise on environmental law is already present within the Court. See more in: Keller, H.; Heri, C., *The Future is Now: Climate Cases Before the ECtHR*, Nordic Journal of Human Rights, Vol. 40, No. 1, 2022, pp. 168-169.

156 *Verein KlimaSeniorinnen Schweiz and others v Switzerland*, no. 53600/20 (communicated case), 17 March 2021.

157 The applicants are an association concerned with the consequences of climate change whose members are older women (more than 2,000 members, and one-third of whom are over 75) as well as four individual women (over 80 years old).

158 European Court of Human Rights, *Grand Chamber hearing on consequences of global warming on living conditions and health*, Press Release, 29 March 2023, [https://hudoc.echr.coe.int/eng-press?i=003-7610087-10470692], Accessed 15 April 2023.

159 *Carême v France*, no. 7189/21 (communicated case), 7 June 2022.

160 European Court of Human Rights, *Grand Chamber hearing concerning combat against climate change*, Press Release, 29 March 2023, [https://hudoc.echr.coe.int/eng-press?i=003-7610561-10471513], Accessed 15 April 2023.

161 *Duarte Agostinho and Others v. Portugal and Others*, no. 39371/20 (communicated case), 13 November 2020. The applicants are six Portuguese nationals between 8 and 21 years of age (at the moment of applying to the Court).

162 Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Russian Federation (ceased to be a Party to the ECHR on 16 September 2022), Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine and United Kingdom.

163 United Nations, Paris Agreement, FCCC/CP/2015/10/Add.1,12 December 2015. The Paris Agreement is the first legally binding international treaty on climate change. Its primary goal is to keep the

comply with their commitments in order to limit the effects of climate change. They argue that this is already affecting their living conditions and health, and that they experience 'eco-anxiety'[164] caused by the natural disasters and by the prospect of spending their whole lives in an increasingly warm environment, affecting them and any future families they might have.[165]

There is no room here for thorough review, however few issues should be mentioned because they could prove to be stumbling blocks[166] to the further evolution of the Court's environmental case-law under Article 8.

Firstly, the fact that individual applicants in *Verein Klimaseniorinnen Schweiz and Others* are represented by an association could potentially disable their victim status,[167] while in *Carême* this could happen because of the applicant's resident situation as he presently lives in Belgium, not in France.[168] On the other hand, the Court has dealt with applications related to broader policy measures or situations,[169] and it has already acknowledged the important role of NGOs in environmental litigation.[170] Secondly, taking the case directly to the Court, without exhausting the domestic remedies, could prove to be an insurmountable obstacle

---

increase in the global average temperature to well below 2°C above pre-industrial levels while simultaneously pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels. The EU and its Member States are parties to this Agreement. See: Council Decision (EU) 2016/1841 of 5 October 2016 on the conclusion, on behalf of the European Union, of the Paris Agreement adopted under the United Nations Framework Convention on Climate Change [2016] OJ L 282/1.

164 "Eco-anxiety" is described as distress relating to the climate and ecological crises which causes anxiety about the future of the planet and the individuals' own lives. Studies show it is wide-spread globally. See: Hickman, C., *et al.*, *Climate anxiety in children and young people and their beliefs about government responses to climate change: a global survey*, The Lancet Planetary Health, Vol. 5, No. 12, 2021, pp. e863-e873.

165 European Court of Human Rights, *Grand Chamber to examine case concerning global warming*, Press Release, 30 June 2022, [https://hudoc.echr.coe.int/eng?i=003-7374717-10079435], Accessed 15 April 2023.

166 Keller; Heri, *op. cit.* note 155, pp. 154-155.

167 For the criteria applied in the Court's previous case-law for the purposes of assessing whether a legal entity can be allowed to represent the alleged victim see e.g., *Centre for Legal Resources on behalf of Valentin Câmpeanu v. Romania*, no. 47848/08, 17 July 2014, paras. 96-113. On the relevance of the environmental associations see: *Collectif national d'information et d'opposition à l'usine Melox - Collectif stop Melox and Mox v. France (dec.)*, no. 75218/01, 28 March 2006, para. 4.

168 Pedersen, *Climate Change hearings and the ECtHR*, 2023, [https://www.ejiltalk.org/climate-change-hearings-and-the-ecthr/], Accessed 15 April 2023. The author's analysis indicates that the optimism in this context is not unfounded.

169 Keller; Heri; Piskóty, R., *op. cit.* note 83, p. 18. For a more detailed discussion on arguments *pro* adopting a flexible approach to the question of victim status see Keller, H.; Heri, C., *op. cit.* note 155, pp. 155-158.

170 Kobylarz, *op. cit.* note 16, p. 109.

in *Duarte Agostinho and Others*,[171] although cautious optimism arises from the fact that the case was communicated to the respondent States, it was assigned with the priority status, and the hearing before the Grand Chamber[172] is scheduled to be held on 27 September 2023.[173] Perhaps, also, the Court's liberal approach to the issue of exhaustion of domestic remedies in previously mentioned *Pavlov and Others*[174] offers some hope. Thirdly, the transboundary nature of climate cases raises the further question of (extra)territorial jurisdiction of the Court, especially in *Duarte Agostinho and Others.* Vertical nature and territorial application are generally considered as the main limitations of the human rights framework,[175] and the Court's approach to this matter has been conservative so far.[176]

Within the substantive context, one issue arises from the fact that all three cases concern for the most part the risks of future harm and the violations of the applicants' right to private and family life that have yet to occur. In this connection, it has been argued that the ECHR itself is future-oriented and the Court has established that States have positive obligations under Article 8 which apply to violations of which the State knew or ought to have known.[177] Generally, the Court's applicability tests have become more relaxed which may open the door for rulings of more preventative nature.[178]

Central issue in the hearings in the *Verein Klimaseniorinnen Schweiz and Others* and *Carême,* held before the Grand Chamber on 29 March 2023,[179] was the specific content and detail of the state's positive obligation in climate cases, i.e. what criteria the Court ought to apply when establishing whether the mitigation efforts of the respondent States were insufficient. The reasonable solution suggested by

---

171 Keller; Heri, *op. cit.* note 155, pp. 158-159.

172 The respondent Governments in all three cases were given notices on the applications, the cases were assigned priority status, and the Chambers of the Court to which the cases had been allocated relinquished jurisdiction in favour of the Grand Chamber. European Court of Human Rights, *Factsheet – Climate change*, March 2023, pp. 1-2, [https://www.echr.coe.int/Documents/FS_Climate_change_ENG.pdf], Accessed 15 April 2023.

173 European Court of Human Rights, *Cases pending before the Grand Chamber*, [https://www.echr.coe.int/pages/home.aspx?p=hearings/gcpending&c], Accessed 15 April 2023.

174 *Pavlov and others*, *op. cit*. note 102, paras. 54-57.

175 Atapattu, S; Schapper, A., *Human Rights and the Environment: Key Issues*, Routledge, London and New York, 2019, pp. 65-66.

176 See Keller; Heri, *op. cit.* note 155, pp. 159-163, where the authors discuss the possibilities for overcoming this obstacle.

177 *Ibid.*, pp. 163-166.

178 Kobylarz, *op. cit.* note 16, p. 112.

179 European Court of Human Rights, *Grand Chamber procedural meeting in climate cases*, Press Release, 3 February 2023, [https://hudoc.echr.coe.int/eng-press?i=003-7559178-10387331], Accessed 15 April 2023.

the applicants was to simply apply the Court's existing environmental case-law to their cases in combination with the principle of 'harmonious interpretation' through which the Court draws inspiration from international environmental law for the purposes of filling in the gaps inherent to the application of the ECHR to environmental cases.[180]

Environmental case-law of the Court definitely proves that the story of the development of Article 8 of the ECHR continues[181] in all its aspects. Even if the Court chooses to take prudent approach in climate cases, for which there is enough ground,[182] that would still mean further advancement of *de facto* already recognised right to live in a favourable environment, as well as extending the scope of protection of the 'green' side of the right to peacefully enjoy in private and family life within one's home, and within the protected environment.

6. CONCLUSION

It is hardly necessary to reiterate that the clean environment is a *conditio sine qua non* to the enjoyment of all the fundamental human rights. Not only has this mutual connection and dependence been recognised on the international level, individuals are facing the consequences of the environmental destruction in their everyday lives as they adversely affect, among others, their right to peacefully live their private and family lives in their homes.

Despite the proliferation of policies and legislation aiming at building a comprehensive system which would incorporate human rights based approach to environmental action, the EU has failed in its efforts to protect both the environment and the human rights affected by environmental degradation. Its human rights system is based on the Charter which treats the environmental protection only as a principle, and on the jurisprudence of the CJEU that had been consistently employing highly unsatisfactory approach to admissibility issues in environmental matters since the 1960's, which could be described as "injury to all is injury to none".[183] Furthermore, the EU failed on a practical level. The European Environment Agency's reports on the state of the European environment and EU policy targets reveal discouraging outlook and show that EU environmental law is not

---

180 Pedersen, *op. cit.* note 168.

181 Burbergs, M., *How the right to respect for private and family life became the nursery in which new rights are born*, in: Brems, E.; Gerards, J. (eds.), Shaping Rights in the ECHR - The Role of the European Court of Human Rights in Determining the Scope of Human Rights, Cambridge University Press, Cambridge, 2014, p. 329.

182 Pedersen, *op. cit.*, note 168.

183 Woerdman; Roggenkamp; Holwerda, *op. cit.* note 14, p. 286.

being properly implemented.[184] The EU also fails in fulfilling its obligations undertaken by the Paris Agreement.[185] After recent legislative amendments which allowed the members of public to challenge EU's administrative acts and relaxed the criteria of proving the direct and individual concern, the CJEU will be forced to adapt. Hopefully, this might also serve as an incentive to initiate the dialogue between the CJEU and the Court on environmental matters, even though, due to the fact the EU's and the ECHR's human rights systems rest on different foundations,[186] it is not likely that there will ever be equivalent protection of human rights in the jurisprudence of these two courts.

On the other hand, notwithstanding the lack of any mention of the environment in the ECHR, the Court keeps finding ways to provide protection to the environment by means of human rights that the ECHR guarantees, most notably by virtue of Article 8 providing for the right to respect for private and family life and home. The 'living instrument' doctrine and its ability to transform have been playing a significant part in continuous widening the scope of Article 8[187] in all its aspects. It is true that the Court**'s** doctrine of "direct harmful effect", coupled with its position that the right of individual petition cannot serve the purpose of preventing a violation of the ECHR, has been used as an argument against human rights litigation in the field of environmental protection. At the same time, its case-law clearly shows that the Court will examine the merits of cases in which applicants can arguably claim that their ECHR rights are at, not too remote, risk of being harmed[188] which is of particular significance for the pending climate cases.

As follows from the previous analysis in this paper, states' positive obligations under Article 8 include a wide range of preventive and protective measures, including those of procedural nature, not just the 'reactive' ones.[189] What is also

---

184 Pánovics, *op. cit*. note 32., pp. 107-108, 124. See also: European Environment Agency, *The European environment — state and outlook*
[https://www.eea.europa.eu/soer], Accessed 15 April 2023.

185 See: Climate Action Tracker: EU,
[https://climateactiontracker.org/countries/eu/], Accessed 15 April 2023. The Climate Action Tracker is an independent scientific project that tracks government climate action and measures it against the globally agreed Paris Agreement aims. The EU climate targets, policies, and finance are rated as "insufficient" which means that substantial improvements are necessary in order to achieve the Paris Agreement's 1.5°C temperature limit

186 Pedersen, *op. cit.* note 17, p. 94.

187 Burbergs, *op. cit.* note 181, p. 319.

188 Kobylarz, *op. cit*., note 16, pp. 109-110.

189 In the course of the implementation of the Court's judgments specific obligations were imposed on the States which were required to undertake both legal and practical measures aiming at putting an end to the situation that gave rise to violations. More details in: *Ibid*., pp. 114-115.

noticeable is the Court's willingness to further extend the scope of the 'green' side of the rights embedded in Article 8 of the ECHR. *De facto*, it has already acknowledged, several times, that the individual has a right to live in a safe, healthy and favourable environment. Considering the urgency inherent in environmental matters, especially in climate change context, it is hard to be patient and wait for the Court to incrementally evolve its general principles further and to find or adapt its tools and doctrines to the pressing challenges of degrading environment. Still, in the absence of other mechanisms comparable to the Court with regard to their direct effect and efficiency, both the applicants and the Court itself should employ the possibilities offered by the ECHR to the maximum extent. Certainly, it would not be realistic to expect giant leaps forward, but even small steps taken in the direction outlined so far would be a progress.

It would be more than convenient, even necessary for the Court to elaborate its reasoning on specific criteria upon which a violation of the right to family life, in addition to the right to private life and/or home, may be argued by the applicants and established by the Court. Clarification on this point would most likely result in positive contribution to future environmental case-law which will certainly continue to evolve, as it has been evolving so far. Naturally, any further expansion of the scope of protection afforded to the right to private life and home will inevitably have a favourable impact on the right to family life, i.e. on the possibility of maintaining and developing relationships between members of the family without being disturbed by adverse effects of environmental pollution. Even if the Court chooses to refrain from deciding on the merits of the pending climate cases, the progress achieved in recent decades raises hopes that the environmental protection by means of the right to private and family life will continue to develop, which will also mean further advancing of the right of every individual to live his/her private and family life in a safe and favourable environment.

REFERENCES

BOOKS AND ARTICLES

1. Antonopoulos, I., *The day after: Protecting the human rights affected by environmental challenges after the EU accession to the European Convention on Human Rights, Environmental Law Review*, Vol. 20, No. 4, 2014, pp. 213-224
2. Atapattu, S., *Emergence of International Environmental Law: A Brief History from the Stockholm Conference to Agenda 2030*, in: Sobenes, E., Mead, S., Samson, B. (eds.), The Environment Through the Lens of International Courts and Tribunals, T.M.C. Asser Press, The Hague, 2022, pp. 1-33
3. Atapattu, S. Schapper, A., *Human Rights and the Environment: Key Issues*, Routledge, London and New York, 2019

4. Burbergs, M., *How the right to respect for private and family life became the nursery in which new rights are born*, in: Brems, E., Gerards, J. (eds.), Shaping Rights in the ECHR - The Role of the European Court of Human Rights in Determining the Scope of Human Rights, Cambridge University Press, Cambridge, 2014, pp. 315-329
5. Cenevska, I., *A Thundering Silence: Environmental Rights in the Dialogue between the EU Court of Justice and the European Court of Human Rights*, Journal of Environmental Law, Vol. 28, No. 2, 2016, pp. 301–324
6. Garben, S., *Article 1919 TFEU*, in: Kellerbauer, M., Klamert, M., Tomkin, J. (eds.), The EU Treaties and the Charter of Fundamental Rights: A Commentary, Oxford University Press, New York, 2019, pp. 1516-1525
7. Groussot, X., Gill-Pedro, E., *Old and new human rights in Europe – The scope of EU rights versus that of ECHR rights*, in: Brems, E.; Gerards, J. (eds.), Shaping Rights in the ECHR-The Role of the European Court of Human Rights in Determining the Scope of Human Rights, Cambridge University Press, Cambridge, 2014, pp. 232-258
8. Keller, H., Heri, C., *The Future is Now: Climate Cases Before the ECtHR*, Nordic Journal of Human Rights, Vol. 40, No. 1, 2022, pp. 153-174
9. Keller, H., Heri, C., Piskóty, R., *Something Ventured, Nothing Gained? – Remedies before the ECtHR and Their Potential for Climate Change Cases*, Human Rights Law, Review, Vol. 22, Issue 1, 2022, pp. 1-26
10. Kobylarz, N., *The European Court of Human Rights: An underrated forum for environmental litigation*, in: Tegner Anker, H.; Egelund Olsen, B. (eds.), Sustainable Management of Natural Resources – Legal Instruments and Approaches, Intersentia, Cambridge-Antwerp-Portland, 2018, pp. 99-120
11. Krstić, I., Čučković, B., *Procedural aspect of Article 8 of the ECHR in environmental cases - the greening of human rights law*, Annals FLB - Belgrade Law Review, Year LXIII, 2015, No. 3, pp. 170-189
12. Lombardo, M., *The Charter of Fundamental Rights and the Environmental Policy Integration Principle*, in: Di Federico, G. (ed.), The EU Charter of Fundamental Rights: From Declaration to Binding Instrument, Springer Dordrecht, 2011, pp. 217-240
13. Marshall, F., *Participatory rights under the Aarhus Convention – more important than ever*, in: Council of Europe, Human Rights for the Planet, Proceedings of the High-level International Conference on Human Rights and Environmental Protection, Strasbourg, 5 October 2020, 2021, pp. 44-48
14. Morgera, E., Marin-Duran, G., *Commentary to Article 37: Environmental Protection*, in: Peers, S., Hervey, T., Kenner, J., Ward, A. (eds.), The EU Charter of Fundamental Rights: A Commentary, Hart Publishing, Oxford, 2021, pp. 1041-1064
15. Müllerová, H., *Environment Playing Short-handed: Margin of Appreciation in Environmental Jurisprudence of the European Court of Human Rights*, Review of European Community & International Environmental Law, Vol. 24, No. 1, 2015, pp. 83-92
16. Pánovics, A., *The missing link: Access to justice in environmental matters, EU 2020 – lessons from the past and solutions for the future*, in: Duić, D., Petrašević, T. (eds.), EU and comparative law issues and challenges series (ECLIC 4), Josip Juraj Strossmayer University of Osijek, Faculty of Law Osijek, 2020, pp. 106-127

17. Pedersen, O. W., *The European Court of Human Rights and International Environmental Law*, in: Knox, J., Pejan, R. (eds.), The Human Right to a Healthy Environment, Cambridge University Press, New York, 2018, p. 86-96
18. Peiffert, O., *European Union Court System and the Protection of the Environment*, in: Sobenes, E., Mead, S., Samson, B. (eds.), The Environment Through the Lens of International Courts and Tribunals, T.M.C. Asser Press, The Hague, 2022, pp. 219-248
19. Peters, B., *The European Court of Human Rights and the Environment*, in: Sobenes, E., Mead, S., Samson, B. (eds.), The Environment Through the Lens of International Courts and Tribunals, T.M.C. Asser Press, The Hague, 2022, pp. 189-217
20. Romaniszyn, A., *Human rights climate litigation against governments*: *a comparative overview of current cases and the potential for regional approaches*, McGill Journal of Sustainable Development Law, Vol. 16, Issue 2, 2020, pp. 233-272
21. Woerdman, E., Roggenkamp, M., Holwerda, M. (eds.), *Essential EU Climate Law*, Edward Elgar Publishing, Cheltenham, 2021
22. Zahradnikova, E., *European Court of Human Rights: Giving the Green Light to Environmental Protection*, Queen Mary Law Journal, Vol. 8, 2017, pp. 13-26

CJEU

1. Case 25/62 *Plaumann & Co. v Commission of the European Economic Community*, 15 July 1963

ECHR

1. *Apanasewicz v Poland*, no. 6854/07, 3 May 2011
2. *Băcilă v Romania*, no. 19234/04, 30 March 2010
3. *Buckley v the United Kingdom*, no. 20348/92, 25 September 1996
4. *Calancea and Others v the Republic of Moldova (dec.)*, no. 23225/05, 1 March 2018
5. *Carême v France*, no. 7189/21 (communicated case), 7 June 2022.
6. *Centre for Legal Resources on behalf of Valentin Câmpeanu v Romania*, no. 47848/08, 17 July 2014
7. *Çiçek and Others v Turkey (dec.)*, no. 44837/07, 4 February 2020
8. *Collectif national d'information et d'opposition à l'usine Melox - Collectif stop Melox and Mox v France (dec.)*, no. 75218/01, 28 March 2006
9. *Cordella and Others v Italy*, nos. 54414/13 and 54264/15, 24 January 2019
10. *Di Sarno and Others v Italy*, no. 30765/08, 10 January 2012
11. *Duarte Agostinho and Others v Portugal and Others*, no. 39371/20 (communicated case), 13 November 2020
12. *Dubetska and Others v Ukraine*, no. 30499/03, 10 February 2011
13. *Dzemyuk v Ukraine*, no. 42488/02, 4 September 2014
14. *Fadeyeva v Russia*, no. 55723/00, 9 June 2005
15. *Fieroiu and Others v Romania (dec.)*, no. 65175/10

16. *Fredin v Sweden (no. 1)*, no. 12033/86, 18 February 1991
17. *Genç and Demirgan v Turkey*, nos. 34327/06 and 45165/06, 10 October 2017
18. *Giacomelli v Italy*, no. 59909/00, 2 November 2006
19. *Greenpeace E.V. and Others v Germany (dec.)*, no. 18215/06, 12 May 2009
20. *Grimkovskaya v Ukraine*, no. 38182/03, 21 July 2011
21. *Guerra and others v Italy*, no. 14967/89, 19 February 1998.
22. *Hardy and Maile v the United Kingdom*, no. 31965/07, 14 February 2012
23. *Hatton and Others v the United Kingdom*, no. 36022/97, 8 July 2003
24. *Hudorovič and Others v Slovenia*, nos. 24816/14 and 25140/14140, 10 March 2020
25. *Jugheli and Others v Georgia*, no. 38342/05, 13 July 2017
26. *Kapa and Others v Poland*, nos. 75031/13, 75282/13, 75286/13, and 75292/13, 14 October 2021
27. *Kotov and Others v Russia,* nos. 6142/18 and 13 others, 11 October 2022
28. *K.U. v Finland,* no. 2872/02, 2 December 2008
29. *Kyrtatos v Greece,* no. 41666/98, 22 May 2003
30. *Lemke v Turkey*, no. 17381/02, 5 June 2007
31. *López Ostra v Spain*, no. 16798/90, 9 December 1994
32. *Marchiş and Others v Romania (dec.)*, no. 38197/03, 28 June 2011
33. *Martínez Martínez and Pino Manzano v Spain*, no. 61654/08, 3 July 2012
34. *Mileva and Others v Bulgaria,* nos. 43449/02 and 21475/04, 25 November 2010
35. *Öçkan and Others v Turkey*, no. 46771/99, 28 March 2006
36. *Oluić v Croatia*, no. 61260/08, 20 May 2010
37. *Öneryıldız v Turkey,* no. 48939/99, 30 November 2004
38. *Pavlov and Others v Russia*, no. 31612/09, 11 October 2022
39. *Powell and Rayner v United Kingdom*, no. 9310/81, 21 February 1990
40. *Schmidt v Federal Republic of Germany (dec.)*, no. 715/60, 5 August 1960
41. *Solyanik v Russia*, no. 47987/15, 10 May 2022
42. *Strand Lobben and Others v Norway*, no. 37283/13, 10 September 2019
43. *Taşkın and Others v Turkey*, 46117/99, 10 November 2004
44. *Tătar v Romania*, no. 67021/01, 27 January 2009
45. *Thibaut v France (dec.)*, nos. 41892/19 and 41893/19
46. *Tolić and Others v Croatia (dec.)*, no. 13482/15
47. *Tyrer v the United Kingdom*, no. 5856/72, 25 April 1978
48. *Verein KlimaSeniorinnen Schweiz and others v Switzerland*, no. 53600/20 (communicated case), 17 March 2021
49. *Yevgeniy Dmitriyev v Russia*, no. 17840/06, 1 December 2020
50. *Zammit Maempel v Malta*, no. 24202/10, 22 November 2011

EU LAW

1. Charter of Fundamental Rights of the European Union [*2012*] *OJ C 326*/391
2. Council Decision of 17 February 2005 on the conclusion, on behalf of the European Community, of the Convention on access to information, public participation in decision-making and access to justice in environmental matters [2005] OJ L 124/1
3. Council Decision (EU) 2016/1841 of 5 October 2016 on the conclusion, on behalf of the European Union, of the Paris Agreement adopted under the United Nations Framework Convention on Climate Change [2016] OJ L 282/1
4. Regulation (EC) No 1367/2006 of the European Parliament and of the Council of 6 September 2006 on the application of the provisions of the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters to Community institutions and bodies [2006] OJ L264/13
5. Regulation (EU) 2021/1767 of the European Parliament and of the Council of 6 October 2021 amending Regulation (EC) No 1367/2006 on the application of the provisions of the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters to Community institutions and bodies [2021] OJ L356/1

UN

1. Declaration of the United Nations Conference on the Human Environment, A/CONF.48/14/Rev.1, 16 June 1972
2. United Nations General Assembly, Resolution: The human right to a clean, healthy and sustainable environment, A/RES/76/300, 28 July 2022
3. United Nations, Paris Agreement, FCCC/CP/2015/10/Add.1,12 December 2015

NATIONAL REGULATIONS

1. Convention for the Protection of Human Rights and Fundamental Freedoms (Konvencija za zaštitu ljudskih prava i temeljnih sloboda), Official Gazette, International Agreements No. 18/1997, 6/1999, 8/1999, 14/2002, 13/2003, 9/2005, 1/2006, 2/2010, 13/2017
2. Convention on access to information, public participation in decision-making and access to justice in environmental matters (Konvencija o pristupu informacijama, sudjelovanju javnosti u odlučivanju i pristupu pravosuđu u pitanjima okoliša), Official Gazette, International Agreements No. 1/2007, 7/2008

WEBSITE REFERENCES

1. Climate Action Tracker, *EU*, [https://climateactiontracker.org/countries/eu/], Accessed 15 April 2023
2. European Commission, *Environment*, [https://environment.ec.europa.eu/index_en], Accessed 15 April 2023
3. European Court of Human Rights, *Cases pending before the Grand Chamber*, [https://www.echr.coe.int/pages/home.aspx?p=hearings/gcpending&c], Accessed 15 April 2023

4. European Court of Human Rights, *Factsheet – Climate change*, March 2023, [https://www.echr.coe.int/Documents/FS_Climate_change_ENG.pdf], Accessed 15 April 2023
5. European Court of Human Rights, *Guide on Article 8 of the European Convention on Human Rights - Right to respect for private and family life*, 31 August 2020, [https://www.echr.coe.int/Documents/Guide_Art_8_ENG.pdf], Accessed 15 April 2023
6. European Court of Human Rights, *Grand Chamber procedural meeting in climate cases*, Press Release, 3 February 2023, [https://hudoc.echr.coe.int/eng-press?i=003-7559178-10387331], Accessed 15 April 2023
7. European Court of Human Rights, *Grand Chamber to examine case concerning global warming*, Press Release, 30 June 2022, [https://hudoc.echr.coe.int/eng?i=003-7374717-10079435], Accessed 15 April 2023
8. European Court of Human Rights, *Grand Chamber hearing on consequences of global warming on living conditions and health*, Press Release, 29 March 2023, [https://hudoc.echr.coe.int/eng-press?i=003-7610087-10470692], Accessed 15 April 2023
9. European Court of Human Rights, *Grand Chamber hearing concerning combat against climate change*, Press Release, 29 March 2023, [https://hudoc.echr.coe.int/eng-press?i=003-7610561-10471513], Accessed 15 April 2023
10. European Environment Agency, *The European environment — state and outlook*, [https://www.eea.europa.eu/soer], Accessed 15 April 2023
11. Pedersen, O. W., *Climate Change hearings and the ECtHR*, 2023, [https://www.ejiltalk.org/climate-change-hearings-and-the-ecthr/], Accessed 15 April 2023
12. Yildirim, O., *Environmental protection as a prerequisite for respect for fundamental rights (information report - SDO)*, 2021, [https://www.eesc.europa.eu/en/our-work/opinions-information-reports/information-reports/environmental-protection-prerequisite-respect-fundamental-rights-information-report-sdo], Accessed 15 April 2023

UDK 502.14:338](4-67EU:497)
502.14:338](4-67EU:497.16)
Review article

THE ROLE OF THE EUROPEAN ENVIRONMENT AGENCY IN LIGHT OF GREEN AGENDA PRIORITIES FOR THE WESTERN BALKANS WITH A SPECIAL FOCUS ON MONTENEGRO - RECOVERY AND EUROPEAN FUTURE

Stefan Đurić, PhD Candidate
Faculty of Law, University of Belgrade
Bulevar kralja Aleksandra 67, Belgrade, Serbia
sdjuricfpe@gmail.com

Bojana Lalatović, PhD Candidate
Faculty of Law, University of Belgrade
Bulevar kralja Aleksandra 67, Belgrade, Serbia
bojana.lalatovic@rycowb.org; bojana.lalatovic@gmail.com

ABSTRACT

The Environmental policy of the European Union has largely contributed to the diffusion and strengthening of International environmental law, and has yielded a relatively wide harmonization of high standards in this area among the Member States, as well as among countries that strive to become fully-fledged members of the EU. The Green Agenda for the Western Balkans is an example to that end. As a growth strategy, it aims at stimulating growth in the region and helping the transformation from the traditional economic model to a sustainable economy, in line with the European Green Deal priorities.

Therefore, this paper will look at to what extent has the regional environmental governance network, precisely the cooperation with the European Environmental Agency (EEA), fostered alignment with the EU Environmental policy by Montenegro as the EU candidate country. The cooperation between Montenegro and the European Environmental Agency dates back to more than a decade ago, and it has been formalised by signing a Memorandum of Understanding on October 23, 2020, which represented a step towards full membership of the country in the EEA. Cooperation with the EEA also increases the possibility of access to European funds, which will be used to invest in green technologies and renewable energy sources.

The adoption, implementation and enforcement of the EU acquis on Environment, is at the same time, a condition that the Western Balkan countries must meet in order to satisfy criteria set by the accession negotiations. In addition, the Western Balkan countries as signatories to the Paris Agreement have pledged to restructure their economies in order to achieve the goals set in the agreement. This is particularly relevant having in mind the EU aspirations to become the first climate-neutral society by 2050.

To this end, and having special sensitivity towards the challenges the region of Western Balkans is facing, the Union has committed generous resources to the Western Balkans green transition. Hence, the assistance provided by the EU will depend on the quality of the preparatory work done. Therefore, the practical aspect of this paper will be to draw attention to the importance of the EU support in this area, but also to highlight the genuine responsibility and effort expected from Montenegro as a case study, to develop high quality and sustainable projects leading to restructuring its economy into a green one.

Keywords: *European Union, European Green Deal, European Environmental Agency, Green Agenda, Montenegro, Paris Agreement, Western Balkan*

1. INTRODUCTION

The Green Agenda for the Western Balkans is an initiative launched by the EU in 2020 as part of the EU accession negotiation with the Western Balkan countries. It aims at facilitating the transition of these countries towards a low-carbon and circular economies, as well as to improve environmental conditions, and in general quality of life in the region.

It encompasses five main thematic focuses: a) circular economy, b) decarbonisation: climate, energy and mobility, pollution: air, water, soil, c) sustainable food systems and rural areas, d) biodiversity: protection and restoration of ecosystems. The vision presented by the Green Agenda is to align the Western Balkans region with the EU`s ambition 2050 to make Europe a carbon neutral continent. Furthermore, it also aims to unlock the potential for a circular economy, fight pollution - air, water, soil, promote sustainable methods of food production and supply, exploit a huge tourism potential of the region focusing on biodiversity protection and restoration of ecosystems.

The European Environmental Agency (hereinafter: EEA) is one of the specialised agencies within the European Union, responsible for providing sound, independent information on the environment to policy makers and the public, all with the general goal of contributing to ensuring a better quality of life for citizens. To achieve this, the EEA operates through a wide network of national focal points that play an important role in shaping environmental policies at the national level by providing information, assessments and recommendations.

Both the EEA and the Green Agenda for the Western Balkans are aimed at promoting sustainable development and protecting the environment. The EEA also plays an important role in the implementation of the Green Agenda for the Western Balkans by providing technical and scientific expertise, as well as by monitoring and reporting on the environmental situation in the region. It supports the capacity building efforts of Western Balkan countries in the field of environmental policy and works closely with other EU institutions and international organisations to promote sustainable development in the region.

Ever growing concern about the state of environment and multiplying challenges we are witnessing nowadays have a huge impact on the quality of lives of people around Europe and beyond. This adds to the importance of the structures such as EEA and to the substance of the role it should assume in the forthcoming period. This article will encompass historical development of the EEA, its structure, functioning and competences. It will also analyse the legal framework of the EEA and will point out the need to introduce the novelties that would efficiently respond to the needs of the current moment, particularly given the fact that the last revision of the EEA happened more than a decade ago.

Additionally, the paper will discuss the role of the European Environment Information and Observation Network (Eionet), which is a network within the EEA that facilitates the exchange of environmental information and knowledge among its members, including EU member states, other European countries, and international organisations.

This part will be followed by examination of the existing control mechanisms of the Agency's work, institutional and non-institutional ones. The EEA employs a variety of control mechanisms in order to ensure that information on the environment is accurate, reliable, and relevant.

The paper will also cover the cooperation the EEA has established with Montenegro by signing Memorandum of Understanding. It will draw conclusions about the importance of this type of cooperation between the aforementioned actors, which provides assistance to the EU candidate states to efficiently complete the negotiation processes and become fully-fledged members of the Union.

The paper will also shed light on some recent developments and good practices of cooperation between the EEA national focal point in Montenegro, Environment Protection Agency, and local activists and initiatives. This cooperation led to successful work in mapping and tackling the existing environmental challenges in Montenegro. EEA reports on the state of the environment are very important for

both decision-makers and the public, so this paper will briefly refer to the state of the environment in Montenegro as presented in the aforementioned reports.

In conclusion, the article will highlight the importance of the cooperation between Montenegro as a case study, and EEA, particularly considering the ongoing EU negotiations processes. This cooperation has the immediate benefits in terms of tackling the environmental challenges and providing benefits to the EU potential candidates and candidate states. At the same time, it strengthens the EU's lead and legitimacy to tackle these issues further.

2. THE PRIORITY AREAS OF THE GREEN AGENDA FOR THE WESTERN BALKANS

The Sofia Summit marked a significant milestone for the Western Balkans region, as it laid out a comprehensive vision to enhance environmental protection and combat climate challenges. The Green Agenda for the Western Balkans aims to place sustainable development, resource efficiency, nature protection, and climate action at the core of economic activities. The agenda encompasses various thematic areas, including climate action, energy, sustainable transport, the circular economy, depollution, sustainable agriculture, and the protection of nature and biodiversity.

The region's commitment to *climate action* is evident through signing the Sofia Declaration on the Green Agenda, aligning with global efforts to achieve net-zero greenhouse gas emissions by 2050.[1] The priority for the region is to define transitional 2030 climate targets aligned with the increased EU ambitions and transpose the Fit for 55 package and the EU Climate Law.[2] Additionally, alignment with the EU Strategy on Adaptation to Climate Change, increased deployment of carbon sinks, and a swift green transformation of all economic sectors, particularly carbon-intensive ones, are essential.[3]

Coal, a major source of electricity production in the Western Balkans, poses significant challenges for health and environment. Besides the fact that, unsustainable nature of coal combustion makes transitioning to renewable energy imperative, it also has a negative health impact. According to available data, coal combus-

---

1 OECD Development Pathways*, Multi-dimensional Review of the Western Balkans, from analyses to action*, OECD, 2022, p. 383.

2 Fit for 55, available at: [https://www.consilium.europa.eu/en/policies/green-deal/fit-for-55-the-eu-plan-for-a-green-transition/], accessed 3 June 2023.

3 Action Plan for the implementation of the Sofia Declaration on the Green Agenda for the Western Balkans 2021-2023, Regional Cooperation Council, Sarajevo, 04 October 2021.

tion causes around 4,000 premature deaths per year in the Western Balkans, with directly attributable health and lost productivity costs estimated to be around 11 billion EUR annually.[4]

However, this renewable energy transition comes with socio-economic challenges, such as unemployment and economic disruption. Despite these challenges, the transition away from coal is necessary for human health, the environment, and the climate, and, therefore, structured dialogue among stakeholders and target groups is crucial for successful climate actions in the region.

A closer insight into the *energy sector*, reveals that the Western Balkan countries face two key challenges related to that field. Firstly, they need to fulfil existing obligations, including the creation of competitive and integrated energy markets. Secondly, the region's responsibility is to adapt to the changing regulatory environment and integrate the latest EU objectives into their policy and legal frameworks. The energy sector of the Western Balkans, which is currently heavily reliant on fossil fuels and outdated technologies, plays a crucial role in the region's transformation. Nonetheless, increased decarbonization ambitions and tight deadlines, do not produce desired effect, and to the certain extent impede the sector's profound transformation and make integration in the EU energy market even more challenging.

The *transport sector* is a significant contributor to greenhouse gas emissions in the region, primarily from road transport.[5] The sector's emissions have increased parallel to economic activities, causing pollution and negatively impacting air quality, particularly in urban areas. To address these challenges, the Transport Community Permanent Secretariat (TCPS) has developed a Sustainable and Smart Mobility Strategy for the Western Balkans. This strategy aligns with the EU's goals while adjusting to the region's reality. It provides a decarbonization and digitalization roadmap for the transport sector, focusing on increasing greening and digitalization of mobility and making transport greener, more sustainable, and healthier for citizens.

Furthermore, the Western Balkans region faces challenges in aligning with *waste management* legislation and adopting circular economy practices (recycling, plastics, chemicals, eco-design, etc.). The concept of circular economy is relatively new in the region, requiring rising awareness strategies and mainstreaming of objectives and integration of circular practices in all sectors of the economy. In

---

4 Climate Action Network Europe, *Report: EU action on Western Balkans' chronic coal pollution is a unique opportunity to improve health and productivity*, 2019 available at: [https://caneurope.org/report-eu-action-on-western-balkans-chronic-coal-pollution-is-a-unique-opportunity-to-improve-health-and-productivity/], Accessed 09 June 2023.

5 The transport sector is one of the main sources of GHG emissions in the Western Balkans region and coupled with the energy sector account for two-thirds of the overall share of emissions.

light of current practices in the Western Balkans, the linear collect-and-dispose approach dominates waste management, and a shift towards a sustainable waste management system based on circularity is necessary. The EU's new policy framework, including the Circular Economy Action Plan, offers strategic guidance for the Western Balkans to achieve carbon neutrality and unlock economic potential while realising environmental benefits.

Depollution in the Western Balkans is also one of the priority goals, due to the fact that the population of the Western Balkans is exposed to the highest rates of air pollution in Europe. This is primarily due to the widespread use of low-quality solid fuels[6], outdated industry facilities, and coal-fired power plants.[7] Besides air pollution, the region also experiences water shortages, deteriorating drinking water quality[8], and soil pollution.[9]

To address these challenges, the Western Balkans need to improve air quality monitoring, upgrade water distribution systems, and enhance wastewater treatment/management. Equally important, the enforcement of existing environmental standards and regulations, along with better control of illegal practices, is critical for reducing pollution levels and protecting public health.

The *agricultural* sector plays a significant role in the Western Balkans' human and economic development. In order to achieve economic and environmental sustainability, as outlined in the Green Agenda, the region needs to develop and implement agricultural policies aligned with the Common Agricultural Policy (CAP) framework. Greening the agriculture and rural economy is essential for improved natural resource conservation, increased efficiency, reduced negative environmental impacts, and strengthened climate resilience.

To be able to address the agriculture-related priorities the Action plan for the implementation of Green Agenda envisages that the region needs to work on harmonisation of agricultural policies, build baselines on strong data and evidence (in particular data illustrating the relation between agriculture and the environment,

---

6 Solid fuels (coal and firewood) are used for domestic heating by over 60% of the population.

7 Colovic, Daul, M.; Kryzanowski, M.; Kujundzic, O., *Air pollution and human health: The case of Western Balkans,* UNEP, 2019, available at: [https://api.developmentaid.org/api/frontend/cms/file/2019/06/Air-Quality-and-Human-Health-Report_Case-of-Western-Balkans_preliminary_results.pdf], Accessed 7 May 2023.

8 European Environment Agency, *Changes in urban waste water treatment in the Western Balkans,* 2017, available at: [https://www.eea.europa.eu/data-and-maps/daviz/changes-in-wastewater-treatment-in-13#tab-dashboard-01], accessed 02 April 2023.

9 Outlook on water and climate change vulnerability in the Western Balkans, ETC/ICM Technical Report 1/2018.

e.g. use of pesticides, fertilisers), and invest in capacity building in all relevant bodies needed to implement the priorities set within the Instrument for Pre-Accession Assistance for Rural development (IPARD).

Lastly, the Western Balkans possess rich *biodiversity and natural ecosystems*[10] but, unfortunately, at the same time, it is unable to provide adequate protection. Biodiversity and habitat loss are observed across the region, which poses risks to numerous species, and in particular endemic ones.

As it is emphasised by the Action plan, the actions of decision makers in the Western Balkans region should be directed to halt biodiversity loss, increase protected areas, integrate conservation targets, and enforce nature protection legislation.[11] The report emphasises that it is necessary to strengthen institutional arrangements in the biodiversity sector. Since the Western Balkan countries are relatively small, the importance of regional cooperation should be highlighted in order to protect transboundary clusters of protected areas and promote ecological connectivity. Intensifying regional cooperation is critical to achieving better synergies, as well as effective management of the networks of the protected areas.

Addressing existing challenges, as stipulated in the Green Agenda for the Western Balkans, such as coal dependence, outdated technologies, and linear waste management approaches, is key to the region's sustainable development. By embracing the Green Agenda, the Western Balkans can seize opportunities for economic growth, protect the environment, mitigate climate change, and improve the well-being of its citizens. All of this requires effective collaboration among all relevant stakeholders, implementation of comprehensive strategies, regional cooperation, and alignment with EU objectives that could pave the way for a sustainable and resilient future in the Western Balkans.

3. THE EUROPEAN ENVIRONMENT AGENCY

3.1. About the European Environment Agency

The European Environment Agency is a specialised agency of the EU, established in 1990 with the primary objective of providing specialised and scientific knowledge in the domain of environment. Headquartered in Copenhagen, Denmark, and the EEA enjoys the status of a legal entity with full legal capacity.

---

[10] The Western Balkan region is exceptionally rich in species and habitat diversity and many of the species found in the region are endemic.

[11] European Environment Agency, *European Natura 2000 database on ecological networks*, 2022, available at: [https://www.eea.europa.eu/data-and-maps/data/natura-2000-eunis-database], Accessed 05 May 2023.

The EEA distinguishing features are mirrored in its openness and closer cooperation with "third countries", which is facilitated through signing agreements and memoranda of cooperation. The EU system of agencies consists of: decentralized agencies, agencies within the Common Security and Defence policy, executive agencies and agencies and bodies of EURATOM[12]. As a decentralised agency, the EEA provides assistance, specialised and in-depth expertise to the member states and the EU institutions in diverse areas, including food, medicines, chemicals, education, quality of life and working environment, justice, transport safety, security, fundamental rights, knowledge and providing services to the private and public sector. Decentralised agencies carry out entrusted tasks set within the limits of their competences,[13] with a main goal of facilitating and improving living conditions for people within the borders of the EU, and beyond.

The European system comprises over 30 decentralised agencies which also engage in control and collaboration with other EU institutions. The European Anti-Fraud Office (OLAF) provides a good example of this, since it is competent for developing anti-fraud policy for the European Commission, while it also deals with fraud against the EU budget, corruption and unfounded subsidy payments, and other serious misconduct within the European institutions.

Shyrokykh and Rimkute emphasise the increasing significance of agencies in the external governance of the European Union.[14] Establishing this type of close cooperation and economic connection with the Union, also affects EU`s foreign policy and decision-making processes. Consequently, Hazelzet suggests that the EU is less likely to impose sanctions on countries with which it has signed trade agreements.[15]

The EEA's forerunner is the Corine program, established in 1985,[16] which focused on collecting environmental information related to various environmental issues. The EEA took over its data and continued its work.[17]

---

12 See more: Pretraživanje institucija i tijela EU, available at: [https://europa.eu/european-union/about-eu/agencies_hr], Accessed 10 August 2022.

13 See more: Types of Institutions and bodies, available at: [https://europa.eu/european-union/about-eu/agencies/decentralised-agencies_en], Accessed 10 August 2022.

14 Shyrokykh, K.; Rimkute, D., *EU rules beyond its Borders; The policy-specific Effects of transgovernmental networks and EU agencies in the European Neighbourhood*, Journal of common market studies, No. 57, 2019, pp. 750.

15 Hadewych, H., *Suspension of Development Cooperation: An Instrument to Promote Human Rights and Democracy?*, European Centre for Development Policy Management, Discussion Paper, No. 64B, 2005, pp. 9-10.

16 European Environment Agency, *Corine Land Cover*, 1995, available at: [https://www.eea.europa.eu/publications/COR0-landcover], Accessed 11 August 2021.

17 *Ibid.*

Council Regulation (EEC) No 1210/90 of 07 May 1990,[18] laid the foundations for the establishment of the European Environment Agency and the European Environment Information and Observation Network (Eionet) - founded in 1994. The regulation was adopted by the European Parliament during the second reading due to a disagreement between the Commission and the Parliament regarding the Agency's prerogatives.[19] Finally, a compromise reached, in its essence, was closer to the position of the Commission. It advocated in favour of the Agency's competencies in relation to environmental data and information, at the same time leaving it without executive and regulatory competencies. It was first amended in 1999 by Council Regulation No 933/1999.[20] The legal regulation in force was adopted in 2009 in the form of a codified version of Council Regulation No 401/2009.[21]

The EEA works closely with other European institutions and organisations, as well as with national environmental agencies and other stakeholders, to improve the understanding and management of environmental issues in Europe.

The importance of environmental protection is also indicated in its preamble, which emphasises that "environmental protection conditions should be an integral part of other Community policies". The goal of establishing the Agency is to protect and improve the state of the environment as well as sustainable development, by providing the member states, the Union and other stakeholders with objective, reliable and comparable information as well as with necessary technical and scientific support.[22]

The Agency's main areas are "air quality, water quality, pollutants and water resources, soil condition, biodiversity, use of land and natural resources, waste management, noise emission, chemical substances that are dangerous for the environment and coastal and marine protection".[23] The EEA's mandate is guided by

---

18 Council Regulation (EEC) 1210/90 on the establishment of the European Environment Agency and the European Environment Information and Observation Network [1990] OJ L120/ 1.

19 Westbrook D., *Environmental Policy in the European Community: Observations on the European Environment Agency,* Harvard Environmental Law Review, Vol. 15, 1991, pp. 261-267.

20 Council Regulation (EC) 933/1999 amending Regulation (EEC) 1210/90 on the establishment of the European Environment Agency and the European environment information and observation network [1999] OJ L117/1.

21 Regulation (EC) 401/2009 of the European Parliament and of the Council on the European Environment Agency and the European Environment Information and Observation Network (Codified version) [2009] OJ L126/13 (Regulation 401/2009).

22 *Ibid.*, Article 1.

23 *Ibid.,* Article 7, The work of EEA includes:
a) Collecting and analysing data from EU member states and other European countries;
b) Producing reports and assessments on the state of the environment in Europe;

a commitment to promoting sustainable development and protecting Europe's environment and natural resources for the benefit of future generations.[24]

Looking at the stipulated objectives, it can be concluded that the Agency was established to provide information based on which decision makers would direct their actions and make decisions. Although this information is often neglected by a number of decision-makers worldwide, one of the objectives of this paper is to point out that the European Union and its members, as it is not always the case with other large countries/economies, are showing sensitivity towards environmental protection. Although there is space for significant improvement of the role and impact of the EEA, its achievements are still an important step forward toward reaching the stipulated climate and energy targets by 2030 and 2050.

3.2. Competences of the EEA

The EEA was created in response to the need for a coordinated approach to environmental issues in Europe. Its primary role is to collect and disseminate environmental data, monitor and assess the state of the environment in Europe, and provide technical support to the EU and its member states in the development and implementation of environmental policies.

The Agency's competencies are delineated in Article 2 of the Regulation,[25] which encompasses four key areas. Firstly, the EEA is responsible for data and information collection and management. The Agency established and manages the Eionet, with a goal to collect, process and analyse data from the field of environment and sustainable development. This aims to provide the EU and the member states with objective information necessary for formulating and implementing effective environmental protection policies.

Secondly, the EEA is entrusted with assessment and reporting tasks. It produces assessments and reports on the state of the environment in Europe, while establishing uniform criteria for the assessment of environmental data, to ensure comparability and measurability across member states. It is responsible for publishing reports on the state, trends and prospects for the environment every five

c) Supporting the development and implementation of EU environmental policy;
d) Providing technical support to EU institutions and member states;
e) Providing information on the state of environment to the public and stakeholders.

24 *Ibid.,* Article 3.

25 Council Regulation (EEC) 1210/90 on the establishment of the European Environment Agency and the European Environment Information and Observation Network [1990], available at: [https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A31990R1210], accessed 23 February 2023.

years, stimulating development of forecasting techniques to enable timely preventive measures. These reports, known as "the European environment - state and outlook"[26] also contribute to estimating the costs of environmental damage and policies for protection and restoration of the environment, thus enabling informed decision-making.

The third area of responsibility involves building a knowledge base, exchange of information on environmental issues and creating and maintaining networks of experts and stakeholders. This also entails cooperation with other European and international bodies and programs to foster knowledge sharing and cooperation.

Last but not the least, the EEA provides capacity building and implementation support. It offers technical assistance and support to the EU and its member states in implementation of environmental policies and legislation. It stimulates the exchange of information that is needed for the successful implementation of measures and laws in the field of the environment.[27]

While the EEA's competencies are primarily advisory in nature, focused on data collection and information dissemination, there is a growing consensus that the Agency should be granted more authority and become a significant actor in the EU's legislative process, even as the main proposer of legal acts. Presently, the Agency's influence on decision-makers is somewhat limited, as environmental concerns may not always be accorded top priority in political agendas.

Despite this, the EEA's possession of information grants it a degree of power. The type of information it holds can influence decision-makers and shape the definition of problems and solutions.[28]

Hornbeek makes a distinction between environmental information whose purpose is to influence citizens' awareness and point out environmental problems, and those that decision-makers use to justify their actions or that serve as a basis for decision-making.[29]

---

[26] The European environment — state and outlook 2020: knowledge for transition to a sustainable Europe, available at:
[https://www.eea.europa.eu/soer/2020], Accessed 01 April 2023.

[27] Regulation 401/2009.

[28] Martens, M., *Voice or Loyalty? The Evolution of the European Environment Agency (EEA)*, Journal of Common Market Studies, 2010, Vol. 48, No. 4, p. 882.

[29] Hoornbeek, J., *Information and Environmental Policy: A Tale of Two Agencies*, Journal of Comparative. Policy Analysis: Research and Practice, 2000, Vol. 2, pp. 145-187; Holmes, J.; Savgård, J., Dissemination and implementation of environmental research – including guidelines for best practice, Swedish Environmental Protection Agency, 2008, p. 39, available at:

Gornitzka and Sverdrup state that "information structures the definition of problems and solutions".[30] In connection with this, there are two types of reports that the EEA issues. The first concerns reports of a general nature that are tightly related to the quality of the environment in the member states and the EU, and the second type are reports on current issues, most often associated with the Directorate-General for the Environment.[31]

Nonetheless, the Agency must exercise caution to avoid becoming a tool within the decision-making system, as that could compromise its credibility, independence, and freedom of action. Striking a balance between providing valuable information and maintaining independence is crucial for the EEA to remain an influential and credible entity in environmental policymaking.

3.3. Organisational structure

The EEA operates under a comprehensive organisational structure, consisting of a Management Board, Executive Director and Scientific Board. The Management Board is the EEA governing body, composed of one representative *per* each member state, two representatives of the Commission and two environmental experts appointed by the Parliament. It is important to note that the Management Board may include a representative from other countries participating in the work of the EEA, and each member of the Management Board holds voting rights. This body is also responsible for setting the strategic direction of the agency, approving its work program and budget, and ensuring the efficient functioning of the EEA.[32]

Decision-making process requires a two-thirds majority of the members of the Management Board.[33] This provides an obstacle for the effectiveness of such a structure, so introducing other decision-making rules (*i.e.* voting by simple majority) would be highly beneficial for specific and complex structures such as EEA. This approach would rank decisions based on their importance, and simplify management of the Agency, while reserving the 2/3 majority for decisions critical for the functioning of the Agency.

[http://www.idaea.csic.es/sites/default/files/Dissemination-and-implementation-of-environmental-research.pdf], Accessed 29 January 2023.

30 Gornitzka, A.; Sverdrup, U., *Who are the Experts? The Informational Basis of EU Decision-Making*, ARENA Working paper, No. 14/08, 2008. pp. 1.

31 Martens, *op. cit.* note 28, p. 889.

32 European Environment Agency Governance, available at: [https://www.eea.europa.eu/en/about/who-we-are/governance], Accessed 23 February 2023.

33 Regulation 401/2009, Article 8.

The Management Board appoints the Executive Director for a five-year term, with the possibility of re-election. The Executive Director is accountable to the Management Board and ensures full and accurate implementation of its decisions. In addition, he performs day-to-day management of the Agency, exercises authority over budgetary matters, participates in the process of preparing five-year reports on the state of the environment and makes decisions regarding rights and obligations of Agency employees.[34]

The Scientific Board is an expert body of the Agency, and its members are elected for a four-year term by the Management Board from among reputable and highly qualified persons in the field of environment. Their primary role is assisting the Management Board and the Executive Director, providing them with professional knowledge and information. The reports and opinions of the Scientific Board are published, thus enabling external scrutiny of their work and expertise.[35]

The EEA also closely cooperates with a wide range of networks, including national environmental agencies and non-governmental organisations. These networks help to ensure that the agency's work is grounded in real-world experience and is relevant to the needs of a wide range of stakeholders with whom it cooperates. This approach enhances the credibility and effectiveness of the EEA's work by incorporating a wide range of perspectives and expertise from relevant environmental stakeholders.

3.4. EEA budget

This section of the paper will briefly examine the budget of the Agency over a ten-year period, from 2013 to 2023, based on the data available on the EEA's website.[36] The budget of the EEA is primarily derived from two main sources, namely revenues from the European Union budget and other sources of revenues.

Revenues from the EU budget are structured under the budget heading "European Union subsidy and EFTA contribution", and they form the primary source of income for the EEA. From 2013 to 2018, this source of income provided the Agency with approximately 41 million euros *per* year. In the period from 2018 to 2020, there was an increase of 2 million euros per year, and in 2020 it amounted to 47 million euros. In 2021, 2022, and 2023, this contribution amounted to 51, 55, and

[34] Regulation 401/2009, Article 9.

[35] European Environment Agency Governance, available at: [https://www.eea.europa.eu/en/about/who-we-are/governance], Accessed 23 February 2023.

[36] EEA Budget, available at: [https://www.eea.europa.eu/about-us/documents/eea-budgets], Accessed 20 January 2023.

60 million euros, respectively. This indicates that the Union's allocations to the EEA budget are modest. Moreover, these small increases in the budget do not correspond to the importance of the Agency, given the current circumstances and Union aspirations, which consequently has a limiting effect on its performance.

Other sources of income are found under the budget heading "Miscellaneous revenue" and budget line "Contributions under special agreements and assigned revenue." From 2013 to 2017, these funds amounted to 7 to 10 million euros per year. In 2017, the "Copernca"[37] project was launched, and based on this, the income in this budget heading increased to 29 million euros in 2017, 22 million in 2018, over 6.5 million in 2019, and over 13.5 million in 2020. Budget revenues increased precisely thanks to the Copernca project, which contributed 27 million in 2017, almost 20 million in 2018, around 6.5 million in 2019 and a little over 12 million in 2020.[38] In 2021, 2022, and 2023, this source of income to the EEA amounted to 13, 32, and 38 million euros, respectively.[39]

Regarding the expenditure side of the budget,[40] the costs incurred based on the available data for the period 2013-2018 and from 2018 onwards will be the focus of this analysis.[41] Costs are divided into three categories, namely staff costs, administrative costs, and operating expenditures. From the available data, it can be concluded that in the first indicated period, administrative expenses were continuous and amounted to a little more than 4 million euros. From 2021-2023, this type of cost varied from 5 to 6.5 million euros.

Personnel costs from 2013 to 2018 varied between 23 and 26 million euros, while operating costs for 2019 and 2020 amounted to over 28 million euros. For 2019, 2020, and 2021, available data indicate that they amounted to 42, 27, and 29 million euros, respectively. From 2022 to 2023, they were significantly higher and amounted to 46 and 52 million euros, respectively. Also, this was accompanied by an increase in staff costs, which in 2021 and 2022 were around 40 million euros *per* year.[42]

---

37 See more: COPERNICUS, available at: [https://www.eea.europa.eu/about-us/who/copernicus-1], Accessed 20 January 2023.

38 EEA Budget, available at: [https://www.eea.europa.eu/about-us/documents/eea-budgets], Accessed 20 January 2023.

39 *Ibid.*

40 Outturn expenditures.

41 Appropriations expenditures.

42 Statement of revenue and expenditure of the European Environment Agency for the financial year 2022 (2022/C999/03) EN Official Journal of the European Union C 999/1229.3.2022, available at: [https://www.eea.europa.eu/about-us/documents/eea-budgets/budget-of-the-european-environment-2], Accessed 1 April 2023.

Based on a comparison of budget revenues and expenditures for the period from 2013 to 2018, in 2015, 2018 and 2019, expenditures exceeded income. Notably, in 2019, there was a budget overrun of almost 20 million.[43] This overview provides quite a solid basis for providing arguments in favour of raising the budget of the European Environment Agency.

This could yield several important benefits, directly impacting the quality of work the agency performs. It would improve the quality, as well as the quantity of environmental data it collects and analyses, which could lead to more accurate and timely reporting on the state of Europe's environment. This information is critical for policy-making and decision-making at all levels, from local to European.

Furthermore, environmental challenges such as climate change, biodiversity loss, and pollution are becoming more severe and complex. A higher budget for the EEA would enable it to address emerging challenges more effectively by investing in research, developing new methodologies, and promoting innovative solutions.

Lastly, given the international importance of the EEA, an augmented budget could strengthen its collaborations with international partners, such as the United Nations Environment Programme (UNEP), the Intergovernmental Panel on Climate Change (IPCC), and other regional and global organisations. This increased engagement may open doors to building consensus around environmental policies and promote greater coherence in international environmental governance.

4. EUROPEAN ENVIRONMENT INFORMATION AND OBSERVATION NETWORK (EIONET) AND COOPERATION

The European Environment Information and Observation Network (Eionet) was established by the European Environment Agency in1994. Its primary purpose is to facilitate the collection of data and its unification into a centralised database, all with the main goal of easier systematisation and usage of available data. Although Eionet does not possess legal entity status, all legal transactions are signed on its behalf by its founder, the EEA. The work carried out by the EEA and Eionet is often compared to the chain process that leads from monitoring and data collection to assessments and knowledge generation.[44]

---

[43] European Environment Agency Budget, available at: [file:///C:/Users/User/Downloads/Budget%20of%20the%20European%20Environment%20Agency%20for%20the%20financial%20year%202023%20(1).pdf], Accessed 24 February 2023.

[44] Hřebíček, J.; Jensen, S.; Steenmans, C., *The Framework for Environmental Software Systems of the European Environment Agency*, ISESS 2015, IFIP Advances in Information and Communication Technology, 448, 2015, pp. 47.

The membership structure of Eionet includes 38 countries, comprising all EU member states. Great Britain no longer has any arrangement with the EEA.[45] Also, membership in the EU is not a precondition to Eionet membership. Therefore, some non-EU countries, such as Switzerland, Norway, Liechtenstein, Iceland, and Turkey, are Eionet members. In addition, cooperation with Eionet can be also established through signing Memorandum of cooperation between the EEA and respective countries. This applies to the case of Montenegro, Serbia, Bosnia and Herzegovina, North Macedonia, and Albania.

The EEA and Eionet have extensive international cooperation with many non-EU countries, namely the USA, Australia, Canada, China, India, South Korea, Armenia, Azerbaijan, Georgia, Algeria, Egypt, Israel, Jordan, Lebanon, Libya, Morocco, Palestine, and Tunisia.[46] Close cooperation has also been established at the regional level with African, Asian, and South American institutions and international organisations.

Regulation No 401/2009 underlines the significance of cooperation with other bodies and organisations[47], such as: EU Commission Joint Research Center, the EU Statistical Office (Eurostat),[48] the European Space Agency (ESA), the Organization for Economic Cooperation and Development (OECD), the Council of Europe, the International Energy Agency (IEA), as well as the United Nations and its specialised agencies, especially the United Nations Environment Program, the World Meteorological Organization, the International Atomic Energy Agency (IAEA) and the World Health Organization (WHO).[49]

Caspersen states that the network of institutions dealing with the collection of environmental data consists of several hundred institutions,[50] while Bosch mentions a figure of over 600 institutions solely in Europe, providing assistance to the EEA.[51]

This wide international network and cooperation is highly important bearing in mind the nature of environmental challenges that could only be efficiently tackled through joint and consolidated actions.

---

45 Westbrook, *op. cit.* note 19, p. 261.

46 European Environment Agency, *International engagement*, available at: [https://www.eea.europa.eu/about-us/who/international-cooperation], Accessed 25 December 2022.

47 Regulation 401/2009, Article 15.

48 Weber, J., I*mplementation of land and ecosystem accounts at the European Environment Agency*, Ecological Economics, Volume 61, Issue 4, 2007, pp. 695-707.

49 Caspersen, O., *The European Environment Agency,* Global Environmental Change 9, 1999, p. 74.

50 *Ibid.,* p. 73.

51 Bosch, P., *The European Environment Agency focuses on EU-policy in its approach to sustainable development indicators*, Statistical Journal of the United Nations ECE 19, 2002, p. 5.

5. MECHANISMS FOR SCRUTINY OVER THE WORK OF AGENCY

Although decentralised agencies are independent in their work from the European Union, they are subject to control performed by the side of member states and the Union itself. The control over the agencies' work is based on the principle "whoever delegates responsibilities, retains control".

The European Commission established the Directorate-General for the Environment (DG Environment) in 1973. Martens designates the DG Environment as the main client of the Agency.[52] The agency also works closely with other directorates-general and forms the "science-policy interface".[53] The key domain of responsibilities of the DG Environment is developing and implementing the EU's environmental policies and ensuring that member states comply with EU environmental regulations. Furthermore, it is responsible for promoting sustainable development, protecting human health and the environment, and ensuring the prudent and rational use of natural resources. Lastly, it is also proposing and implementing EU environmental legislation, monitoring and reporting on the state of the environment in the EU, and working with member states and international organisations to address global environmental challenges.[54]

The environment is highly important for the Commission, as evidenced by the fact that in 2010 it established the Directorate-General for Climate Action (DG CLIMA), entitled with exclusive competences in the field of climate change.[55] It`s competencies encompass developing and implementing EU policies related to climate change, while its main goal is to ensure that the EU complies with its commitments under the Paris Agreement and other international agreements on climate change.

Both DG CLIMA and the EEA are important actors in the EU's efforts to address climate change and promote sustainable development. While DG CLIMA is responsible for developing and implementing policies and regulations related to climate action, the EEA provides scientific and technical information to support policy development and implementation.

The control of the EEA's work is primarily carried out by the member states and the Union itself - through the Management Board, in which each member state, the European Commission and the European Parliament are represented. One of

52 Regulation 401/2009, Article 8.

53 Martens, *op. cit.* note 28, p. 884.

54 *Ibid.*

55 Hřebíček, *et al.*, *op. cit.* note 44, p. 46.

the important specificities of this body is that a representative of another country that cooperates with the Agency can be elected as a member of the Management Board. This, in fact, means that the control can be performed by countries that are not members of the Union. Agreeing that countries that are non-EU member states could have full insight into all events and participate in decision-making, the Union showed understanding towards the nature of environmental challenges - which recognize no border and which require perpetual and joint cooperation and efforts for the benefit of all.

The Management Board is the main management body that appoints and dismisses all Agency bodies and ensures that the tasks from Article 2 of the Regulation are fully and timely fulfilled. The Management Board exercises administrative control over all bodies of the Agency (e.g. Executive Director reports to the Management Board).

In addition, one of the important aspects of exercising the control is budgetary control, carried out by the budgetary authorities of the Union. This means that control is exercised by both the Parliament and the Council of the European Union, as they jointly decide on the annual budget. Apart from them, the work of the Agency is controlled by the European Commission, which, as the executive body of the Union holds responsibility for implementing and managing the budget, as well as the European Court of Auditors, which ensures the legality of spending budget funds.[56] Also, Article 8 of the Regulation stipulates that "the Agency annually submits to the budget authority all data relevant for the outcome of the evaluation procedures". Almost 20% of the provisions of the Regulation refer to budgetary issues. This clearly indicates the importance of spending and control of budget funds.

The Agency submits annual reports on work and activities to member states, the European Parliament, the Commission, the Council and the Court of Auditors. Also, those reports are made public, which allows for civil control of the Agency's work.[57]

EU institutions have the right to initiate the proceedings before the European Court of Justice in order to examine the legality of the Agency's actions. Articles 263, 265 and 340 of the TFEU stipulate that proceedings can be initiated before

---

[56] See more: Commission creates two new Directorates-General for Energy and Climate Action, 2010, available at: [https://ec.europa.eu/commission/presscorner/detail/en/IP_10_164], Accessed 04 September 2022.

[57] Košutić, B., *Osnovi prava Evropske unije*, CID, Podgorica, 2014, p. 200.

the European Court of Justice for the annulment of acts, due to omissions, for the compensation of damages from non-contractual liability.

6. ENVIRONMENT IN EUROPE - SITUATION AND PERSPECTIVES IN 2020

The publication "Environment in Europe - situation and perspectives in 2020" marks 25 years on SOER reporting on the state of environment, and begins by highlighting the main problem, namely, the mismatch between the policies and the environmental issues.[58] In the introduction, the executive director of the European Environment Agency, Hans Bruyninckx, states that "it is Europe that must be the leader in the global transition towards environment protection in a just and sustainable world". This is certainly a visionary prospect, but the question is, can Europe influence the USA, Russia, China, India and other big polluters in order to adapt their economies so they cause a lower level of pollution, by investing in green technologies, etc? The European Union is emphasising the global significance of environmental issues, recognizing them as urgent challenges that affect us all. By highlighting this, the EU aims to encourage collaborative efforts towards finding solutions and promoting solidarity, cohesion and sustainable development[59]. Ignoring these challenges could have catastrophic consequences, making it imperative to confront the recognized issues head-on.

On the brighter side, it is commendable that the EEA puts pressure on the EU to invest more effort in order to preserve the environment. The EU has defined six thematic priority policies by the 8th Environment Action Program for common agenda on environmental policy by 2030,[60] namely:

a) achieving the 2030 greenhouse gas emission reduction target and climate neutrality by 2050;
b) enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change;

---

58 SOER 2020, Reporting on the environment in Europe, available at: [https://www.eea.europa.eu/soer/2020], Accessed 01 April 2023.

59 Lenaerts, K.; Van Nuffel, P., *European Union Law,* Sweet & Maxwell, London, 2011, p. 423.

60 Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the monitoring framework for the 8th Environment Action Programme: Measuring progress towards the attainment of the Programme's 2030 and 2050 priority objectives COM/2022/357 final, 2022, available at: [https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2022%3A357%3AFIN], Accessed 17 April 2023.

c) advancing towards a regenerative growth model, decoupling economic growth from resource use and environmental degradation, and accelerating the transition to a circular economy;

d) pursuing a zero-pollution ambition, including for air, water and soil and protecting the health and well-being of Europeans;

e) protecting, preserving and restoring biodiversity, and enhancing natural capital;

f) reducing environmental and climate pressures related to production and consumption (particularly in the areas of energy, industry, buildings and infrastructure, mobility, tourism, international trade and the food system).[61]

The ambition to make Europe a climate-neutral continent by 2050[62] is at the core of the Union's interest, which has allocated over 17 billion euros for this purpose.[63]

As it has been stated in the program: "Europe has made more progress in terms of efficient use of resources and the circular economy. The consumption of raw materials decreased and the efficient use of resources improved as the gross domestic product increased. Greenhouse gas emissions decreased by 22% between 1990 and 2017 due to policy measures and economic factors. The share of renewable energy sources in final energy consumption has been steadily increasing to reach 17.5% in 2017. Energy efficiency has improved, and final energy consumption has fallen to a level roughly equal to the 1990 level. The emission of pollutants into both air and water has been reduced, while total water abstraction in the EU has been reduced by 19% in the period from 1990 to 2015".[64]

However, recent trends are less positive. For example, final energy demand has actually increased since 2014 and, and this trend continues. Harmful emissions from traffic and agriculture also increased, while the production and consumption of hazardous chemicals remained stable. The 2030 outlook suggests that the cur-

---

61 European Commission, *Environment Action Programme*, 2022, available at: [https://environment.ec.europa.eu/strategy/environment-action-programme-2030_en], Accessed 17 April 2023.

62 See more:
[https://ec.europa.eu/commission/presscorner/detail/en/SPEECH_20_1772], Accessed, 17 January 2023.

63 „The Just Transition Fund is a new instrument with an overall budget of €17.5 billion, of which €7.5 billion are coming from the Multiannual Financial Framework (MFF) and €10 billion from the NextGenerationEU. The JTF is a key element of the European Green Deal and the first pillar of the Just Transition Mechanism (JTM)", available at:
[https://ec.europa.eu/commission/presscorner/detail/en/IP_20_2354], Accessed 10 January 2023.

64 The European environment — state and outlook 2015 — synthesis report, Resource efficiency and the low-carbon economy, available at:
[https://www.eea.europa.eu/soer/2015/synthesis/report/4-resourceefficiency], Accessed 09 May 2023.

rent rate of progress will not be sufficient to meet the 2030 and 2050 climate and energy targets.[65] In addition, solving the problem of pressures on the environment from economic sectors through the integration of environmental protection measures was not successful, which can be seen from the constant effects of agriculture on biological diversity and pollution of air, water and soil.

The recent geopolitical tensions, caused by war in Ukraine, and energy security crisis can provide additional momentum and justification for the EU's energy transition, but they also highlight the need for effective policies and measures to ensure a secure, sustainable, and affordable energy supply for all Europeans.

In conclusion, the EU's Environment Action Programme to 2030 can contribute to reducing the EU's energy demand and promoting a more sustainable and resilient energy system, which can help to address geopolitical tensions and energy security concerns.[66]

However, its successful implementation will require sustained efforts and political will, as well as effective cooperation among member states and stakeholders.

Based on the above, it is clear that the environment is facing significant threats, and that we are only at the initial stages of addressing this issue. Environmental challenges are a global problem, and it is crucial that all parties should play an active role and demonstrate a high level of sensitivity towards this topic. Simply reducing pollution in one region will not be enough if the waste is just moved to another area. Therefore, it is imperative to take collective action to address this issue, and work together to create a cleaner and safer planet.

The report Environment in Europe - State and Prospects 2020 also notes that "the global burden of disease and premature death linked to environmental pollution is already three times greater than the combined burden of HIV, tuberculosis, and malaria.".[67] Therefore, it is crucial not to ignore the sociological factor of climate change,[68] as purely technological fixes without considering social factors will not

---

65 Van Oudenaren, J., *Crisis and Renewal: An Introduction to the European Union,* Rowman & Littlefield Publishers, London, 2022, p. 209.

66 Decision (EU) 2022/591 of the European Parliament and of the Council of 6 April 2022 on a General Union Environment Action Programme to 2030, available at: [https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32022D0591], Accessed 10 January 2023.

67 Životna sredina u Evropi, stanje i perspektive, 2020, 7, available at: [https://www.eea.europa.eu/soer/2020/soer-2020-executive-summary-translations/zivotna-sredina-u-evropi-stanje-1/view], Accessed 12 January 2023.

68 Miltojević, V.; Ilić Krstić, I., *Sociology and climate change*, Sociological Review, Vol. LIV, No. 3, 2020, pp. 1106-1121.

be enough to mitigate or adapt to global climate change, as highlighted by Nagel, Dietz, and Broadbent.[69]

7. COOPERATION BETWEEN MONTENEGRO AND EEA

7.1. Historical perspective

Montenegro has been an official candidate country for membership to the European Union since 2012. Two decades of cooperation of Montenegro with the EU led to establishing close ties with this *sui generis* community. This includes Montenegro's participation in the Stabilization and Association Process (SAP) and the European Neighborhood Policy (ENP). The SAP framework is aimed at promoting political, economic, and institutional reforms in the region, while the ENP is a policy that seeks to promote stability, democracy, and prosperity in the EU's neighbouring countries.

Montenegro, as a candidate state, is also committed to aligning its environmental policies and practices with those of the EU. Naturally, the European Environmental Agency, which provides expert advice, data, and tools to support the development and implementation of environmental policies, is an important partner to Montenegro in this process. The Environment Protection Agency of Montenegro is the competent state agency that provides scientific information in the field of the environment.[70] It was established on 12 November 2008 with a goal to become an operative implementation authority for the country's environmental protection law.[71]

In fact, the cooperation between Montenegro and the EEA has a history of more than a decade, that predates the official signing Memorandum of Understanding on October 23, 2020. The MoU represents a significant step towards full membership of Montenegro in the EEA. Its primary goal is to enhance the longstanding cooperation of the Environmental Protection Agency of Montenegro (before:

---

69 Nagel, J.; Dietz, T.; Broadbent, J., *Sociological Perspectives on Global Climate Change,* National Science Foundation & American Sociological Association, 2010, pp. 14.

70 Memorandum of Understanding between the EEA and Nature and the Environment Protection Agency of Montenegro (hereinafter: MoU), available at: [https://www.gov.me/dokumenta/a077f480-8efb-4160-9263-653611b31ee2], Accessed 21 January 2023.

71 The Agency performs professional and related administrative tasks in the field of environmental protection, namely: Environmental monitoring, prepares analyses and reports, issues permits, communicates with relevant domestic and international authorities and organisations, as well as with the public, performs other tasks established by the Law on the Environment and special regulations, [https://www.eea.europa.eu/soer/2010/countries/me/national-and-regional-story-a], Accessed 10 January 2023.

the Nature and Environmental Protection Agency of Montenegro) with the EEA, through a greater degree of coordination of activities in the field of environment monitoring and reporting. MoU seeks to improve the relationship between these two agencies, while reaffirming the unwavering support the EU provides to Montenegro on its path towards joining this community.[72]

At the session where the signing of the MoU with Montenegro was approved, it was also decided that the countries of the Western Balkans have the opportunity to participate as observers in the EEA Management Board meetings. This decision further underscores the EEA's commitment to fostering regional cooperation and engagement with neighbouring countries in the Western Balkans, facilitating mutual learning and knowledge exchange in the realm of environmental governance.

7.2. Memorandum of Understanding, vision and benefits

Expanding on the central objective of the Memorandum of Understanding, signed between Montenegro and the EEA, the agreed goals are geared towards fostering the exchange of experience and knowledge, enhancing capacity building, promoting data exchange, and fostering cooperation with Eionet. Ultimately, the overarching ambition of the Memorandum is to pave the way for Montenegro's full membership in the EEA.[73]

Article 1 paragraph 2 stipulates that "no assignment or transfer of any obligations or responsibilities of one or the other contractual party to the other shall be made, so that each contractual party will retain its obligations and responsibilities in accordance with its internal rules and regulations".[74] The areas and leading principles of cooperation are prescribed by Article 3. Among key areas is raising awareness and visibility of the results achieved by Montenegro in order to speed up both the admission to the EEA, as well as admission to the EU. Symbolic move made in that direction is inviting the representatives of Montenegro to participate as observers in EEA and Eionet meetings. The EEA also pledged to provide full support to the Environment Protection Agency of Montenegro in order to strengthen its human, administrative and institutional capacities. The exchange of information, data and expertise is prescribed by paragraph 2 of Article 3, with the emphasis that the EEA will provide the necessary scientific and technical support. Beyond

---

72 Environmental Protection Agency of Montenegro, signing MoU with the EEA, available at: [https://epa.org.me/2020/10/26/agencija-za-zastitu-prirode-i-zivotne-sredine-crne-gore-potpisala-memorandum-o-razumijevanju-sa-evropskom-agencijom-za-zivotnu-sredinu/], Accessed 24 February 2023.

73 MoU, Article 2.

74 MoU, Article 1.

exchange of information, the signatories undertook an obligation to exchange experiences and know-how.

The Memorandum envisages no activities that create financial obligations for the signatories, and states that "additional activities are subject to external sources of funding within the Instrument for Pre-Accession Assistance (IPA) and/or other financial instruments".[75] Notably, paragraph 3 of Article 7, stipulates that the Memorandum will be terminated or revised "when external sources of funding are not available for the implementation of the above-mentioned areas of cooperation".

The principle of cooperation is deeply ingrained through Article 5 of the Memorandum, which stipulates that "the contracting parties will jointly prepare and coordinate their activities in the field of public relations in the work that includes this Memorandum of Understanding." In addition, the EEA will provide the Environment Protection Agency with support at the national level, further solidifying the cooperative spirit of this MoU.

7.3. Forms of cooperation

The cooperation between Montenegro and the EEA takes many forms. Exchange of information is certainly among the key ones. Montenegro receives regular updates and information from the EEA on EU environmental policy developments, best practices, and scientific research. This helps alignment of Montenegrin policies with the EU standards, as well as identification of areas for improvement. This in particular refers to the technical and scientific support Montenegro receives in terms of development and implementation of environmental policies and strategies (*i.e.* air and water quality, waste management, biodiversity conservation, and climate change mitigation and adaptation).

Furthermore, this cooperation also provides the capacity building opportunities for Montenegrin officials and experts in areas such as environmental monitoring, data analysis, and reporting. Montenegro and the EEA collaborate on joint EU-funded projects related to environmental protection, such as the IPA Adriatic-funded project "Towards a joint monitoring programme for assessing the ecological status of the Adriatic Sea" and the Horizon 2020-funded project "Adriatic Ionian Green Ports". The key areas of these joint projects are improving air quality, waste management, and protecting biodiversity, and they are aimed at helping Montenegro meet the requirements for EU membership.

[75] MoU, Article 4.

The EEA provides guidance and support to Montenegro for preparing the annual reports on its environmental performance, within the EU accession negotiation process. This is also beneficial to EEA as it collects information necessary to prepare annual reports on the state of the environment in Europe (which are publicly available on its website), as well as other publications, indicators, and assessments.

The last report highlights that Montenegro has made progress in the implementation of environmental policies, but that key environmental problems remain, and these include air and water pollution, land degradation, loss of biodiversity and ecosystems, especially in forest areas and in the coastal zone and poor waste management.[76] Moreover, it is stated that Montenegro faces significant challenges related to the protection of its marine[77] and freshwater ecosystems, and that reduction of greenhouse gas emissions and the promotion of sustainable transport should take place. The report emphasises the need for continued efforts to improve environmental monitoring, strengthen environmental governance, and enhance public awareness and participation in environmental decision-making.[78]

Overall, although Montenegro is not a member of the EEA, it has established mutually beneficial and close relations with the agency. This cooperation has contributed to improving the environmental situation in Montenegro and achieving sustainable development goals. The EEA has provided Montenegro with access to the latest scientific data, know-how, and capacity building for effective policy implementation. Additionally, this partnership has provided the EEA with valuable data and insights on the state of the environment in Montenegro and the wider region. This is especially significant given the cross-border nature of environmental challenges and their interconnectedness in the region.[79]

During the last meeting in Copenhagen in October 2022, there was a suggestion made that the Environment Protection Agency of Montenegro has achieved significant results in reporting to the EEA in the field of the environment.[80] In addition, it is important to emphasise that the transparency of the work of the

---

76 Todić, D.; Vučić, M.; *Environmental Law in Montenegro*, Netherlands, Wolters Kluwer, 2023, p. 21.

77 *Ibid.*

78 Environment Protection Agency of Montenegro, Information on the state of environment, available at: [https://epa.org.me/informacije-o-stanju-zivotne-sredine/], Accessed 25 March 2023; Montenegro, State of the Environment reporting, available at: [https://www.eea.europa.eu/en/advanced-search?q=montenegro&size=n], Accessed 24 March 2023.

79 See more: *Climate Change and the Future of Europe: Views from the Capitals*, Pollak J.; Kaeding M.; Schmidt P., (eds.), Springer International Publishing, Germany, 2023, p. 146.

80 See more: [https://epa.org.me/2022/10/14/u-kopenhagenu-odrzan-sastanak-predstavnika-agencije-za-zastitu-zivotne-sredine-crne-gore-i-evropske-agencije-za-zastitu-zivotne-sredine/], Accessed 20 January 2023.

agency and its cooperation with the interested actors in Montenegro (in particular eco activist, grassroots organisation in the field of environment protection, etc.), has been substantially improved in the last few years. Numerous activities have been jointly conducted by the side of mentioned actors, which led to discovery and prosecution of individuals responsible for cases of major degradation of the environment. Illustrative example is the case of devastation of the bank of river Morača. This was caused by decades of gravel exploitation, which has led to the destruction of habitats and the loss of biodiversity, as well as to significant changes in the river's hydrology and sediment transport. The coordinated activities by the Environment Protection Agency of Montenegro and eco activists led to successful action, which stopped the further gravel exploitation that would have a huge damaging impact on the quality of life of local communities and beyond.[81]

7.4. The benefits of strengthening of cooperation between Montenegro and EEA

It is critical for Montenegro to build up resilience to climate and disaster risks proactively, whilst at the same time ensuring its own energy security in order to boost the country's potential growth. There are several researches and recommendations that outline the key challenges and solutions on the development path of Montenegro, according to which: a) European Investment Fund resources should be used to stimulate a fast, green and effective transformation of the energy sector. This particularly refers to large regional hydro plants and expensive accompanying infrastructure in the country's northern region; b) Policy-makers should be aware of the momentum that has built up to support a green energy transition and offer favourable investment as well as business conditions to attract European private investors (e.g. to finance solar energy projects); c) Raising public awareness and education in the area of green energy transition and its potential economic benefits is vital.[82]

While the cooperation between Montenegro and the European Environment Agency has been beneficial, there are still a number of areas also highlighted by the Green Agenda that require attention and enhancement. One aspect that needs improvement is the protection of Montenegro's marine and freshwater ecosystems, which have been identified as a source of significant challenges. Additionally, sus-

---

81 Concerted action of the Environment Protection Agency of Montenegro and eco activists in the case of devastation of the bank of river Morača, available at: [https://www.ecoportal.me/na-koji-nacin-je-visedecenijska-eksploatacija-sljunka-ostetila-gradane-i-prirodu-crne-gore/], Accessed 28 March 2023.

82 Pollak *et al.*, *op. cit.* note 75, pp. 146-149.

tainable transport remains an area of concern. Montenegro needs to prioritise the promotion of sustainable transport methods to reduce pollution and improve mobility options. This includes investing in infrastructure, enhancing public transportation systems, encouraging active modes of transport such as walking and cycling, etc.

To enhance cooperation between Montenegro and the EEA, several steps can be taken. First, in order to ensure that Montenegro's environmental policies align with EU standards, there should be a continued exchange of information and best practices. This can be achieved through regular updates and communication channels that facilitate the exchange of knowledge and expertise.

Equally important, capacity building initiatives should be expanded to further empower Montenegrin officials and experts in environmental monitoring, data analysis, and reporting. This will enable them to effectively implement and evaluate environmental policies and strategies.

Furthermore, collaborative projects, supported by EU funding, should continue to focus on areas such as air quality improvement, waste management, and biodiversity protection.

In order to achieve further progress, it is crucial to focus on strengthening environmental governance and promoting public awareness and participation in decision-making processes.[83] This can be accomplished through the establishment of transparent and inclusive mechanisms that involve eco activists, grassroots organisations, and other stakeholders. Engaging these actors will not only provide valuable insights and perspectives but also foster a sense of ownership and responsibility towards environmental protection.

The successful case of joint efforts between the Environment Protection Agency of Montenegro, eco activists, and grassroots organisations in addressing environmental degradation, such as the devastation of the bank of the river Morača, demonstrates the positive impact of this model of collaboration. Such examples should be encouraged and replicated, ensuring that environmental concerns are effectively addressed and the interests of local communities are safeguarded.

Overall, by strengthening cooperation, Montenegro and the EEA can work together to address the remaining challenges and achieve sustainable development goals. The exchange of information, capacity building, and collaborative projects will contribute to the effective implementation of environmental policies and

[83] Drobnjak, R., *Green economy in the Western Balkans, Towards a sustainable future,* Renko S; Pester, A. (eds.), Emerald Publishing, 2017, pp. 395-419.

the protection of Montenegro's natural resources. Moreover, a transparent and inclusive approach to environmental governance will foster public support and involvement in decision-making processes, ensuring the long-term sustainability of Montenegro's environment.

8. CONCLUSION

Deterioration of the state of the environment is the trend that has been going on for years, and efforts made by the biggest world polluters are still too weak to change the general course. The present state of environmental affairs, poses a quest for serious and collective efforts to reverse negative trends. The European Union's Green Deal serves as a compelling model for other countries to emulate in order to effect positive change. Since pollution is a global problem, it requires coordinated action and solidarity among major polluters, with particular attention paid to the most severely affected and fragile regions. The critical question that remains is the extent to which the Union can influence other actors. While setting a positive example is a valuable first step, it is necessary to explore additional measures that can be taken into account.

The European Environmental Agency, as a specialised agency within the EU, is responsible to provide sound and independent information and knowledge on the state of environment and to support the development, implementation and evaluation of EU environmental policies. Although it does not possess executive powers, the EEA plays a vital role in supporting EU environmental policy-making and in promoting sustainable development in Europe. Unfortunately, the importance of this Agency is not sufficiently recognized. Taking the example of analysing the budget for the period from 2013 to 2023, it can be concluded that the allocations of the EU budget, increased only a few million euros, which considering the importance of the Agency's work in the light of ever growing environmental challenges, remains a modest contribution.

Having in mind the importance of information about the state of environment the EEA is collecting and processing, enhancing its role and competencies, is the way EU decision makers can demonstrate a genuine sensitivity toward the environmental challenges. Certainly, it would require more than a political will, but also a devotion and expertise in implementing environmental policies and regulations in the field.

One of the proposals in direction of enhancing the EEA role, would be introducing the system of mandatory control conducted by the member states. It would also require a special fund that could be deployed for special occasions such as

weather disasters, from which funds would be provided to vulnerable countries. Also, the existing legal framework of the Agency dates back to 2009, and therefore it would be desirable to introduce changes and to adapt the functionality of the Agency to the current circumstances.

Furthermore, as highlighted in the article, the "political will" towards enhancing the role and impact of the EEA should also be underpinned by adequate working resources. Here we particularly refer to the sufficient funds and staff in order to carry out its responsibilities, which would allow for effective work in collecting and analysing data, monitoring environmental trends, and providing policy recommendations. This is also closely related to the independence of the EEA in its work and its ability to provide objective advice and recommendations based on scientific evidence. Here we should not neglect the importance of effective coordination among the various EU institutions, agencies, and member states. Coordination will also help to avoid duplication of efforts and ensure efficient use of resources. Lastly, community engagement (involvement of the environmental NGOs, industry groups, citizens, etc.), would be one more important aspect leading to the success of the agency and will help to build transparency, trust and public support for the agency's work.

Closer examination of Montenegro's cooperation with European agencies led us to the conclusion of its paramount importance in the accession process and in terms of necessary alignments in the field of environmental protection. The preamble of the Memorandum signed between Montenegro and the EEA acknowledges that the European Union provides unequivocal and constant support to the Western Balkans in their path towards EU membership. Cooperation with the EEA also increases the possibility of accessing the available EU funds, facilitating investments in green technologies and renewable energy sources. Also, in 2018, Montenegro opened Chapter 27 which tackles the environment related issues. Certainly, through the cooperation with the EEA, the process of closing the chapter runs faster and it secures a better quality of the necessary legislative alignments and reforms. Apart from Montenegro, the EEA also signed a memorandum of cooperation with Serbia, Bosnia and Herzegovina, North Macedonia and Albania, expressing its commitment to the development of the Western Balkans and its integration to the EU.

In conclusion, it is important to underline that the European Environment Agency provides for a knowledge base and secures the quality of the integration processes in the field of environment protection for the Western Balkans. It also provides a bright example of the EU cooperation with the Western Balkans in equipping them with the capacities to effectively implement the required reforms,

and therefore, contributes to the general "course/lead of world-wide importance" the EU has taken with the objectives set by the Green Deal.

REFERENCES

BOOKS AND JOURNAL ARTICLES

1. Bosch, P., *The European Environment Agency focuses on EU-policy in its approach to sustainable development indicators*, Statistical Journal of the United Nations ECE 19, 2002, pp. 5-18.
2. Busch, D., *Is the European Union going to help us overcome the covid 19 crisis,* European Banking Institute Working Paper Series, No. 64, 2020.
3. Caspersen, O., *The European Environment Agency,* Global Environmental Change 9, 1999, p. 71-75.
4. *Climate Change and the Future of Europe: Views from the Capitals,* Johannes Pollak, Michael Kaeding, Paul Schmidt (eds.), Springer International Publishing, Germany, 2023, p. 146-149.
5. Drobnjak, R., *Green economy in the Western Balkans, Towards a sustainable future,* Sanda Renko, Almir Pester (eds.), Emerald Publishing, 2017, p. 395-419.
6. Flyvbjerg, B., *The Law of Regression to the Tail: How to Survive Covid-19, the Climate Crisis, and Other Disasters,* Environmental Science and Policy, 2020.
7. Gornitzka, A., Sverdrup, U., *Who are the Experts? The Informational Basis of EU Decision-Making*, ARENA Working paper, No. 14/08, 2008. pp. 1.
8. Gorny, D., *The European Environment Agency and the Freedom of Environmental Information Directive: Potential Cornerstones of EC Environmental Law*, Boston College International and Comparative Law Review, Vol. 14, Issue 2 Symposium on European Community, 1991, pp. 279-299.
9. Hadewych, H., *Suspension of Development Cooperation: An Instrument to Promote Human Rights and Democracy?*, European Centre for Development Policy Management, Discussion Paper, No. 64B, 2005, pp. 9-10.
10. Holmes, J., Savgård, J., Dissemination and implementation of environmental research – including guidelines for best practice, Swedish Environmental Protection Agency, 2008, p. 39, available at:
11. [http://www.idaea.csic.es/sites/default/files/Dissemination-and-implementation-of-environmental-research.pdf], accessed 29 January 2023.
12. Hoornbeek, J., *Information and Environmental Policy: A Tale of Two Agencies*, Journal of Comparative. Policy Analysis: Research and Practice, 2000, Vol. 2, pp. 145-187.
13. Hřebíček, J., Jensen, S., Steenmans, C., *The Framework for Environmental Software Systems of the European Environment Agency*, ISESS 2015, IFIP Advances in Information and Communication Technology, 448, 2015, pp. 47.
14. Košutić, B., *Osnovi prava Evropske unije*, Podgorica, CID, 2014, p. 200.
15. Lenaerts, K., Van Nuffel, P., *European Union Law,* Sweet & Maxwell, London, 2011, p. 423.

16. Martens, M., *Voice or Loyalty? The Evolution of the European Environment Agency (EEA)*, Journal of Common Market Studies, 2010, Vol. 48, No. 4, pp. 882.
17. Miltojević, V., Ilić Krstić, I., *Sociology and climate change*, Sociological Review, Vol. LIV, No. 3, 2020, pp. 1106-1121.
18. Nagel, J., Dietz, T., Broadbent, J., *Sociological Perspectives on Global Climate Change,* National Science Foundation & American Sociological Association, 2010, pp. 14.
19. OECD Development Pathways Multi-dimensional Review of the Western Balkans, from analyses to action, OECD, 2022, p. 383.
20. Rowell, A., *COVID-19 and Environmental Law,* Environmental Law Reporter, University of Illinois College of Law Legal Studies Research Paper, Vol. 50, No. 20-19, 2020, available at: [https://ssrn.com/abstract=3582879] or [http://dx.doi.org/10.2139/ssrn.3582879], Accessed 20 January 2023.
21. Shyrokykh, K.; Rimkute, D., *EU rules beyond its Borders; The policy-specific Effects of transgovernmental networks and EU agencies in the European Neighbourhood*, No. 57, 2019, pp. 750.
22. Todić, D., Vučić, M.; *Environmental Law in Montenegro*, Netherlands, Wolters Kluwer, 2023, p. 21.
23. Van Oudenaren, J., *Crisis and Renewal: An Introduction to the European Union,* Rowman & Littlefield Publishers, London, 2022, pp. 209.
24. Westbrook, D., *Environmental Policy in the European Community: Observations on the European Environment Agency,* Harvard Environmental Law Review, Vol. 15, 1991, pp. 261-267.
25. Weber, J., I*mplementation of land and ecosystem accounts at the European Environment Agency*, Ecological Economics, Vol. 61, Issue 4, 2007, pp. 695-707.

EU LEGISLATION

1. Council Regulation (EEC) 1210/90 on the establishment of the European Environment Agency and the European Environment Information and Observation Network [1990] OJ L120/ 1
2. Council Regulation (EC) 933/1999 amending Regulation (EEC) 1210/90 on the establishment of the European Environment Agency and the European environment information and observation network [1999] OJ L117/1
3. Council Regulation (EEC) 1210/90 of 7 May 1990 on the establishment of the European Environment Agency and the European Environment Information and Observation Network, available at: [https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A31990R1210], accessed 23 February 2023.
4. Regulation (EC) 401/2009 of the European Parliament and of the Council on the European Environment Agency and the European Environment Information and Observation Network (Codified version) [2009] OJ L126/13
5. Regulation (EC) 1049/2001 regarding public access to European Parliament, Council and Commission documents [2001] OJ L145

6. Statement of revenue and expenditure of the European Environment Agency for the financial year 2022 (2022/C999/03) EN Official Journal of the European Union C 999/12 available at:
[https://www.eea.europa.eu/about-us/documents/eea-budgets/budget-of-the-european-environment-2], accessed: 01 April 2023.
7. Statistics for a Green Future: Factsheets for the Western Balkans and Turkey, Publications Office of the European Union, 2022

WEB SOURCES

1. Action Plan for the implementation of the Sofia Declaration on the Green Agenda for the Western Balkans 2021-2023, Regional Cooperation Council, Sarajevo, 04 October 2023
2. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the monitoring framework for the 8th Environment Action Programme: Measuring progress towards the attainment of the Programme's 2030 and 2050 priority objectives COM/2022/357 final, available at:
[https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2022%3A357%3AFIN], Accessed 17 April 2023
3. Concerted action of the Environment Protection Agency of Montenegro and eco activists in the case of devastation of the bank of river Morača, available at: [https://www.ecoportal.me/na-koji-nacin-je-visedecenijska-eksploatacija-sljunka-ostetila-gradane-i-prirodu-crne-gore/], Accessed 28 March 2023
4. Climate Action Network Europe, *Report: EU action on Western Balkans' chronic coal pollution is a unique opportunity to improve health and productivity*, 2019 available at: [https://caneurope.org/report-eu-action-on-western-balkans-chronic-coal-pollution-is-a-unique-opportunity-to-improve-health-and-productivity/], Accessed 09 June 2023
5. Colovic Daul, M., Kryzanowski, M., Kujundzic, O., *Air pollution and human health: The case of Western Balkans,* UNEP, 2019, available at: [https://api.developmentaid.org/api/frontend/cms/file/2019/06/Air-Quality-and-Human-Health-Report_Case-of-Western-Balkans_preliminary_results.pdf], Accessed 7 May 2023
6. European Environment Agency Governance, available at: [https://www.eea.europa.eu/en/about/who-we-are/governance], Accessed 23 February 2023
7. European Environment Agency Budget, available at: [file:///C:/Users/User/Downloads/Budget%20of%20the%20European%20Environment%20Agency%20for%20the%20financial%20year%202023%20(1).pdf], Accessed 24 February 2023
8. European Environment Agency, *Changes in urban waste water treatment in the Western Balkans,* 2017, available at:
[https://www.eea.europa.eu/data-and-maps/daviz/changes-in-wastewater-treatment-in-13#tab-dashboard-01], Accessed 02 April 2023
9. European Environment Agency, *European Natura 2000 database on ecological networks*, 2022, available at:
[https://www.eea.europa.eu/data-and-maps/data/natura-2000-eunis-database], Accessed 05 May 2023

10. European Environment Agency, *Corine Land Cover*, 1995, available at: [https://www.eea.europa.eu/publications/COR0-landcover], Accessed 11 August 2021.
11. Environmental Protection Agency of Montenegro, signing MoU with the EEA, available at: [https://epa.org.me/2020/10/26/agencija-za-zastitu-prirode-i-zivotne-sredine-crne-gore-potpisala-memorandum-o-razumijevanju-sa-evropskom-agencijom-za-zivotnu-sredinu/], Accessed 24 February 2023
12. European Environment Agency, *International engagement*, available at: [https://www.eea.europa.eu/about-us/who/international-cooperation], Accessed 25 December 2022
13. Environment Protection Agency of Montenegro, Information on the state of environment, available at:
[https://epa.org.me/informacije-o-stanju-zivotne-sredine/], Accessed 25 March 2023
14. European Commission, *Environment Action Programme*, 2022, available at: [https://environment.ec.europa.eu/strategy/environment-action-programme-2030_en], accessed 17 April 2023
15. Executive summary of the European environment-state and outlook 2020, available at: [https://www.eea.europa.eu/publications/soer-2020-executive-summary], Accessed 23 February 2023
16. Green Agenda for the Western Balkans, available at: [https://www.rcc.int/priority_areas/61/green-agenda-for-the-western-balkans], Accessed 07 January 2023
17. Montenegro, State of the Environment reporting, available at: [https://www.eea.europa.eu/en/advanced-search?q=montenegro&size=n], Accessed 24 March 2023
18. Montenegro, State of the Environment reporting, available at: [https://www.eea.europa.eu/en/advanced-search?q=montenegro&size=n], Accessed 24 March 2023
19. Secretary-General's Press Conference to launch the "United in Science 2020" Climate Report, available at:
[https://www.un.org/sg/en/content/sg/press-encounter/2020-09-09/secretary-generals-press-conference-launch-the-united-science-2020-climate-report], Accessed 20 February 2023
20. The European environment - state and outlook 2020: knowledge for transition to a sustainable Europe, available at:
[https://www.eea.europa.eu/soer/2020], Accessed 01 April 2023
21. Životna sredina u Evropi, stanje i perspektive, 2020, available at: [https://www.eea.europa.eu/soer/2020/soer-2020-executive-summary-translations/zivotna-sredina-u-evropi-stanje-1/view], Accessed 12 January 2023.

Topic 2

EU law challenges in administrative law

UDK 338.465:004]:502.14(4-67EU)
Review article

SMART DIGITALIZATION AND PUBLIC SERVICES IN THE EU

Mirko Klarić, PhD, Full Professor
Faculty of Law, University of Split
Domovinskog rata 8, Split, Croatia
mirko.klaric@pravst.hr

ABSTRACT

„Smart digitalization "is a term which describes the implementation of contemporary information technologies and application of digital solutions in improving various public services in society. The main aspect of smart digitalization is the promotion of smart digital services such as „smart cities ", „smart government "and „smart administration ", which represent digitalization of various local, regional and central government activities in the true creation of a common digital platform with a unique approach. A common and unique platform of public services can assure their provision and delivery to various users in society, and the possibility to choose the type of services which they need in daily life. Another aspect of „smart digitalization "is participation in political life of the community by using digital services as a main tool to canalize political processes in the community. An additional element of „smart digitalization "is the harmonization of digital public services, which can assure efficient and economic functioning of public institutions, central and local administrative bodies and different levels of government authority. That approach can be important in the context of green transformation of the EU, which represents one of the main EU public policies, connected with the transition of the European economy and society in the direction of sustainable development. This paper will analyze the main elements of the integrative approach in the implementation of digital technologies in public services. Elements of the integrative approach can be divided according to the implementation of digital technologies in central government digital services, regional government, digital services and local government digital services. The second division of smart digitalization can be divided into e-democracy and e-administration, where e-democracy represents the implementation of information technology in democratic processes in society, and e-administration includes implementation of information technologies in the functioning of administrative bodies and the delivery of public services and goods to the citizens, companies and other social, economic and political subjects in society. In this paper as a research methodology deductive and synthetic approach will be used to describe the main aspects of the implementation of a „smart digitalization "policy and analyze its influence on the sustainable transformation of European society. The applied methodology needs to explain how the implementation of "the smart digitalization "policy in public services impacts on green transition

and the social transformation of European society in the direction of sustainable development and strengthening energy independency.

Keywords: *public services, Smart digitalization, sustainable development*

1. INTRODUCTION

Smart digitalization represents the implementation of information and communication technologies in various aspects of social, economic and political life of the modern social community. The application of smart digital technologies is oriented towards implementation in public and private services; to assure better quality of delivered goods and approach to services.[1] The green technologies is the crucial part in smart digitalization with the main purpose of ensuring sustainable development and better availability of goods and services in society. It includes all aspects of services provision and delivery of goods. In that sense, smart digitalization is a term which can be applied on the private and public sector.[2] The implementation of smart digitalization is usually efficient in the private sector, because of market conditions and high competition. Public institutions and governmental bodies needs more time to implement digital solutions in public service provision, because of the lack of direct pressure for change and immediate adoption of public sector and the different functioning of public bodies. Pressure and petition for change in public institution and governmental bodies usually comes as result of political processes caused by social and economic changes in society.[3] When social and economic changes derive pressure in political institutions, then it results in change in administrative and governmental bodies, public institutions and public utilities in the community.

Digitalization and green transformation of the EU are challenges in the future development of the EU and member states. They are at the focus of interest for politicians, scientists, civic society and other stakeholders.[4] One of the main elements for successful transformation is the question of effective digitalization of public institutions and governmental bodies. Smart digitalization of public services includes the implementation of information and communication technologies in combination with artificial intelligence (AI) solutions. The most important aspect of smart digitalization is the possibility of interaction between users and public institutions which provide public services and goods. The interactive approach is

---

1 Gilbert, P.; Thoenig, J., *Assessing Public Management Reforms*, Palgrave Macmillan, Cham, 2022.

2 Mondejar, M. E. *et al.*, *Digitalization to achieve sustainable development goals: Steps towards a Smart Green Plane,* Science of the Total Environment, Vol 794, 2021, pp. 1 – 20.

3 Yang, K.; Rho, S., *E-Government for Better Performance: Promises, Realities, and Challenges,* International Journal of Public Administration, Vol 30, Issue 11, 2007, pp. 1197 – 1217.

4 Vial, G., *Understanding digital transformation: A review and a research agenda*, The Journal of Strategic Information Systems, Vol. 28, Issue 2, 2019, pp. 118 – 144.

important in two main directions: it assures citizens participation and controlling mechanisms in democratic political institutions and providing additional tools for the development of quality standards in public service delivery. The implementation and development of smart digitalization in the public sector, with the application of smart digital technologies and clever AI solutions can be efficient additional tools in green transformation of the EU. Green transformation of the EU includes the implementation of technological solutions with sustainable development, and smart digitalization can actively provide conditions for achieving elements of sustainable development.[5] The main aspect of smart digitalization in the future will be the implementation of AI application, but the basic problem is in the lack of a regulatory framework for the implementation of AI solutions. According to the development of green transformation of the EU economy, smart digitalization with the implementation of modern digital technologies open up many new questions in the modernization of the functioning of public authorities on all levels of government organization: central, regional and local. Every level of government organization poses various questions according to specific elements of public services delivery. The local level of government organization is focused on managing local public tasks and citizen participation in political activities of the local community.[6] The regional level of government organization is focused on highly decentralized public services and their provision to citizens, according to the dynamics between central and regional authorities.[7]Central level off government organization is more focused on integration of national (digital) public services and their integration and coordination with the services at local and regional level.[8] The capacity for the development of smart digital services is positioned in central government authorities, but the dynamics of implementation is on local government authorities.[9] This paper aims to determine the role of smart digital technologies, including AI application, in the modernization of public services, and their position in green transformation of the EU economy and institutions.

---

5 Andersen, A. D., *et al., On digitalization and sustainability transitions*, Environmental Innovation and Societal Transitions, Vol 48, 2021, pp. 96 – 98.

6 D'Inverno, G., Moesen, W., Witte, K., Local government size and service level provision. Evidence from conditional non-parametric analysis, Socio-Economic Planning Sciences, Vol 81, 2022, https://doi.org/10.1016/j.seps.2020.100917.

7 Cuadrados-Ballesteros, B., Garcia-Sanchez, I., Prado-Lorenzo, J. M., Effect of modes of public services delivery on the efficiency of local governments: A two-stage approach, Utilities Policy, Vol 26, 2013, pp. 23 – 35.

8 Wouters, S., *et al., Strategies to advance the dream of integrated digital public service delivery in inter-organizational collaboration networks*, Government Information Quarterly, Vol. 40, 2023, pp. 1 – 14.

9 Andersson, C.; Hallin, A.; Ivory, C., *Unpacking the digitalization of public services: Configuring work during automation in local government,* Government Information Quarterly, Vol 39, 2022, pp. 1 – 9.

2. METHODS

The methods used in this paper will be induction and deduction. The deductive approach will be analysis of the main aspects of smart digitalization and their implementation to public services. The inductive approach includes presentation of the development of smart digital solutions in the context of green transformation and its implementation in public services. The main aspects of smart digitalization include elements for the application of information and communication technologies, which can be applied in the delivery of goods and availability of services. Special attention will be paid to smart digitalization of various governmental and public services, which is important for the green transformation of technologies and sustainable development in society. An additional aspect will be the issue of implementation of artificial intelligence (AI) in the development of smart digital solutions in the context of green transformation of EU society. After deductive analysis, elements of smart digitalization, which include the possibility of the application AI solutions, the possibility of implementation digital platform will be presented which encompasses all aspects of public services digitalization. Secondly, aspects of smart digitalization will be the description of the regulatory framework which defines elements for implementation of AI solutions in the functioning of digital public services. Inductive approach will be used in explanation of implementation smart digital platform in combination with AI solutions to assure transformation of the provision of public services and efficient delivering of public goods. That will explain the position of smart digitalization in green transformation and define the role of modern digital solutions for the sustainable development of society, based on the implementation of new digital technologies and practical scientific solutions. This approach will also show how smart digitalization stimulates green transition of EU society and the economy in the context of global climatic changes.

3. ANALYSIS OF SMART DIGITALIZATION IMPLEMENTATION IN PUBLIC SERVICES

3.1. The main aspects of smart digitalization in the public administration

Smart digitalization is usually defined as the implementation of modern information technologies to support various aspects of social, economic and technical activity in the community.[10] In public administration, smart digitalization is focused to assure efficient public services and support public institutions in their role and

[10] George, G.; Schillebeeckx, S. J. D., *Digital transformation, sustainability, and purpose in the multinational enterprise,* Journal of World Business, Vol. 57, Issue 3, 2020, pp. 1 – 8.

position of the instrument for efficient implementation of political decisions in society. For the purpose of this paper, the implementation of smart digitalization in the public administration and public services and specific elements of this application will be analyzed, according to the green transformation of EU society and public institutions.[11]

The second element of smart digitalization implementation is the division into e-administration and e-democracy, as the two main types in the application of information technologies.[12] E-democracy is focused on digital interaction between citizens and political authorities, whereas information and communication technologies provide the digital framework for the development of political relations in the community. In that sense, e-democracy provides a digital playground for democratic political processes in society.[13] These processes can be divided as direct and indirect tools for citizens' participation in the political process, which also includes participation in the decision making process.[14] Digital forms of direct or indirect participations can be in formal or informal ways of political participation. Formal ways of political participation are digital forms of elections or plebiscite and referendum as direct forms of the citizen's will in various issues important for the dynamics of social life in the community. Informal ways of political participation are e-petitions, debates and public initiatives on various social, economic and political matters in the community. The implementation of smart digitalization in democratic processes provides more open possibilities for better citizen participation.[15]Smart digitalization creates a virtual framework for an interactive approach and communication between citizens in the community. This type of communication is most popular as the means of public discussion between various participants with the intention to offer the best solutions for organizing public life in society. Digital participation of citizens represents a contribution to the development of new forms of democratic innovation in contemporary society.[16] Special elements of e-democracy are openness, inclusiveness and participativeness

---

11 Wallis, J.; Zhao, F., *E-Government Development and Government Effectiveness: A Reciprocal Relationship*, International Journal of Public Administration, Vol. 47, Issue 7, 2018, pp. 479 – 491.

12 Anderson, L.; Bishop, P., *E-Government to E-Democracy*, Communicative Mechanisms of Governance, Vol. 2, Issue 1, 2005, pp. 5 – 26.

13 Atkinson, R. D.; Leigh, A., *Customer-Oriented E-Government*, Journal of Political Marketing, Vol. 2, Issue 3 – 4, 2003., pp 159 – 181.

14 Irvin, R.; Stansbury, J., *Citizen Participation in Decision Making: Is it Worth the Effort?,* Public Administration Review, Vol 64, Issue 1, 2004, pp. 55–65.

15 Holzer, M.; Manoharan, A., *Digital governance in municipalities worldwide (2011-12),* National Centre for Public Performance, Newark, 2012., pp. 81 – 89.

16 Russon Gilman, H.; Carneiro Peixoto, T., *Digital Participation*, in: Elstub, S.; Escobar, O, (eds.), Handbook of Democratic Innovation and Governance, Edward Elgar Publishing, Cheltenham, 2019., pp. 105 – 119.

of the community member. E-democracy by default assures an open digital approach to all community citizens, with the possibility to express their opinions and suggest solutions for social, economic, political and organizational problems at local or national level.[17] The virtual network established by digital tools enables interaction and communication between different members of the community, and contributes to the openness of national and local public authorities. The digital playground assures the possibility of the inclusion of various participants in virtual space, with their ideas and propositions of political solutions in the social, economic and political life of the local and national community.[18] On the other hand, formal ways of digital democracy include the possibility of legal organization of electronic elections, plebiscite and referendum. They are formal in the legal sense because of the necessary creation of a regulatory framework for implementation and formal application democratic political processes in political and public authorities and institutions.[19]

Elements of smart digital application in public administration can be divided on main categories of users: *government authorities to government authorities, government authorities to citizens, government authorities to business and corporative entities, and government authorities to non-governmental organizations*.[20] Smart digitalization includes horizontal and vertical integration of e-government services. Vertical integration of smart digitalization includes connection of national e-government services with local e-government services. Horizontal integration of e-government services includes integrative approach by using e-government services at the same level of communication, with intensive mutual communication between different parts of the communication network. Vertical integration usually has some type of integrative communication with horizontal integration, which includes communication different level of the government authorities and central and local administrative bodies and public institutions, but also interconnection between all parts of public institution at the same level incorporated in smart digital network. The main element of smart digitalization of public administration is more efficiency and effectiveness in providing ~~of~~ public services and delivering goods. The digital

---

17 Stier, S., *Political determinants of e-government performance revisited: Comparing democracies and autocracies*, Government Information Quarterly, Vol. 32, Issue 3, 2015, pp. 270 – 278.

18 Aström, J. *et al., Understanding the rise of e-participation in non-democracies: Domestic and international factors*, Government Information Quarterly, Vol. 29, Issue 2, 2012, pp. 142 – 150.

19 Ju, J.; Liu, L.; Feng, Y., *Public and private value in citizen participation in E-governance: Evidence from a government-sponsored green commuting platform*, Government Information Quarterly, Vol. 36, Issue 4, 2019, [https://doi.org/10.1016/j.giq.2019.101400].

20 Bindu, N.; Sankar, C. P.; Kumar, K. S., *From conventional governance to e-democracy: Tracing the evolution of e-governance research trends using network analysis tools*, Government Information Quarterly, Vol. 36, Issue 3, 2019, pp. 385 – 399.

platform for public administration needs to be organized with unique access to all services. That contributes to establishing a new paradigm in the implementation of digital public services: public administration in cyberspace.[21]

The implementation of digital technologies improves cross communication between different parts of government authorities, administrative bodies and public institutions, and assures unique access to different public services.[22] Smart digitalization is designed to connect and unify access to various parts of government services, which includes services and goods delivered from central government authorities, but also services from local government authorities usually called smart city services. The combination of local and central e-government services connected in a single platform assures wide access in the use of different public services from central and local government authorities. That facilitates the use and increasing quality of local and central government public services, which is the intention of an integrative approach in implementation of smart digitalization.[23]

According to the main categories of users, smart digitalization has some specific elements important for implementation in the daily functioning of public authorities and governmental bodies. These elements depend on interaction between different types of users in digital space and their specific needs.[24] They are interconnection, common access, development of a unique digital platform for central and local government services, simplified digital access and smart digital service.

A category government authority to government authorities is focused on intergovernmental communications and cooperation between different parts of public authorities and public institutions. This cooperation is important because of rising efficiency in public administration and better working performances of public institutions. Prerequisites for application are unique digital platform with common access, compatible applications and possibility of data sharing between different databases. Main problem is possibility of data access for different category of government users because of legal restrictions. Main advantage is better control over public spends and preventing of various misuse from the users. Additional advan-

---

21 Frissen, P. H. A., *Public Administration in Cyberspace*, in: Snellen, I. T.M.; Van de Donk, W.B.H.J., Public Administration in an Information Age, IOS Press, Amsterdam, 1998, pp. 33 – 46.

22 Addo, A.; Senyo, P. K., *Advancing E-governance for development: Digital identification and its link to socioeconomic inclusion,* Government Information Quarterly, Vol 38, Issue 2, 2021, [https://doi.org/10.1016/j.giq.2021.101568].

23 Caragliu, A.; Del Bo, C.; Nijkamp, P., *Smart Cities in Europe, Journal of Urban Technology*, Vol. 18, Issue 2, 2011, pp. 65 – 82.

24 Verma, S., *Sentiment analysis of public services for smart society: Literature review and future research directions,* Government Information Quarterly, Vol 39, No 3, 2022, [https://doi.org/10.1016/j.giq.2022.101708].

tage lay down in possibility of common data disposal, which enables faster, better and efficient decision making process.

A category government authority to citizens is focused on interaction between citizens, administrative bodies and public authorities. This category regulates the provision of various public services at local and central government level. For the delivery of goods and services from public authorities and public institutions it is important to define a common digital platform for their application and the possibility of horizontal and vertical integration in the delivery of all public services with common access to all applications. That includes easier access in the possibility of using services from central and local government authorities. A common public services platform contributes to standardization of government services and interaction between citizens and public authorities.

A category government authority to business and corporative entities defines the delivery of public services and interaction with economic subjects in economic activities in order to support economic development of society. For development, this type of smart digitalization it is necessary to develop various programs and activities such as one stop shops, virtual marketplaces etc. An important part in developing this category is access to various e-services such as e-taxation, e-customs etc., which provides possibility to developing business in real time at the virtual space.[25]

Category government to non-governmental organizations is focused on developing e-services for interaction between organizations of civil society and public institutions. This is important for the development of a social framework to support political, cultural, educational and social activity in society. This type of public service digitalization also assures support development of various e-government programs and digital services connected in a common e-democracy digital platform. Due to this category, an e-democracy and e-administration service assures unique access to various central and local government political and administrative services. A special aspect of this category is the possibility of monitoring, supervision and control of functioning and activity of public authorities and governmental institutions from civil sector institutions and non-government organizations. This type of controlling and supervision can be implemented in virtual public space, which assures widely visibility of public sector organizations and institutions in their daily activities in society.

The provision of digital public services depends on the institutional capacity of central and local government authorities, and their preparedness to modernize the

[25] Awan, M. A., *Dubai e-Government: An Evaluation of G2B Websites*, Journal of Internet Commerce, Vol 6, Issue 3, 2007, pp 115. – 129.

functioning of political and administrative institutions.[26] Central government institutions develop digital services important for all citizens in society. Elements of central e-government services have a global impact, no matter where citizens live. Their effects are applicable to all of society. Local government institutions are more focused on strengthening digital services important for local communities.[27] Their effects are focused on local public needs and they are oriented on the delivery of goods and services provided by local government bodies and institutions. In the local community, the possibility of providing digital services depends on the institutional capacities of local government units. If they have large institutional capacity, because of broadly fiscal, administrative, and political autonomy, they can implement various local digital services for the coordination of local public tasks and activities. Local digital services are oriented to ensure easier possibility of citizen's participation in social, political and economic life of local government units.[28]

The second element of local digital services is oriented on digitalized forms of citizens' political participation in the local community, which is connected with citizens' voluntary engagement in local public affairs.[29] This is an important part of local public services digitalization, which includes citizens' participation in activities of sub-municipal government, as a specific part of local government. Sub-municipal government includes participation of citizens in local public affairs and tasks closely connected with the daily life of citizens in the local community. This participation has a voluntary character and depends on the position of sub-municipal government in the organization of local government units. Participation of citizens in local public affairs includes two types of engagement: support to local public authorities and local institutions in providing local public services and direct participation through voluntarily engagement in managing and maintaining local public tasks. Because of the voluntary engagement, the local community in sub-municipal government units needs effective logistic support in the coordination of social, cultural and politic activity. Digitalization of sub-municipal government activities provides efficient participation of citizens in the local community, and their coordination with activities of local government units, with less organizational, personal and financial engagement of local government administration and more

---

[26] Atkinson, R. D.; Leigh, A., *Customer-Oriented E-Government,* Journal of Political Marketing, Vol. 2, Issue 3 – 4, 2003., pp 159 – 181.

[27] Ruano de la Fuente, J., M., *E-Government Strategies in Spanish Local Governments*, Local Government Studies, Vol 40, Issue 4, 2014, pp. 600 – 620.

[28] Albino, V.; Bernardi, U.; Dangelico, R., M., *Smart Cities: Definitions, Dimensions, Performance, and Initiatives,* Journal of Urban Technology, Vol 22, Issue 1, 2015, pp. 3 – 21.

[29] Viale Pereira, G., *et al., Increasing collaboration and participation in Smart City governance: a cross-case analysis of Smart City initiatives*, Information Technology for Development, Vol. 23, Issue 3, 2017, pp. 526 – 553.

influence in public affairs and local government services in sub-municipal units. Smart digitalization of sub-municipal government usually includes an integrative political and administrative approach, because of the many local tasks which are organized on a voluntary basis and capacity of the citizens in the local community to directly influence their organization and performance conditions. Smart digitalization of sub-municipal activities and their regulation in virtual space assures the possibility of the citizens to directly participate in the provision of sub-municipal services and propose solutions for their improvement. Importance of implemented solutions of smart digitalization in sub-municipal government depends on organizational positions and the role of sub-municipal units in the organization of the local government system. If sub-municipal government plays a significant role in the type of local government system, then implementation of smart digitalization is generally more important for the local community, and its integration in other local government activities. In other situations, where position of sub-municipal government is not so significant, smart digitalization of sub-municipal government can be more important for the coordination of local public activities in those type of units, without integration in the wider system of local self-government.[30]

The implementation of smart digitalization in local government units depends on elements important for building a Smart City platform. These elements are values, innovation, governance, finances, information management, connectivity and accessibility and local infrastructure.[31] On the other hand, smart digitalization of central government administration and national public services, besides these elements characteristic for local level of government organization, also includes an integrative approach and global impact on all economic and social activities in society.[32]An integrative approach includes general connection all digital public services with horizontal and vertical integration of services providing. Global impact to all economic and social activities defines the influence of smart digitalization on all aspects of public activity in the community.[33]

---

30 Komninos, N., *et al., Smart City Planning from an Evolutionary Perspective*, Journal of Urban Technology, Vol. 26, Issue 2, 2019., pp. 3 – 20.

31 Klarić, M., *Smart City Model as a Possible Answer to New Challenges in Post Covid Era*, in: Duić, D.; Petrašević, T. (eds.), The recovery of the EU and strengthening the ability to respond to new challenges – legal and economic aspects, EU and Comparative Law Issues and Challenges Series, ECLIC 6, pp. 527 – 546.

32 Buffat, A., *Street-Level Bureaucracy and E-Government,* Public Management Review, Vol. 17, Issue 1, 2015, pp. 149 – 161.

33 Wyld, D. C., *The 3Ps. The Essential Elements of a Definition of E-Government*, Journal of E-Government, Vol. 1, Issue 1, 2004, pp. 17 – 22.

3.2. Smart digitalization and public services

Public services represent an important part in the activity of central and local government authorities. It can be divided into a narrower and broader sense. In a narrower sense, public services represent services of general interest, which can be divided into commercial or non-commercial services. Commercial services include services of general economic interests, which can be divided into central and local services, according to the level of their managing and organizing. Non-commercial services include services of general interests, organized by non-profit principles with the purpose of fulfilling public needs in the social community at local, regional or national level. In a broader sense, public services include all administrative services organized and managed by central or local government or public authorities. This includes services from central and local government administration, national public utilities, public institutions (such as hospitals, museums, schools, etc.) and local communal utilities and institutions. For the purpose of this paper, a broader term of public service will be used.

Smart digitalization includes connectivity between various e-government services with the purpose of assuring the possibility of using public services in virtual space.[34] Various aspects of smart digitalization of public services are connectivity, efficiency, simplicity, innovation and better governance. Connectivity as the element of smart digitalization assures interaction between different public services at local and central government level, with horizontal and vertical cooperation between public authorities and institutions. That ensures supervision over the functioning of different parts of public administration and prevents abuse in the use of public services or access to benefits from public institutions.[35] In that sense, connectivity assures visibility, transparency and control of digital public services.

The second aspect is efficiency, which is provided by unique digital platform, common access and interconnection between different digital services. The possibility of using public services increases with their digitalization and availability in digital space, which enables greater and easier access to services, which is additionally supported by the implementation of smart digital solutions, including artificial intelligence. Simplicity is the third element, which can be assured by the implementation of new digital platforms with unique and relatively easier access to various central and local government services. Simplicity is the important part of smart digitalization. Without simplicity, public services cannot be accessed by a

[34] Menash, I. C., *Impact of Government Capacity and E-Government Performance on the Adoption of E-Government Services*, International Journal of Public Administration, Vol. 43, Issue 4, 2020, pp. 303. – 311.

[35] Ingrams, A., *et al., Stages and Determinants of E-Government Development: A Twelve-Year Longitudinal Study of Global Cities,* International Public Management Journal, Vol 23, Issue 6, 2020, pp. 731 – 769.

large number of people who do not have specific knowledge of advanced communication and information technologies. Simplicity supports the implementation of digital technologies and communication between different parts of public services in virtual space. Innovation is connected with simplicity, and assures direct implementation of new technological solutions such as artificial intelligence as a new dimension of smart digitalization. Better governance is the basic part in the implementation of smart digitalization. Good governance is the modern administrative doctrine, developed to harmonize administrative reforms with democracy processes and decentralization. In that sense, better governance unifies various aspects of smart digitalization, with the purpose of assuring new standards in the functioning of administrative and political institutions. That opens up a new dimension in the behavior of public institutions, where better governance assures direct virtual participation of the citizens in political and administrative processes, active political, administrative and normative control over digital public services and the possibility of revision, including adoption of new digital technologies. For the first time, citizens can have active control over managing public services, and insist on advanced technological solutions, including smart digitalization and the implementation of artificial intelligence technologies.[36]

3.3. Implementation of artificial intelligence in the smart digitalization process

Artificial intelligence (AI)is an important part in developing digital technologies in contemporary society. It represents new step in the process of smart digitalization, including smart digitalization of public services. Other aspects of smart digitalization are primary focused on interconnection, the possibility of different digital services integration and digital participation in political and administrative processes via true access on virtual space.AI assures the implementation of smart digital services with autonomy in decision making process, as a result of so called deep learning technology, which is ground level for the development and implementation of various AI applications.[37] Deep learning assures the integration of data feature extraction and classification, which is different from classic machine learning, which includes data input, feature extraction and data classification. By definition, deep learning creates postulations for implementation decisions based

[36] Irani. Z., *et al., The impact of legacy systems on digital transformation in European public administration: Lesson learned from a multi case analysis*, Government Information Quarterly, Vol. 40, Issue 1., 2023, [https://doi.org/10.1016/j.giq.2022.101784].

[37] Sharma, M., *et al., Implementing challenges of artificial intelligence: Evidence from public manufacturing sector of an emerging economy*, Government Information Quarterly, Vol. 39, Issue 4, 2022., [https://doi.org/10.1016/j.giq.2021.101624].

on data analysis with better possibility of prediction of future happenings, according to interactive and dynamic communication with the data environment, by using structured data according to specific machine algorithm. Deep learning assures the AI the possibility of self-learning and specialization in different fields of knowledge, truly better interaction and implementation of logarithm programs by using modern tools such as neuronal networks, which efficiency depend on processor strength of modern computer networks. The main standards of AI implementation with potential abuse are still open questions in Europe and worldwide. Special problems are control tools and mechanisms, which can provide prevention of AI abuse, according to the defined standards of risks.[38]

Artificial intelligence (AI) is a widely open question in the regulation of European public authorities because of specific elements without a clear answer. In that sense, regulation of artificial service is the next step in the process of transformation of public services. The main aspects of this transition in the development of smart digitalization are ethical questions arising from new technological solutions. Ethical issues are usually connected with administrative decisions, which are the product of political decisions. Those decisions, which are results of human behavior, became part of AI functioning with potentially far-reaching consequences.[39]The European Parliament holds discussion on the influences of AI over digital public services. At the same time, the European Commission proposed to the European Parliament and the European Council enactment of Artificial Intelligence Act, as a general legal framework for regulation of artificial intelligence in Europe. Currently, proposal of the Act is in legal procedure from 2021.[40]

The proposition of the Artificial Intelligence Act contents regulation of different fields of risk, which can be generally divided into unacceptable risk applications, high-risk applications and low-risk applications. The main problem is in defining what contains every type of risk in AI applications.[41] It is obvious that some application represents unacceptable risk because of the possibility of manipulation. Some of the AI applicative solutions show significant potential for manipulation with reality in virtual

---

38 Wilson, C., *Public engagement and AI: A values analysis of national strategies*, Government Information Quarterly, Vol. 39, Issue 1., 2022, https://doi.org/10.1016/j.giq.2021.101652].

39 Meszaros, J.; Minari, J.; Huys, I., *The future regulation of artificial intelligence systems in health careservices and medical research in the European Union*, Frontiers in Genetics, Vol. 13, 2022. [https://doi.org/10.3389/fgene.2022.927721].

40 See: Proposal for a Regulation of the European Parliament and of the Council laying down harmonised rules on artificial intelligence (Artificial Intelligence Act) and amending certain union legislative acts, COM (2021) 206, [https://eur-lex.europa.eu/legal-content/EN/HIS/?uri=COM:2021:206:FING], Accessed 05.04 2023.

41 Carrico, G., *The EU and artificial intelligence: A human-centered perspective*, European View, Vol. 17, Issue 1, 2018, pp. 29 – 36.

space, and there are no appropriate tools for measuring or controlling the possibility of damage. The capability of AI applications is widely mentioned, and the risks of implementation are not yet clearly defined and determined.[42]That is the reason why this Proposal is part of broader social discussions, not only in EU member states and EU institutions, but also wider, in counties which are influenced by European administrative and political space.[43]An additional element to this discussion is for the first time this type of innovation managed from the private providers which operate globally and potentially without of political or ethical control. Discussion is still focused on technical aspects of AI, and political, ethical and economic consequences of the application for contemporary society are still a secondary question. Institutions and public authorities of the EU and member states are leading in opening up these questions, and represent the direction for future development and implementation of this type of smart digitalization. It is especially important in the implementation of public services digitalization, because of political and democratic components of services in virtual space. This reasoning is especially applicable to the manipulation of virtual reality which is very difficult to detect, unlike the social reality without virtual networks. It bears witness to the transition of social reality into social virtual reality, which under conditions of smart digitalization can be very manipulative for decisions of the individuals in community. A special problem is potential manipulation of human rights and individual freedoms, in situations where the implementation of AI represents one of the key elements in smart digitalization of the public services.[44]

There are three main standards of risks of AI application in daily use. The first standard of AI risks daily application is usually determined as unacceptable risk, where application can distort, change and manipulate with social realty in virtual space. This type of application is dangerous because it leads to misconceptions in virtual space, which affects to the behavior of individuals and the decisions they make. As results of misconceptions and distorted perception of reality, decisions of individuals are illogical. This is unacceptable, because the possibility of manipulating people by using digital services in virtual space is enormous. The main question is how to certainly define clear conditions which are precisely unacceptable

---

42 Wirtz, B. W.; Weyerer, J. C.; Kehl, I., *Governance of artificial intelligence: A risk and guideline-based integrative framework,* Government Information Quarterly, Vol. 39, Issue 4, 2022, [https://doi.org/10.1016/j.giq.2022.101685].

43 Alujevic-Vesnic, L.; Nascimento, S.; Pólvora, A., *Societal and ethical impacts of artificial intelligence: Critical notes on European policy frameworks*, Telecommunications Policy, Vol. 44, Issue 6, 2020., [https://doi.org/10.1016/j.telpol.2020.101961].

44 Dijk, van N.; Casiragi, S.; Gutwirth, S., *The 'Ethification' of ICT Governance. Artificial Intelligence and Data Protection in the European Union,* Computer Law & Security Review, Vol. 43, 2021, [https://doi.org/10.1016/j.clsr.2021.105597].

risks of AI application, because of the possibility of prohibition of this type of AI platforms and program solutions.

The second standard of AI risk application is high risk application, where significant possibility of manipulation in virtual space exists. The possibility of manipulation includes a type of AI application which can distort information in virtual space and manipulate with users' decisions, according to the requests set in application programs. This can be very problematic in many ways, because it implicitly influences users' reactions and decision making process, which is not based on objective facts and circumstances. This type of AI implementation can be defined as manipulative and it can be potentially dangerous for the users and their ability to make reasonable decisions.

The third standard of AI risk is defined as low-risk, which means that this type of implementation of artificial intelligence does not creates significant risk for the users. Implementation of this smart digitalization model, risk standards can be showed, but the possibility for manipulation and abuse is relatively low, which makes the possibility of using low risk AI application much easier. The main element for delimitation between high or low risk AI applications is the possibility of distortion of virtual reality and complexity of elements in the decision making process based on using of AI application. These parameters are not yet clearly defined, and public discussion on this problem remains open in European institutions. The main problem is in the possibility of some forms of AI under low-risk definition to be used in situations where it can be in a high-risk position for the users. Other problems are limits of the risks in using of AI application dependently under various conditions, which define the possibility of smart digitalization implementation in various aspects of social or economic activity. It will be necessary to create appropriate tools which can lead standards of risks, and assure security in using AI application. The problem is in new implementation of AI technologies, where it is very hard to define elements of protection against AI implementation abuse in context smart digitalization.[45]

The Proposition of the EU Artificial Intelligence Act could become the global standard in Europe (and abroad), which would determine on what implementation and extent of artificial intelligence is more or less accepted or non-accepted in daily life and which application can have more positive than negative effect to users.[46] Another aspect of this Proposal is connected with the issue of personal and

[45] Palladino, N., *The role of epistemic communities in the "constitutionalization" of internet governance: The example of the European Commission High-Level Expert Group on Artificial Intelligence*, Telecommunications Policy, Vol. 45, Issue 6, 2021, [https://doi.org/10.1016/j.telpol.2021.102149].

[46] Stahl, B. C., *et al., A European Agency for Artificial Intelligence: Protecting fundamental rights and ethical values*, Vol. 45, 2022, [https://doi.org/10.1016/j.clsr.2022.105661].

societal consequences, which will be caused with implementation. To assure security in use of AI, the Proposal prohibited AI practices to the group of individuals who are vulnerable due to their social or economic situation.[47]

The second aspect, which is important in the context of this proposal, is the question of personal and societal harm, which will arise true implementation of this Act. To reduce potentially harm (individual as societal) proposal of Artificial Intelligence Act prohibited AI practices to groups of individuals who are vulnerable according to their social or economic situation. The second important thing is classification of AI risks with clear definition that divides high risk situations in AI implementation from low risk situations. An additional question is the general purpose of AI systems, where the Act proposal specifies certain situation where the principles of high-risk AI system are implemented on the design of AI system which can be used for many different purposes (general purpose AI). The important part of AI Act proposal is implementation of the transparency principle according to the implementation, development and use of high-risk AI. New added provisions have provided obligation for users of AI emotion recognition system to inform people when they are exposed to the influence of the system.

3.4 Artificial intelligence in the public services as a part of smart digitalization

Artificial intelligence represents a logical step in the development of smart digitalization public service. It can assure better communication between citizens and public authorities, faster and more available public services, better quality in providing service and easier control over delivering various public services.[48]Smart digitalization was a step further in the process of digitalization at local and central government level, because of the integrative platform and interconnection between central and local public services. The implementation of AI can assure possibilies for better interaction of users with digital public services, and the most important characteristics such as ability of learning and possibility of correcting various decisions, according to new occasions and circumstances.[49] The implementation of AI in digital public services needs to assure an interactive approach

---

47 Kop, M., *EU Artificial Intelligence Act: The European Approach to AI*, [https://law.stanford.edu/publications/euartificial-intelligence-act-the-european-approach-to-ai/], Accessed 5 April 2023.

48 Gesk, T. S.; Leyer, M., *Artificial intelligence in public services: When and why citizens accept its usage*, Government Information Quarterly, Vol. 39, Issue 3, 2022., [https://doi.org/10.1016/j.giq.2022.101704].

49 Noordt, C.; Misuraca, G., *Artificial intelligence for the public sector: results of landscaping the use of AI in government across the European Union,* Government Information Quarterly, Vol. 39, Issue 3, 2022., [https://doi.org/10.1016/j.giq.2022.101714].

in communication between users and digital platform, flexibility in access of digital services, better coordination between central and local government services, significant control over public services delivery and possibility of real-time self-improvement services.[50]

Categories of AI implementation can be divided into central, regional and local service application, according to the specific conditions characterized for different levels of administrative organization. The second division of AI implementation can follow categories of the risk, according to the approach of EU institutions. The third division of public services can be selected on political and administrative services. Political services are more focused on supporting political processes of the government authorities, like participation of the citizens in election or political decision making process, such as new regulations, spatial plans in local or regional government units, plebiscite, referendum or discussion on public spends, or other local, regional or national political matters. Administrative are more focused on public services providing from public authorities and institutions to fulfill public needs or assure functioning of government institutions. Crucial questions which AI opens up by implementation in the daily functioning of public services are: the question of data protection of users, the question of clearly identification of the users which includes protection of potentially abuse, question of virtual reality distortion and manipulation with the data including disinformation, question of mass collecting, saving and memorizing of the data without adequate control of the users and government authorities and question of the protection of minors according to their stages of development and consciousness.

All of these questions define a regulatory framework for the development of appropriate tools for the implementation of AI as a further part in development of smart digitalization of public services. In that sense, it is important truly open up public discussion to try to connect main elements of future EU regulation of AI application in daily use with specific elements characteristically for public services digitalization.[51] These elements usually are openness, transparency, personal data protection, simplicity, common access, interconnection between services, responsiveness and the ability to provide complex answers or alternative solutions to the users depending on circumstances, what is usually define as contingency. Implementation of AI solutions in digital public services presents future development of smart digitalization and it would be an integral part of green transformation of

---

50 Janssen, M., *et al., Data governance: Organizing data for trustworthy Artificial Intelligence*, Government Information Quarterly, Vol. 37, Issue 3, 2020., [https://doi.org/10.1016/j.giq.2020.101493].

51 Hildebrandt, M., *The Artificial Intelligence of European Union Law*, German Law Journal, Vol. 28. Issue 1, 2020, pp. 74 – 79.

EU society, according to the imperative of sustainable development. This leads to development of a new framework, which includes legal, ethical, sociological and psychological elements important for the implementation of various AI solutions, to protect users and prevent the possibility of potential abuse. This is important in the implementation of AI in all aspects of social life of citizens, and especially important in functioning of public services because of additional political dimension, which includes the problem of personal data protection, possibility of human or political rights manipulation and other questions connected with the protection of citizens' rights, including question such as election, political participation, possibility of political discussion, or just protection of human dignity.[52]

4. DISCUSSION

Smart digitalization of public services is one of the contemporary questions arising as a result of increased development of information and communication technologies in modern society. The digitalization of public services came with the initiation of the first models of e-government and development of digital technologies being one of the main initiators of social and political development. On the other hand, it can be also new challenge, because of the social and political effects caused with the ability of people to achieve and use modern digital technologies in daily communication, which is described as *the digital divide caused by digital access*.[53] Smart digitalization is an attempt to support sustainable development of society. Smart digitalization of public services is a specific part of this process, which includes additional elements important in democratic institutions such as openness in acting, transparency in delivering public services, personal data protection and mutual access to various public services, an integrative approach in delivering public services and protection of political and human rights.

With the introduction of AI as a further phase of smart digitalization of public services, implementation of digital technologies in political and administrative system brings new challenges which will be need to clearly defined, according to their potential influence. These open up many questions and the answers are not specified. European institutions discuss AI trying to define its implementation and use in various services delivery. At the same time, the development of AI pro-

[52] Erdélyi, O. J.; Goldsmith, J., *Regulating artificial intelligence: Proposal for a global solution*, Government Information Quarterly, Vol. 39, Issue 4, 2022., [https://doi.org/10.1016/j.giq.2022.101748].

[53] See Van Dijk, J. A. G. M.,*Digital Divide: Impact of Access*, The International Encyclopedia of Media Effects [https://www.utwente.nl/en/bms/vandijk/publications/digital_divide_impact_access.pdf], Accessed 4 July 2023, pp. 1 – 11.

grams and applications accelerating and requires clear social, ethical and legal rules that guide this development.

In the future, the development of smart digitalization of public services in three different directions can be expected: smart digitalization of political tools such as e-election, e-discussion, e-referendum, e- citizen participation; smart digitalization of administrative tools such as e-taxation, one stop shops, e-health, e-education, etc.; smart digitalization of local government tools, which is usually described as smart city concept, with integrated local digital services. Accordingly, significant influence of AI applications on digital public services can be also predicted. The main issues in the process of AI implementation which need to be discussed are: *personal data protection, protection of data distortion, protection of data manipulation and general protection of human and political rights against manipulation and abuse by using of AI program solutions*. Personal data protection is one of the most important questions posed with the development of digital technologies, which enables collecting and using large amounts of data. These data which can be connected with some person, and there is the possibility of manipulation or abuse of virtual reality which is used for manipulation of digital services, especially in the situation of AI data processing, where the assessment of some action depends on the valuation of the present situation from AI program solutions.

The second aspect is data distortion, where AI programs do not process and connect data in a neutral and objective way. General protection of human and political rights is real in situations where AI program solutions do not support or do not reflect legal and democratic standards in the implementation of smart digital solutions in the development of digital public services. In the development of AI application, it can be a problem, because AI platforms or program solutions can be, in technical dimensions, built as neutral technical settlement, and ethical, psychological, social, economic or political elements of AI development depends on democratic political standards in society. As a single European market, based on convergence of the similar values of connected member states, the EU needs to establish and develop standards for the implementation of smart digital platforms and applications, including the implementation of AI application. The main elements of EU regulations in the field of smart digitalization services and implementation of the green technologies need to be openness and transparency, friendly access and use by various users in virtual space, protection from manipulation and abuse and a high level of security. Additional conditions for the smart digitalization of public services are equal accessibility to the public services provided at local, regional or national level and possibility of mutual interaction with different levels of government authorities, which depends on effective application

of AI solutions, based on developing standards common for the European regulatory framework.

5. CONCLUSION

Smart digitalization is a new way for improving delivery of services and goods in a single European market. It usually comes with requests for green transformation of the EU economy. This is a further step in the process of the digitalization of society, and it has political, economic and social implications. The development of smart digitalization becomes an oriented application of smart digital solutions in two main directions.

Firstly, the improvement of public services at local level (known as a concept of smart cities) and assuring the participation of citizens in the local community by developing local virtual space, which contributes to dialogue between different local actors, such as citizens, local institution, political organizations, etc.

Secondly, the implementation of e-government models at national level, which includes the development of e-democracy services for the implementation of democratic political tools and e-administration services for providing various public services and delivering public goods, contributes to the development of common national digital platforms, which connects and unifies local and national digital services. An additional step in the development of smart digitalization is the implementation of AI technologies, application of which has been accelerated according to the further development of information and communication solutions. The development of digital public services is an integral part of the smart digitalization process, and the possibility to implement AI technology opens up many options in using public services and interactive communication with public institutions.

On the other hand, development of AI technology is relatively fast, and consequences and negative aspects of AI usage are relatively unknown. The influence of AI technology implementation is the subject of public discussions with different definitions and opposing stands. These circumstances open up many questions about creating an efficient framework for using AI with regard to legal, economic, political and social consequences in the community.

The future development of smart digitalization as a part of green transformation of the EU economy is a complex process with many challenges. Future perspectives and dynamics depends on the further development of information and communication technologies which will be based on the implementation of AI applications and the possibility of regulating these new technologies and their influence on the

social, economic and political life of the community. These developments can accompany true implementation in local, regional or central government level, and includes interaction between government authorities and cooperation in services provided between the public and private sector. Efficiency of smart digital implementation depends on future use of AI technologies, which is an important issue for the preparedness of public authorities and public institutions to be a support for the green transition of European society and sustainable development. On the other hand, implementation of AI technologies will radically change approaches in using various digital services and interaction between users and providers, including the ability of public authorities to provide various public services, according to the newly defined standards of the green transition of modern society in the EU community.

REFERENCES

BOOKS AND ARTICLES

1. Addo, A.; Senyo, P. K., *Advancing E-governance for development: Digital identification and its link to socioeconomic inclusion*, Government Information Quarterly, Vol. 38, Issue 2, 2021, [https://doi.org/10.1016/j.giq.2021.101568].
2. Albino, V.; Bernardi, U.; Dangelico, R., M., *Smart Cities: Definitions, Dimensions, Performance, and Initiatives,* Journal of Urban Technology, Vol. 22, Issue 1, 2015, pp. 3 – 21.
3. Alujevic-Vesnic, L.; Nascimento, S.; Pólvora, A., *Societal and ethical impacts of artificial intelligence: Critical notes on European policy frameworks*, Telecommunications Policy, Vol. 44, Issue 6, 2020, [https://doi.org/10.1016/j.telpol.2020.101961].
4. Andersen, A. D., *et al., On digitalization and sustainability transitions,* Environmental Innovation and Societal Transitions, Vol. 48, 2021, pp. 96 – 98.
5. Anderson, L.; Bishop, P., *E-Government to E-Democracy*. Communicative Mechanisms of Governance, Vol. 2, Issue 1, 2005, pp. 5 – 26.
6. Andersson, C.; Hallin, A.; Ivory, C., *Unpacking the digitalisation of public services: Configuring work during automation in local government*, Government Information Quarterly, Vol. 39, 2022, pp. 1 – 9.
7. Aström, J., *et al., Understanding the rise of e-participation in non-democracies: Domestic and international factors,* Government Information Quarterly, Vol. 29, Issue 2, 2012, pp. 142 – 150.
8. Atkinson, R. D.; Leigh, A., *Customer-Oriented E-Government*, Journal of Political Marketing, Vol. 2, Issue 3 – 4, 2003., pp 159 – 181.
9. Awan, M. A., *Dubai e-Government: An Evaluation of G2B Websites*, Journal of Internet Commerce, Vol. 6, Issue 3, 2007, pp 115. – 129.
10. Bindu, N.; Sankar, C. P.; Kumar, K. S., *From conventional governance to e-democracy: Tracing the evolution of e-governance research trends using network analysis tools*, Government Information Quarterly, Vol. 36, Issue 3, 2019, pp. 385 – 399.

11. Buffat, A., *Street-Level Bureaucracy and E-Government*, Public Management Review, Vol. 17, Issue 1, 2015, pp. 149 – 161.
12. Caragliu, A.; Del Bo, C.; Nijkamp, P., *Smart Cities in Europe*, Journal of Urban Technology, Vol. 18, Issue 2, 2011, pp. 65 – 82.
13. Carrico, G., *The EU and artificial intelligence: A human-centred perspective*, European View, Vol. 17, Issue 1, 2018, pp. 29 – 36.
14. Cuadrados-Ballesteros, B.; Garcia-Sanchez, I.; Prado-Lorenzo, J. M., *Effect of modes of public services delivery on the efficiency of local governments: A two-stage approach*, Utilities Policy, Vol. 26, 2013, pp. 23 – 35.
15. Dijk, van N.; Casiragi, S.; Gutwirth, S., *The 'Ethification' of ICT Governance. Artificial Intelligence and Data Protection in the European Union*, Computer Law & Security Review, Vol. 43, 2021, [https://doi.org/10.1016/j.clsr.2021.105597].
16. D'Inverno, G.; Moesen, W.; Witte, K., *Local government size and service level provision. Evidence from conditional non-parametric analysis*, Socio-Economic Planning Sciences, Vol. 81, 2022, [https://doi.org/10.1016/j.seps.2020.100917].
17. Erdélyi, O. J.; Goldsmith, J., *Regulating artificial intelligence: Proposal for a global solution*, Government Information Quarterly, Vol. 39, Issue 4, 2022., [https://doi.org/10.1016/j.giq.2022.101748].
18. Frissen, P. H. A., *Public Administration in Cyberspace*, in: Snellen, I. T. M.; Van de Donk, W. B. H. J., Public Administration in an Information Age, IOS Press, Amsterdam, 1998, pp. 33 – 46.
19. Gesk, T. S.; Leyer, M., *Artificial intelligence in public services: When and why citizens accept its usage*, Government Information Quarterly, Vol. 39, Issue 3, 2022., [https://doi.org/10.1016/j.giq.2022.101704].
20. Gilbert, P.; Thoenig, J., *Assessing Public Management Reforms*, Palgrave Macmillan, Cham, 2022.
21. Grimsley, M.; Meehan, A., *E-Government information systems: Evaluation-led design for public value and client trust,* European Journal of Information Systems, Vol. 16, Issue 2, 2007, pp 134 – 148.
22. Hildebrandt, M., *The Artificial Intelligence of European Union Law*, German Law Journal, Vol. 28. Issue 1, 2020, pp. 74 – 79.
23. Holzer, M.; Manoharan, A., *Digital governance in municipalities worldwide (2011-12),* National Centre for Public Performance, Newark, 2012, pp. 81 – 89.
24. Ingrams, A., *et al., Stages and Determinants of E-Government Development: A Twelve-Year Longitudinal Study of Global Cities,* International Public Management Journal, Vol. 23, Issue 6, 2020, pp. 731 – 769.
25. Irani. Z., *et al., The impact of legacy systems on digital transformation in European public administration: Lesson learned from a multi case analysis*, Government Information Quarterly, Vol. 40, Issue 1., 2023, [https://doi.org/10.1016/j.giq.2022.101784].
26. Irvin, R.; Stansbury, J., *Citizen Participation in Decision Making: Is it Worth the Effort?,* Public Administration Review, Vol. 64, Issue 1, 2004, pp. 55–65.

27. Janssen, M., *et al., Data governance: Organizing data for trustworthy Artificial Intelligence*, Government Information Quarterly, Vol. 37, Issue 3, 2020, [https://doi.org/10.1016/j.giq.2020.101493].
28. Ju, J.; Liu, L.; Feng, Y., *Public and private value in citizen participation in E-governance: Evidence from a government-sponsored green commuting platform*, Government Information Quarterly, Vol. 36, Issue 4, 2019, [https://doi.org/10.1016/j.giq.2019.101400].
29. Klarić, M., *Smart City Model as a Possible Answer to New Challenges in Post Covid Era,* in: Duić, D.; Petrašević, T. (eds.), The recovery of the EU and strengthening the ability to respond to newchallenges – legal and economic aspects, EU and Comparative Law Issues and Challenges Series, ECLIC 6, 2022, pp. 527 – 546.
30. Komninos, N., *et al., Smart City Planning from an Evolutionary Perspective*, Journal of Urban Technology, Vol. 26, Issue 2, 2019, pp. 3 – 20.
31. Menash, I. C., *Impact of Government Capacity and E-Government Performance on the Adoption of E-Government Services*, International Journal of Public Administration, Vol. 43, Issue 4, 2020, pp. 303. – 311.
32. Meszaros, J.; Minari, J.; Huys, I., *The future regulation of artificial intelligence systems in healthcare services and medical research in the European Union*, Frontiers in Genetics, Vol. 13, 2022, [https://doi.org/10.3389/fgene.2022.927721].
33. Mondejar, M. E., *et al., Digitalization to achieve sustainable development goals: Steps towards a Smart Green Plane*, Science of the Total Environment, Vol. 794, 2021, pp. 1 – 20.
34. Noordt, C.; Misuraca, G., *Artificial intelligence for the public sector: results of landscaping the use of AI in government across the European Union*, Government Information Quarterly, Vol. 39, Issue 3, 2022, [https://doi.org/10.1016/j.giq.2022.101714.
35. Palladino, N., *The role of epistemic communities in the "constitutionalization" of internet governance: The example of the European Commission High-Level Expert Group on Artificial Intelligence*, Telecommunications Policy, Vol. 45, Issue 6, 2021, [https://doi.org/10.1016/j.telpol.2021.102149].
36. Ruano de la Fuente, J., M., *E-Government Strategies in Spanish Local Governments*, Local Government Studies, Vol. 40, Issue 4, 2014, pp. 600 – 620.
37. Russon Gilman, H.; Carneiro Peixoto, T., *Digital Participation*, in: Elstub, S.; Escobar, O; (eds.), *Handbook of Democratic Innovation and Governance*, Edward Elgar Publishing, Cheltenham, 2019, pp. 105 – 119.
38. Sharma, M., *et al., Implementing challenges of artificial intelligence: Evidence from public manufacturing sector of an emerging economy*, Government Information Quarterly, Vol. 39, Issue 4, 2022, [https://doi.org/10.1016/j.giq.2021.101624].
39. Söderström, O.; Paasche, T.; Klauser, F., *Smart cities as corporate storytelling*, City: Analysis of Urban Change, Theory, Action, Vol. 18, Issue 3, 2014, pp. 307 – 320.
40. Stahl, B. C., *et al., A European Agency for Artificial Intelligence: Protecting fundamental rights and ethical values*, Vol. 45, 2022, [https://doi.org/10.1016/j.clsr.2022.105661].
41. Stier, S., *Political determinants of e-government performance revisited: Comparing democracies and autocracies*, Government Information Quarterly, Vol. 32, Issue 3, 2015, pp. 270 – 278.

42. Verma, S., *Sentiment analysis of public services for smart society: Literature review and future research directions*, Government Information Quarterly, Vol. 39, No 3, 2022, [https://doi.org/10.1016/j.giq.2022.101708].
43. Vial, G., *Understanding digital transformation: A review and a research agenda*, The Journal of Strategic Information Systems, Vol. 28, Issue 2, 2019, pp. 118 – 144.
44. Viale Pereira, G., *et al., Increasing collaboration and participation in Smart City governance: a cross-case analysis of Smart City initiatives*, Information Technology for Development, Vol. 23, Issue 3, 2017, pp. 526 – 553.
45. Wallis, J.; Zhao, F., E-*Government Development and Government Effectiveness: A Reciprocal Relationship*, International Journal of Public Administration, Vol. 47, Issue 7, 2018, pp. 479 – 491.
46. Wilson, C., *Public engagement and AI: A values analysis of national strategies, Government Information Quarterly*, Vol. 39, Issue 1., 2022, [https://doi.org/10.1016/j.giq.2021.101652].
47. Wirtz, B., W.; Müller, W.; M., Schmidt, F., *Public Smart Service Provision in Smart Cities: A Case-Study-Based Approach,* International Journal of Public Administration, Vol. 43, Issue 6, 2020, pp. 499 – 516.
48. Wouters, S., *et al., Strategies to advance the dream of integrated digital public service delivery in inter-organizational collaboration networks*, Government Information Quarterly, Vol. 40, 2023, pp. 1 – 14.
49. Wyld, D. C., *The 3Ps. The Essential Elements of a Definition of E-Government*, Journal of E-Government, Vol. 1, Issue 1, 2004, pp. 17 – 22.
50. Yang, K.; Rho, S., *E-Government for Better Performance: Promises, Realities, and Challenges*, International Journal of Public Administration, Vol. 30, Issue 11, 2007, pp. 1197 – 1217.

EU LAW

1. Proposal for a Regulation of the European Parliament and of the Council laying down harmonised rules on artificial intelligence (Artificial Intelligence Act) and amending certain union legislative acts, COM (2021) 206, [https://eur-lex.europa.eu/legal-content/EN/HIS/?uri=COM:2021:206:FIN, Accessed 05.04.2023.

WEB REFERENCES

1. Kop, M., *EU Artificial Intelligence Act: The European Approach to AI*, [https://law.stanford.edu/publications/euartificial-intelligence-act-the-european-approach-to-ai/. Accessed 5 April 2023.
2. Van Dijk, J. A. G. M., *Digital Divide: Impact of Access, The International Encyclopedia of Media Effects,* John Wiley & Sons, Inc, 2017, [https://www.utwente.nl/en/bms/vandijk/publications/digital_divide_impact_access.pdf], Accessed 4 June 2023.

UDK 336.225(497.5:474.2):004
Review article

TAX PROCEDURES IN DIGITAL DECADE – SITUATION ASSESSMENT AND PERSPECTIVES

Boris Ljubanović, PhD, Full Professor
Josip Juraj Strossmayer University of Osijek, Faculty of Law Osijek
Stjepana Radića 13, Osijek, Croatia
ljubanovic.boris@pravos.hr

Ines Alpeza, mag. iur
Osijek-baranja County, Osijek
Trg Ante Starčevića 2, Osijek, Croatia
ines.alpeza@gmail.com

ABSTRACT

The digital transformation of public administration is of strategic importance for Croatia, and digitization has been an important goal in shaping public policy in Croatia and the European Union in recent years. Modernization of Croatian public administration and fast and reliable public service delivery are necessary for a stimulating entrepreneurial environment and better living conditions for all citizens. Public administration needs stable institutions, which should be oriented towards the satisfaction of all users, but at the same time sufficiently adaptable to the numerous social challenges.

The fundamental task of tax administrations is to educate and inform taxpayers about their obligations, provide them with assistance, process applications in a timely and professional manner, and ensure accuracy and fairness in the determination and allocation of obligations, thereby strengthening trust in the tax administration as an institution and consequently encouraging taxpayers to voluntarily fulfill their obligations as responsible citizens of the Republic of Croatia.

Citizens, tradesmen and entrepreneurs communicate with the tax administration on a daily basis, so there is a strong awareness among the public of the need for efficiency, fairness and competence of the tax administration in every area.

The digital transformation of tax administration can significantly impact the synergy between tax administration and taxpayers. Taxpayers will have new, modern, and widely available communication channels that allow access to accurate, timely data at any time and from any location, and the tax administration will have the ability to process data quickly, efficiently, and accurately and take the necessary actions to collect revenue.

This paper presents the progress of the Republic of Croatia in the digitization process and the changes in the regulations, and compares the state of digitization in the Republic of Croatia and Estonia, which is the leader in Europe in terms of the level of digitization in the field of public services.

Keywords: *Digitization, Digital Decade, DESI 2022, E-tax, real estate transfers, tax procedures*

1. EUROPE'S DIGITAL DECADE: DIGITAL TARGETS FOR 2030

The digital world should be based on European values - where no one is left behind and everyone enjoys freedom, protection and fairness. Europe's digital decade is one where everyone has the ability to use everyday technologies. Connectivity is reaching people in villages, mountains, and remote areas, enabling everyone to take advantage of online opportunities and share in the benefits of digital society. Key public services and administrative procedures are available online to make it easier for citizens and businesses.

The Digital Decade is a comprehensive framework that will guide all measures related to digitization. The goal of the Digital Decade is to ensure that all aspects of technology and innovation benefit people.

1.1. Path to the Digital Decade

The "Path to the Digital Decade" policy program, which is a political agreement of the European Parliament and the Council of the EU, creates a mechanism for monitoring and collaboration to achieve the common goals of Europe's digital transformation set out in the Digital Compass by 2030. This relates to skills and infrastructure, including connectivity, digitization of businesses and online public services, as well as monitoring compliance with digital rights and EU principles in achieving common goals. To achieve the goal, an annual mechanism of cooperation between the Commission and member states is needed, so that the Commission, together with member states, sets the direction of European Union action toward a specific goal, after which states propose national strategic plans to achieve it.

The mechanism of cooperation would include:

- a structured, transparent, and shared monitoring system in which progress toward a given goal by 2030 is measured through the Economic and Social Digitization Index (DESI)

- an annual report on the state of the digital decade, in which the Commission assesses progress and makes recommendations for action

- multi-annual strategic plans for the Digital Decade, in which member states briefly outline adopted or planned policies and measures to support the achievement of the goal by 2030.

- a structured framework for discussing and resolving issues where insufficient progress has been made, through shared commitments between the Commission and member states
- a mechanism to support the implementation of cross-state projects[1].

1.2. National development strategy of the Republic of Croatia until 20302

The vision of the Republic of Croatia is that in 2030 Croatia will be a competitive, innovative and secure country with a recognizable identity and culture, a country with preserved resources, good living conditions and equal opportunities for all.[3] The National Development Strategy defines strategic goals in four development directions that will contribute to the realization of the vision of Croatia in 2030. With regard to the topic of the work, we will analyze the development direction Sustainable Economy and Society, whose strategic goals are: 1. A competitive and innovative economy, 2. Educated and employed people, 3. Efficient and effective judiciary, public administration and state property management, and 4. Global recognition and strengthening of Croatia's international position and role.[4]

In the next decade, the public administration should be functional and open, responding effectively at all levels to the needs of society and contributing to the quality of life of citizens and the economic progress of the country[5]. In order to increase the legal security of citizens, special efforts will be made to improve the quality of communication between public institutions and citizens. In the spirit of more accessible and understandable communication, special standards and guide-

---

1 Digitalno desetljeće Europe: digitalni ciljevi za 2030., [https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/europes digital-decade-digital-targets-2030_hr], Accessed 23 March 2023.

2 In 2018, the government began drafting the National Development Strategy to 2030. year as comprehensive act of strategic planning, which in the long term guides the development of society and the economy in all issues of importance to Croatia, and thus represents the first way since gaining independence, receives a framework for development in the next decade. The document is based on the competitive economic potential of Croatia and the identified challenges of development potential at the regional, national, European and global levels. The elements of the strategic framework consist of the vision of Croatia in 2030, development directions and strategic goals.

3 Razvojna nacinalna strategija Republike Hrvatske do 2030., [https://hrvatska2030.hr/], Accessed 24 March 2023.

4 *Ibid.*, p. 3.

5 Jurlina-Alibegović, D., *Reformskim mjerama do učinkovite javne uprave u Hrvatskoj*, in: Novosti u upravnom pravu i upravnosudskoj praksi, 2016, pp. 1-23.

lines will be developed to improve and simplify written and online communication by state and public administration agencies.

1.3. Strategy of Digital Croatia for the period until 2032

Because of the priorities of the European Union, with the participation of representatives of the public sector, business, academic community and professional associations, the Digital Croatia Strategy for the period until 2032 was prepared and adopted by the Croatian Parliament in December 16th, 2022. The strategy is one of the acts of strategic planning that supports the implementation of the National Development Strategy of the Republic of Croatia until 2030.

The strategy sets clear goals for Croatia's digital transformation over the next decade and defines priority areas for public policy implementation[6]. Based on the defined vision, which determines what should be achieved through digitalization, and based on the analysis of the current situation and the identified development needs and potential, four strategic goals were set: Developed and innovative digital economy, Digitized public administration[7], developed, available and used networks with very large capacities, and Developed digital skills for living and working in the Digital age.[8]

The plan envisages Croatia becoming a country with digitally and economically competitive businesses and a digitized public administration by 2032, with the importance of all levels of government and citizens being actively involved in digital processes.

1.4. National plan for the development of public administration for the period from 2022 to 2027.[9]

The national plan was created respecting the principles of partnership and transparency, using different dialogue and consultation mechanisms. By decision of the

---

6 Tham, J., *Critical Factors for Creating a Successful Digital Public Administration*, SSRN Electronic Journal, 2018, [http://dx.doi.org/10.2139/ssrn.3296207].

7 Ižaković, I., *Sustav e-Građani kao čimbenik razvoja e-uprave – perspektiva primjene u izvanrednim okolnostima*, in: Sudarić, Ž.; Petrašević, T. (ur.), Zbornik radova 11 . međunarodne konferencije „Razvoj javne uprave", Veleučilište „Lavoslav Ružička",Vukovar 2021., pp. 175-184.

8 Strategija digitalne Hrvatske za razdoblje do 2032., [https://rdd.gov.hr/istaknute-teme/strategija-digitalne-hrvatske-za-razdoblje-do-2032/2009], Accessed 24 March 2023.

9 The goal in the next seven years is to act in three directions: legislative, organizational and development, and all in order to ensure faster and better quality public services, resilient and agile public services and administration that is capable of responding to the demands of citizens and business entities.

Government of the Republic of Croatia, Ministry of Justice and Public Administration was charged for creating the National plan and they formed an expert working group.

Every citizen of the Republic of Croatia has the right to good public administration[10]. Good public administration means an efficient administration organized in such a way that the rights of citizens can be easily exercised and the norms and principles of (administrative) conduct are respected. Without good public administration, there will be neither transparent and accountable executive authorities nor independent institutions.[11]

The reforms implemented in the Croatian public administration over the past two decades have improvedthe efficiency of the public administration and its cost effectiveness. State administration and public institutions have become more open and transparent, and access to public information has improved through digitalization.

National plan for the development of public administration for the period from 2022 to 2027 will enable the further transformation of Croatian public administration into a professionalized, efficient and transparent public administration, adapted to the needs of society and citizens. In the period of implementation of the National plan, public administration will take advantage of the opportunities offered by digital transformation.

One of the biggest challenges for public administration is finding and keeping high competent and motivated employees. The knowledge, skills and motivation of each employee have significant impact on the productivity and quality of public administration, and thus the quality of public services. Therefore, one of the most important goals of the National plan is related to reform and development human resources in public administration.

There is a need to integrate technological innovations into public administration business processes, especially to meet the expectations of users, primarily citizens and businesses. Citizens expect to find all necessary information about public institutions on the Internet and social networks.

---

10 Čolak, K.; Tušek, K.; Pušeljić; M., *Uloga menadžmenta u procesu digitalne transformacije*, Društvena i tehnička istraživanja, Vol. 6, No. 2, 2020, pp. 196-212.

11 Charter of Fundamental Rights of the European Union, [https://eur-lex.europa.eu/legal-content/HR/TXT/PDF/?uri=CELEX:12016P/TXT&from=RO], Accessed 24 March 2023.

2. DIGITAL ECONOMY AND SOCIETY INDEX 2022 (DESI 2022)12

The proposed Path to the Digital Decade Policy Programme will use DESI indicators to monitor progress towards the 2030 targets. The targets set out in the proposed Digital Decade Policy Programme are organised under four cardinal points: a digitally skilled population and highly skilled digital professionals, secure and sustainable digital infrastructures, the digital transformation of businesses, and the digitalisation of public services. The structure of the DESI and indicators have been adapted accordingly.[13]

The DESI 2022 results show that while most of the Member States are making progress in their digital transformation, the adoption of key digital technologies by businesses, such as artificial intelligence and big data remains low.

As in the previous years, Finland, Denmark, the Netherlands and Sweden continue to be the EU frontrunners and the data indicates that Italy, Poland and Greece made the most progress over the last 5 years. The other Member States are advancing and EU as a whole continues to improve its level of digitalisation.

In the area of digital public services, DESI monitors the online provision of public services by scoring Member States on whether or not it is possible to complete each step of key services completely online, and the extent to which they are available cross-border. The scores (describing how fully the services are provided online) reached 75 out of 100 for digital public services for citizens and 82 out of 100 for businesses. Estonia, Denmark, Finland and Malta have the highest scores for digital public services in DESI, while Romania and Greece have the lowest. Like we said before, The Path to the Digital Decade sets the target that all key public services for citizens and businesses should be fully online by 2030.

---

12 The European Commission has monitored Member States' progress on digital and published annual Digital Economy and Society Index (DESI) reports since 2014. The Digital Economy and Society Index (DESI) is an annual report published by the European Commission that monitors the progress of EU Member States on their digital development. This report includes country profiles, which help Member States identify areas for priority action, as well as thematic chapters providing an EU-level analysis in the four principal policy areas: human capital, connectivity, integration of digital technology, and digital public services. In addition, the DESI country reports provide an assessment of national digital policies and an overview of the digital investments and reforms in the Recovery and Resilience Plans.

13 Questions and Answers: Digital Economy and Society Indeks (DESI) 2022, [https://ec.europa.eu/commission/presscorner/detail/en/qanda_22_4561], Accessed 11 April 2023.

2.1. DESI-Croatia[14]

Croatia ranks 21th of 27 EU Member States in the 2022, with score 47.5, while EU score is 52.3. Croatia scores well in terms of open data, but its score is counterbalanced by poor performance in the field of Digital Public Services, with a small number of users, a scarce use of prefilled forms and limited provision of public services both to citizens and enterprises. Ongoing efforts need to be continued to achieve the Digital Decade target of 100% online provision of key public services for citizens and businesses.

Croatia ranks 23rd in the EU on Digital public services. Despite many improvements by the government in digital public services, Croatia is still underperforming on the availability of digital public services, with a score of 69 on digital public services for citizens (average in EU is 75) and 68 for businesses (average in EU is 82). The people of Croatia have access to a variety of online services through the e-Citizen national web portal, which has been used more than 33.5 million times in 2021.[15]

Among the new applications launched in 2021 were the e-Application of Life Partnership, eenrolment in educational institutions, the population census and the EU Digital COVID certificate.

2.2. Estonia - world's most advanced digital society

Estonia is a global leader in the digitalisation of public services and continues to invest heavily in this area. Both the public and businesses are used to carrying out administrative tasks online which are user-centred and very accessible, so country can be an example to other Member States for the Digital Decade in that respect.[16] Thanks to a safe, convenient, and flexible digital ecosystem, Estonia has reached an unprecedented level of transparency in governance. This has built broad trust in its digital society.

Estonia often positions itself as one of the most digitalised nations in the world, branded as eEstonia. The county is also at the forefront of digital democracy. Electronic voting is possible for local, national and European elections.

---

14 The Digital Economy and Society Index — Countries' performance in digitization, [https://digital-strategy.ec.europa.eu/en/policies/countries-digitisation-performance], Accessed 11 April 2023.

15 Total number of e-citizens on 31 December 2021, was 1 571 947, with an annual increase of approx. 380 000 users in each of the last 2 years.

16 The Digital Economy and Society Index — Countries' performance in digitisation, [https://digital-strategy.ec.europa.eu/en/policies/countries-digitisation-performance], Accessed 11 April 2023.

Almost 90% of Estonians have an ID card, which is also an eID notified under the eID regulation and issued by the government. It gives citizens access to a wide range of digital public services. In addition, 6 additional eID systems (including 5 of them notified under the eID regulation) exist in the country. E-ID systems of 12 other Member States can be used to access digital Estonian public services.

Estonian public institutions gradually moves from legacy IT systems to a new government cloud solution, which has been developed in line with the national IT Security Standard. The Estonian Government Cloud supports the modernisation and renewal of existing information systems, allowing the government to embrace opportunities offered by cloud technology. This will allow more agility in the provision of e-services by government agencies and critical service providers to residents and e-residents.[17]

3. TAX PROCEDURE – SPECIAL ADMINISTRATIVE PROCEDURE

3.1. Legal framework for digitalization of administrative procedure

The rapid development of information and communication technology steers public administration towards modernization and development, especially if it wants to play the role of a socially useful and necessary service in the function of social progress.[18]

Electronic administration (or e-administration for short) is a public administration that has undertaken an infrastructural transformation of work processes through the use of information and communication technologies[19], resulting in greater work efficiency, more rational use of budgetary resources, and higher quality in the provision of services. Their development creates the conditions for a faster response of the administration to a request made by a public service.

---

17 Government Cloud, [https://e-estonia.com/solutions/e-governance/government-cloud/], Accessed 11 April 2023.

18 Ljubanović, D., *Izazovi upotrebe sredstava elektroničke komunikacije i novi Zakon o općem upravnom postupku*, in: Koprić, I.; Đulabić,V. (ur.), Modernizacija općeg upravnog postupka i javne uprave u Hrvatskoj, p. 123.

19 According to the World Bank's definition, Information and communications technology expenditures include computer hardware (computers, storage devices, printers, and other peripherals); computer software (operating systems, programming tools, utilities, applications, and internal software development); computer services (information technology consulting, computer and network systems integration, Web hosting, data processing services, and other services); and communications services (voice and data communications services) and wired and wireless communications equipment.

For the digitization of public administration[20] to achieve the desired efficiency, digital equality, i.e., the availability of digital tools[21], must be ensured. The basic prerequisite for the digitization of public administration and its ability to function is the provision of the material and technical prerequisites. The concept of non-availability of technologies (for the purpose of realizing the right of access to public administration services) is defined as a digital divide. The digital divide refers to differences in the use of new technologies, and this concept can be considered in terms of general Internet access and personal Internet access.[22]

The Act on the General Administrative Procedure prescribes, as a general procedural regulation, the rules on the basis of which public law bodies[23] decide on administrative matters within their jurisdiction. With the Amendments of the General Administrative Procedure Act[24] and the New Regulation on Office Administration[25], a complete legal framework has been created that enables and promotes electronic communication and the digitization of administrative and other procedures and business processes of public-law entities[26]. The principle of communication and official correspondence between public-law entities and between public-law entities and natural and legal persons is introduced, primarily by electronic means.

The Amendments of the General Administrative Procedure Act created a legal framework for reliable and secure electronic communication with parties in administrative proceedings through identification with the OIB. The certification of administrative acts by electronic signature and seal as well as delivery by electronic means were regulated[27].

New Regulation on Office Administration provides for the obligation to adapt or establish office operations information systems in accordance with the rules of the

---

20 Pusić, E., *Modernizacija javne uprave, Hrvatska i komparativna javna uprava*, Vol. 1, No 1, 1999, pp. 1-42.

21 Đanić Čeko, A.; Guštin, M., *Digitalizacija hrvatske javne uprave s posebnim osvrtom na sustav socijalne skrbi*, Zbornik radova Pravnog fakulteta u Splitu, Vol. 59., No. 4., 2022, pp. 793-821.

22 Musa, A., E-uprava i problem digitalne podjele, in: Informatopolis: Otvoreni dan suvremene javne uprave, Vrček, N.; Bača, M., Fakultet organizacije i informatike, 2006., p. 17.

23 State administrative bodies, other state bodies, bodies of local and regional self-government units and legal persons under public law.

24 Amendments of the General Administrative Procedure Act, Official Gazette, No. 47/09 and 110/21.

25 New Regulation on Office Administration, Official Gazette, No. 75/21.

26 Martinović, T., *Prve novele u Zakonu o općem upravnom postupku*, Financije, pravo i porezi, 2022, pp. 156-159.

27 Staničić, F., Što nam donosi prva promjena Zakona o općem upravnom postupku?, Informator, Vol. 69, No. 6699, 2021, pp. 1-5.

Regulation by the beginning of 2023 at the latest. The office operation information system must enable complete office operation in electronic form, it must have the possibility to connect and exchange data with other information systems kept separately for certain administrative areas, and it must have the possibility to connect and exchange data with the ZUP IT system.

Although a legal framework for digitalization is being created and information and communication solutions are being developed, we believe that public administration cannot be fully digitalized because older or financially weaker people do not have the technical conditions to use the services.

3.2. Tax procedure – special administrative procedure

All administrative matters should be treated according to the Act on General Administrative Procedure[28] as a general law and equally for all to whom it is applied, provided that this law contains adequate legal norms and that there are administrative bodies that know how to apply them in each case. If, nevertheless, the legislator has decided on the possibility of different treatment in certain administrative areas, this can be done only as an exception and under precise legal conditions.[29]

The tax procedure is a special administrative procedure that establishes the rights and obligations of the taxpayer, and is governed by the General Tax Law[30] and special laws on certain types of taxes and other public benefits.[31] Issues not regulated by these laws are governed by the Law on General Administrative Procedure. In the tax procedure, the tax authority[32] is obliged to ascertain all facts necessary for a lawful and correct decision.

Due to the broad scope of the tax authorities' duties, the tax authority is obliged to establish an information system that provides taxpayers with clear, modern and

---

28 Only certain matters of administrative procedure may be regulated by law in a deviating manner, if this is necessary for processing in certain administrative areas and if this does not contradict the basic provisions and purpose of the General Administrative Procedure Act.

29 Ljubanović, B., *Postupanje po novom Zakonu o općem upravnom postupku i posebni upravni postupci*, in: Koprić, I.; Đulabić,V., Modernizacija općeg upravnog postupka i javne uprave u Hrvatskoj, Zagreb, pp. 143-155.

30 General Tax Law, Official Gazette 115/16, 106/18, 121/19, 32/20, 42/20, 114/22.

31 General tax law regulates the relationship between taxpayers and tax authorities applying rules on taxes and other public benefits, unless special laws on certain types of taxes and other public benefits provide otherwise, and constitutes the common basis of the tax system.

32 According to the General Tax Law, a tax authority is a state administrative body, an administrative body of a regional (local) self-government unit, or an administrative body of a local self-government unit, the scope of which includes the assessment and/or supervision and/or collection of taxes.

easy access to information by publishing tax regulations and their amendments on its websites.

3.3. Implementation of e-tax

The Croatian tax system is based on the principles of equality and justice, according to which all citizens are obliged to contribute to the financing of public expenditures according to their economic possibilities. The tax administration performs its duties in compliance with these constitutional principles.

As a tax authority within the meaning of the Tax Administration Act[33], the Tax administration[34], in cooperation with taxpayers, collects public revenues in order to protect society, to protect the financial interests of the Republic of Croatia and the European Union, and to ensure equal conditions for all entrepreneurs and citizens in accordance with constitutional principles.

E-commerce is a very important goal of the Tax Administration, as it contributes to a further reduction of indirect tax costs. The electronic services of the Tax Administration date back to 2005, which made the Tax Administration one of the pioneers of electronic state administrative services in the Republic of Croatia. At that time, eTax was developed as a client application, and the service initially enabled the submission of a form VAT, which was later extended to other forms. During 2013, eTax became a web application and enabled the submission of a much larger number of forms and the use of other electronic services.

With the opening of the European funds, the possibility of a further step to improve the eTax services was recognized, which initiated a profiled project that foresaw the establishment of the Unified Portal of the Tax Administration (hereinafter: Unified Portal), which will unify the existing services and enable new services, such as mutual communication, verification and modification of data, transmission of applications and, furthermore, the opening of the Unified Portal services to citizens.

3.4. Unified Portal of the Tax Administration

By using eTax services, taxpayers can fulfill their obligations or exercise their rights from home without having to visit the Tax administration and without paying administrative fees. In addition to taxpayers for whom the obligation to submit

---

33 Tax Administration Act, Official Gazette, No. 115/16 and 98/19.

34 According to the Tax Administration Act, the Tax Administration is a unique and independent administrative organization within the Ministry of Finance, whose main task is to apply and supervise the application of tax regulations and regulations on the collection of contributions.

electronic forms is mandatory, the services of the eTax system are used more and more every day by other business clients and citizens. Within the eTax Tax Administration electronic services it is possible to submit and verify electronic forms (VAT, PD, DOH, JOPPD, etc.), submit and verify electronic applications for various services (e.g. application for issuance of certificates), verify and manage taxpayers' tax data and numerous other services.[35] The user of the eTax system can be any person who can log into the system of electronic services.

The basic requirement for using the system is electronic credentials for logging into the system and authorization to work in the system. Access rights to the eTax application are managed through the authorization system, and each user can log in to eTax for himself (then he is a taxpayer) or he can log in for another taxpayer, provided he has received authorization for him (then he is an authorized representative). This means that each taxpayer does not have to be a user of eTax electronic services himself, but may have an authorized representative, who, according to the provisions of the Tax Code, is considered a person who represents the taxpayer within the scope of the granted authorization and may perform actions in the tax procedure on his behalf. In the past, eTax was available only to business users who were obliged to use the eTax system in accordance with the provisions of the General Tax Law, and the application condition was the use of digital business certificates.

Following the expansion of the eTax system in 2017 by connecting it to the National Identification and Authentication System (NIAS), eTax services became available to citizens. Other issuers of digital certificates and other credentials have appeared on the market, and access to the eTax system has been simplified and facilitated in such a way that it is possible to log into the system using any NIAS credential.

With the latest improvement and expansion of the system, the division into two entrances has disappeared, and the eTax application is now entered through a single entrance, regardless of whether the user is a citizen, a natural person or a company (regardless of whether the user uses the ePorezna application for himself, for his company or for another person for whom he has a credential). A single access to eTax allows all users, whether citizens, business managers or traders, to manage their authorizations, i.e. to grant any other person the authorization to perform obligations on their behalf or to exercise certain rights through the eTax system towards the tax administration. In order to grant and manage authorizations, it is sufficient to log in to the system with any credential NIAS.

---

[35] Borota, N.; Blekić, A., *EPorezna: jedinstveni ulaz, nadogradnja sustava ovlaštenja i proširenje korisničkog pretinca*, Financije, pravo i porezi: časopis za poduzeća i banke, obrtnike, proračune i proračunske korisnike, neprofitne i ostale organizacije, 2020., pp. 17-27.

The eTax system enables the Tax Administration to communicate with its taxpayers through the user mailbox. The Tax Administration can send tax acts, certificates and various other documents, messages and notifications to the user mailbox. In 2019, the Tax Administration started delivering tax acts to the eTax user mailbox, in the new message category "Tax acts". The tax document is a document with an obligation to serve, and the taxpayer will receive a notification about each delivery of the tax document to the e-mail address specified in the taxpayer's profile, and the same notification will also be received by all authorized users for the user box at the address entered in the user's data. After opening the message in the user's inbox and thereby downloading the tax act, all authorized persons will receive a notification via e-mail of the reading/downloading of the tax act and the time when the tax act was downloaded, and the taxpayer will also receive additional information about which of the authorized persons read the tax act first.

Sending the notification about sending and receiving the tax document to the user's inbox and the notification about downloading the tax document is important for the taxpayer's right to appeal, which must be submitted within the prescribed period. It is stipulated that the delivery of the tax act to the eTax user box was made on the day of the record on the server, when the taxpayer or his authorized representative took over the tax act. If the tax act is not picked up within seven days, it will be considered that the delivery has been made after the expiry of the period of seven days from the day the tax act was sent to the user's inbox.

It is particularly noteworthy that at the end of October 2019, the Tax administration started delivering Tax Debt Notices to the user's inbox, if the tax obligations have not been settled within the prescribed period. Upon delivery of a notice to the user's inbox, the taxpayer can settle the tax debt, which will prevent further calculation of default interest, or ask the Tax Administration to conclude an administrative contract before starting the enforcement procedure, which avoids paying additional costs arising from the initiation of enforcement.

4. DIGITIZATION OF THE PROCEDURE FOR DETERMINING REAL ESTATE TRANSFER TAX

4.1. Generally about real estate transfer tax

Real estate sales tax is determined and paid in accordance with the Real Estate Transfer Tax Act.[36] Real estate transactions are any acquisition[37] of real estate own-

[36] Real Estate Transfer Tax Act, Official gazette, No. 115/16 and 106/18.

[37] Acquisition of real estate is considered to be the purchase, sale, exchange, inheritance, donation, entry and removal of real estate from a trading company, acquisition by inheritance, acquisition of real estate

ership in the Republic of Croatia, and the person liable for real estate transaction tax is the acquirer of the real estate. The subject of taxation is the occurrence of the fact of transfer of ownership rights to a certain real estate.[38]

The basis of real estate tax is the market value of the real estate at the time of the tax liability. The Tax administration determines the tax base, which represents the market value of the real estate. This is the price of the real estate that is achieved or can be achieved on the market at the time of its acquisition, considering the condition and physical properties of the real estate, such as the purpose and location of the real estate, and in the case of buildings, in addition to the aforementioned properties, the quality of construction, age of the building, equipment utilities and others.

The tax base is the price specified in the acquisition document, if the total amount of compensation given or paid by the acquirer is approximately equal to the prices that are achieved or can be achieved on the market. The Tax administration determines the market value of the real estate by assessment if the total amount of compensation is less than the prices that are achieved or can be achieved on the market at the time of the tax liability or if the real estate acquisition document does not state the value of the real estate. The assessment of the market value of the real estate is determined by an employee of the Tax Administration on the basis of comparative data on the movement of market values of similar real estate from approximately the same area at approximately the same time or exceptionally by hiring an authorized expert. Real estate sales tax is paid at the rate of 3%.

4.2. Registration of tax liability

Until January 1, 2017, mostly the tax payer was obliged to report the occurrence of tax liability on the form Real Estate Transaction Declaration, and it was the data from the Declaration that was the basic source of data on real estate transactions. Today, the taxpayer and the supplier of real estate subject to VAT submit the Application form only exceptionally in cases where the document on the basis of which the transaction is created has not been certified by a notary, drawn up as a notary act or issued by a court or other public law body (for example, acquisition of real estate on based on the European Certificate of Inheritance).[39]

in liquidation or bankruptcy proceedings, acquisition based on a decision of a court or other body, acquisition based on the law and other ways of acquiring real estate from others person.

[38] Dojčić, I., Novosti u oporezivanju prometa nekretnina, Financije, pravo i porezi, 2018, p. 105.

[39] Vrdoljak, A., *Evidencija prometa nekretnina*, Financije, pravo i porezi, 2020, pp. 93-96.

With the entry into force of the Real Estate Tax Act, the provision on the method of reporting real estate transactions was changed. In accordance with the goals of the tax reform, in terms of simplifying the procedure for reporting real estate transactions and relieving the taxpayer, notaries, courts and other public law bodies have been assigned the function of reporting real estate transactions. Thus, the obligation of the notary public to certify the signatures on the documents on the sale or other way of disposal of the real estate, and within 30 days at the latest, one copy of the document, as well as any other document on the basis of which the real estate is traded (partnership agreement, contract on the establishment of building rights, etc.) along with information on the personal identification number of the participants in the procedure, submit it electronically to the office of the Tax Administration in the area where the real estate is located. The same obligation is prescribed for courts and other public law bodies, which are obliged to submit their decisions to the Tax Administration office in the area where the real estate is located, together with information on the personal identification number of the participants in the procedure by which the ownership of the real estate is changed in the land registers, i.e. in the official records, in within 15 days after the end of the month in which the decision became final, according to the regulations on mandatory personal delivery of letters. Real estate transactions are reported electronically by notaries, and by courts and other public law bodies according to the rules on personal delivery.

4.3. Records of real estate transfers

Real estate transfer records[40], as an application subsystem for recording real estate transfers, were formalized for the first time by the Amendments to the Real Estate Transaction Tax Act from 2014, and are applicable from January 1, 2015, and following the legal requirement to enter into the Transaction Records real estate, enter the data shown in the Real Estate Transfer Application form and/or in the document on the acquisition of real estate.

Real estate transaction records are the official records of the Tax Administration on all real estate transactions from the territory of the Republic of Croatia. The Act on General Administrative Procedure defines official records as records established on the basis of regulations, that is, a general act of a public authorities.

The Real Estate Transaction Tax Act contains provisions on Real Estate Transaction Records and the data it contains. The information stated in the document on the acquisition of real estate, which is reported to the Tax Administration by

40 *Ibid.*

notaries public, courts and other public law bodies in accordance with the Law, is recorded in the Registry of Real Estate Transfers within 30 days from the date of receipt. By prescribing the deadline for recording transactions, the legislator ensured the up-to-dateness of data on the origin of real estate transactions.

Thanks to many years of continuous recording of real estate transactions, the Tax Administration has obtained a database in which an average of 230,000 transactions are recorded annually.

4.4. Determining the tax liability and making a decision

Procedural provisions for the tax procedure are contained in the General Tax Law, that stipulates that in tax proceedings, the tax authority bears the burden of proof for the facts that establish the tax, and the taxpayer for the facts that reduce or cancel the tax.

As a rule, an employee of the Tax Administration determines the obligation of real estate sales tax by direct settlement on the basis of the information specified in the document (if the document contains information necessary to determine the correct factual situation), without checking this information, and issues a temporary tax decision on it.

It is possible to review the determined tax liability later and pass a tax ruling that determines the difference in the subsequently determined tax liability. In this case, before the adoption of a tax ruling that determines the difference in the subsequently determined tax liability, it is important to allow the taxpayer to state the facts relevant to taxation, as well as to prove his allegations.

An appeal can be filed against the decision of the Tax Administration. If the employee of the Tax Administration considers that the appeal allegations are founded and that the relevant evidence is attached, the taxpayer's appeal is accepted and a new decision is issued. In the event that the appeal allegations are not founded, that is, they are not supported by appropriate evidence, the Tax Administration official will forward the appeal together with a copy of the documentation to the Independent Sector for second-level administrative proceedings.

4.5. Delivery of the tax act

A tax act that decides on individual rights and obligations from the tax-legal relationship, or when a non-extendable term begins to run from the date of delivery of the tax act, is delivered to the place of delivery by personal delivery to the

participants in the tax procedure. Personal delivery is considered a delivery made personally to the person to whom the tax document is intended.

Tax acts that decide on individual rights and obligations from the tax-legal relationship can be delivered electronically upon request or with the express consent of the party, and exceptionally personal delivery to entrepreneurs can be done electronically without a request or express consent.

The delivery of the tax act electronically is made to the electronic box designated by the tax authority for such a purpose. At the same time as the delivery of the tax act, an informative message is sent to the participant's electronic address that he has registered with the tax authority, informing him that the tax act is in his electronic inbox and that the participant is obliged to retrieve it within seven days from the day the tax act arrived in his electronic inbox. The delivery is considered to have been made on the date of the record on the server when the participant took over the tax act. If the tax act is not collected within seven days, it will be considered that the delivery was made after the expiry of the period of seven days from the day when the tax act arrived in the electronic mailbox.

5. CONCLUDING REMARKS

Europe strives to enable businesses and citizens to take advantage of a more sustainable and prosperous digital future where people come first. As part of the Digital Compass, proposed level of ambition is that by 2030: all key public services are available online, all citizens have access to their e-medical records and 80% of citizens use a digital ID solution.

Proactive public services are the future because of the simplicity of services for citizens and the government. It saves time and resources by eliminating the need for citizens to visit government offices and for officials to process each application's data manually. The government offers its services and aid proactively. Proactive public services help ensure government policies are effective and reach the people for whom they are intended.

Digital transition is accelerating. Most Member States are progressing in building resilient digital societies and economies, through the Recovery and Resilience Plans, EU Budget or, more recently also through the Structured Dialogue on Digital Education and Skills. Changes must happen already now, if European Union, and also Republic of Croatia wants to meet the Digital Decade targets in 2030.

The paper shows how changes in the legal framework contribute to a greater degree of digitization in the Republic of Croatia, and the tax procedure, i.e. the

procedure for determining real estate sales tax, is highlighted as a positive example for changes.

The real estate transfer registration process underwent changes in 2016 when new business process has completely replaced the old way of working, which was based on a lot paperwork and physical presence of taxpayers who are parties to the proceedings. Today's business processes are processes that are in accordance with the norms of the European Union, which require less work and give better results, data is stored in "data warehouses" and in eachare currently available to their users. This way of doing business is achieved cooperation, partnership, and efficiency in the use of available resources. The Tax Administration is much closer to its goal and business vision.

REFERENCES

BOOKS AND ARTICLES

1. Borota, N., Blekić A., *EPorezna: jedinstveni ulaz, nadogradnja sustava ovlaštenja i proširenje korisničkog pretinca*, Financije, pravo i porezi, 2020, pp. 17-27
2. Čolak, K., Tušek, K., Pušeljić, M., *Uloga menadžmenta u procesu digitalne transformacije*, Društvena i tehnička istraživanja, Vol. 6, No. 2, 2020, pp. 196-212
3. Dojčić, I., Novosti u oporezivanju prometa nekretnina, Financije, pravo i porezi, 2018
4. Đanić Čeko, A., Guštin, M., *Digitalizacija hrvatske javne uprave s posebnim osvrtom na sustav socijalne skrbi*, Zbornik radova Pravnog fakulteta u Splitu, Vol. 59., No. 4., 2022, pp. 793-821
5. Đerđa, D. (2012), *Pravila upravnog postupka u europskom pravu*, Zbornik Pravnog fakulteta Sveučilišta u Rijeci, Vol. 33, No. 1, 2012, pp. 109-144
6. Hranjec, R., Negativni aspekti digitalizacije, 2021,
7. [https://www.iusinfo.hr/aktualno/u-sredistu/45140#]
8. Ižaković, I., *Sustav e-Građani kao čimbenik razvoja e-uprave – perspektiva primjene u izvanrednim okolnostima*, in: Sudarić, Ž., Petrašević, T. (ur.), Zbornik radova 11. međunarodne konferencije „Razvoj javne uprave", Veleučilište „Lavoslav Ružička",Vukovar 2021., pp. 175-184.
9. Jurlina-Alibegović, D., *Reformskim mjerama do učinkovite javne uprave u Hrvatskoj*, in: Novosti u upravnom pravu i upravnosudskoj praksi, 2016, pp. 1-23
10. Ljubanović, B., *Postupanje po novom Zakonu o općem upravnom postupku i posebni upravni postupc*i, in: Koprić, I., Đulabić, V., Modernizacija općeg upravnog postupka i javne uprave u Hrvatskoj, Zagreb, pp. 143-155
11. Ljubanović, D., *Izazovi upotrebe sredstava elektroničke komunikacije i novi Zakon o općem upravnom postupku*, in: Koprić, I., Đulabić, V. (ur.), Modernizacija općeg upravnog postupka i javne uprave u Hrvatskoj, pp. 123-143

12. Martinović, T., *Prve novele u Zakonu o općem upravnom postupku*, Financije, pravo i porezi, 2022, pp. 156-159
13. Musa, A., *E-uprava i problem digitalne podjele*, in: Vrček, N., Bača, M., Informatopolis: Otvoreni dan suvremene javne uprave, Fakultet organizacije i informatike, Varaždin 2006., pp. 17-29
14. Pusić, E., *Modernizacija javne uprave*, Hrvatska i komparativna javna uprava, Vol. 1, No 1, 1999, pp. 1-42
15. Staničić, F., *Što nam donosi prva promjena Zakona o općem upravnom postupku?*, Informator, Vol. 69, No. 6699, 2021, pp. 1-5
16. Tham, J., *Critical Factors for Creating a Successful Digital Public Administration*, SSRN Electronic Journal, 2018, [http://dx.doi.org/10.2139/ssrn.3296207]
17. Vrdoljak, A., *Evidencija prometa nekretnina*, Financije, pravo i porezi, 2020, pp. 93-96

NATIONAL LAW

1. Act on the General Administrative Procedure, Official Gazette No. 47/09 and 110/21
2. General Tax Law, Official Gazette No. 115/16, 106/18, 121/19, 32/20, 42/20 and 114/22
3. Real Estate Transfer Tax Act, Official Gazette No. 115/16 and 106/18
4. Regulation on Office Administration, Official Gazette No. 75/21
5. Tax Administration Act, Official Gazette No. 115/16 and 98/19

WEB REFERENCES

1. The Digital Economy and Society Index — Countries' performance in digitisation [https://digital-strategy.ec.europa.eu/en/policies/countries-digitisation-performance], Accessed 23 March 2023
2. Croatia in the Digital Economy and Society Indeks, [https://digital-strategy.ec.europa.eu/en/policies/desi-croatia], Accessed 26 March 2023
3. Government Cloud, [https://e-estonia.com/solutions/e-governance/government-cloud], Accessed 26 March 2023
4. Digitalno desetljeće Europe: digitalni ciljevi za 2030., [https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/europes-digital-decade-digital-targets-2030_hr], Accessed 21 March 2023
5. Razvojna nacinalna strategija Republike Hrvatske do 2030., [https://hrvatska2030.hr/], Accessed 24 March 2023
6. Strategija digitalne Hrvatske za razdoblje do 2032., [https://rdd.gov.hr/istaknute-teme/strategija-digitalne-hrvatske-za-razdoblje-do-2032/2009], Accessed 24 March 2023

UDK 341.645.5(4):502.14
342.7-056.83
613.261:349.6(4-67EU)
Review article

EUROPEAN COURT OF HUMAN RIGHTS AND THE EUROPEAN GREEN DEAL

Boris Bakota, PhD, Full Professor
Josip Juraj Strossmayer University of Osijek, Faculty of Law Osijek
Stjepana Radića 13, Osijek, Croatia
bbakota@pravos.hr

ABSTRACT

The European Green Deal aims to make Europe the first climate-neutral continent by 2050 and maps a new and inclusive growth strategy to boost the economy, improve people's health and quality of life, care for nature, etc. EU Farm to Fork Strategy for fair, healthy and environmentally-friendly food system, among others, asks for „moving to a more plant-based diet".

Plant-based diet is a diet consisting mostly or entirely of plant-based foods. Plant-based diet does not exclude meat or dietary products totally, but the emphasis should be on plants. Vegetarianism is the practice of abstaining from the meat consumption. Vegetarians consume eggs dairy products and honey. Veganism is the practice of abstaining from the use of animal product in diet and an associated philosophy that rejects the commodity status of animals.

Article 9 of European Convention for the Protection of Human Rights and Fundamental Freedoms and article 10 of the Charter of Fundamental Rights of the European Union almost use the same text enshrining Freedom of thought, conscience and religion. To ensure the observance and engagements in the Convention and the Protocols, Council of Europe set up European Court of Human Rights. All European Union Member States are parties to the European Convention for the Protection of Human Rights and Fundamental Freedoms.

European Court of Human Rights had many cases dealing with above-mentioned article 9. This paper will focus on Court's cases dealing with veganism, vegetarianism and plant-based diet. It will investigate obligations, which arise from European Convention for the Protection of Human Rights and Fundamental Freedoms to public administration institutions, namely hospitals, prisons, army, school and university canteens, etc. The paper will explore the practice of several European countries and Croatia. The results will show if veganism, vegetarianism and EU promoted plant-based diet are equally protected under European Convention or there are differences, and what differences if there are any.

Keywords: *Convention for the Protection of Human Rights and Fundamental Freedoms European, European Court of Human Rights, plant-based diet, The European Green Deal, veganism, vegetarianism*

1. INTRODUCTION

The European Green Deal is a set of policy initiatives by the European Commission, approved in 2020, aiming to make European Union climate neutral in 2050. European Commission's plan has 10 main points: 1. 'Climate neutral' Europe, 2. Circular economy, 3. Building renovation, 4. Zero-pollution, 5. Ecosystems & Biodiversity, 6. Farm to fork strategy, 7. Transport, 8. Money, 9. R&D and innovation, and 10. External relations.[1] For the purpose of this article, we will focus on point 6. Farm to fork strategy. The Farm to Fork strategy is at the heart of the Green Deal addressing the challenges of sustainable food system. The strategy recognizes links between healthy people, healthy societies and a healthy planet.[2] This strategy is initiated by the fact that over half of the adult population in the EU is now overweight and that European diets are not in line with national dietary recommendations. The healthy option should always be the easiest one. "If European diets were in line with dietary recommendations, the environmental footprint of food systems would be significantly reduced."[3] European Commission in 2018 proposed new Common Agricultural Policy aiming to help farmers improving their environmental and climate performance. The measures should be voluntary and the focus will be increased "… on investments into green and digital technologies and practices."[4] EU Code of conduct for responsible business and marketing practice will be developed by European Commission in order to increase "… the availability and affordability of healthy, sustainable food options to reduce overall environmental footprint of the food system."[5] EU Farm to Fork Strategy for fair, healthy and environmentally-friendly food system asks for "moving to a more plant-based diet."[6], because "Current food consumption patterns are unsustainable from both health and environmental points of view … consumption of whole-grain cereals, fruit and vegetables, legumes and nuts is insufficient."[7] This document in length explains problems with current food production, environmental impact, health problems conditioned by food production and consumption. Food producers and farmers are not forgotten, but there is a clear vision as how to help them transition towards fulfilling envisaged strategic goals. Poore

---

1 Simon, F., *EU Commission unveils 'European Green Deal': The key points,* [https://www.euractiv.com/section/energy-environment/news/eu-commission-unveils-european-green-deal-the-key-points/], Accessed 28 March 2023.

2 *Farm to Fork Strategy: For a fair, healthy and environmentally-friendly food system*, European Union, 2020, p. 4.

3 *Ibid.*, p. 5.

4 *Ibid.*, p. 11.

5 *Ibid.*, p. 13.

6 *Ibid.*

7 *Ibid.*, p. 14.

and Nemecek in their analysis have found out that"… diet that excludes animal products … has transformative potential, reducing food's land use by 3.1 (2.8 to 3.3) billion ha (a 76% reduction)."[8] They further notice how impacts of animal products exceed those of vegetable substitutes "… meat, aquaculture, eggs, and diary use ~83% of the world's farmland and contribute 56 to 58% of food's different emissions, despite providing only 37% of our protein and 18% of our calories."[9] European leaders, as well as global ones, need to look for solutions to environmental problems caused by decades of neglect. "… livestock production is the single largest contributor of emissions around the globe (more than planes, trains and cars combined) … Raising animals for food is also the largest contributor to wildlife extinction around the world."[10] Plant-based diet will help with waste management, because "… farm with only 2,500 pigs produces the same amount of waste as a city of around 400,000 people."[11] The European Green Deal aims to make Europe the first climate-neutral continent by 2050 and we must notice that arguments for veganism are "… more consistent on climatic grounds than arguments for vegetarianism: vegetarianism prohibits most notable non-vegan low-carbon food (fish) but permits non-vegan high-carbon foods (cheese)."[12] Possible solution to The European Green Deal aims is a technology that produces cultured meat. Bryant does not only mention animal slaughter causing ethical concerns, but emphasizes possible solution to environmental and public health concerns. Traditional meat production is connected to problems like greenhouse gas emissions, land and water use, antibiotic resistance and food-borne and zoonotic diseases.[13] National Governments will have to play key roles in shifting to environmentally friendly plant-based food consumption. [14]

---

8 Poore, J.; Nemecek, T. *Reducing food's environmental impacts through producers and consumers,* Science, 360, 2018, p. 992.

9 *Ibid.*, p. 991.

10 Rowland, M. P., *The Most Effective Way To Save The Planet,* [https://www.forbes.com/sites/michaelpellmanrowland/2018/06/12/save-the-planet/], Accessed 31 March 2023.

11 Pariona, A. *Environmental Impact of Animal Agriculture* [https://www.worldatlas.com/articles/environmental-impact-of-animal-agriculture.html?fbclid=IwAR2ohiILhENFJQ0i09yPNaiOHYIaW_JDZ-fNmrdeiRbPiq_kXQnCOnnpI3o], Accessed 31 March 2023.

12 Kortetmäki, T.; Oksanen, M. *Is there a convincing case for climate veganism,* Agriculture and Human Values, Vol. 38, 2021, p. 738.

13 Bryant, C. J., *Culture, meat, and cultured meat,* Journal of Animal Sciences, Vol. 98, No. 8, 2020, p. 5.

14 More on options for Governments to consider in: Wills J. *Animal Agriculture, the Right to Food and Vegan Dietary,* in: Rowley, J; Prisco C. (eds.), Law and Veganism, Lexington Books, Lanham, 2022, pp. 133 – 134.

2. EUROPEAN CONVENTION FOR THE PROTECTION OF HUMAN RIGHTS AND FUNDAMENTAL FREEDOMS AND ITS ARTICLE 9

Article 9 of the Convention reads, "1. Everyone has the right to freedom of thought, conscience and religion; this right includes freedom to change his religion or belief and freedom, either alone or in a community with others and in public or private, to manifest his religion or belief, in worship, teaching, practice and observance. 2. Freedom to manifest one's religion or beliefs shall be subject only to such limitations as are prescribed by law and are necessary in a democratic society in the interests of public safety, for the protection of public order, health or morals, or for the protection of rights and freedom of others." Most of ECtHR jurisprudence *vis-à-vis* Article 9 deals with protection of religious freedoms. Cases brought to ECtHR concerning freedom of thought and conscience and freedom to manifest one's beliefs represent significantly smaller percentage dealing with possible violation of Article 9. Most of literature also covers infractions of freedom of religion.

The freedom to hold beliefs and convictions is unconditional; the only limitation – specified in Article 9 itself – concerns the way in which this freedom is exercised.[15] Renucci observes, without further explanation, that, apart from Articles 8, 10 and 11 that in their second paragraphs cover all rights mentioned in their paragraph 1, Article 9 in its second paragraph specifies only freedom to manifest one's religion or belief.

Convictions are not synonymous with opinions and ideas. They are views that attain certain level of cogency, seriousness, cohesion and importance.[16] A belief is different from a personal motivation, because it must be possible to construe it as the expression of a coherent view of basic issues.[17] Freedom of conscience is "… more sophisticated and structured product than an individual's thought."[18] Freedom of thought, conscience and religion is vital to believers, but it is also precious for atheists, agnostics, sceptics and the unconcerned.[19] The fact that veganism is the moral standing towards suffering of nonhuman animals is not important fact

---

15 Renucci, J. F. *Article 9 of the European Convention on Human Rights – Freedom of thought, conscience and religion,* Human Rights Files no. 20, Council of Europe, Strasbourg, 2005, p. 11.

16 European Court of Human Rights, *Campbell and Cosans v United Kingdom* (1982) Application nos. 7511/76, 7743/76, par. 36.

17 *X. v FRG* (1981) in: Renucci, *op. cit.* note 15, p. 13.

18 Bîrsan, C., *Le juge européen, la liberté de pensée et de consience in:* Massis et Pettiti (eds.), *La liberté religieuse et la Novention européene des droits de l'homme*, Droit et Justice, No. 58, 2004, p. 45 *et seq.* in: Renucci, J. F., *op. cit.* note 15, p. 14.

19 European Court of Human Rights, *Kokkinakis v. Greece* (1993) Application no. 14307/88, par. 31.

for ECtHR, which deals with human rights as matters of personal and private conscience.[20]

It is possible for state to restrict the exercise of rights and freedoms guaranteed by the European Convention if three conditions are met. Two of Article 9 paragraph 2 restrictions do not raise serious problems - restrictions are to be prescribed by law and these restrictions have legitimate aim. Nevertheless, mentioning necessity in a democratic society might create problems concerning the freedom of manifesting one's freedom of thought, conscience and religion. National authorities are in touch with the reality of the situation and they are in the best position to decide on any restriction, but European judges exercise supervision over state interference. The European Court will assess if reasons used by national authorities are relevant and sufficient, while determining if the interference is proportionate to the aim pursed.[21]

The biggest threat to someone trying to follow his/her religion or belief occurs when that person is not able to provide for him/herself. Patients in hospitals can rely on their relatives or friends, while situation is completely different for incarcerated persons. Many rights and liberties are not enjoyable while a person is in a detention, but some of the rights and liberties have to be protected and provided for. Council of Europe Committee of Ministers adopted on 11 January 2006 Recommendation Rec (2006) 2 on the European Prison Rules based on United Nations basic standards for the treatment of prisoners. Point 29. 1. asks for prisoner's freedom of thought, conscience and religion to be respected for. Nutritious diet, among others, will take into account prisoners religion and culture. Prison Rules are to be applied without any discrimination as to religion, political or other opinion, etc. Although Prison Rules are non-binding document, they are important recommendation for Council of Europe member states.

3. VEGETARIAN, PLANT-BASED OR VEGAN?

We will try to make clear distinguish between terms vegan, vegetarian and plant-based for the purpose of this article. There are differences and this differences are very significant. While terms vegetarian and plant-based are solely oriented toward a diet, term vegan has a much broader concept.

Plant-based diet focuses mainly on health benefits in eating mostly plants, such as fruits, vegetables, nuts, seeds, herbs, etc. Plant-based, although mainly consist-

---

[20] Rowley, J., *Towards a Vegan Jurisprudence,* Lexington Books, Lanham, 2020, p. 78.

[21] Renucci, *op. cit.* note 15, pp. 49 – 50.

ing on plants, does not exclude meet, eggs and dairy products. There is no ethical moment in a plant-based diet. It focuses only on human benefits in eating certain food. People on plant-based diet focus on healthy advantages for themselves. Nevertheless, plant-based food is food that exclude food from animals or food product made by animals. Essentially, vegans eat plant-based food, but plant-based diet comprises plant-based food, and can include meet, eggs, honey, and dairy products.

Vegetarian diet excludes all kinds of meat, but not the product made by animals, for example: milk, eggs and honey. Although most of the vegetarians do not use leather or fur, it is a general conclusion that vegetarianism does not include consistent ethical stance. In their life-style, most of the animals are protected and safe, but some, as cows, sheep, goats, chicken, bees, etc., are exploited even more. People on vegetarian diet tend to eat more cheese, milk and eggs than before, and it results in more animals needed to produce it.

In contrast to plant-based and vegetarian, it is not that easy to define what veganism entails. Vegan diet is the easiest part, because vegans do not eat any kind of food made from animals (meat, milk, eggs and honey). Vegan diet does not need to be healthy; it only has to be void of any animal products or products made by animal work. It is possible to be vegan and only eat chips, because focus is on animals and their sufferings. To clarify other aspect of being vegan is not that easy. "Philosophically, the concept of veganism is rooted in the ancient concept of 'ahimsa', which is one of the main premises of the Indian religion of Jainism."[22] Vegans do not use leather or fur, but some vegans argue that it is ethically all right to use second-hand leather or fur, because it is environmentally friendly. Some vegans might argue that people should eat only locally produced vegan food, because any kind of transport pollutes and has negative impact on environment, for instance importing mangos or papayas. On the other hand, some vegans also argue not just for the environmental reasons, but also for other ethical reasons, i. e. importing goods manufactured by labourers in poor working conditions, made by children, underpaid workers, etc. There are vegans claiming that owning any kind of companion animal is contrary to animals' freedoms, while majority claim that taking care for companion animals or any other animal means protecting them, because they are not able to survive on their own. We will later see the term ethical vegan being used. Some people might define themselves as being vegan for health or medical reasons, environmental concerns, or some religious or spiritual

[22] Casamitjana, J., *The Confirmation of Ethical Veganism as a Protected Philosophical Belief in Great Britain: A Personal Account of Triumph,* in: Rowley, J.; Prisco, C. (eds.), Law and Veganism, Lexington Books, Lanham, 2022, p. 249.

reasons. However, ethical vegan is someone concerned with ethical reasons vis-à-vis animals. Vegans usually identify only ethical vegans as people really adhering to veganism, while others would be people eating plant-based diet. As for the purpose of this article and legal protection of veganism, it might be important to make strict differences between these two categories of vegans. Especially, because some of authors even conclude how veganism is enjoying increasing mainstream acceptance and that it is one of the fastest-growing diets in the world.[23] First vegan society in the world was established in 1944 in London out of The Vegetarian Society previously established in 1847. Although most of The Vegetarian Society members followed vegan diet it was not seen as a priority, vegetarian diet sufficed. Vegan diet was a common term being used for some time, but there was no definition of veganism. In time when term veganism was not coined at all, vegetarianism received judicial protection in two case in Ireland, still under Great Britain's rule. In the cases In re Crantson, Web & Oldfield in 1898 and O'Hanlon v Logue in 1906 judges recognised vegetarianism as a belief worthy of protection.[24]

Leslie J. Cross from The Vegan Society suggested that veganism is: "…the principle of the emancipation of animals from exploitation by man."[25] and later clarified as "to seek and end to the use of animals by man for food, commodities, work, hunting, vivisection, and by all other uses involving exploitation of animal by man."[26] The Memorandum and Articles of Association, when they were registered as a charity in 1979, defined veganism as: " … a philosophy and a way of living which seeks to exclude – as far as is possible and practicable – all forms of exploitation of, and cruelty to, animals for food, clothing or any other purpose; and by extension, promotes the development and use of animal-free alternatives for the benefit of humans, animals and the environment."[27]

Some might argue that different practises of veganism present big obstacles in legal protection of veganism as a belief, contrary to religion, which is usually clear in its belief system structure and its member's obligations. To accept this position, it is necessary to ask what does constitute a true member of certain religion. There is no definition of religion neither in the text of Article 9 of European Convention or in

---

23 Offer, K.; Barker, R., *Should Ethical Vegans Have a Beef with the Definition of Religion?,* Victoria University Law and Justice Journal, Vol. 9, No. 1, College of Law and Justice, Melbourne, 2017, p. 19.

24 O'Sullivan Garcia, M., *Vegetarian and vegan rights in Europe: chickening out or egging them on?,* Derecho Animal, Barcelona, Vol. 11, No. 4, 2020, pp. 72 – 73.

25 The Vegan, Autumn, 1949 in: *Ripened by human determination – 70 years of The Vegan Society,* The Vegan Society, 2014, p. 6.

26 The Vegan, Autumn, 1950 in: *Ripened by human determination – 70 years of The Vegan Society, op. cit.* note 23, p. 6.

27 *Ibid.*

European Court's case law. "This omission is quite logical, because such a definition would have to be both flexible enough to embrace the whole range of religions worldwide … and specific enough to be applicable to individual cases…"[28]

As we have previously noted there are different concepts, what veganism is? If one has to find out what is veganism by talking to some vegan, one might end up with a false understanding of veganism. Each vegan can hold different views as to what constitutes veganism. Some authors conclude that veganism should only refer to an abstention from consuming and using animal-derived products.[29] Deckers considers that vegan diet should be the default diet for the majority of human population, but simultaneously his vegan agricultural system encompasses insects and animals used to provide labour.[30] Most vegans would argue with this definition because insects are animals and it is unacceptable for animals to provide labour for human benefit.

4. EUROPEAN COURT OF HUMAN RIGHTS CASE LAW

Many cases dealing with possible violation of Article 9 were brought before European Court, but there are only few dealing with food. We will describe all those cases. European Commission on Human Rights found no violation of article 9 in case *X. v. United Kingdom* (1976) Application no. 5947/72 when Jewish inmate in prison was given kosher diet, but the vegetarian one. The Court affirmed that meal is kosher and that even Jewish Visitation Committee advised him to accept it. Therefore, prison administration fulfilled kosher meal request. The fact that it was a vegetarian one had no bearing on the merits of the case.

According to Article 109 of the Code of Execution of Criminal Sentences (1997) of the Republic of Poland, prisoners should receive meals taking into consideration, where possible, their religious and cultural beliefs. Buddhist inmate asked for vegetarian diet, but prison offered him instead *no pork diet*, which was also given to six Muslims detained in the same penitentiary. Muslim detainees received diet according to their religion, but the applicant did not. Every prison inspections and judiciary organs rejected his appeals stating that vegetarian diet is too expensive. Above all, the Polish Government argued that according to the Great Polish Encyclopaedia and searches on Wikipedia, Buddhism in general, and even followers of stricter form of Buddhism - Mahayana Buddhist - were not obliged

---

28 *Guide on Article 9 of the European Convention on Human Rights: Freedom of thought, conscience and religion,* Council of Europe/European Court of Human Rights, Strasbourg, 2022, p. 8.

29 Dutkiewicz, J.; Dickstein, J., *The Ism in Veganism: The Case for a Minimal Practice-based Definition,* Food Ethics, Vol. 6, No. 2, 2021, pp. 1 – 2.

30 Deckers, J., *In Defence of the Vegan Project*, Bioethical Inquiry, Vol. 10, 2013, pp. 187 – 189.

to follow vegetarian diet. The applicant brought his case to ECtHR which found that the applicant was denied of „… the right to manifest his religion through observance of the rules of the Buddhist religion. "[31] Although vegetarian diet is not a precondition for Buddhist religion, the Court found violation of Article 9.

In case *W. v. United Kingdom* (1993) Application no. 18187/91, par. 1 „The Commission finds that the Vegan convictions with regard to animal products fall within the scope of Article 9 para 1. (Art. 9-1) of the Convention." British Government did not contest Veganism as being capable of concerning conscience or belief within the meaning of Article 9. We will not discuss main aspects of the case, because they are not relevant for dietary aspect of veganism. Veganism is not linked to any religion, or a prerequisite for a member of certain religion. Veganism is a secular belief not connected with any religion, but also enjoying the same level of protection. Vegans in English and Welsh prisons currently are being served with vegan meals.[32]

ECHR found no appearance of violation of Article 9 in case C. D. and Others v. Greece (2013) Application no. 33441/10, par. 79 where four Muslim detainees argued that they were forced to eat fork. Two of the caterers supplying detention centre were Muslims and provided pork-free meals.

In case *Vartic v. Romania* no. 2. (2014) Application no. 14150/08 the applicant was serving a prison sentence and according to his Buddhist beliefs, he asked for vegetarian meals to be provided by prison authorities. The general practitioner in prison agreed that vegetarian diet is most appropriate for inmate's hepatitis type C. Prison authorities offered only Christian Orthodox fasting diet, which excluded food of animal origin, arguing that relevant legislation did not provide for a vegetarian diet. Since 2007 inmates were not allowed to receive food parcels by post, only family could bring them food during their visits. The Government argued, contrary to GP's opinion, that vegetarian diet is not suitable for persons with hepatitis type C. Domestic courts dismissed all applicant's claims, stating that meals served, all of them including some type of meat, provided him with adequate diet in religious terms. The European Court, citing case *Jakóbski v. Poland* (2010) Application no. 18429/06, ruled that there has been a violation of Article 9 in this case.[33]

---

31 European Court of Human Rights, *Jakóbski v Poland* (2010) Application no. 18429/06, par. 54.

32 *Vegetarian Society Investigates: Prison Food in England and Wales,* [https://vegsoc.org/lifestyle/vsi-prison-food-in-england-and-wales/], Accessed 13 March 2023.

33 European Court of Human Rights, *Vartic v Romania* no. 2. (2014) Application no. 14150/08, par. 55.

Cases *Neagu v. Romania* (2020) Application no. 21969/15 and *Saran v. Romania* (2020) Application no. 65993/16 are very similar. In both cases prisoners asked for their meals to be served according to their religious beliefs. When placed in custody each inmate had a chance to declare his religion, and Romanian courts do not allow the possibility that one can change later his/her religion freely. When being transferred some prisons served pork free meals, but in general, the State claimed that it puts a too heavy burden on prisons. The Court noted that since applicants received meals compatible with his religion in three prisons, Romanian prison system is capable of accommodating such requests, and especially since Romanian Law 254/2013 in its article 50 affirms that inmates will receive food, among others, compatible with their religious beliefs. European Court confirmed that „ … the national authorities had not complied to a reasonable degree with their positive obligations under Article 9. "[34]and awarded applicants for the damage incurred.

ECtHR mentioned as an example of good practice that Romania in 2016 only had eight persons of Jewish faith in their prisons. Their requests for kosher meals were granted and in reality, it did place a burden on national authorities, but even so, they managed to fulfil it. In cases Erlich and *Castro v. Romania* (2020) Application nos. 23735/16 and 23740/16, although being given kosher meals, prisoner obtained additional alimentary products, incompliance with their religious belief with their own money. They wanted their money reimbursed, as being instructed by Romanian court, but they failed to ask for reimbursement in Romanian legal system. Not asking for reimbursement within Romanian legal system was the only reason why ECtHR concluded of no violation of article 9 and subsequently rejected their claims.[35]

The State can examine competing interests of and individual and the interests of the community as a whole[36] and it is legitimate to ask are all prisons obliged to serve vegan food, no matter if there is only one vegan inmate being incarcerated in a specific prison. Yes, if it does not put an undue financial or logistical burden on the state. Apart from Article 9, it is now necessary to consider the inmate's veganism with Article 14 of European Convention, which prohibits discrimination in connection with rights and freedom enjoyment. The authorities have to treat all

---

[34] Information Note on the Court's case-law 245, November 2020: European Court of Human Rights, *Neagu v Romania* (2020) Application no. 21969/15 and European Court of Human Rights, *Saran v Romania* (2020) Application no. 65993/16, p. 3.

[35] European Court of Human Rights*, Erlich and Castro v Romania* (2020) Application nos. 23735/16 and 23740/16, par. 40.

[36] Kubitová, A., *Detention of vegetarians, Vegans, and Persons Eating Halal or Kosher Food: Should We Recognise the Right to Follow Special Diets?,* Common Law review, Vol. 15, 2018, p. 63.

inmates equally and it is either that no inmate can receive any special diet or that all inmates can receive diets according to their religious or secular beliefs.

5. COMPARATIVE ANALYSIS OF VEGANISM AS A PROTECTED BELIEF

Although European institutions set harmonised and universal standards, while national courts and tribunals do not always follow suit in their interpretation.[37]

There are differences in exercising one's right on vegan diet in different public institutions in Germany. Since Germany is a federal state it has sixteen special laws and German constitution to consider when we talk of vegan diet in schools. Each federal state has its own regulation and usually children have to self-supply. Article 3 para 3 of German Basic Law (Grundgesetz)[38] affirms the principle of equality, and courts mostly have decided that if children in schools received kosher food or halal food, than vegan food has to be provided for also. Nevertheless, if kosher and halal food are not provided for, then vegan children also have to self-supply their food.[39] Legal situation is very similar at public universities, although vegan food offer is much better than the one in schools. Prisons are also organized at federal level and situation differs in different states. Some federal states supply vegan food, while others enable their prisoners to self-supply, or even take two portions of something that is vegan (side dishes, salad etc.) instead of meat. Some prisons do not supply vegan food and prohibit prisoners to self-supply. Patients at hospitals can claim insurance company to reimburse their costs in self-supplying vegan food. Professional soldiers are exempted for the provision of non-vegan food and can self-supply, while volunteer draftees will receive financial support for vegan food.

Italian government approved in 2010 guidelines to set common principles for publish institutions. Although veganism and vegetarianism are not specifically mentioned, guidelines do mention *ethical-religious needs*. Therefore, veganism and vegetarianism should be protected under guidelines. Guidelines also assure the provision of adequate food replacements required for ethical, religious or cultural reasons. When parents ask special diet for their schoolchildren, they do not need

---

37 O'Sullivan Garcia, *op. cit.* note 22, p. 72.

38 "No person shall be favoured or disfavoured because of … faith, religious or political opinions." Official translation of German Basic Law (Grundgesetz) by German Federal Ministry of Justice, [https://www.gesetze-im-internet.de/englisch_gg/englisch_gg.html#p0026], Accessed 5 April 2023.

39 Müller-Amenitsch, R., *Vegan Legal Issues in Germany,* in: Rowley, J.; Prisco, C. (eds.), Law and Veganism, Lexington Books, Lanham, 2022, p. 77.

any kind of medical certification.[40] In 2006, Anti-Vivisection League promoted special act for mandatory vegetarian and vegan options, and in 2007, the proposed Act was presented in Italian Senate, but it is still pending in Senate without knowing further prospects.[41] It would have been the very first act in Western society to deal with fulfilment of vegetarian and vegan dietary rights. In 2015 Administrative Court in Bolzano ruled, that public nursery has to re-enrol the child, expelled for asking for a vegan diet. The child was re-enrolled and remained vegan.

Study carried out in 2017 in Portugal shows that 1.2% of Portuguese population are vegetarians, while 0.6 are vegans.[42] Article 41 of Portuguese Constitution protects freedom of conscience, religion and of form of worship.[43] It is interesting to notice that conscience even precedes religion, and that veganism as the expression of belief is therefore protected. Nevertheless, vegans in reality do not enjoy protection by State bodies that protect equality principle. At a worldwide level, Portugal became the very first country in 2017 that proscribed mandatory provision of a strict vegetarian option on the menus of all public canteens and refectories.[44] The Law 11/2017[45] in Article 3 defines strict vegetarian option as a meal containing no animal products at all. The regulation applies to health care units, nursing homes, primary and secondary schools, universities, prison facilities and social services. Public canteens and cafeterias may not provide strict vegetarian option if there is no demand (in order to minimize food waste) and if demand is reduced; it is therefore possible for institutions to ask for prior registration. All these limitations are reasonable and consistent with the European Convention which asks for veganism to be protected, but does not protect food offer per-se. Meaning, it is not necessary to offer vegan diet if there is no consumer. According to report in 2018 by Portuguese Vegetarian Association, there are obstacles in fulfilment of this obligation. Contrary to legal regulations, some institutions offer either ovo-lacto-vegetarian option instead of strict vegetarian, or no option at all stating that demand is law, and some even ask for medical report, which justifies vegetarian

---

40 Prisco, C., *Veganism and Law in Italy,* in: Rowley, J.; Prisco, C. (eds.), Law and Veganism, Lexington Books, Lanham, 2022, p. 94.

41 *Ibid.*, p. 97.

42 *120 000 vegetarianos – Número quadruplica em 10 anos,* [https://www.centrovegetariano.org/Article-620-Numero-vegetarianos-quadruplica-10-anos-Portugal.html], Accessed 17 March 2023.

43 *Constitution of the Portuguese Republic, Seventh Revision (2005), article 41*, [https://www.parlamento.pt/sites/EN/Parliament/Documents/Constitution7th.pdf], Accessed 5 April 2023.

44 Alvim, N., *The Protection of Vegans in Portugal: Law and Progress,* in: Rowley, J.; Prisco, C. (eds.), Law and Veganism, Lexington Books, Lanham, 2022, pp. 112 – 113.

45 *Lei n.º 11/2017 de 17 de abril – Estabelece a obrigatoriedade de existência de opção vegetariana nas ementas das cantinas e refeitórios públicos,* Diário da República n.º 75/2017, Série I de 2017-04-17.

diet.[46] In 2018 in universities 10% of meals consumed were vegetarian, 14% in public hospitals and healthcare units, 10% in social services facilities, but only 1% in schools.[47]

Although French legislation and international conventions that France adheres to clearly protect veganism as a belief, there are still obstacles to their protection. Website of French Ministry for Education and Youth compared vegetarianism to an eating disorder in 2020, but removed it after a letter from French Vegetarian Association.[48] In 2019, French National Assembly report suggested that vegan groups should be included among radical movement groups.[49] French Interior Ministry, the Natonal Federation Farmers Unit and Young Agricultors signed Convention in 2019, which established Cellule Demeter. Its task is to create awareness of and prevent threats from those referred to as animal rights militants. Employees and volunteers from ecologist and animal protection associations reported being questioned and intimidated by police.[50]

French Rural and Maritime Fishery Code prescribes that school has to serve animal products with each meal. But, in 2021 new French Climate and Resilience Act obliges schools to serve vegetarian menu once per week, while in other public administration institutions, canteens will offer vegetarian meal each day.[51]

United Kingdom is a dualist state, which must pass enabling domestic legislation for an international document to become a law. The European Convention was domesticated in United Kingdom in 1998 with Human Rights Act. As for United Kingdom, it is important to know that Equality Act of 2010 is only applicable in Great Britain (England and Wales), while UK Human Rights of 1998 is appli-

---

46 *Opção vegetariana nas cantinas portuguesas: realidade ou intenção: Um estudo (2019) da avliação da lei № 11/2017,* [https://www.avp.org.pt/opcao-vegetariana-estudo-avaliacao], Accessed 17 March 2023.

47 Cardoso, M. D., *Quase 10% das refeições servidas nas universidades são vegetarianas,* [https://www.publico.pt/2018/02/13/sociedade/noticia/quase-10-das-refeicoes-servidas-nas-universidades-sao-vegetarianas-1802926], Accessed 17 March 2023.

48 Laffineur-Pauchet, M., *The Growth of Veganism in France: Law and Current Challenges,* in: Rowley, J.; Prisco, C. (eds.), Law and Veganism, Lexington Books, Lanham, 2022, p. 150.

49 The report initially was to fight extreme right-wing groups in France and it is funny that veganism is included, because in reality, it is a common belief that veganism correlates with left wing values.

50 [https://www.1214.com/letres-infos/2020/07/31-recours-justice-cellule-demetar-ligue-droits-homme/] in: Laffineur-Pauchet, *op. cit.* note 48, 2022; pp. 150 – 151.

51 Huet, N., *France's new climate law has just been approved. So why are activists so unimpressed?* [https://www.euronews.com/green/2021/07/20/france-s-new-climate-law-has-just-been-approved-so-why-are-activists-so-unimpressed], Accessed 18 March 2023.

cable in the United Kingdom as a whole.[52] Equality Act protects individuals from different types of discrimination, either direct or indirect. Vegan individual might not be employed because of his/her vegan beliefs, which would constitute direct discrimination. More likely, the person might not be discriminated due to being vegan, but because of manifestation of vegan beliefs, i. e. eating vegan meals that are not provided by his employer.[53] Religion or belief, among others, are protected characteristics, protecting individuals against discrimination under Equality Act: "A person (A) discriminates against another (B) if A applies to B a provision, criterion or practice which is discriminatory in relation to a relevant protected characteristic of B's."[54] The Equality and Human Rights Commission included veganism as an example of a belief attaining protection under Equality Act, while the Government did not share the same position, but left the decision ultimately for the courts to determine.[55]

Although in case *Regina v Secretary of State for Education and Employment and others (Respondents) ex parte Williamson (Appellant) and others*[56] and referenced in *Grainger plc & others v Nicholson*[57] vegetarianism was regarded as an example of belief that controversially meets the test for what qualifies as a belief in legal meaning, it changed in more recent English employment tribunal case.[58] In *Connisbee v Crossley Farms Ltd.* In a preliminary hearing the judge refused to accept that vegetarianism qualifies as a protected belief. "… there are many vegetarians across the world, … Vegetarians adopt the practice for many different reasons; lifestyle, health, diet, concern about the way animals are reared for food and personal taste. Vegans simply do not accept the practice under any circumstances of eating meat, fish or dairy products, and have distinct concerns about the way ani-

---

52 Overton, M., *Veganism as a Protected Belief under United Kingdom Human Rights and Equality Law,* in: Rowley, J.; Prisco, C. (eds.), Law and Veganism, Lexington Books, Lanham, 2022, p. 169.

53 McKeown, P.; Dunn, R. A., *A 'Life-Style Choice' or a Philosophical Belief?: The Argument for Veganism and Vegetarianism to be a Protected Philosophical Belief and the Position in England and Wales,* Liverpool Law Review, Vol. 42, 2021, p. 215.

54 *Equality Act 2010*, section 19 (1), [https://www.legislation.gov.uk/ukpga/2010/15/section/19], Accessed 21 March 2023.

55 McKeown; Dunn, *op. cit.* note 53, p. 230.

56 *Judgement Regina v Secretary of State for Education and Employment and others (Respondents) ex parte Williamson (Appellant) and others*, par. 55, [https://publications.parliament.uk/pa/ld200405/ldjudgmt/jd050224/will-1.htm], Accessed 6 April 2023.

57 EAT/0219/09 in: *Grainger plc & ors v Nicholson – the Employment Appeal Tribunal clarifies what constitutes a 'philosophical belief',* [https://redmans.co.uk/insights/grainger-plc-ors-v-nicholson-the-employment-appeal-tribunal-clarifies-what-constitutes-a-philosophical-belief/], Accessed 6 April 2023.

58 Overton, *op. cit.* note 52, p. 175.

mals are reared … There you can see a clear cogency and cohesion in vegan belief, which appears contrary to vegetarianism…"[59]Although the judge accepted that vegetarianism hold beliefs that satisfied some of the criteria, nevertheless he points out that vegetarian system of belief is not a coherent one. He further points, "The Tribunal therefore concluded on balance they were not persuaded vegetarianism amounted to a philosophical belief capable of protection under the Equality Act 2010."[60] Although animals are not initially killed for a vegetarian diet, because vegetarians do not consume animal flesh, in the end animals are killed in dairy business and honey production. "… it might be thought intellectually inconsistent to be against the slaughter of animals for food but to drink milk and eat butter … regular calving is necessary for continued annual lactation and most of the bull calves from a dairy herd go to the abattoir."[61] The same judge, just a year later, in *Casamitjana v League against Cruel Sports* qualified ethical veganism as a genuinely held protected belief and not only a viewpoint. Belief that is a weighty and substantial aspect of human life and behaviour. It is a belief, which obtains high level of cogency, cohesion and importance. "… ethical veganism is capable of being a philosophical belief and thus protected characteristic under the Equality Act 2010."[62] Nevertheless, even if ethical veganism is capable of being a philosophical belief "… the Tribunal then needs to consider whether the Claimant actually adheres to that belief and that that adherence form something more than merely assertion of opinion or viewpoint."[63] It is probably, due to many misconceptions, as to what constitutes veganism, why judge in *Casamitjana v League against Cruel Sport* qualified ethical veganism as a protected belief, but permitted some flexibility in someone's practice of veganism. "… animal rights advocates, … , argue that ethical veganism is the only way to project animals to higher moral and legal standing an produce consistent behaviour, …"[64] "While previously deemed within the scope of Article 9, and reaffirmed in a recent English employment tribunal case, upon assessment veganism clearly meets the *Grainger* test."[65]

Although UK Government School Food Standards observes plant-based milk as highly nutritious, schools receive state subsidies for serving cows' milk only. Catering in majority of UK schools is a met-based diet, and parents were sometimes not

---

59 Employment Tribunals case number: 3335357/2018, point 41.

60 Employment Tribunals case number: 3335357/2018, point 44.

61 Cranmer, F.; Sandberg R., *A Critique of the Decision in Conisbee that Vegetarianism Is Not 'A Belief,* Ecclesiastical Law Society, Vol. 22, 2020, p. 43.

62 Employment Tribunals case number: 3331129/2018, point 39.

63 Employment Tribunals case number: 3331129/2018, point 4.

64 McKeown; Dunn, *op. cit.* note 53, p. 218.

65 Overton, *op. cit.* note 52, p. 182.

allowed to self-supply for their children.[66] Elliot-Archer believes that provision of forcible non-vegan feeding to patient who lacks capacity or a minor is contrary to European Convention, but that courts may conclude it justifiable in order to protect right to life. "If there is a dispute between a treatment centre and a patient/family in respect of the relevance of vegan beliefs, then most effective remedy may well be an application to the court to decide the issue and protect all parties involved."[67]

Some of the courts do check if vegans actually adhere totally to veganism or is it just occasionally. The same tests courts do not carry out if somebody asks for his/her religious beliefs to be protected. We will inquiry into Catholic, Orthodox, Jewish and Muslim positions on status of their believers (how to stop being one and obeying the duties). The Roman Catholic Canon Law "… bind those that have been baptized in the Catholic Church or received into it…"[68] Current Code of Canon Law in seven canons (1364, 1367, 1370, 1378, 1382, 1388, 1398) regulates acts that cause excommunications. Excommunication is a tool and a remedy and not a final cause and destiny. "While excommunication excludes a Catholic from many of the Church's spiritual goods, its purpose in fact is to encourage conversion, the excommunicate's return to the light of truth and communion of grace."[69] It is not possible for a person to stop being Catholic, if that person has been previously baptized in Catholic Church. It does not matter if a person goes to Church (at least on Sundays), receives a Communion, or anything else prescribed as a duty by Catholic Church Catechism or not. This person can always invoke his/her being Catholic and demand that State recognizes some of his religious rights. Neither administrative bodies nor courts scrutinize someone's life to verify if that person follows everything stated in Catechism. In Orthodox Church priest may prescribe private excommunication for scandalous personal sins. Excommunicated person is allowed to participate in a worship, but not in part taking of a Eucharist. Sins that ask for excommunication are identified, but without specifying a duration of excommunication. Excommunication is con-

---

66 Rowley, J.; Bowles, E. *Veganism, Law and Education in the United Kingdom,* in: Rowley, J.; Prisco, C. (eds.), Law and Veganism, Lexington Books, Lanham, 2022, pp. 200 – 201.

67 Elliot-Archer, J., *Treatment for Disordered Eating in England: Balancing Vegan Rights and Treatment Requirements,* in: Rowley, J.; Prisco, C. (eds.), Law and Veganism, Lexington Books, Lanham, 2022, p. 238 – 239.

68 *Code of Canon Law*, canon 11, [https://www.vatican.va/archive/cod-iuris-canonici/eng/documents/cic_lib1-cann7-22_en.html], Accessed 22 March 2023.

69 Guilbeau, A. Excommunication: what is it and does the Church still do it? [https://aleteia.org/2018/03/20/excommunication-what-is-it-and-does-the-church-still-do-it/], Accessed 22 March 2023.

sidered as a remedy that will help person in realization that some life-changes are necessary in order to come back to Church.[70] While Christian religions have formalized procedures for a person to be excommunicated there is no procedure for a Muslim to be declared takfir. The declaration is called mukaffir, but there is no agreement as how to accomplish that declaration. Some scholars think that only Prophet Muhammed can make that declaration, but as the Prophet is deceased, there is no living person authorized to excommunicate another person. Others say that it is possible with fatwa pronounced by a cleric, scholar or Islamic Court declaring someone a kafir. The third opinion holds that any lay practitioner of Islam can declare someone excommunicated for apostasy, idolatry or for grossly inappropriate behaviour.[71] Jewish rabbis employed excommunication in Judaism during Talmudic times and during the Middle Ages. Herem "is the highest ecclesiastical censure the exclusion of a person from the religious community, which among the Jews meant a practical prohibition of all intercourse with society."[72] "Herem mostly has not been instituted since the Enlightenment period, when Jews – freed from the ghettos – stopped having political autonomy over their communities."[73], but with some exceptions in Orthodox communities.

6. REPUBLIC OF CROATIA AND ARTICLE 9

Ordinance on Conditions and Modalities in Fulfilling Rights of Covering Costs of Students' Meals[74] prescribes in detail which meals could be offered to students. Each ingredient (with weight) as well as meal's price is specified. Every student canteen in Croatia has to follow this Ordinance concerning meal ingredients and food weight specifications and cannot change anything. Otherwise, they could be liable for breaching a regulation. Article 18 mandates that three meals must be offered for lunch and dinner for students to choose, one of them being vegetarian. Ordinance does not mention vegan meals, or any special religious or health diet. It is possible for students either to choose already prepared menu or to choose a specific meal. To choose specific meal, not following standard menu, is of course more expensive. There are 31 already prepared menus for lunch (10 of them being

70 McGuckin, J. A. *The Encyclopaedia of Eastern Orthodox Christianity – Excommunication*, [https://azbyka.ru/otechnik/world/the-encyclopedia-of-eastern-orthodox-christianity/112], Accessed 2 April 2023.

71 Gaskill, A. L., *Do Muslims Get Excommunicated?,* [https://www.patheos.com/answers/do-muslims-get-excommunicated], Accessed 2 April 2023.

72 Schechter, S., Greenstone, J. H. *Excommunication (Hebrew, "niddui," "ḥerem")* [https://www.jewishencyclopedia.com/articles/5933-excommunication], Accessed 2 April 2023.

73 Ratzabi, H., *What is Herem?,* [https://www.jewishencyclopedia.com/articles/5933-excommunication], Accessed 2 April 2023.

74 Official Gazette Nos. 120/2013, 140/2014, 113/2022.

vegetarian) and 31 for dinner (12 of them being vegetarian). Out of 10 vegetarian lunches, only one might satisfy vegan diet. The problem is that Spring soup included in that menu is an instant one, and kitchen only follows manufacture's suggestion. There are many different manufacturers of Spring soup in Croatia and it could be that some of them includes ingredients not compatible with vegan diet. Out of 12 vegetarian dinners, only one is suitable for vegans. If students can afford to pay more and get something more suitable for them, one might believe that there will be more vegan options. Although, there are 35 vegetarian meals, only one of them is being suitable for vegans, namely Tortellini with spinach and tomato sauce. Two more meals might be suitable, but they include Spring soup which might not be suitable as previously discussed. Only one of 13 stews is vegan and two soups out of 17 (while nine of them are instant soups made under manufacturer's suggestion and they might contain non- vegan products). Nothing changed in a past year, even though Croatian Ministry of Science and Education stated in April 2022 that they are working on new dietary regulations for student canteens in order to facilitate students with food intolerances, specifically lactose intolerance.[75]

Decision on Patients' Diet Standard in Hospitals[76] defines 57 possible diets for hospitals that can also be used in other health institutions and social welfare institutions. Most of the diets are consistent with patients' diagnostic conditions while four of them (vegan, halal, kosher and a diet according to specific conditions) follow patients' beliefs. It is further specified that lacto ovo vegetarian diet is served to patients that use eggs, milk and dietary products as sources of animal protein in their diet. Vegan diet is for an adult patient that do not consume anything from animal origin either as a main meal or as an ingredient, emphasizing that vegan diet is served exclusively at individual request. Halal and kosher diets are for Muslim and Jewish patients, but only if institution previously has signed a contract with food supplier that has halal or kosher certificate. While Decision specifies that vegan diet is to be served at individual request, halal and kosher diets are served at personal request. According to previous Decision on Patients' Diet Standard in Hospitals[77], vegan diet was served only at patient's personal request (now individual). The problem with different wording might arise if a patient is not capable of stating his/her will. Patient's designated person in an emergency

---

75 Kršul, D., *Ministarstvo konačno mijenja propise: studenti vegetarijanci u menzama više neće ostajati gladni,* [https://www.telegram.hr/zivot/ministarstvo-konacno-mijenja-propise-studenti-vegetarijanci-u-menzama-vise-nece-ostajati-gladni/], Accessed 31 March 2023.

76 Decision on Patients' Diet Standard in Hospitals, Official Gazette No. 59/2015.

77 Decision on Patients' Diet Standard in Hospitals, Official Gazette No. 121/2017.

might decide for vegan diet, while it would be impossible to decide for halal and kosher ones, which are only served at patient's personal request. Previous Decision mentioned lacto ovo vegetarian and semi vegetarian diet. Lacto ovo vegetarian diet was served for patients that use eggs, milk and dairy products as sources of animal products in their diet, while semi vegetarian was for patients that exclude specific animal products from their diet, mainly red meat. Current Decision only specifies lacto ovo vegetarian diet as the previous Decision, but adding that patients might consume fish occasionally. Vegetarians do not consume fish and there is even a term coined for people following mostly vegetarian diet, but consuming seafood as well – pescatarian diet. Previous Decision did not mention halal and kosher diets at all.

Municipal Civil Court in Zagreb decided in February 2023 in a case[78] partially related to Article 9 of European Convention. The applicant of Muslim religion, while being incarcerated has been denied diet according to his religious beliefs and obligations. While explaining the verdict, the Court mentioned European Court of Human Rights case law, but not Article 9 and cases concerning prison food. Apart from usual diets, prison in Zagreb only serves vegetarian diet and special diets concerning specific health issues. Prison does not serve any special diet concerning members of any specific religion or a vegan diet. Prison administration offered a vegetarian diet to applicant, which he did not accept. Nevertheless, it is doubtful if vegetarian diet is prepared on lard, because Court explicitly accepted that all prison food has similar taste, due to identical food preparation (???) and added spices. According to Act on Serving Prison Sentences[79], Article 78, inmates will receive diet consistent with their religious and cultural demand pursuant to penitentiary possibilities. Inmates are also allowed to purchase alimentary products within penitentiary canteen if it is not possible to fulfil inmates' demands to avoid certain food. Therefore, inmates with special demands are in a financially worse situation then other inmates. In addition, we need to bear in mind that it might be easier for a penitentiary to declare not being able to serve special diet than preparing it. The Court affirmed that inmate sometimes received food with pork meat or prepared on lard. That food was exchanged sometimes with appropriate food, but sometimes he received nothing to eat at all. The Court went through inmate's invoices from penitentiary canteen noticing that he was buying Coke, mineral water and chewing gums that are not necessary alimentary products. In addition the Court declared buying fresh fruit and vegetables as being above inmate's dietary standard, and noticed the fact that he was being offered vegetarian meal (even though he is not a vegetarian). Therefore, the Court concluded that

[78] Business number: 1 Pn-3205/2015-116.

[79] Act on Serving Prison Sentences, Official Gazette No. 14/2021.

there was no infringement of Article 78. We have to point out that the Court did not mention specific ECtHR case law (*Jakóbski v. Poland* (2010) Application no. 18429/06), which guarantees serving meals according to inmate's religious dietary obligations. Not eating pork meat is definitely a precondition for practising Islam and consequently inmate's right in Article 9 was definitely violated. Professor of Catholic Theology Raguž reminds that according to Bible God gave every seed-bearing plant and every tree that has fruit with seed in it for humans to eat (Gen. 1, 29) and eating meat for Christians is just a temporary and not a final solution. Intrinsically spiritual Christian life means to eat less meat.[80]

7. CONCLUSION

The plant-based diet recommended by European Union is not a vegan diet. Plant-based diet does not necessarily exclude meat but calls for more dishes based on plants and focuses on health benefits. The Green Deal does not prohibit meat and dairy consumption, but recommends consumer's shifts in daily dietary habits.

Religious beliefs guaranteed by the Convention are usually protected, but let us not forget that it is not only very difficult not to be considered member of a religion any more, but it is also questionable are all religious dogmas or beliefs equally held by all its members? Is it a prerequisite for Christians to attend Church each Sunday (at least), pray daily and observe al other regulations to be suitable for calling themselves Christians? The same could be said for Muslims or Jews not fulfilling their religious duties. Moreover, do Courts need to accept them as being religious if they are not fulfilling their religious obligations or can Courts deny them protection deciding that they are not religious? Religious beliefs are protected and nobody scrutinizes applicants, submitting a complaint that their religious rights are violated, if they are fulfilling all their religious duties, or not. Nevertheless, other beliefs are checked for their cogency, seriousness, cohesion and importance. That is why vegetarianism in some case did not qualify as a protected belief. We could argue that there is no worldwide held conclusion what always constitute vegetarianism and/or veganism. Since nobody checks religious believers fulfilling their obligations, holders of other non-religious beliefs should not be scrutinized for each decision or behaviour that does not follow mainstream line of their belief. How different situation is a vegan eating piece of cheese when travelling, eating in a non-vegan fast food restaurants (unacceptable for many vegans), eating a cake not checking if all ingredients are vegan, etc. to a Christian, Muslim or Jew not praying, having an extramarital affair, eating forbidden food or not fasting? Are

[80] Raguž, I., *Jesti meso?,* [https://www.svjetlorijeci.ba/kolumne/jesti-meso], Accessed 5 March 2023.

believers following all their official Church positions not only on moral questions, but on everyday practices as well? Other belief system such as, for instance, Marxism or pacifism are well known. Nevertheless, do all adherents of these systems think the same about each question?

Very often, there is a misconception that vegan diet is not a healthy one, especially for children and some other groups of people. British Dietetic Association (BDA)[81] confirms that "… well-planed vegan diet can support healthy living in people of all ages … balanced vegan diet can be enjoyed by children and adults, including during pregnancy and breastfeeding, if the nutritional intake is well-planned."[82]

Whether we are aware of them or not, certain aspects of discrimination do exist. It is debatable if discrimination is only the situation where vegans have nothing to eat at all, or is it discrimination if vegan variety of food options are significantly less than food options offered to non-vegans?[83]

"It is clear, however, that State authorities will interpret Article 9 right to freedom of conscience narrowly (even if the Court has ruled against them previously) and that applications from prisoners will continue to be made to the Court."[84]

REFERENCES

BOOKS AND ARTICLES

1. Alvim, N., *The Protection of Vegans in Portugal: Law and Progress,* in: Rowley, J.; Prisco, C. (eds.), Law and Veganism, Lexington Books, Lanham, 2022, pp. 107 - 120
2. Bryant, C. J., *Culture, meat, and cultured meat,* Journal of Animal Science, Vol. 98, No. 8, 2020. pp. 1 – 7
3. Casamitjana, J., *The Confirmation of Ethical Veganism as a Protected Philosophical Belief in Great Britain: A Personal Account of Triumph,* in: Rowley, J., Prisco, C. (eds.), Law and Veganism, Lexington Books, Lanham, 2022, pp. 245 - 258

---

81 BDA, founded in 1936, is the professional association and trade union for dietitians in Great Britain and Northern Ireland. It is the nation's largest organisation of food and nutrition professional with over 9,000 members.

82 *British Dietetic Association confirms well-planned vegan diets can support healthy living in people of all ages,*
[https://www.bda.uk.com/resource/british-dietetic-association-confirms-well-planned-vegan-diets-can-support-healthy-living-in-people-of-all-ages.html?fbclid=IwAR2uAp1_S6e42lkk_pA_5Yt8PMg_H4A_rR9ipMBr55Ypezj8MFJklTNIpQk], Accessed 31 March 2023.

83 Horta, O., *Discrimination Against Vegans,* Res Publica, Vol. 24, 2018, p. 367.

84 Rowley, J., *The Right to Vegan Food in Prison in Europe* – paper presented at the Seventh Austrian Animal Rights Congress and CARE Vienna, November 2017, p. 8.

4. Cranmer, F., Sandberg R., *A Critique of the Decision in Conisbee that Vegetarianism Is Not 'A Belief',* Ecclesiactical Law Society, Vol. 22, 2020, pp. 36 – 48
5. Deckers, J., *In Defence of the Vegan Project*, Bioethical Inquiry, Vol. 10, 2013, pp. 187 – 195
6. Dutkiewicz, J., Dickstein, J., *The Ism in Veganism: The Case for a Minimal Practice-based Definition,* Food Ethics, Vol. 6, No. 2, 2021, pp. 1 - 19
7. Elliot-Archer, J., *Treatment for Disordered Eating in England: Balancing Vegan Rights and Treatment Requirements,* in: Rowley, J., Prisco, C. (eds.), Law and Veganism, Lexington Books, Lanham, 2022, pp. 221 – 243
8. *Farm to Fork Strategy: For a fair, healthy and environmentally-friendly food system*, European Union, 2020
9. *Guide on Article 9 of the European Convention on Human Rights: Freedom of thought, conscience and religion,* Council of Europe/European Court of Human Rights, Strasbourg, 2022
10. Horta, O., *Discrimination Against Vegans,* Res Publica, Vol. 24, 2018, pp. 359 - 373
11. Kortetmäki, T., Oksanen, M., *Is there a convincing case for climate veganism?,* Agriculture and Human Values, Vol. 38, 2021, pp. 729 – 740
12. Kubitová, A., *Detention of vegetarians, Vegans, and Persons Eating Halal or Kosher Food: Should We Recognise the Right to Follow Special Diets?,* Common Law review, Vol 15, 2018, pp. 63 - 65
13. Laffineur-Pauchet, M., *The Growth of Veganism in France: Law and Current Challenges,* in: Rowley, J.; Prisco, C. (eds.), Law and Veganism, Lexington Books, Lanham, 2022, pp. 143 – 168
14. McKeown, P., Dunn, R. A., *A 'Life-Style Choice' or a Philosophical Belief?: The Argument for Veganism and Vegetarianism to be a Protected Philosophical Belief and the Position in England and Wales,* Liverpool Law Review, Vol. 42, 2021, pp. 207 – 241
15. Müller-Amenitsch, R., *Vegan Legal Issues in Germany,* in: Rowley, J., Prisco, C. (eds.), Law and Veganism, Lexington Books, Lanham, 2022, pp. 71 – 89
16. Offer, K., Barker, R., *Should Ethical Vegans Have a Beef with the Definition of Religion?,* Victoria University Law and Justice Journal, Vol. 9, No. 1, College of Law and Justice, Melbourne, 2017, pp. 17 - 30
17. O'Sullivan Garcia, M., *Vegetarian and vegan rights in Europe: chickening out or egging them on?,* Derecho Animal, Barcelona, Vol. 11, No. 4, 2020, pp. 71 - 78
18. Overton, M., *Veganism as a Protected Belief under United Kingdom Human Rights and Equality Law,* in: Rowley, J., Prisco, C. (eds.), Law and Veganism, Lexington Books, Lanham, 2022, pp. 169 – 196
19. Poore, J., Nemecek, T., *Reducing food's environmental impacts through producers and consumers,* Science, 360, 2018, pp. 987 - 992
20. Prisco, C., *Veganism and Law in Italy,* in: Rowley, J., Prisco, C. (eds.), Law and Veganism, Lexington Books, Lanham, 2022, pp. 91 - 105
21. Renucci, J. F., *Article 9 of the European Convention on Human Rights – Freedom of thought, conscience and religion,* Human Rights Files no. 20, Council of Europe, Strasbourg, 2005
22. *Ripened by human determination – 70 years of The Vegan Society,* The Vegan Society, 2014

23. Rowley, J., Bowles, E., *Veganism, Law and Education in the United Kingdom,* in: Rowley, J., Prisco, C. (eds.), Law and Veganism, Lexington Books, Lanham, 2022, pp. 197 – 219
24. Rowley, J., *Towards a Vegan Jurisprudence,* Lexington Books, Lanham, 2020
25. Rowley, J., *The Right to Vegan Food in Prison in Europe* – paper presented at the Seventh Austrian Animal Rights Congress and CARE Vienna, November 2017
26. Wills, J., *Animal Agriculture, the Right to Food and Vegan Dietary,* in: Rowley, J., Prisco, C. (eds.), Law and Veganism, Lexington Books, Lanham, 2022, pp. 121 – 142

ECHR

1. European Convention for the Protection of Human Rights and Fundamental Freedoms, as amended by Protocols Nos. 11 and 14, 4 November 1950, ETS 5

DECISIONS

1. European Court of Human Rights*, Campbell and Cosans v United Kingdom (1982)* Application nos. 7511/76 and 7743/76
2. European Court of Human Rights*, C. D. and Others v Greece (2013)* Application no. 33441/10
3. European Court of Human Rights*, C. W. v United Kingdom (1993)* Application no. 18187/91
4. European Court of Human Rights*, Erlich and Castro v Romania (2020)* Application nos. 23735/16 and 23740/16
5. European Court of Human Rights*, Jakóbski v Poland (2010)* Application no. 18429/06
6. European Court of Human Rights*, Kokkinakis v Greece (1993)* Application no. 14307/88
7. European Court of Human Rights*, Neagu v Romania (2020)* Application no. 21969/15
8. European Court of Human Rights*, Saran v Romania (2020)* Application no. 65993/16
9. European Court of Human Rights*, Vartic v Romania no. 2 (2014)* Application no. 14150/08
10. European Court of Human Rights*, X. v United Kingdom (1976)* Application no. 5947/72

LIST OF NATIONAL REGULATIONS, ACTS AND COURT DECISIONS

1. *Act on Serving Prison Sentences,* Official Gazette No. 14/2021
2. *Decision on Patients' Diet Standard in Hospitals,* Official Gazette No. 59/2015
3. *Decision on Patients' Diet Standard in Hospitals,* Official Gazette No. 121/2007
4. *Employment Tribunals, case number 3331129/2018*
5. *Employment Tribunals case number 3335357/2018*
6. *Equality Act 2010, 2010 Chapter 15*
7. *Lei n.º 11/2017 de 17 de abril – Estabelece a obrigatoriedade de existência de opção vegetariana nas ementas das cantinas e refeitórios públicos,* Diário da República n.º 75/2017, Série I de 2017-04-17

8. *Municipal Court of Zagreb, business number: 1 Pn-3205/2015-2016*
9. *Ordinance on Conditions and Modalities in Fulfilling Rights of Covering Costs of Students' Meals,* Official Gazette Nos. 120/2013, 140/2014, 113/2022
10. *Romanian lege nr. 254/2013*

WEBSITE REFERENCES

1. Basic Law for the Federal Republic of Germany [https://www.gesetze-im-internet.de/englisch_gg/englisch_gg.html#p0026], Accessed 5 April 2023
2. British Dietetic Association confirms well-planed vegan diets can support healthy living in people of all ages [https://www.bda.uk.com/resource/british-dietetic-association-confirms-well-planned-vegan-diets-can-support-healthy-living-in-people-of-all-ages.html?fbclid=IwAR2uAp1_S6e42lkk_pA_5Yt8PMg_H4A_rR9ipMBr55Ypezj8MFJklTNIpQk], Accessed 31 March 2023
3. Cardoso, M. D., *Quase10% das refeições servidas nas universidades são vegetarianas,* [https://www.publico.pt/2018/02/13/sociedade/noticia/quase-10-das-refeicoes-servidas-nas-universidades-sao-vegetarianas-1802926], Accessed 17 March 2023
4. Code of Canon Law, Bok I. General Norms, Title I. Ecclesiastical Laws (Cann. 7 – 22), [https://www.vatican.va/archive/cod-iuris-canonici/eng/documents/cic_lib1-cann7-22_en.html], Accessed 22 March 2023
5. *Constitution of the Portuguese Republic, Seventh Revision (2005), article 41,* [https://www.parlamento.pt/sites/EN/Parliament/Documents/Constitution7th.pdf], Accessed 5 April 2023
6. Gaskill, A. L., *Do Muslims Get Excommunictaed?* [https://www.patheos.com/answers/do-muslims-get-excommunicated], Accessed 2 April 2023
7. *Grainger plc & ors v Nicholson – the Employment Appeal Tribunal clarifies what constitutes a 'philosophical belief'* [https://redmans.co.uk/insights/grainger-plc-ors-v-nicholson-the-employment-appeal-tribunal-clarifies-what-constitutes-a-philosophical-belief/], Accessed 6 April 2023
8. Guilbeau, A., *Excommunication: What is it and does the Church still do it?* [https://aleteia.org/2018/03/20/excommunication-what-is-it-and-does-the-church-still-do-it], Accessed 22 March 2023
9. Huet, N., *France's new climate law has just been approved. So why are activists so unimpressed?* [https://www.euronews.com/green/2021/07/20/france-s-new-climate-law-has-just-been-approved-so-why-are-activists-so-unimpressed], Accessed 18 March 2023
10. *Judgement Regina v. Secretary of State for Education and Employment and others (Respondents) ex parte Williamson (Appellant) and others* [https://publications.parliament.uk/pa/ld200405/ldjudgmt/jd050224/will-1.htm], Accessed 6 April 2023
11. Kršul, D., *Ministarstvo konačno mijenja propise: studenti vegetarijanci u menzama više neće ostajati gladni*

[https://www.telegram.hr/zivot/ministarstvo-konacno-mijenja-propise-studenti-vegetarijanci-u-menzama-vise-nece-ostajati-gladni/], Accessed 31 March 2023

12. McGuckin, J. A., *The Encyclopaedia of Eastern Orthodox Christianity – Excommunication,* [https://azbyka.ru/otechnik/world/the-encyclopedia-of-eastern-orthodox-christianity/112], Accesed 2 April 2023
13. Opção vegetariana nas cantinas portuguesas: realidade ou intenção? Um estudo (2019) da avliação da lei № 11/2017., [https://www.avp.org.pt/opcao-vegetariana-estudo-avaliacao], Accessed 17 March 2023
14. Pariona, A., *Environmental Impact of Animal Agriculture* [https://www.worldatlas.com/articles/environmental-impact-of-animal-agriculture.html?fbclid=IwAR2ohiILhENFJQ0i09yPNaiOHYIaW_JDZ-fNmrdeiRbPiq_kXQnCOnnpI3o], Accessed 31 March 2023
15. Raguž, I. *Jesti meso?* [http://www.svjetlorijeci.ba/kolumne/jesti-meso], Accessed 5 March 2023
16. Ratzabi, H. *What Is Herem?* [https://www.myjewishlearning.com/article/herem/], Accessed 2 April 2023
17. Rowland, M. P. *The Most Effective Way To Save The Planet* [https://www.forbes.com/sites/michaelpellmanrowland/2018/06/12/save-the-planet/?fbclid=IwAR1MnJqvpPQcc9apgR_dps3QlBgXLWwHV9IrK-Ynor16qH0tf8TkEhnlZao&sh=27a15bd73c81], Accessed 31 March 2023
18. Schechter, S., Greenstone J. H., *Excommunication (Hebrew, "niddui," "ḥerem")* [https://www.jewishencyclopedia.com/articles/5933-excommunication], Accessed 2 April 2023
19. Simon, F., *EU Commission unveils 'European Green Deal': The key points,* [https://www.euractiv.com/section/energy-environment/news/eu-commission-unveils-european-green-deal-the-key-points/], Accessed 28 March 2023
20. *Vegetarian Society Investigates: Prison Food in England and Wales*, [https://vegsoc.org/lifestyle/vsi-prison-food-in-england-and-wales/], Accessed 13 March 2023
21. *120 000 vegetarianos – Número quadruplica em 10 anos*, [https://www.centrovegetariano.org/Article-620-Numero-vegetarianos-quadruplica-10-anos-Portugal.html], Accessed 17 March 2023

UDK 35(497.1:4-67EU):004
Original scientific paper

THE EUROPEAN PRINCIPLES OF PUBLIC ADMINISTRATION SERVICES DELIVERY FROM THE PERSPECTIVE OF DIGITALIZATION AND SIMPLIFICATION: NORMATIVE FRAMEWORK AND PRACTISE IN THE REPUBLIC OF SERBIA*

Zorica Vukašinović Radojičić, PhD, Full Professor
The University of Criminal Investigation and Police Studies,
Belgrade, Serbia
Ulica Cara Dušana 196, Belgrade, Serbia
zorica.vr@kpu.edu.rs

Dejan Vučetić, PhD, Full Professor
Law Faculty, University of Niš, Serbia
Univerzitetski trg 2, Niš, Serbia
dvucetic@prafak.ni.ac.rs

ABSTRACT

European Union principle of Public administration service delivery is a key principle underpinning the efficiency principle and simplification of administrative procedures. Serbian government has done a lot of efforts and made a progress in the last five years in the sphere of public services digitalization, through strategic, institutional, normative changes, but some weaknesses still remain in terms of realizing the full potential of the different strategies and legislation. The purpose of the paper is to elaborate the application of quality and efficient public service delivery through analysis of Serbian strategic and normative framework de lege ferenda, simplification of administration procedures, focusing to main concerns for effective implementation of general procedure legislation and applying consistent practice. In the Introduction

* The paper is the result of the realization of the Scientific Research Project entitled "Development of Institutional Capacities, Standards and Procedures for Fighting Organized Crime and Terrorism in Climate of International Integrations". The Project is financed by the Ministry of Education and Science of the Republic of Serbia (No 179045), and carried out by the Academy of Criminalistic and Police Studies in Belgrade (2011-/). The paper is also the result of research within the project "Responsibility in the Legal and Social Context", funded by the Faculty of Law, University of Niš, in the period 2021−2025.

authors emphasize the progressing importance of digitalization of public services, from the perspective of European Union principles. This part also addresses conceptual issues of efficiency and effectiveness for ensuring high quality of public service delivery. The second part reveals the analysis of Serbian normative and strategic framework towards reducing bureaucratic burdens, simplification of administrative procedures through one-stop-shops, coordinating and "connecting" procedures from the jurisdiction of one or more administrative organs or organizations in the way the they provide better access to public services across the country. This part contains analysis of general legal framework from the aspect of reducing bureaucratic burdens for citizens and business entities, by imposing the obligation for public authorities to provide the documents ex officio and use them in administrative procedures. The authors analyze the provisions of the General Administrative Procedure Act de lege ferenda and its weaknesses for effective implementation. In Conclusion authors will summarize results of research in the way to point out to contemporary tendencies regarding digitalization of public services and means of application of efficiency, transparency, accessibility, openness and quality of public services in practice. Dominant methods of scientific research are dogmatic, comparative, content analysis, analysis and synthesis.

Keywords: *administrative procedures, digitalization, efficiency, European administrative principles, Public services*

1. INTRODUCTION

The initiatives by European Union and its institutions strongly encourage constant changes in public administration systems of Member States. European administrative standards and values make up the unofficial Acquis, which is getting closer to becoming official, and together with other administrative standards, values, procedures, and institutions constitute the European Administrative Space – a basis for the conduct of the participants in the public life of the Member States.[1] Essential administrative law principles common to all EU countries remain the same - reliability and predictability (legal certainty); openness and transparency; accountability; efficiency and effectiveness.[2] The European Commission devotes special attention and further elaborates the standards for the reform of public administration. The principles use a combination of EU legislation and non-binding texts as benchmark references.

One of the main priorities of public administration is to deliver public services effectively and efficiently. National administrative laws reflect a balance between the traditional administrative values and increasing a concept of "citizens-oriented" public administration. Theoretically, two public administration doctrines that

---

1 Vukašinović Radojičić Z.; Čogurić V., *Convergence and symbiosis of public administration principles - International and European Perspective,* Bezbednost, Vol. 59, No. 2, Ministarstvo unutrašnjih poslova Republike Srbije, 2021, pp. 27-42.

2 SIGMA/OECD, *The Principles of Public Administration*, Paris, 2017, pp.63, [http://www.sigmaweb.org/publications/principles-public-administration.htm] Accessed 10 September 2021.

have substantial influence on public regulations - New Public Management Theory and the doctrine of Good Governance.

The Good Governance doctrine focuses on openness, transparency and participation of citizens.[3] While the terms good governance and good administration are often used as synonyms, the content of the two concepts is not the same. "Good governance is a broader concept describing how country institutions perform public affairs and manage public resources." [4] The principles of good governance that are most common in the practice of international or regional organisations include accountability, openness, transparency, efficiency, effectiveness, and participation.[5]

In contrast to the concept of good governance, the concept of 'good administration' refers exclusively to the acts and actions of public administration; however, it is not limited to complying with legal requirements – the principle of legality of administration and the rule of law, but also includes other standards of proper and good administrative practice. Good administration is a key policy objective underpinning the delivery of public service, enacted in legislation and applied consistently in practice. According to Article 41 of the Charter of Fundamental Rights of European Union ("right to good administration") "every person has the right to have his or her affairs handled impartially, fairly and within a reasonable time by the institution and bodies of the Union."[6] Key requirements concerning rights to good administration relate to following: a coherent legal framework exists limiting special regulations to a minimum; legal framework is effectively implemented in all state bodies; key principles of good administration are defined in legislation, such as legality, equity, equal treatment, proportionality, lawful exercise of discretion, openness and transparency, impartiality, due diligence, the right of hearing, to state the reasons for the decisions, consultations with civil society, fair balance between public interest and legitimate expectations of individual, repeal of administrative act. Those principles have been further elaborated in European Union documents and guidelines representing a framework for harmonization with national regulation.

---

3 Vukašinović, Z.; Vučetić, D., *Profesionalizacija javne uprave u Srbiji,* Kriminalističko-policijski univerzitet, Beograd, 2021, p. 211.

4 Jerinić, J. *et al.*, *Handbook for Implementing the Principles of Good Governance at the Local Level, Second revised and updated edition (Priručnik za sprovođenje principa dobrog upravljanja na lokalnom nivou, II dopunjeno i izmenjeno izdanje),* SKGO, Beograd, 2022, p. 31.

5 *Ibid.*

6 Charter of Fundamental Rights of European Union (2000) OJ C 364/1.

The New Public Management Theory entails the notion of efficiency and effectiveness of administrative proceedings, optimization, simplification and digitalization. The concept of efficiency arises within the New Public Management doctrine, emerging in the 1980s, which emphasizes the economic aspects of work of public administration, efficiency, strategic planning, managerial skills, management, and performance evaluation. The concept of efficiency assumes that 'the selected goals are achieved with optimal use of time, material and human resources.[7] Cost-effectiveness implies producing a specified amount of results at minimal costs. Effectiveness means choosing the right goals and pursuing them utilising the available resources. [8]

The efficiency principle is generally ensured through key instruments encompassing: optimisation of administrative proceedings, increased digitalisation and application of e-Government, data exchange by official duty, integration and optimisation of multiple procedures through a single administrative point (one-stop-shop). Effectiveness is about focusing on the objectives (values) of a particular community with the aim to protect the public interest. Unlike efficiency, which is quantitative, effectiveness is concerned with issues of qualitative nature. What is efficient is not always also effective. Effectiveness is the *ratio* of the targets set to the results achieved, and most often comprises three aspects – legal, economic, and social.

Reform processes towards digitalization at the European Union level and national administrative systems may be viewed in the context of simplification of administrative procedures through regulatory reform. From the European union perspective, reducing administrative burdens is an essential part of the Better Regulation programme in almost all European Union member states, especially in terms of procedure simplification and deregulation.[9] "Speaking of simplification and reduction of administrative burdens or costs, two types of measures aimed at rationalising administrative and other procedures and removing unnecessary elements in such procedures without changing in any way the extent of state supervision or public interest protection. …Rationalisation may, for example, be attained by applying principles of one-stop-shops and "let data circulate instead of the citizens."[10] It is based on the standard for removing administrative barriers, incorporated in

---

7 Jerinić, J. *et al.*, *Priručnik za sprovođenje principa …, op.cit.,* note, 4, p. 295.

8 *Ibid.*

9 European Commission, *Better regulation guidelines*, SWD (2021) 305 final, 2021 [https://commission.europa.eu/system/files/2021-11/swd2021_305_en.pdf] Accessed 30.03.2023.

10 Virant, G.; Kovač, P., *Reducing administrative burdens as part of the» better regulation «programme–the case of Slovenia,* Lex Localis-Journal of Local Self-Government, Vo. 8 No, 2010, pp. 369-390.

process of drafting and adopting decisions through Regulatory Impact Analysis.[11] In terms of simplification and modernization public services, quality regulation principles and standards have been recognized such as necessity, proportionality, subsidiarity, transparency, accountability, accessibility and simplicity. Removal of administrative burdens was furthered by implementing the Lisbon Strategy."[12] European regulatory framework on e-communication from 2002, has significantly accelerated digitalization, technological development and competitiveness of the single market on e-communication.[13]

Nevertheless, putting the needs of service users at the centre of the reform, simplifying the administrative procedures, and intensifying the development of e-government enable greater efficiency in public administration. The paper shall present the importance of public service delivery through digitalization and simplification administration procedures, in view of European principles and national administrative systems.

1.1. Public service delivery through perspective of efficiency and effectiveness - conceptual issues

The synthesis of European Union standards identified by its institutions and programs[14] constitutes a reference framework for assessing the degree of administrative systems development, which is revised over time and adapted to the conditions of the acceding countries complementing it with new elements. The framework set out in 1999[15] was amended and made more specific in 2014 and 2017, respec-

---

11 *Ibid.*, p. 384.

12 European Parliament, The Lisbon Strategy, 2009-2014 [https://www.europarl.europa.eu/meetdocs/2009_2014/documents/empl/dv/lisbonstrategybn_/lisbonstrategybn_en.pdf] Accessed 20 June 2022.

13 Council Directive 2002/21/EC on a common regulatory framework for electronic communications networks and services – Framework Directive (2002) OJ L108, p.33-50; Council Directive 2002/20/EC on the authorisation of electronic communications networks and services - Authorisation Directive (2002) OJ L108, p.21-32; Council Directive 2002/19/EC on access to, and interconnection of, electronic communications networks and associated facilities - Access Directive (2002) OJ L108, p.7-20; Council Directive 2002/22/EC on universal service and users' rights relating to electronic communications networks and services - Universal Service Directive (2002) OJ L108, p.51-77; Council Directive 2002/58/EC concerning the processing of personal data and the protection of privacy in the electronic communications sector -Directive on privacy and electronic communications (2002) OJ L108, pp. 37-47.

14 The most effective is SIGMA program - Support for Improvement in Governance and Management as a joint initiative of the OECD *and the* European Union.

15 SIGMA/OECD, *Control and Management System Baselines for European Union Membership*, Paris, 1999, [https://www.sigmaweb.org/publicationsdocuments/35007180.pdf] Accessed 20 June 2020.

tively, by The Principles of Public Administration.[16] The principles were complemented by a monitoring framework, making it possible to assess the state of affairs of public administration and the progress achieved.[17]

Main principles set out in the SIGMA documents[18] point to the course of administrative system development towards professionalisation and efficiency. "In a broader multidisciplinary sense, efficiency exist when the most important social goals and values in the work of the administration are achieved to the greatest possible extent". It is a question of the degree of achievement of well-chosen goals through the maximum use of available resources."[19] The principle of effectiveness implies that the procedure is regulated so as to ensure that the proceedings are conducted at the lowest possible cost to the party and other participants in the procedure, which includes obtaining data information *ex officio,* prescribing simple and clear application (request) forms, conducting the procedure in electronic form when relevant requirements are met. According to SIGMA document "effectiveness depends to a great extent on fulfilling customer expectations while respecting legal provisions. Effectiveness also entails ensuring equal access to public administration services and the efficient provision of these services saving citizens both money and time."[20]

The principle of Public administration service delivery is a key requirement underpinning the efficiency principle and simplification of administrative procedures. It is related to citizen-oriented public administration and the quality of accessibility of public services. Increasing customer expectations mean that effective and efficient public administration reform with a strengthened customer focus are increasingly essential in most countries. In this context, orientation towards clients – citizens and enterprises – contacts, seeking official data, adhering to rules of the administrative procedure, has been the main concern of administrative performance. Public service delivery encompasses: designed and applied policy for citizen-oriented administration, political commitment, vision and strategy, relevant strategic framework and consistently applied policy for administrative simplifica-

---

16 SIGMA/OECD, *The Principles of Public Administration,* Paris, 2017, [http://www.sigmaweb.org/publications/principles-public-administration.htm] Accessed 10 September 2021.

17 SIGMA/OECD, *Methodological Framework for the Principles of Public Administration*, Paris, 2017, (http://www.sigmaweb.org/publications/Methodological-Framework-for-the-Principles-of-Public-Administration-May-2019.pdf), Accessed 10 September 2021.

18 SIGMA/OECD*, The Principles of Public Administration…, op.cit.,* note 16, p. 64.

19 Vučetić, D., *"Is Serbian Administrative Procedure Red, Green, or Forever Amber?,* in: Kmieciak, Z. (ed.), Comparative legal studies - Contemporary Concepts of Administrative Procedure, Between Legalism and Pragmatism, Wydawnictwo Univerwersytetu Lodzkiego, Wolters Kluwer, 2023, pp. 163-178

20 SIGMA/OECD, *The Principles of Public Administration…,op.cit.,* note 16, p. 64.

tion, consistent legal framework effectively applied in practice and adequate institutional set-up. These standards should contain the following mechanisms for ensuring the quality of public service: regular monitoring od service delivery and analysis of user's needs; modernization to save the time spent by customers, the number of times physical presence is required and improving the ease of obtaining information and services; interoperability of registries and digital services to simplify procedures for citizens promoted through legal framework and technical preparedness; sharing good practices, setting out the standards of service delivery for main public services. [21]

Accessibility of public services, as an important element of public service delivery ensures territorial access for individuals and businesses, one-stop-shops/points covering a wide range of services available, communication of official matters through user-friendly electronic channels, official websites providing contact information, clear advice and guidance on accessing public services, as well as on right and obligations of users and public institutions providing services, service provision taking into account needs of special groups of customer (disabled persons, seniors, foreigners, families with children, etc.).[22] This principle has been elaborated in national regulations and practice.

Administrative procedure acts in European countries represent an important tool to |simplify administrative procedures and meet the needs and interests of citizens and business entities. "Administrative procedure is traditionally understood as a system of rules that primarily govern the administrative decision-making process."[23] *Stricto sensu,* administrative procedure means a set of rules that direct a process throughout an orderly succession of administrative actions or proceedings that lead to a binding, final administrative decision affecting individual rights.."[24] "Succinctly, today's administrative procedure is a central legal institution whose scope far exceeds its original function of merely channeling the issuance of administrative acts." [25] Basic principles of administrative procedure relate to legality principle, the principal of impartial administration, the equality principle and the

---

21 *Ibid.*

22 *Ibid.*

23 Barnes, J., *Towards a Contemporary Understanding of Administrative Procedure,* in: Kmieciak, Z. (ed.), Comparative legal studies - Contemporary Concepts of Administrative Procedure, Between Legalism and Pragmatism, Wydawnictwo Univerwersytetu Lodzkiego, Wolters Kluwer, 2023, pp. 21-40.

24 *Ibid*, p. 27.

25 Djerđa, D., *Stages in the evolution of the law on administrative procedures - from the first codification,* in: Kmieciak, Z., (ed.), Administrative Proceedings in the Habsburg Succession Countries, Wolters Kluwer, Lodz/Warszava, 2021, pp. 89-105.

proportionality principle.[26] [27] Some authors state that "solutions of Spanish and Austrian legal though have had the greatest impact on development of the administrative procedure law not only in Europe but also outside it. "[28] "We need to face up the fact that the obvious trend toward the law "streamlining" is sometimes at the cost of transparency and utility."[29] Some authors point out to collaboration vs. adversarialism - administrative procedures which are not based on a strict public-private division of responsibilities. "The collaborative model is defined more by the intense participation of a variety of actors – public and private - that do not necessarily represent antagonistic interests.."[30]

Most of the Eastern European countries adopted general administrative procedure acts during period of EU accession, influenced by principles of European Administrative Space, "which give rise to the different understanding of the role of public administration and a modern perception of its activities."[31]

Recent studies have indicated that digitalization of public services has been underpinned by simple and clear rules, digital communication, making automatic case handling possible, transverse coherence-uniform terms and reuse of data, safe and secure data handling, use of public infrastructure, preventing cheating and mistakes.[32]

2. SERBIAN ADMINISTRATIVE NORMATIVE AND STRATEGIC FRAMEWORK – REDUCING BUREAUCRATIC BURDENS?

Serbian government has done a lot of efforts and made a progress in the last five years in the sphere of public services digitalization, through strategic, institutional, normative changes, but some weaknesses still remain in terms of realizing the full potential of the different strategies and legislation. The overall objective behind the process of informatisation of government and digital transformation of the work processes is to increase user satisfaction with public services, reduce the admin-

---

26 Gram Mortensen, B.O., Waage, F., *"Trends in the in the Administrative Procedures of Denmark"*: Kmieciak, Z. (ed.), Comparative legal studies - Contemporary Concepts of Administrative Procedure, Between Legalism and Pragmatism, Wydawnictwo Univerwersytetu Lodzkiego, Wolters Kluwer, 2023, pp. 278-279.

27 Barnes, J., *"Towards a Contemporary Understanding…, op.cit.,* note 23, p. 37.

28 Kmieciak, Z., *In the Circle of the Austrian Codification Ideas*, in: Kmieciak, Z., (ed.), Administrative Proceedings in the Habsburg Succession Countries, Wolters Kluwer, Lodz/Warszava, 2021, pp. 23/37

29 *Ibid*, p. 35.

30 Barnes, J.,*"Towards a Contemporary Understanding…, op.cit.,* note 23, p. 37.

31 Djerđa, D., *Stages in the evolution of the law on administrative procedures…*, *op.cit.,* note 25, pp. 97-98.

32 Gram Mortensen, B.O., Waage, F., *op.cit.,* note 26, p. 280.

istrative burden for citizens and businesses, and improve public administration efficiency and national and cross-border interoperability.[33] The information and communication technologies assisted simplification of administrative procedures leads to rationalisation and restructuring of administration, reduced administration costs, and a more efficient exercise of citizens' and businesses' rights.

Digitalisation has become the strategic goal of the Serbian Government[34] in the field of public administration, and it essentially refers to the use of information and communication technologies means in all public administration activities.[35] The Office for Information Technology and e-Government has been established as a Government service responsible for designing, harmonising and developing the electronic government system of public administration authorities and Government services and providing technical assistance to all public authorities in the development and implementation of electronic government.[36] Regarding institutional framework, other state authorities have also significant competences for developing e-government (Ministry for public administration and local self-government, Public policies Secretariat, other ministries and state administration authorities, local self-government units, etc..).

Notably, in accordance with Serbian Public Administration Reform Strategy,[37] key strategic objective is increasing efficiency of public service delivery. Main goal is to respond to citizen's and business's needs and increase their satisfaction. As regards, European Commission monitoring reports indicate that citizen's perception of the

---

33 Vukašinović Radojičić, Z., *et al., Challenges of applying advanced information technologies and the public administration reform in the Republic of Serbia (Izazovi primene savremenih informacionih tehnologija i reforma javne uprave u Republici Srbiji)*, 32. Susret Kopaoničke škole prirodnog prava, Pravni život, 2019, pp. 285-297.

34 Ministry of Public Administration and Local Self-Government of the Republic of Serbia, E-Government Development Programme of the Republic of Serbia for the period 2019-2022 and Action Plan for its implementation [http://mduls.gov.rs/wp-content/uploads/Program-razvoja-e-upravezaperiod-od-2019-do-2022.pdf] Accessed 20 September 2020; The Draft Public Administration Reform Strategy for the period 2021-2030 [http://mduls.gov.rs/wp-content/uploads/Predlog-strategije-reforme-javne-uprave-u-Republici-Srbiji-za-period-2021-2030..docx] Accessed 20 December 2022; The Draft Action Plan for the period 2021-2025 in the Republic of Serbia [http://mduls.gov.rs/wp-content/uploads/Predlog-akcionog-plana-za-period-2021-2025..xlsx] Accessed 20 December 2021.

35 Vučetić, D., General Administrative Procedure Act and information technology improvements in Serbian public administration. *Collected Papers from the international scientific conference 'Law and Multidisciplinarity' („Pravo i multidisciplinarnost"),* Law School, 2020, Niš, pp. 3-17.

36 Regulation establishing the Office for Information Technologies and Electronic Government, Official Gazette No. 73/2017, 8/2019.

37 Serbian Public Administration Reform Strategy for the period 2021-2030, Official gazette No. 42/2021, 9-2022.

efficiency of administrative procedures in Serbian public institutions has increased remarkably (from 39% to 64%) since 2017.[38]

With the Strategy for the Development of Electronic Government in the Republic of Serbia,[39] the Strategy for the Development of Electronic Communications in the Republic of Serbia for 2010-2020,[40] and the Information Society and Information Safety Development Strategy for 2021-2026,[41] the main directions and goals were set for the successful development of electronic communications and ensuring a more favourable position in the global economy. Key development goals concerning e-government relate to finalising the institutional and legal frameworks, establishing functional interoperability, setting up basic e-government registers, developing new services tailored to match user needs, and increasing knowledge not only in public administration employees but also in citizens.[42] Reform processes towards digitalization have been also implemented through E-government Program[43] and standards for removing administrative barriers, incorporated in the process of drafting and adopting decisions through Regulatory Impact Analysis.[44] Administrative capacities have been constantly and effectively monitored and accessed by the European Commission and its programs in the context of future enlargement.

2.1. Accomplishments of the general administrative procedure act: increasing digitalization of public services

Traditionally, the Serbian administrative procedure has both protective role, based on the rule of law principle and full transparency, predictability (legitimate expectations) and effectiveness of administrative procedures ("the green light" model).[45]

---

38 SIGMA, OECD, *Monitoring Report, The principles of Public Administration*, Serbia, 2021, [https://www.sigmaweb.org/publications/Monitoring-Report-2021-Serbia.pdf] Accessed 12 December 2022, p. 114.

39 Strategy for the Development of Electronic Government in the Republic of Serbia for the period 2015-2018, Official Gazette No. 107/2015.

40 Strategy for the Development of Electronic Communications in the Republic of Serbia for 2010-2020, Official Gazette No. 68/2010.

41 The Information Society and Information Safety Development Strategy for 2021-2026, Official Gazette No. 86/2021.

42 Strategy for the Development of Electronic Government in the Republic of Serbia for the period 2015-2018, Official Gazette No. 107/2015.

43 Serbian E-government development program 2020-2022, Official gazette No. 85/2020.

44 Milovanović D.; Nenadić, N.; Todorić, B., *Study on improvement regulatory process in the Republic of Serbia* (Студија о унапређењу законодавног процеса у Републици Србији), Belgrade, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), 2012, p. 271.

45 Vučetić, D., *Is Serbian Administrative Procedure…, op.cit.*, note 19, p. 177.

The Austrian administrative procedure law codification has had a strong influence on the grounds of Serbian administrative procedure.[46] Likewise continental systems of administrative law, according to the Serbian general administrative procedure act,[47] administrative procedure is a set of rules applied by state bodies and organizations, bodies and organizations of provincial autonomy and local self-government units, institutions, public enterprises, special bodies which perform regulatory function and legal and natural persons entrusted with public powers when acting in administrative matters.[48]

Similarly to other European countries (Poland, Croatia, Slovenia, Check Republic, Slovakia, etc..) General administrative procedure act states key principles of administrative procedures preserving characteristics of Austrian tradition of administrative procedure law: the principle of legality and predictability, the principle of proportionality, the principle of protection of the rights of the parties and the exercise of public interest, the principle of assistance to a party, the principle of the efficiency and effectiveness of the proceedings, the principle of truth and free assessment of evidence, right to submit pleadings, principle of independence, the right of appeal and objection, the principle of validity of the decision and the principle of access to information and data protection. Notably, administrative procedural rules are fully harmonized with principles and standards od "European administrative space".

Main goal of the Serbian administrative procedural legislation is to shorten administrative procedure, to extend protection of the parties to the provision of public services, to regulate the basics of administrative contracts, to protect the parties' rights in broad areas governed by special administrative procedures. "The most significant accomplishment of General Administrative Procedure Act (which exceeds legal effects *sensu stricto)* is the full implementation of digitalization in every possible area of administrative decision making. It has enhanced the efficiency and effectiveness of administrative proceedings to a completely new level and significantly reduced the costs for citizens and even more for entrepreneurs."[49] "The Act has struck a good balance between the demands of the EU regulation, the

---

46 Vučetić, D., *Stages in the evolution of the law on administrative procedures - from the first codification,* in: Kmieciak, Z., (ed.), Administrative Proceedings in the Habsburg Succession Countries, Wolters Kluwer, Lodz-Warszava, 2021, pp. 181-198.

47 Art. 1 of the General Administrative procedure act, Official gazette No. 18/2016, 95/2018, 2/2023.

48 According to Article 2 of the Law administrative matter is defined as an individual situation in which an authority directly applying the laws or regulations legally or factually influences a party's position by issuing administrative acts, guarantee acts, concluding administrative contracts, undertaking administrative actions and providing public services. It includes a wide range of almost all administrative activities.

49 Vučetić, D., *Stages in the evolution…*, note 46, p. 194.

adaptation to the Good Governance doctrine and the successful implementation of the ICT solutions into the administrative decision making."[50]

With the General Administrative Procedure Act,[51] specifically the provisions of articles 9, 102, 103 and 207, grounds were set for developing the e-government information system for the exchange of data *ex officio* and removing a major burden for citizens and businesses, which, with these provisions' entry into force, ceased to be obliged to provide, as proof for their rights, the documents already contained in the public administration bodies' and organisations' records. These are the crucial provisions that have contributed to the modernization of Serbian administrative procedure.[52] The provisions of these articles were subsequently elaborated in a series of laws and regulations.[53]

Under the provisions of paragraphs 3 and 4 of Article 9, the competent authority has an *ex officio* obligation to inspect, following the law, the data concerning the facts relevant to decision making that are kept in the official records, to acquire and process them, and is allowed to request from the party only the data essential for its identification and the documents acknowledging the facts on which no official records are kept.

In accordance with Article 9, the procedure is conducted without delay and at the lowest possible cost to the party and the other participant in the procedure, ensuring that all the evidence necessary for the proper and complete determination of facts is presented. The principle of efficiency has been also underpinned by the possibility of using videoconference tools for oral hearings if the authority and parties have adequate technical capacities and making decisions in electronic form.[54] This principle has been further elaborated by articles 102 and 103 of the Act. According to paragraph 2 of Article 102, the party has no obligation to acquire the evidence capable of being collected by the competent authority itself or the certificates or other documents in respect of which the authorities have no issu-

---

50 *Ibid.*

51 General Administrative Procedure Act, Official Gazette of RS No. 18/2016, 95/2018 – authentic interpretation.

52 Vučetić, D., *Stages in the evolution…, op.cit.,* note 46, p. 191.

53 Rulebook on the ways in which public authorities inspect, acquire, process and provide, or deliver from the electronic registers the data concerning the officially recorded facts that are necessary for the decision in the administrative proceedings, Official Gazette No. 57/2019; Regulation governing the acquisition and provision of data concerning the facts recorded in the official records and registers, Official Gazette No. 56/2017; Regulation specifying the conditions for establishing the e-government, Official Gazette No. 104/2018; The Act on Electronic Document, Electronic Identification and Trust Services in Electronic Transactions, Official Gazette No. 94/2017.

54 Art. 111 of the General Administrative Procedure Act, Official gazette No. 18/2016, 95/2018, 2/2023.

ing obligation. In addition to that, article 103 of the Act mandates the competent authorities to *ex officio* inspect, acquire and process data concerning the facts kept in the official records and necessary for decision making. If the official records are kept by another authority, the authority conducting the procedure must promptly request the relevant data, and the requested authority must provide them, free of charge within 15 days, unless stipulated otherwise. If the requested data can be obtained electronically, the requested authority delivers them as quickly as possible. In the procedure instituted at the party's request, the competent authority is allowed to inspect, acquire and process personal data concerning the facts kept in the official records if necessary for the decision, except when the party expressly states that it will acquire those data by itself.

Adhering to European Union standards and best practise in national administrative systems, in accordance with Article 42 of the General Administrative Procedure Act, a party may address the single administrative point (one-stop-shop) if the exercise of one or more of its rights requires action by one or more authorities. It represents the point of either physical or digital contact, through which public services are provided to citizens or businesses without changes in jurisdiction and internal relationships among the organisational units within the public administration authorities and organisations. The main functions of the single administrative point are: to instruct applicants on what relevant authorities require to act upon a request, to receive applications and submit them to responsible officers, and to notify applicants of the actions taken and the documents adopted. These functions can also be performed electronically, by mail or other appropriate means, with time limits for the decision starting from submitting an orderly request. This provision also extends to the work of local government units, whereby the establishment of the single administrative point, as per paragraph 2 of the said Article, affects neither the authorities' jurisdiction nor the party's right to approach the competent authority directly.

According to SIGMA Monitoring Report, the number of municipal one-stop-shops is increasing and providing better access to public services across the country.[55] The accessibility of public services has improved thanks to the gradual expansion of one-stop-shops. In 2020, 14 one-stop-shops were operating and the plan is to reach 24 in 2022.[56] However, in terms of realizing the full potential of the different strategies, some weaknesses remain. The degree of integration competent institutions and their outcomes service delivery remains unclear,[57] since different

[55] SIGMA, OECD, Monitoring Report…, *op.cit*., note 38, p. 109.

[56] *Ibid*, p. 120.

[57] *Ibid*, p. 112.

units deal with the projects related to service delivery – Public Policies Secretariat (simplification and the registry of procedures), Ministry of Public administration and Local self-government (integration of services in one-stop-shops), the Office for Information technologies and electronic government in charge of digital one-stop shops and simplification of digital services.

In this respect, making a series of organisational, functional, technological, normative, IT-related, and educational arrangements is necessary. Public servants employed in the unit for communication with citizens (front office) should become 'personal officers', taking due care of citizens' or businesses' requests. They should be client-oriented, advising the citizens, responding to all their inquiries and resolving their concerns quickly and efficiently. To do so, they must possess expert knowledge of various fields, be well familiar with the work of the public administration and the rights and legal interests the citizens can realise within their administrative authority or organisation, and be capable of acting proactively. There is a demand for trained staff, for work in a dynamic environment, with a duty to keep up to date with relevant trends and meet citizens' and other users' needs.

Without The E-Government Act,[58] it would have been impossible to achieve fully-functional e-government since now, for the first time, we also have a systemic obligation for each subject of the state mechanism, particularly the administration, to apply modern technologies in all administrative procedures establishing relationships between the citizens and businesses and the public administration. The Act applies to all electronic activities taken by public authorities, organisations, or other holders of public authority, as well as to electronic communications of these subjects.[59] There are two significant areas that this Act regulates: electronic procedure and electronic communication, proceeding from the principle of efficiency in equipment management, the principle of e-government security and the prohibition of discrimination. Under The E-Government Act, the electronic administrative point is a web portal or other software solution allowing for the electronic administrative procedure of one or more public authorities to realise one or more rights to be conducted in one place. Also worth noting is that introducing the electronic reception office (with a document management system) enables a simple electronic exchange of data between different organisational units

58 The E-Government Act, Official Gazette of RS No. 27/2018.

59 Electronic administrative procedure can be defined as acting in administrative matters by electronic means. For the authorities to act electronically and citizens and businesses to exercise their respective rights in the like manner, the Act lays down specific requirements, which primarily include: authentication and authorisation of all types of users, authorities' obligations concerning communication in electronic administrative decision making (a term we will use to refer to electronic administrative procedure), electronic application and its receipt, electronic delivery and electronic delivery confirmation.

of the public administration system and the delivery of electronic services to citizens and businesses.

For further development in this area, the Register of Administrative Procedures Act has been adopted in 2021, foreseeing that the Register will cover all administrative procedures for citizens and businesses by 2025.[60] The legislator intended to make the procedures uniform and transparent to the greatest extent possible. Within the meaning of this Act, administrative procedure refers to the exercise of rights and obligations and legal interests of businesses and citizens for which purpose public authorities issue licences, permits, consents or approvals, decisions, various certificates, opinions, notices, records, extracts from the official records, and alike. In one place, the Register provides all public service users with information about the administrative procedures of their interest via the Internet, thus eliminating the need for them to visit physical office locations.[61]

The aim is to establish a publicly available electronic database of all administrative procedures to streamline the exercise of rights and fulfilment of obligations for businesses and citizens by providing publicly available, accurate and up-to-date information on the procedures managed by the administration.[62] It was made possible for businesses to initiate the procedure electronically, by submitting a digital request, which the competent authority, upon the receipt of the required documents, decides in the shortest time possible, issuing the electronic decision and delivering it to the applicant's electronic mailbox on the e-Government Portal. While, at this point, the Register contains more than 2600 procedures, there are 2582 procedures carried out by the state authorities and authorities of the Autonomous Province of Vojvodina that are currently available to the public.[63]

According to Article 7 of the Act, each procedure comprises the following elements as mandatory: the entity submitting a registration application with the Register, the authority responsible for conducting the procedure, the responsible data entry clerk, the supervisory body, information about parties, legal basis, purpose and description of the procedure, manner of initiation, time limits for initiation,

---

60 The Registry of Administrative Procedures Act, Official Gazette No. 44/2021.

61 The Act defines the principles for regulating and conducting administrative procedures, the authorities for adopting methodological rules governing administrative procedures, and the management, maintenance and content of the respective Register.

62 Vučetić D., Dimitrijević P., *Registration of administrative procedures – dilemmas in theory and consequences in practice (Registrovanje administrativnih postupaka – teorijske nedoumice i praktične posledice),* Pravna riječ, No. 64/2021, Banja Luka, 2021, pp. 77-95.

63 Vučetić D., Dimitrijević P., *Registration of administrative procedures…*, note 62, p.78, Public Policies Secretariat, Register of Administrative Procedures, (https://rap.euprava.gov.rs), Accessed on April 14 2023.

legal consequences of (not) acting within the stipulated time limits, application form, service price (fee, charge, etc.), other bodies participating in the procedure. Interestingly, some of these data are published on the E-Government Portal, by which practice the principle of openness of the administration is fully applied. These solutions result from applying good governance principles and concern "the economisation of administrative procedure law, having as the primary instrument the simplification of the administrative procedure."[64] It is suggested to align the solutions of the Administrative Procedures Register Act with the existing elements of the entire normative system.[65]

The efficiency principle within the meaning of this Act assumes that related and interdependent procedures are merged, if justified and possible, or conducted through a single administrative point, that is, through unified procedure, depending on the authority for administration, or abolished if there is no justification for their continued existence. In this respect, the procedure is regulated to allow for its administration at as low a cost to the party and the other participant in the procedure as possible, with the acquisition of data *ex officio* and carrying out of the procedure electronically when conditions for doing so are met.

A significant role is played by the Republic Public Policies Secretariat, which monitors procedural compliance and makes proposals to competent authorities for alignment with the Methodology. This practice entails appointing the administrators within the relevant authorities and notifying the Republic Secretariat thereof to be granted access to the Register. Data on the procedures are published on the E-Government Portal. The principle of responsibility is underpinning the efficiency principle, implying that the competent authority is required to institute proceedings for establishing the liability of authorized persons in case of non-compliance with the prescribed principles, methodology and implementation of administrative procedures.

The responsibility for the development of public services is still fragmented and some of the aspects remain uncovered. Despite of the good progress made in improving the enablers of digital government an analysis of a sample of services for citizens indicate that they are still highly bureaucratic and are at low level of digitalisation.[66]

In view of essential European principles, particular importance is attached to the e-Government Portal – a national webpage through which citizens can make re-

64 *Ibid*, p. 89.

65 *Ibid*, p. 90.

66 SIGMA, OECD, Monitoring Report…, *op.cit.*, note 38, p. 108.

quests, receive responses, and acquire documents. Additionally, the the Portal allows citizens to get informed about the list of services offered by the authorities, monitor the status of their case, pay fees, and exchange data through the Government Service Bus. Within the provision of E-government services on the E-Government Portal, the latter keeps the register of users of those services and the records of system access and service usage.

In the domain of e-government, the legislator specified the key concepts that constitute a precondition for service provision and electronic administration. These concepts include: unified e-government information and communication network, Government Service Bus, establishment and management of electronic registers and records and their data usage, data and documents protection in the process of their acquisition and transfer, setting up and management of a Meta register, email account of an authorised official, unique electronic mailbox, software solution, E-Government Portal and government operations on it, rights of users of e-government services, establishment and maintenance of web portals within e-government, renewals and accompanying licences, Open Data Portal, development and maintenance of the web presentation, physical data protection and storage of backup data, maintenance, repair and withdrawal of the work equipment, requirements for the establishment of e-government.

Open Data Portal is a central point in which data from administrative authorities and organisations are integrated and made available to citizens and the private sector. Each authority is required to publish the open data from its scope of powers on the Open Data Portal so that they can be easily searched and reused. Open Data Portal is managed and maintained by a competent authority, while the Government sets out detailed requirements regarding its establishment and operation, including the organisational and technical standards.[67]

Definitions of the above notions were given on the basis of the E-Government Act and its accompanying regulations, the most essential of which include: Regulation on electronic office management in public administration authorities,[68] Instruction on electronic business,[69] Regulation on acquiring and transferring data concerning the facts recorded in the official records[70] and the Instruction on its

---

67 Regulation on the operation of Open Data Portal, Official Gazette No. 104/2018.

68 Regulation on electronic office management in public administration authorities, Official Gazette No. 40/2010, 42/2017.

69 Instruction on electronic business, Official Gazette No. 102/2010.

70 Regulation on acquiring and transferring data concerning the facts recorded in the official records, Official Gazette No. 56/2017.

implementation, Regulation on the operation of Open Data Portal,[71] Regulation specifying the conditions for developing and maintaining public authorities' web presentations,[72] Regulation specifying the conditions for establishing electronic government,[73] Regulation on the management of Meta register, manner of approving, suspending and denying access to the Government Service Bus and modes of operation on the e-Government Portal,[74] Regulation on technical and organisational standards concerning the Unified information and communication network of e-government.

All those regulations have led to the creation of the system for electronic communication which is used in decision-making processes in different administrative procedures. While significant progress in the area of simplifying administrative procedures is evident,[75] major transformations in this respect are yet to come.

Harmonisation of regulations with the General Administrative Procedure Act continues, with ongoing training also being conducted in this field. After the amendments to the General Administrative Procedure Act, the E-Government Act, and other acts, the revision and harmonisation ensued of special laws governing administration in different areas (tax matters, state survey and cadastre, health, customs, etc.).[76] As previously noted, education in e-Government is needed at all levels, for both end users (citizens and the business sector) and public sector employees, particularly the decision-makers.

---

71 Regulation on the operation of Open Data Portal, Official Gazette No. 104/2018.

72 Regulation specifying the conditions for developing and maintaining public authorities' web presentations, Official Gazette No. 104/2018.

73 Regulation specifying the conditions for establishing electronic government, Official Gazette No. 104/2018.

74 Regulation on the management of Meta register, manner of approving, suspending and denying access to the Government Service Bus and modes of operation on the e-Government Portal, Official Gazette No. 04/2018.

75 Particularly in business registration, geodetic affairs, tax affairs, school enrolment, 'Baby, welcome to the world' and other areas designing new solutions (e.g. sick leaves and salary compensations for employees on a sick leave) and involving only electronic procedures.

76 Under the Central Population Register Act, adopted in 2019, the Central Population Register was set up as the crucial database enabling the integration of personal data of citizens of the Republic of Serbia, both domestic residents and foreigners exercising rights and obligations, in one place. These data must be available to the public administration to help it act on administrative matters less costly, more quickly, more efficiently and to the benefit of citizens and businesses. The primary purpose of the Register is twofold: the efficient management of the administrative and other procedures, that is, their administration with minimum expense and without delay, and the efficient management of the electronic population data records. The Central Population Register Act, Official Gazette No. 17/19.

3. CONCLUSION

The possibility to use modern technologies presents enormous potential for application in public administration and the public sector. The overall objective behind the process of informatisation of government is to increase user satisfaction with public services, reduce the administrative burden for citizens and businesses, and improve public administration quality and efficiency.

National administrative laws tend to maintain a balance between the traditional administrative values and "citizens-oriented" public administration. Two public administration doctrines - New Public Management Theory and the doctrine of Good Governance promote key administrative principles: openness, transparency, accountability, efficiency, participation. effectiveness of administrative proceedings, optimization, simplification and digitalization. Increasing customer expectations mean that effective and efficient public administration reform with a strengthened customer focus are increasingly essential in most countries.

Reform processes towards digitalization at the European Union level and national administrative systems may be viewed in the context of simplification of administrative procedures through regulatory reform. Better regulation includes removal of administrative barriers at the EU and national government levels. Main purpose of administrative procedure acts in European union member countries is to simplify administrative procedures and meet the needs and interests of citizens and business entities. At the European Union and national level, E-governance involves using information and communication technologies to improve the efficiency, effectiveness, participation, openness, transparency and quality of work of public administration. It can be employed in the domain of interactions between the public administration and citizens, between the public administration and the economy, and between different administrative authorities and organisations, or between the latter and other public authorities (interaction between the state and non-state administration, etc.). In practise, in national administrative systems, the efficiency principle is generally ensured through optimisation of administrative proceedings, increased digitalisation and application of e-Government, data exchange by official duty, integration and optimisation of multiple procedures through one-stop-shops.

Essential European Union administrative principles point to the course of administrative system development towards professionalisation, quality and efficiency of public services. One of the key European principles is Public administration service delivery related to citizen-oriented public administration and the quality of accessibility of public services. Public service delivery implies to designed and implemented policy for citizen-oriented administration, political commitment,

vision and strategy, relevant strategic framework and consistently applied policy for administrative simplification, consistent legal framework effectively applied in practice and adequate institutional set-up.

Serbian service delivery policy framework has received strong support from the Government in order to fulfil those requirements. Main achievement is the creation of a flexible public administration which will within reasionable time deliver public services and become client–oriented, considering vulnerable social groups and rights of minorities. Serbian authorities are committed to reducing administrative burdens by strengthening the program of process simplification and the approval of a register of administrative procedures is a step in this process. In the domain of e-government, the legislator specified the key principles of legality and predictability, the principle of proportionality, the principle of protection of the rights of the parties and the exercise of public interest, the principle of assistance to a party, the principle of the efficiency and effectiveness of the proceedings, the principle of truth and free assessment of evidence, right to submit pleadings, principle of independence, the right of appeal and objection, the principle of validity of the decision and the principle of access to information and data protection. It provides a basis for full and effective implementation of digitalization in all areas of administrative decision making. The most significant accomplishment of General Administrative Procedure Act should be full implementation of digitalization in every possible area of administrative decision making. Main goal is to enhance the efficiency and effectiveness of administrative proceedings to a completely new level and significantly reduced the costs for citizens and even more for entrepreneurs.

Serbian General Administrative Procedure Act has been harmonized with European administrative principles addressing crucial issues regarding e-government information system - the exchange of data *ex officio* and removing a major burden for citizens and businesses, integration of administrative procedures into a single administrative point (one-stop-shops), facilitating e-public services. The provisions of the Act were subsequently elaborated in a series of laws and regulations. The implementation of the robust general legal framework established with the General Administrative Procedure Act is still progressing.

Under The E-Government Act, fully-functional e-government has been established, introducing a systemic obligation for each subject of the state mechanism, particularly the administration, to apply modern technologies in all administrative procedures establishing relationships between the citizens and businesses and the public administration. Particular importance is attached to the e-Government

Portal – a national webpage through which citizens can make requests, receive responses, and acquire documents.

Harmonisation of regulations with the General Administrative Procedure Act continues, with ongoing training also being conducted in this field. For further development, under the Register of Administrative Procedures Act, a Register has been established covering all administrative procedures for citizens and businesses. The intention of the Act is to make the procedures uniform and transparent to the greatest extent possible.

The General Administrative Procedure Act cannot be implemented without amending numerous laws that regulate different areas of social life. As previously noted, education in e-Government is needed at all levels, for both end users (citizens and the business sector) and public sector employees, particularly the decision-makers. However, the responsibility for the development of public services is still fragmented and some of the aspects remain uncovered. Despite of the good progress made in improving the enablers of digital government an analysis of a sample of services for citizens indicate that they are still highly bureaucratic and are at low level of digitalisation. While significant progress in the area of e-government and simplifying administrative procedures is evident, major transformations in this respect are yet to come.

REFERENCES

BOOK AND ARTICLES

1. Barnes, J., *"Towards a Contemporary Understanding of Administrative Procedure",* in: Kmieciak, Z. (ed.), Comparative legal studies - Contemporary Concepts of Administrative Procedure, Between Legalism and Pragmatism, Wydawnictwo Univerwersytetu Lodzkiego, Wolters Kluwer, 2023, pp. 21-40
2. Djerđa, D., *Stages in the evolution of the law on administrative procedures - from the first codification,* in: Kmieciak, Z., (ed.), Administrative Proceedings in the Habsburg Succession Countries, Wolters Kluwer, Lodz-Warszava, 2021, pp. 89-105
3. Gram Mortensen, B.O.; Waage, F., *"Trends in the in the Administrative Procedures of Denmark"*: Kmieciak, Z. (ed.), Comparative legal studies - Contemporary Concepts of Administrative Procedure, Between Legalism and Pragmatism, Wydawnictwo Univerwersytetu Lodzkiego, Wolters Kluwer, 2023, pp. 278-279
4. Jerinić, J.; Vučetić, D.; Stanković, M., *Handbook for Implementing the Principles of Good Governance at the Local Level, Second revised and updated edition (Priručnik za sprovođenje principa dobrog upravljanja na lokalnom nivou, II dopunjeno i izmenjeno izdanje),* SKGO, Beograd, 2022

5. Kmieciak, Z., *In the Circle of the Austrian Codification Ideas*, in: Kmieciak, Z., (ed.), Administrative Proceedings in the Habsburg Succession Countries, Wolters Kluwer, Lodz-Warszava, 2021, pp. 23/37
6. Milovanović D.; Nenadić, N.; Todorić, B., *Study on improvement regulatory process in the Republic of Serbia* (Студија *о* унапређењу законодавног процеса *у* Републици Србији*)*, Belgrade, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), 2012, p. 271
7. Virant, G.; Kovač, P., *Reducing administrative burdens as part of the» better regulation «programme–the case of Slovenia,* Lex Localis-Journal of Local Self-Government, Vol. 8 No. 4, 2010, pp. 369-390
8. Vučetić, D., *General Administrative Procedure Act and information technology improvements in Serbian public administration*, Collected Papers from the international scientific conference 'Law and Multidisciplinarity' („Pravo i multidisciplinarnost"), Law School, 2020, Niš, pp. 3-17
9. Vučetić, D., *"Is Serbian Administrative Procedure Red, Green, or Forever Amber?,* in: Kmieciak, Z. (ed.), Comparative legal studies - Contemporary Concepts of Administrative Procedure, Between Legalism and Pragmatism, Wydawnictwo Univerwersytetu Lodzkiego, Wolters Kluwer, 2023, pp. 163-178
10. Vučetić, D., *Stages in the evolution of the law on administrative procedures - from the first codification,* in: Kmieciak, Z., (ed.), Administrative Proceedings in the Habsburg Succession Countries, Wolters Kluwer, Lodz-Warszava, 2021, p.p. 181-198
11. Vučetić D.; Dimitrijević P., *Registration of administrative procedures – dilemmas in theory and consequences in practice (Registrovanje administrativnih postupaka – teorijske nedoumice i praktične posledice),* Pravna riječ, No. 64/2021, Banja Luka, 2021, pp. 77-95
12. Vukašinović Radojičić, Z.; Marković, N., Challenges of applying advanced information technologies and the public administration reform in the Republic of Serbia (Izazovi primene savremenih informacionih tehnologija i reforma javne uprave u Republici Srbiji), *32. Susret Kopaoničke* škole *prirodnog prava, Pravni* život*,* 2019, pp. 285-297
13. Vukašinović Radojičić Z.; Čogurić V., *Convergence and symbiosis of public administration principles - International and European Perspective,* Bezbednost, Vol. 59, No. 2, Ministarstvo unutrašnjih poslova Republike Srbije, 2021, pp. 27-42
14. Vukašinović, Z.; Vučetić, D., *Profesionalizacija javne uprave u Srbiji,* Kriminalističko-policijski univerzitet, Beograd, 2021, p. 211

EU LAW

1. Charter of Fundamental Rights of European Union (2000) OJ C 364/1
2. Council Directive 2002/21/EC on a common regulatory framework for electronic communications networks and services – Framework Directive (2002) OJ L108
3. Council Directive 2002/20/EC on the authorisation of electronic communications networks and services - Authorisation Directive (2002) OJ L108
4. Council Directive 2002/19/EC on access to, and interconnection of, electronic communications networks and associated facilities - Access Directive (2002) OJ L108

5. Council Directive 2002/22/EC on universal service and users' rights relating to electronic communications networks and services - Universal Service Directive (2002) OJ L108
6. Council Directive 2002/58/EC concerning the processing of personal data and the protection of privacy in the electronic communications sector -Directive on privacy and electronic communications (2002) OJ L108

LIST OF NATIONAL REGULATIONS, ACTS

1. Central Population Register Act, Official Gazette No. 17/19
2. E-Government Act, Official Gazette of RS No. 27/2018
3. Electronic Document, Electronic Identification and Trust Services in Electronic Transactions Act, Official Gazette No. 94/2017
4. General Administrative Procedure Act, Official Gazette of RS No. 18/2016, 95/2018 – Authentic interpretation
5. Instruction on electronic business, Official Gazette No. 102/2010
6. Information Society and Information Safety Development Strategy for 2021-2026, Official Gazette No. 86/2021
7. Public Administration Reform Strategy for the period 2021-2030, Official gazette No. 42/2021, 9-2022
8. Registry of Administrative Procedures Act, Official Gazette No. 44/2021
9. Regulation establishing the Office for Information Technologies and Electronic Government, Official Gazette No. 73/2017, 8/2019
10. Regulation governing the acquisition and provision of data concerning the facts recorded in the official records and registers, Official Gazette No. 56/2017
11. Regulation specifying the conditions for establishing the e-government, Official Gazette No. 104/2018
12. Regulation on the operation of Open Data Portal, Official Gazette No. 104/2018
13. Regulation on electronic office management in public administration authorities, Official Gazette No. 40/2010, 42/2017
14. Regulation specifying the conditions for developing and maintaining public authorities' web presentations, Official Gazette No. 104/2018
15. Regulation on acquiring and transferring data concerning the facts recorded in the official records, Official Gazette No. 56/2017
16. Regulation on the management of Meta register, manner of approving, suspending and denying access to the Government Service Bus and modes of operation on the e-Government Portal, Official Gazette No. 04/2018
17. Regulation specifying the conditions for establishing electronic government, Official Gazette No. 104/2018
18. Rulebook on the ways in which public authorities inspect, acquire, process and provide, or deliver from the electronic registers the data concerning the officially recorded facts that are necessary for the decision in the administrative proceedings, Official Gazette No. 57/2019

19. Serbian E-government development program 2020-2022, Official gazette No. 85/2020
20. Strategy for the Development of Electronic Government in the Republic of Serbia for the period 2015-2018, Official Gazette No. 107/2015
21. Strategy for the Development of Electronic Communications in the Republic of Serbia for 2010-2020, Official Gazette No. 68/2010

WEBSITE REFERENCE

1. Draft Public Administration Reform Strategy for the period 2021-2030 [http://mduls.gov.rs/wp-content/uploads/Predlog-strategije-reforme-javne-uprave-u-Republici-Srbiji-za-period-2021-2030..docx] Accessed 20 December 2022
2. Draft Action Plan for the period 2021-2025 in the Republic of Serbia [http://mduls.gov.rs/wp-content/uploads/Predlog-akcionog-plana-za-period-2021-2025..xlsx] Accessed 20 December 2021
3. European Commission, *Better regulation guidelines*, SWD (2021) 305 final, 2021 [https://commission.europa.eu/system/files/2021-11/swd2021_305_en.pdf] Accessed 30.03.2023
4. European Parliament, *The Lisbon Strategy*, 2009-2014 [https://www.europarl.europa.eu/meetdocs/2009_2014/documents/empl/dv/lisbonstrategybn_/lisbonstrategybn_en.pdf] Accessed 20 June 2022
5. Ministry of Public Administration and Local Self-Government of the Republic of Serbia, E-Government Development Programme of the Republic of Serbia for the period 2019-2022 and Action Plan for its implementation [http://mduls.gov.rs/wp-content/uploads/Program-razvoja-e-upraveza-period-od-2019-do-2022.pdf] Accessed 20 September 2020
6. Public Policies Secretariat, *Register of Administrative Procedures*, [https://rap.euprava.gov.rs] Accessed on April 14 2023
7. SIGMA, OECD, *Monitoring Report, The principles of Public Administration,* Serbia, 2021, [https://www.sigmaweb.org/publications/Monitoring-Report-2021-Serbia.pdf] Accessed 12 December 2022
8. SIGMA/OECD, *Control and Management System Baselines for European Union Membership*, Paris, 1999, [https://www.sigmaweb.org/publicationsdocuments/35007180.pdf] Accessed 20 June 2020
9. SIGMA/OECD, *The Principles of Public Administration,* Paris, 2017, fhttp://www.sigmaweb.org/publications/principles-public-administration.htm] Accessed 10 September 2021
10. SIGMA/OECD, *Methodological Framework for the Principles of Public Administration*, Paris, 2017, [http://www.sigmaweb.org/publications/Methodological-Framework-for-the-Principles-of-Public-Administration-May-2019.pdf] Accessed 10 September 2021

UDK 711(497.5):004](4-67EU)
502.14(4-67EU):004
Review article

DIGITALIZATION OF PROCEDURES IN SPATIAL PLANNING AND CONSTRUCTION LAW IN CROATIA

Mateja Held, PhD, Associate Professor
Faculty of Law, University of Zagreb,
Trg Republike Hrvatske 3, Zagreb, Croatia
mateja.held@pravo.unizg.hr

ABSTRACT

Spatial planning and construction are interdisciplinary areas in which various factors interweave, such as sociological, cultural, economic, environmental, etc. In the process of spatial planning, green and digital transformation has an indispensable role. Spatial plans' developers should take into account protection of the environment, which is emphasized in the soft law mechanisms of the European Union (such as the European Green Deal) and the national spatial planning legislation. The aim of the paper is to present the EU legislation on the digitalization of spatial planning which reflects principles of the good administration as laid out in the Charter of the European Union on Fundamental Rights (effective, efficient and transparent public administration) and to research whether Croatia has suitable legislative framework for the digitalization in the area of spatial planning and construction. An additional goal is to research whether the legislative framework is functional and whether obstacles occur in practice.

The paper is therefore divided in five chapters. After the introduction, the paper presents EU legislation, namely the so-called INSPIRE directive which serves as a basic tool for the harmonization of EU Member State's policies regarding environmental questions and as a basis for the national spatial data infrastructures. The next chapter analyzes Croatian response to the INSPIRE directive after the accession of Croatia into the EU in 2013, till the recently adopted Digital Strategy of Croatia in 2023. After the insight into the context of the digitalization of Croatian public administration sector, research is focused on the Regulatory Framework of the Physical Planning Information System and on the reflection of the digitalization in procedures of the protection of the objective legality and subjective rights of the citizens. In those procedures, citizens are considered as collaborators who participate in the process of the spatial plan development. In the final part of the paper, recommendations are given for a better functioning of the digitalized procedures in the area of spatial planning and construction law in Croatia.

Keywords*: Croatia, digitalization, European Union, , INSPIRE directive, planning information system, spatial plan.*

1. INTRODUCTION

Among the key benefits of the recently adopted European Green Deal[1] are fresh air, clean water, healthy soil and biodiversity, as well as energy efficient buildings, all of which is associated with the activities of spatial planning, construction and digitalization.[2] European Green Deal, as a communication of the European Commission, is categorized as a soft law mechanism, or a non-binding instrument.[3] European Commission announced it in 2019 with a common goal of reducing carbon emissions for at least 50% till 2030 and assessing of carbon neutrality till 2050.[4] Measures of the European Green Deal[5] are interrelated with the area of spatial planning[6] and construction[7] due to the interdisciplinary character of both areas.[8] In the proce-

---

1 Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions the European Green Deal, COM/2019/640 final (hereinafter: European Green Deal).

2 Smart technologies and digitalization are important nowadays across the Europe which puts emphasis on environmental protection and transformation from linear economy towards green or circular economy, See: Bertoncelj, A., *Digital Transformation in the Context of European Union's Green Deal*, Amfiteatru Economic, Vol. 24, No. 59, 2022, p. 5.

3 Duić mentions that soft law should be considered as an interspace between legal obligations and political attitudes, See: Duić, D., *Europska politika zaštite okoliša i Europski zeleni plan*, in: Duić, D.; Ćemalović, U. (eds.) Zakonodavstvo zaštite okoliša i održivi ekonomski razvoj u EU, Josip Juraj Strossmayer University of Osijek, Faculty of Law, Osijek, 2022, p. 15.

4 European Green Deal contains eight measures: increasing the EU's climate ambition for 2030 and 2050; supplying clean, affordable and secure energy; mobilizing industry for a clean and circular economy; building and renovating in an energy and resource efficient way; accelerating the shift to sustainable and smart mobility; from 'Farm to Fork': designing a fair, healthy and environmentally-friendly food system; preserving and restoring ecosystems and biodiversity; a zero-pollution ambition for a toxic-free environment.

5 Objectives set down by the European Green Deal will hardly be possible to achieve without integral approach and taking into account relevant factors for urban sustainable development such as challenges of green and digital transitions, specific demographic changes, impact of climate change, etc., European Commission, *Sustainable urban development,* [https://ec.europa.eu/regional_policy/policy/themes/urban-development_en] Accessed 13 April 2023, More on sustainable development and its goals in regard to spatial planning See in: Metternicht, G., *Land Use and Spatial Planning, Enabling Sustainable Management of Land Resources*, Springer, Cham, Switzerland, 2018, pp. 53-54

6 Among the goals of physical planning in Croatia are reasonable usage and protection of the natural resources, protection of the nature, protection of the environment and the prevention of the risks of the pollution, See: Article 6/1/6 of the Physical Planning Act, Official Gazette, No. 153/13, 65/17, 114/18, 39/19, 98/19.

7 For example, measure 'building and renovating in an energy and resource efficient way' is directly connected to the construction, since "construction, use and renovation of buildings require significant amounts of energy and mineral resources (e.g. sand, gravel, cement). Buildings also account for 40% of energy consumed. Today the annual renovation rate of the building stock varies from 0.4 to 1.2% in the Member States. This rate will need at least to double to reach the EU's energy efficiency and climate objectives" (European Green Deal).

8 For example, Physical Planning Act in the Republic of Croatia defines spatial planning as a mechanism of management of utility of the space, but under the condition of preserving the quality of the envi-

dures of the development of spatial plans, spatial plan developers should act in accordance with the principle of legality and with an aim of preventing environmental pollution. In this respect, Ofak mentions "selecting locations for new installations, establishing changes which have occurred in existing installations and planning new infrastructure" as well as „the distance between an installation and residential areas, public places and environmentally significant areas".[9]

Regarding the fact that land and the environment are limited resources and regulation on the national level was set to different standards, EU was making efforts to harmonize public sectors of the Member States when it comes to the public sector information (hereinafter: PSI),[10] with an aim of an efficient and effective public administration.[11] In all the mentioned processes, digitalization plays a key role towards efficient, effective and transparent public administration, as a tool for protecting the rights of the citizens in administrative procedures.

Besides the PSI, the EU developed common standards covering, among other issues, land use data in the Directive 2007/2/EC of the European Parliament and of the Council (hereinafter: INSPIRE directive). Paper focuses on Croatian response to the INSPIRE directive. After accessing into the EU, Croatian response to the INSPIRE directive was the adoption of the National Spatial Infrastructure Act in 2013,[12] and since then process of digitalization in Croatia was constantly evolving. Access to data has multiple positive effects, such as improved standards on efficiency, transparency, smart and good governance. The aim of this paper is to research and systematize guidelines and tools in Croatia available nowadays to all participants of spatial planning and construction in the administrative procedures, such as e-plans, e-permits, Physical planning information system, etc. The paper aims also to present certain obstacles in the functioning of available tools, and to give recommendations for the improvement of the application of those tools in the area of spatial planning and construction law in Croatia.

---

ronment, See: Art. 3/29 of the Physical Planning Act, Official Gazette, No. 153/13, 65/17, 114/18, 39/19, 98/19.

9 Ofak, L., *Croatia In International Encyclopaedia of Laws*, in: Deketelaere, K. (ed.), Alphen van den Rijn,Environmental Law, NL: Kluwer Law International, 2020, p. 116.

10 Directive 2003/98/EC on the re-use of public sector information as amended by Directive 2013/37/EU (the 'PSI Directive'). On public sector information see more in: van Loenen, B.; Grothe, M., *INSPIRE Empowers Re-Use of Public Sector Information*, International Journal of Spatial Data Infrastructures Research, 2014, Vol. 9, pp. 86-106.

11 PSI Directive was transposed to Croatia through Act on Right to Information, and General Administrative Procedure Act, [https://digital-strategy.ec.europa.eu/en/library/implementation-psi-directive-croatia], Accessed 10 April 2022.

12 National Spatial Data Infrastructure Act, Official Gazette, No. 56/13, 52/18, 50/20 (hereinafter NSDI Act).

2. THE INSPIRE DIRECTIVE

Preparation of the INSPIRE directive with the engagement of all important participants took several years.[13] European Commission launched the INSPIRE Initiative in 2001,[14] and the INSPIRE directive was adopted in 2007 after the agreement between the Council and European Parliament in 2006, with an aim of the establishment of the Infrastructure for Spatial Information[15] in the European Community.[16] In art. 3 of the INSPIRE certain basic terms are defined such as infrastructure for spatial information, spatial data, spatial data set, spatial data services, spatial object, metadata, interoperability, Inspire geo-portal, public authority and third party. Chapter II refers to metadata, and chapter III to the interoperability of spatial data sets and services. After the adoption of the INSPIRE Directive, European Union adopted a set of regulation for a better implementation of the INSPIRE Directive.[17]

The first goal of the INSPIRE directive is the protection of the environment and serves as a tool for harmonization of EU Member States' policies regarding environmental questions, but its goal is also usable for all government policies.[18] INSPIRE directive also enables a re-use of geospatial information[19] across the Europe.[20]

---

13 More on the process of the preparation of the INSPIRE directive see in: Craglia, M.; Annoni, A., *INSPIRE: An Inovative Approach to the Development of Spatial Data Infrastructures in Europe*. in: Onsrud, H. (ed.) Research and Theory in Advancing Spatial Data Infrastructure Concepts. ESRI Press, Redlands, California, USA, 2007, pp. 96-106.

14 Annoni, A.; Craglia, M., *Towards a Directive Establishing an Infrastructure for Spatial Information in Europe (INSPIRE)*, From Pharaohs to Geoinformatics FIG Working Week 2005 and GSDI-8 Cairo, Egypt April 16-21, 2005, p. 2, [https://fig.net/resources/proceedings/fig_proceedings/cairo/papers/ts_47/ts47_01_annoni_graglia.pdf], Accessed 10 April 2023.

15 Authors, when referring to the INSPIRE project or INSPIRE directive talk about "the largest harmonization tool ever undertaken in Europe" with the main focus on the "sharing and re-use of spatial data and services in support of European environmental policies and policies that affect the environment.", See: Borzacchiello, M. T.; Boguslawski, R.; Pignatelli, F., *New Directions in Digital Government Using INSPIRE*, International Journal of Spatial Data Infrastructures Research, 2018, Vol. 13, p. 203.

16 Art. 1 of the INSPIRE directive.

17 Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community (INSPIRE) was published in the Official Journal on the 25th April 2007. The INSPIRE Directive entered into force on the 15th May 2007, [https://inspire.ec.europa.eu/id/document/tg/au], Accessed on 3 April 2023.

18 Borzacchiello, M. T.; Boguslawski, R.; Pignatelli, F., *op. cit.*, note 15, p. 219.

19 Geospatial information has its use in multiple areas such as environment, education, traffic, transport, economic development, water management, etc., and its re-use is of importance to all governments on the territory of the Europe. For examples of using geospatial information see in: Avtar, R., *et al. Utilizing geospatial information to implement SDGs and monitor their Progress,* Environ Monit Assess 192, Vol. 35, 2020, pp. 1-21.

20 Sjoukema, J-W. *et. al.*, *The Governance of INSPIRE: Evaluating and Exploring Governance Scenarios for the European Spatial Data Infrastructure,* International Journal of Geo-information, MDPI, Vol. 11, No. 141, 2022, p. 2.

The INSPIRE directive is a basis for the national spatial data infrastructures[21] which should become available not only to the specialists within the area of spatial planning, geodetic specialists, architects or lawyers, but instead, its goal is to create tools which are citizen-friendly or user-centric,[22] meaning those tools should be available to every citizen interested in some sort of spatial information.[23] In that process certain obstacles emerge, such as technical difficulties or fragmentation of the sets of data which are not mutually harmonized in one country. Another obstacle comes from a lack of knowledge of the officials who should be entitled to work with the tools, as well as from the citizen themselves, since there are not very comfortable with a fact they have to share their private data on e-services.[24]

Spatial data infrastructure promoted by the INSPIRE directive in 2007 can affect spatial planning process in two ways: on one hand it gives spatial planners sets of data necessary to create a new spatial plan which facilitates their work, and on the other hand it enables insight into the new spatial plan with a better quality of data to all participants who will later use it as a tool.[25] In 2008, only one year after implementation of the INSPIRE directive, EU adopted the INSPIRE Metadata Regulation[26] where rules were laid down concerning the metadata used to describe the spatial data sets and services from the annex I of the INSPIRE directive (spatial data themes referred to in articles 6(a), 8(1) and 9(a)), annex II of the INSPIRE directive (spatial data themes referred to in articles 6(a), 8(1) and 9(b)) and annex III of the INSPIRE directive (spatial data themes referred to in articles 6(b) and 9(b)) of the inspire directive.[27] Mentioned Metadata Regulation was followed by other decisions and regulations:[28]

---

21 INSPIRE documentation for Croatia is available at: [https://www.nipp.hr/default.aspx?id=14] Accessed 10 April 2023.

22 User-centricity is one of four which are used to evaluate online public services (European Commission, *eGovernment 2022 Insight Report, Synchronizing Digital Governments*, Publications Office of the European Union, 2022, pp. 7-8.

23 On criticism on the INSPIRE see for example in: Sjoukema, J-W. *et. al.*, note 20, p. 2.

24 Borzacchiello, M. T.; Boguslawski, R.; Pignatelli, F., *op. cit.*, note 15, pp. 205-206.

25 Kaczmarek, I.; Iwaniak, A.; Łukowicz, J., *New spatial planning data access methods through the implementation of the INSPIRE Directive*, Real Estate Management and Valuation, Vol. 22, No. 1, p. 21.

26 Commission Regulation (EC) No 1205/2008 of 3 December 2008 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards metadata, OJ L 326, p. 12–30, (Special edition in Croatian: Chapter 13 Volume 058 P. 240 – 258).

27 More on spatial data themes see in: Annoni, A.; Craglia, M., *op. cit.*, note 14, p. 4.

28 Documentation available on: [https://inspire.ec.europa.eu/inspire-directive/2] Accessed 11 April 2023.

- In 2009: Commission Decision regarding INSPIRE monitoring and reporting,[29] Commission Regulation (EC) No 976/2009 of 19 October 2009 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards the Network Services,,[30] Corrigendum to INSPIRE Metadata Regulation ;[31]
- In 2010: Regulation on INSPIRE Data and Service Sharing,[32] Commission Regulation (EU) No 1089/2010 as regards interoperability of spatial data sets and services from,[33] Commission Regulation amending Regulation (EC) No 976/2009 as regards download services and transformation service,[34] Commission Regulation (EU) No 1089/2010 of 23 November 2010 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards interoperability of spatial data sets and services;[35]
- In 2011: Commission Regulation (EU) No 102/2011 of 4 February 2011 amending Regulation (EU) No 1089/2010 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards interoperability of spatial data sets and services ,[36]
- In 2013: Commission Regulation (EU) No 1253/2013 of 21 October 2013 amending Regulation (EU) No 1089/2010 implementing Directive 2007/2/EC as regards interoperability of spatial data sets and services;[37]

---

29 According to Commission Decision 2009/442/EC of 5 June 2009 implementing the INSPIRE Directive, EU Member States have to report annually a number of indicators for monitoring the implementation and use of their infrastructures for spatial information. The information provided includes a list of spatial data sets and services belonging to those infrastructures, [https://inspire.ec.europa.eu/Monitoring-and-Reporting/Monitoring-and-Reporting/69], Accessed 10 April 2022.

30 Commission Regulation (EC) No 976/2009 of 19 October 2009 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards the Network Services OJ L 274, 20.10.2009, p. 9–18 (Special edition in Croatian: Chapter 13 Volume 044 P. 279 – 288).

31 Corrigendum to Commission Regulation (EC) No 1205/2008 of 3 December 2008 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards metadata OJ L 326, 4.12.2008.

32 Commission Regulation (EU) No 268/2010 of 29 March 2010 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards the access to spatial data sets and services of the Member States by Community institutions and bodies under harmonized conditions OJ L 83, 30.3.2010, p. 8–9 (Special edition in Croatian: Chapter 13 Volume 059 P. 146 – 147).

33 Consolidated text: Commission Regulation (EU) No 1089/2010 of 23 November 2010 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards interoperability of spatial data sets and services.

34 Consolidated text: Commission Regulation (EC) No 976/2009 of 19 October 2009 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards the Network Services.

35 Commission Regulation (EU) No 1089/2010 of 23 November 2010 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards interoperability of spatial data sets and services OJ L 323, 08 December 2010.

36 Commission Regulation (EU) No 102/2011 of 4 February 2011 amending Regulation (EU) No 1089/2010 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards interoperability of spatial data sets and services, OJ L 31, 5.2.2011, p. 13–34, (Special edition in Croatian: Chapter 13 Volume 034 P. 198 – 219).

37 Commission Regulation (EU) No 1253/2013 of 21 October 2013 amending Regulation (EU) No 1089/2010 implementing Directive 2007/2/EC as regards interoperability of spatial data sets and services.

- In 2014: Commission Regulation (EU) No 1312/2014 of 10 December 2014 amending Regulation (EU) No 1089/2010 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards interoperability of spatial data services ;[38] Commission Regulation (EU) No 1311/2014 of 10 December 2014 amending Regulation (EC) No 976/2009 as regards the definition of an INSPIRE metadata element ,[39] Commission Regulation (EU) No 1312/2014 of 10 December 2014 amending Regulation (EU) No 1089/2010 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards interoperability of spatial data services [40] Commission Regulation (EU) No 1311/2014 of 10 December 2014 amending Regulation (EC) No 976/2009 as regards the definition of an INSPIRE metadata element.[41]

3. CROATIAN RESPONSE TO THE INSPIRE DIRECTIVE

3.1. Digital transformation process and the role of electronic administration

Digitalization process in Croatia[42] is analyzed after providing broader context of the digitalization process in the Croatian Public Administration.[43] Digitalization of the processes in land administration, spatial planning and construction law can be considered as just one aspect of the digitalization of public administration in

---

38 Commission Regulation (EU) No 1312/2014 of 10 December 2014 amending Regulation (EU) No 1089/2010 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards interoperability of spatial data services, OJ L 354, 11.12.2014, p. 8–16.

39 Commission Regulation (EU) No 1311/2014 of 10 December 2014 amending Regulation (EC) No 976/2009 as regards the definition of an INSPIRE metadata element OJ L 354, 11.12.2014, p. 6–7.

40 Commission Regulation (EU) No 1312/2014 of 10 December 2014 amending Regulation (EU) No 1089/2010 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards interoperability of spatial data services, OJ L 354, 11.12.2014, p. 8–16.

41 Commission Regulation (EU) No 1311/2014 of 10 December 2014 amending Regulation (EC) No 976/2009 as regards the definition of an INSPIRE metadata element OJ L 354, 11.12.2014, p. 6–7.

42 Central State Office for Digital Society Development is a „state administrative organisation with the task of monitoring and improving the development of the digital society and complying with European Union guidelines and regulations in the field of digital society and economics" [https://rdd.gov.hr/o-sredisnjem-drzavnom-uredu/9?lang=en] Accessed 11 April 2023; COVID-19 was catalyst in the digitalization process in Croatia, for example, „in Croatia, the number of e-service transactions rose from approximately 25% of cases pre-pandemic, to 85% during the pandemic" (FAO, UNECE and FIG *Digital transformation and land administration* – Sustainable practices from the UNECE region and beyond. FIG Publication No. 80. Rome. 88, 2022, p. 12, (hereinafter: FAO, UNECE and FIG (2022)). For the Croatian perspective see: Held, M.; Perkov, K., *Spatial Planning in the EU and Croatia under the Influence of COVID-19 Pandemic*, EU And Comparative Law Issues and Challenges Series (ECLIC) – Vol. 6, 2022, pp. 591–624.

43 Governments should aim towards digital governments, otherwise, they won't be able to provide their services efficiently with necessary level of quality, See: Borzacchiello, M. T.; Boguslawski, R.; Pignatelli, F., *op. cit.*, note 15, p. 206.

general which has its roots in the electronic administration or e-administration. E-administration[44] aims towards fast, efficient and effective service towards citizens.[45] Concept of e-administration was recognized and also supported by international organizations.[46] At the EU level, e-administration is accentuated by the two agendas. First was Digital Agenda for Europe which in 2010 (2010-2020) emphasized role of ICT in public administration with specific provisions added in 2015.[47] Second Digital Agenda (2020-2030)[48] focused on „three key objectives in digital: technology that works for people, a fair and competitive economy and an open, democratic and sustainable society".[49]

E-administration sets focus on citizens which achieve their rights in administrative procedures before public bodies. Important benefits from e-administration are simplification and speeding up procedures before public bodies.[50] In Croatia, process of modernization of the administrative procedural law started with the Government document titled Starting points and principles for the modernization of the general administrative procedure in Croatia adopted in 2006.[51] Basic act regulating administrative procedures is the General Administrative Procedure Act,[52] which was adopted in 2009 and entered into the force in 2010.[53] In Article

---

44 Electronic administration indicates „ICT in public administration for increasing efficiency and effectiveness in providing public services and functioning of internal processes and increasing transparency and accountability of public administration from the other side" Musa, A.; Vrček, N.; Jurić, M., *Elektronička uprava kao perspektiva razvoja društva i privatnog sektora*. in: Koprić, I.; Musa, A.; Giljević T. (ed.), Građani, javna uprava i lokalna samouprava: povjerenje, suradnja, potpora. Institute for Public Administration, 2017, p. 527.

45 *Ibid.*, p. 526.

46 Musa, Vrček and Jurić mention World Bank, OECD, United Nations, Open Government Partnership, as well as European Union, *Ibid.*, pp. 530-532.

47 Specific provisions were: providing better access for consumers and businesses to digital goods and services across Europe; creating the right conditions for digital networks and services to flourish; and maximizing the growth potential of the digital economy (https://www.europarl.europa.eu/factsheets/en/sheet/64/digital-agenda-for-europe, Accessed on 4th April 2023).

48 Second digital agenda was complemented by 10-year digital compass, See: European Parliament, *Digital Agenda for Europe* [https://www.europarl.europa.eu/factsheets/en/sheet/64/digital-agenda-for-europe], Accessed on 4 April 2023.

49 *Ibid.*

50 Ciekanowski, Z.; Wyrębek, H., *The Importance of E-administration – Building Information Society*, Rocznik Bezpieczeństwa Morskiego Vol. XIV – 2020, p. 288.

51 Staničić, F.; Jurić, M., *Pravni okvir za implementaciju informacijsko-komunikacijskih tehnologija u hrvatsko upravno postupovno pravo*, Zbornik PFZ, Vol. 65, No. 5, 2015, p. 638. Mentioned document was followed by the strategic document Guidelines of the Government of the Republic of Croatia for adoption the new General Administrative Procedure Act *(Ibid.).*

52 General Administrative Procedure Act, Official Gazette, No. 47/09, 110/21 (hereinafter: GAPA).

53 Public administration in Croatia at that time, as in the other transition countries, went through the reform phase. Results were new procedural acts regulating protection of rights of the citizens before

75 of the GAPA, electronic communication was enabled between public bodies and citizens, but Koprić mentions it was not regulated in a way which could enable its efficient use.[54] The latest version of the GAPA changed provisions regarding electronic communication towards a more efficient use.[55] After adoption of the GAPA, some other important acts regulating the area of the electronic communication entered into the force, such as Electronic Signature Act,[56] Electronic Communication Act[57] and State Information Infrastructure Act adopted in 2014[58] based on which the system of E-citizens[59] was enabled.[60]

Nowadays there is a clear difference between e-government and digital government. Workshop on the implementation of the INSPIRE directive which took place in 2017, explains mentioned difference as follows: "e-government refers to a shift of public services from paper to online formats, while digital government involves a step change in the processes and sometimes the business model involved in providing digital public services."[61] One of the aspect of the implementation of the INSPIRE into the national systems of the member states is the development of national strategies on the digitalization.[62]

The latest document on digitalization of public administration in Croatia is the Strategy for Digital Croatia for the period till 2032[63] which is in connection with Digital Agenda for Europe.[64] Strategy defines vision of the digitalization of the so-

---

public administration and administrative courts due to influence of the EU and ECHR (Held, M., *The Development of the Administrative Court Systems in Transition Countries and Their Role in Democratic, Economic and Societal Transition*, Hrvatska komparativna i javna uprava-Croatian and Comparative Public Administration, Vol. 22, No. 2, 2022, p. 213.

54 Koprić, I., *Jedinstveno upravno mjesto (one-stop-shop) u europskom i hrvatskom javnom upravljanju*. In: Koprić, I.; Musa, A.; Giljević, T. (eds.) Građani, javna uprava i lokalna samouprava: povjerenje, suradnja, potpora. Institute for Public Administration, 2017, p. 568. Procedure could have been initiated or canceled electronically (Art. 41 and 46 of GAPA). Articles 60, 71, 83, 84, 94, 159 regulate actions that could have been committed electronically.

55 GAPA, Official Gazette, No. 110/21.

56 Electronic Signature Act, Official Gazette, No. 10/2002, 80/2008, 30/2014, 62/2017, which is no longer in force.

57 Electronic Communication Act, Official Gazette, No. 76/2022.

58 State Information Infrastructure Act, OG 92/2014 (hereinafter: SIIA).

59 E-Građani, [https://gov.hr/], Accessed 6 April 2023.

60 Staničić, F.; Jurić, M., *op. cit.*, note 51, p. 653; Đanić Čeko, A.; Guštin, M., *Digitalizacija hrvatske javne uprave s posebnim osvrtom na sustav socijalne skrbi*, Zbornik radova Pravnog fakulteta u Splitu, Vol. 59, No. 4, 2022, pp. 796, 804-808.

61 Borzacchiello, M. T.; Boguslawski, R.; Pignatelli, F., *op. cit.*, note 15, p. 205.

62 France, Denmark and Czech Republic have clear digital strategy (*Ibid.*, p. 205).

63 Strategy for Digital Croatia for the Period 2032, Official Gazette, No. 2/2023, entered into the force on 1st April 2023 (hereinafter: the Strategy).

64 See: Chapter 2.2 of the Strategy.

ciety, public administration and economy of the Republic of Croatia, strategical goals, their indicators of efficiency with an aim of realization of the proposed public policies.[65] Strategy is a part of the National Development Strategy of the Republic of Croatia 2030[66] and of Strategy's goal titled 'digital transition of society and economy' in development direction 'green and digital transition'.[67] Spatial Planning and Construction area is incorporated into the chapter 4.3 in the strategical goal 3 which should develop accessible and applied networks of extra-large capacities[68].

In the area of spatial planning and construction, administrative and regulative obstacles were noticed,[69] and following measures were adopted due to their resolving: measure M2 of the Strategy – development and harmonization of the application of the legal framework in the area of construction, and improving practices of spatial planning in connection with setting networking of the large capacities, as well as a reform measure building connectivity as a basis of digital transition of society and economy. Both areas are priority areas of implementation of public policies – enabling preconditions for spatial planning and faster building of networks.[70] Besides the mentioned activities, adjustment of Spatial Planning Act and Construction Act will be constantly under monitoring for ensuring that local spatial plans do not become an obstacle for building and construction of the communication of the networks of extra-large capacities. Strategy mentions Ministry of Spatial Planning, Construction and State Assets, Croatian Regulatory Agency and Ministry of Sea, Traffic and Infrastructure as entitled bodies for a such activities.

---

65 See: Introduction into the Strategy.

66 National Development Strategy of the Republic of Croatia 2030, Official Gazette, no. 13/21.

67 Introduction into the Strategy.

68 In Croatian: *razvoj* širokopojasnih *elektroničkih komunikacijskih mreža*.

69 For example, Croatian Architects Chamber on its website has publicly available research from 2020 on the satisfaction of the architects with the e-permit. Results of the research show that architect are not satisfied with the e-permit system, and they listed almost forty problems, but also gave solutions for resolving them. For example, slow loading of documentation, problems with the registration into the system, too much unnecessary data and re-entering already entered dana, insufficient education of individual civil servants, no possibility of correction mistake by themselves, etc.) They suggest simplification of the whole procedure, faster loading of the documentation, education of all participants, etc., Anketno istraživanje, *Zadovoljstvo arhitekata sustavom E-dozvola* [https://www.arhitekti-hka.hr/files/file/pdf/2020/Zadovoljstvo%20arhitekata%20sustavom%20e-dozvola.pdf] Accessed 11 April 2023).

70 In Croatian: *4.3.1.1 Prioritetno područje provedbe javnih politika 3.1: Osiguravanje preduvjeta za prostorno planiranje i bržu gradnju mreža.*

3.2. National Spatial Data Infrastructure

3.2.1. Regulative framework on the domestic level

National Spatial Data Infrastructure (hereinafter: NSDI) was mention for the first time in the Act on State Survey and Real Estate Cadastre.[71] One whole chapter was dedicated to the NSDI,[72] but it only partially reflected the goals set down by the INSPIRE directive.[73]

After the accession into the European Union in 2013, Croatia accepted the obligation to implement the INSPIRE directive. NSDI[74] was regulated as: "a set of technologies, measures, standards, implementation rules, services, human resources and other factors enabling efficient integration, management and maintenance of the sharing of spatial data as defined by this Act for the purpose of satisfying needs on both the national and European levels, which will be an integral part of the European Spatial Data Infrastructure defined by the INSPIRE Directive." by the National Spatial Data Infrastructure Act adopted in 2013,[75] which was amended twice since.[76] Besides the harmonization of the INSPIRE directive, Croatian NSDI has to be harmonized with international legislation as well (GSDI,[77] UN-GGIM[78]).[79] Preparation for the implementation of the INSPIRE directive started even earlier, in 2009 with the NSDI and INSPIRE days, as well as with the workshops held in 2012 and 2013. "The EU-funded "INSPIRATION – Spatial Data Infrastructure in the Western Balkans" project (duration 2012 – 2013) provided relevant information about the implementation status of policy, institutional and legal NSDI-frameworks with the purpose to promote SDI and further coordinate the implementation in the region (including Croatia)."[80]

---

71 Act on State Survey and Real Estate Cadastre, Official Gazette, No. 16/2007.

72 Articles 84-94 of the Act on State Survey and Real Estate Cadastre.

73 Gašparović, I., *Geospatial Information Managenment in Croatia (Report Croatia)*, 2019, retrieved from: [https://ggim.un.org/country-reports/documents/UN-GGIM_Report_Croatia.pdf] Accessed 5 April 2023, p. 3. (hereinafter: Report Croatia, 2019).

74 Vision of the NSDI is: "Everybody can find, understand and use spatial data." (Report Croatia, 2019).

75 National Spatial Data Infrastructure Act, Official Gazette, No. 56/2013 (hereinafter: NSDI Act).

76 National Spatial data infrastructure act, Official Gazette, No. 52/2018, 50/2020.

77 Global Spatial Data Infrastructure Association.

78 United Nations Initiative on Global Geospatial Information Management.

79 European Commission, Digital Public Administration Fachtsheet Croatia, 2022, p. 43, [https://joinup.ec.europa.eu/sites/default/files/inline-files/DPA_Factsheets_2022_Croatia_vFinal_0.pdf], Accessed 6 April 2023.

80 Three annual INSPIRE country report, 2016, p. 13, [https://cdr.eionet.europa.eu/hr/eu/inspire/reporting/envvznxva/HR_Three_annual_INSPIRE_Country_Report_20160516_FINAL.doc/manage_document], Accessed 6 April 2023.

According to the Report, there are 35 topics covered in Croatia, and the INSPIRE directive has one less (34) which means that Croatia unfortunately has to have an additional topic regarding the mine suspected areas.[81] The Government of the Republic of Croatia is working continuously in the digitalization of the spatial planning and construction area, and accordingly in 2017 it adopted the Strategy Decision on the adoption of the National Spatial Data Infrastructure Strategy 2020 and the Strategic Plan of the National Spatial Data Infrastructure for the period 2017-2020.[82] In the mentioned Decision, the Government entitles State Geodetic Administration for the implementation of measures and activities from its competence in prescribed deadlines. Croatian State Geodetic Administration is also the NSDI contact point[83] for the implementation of the INSPIRE directive.[84] Those tasks are especially important for the local and regional government, since there are expected to be most numerous potential NSDI subjects.[85] Institutional framework regarding the NSDI contains three different bodies,[86] and it is presented in the report as well is in the article of the NSDI Act as NSDI Council, NSDI Board and NSDI Working groups.[87]

81 Report Croatia, 2019, p. 3.

82 Strategy Decision on the adoption of the National Spatial Data Infrastructure Strategy 2020 and the Strategic Plan of the National Spatial Data Infrastructure for the period 2017-2020, Official Gazette, No. 96/17.

83 Contact point of the other European Union member states are available at: Cetl, V. et. al., *Summary Report of the implementation of the INSPIRE directive in EU*, Publications Office of the European Union, Luxembourg, 2017, p. 7, and at:[https://inspire.ec.europa.eu/contact-points/57734], Accessed 10 April 2023.

84 Reports on the monitoring of the implementation of the INSPIRE directive in Croatia are available at: [https://www.nipp.hr/default.aspx?id=13], Accessed 6 April 2023.

85 Report Croatia, 2019, p. 3.

86 For Croatian implementation of the INSPIRE further see: Massers, I.; Cropoets, V., *Progress on the INSPIRE Implementation*, GeoInformatics. 2015, Vol. 18, No. 1, pp. 22-24, [https://www.proquest.com/scholarly-journals/progress-on-inspire-implementation/docview/1655132939/se-2], Accessed 6 April 2023.

87 Article 26 of the NSDI Act.

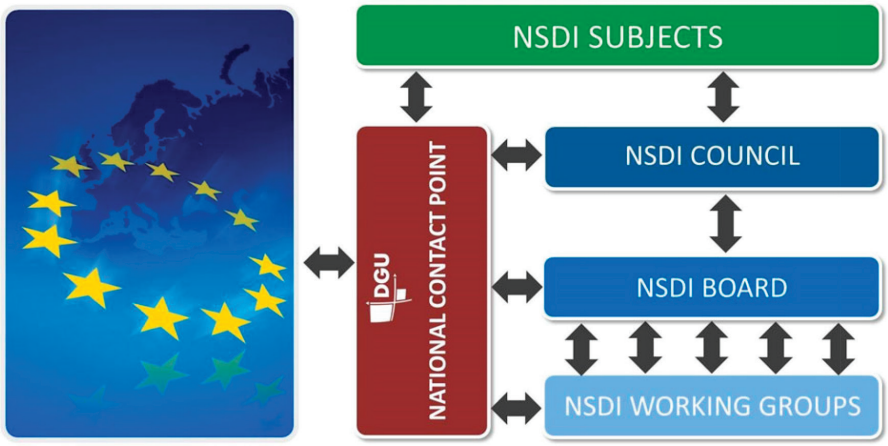


Figure 1. NSDI coordination structure in Croatia as in Report Croatia, 2019 on NSDI, p. 4.

NSDI Council consists of the president of the Council and members elected by the Government. One representative is elected from the National contact point as well as the president of the Council. Other members are elected from different state administration areas, one representative form each one, including the state administration for the spatial planning and construction.[88] Basic activities of the NSDI Council are focused on proposals of strategies, operative programs and other acts important for the creation, maintenance and development of the NSDI to the Government of the Republic of Croatia, it further promotes the establishment, maintenance and development of sources of spatial data and metadata, brings criteria for the establishment, maintenance and sharing of spatial data sources for the purpose of interoperability, etc.[89]

NSDI Board is a permanent body for the NSDI. It consists of the three representatives of the NSDI Council, three representatives of the National contact point and heads of the working groups appointed by the NSDI Council.[90] It serves as

[88] Other members are elected from the state administration for the environmental protection and nature, state administration for e-Croatia, state defense administration, state administration for traffic, traffic infrastructure and electronic communication, state administration for the agriculture and forestry, state administration for science and education, state administration for the protection of the cultural heritage, state economy administration, state administration for the state survey and real estate cadastre, state administration for the statistics, state administration for the meteorology and hydrology, state administration for the safety of the sailing navigation, public institution for hydrographic area, community of geodesy and geoinformatics, community for economy of informatic technology, expert association of engineers of geodesy (Art. 27/1 of the NSDI Act).

[89] Article 27/5 of the NSDI Act.

[90] Article 28/2 of the NSDI Act.

a coordination link between the NSDI working groups and the NSDI Council. According to the Report, at the operational level there are NSDI working groups established for the purpose of elaborating certain tasks and obligations within the scope of the NSDI implementation. "Members of the workgroups are civil servants, regional, local or public officials, scientists and representatives of professional associations and experts from the private sector. Currently there are three workgroups, each dealing with specialized tasks, Working group for NSDI technical standards, Working group for NSDI capacity building, and the Working group for NSDI spatial data."[91]

4. DIGITALIZATION IN SPATIAL PLANNING AND CONSTRUCTION LAW

Digitalization of the spatial planning and construction area is a far more complex process than it could seem at the first sight. Terms such as 'planning', 'space', 'area', are familiar enough, even to non-professionals. But experts dealing with the digitalization have to deal more intensely with the matter in order to make a transparent, actual, precise, etc. planning information system (hereinafter: PIS).[92] Elgendy in his dissertation on planning information systems systematically presents some aspects of the spatial planning problems evolving during spatial planning process. He categorized them into the "interconnectivities in the spatial context, the problem-space and the solution-space and the time dimension in spatial problems".[93] Process of spatial planning is firstly a multi-layer process. In Croatia, spatial plans are developed on three levels, as in most other member state countries:[94] state level, regional level and local level. Various participants are included into spatial planning making process, as well as various factors (political, sociological, economical, legal, etc.) which all together makes spatial planning process and its presentation in PIS very complex.

---

91 Report, p. 5.

92 Getimis, Reimer and Blotevogel emphasize coordination between multiple layers and different actors as one of the challenges of the spatial planning process (Getimis, P.; Reimer, M.; Blotevogel. H. H., *Conclusion – Multiple trends of continuity and change*, In: Getimis, P.; Reimer, M.; Blotevogel. H. H. (eds.) Spatial Planning Systems and Practices in Europe, A comparative perspective on continuity and changes, Routledge, New Your, Abingdon, 2014, pp. 281-282.

93 Elgendy, H., *Development and Implementation of Planning Information Systems in collaborative spatial planning processes*, doctoral dissertation, Bauingenieur-, Geo- und Umweltwissenschaften der Universität Fridericiana from Karlsruhe, 2003, p. 28.

94 See in table 2 *Levels of government relevant for spatial planning in 2016* in: Comparative Analysis of Territorial Governance and Spatial Planning Systems in Europe, (COMPASS), final report, 2018, p. 17, [https://www.espon.eu/sites/default/files/attachments/1.%20 COMPASS_Final_Report.pdf], Accessed 6 April 2023, p. 17.

PIS are expected to be precise, accurate, easily readable, etc. However, spatial plans consist of texts, maps, picture, signs, symbols, which all have to present certain object of the spatial plan, or the purpose of the precise area, or maybe possibility of the construction in the certain area. They have to include transport routes, public areas, forests, national parks, etc. Therefore, the key role in the digitalization of the spatial planning system plays 'planning information' in every spatial plan which could be defined as "any information needed, processed or produced during a planning process."[95] Since spatial planning process (and spatial planning system as well) is characterized by the interdisciplinarity, „information processed or produced in spatial planning in a planning situation is from various professional backgrounds, e.g. legal, social, ecological, engineering, and political, etc. Consequently, it is in different forms, e.g. laws, regulations, norms, studies, statistics, surveys, questionnaires, interviews, plans, decisions, recommendations, announcements, etc."[96] „The primary function of PIS is to facilitate an information platform that supports processing and production of different types of planning information during different information processes in different information domains."[97] While developing PIS, experts should include facts that planning process are not static and that actors included into the spatial planning system have different interest, roles and responsibilities it mentioned process.[98]

Central state administration for the spatial planning area in Croatia is the Ministry for Physical Planning, Construction and State Assets[99] which enables e-services to the citizens on spatial planning and construction. Namely, on the website of the ministry following e-services are mentioned: Geoportal, ISPU-locator, eReal Estate, eCatalogue with eRegistry of spatial plans, ePlans, ePermits, eInvestments, eSpatial inspection, eEngergetic certificate, ePlans editor, eConstruction (building) diary.[100]

In Croatia, PIS is presented by The physical planning information system (PPIS or ISPU)[101] as an application of the Ministry of Construction and Physical Planning that merges into one unit the Geoportal, Cadastre and spatial plans, enabling to

95 Elgendy, H., *op. cit.*, note 93, p. 39.

96 *Ibid.,* p. 44-45.

97 *Ibid.*, p. 103.

98 *Ibid.*, p. 103.

99 *Ibid.*, p. 28.

100 Vlada RH, *e-usluge,* [https://mpgi.gov.hr/eu-sufinanciranja/ispu-i-razvoj-e-usluga/e-usluge/3757] Accessed 5 April 2023.

101 In Croatian: *Informacijski sustav prostornog uređenja (ISPU).*

every citizen a simple access to information on rules of space use, on developing plans and reports on public debates.[102]

The aim of the Croatian PPIS is a transparent physical planning system which is in accordance with the EU Charter of the Fundamental Rights.[103] Incorporating the right to a good governance into the provisions of the EU law, a standard is set for the procedures of the administrative bodies in the area of administrative law of member states of the EU, and not just for the EU institutions. Also, good governance is "a multi-layer concept which at the same time consists of the procedural guarantees aiming at the protection of the party in the procedure, procedural guarantees which cover more than an individual case and are aimed at protecting the public interest and the objective legal order, all the way to non-legal standards of procedures aiming at the optimal functioning of public administration and ensuring the quality of administrative procedures and efficiency".[104]

4.1. Regulatory Framework of the PPIS in Croatia

In the chapter 3 of the Spatial Planning Act, PPIS is regulated as 'an interoperable and multi-platform system where all informational systems of public bodies included into the development or maintenance of the spatial data and other data of importance for the physical planning'.[105] Detailed structure, content, mode of operation, form and electronic standard of the information system, duties and obligations in the management and management of the information system of the Ministry, institutes, administrative bodies and professional administrative bodies in connection with the information system are prescribed by the Government in the Decree on the Information System.[106]According to the Decree, moduls of the PPIS include: ePlans, eCatalouge, ePermit, eInspection, eArchive, eReal Estate, PPIS locator and entrance modul of the NSDI which were developed outside of the PPIS system, but with influence of the PPIS system.[107] It is important also that data available on the PPIS can be downloaded without a charge.[108] PPIS is a

---

[102] The goal of the project „PPIS and its moduls" is to increasingliy upgrade the level of usage of the ICT technologies in communication on the relation citizens-craftsmen-public administration (https://mpgi.gov.hr/UserDocsImages//dokumenti/eRAZVOJ//brosura-A5-ispu.pdf, accessed 11 April 2023).

[103] Article 41 of the Charter on the Fundamental Rights of the European Union, OJ C 326.

[104] Koprić, I., *Prilagodbe hrvatske javne uprave europskim standardima*, Godišnjak Akademije pravnih znanosti, 2014., p. 16.

[105] Article 37/1 of the Physical Planning Act.

[106] *Decree on the Physical Planning Information System*, Official Gazette, No. 115/2015 (hereinafter: PPIS Decree).

[107] Article 5 of the PPIS Decree.

[108] Article 8/2 of the PPIS Decree.

basis for other procedures connected to spatial plan activities, which roughly can be divided on the protection of the objective legality and the protection of the subjective rights of the citizens.

4.2 Digitalization and the protection of the objective legality

Protection of the objective legality can be observed from two standpoints – during the procedure of the adoption of spatial plans and during the assessment of the legality of spatial plans. Both is enabled with the PPIS in Croatia. Basic principles of the Physical Planning Act regarding the adoption procedure of spatial plans are the following: integral approach in spatial planning,[109] horizontal integration in the space protection,[110] vertical integration,[111] public and free access to data and documentation[112] of importance for physical planning.[113] Of course, other principles such as the principle of realization and the protection of public and individual interest show a complexity of the mentioned procedures.[114] Detail analysis of the procedure of the adoption of spatial plans goes beyond the purpose of this paper,[115] but public discussion can be seen as a platform where all citizens of the respected area are included into the decision-making process.[116] PPIS make easily accessible all relevant documentation necessary for the public discussion. Available tools and information on the digital platform make citizens relevant actors in

[109] Article 8 of the Physical Planning Act.

[110] Article 12 of the Physical Planning Act.

[111] Article 13 of the Physical Planning Act.

[112] Article 14 of the Physical Planning Act.

[113] Article 7 of the Physical Planning Act.

[114] For example, the right to a private property is protected on the international and national level (Protocol 1 of the European Convention on Human Rights and Freedoms, Official Gazette, No. – IA 18/97, 6/99, 14/02, 13/03, 9/05, 1/06, 2/10, 13/17, and the article 48/1 of the Constitution of the Republic of Croatia, Official Gazette, No. 56/90, 135/97, 08/98, 113/00, 124/00, 28/01, 41/01, 55/01, 76/10, 85/10, 05/14, and the Property Act, Official Gazette, No. 91/96, 68/98, 137/99, 22/00, 73/00, 129/00, 114/01, 79/06, 141/06, 146/08, 38/09, 153/09, 143/12, 152/14, 81/15, 94/17, but it can be limited under the conditions set by the law, in public interest, for which as an example may serve the institute of expropriation (Article 50/1 of the Constitution).

[115] For the detail insight into the procedure of public participation in the spatial plan adoption process see in: Staničić, F., *Sudjelovanje javnosti i pristup pravosuđu u procesima prostornog planiranja*, Zbornik radova Veleučilišta u Šibeniku, 2017, No. 1-2, pp. 31-52.

[116] Central portal for the counseling with the interested public s portal „*e-savjetovanja*". More about the portal „e-savjetovavanja" see in: Vidačak, I.; Đurman, P., *Savjetovanje s javnošću u donošenju propisa: kvaliteta javnog odlučivanja i sudjelovanje građana*, in: Koprić, I.; Musa, A.; Giljević, T., Građani, javna uprava i lokalna samouprava: povjerenje, suradnja, potpora, Institute for Public Administration, 2017, pp. 73-104.

the decision-making process. For that reason, they can be equal in the decision-making process with other stakeholders.[117]

Second aspect of the PPIS in connection with the protection of the objective legality is the assessment of the legality of spatial plans[118] for which regulatory framework is set in the chapter VI of the Administrative Disputes Act.[119] The High Administrative Court is entitled to declare spatial plan as illegal if the procedure is conducted on the request of a party which received individual administrative act under the suspicion of violating party's rights. Essential condition for such a request is that individual act has its grounds in potentially illegal spatial plan.[120] However, Administrative Disputes Act allows in the article 83/2 initiation of the procedure by the notification of the citizens, the ombudsman or at the request of the court, in which case High Administrative Courts starts the assessment of the spatial plan ex officio.[121] This regulation is of high importance for those citizens who will not be in the position to be considered as a party in the administrative procedure,[122] and consequently, will not be able to receive individual administrative act according to the article 83/1 of the Administrative Disputes Act. The latest case law of the High Administrative Court shows us that the High Administrative Court starts procedures ex officio even if the initiative did not come from the indi-

---

117 Term 'citizen' and 'stakeholder' is not the same (Guidelines for Citizen Participation Processes, OECD Public Governance Reviews, OECD Publishing, Paris, https://doi.org/10.1787/f765caf6-en, hereinafter: OECD), 2022, p. 13). While stakeholder refers to the „interested and/or affected party, including institutions and organizations, whether governmental or non-governmental, from civil society, academia, the media, or the private sector, 'citizens' are individuals, regardless of their age, gender, sexual orientation, religious, and political affiliations. The term is meant in the larger sense of 'an inhabitant of a particular place', which can be in reference to a village, town, city, region, state, or country depending on the context. In this larger sense, it is equivalent of people (OECD, 2022, p. 13).

118 Spatial plans on regional and local level are general acts (see Decision of the Constitutional Court U-II-5157/2005 from 5 March 2012). More on the legal nature of spatial plans see in: Omejec, J.; Banić, S., *Diferencijacija propisa i općih akata u budućoj praksi Ustavnog suda i Upravnog suda u povodu Zakona o upravnim sporovima (2010.)*, Zbornik radova Pravnog fakulteta u Splitu, Vol. 49, No. 2, 2012., pp. 309-324.; Šikić, M.; Crnković, M., *Upravnosudska i ustavnosudska kontrola zakonitosti akata jedinica lokalne i područne (regionalne) samouprave*, Zbornik Pravnog fakulteta Sveučilišta u Rijeci, Vol. 37, No. 1, 2016, pp. 423-447.

119 Articles 83-88 of the Administrative Disputes Act, OG 20/10, 143/12, 152/14, 94/16, 29/17, 110/21.

120 Article 83/1 of the Administrative Disputes Act.

121 In the mentioned case, High Administrative Court is not obliged to conduct the procedure of the assessment of the legality of spatial plan.

122 Party in the administrative procedure is a person who submitted the request before administrative body, a person against whom administrative proceedings are being conducted and a person who in order to protect his rights or legal interests, has the right to participate in the proceeding (Article 4 of the GAPA). Staničić mentiones that while 'the active and passive identification of a party is generally indisputable, there is an increasing amount of controversy surrounding the term 'legal interest'" (Staničić, F., *Abecedarij upravnog postupka*, Novi informator, no. 6572-6573 from 29 April 2019).

viduals, ombudsman or the court, but also if it came from a legal person.[123] Starting the procedure ex officio plays a great role in the protection of the objective legality because even in cases when individuals or legal persons were not parties in the administrative procedure, they can point out that a certain spatial plan is illegal. This is important especially in the inspection procedures in the construction area where a neighbor of the building which is under the inspection can only initiate the procedure, without being a party in such a procedure.[124] Construction inspection is conducting such a procedure ex officio.[125] The mentioned neighbor is excluded form submitting legal remedies in subsequent procedures or even precluded from his right to see the case file from the article 84/1 of the GAPA.

Digitalization of spatial plans and other relevant documentation is very useful in cases were individuals are not parties in the administrative procedures or procedures before the court. Citizens, entitled administrative bodies and administrative courts do not have to search for spatial plan in special issues of local official gazettes where spatial plan is published to start the procedure, since they have access through the portal PPIS in Croatia. This surely affects the efficiency of the mentioned procedures and leads towards a simplification of the protection of the objective legality.

4.3. Digitalization and the protection of the subjective rights of the citizens

Besides the fact that digitalization speeds up the proceedings of the adoption of the general acts through participation of the informed citizens, it also accelerates the issuance of the individual acts, and it enables participation of the citizens in the procedures affecting their rights. Pursuant to the Article 14 of the Physical Planning Act – principle of publicity and free access to data and documents of importance for spatial planning – the public has a right to participate in the procedures of the developing and the adoption of spatial plans. Digitalization also

---

123 See case law of the High Administrative Court: Usoz-97/21-6 from 1 March 2022. Although mentioned case law is not directly connected with the assessment of the legality of spatial plans, it is important because it opens door for the direct requests for the questioning the legality of spatial plans. See also the decisions of the High Administrative Court of the Republic of Croatia: Usoz-75/21-9 from 31 March 2022, Usoz-19/22-9 from 26 September 2022, Usoz-21/22-7 from 26 September 2022, Usoz-81/22-8 from 26 September 2022, Usoz-159/20-5 from 29 November 2021, Usoz-125/20-5 from 29 November 2021, Usoz-61/21-5 from 25 October 2021, Usoz-37/20-11 of 11 June 2021. Mentioned attitude is confirmed also by the Constitutional court of the Republic of Croatia., see in: U-III/5917/2016 from 5 November 2019.

124 Article 105 of the State Inspectorate Act, Official Gazette, No. 115/18, 117/21.

125 Article 58 of the State Inspectorate Act.

implements principle of subsidiarity[126] guaranteed in the European Charter of Local Self-government.[127,128] Citizens are involved in a form of their participation in decision making process.[129] Through the mentioned mechanism, public administration becomes more transparent, which may influence trust of the citizens in public administration and realization of other principles such as transparency, exchange of the information, and collaboration with the citizens.[130] Ministry of the Physical Planning, Construction and State Assets, through e-services, enables citizens to bring a request for issuance of the construction (building) permit[131] through the e-permit system. GAPA regulates that this procedure can be initiated electronically (Article 41/1 of the GAPA). Delivery of the decision is also enabled electronically (article 83/1 and 83/3 of the GAPA).

Procedures before administrative bodies regarding the issuing of the mentioned acts are in its nature administrative procedures. Those procedures have to be transparent, efficient, and harmonized with all basic acts regulating those procedures,

---

126 On subsidiarity principle see more in: Koprić, I., *Upravljanje decentralizacijom kao nov pristup razvoju sustava .lokalne samouprave*, Hrvatska javna uprava, Vol. 8, No. 1., p. 99.

127 Article 4/3 of the European Charter of the Local Self-government, Official Gazette – IA No. 14/1997.

128 Subsidiarity is together with proportionality, listed as one of the twelve interoperability principles of the *European Interoperability Framework* (EIF). More on the EIF see on: [https://joinup.ec.europa.eu/collection/nifo-national-interoperability-framework-observatory/european-interoperability-framework-detail], Accessed 6 April 2023.
Another relevant EIF principle regarding spatial data is openness which refers to the idea that data should be easily accessible to the citizens, unless some justified exceptions exist, such as personal data protection. Simplification of the administrative proceedings and effectiveness and efficiency are also set as principles of the EIF. Other EIF principles are: transparency, reusability, technological neutrality and dana portability, user-centricity, inclusion and accessibility, security and privacy, multilingualism and preservation of information (European Commission, *European Interoperability Framework – Promoting seamless services and data flows for European Public Administrations*, Publications Office of the European Union, Luxembourg, 2017, pp. 11-20, [https://ec.europa.eu/isa2/sites/isa/files/eif_brochure_final.pdf], Accessed 6 April 2023.
The result of the third EIF Monitoring Mechanism data collection exercise within the 27 Member States in 2021 indicated principle of subsidiarity and proportionality, subsidiarity and Proportionality; Inclusion and Accessibility; Multilingualism; and Assessment of Effectiveness and Efficiency as areas which need to be improved (European Commission, *Digital Public Administration Factsheet*, 2022, p. 6.). Report for Croatia shows that areas of improvement could be noticed in the Principles 5 (Technological neutrality and data portability) and 9 (Multilingualism). For the principle 7 (accessibility and inclusion, Croatia is above EU average (Digital Public Factsheet Administration Croatia 2022, p. 5).

129 Article 14/3 of the Physical Planning Act.

130 Musa, A., *Informacije za građane: transparentnom i otvorenom javnom upravom prema boljem upravljanju i povjerenju građana*, in: Koprić, I.; Musa, A.; Giljević T. (ed.), Građani, javna uprava i lokalna samouprava: povjerenje, suradnja, potpora. Institute for Public Administration, 2017, p. 54.

131 Other acts implementing the spatial planning documentation are regulated in the article 114/2 of the Physical Planning Act.

first and foremost with the GAPA, Spatial Planning Act, Construction Act,[132] Construction Inspection Act,[133] as well as with all the relevant spatial plans documentation, namely local spatial plans and all the above mentioned plans on the hierarchical pyramid of spatial planning acts.[134]

With the amendments of the Physical Planning Act and the Construction Act in 2019, the system for the issuing of construction permits became more efficient, faster and cheaper. The key amendment was the introduction of the system of eConference, through which necessary documentation can be submitted, collected and analyzed. Procedure itself has fewer steps, it is fully digitalized, less documentation is necessary and communication of all participants in the process is conducted electronically through the electronic notice board.[135]

5. CONCLUSION

Digitalization nowadays embraces all activities and it is practically impossible to work in public sector without digitally available data sets. The transformation process from classic paper work form to digital tools covers all parts of public administration, and digitalization is used as an umbrella term for all of them.[136] The process of transformation began with the introduction of e-government, and more recently with the transition of e-government towards digital government focused on the user, meaning the citizen himself. Procedures in public administration became 'user-centric'. In other words, accessible spatial data made citizens collaborators, which are more involved in the decision-making process. The fact that citizens are well informed and included in the decision-making process gives them an opportunity to participate on formal or informal public discussions, which is of high importance in the area of spatial planning and construction law.[137]

Digitalization of spatial data and related digitalized procedures, such as issuing construction or building permits through the e-permits system, has positive effects emerging from the harmonization with the INSPIRE directive. Procedures of the protection of rights and freedoms of the citizens before administrative bod-

---

132 Construction Act, Official Gazette, No. 153/13, 20/17, 39/19, 125/19.

133 Construction Inspection Act, Official Gazette, No. 153/13.

134 Levels of spatial plans are set in the Physical Planning Act in articles 60-62.

135 See at: [https://mpgi.gov.hr/eu-sufinanciranja/ispu-i-razvoj-e-usluga/13752], Accessed 11 April 2023

136 FAO, UNECE and FIG (2022), p. 5.

137 Public discussion as a mandatory element in the process of the adoption of the spatial plan is regulated in the articles 94-106 of the Physical Planning Act in Croatia. For the detail insight into the procedure of public participation in the spatial plan adoption process see in: Staničić, F., *op. cit.*, note 15, pp. 31-52.

ies should reflect key elements of good governance guaranteed in the Charter of Fundamental Rights of the EU.

As a result of digitalization in Croatia, spatial plans are available through Physical planning information system, which is an application software of the Ministry of Physical Planning, Construction and State Assests that merges the Geoportal, Cadastre and spatial plans together, enabling every citizen simple access to spatial data. Further, application for the procedure of issuing necessary permits can be submitted through the e-permits portal, which contains a list of relevant services and competent authorities for those procedures, a list of architects who develop spatial plans and develop projects for building construction, a list of pertinent legislation, a list of verified spatial plans, rules for conducting spatial procedures, application forms and instructions, etc.

The general conclusion is that Croatian PPIS and its modules are generally in the accordance with the EU legislation on formal level, meaning that Croatia has adopted necessary acts for the implementation of the INSPIRE directive, has submitted necessary reports such as the 3-year term obligation for every member state of the EU, and has recently adopted Digital Strategy for the period till 2032.[138] However, certain obstacles appear on the functional level. Citizens are enabled to submit requests through the e-permit system. The system could be improved technically in order to allow a faster loading of documentation, otherwise such an obstacle can be especially aggravating for larger investors during the building process (architects warn that uploading the relevant documentation can take up to two or three days).[139] Another warning comes from architects regarding slow loading of documentation, problems with the registration into the system, too much unnecessary data and re-entering already entered data, insufficient education of individual civil servants, no possibility of correction of mistake by themselves.[140] As it was already mentioned, another obstacle in the functioning of the available tools is a lack of knowledge of the officials authorized to work with the tools, as well as from the citizen themselves, since there are not very comfortable with the

[138] „Croatia showed smooth transition into e-services" (FAO, UNECE and FIG (2022) as in Fučkar and Šimic Rukavina, 2021 *Land Registry Procedures in Time of the COVID-19 Pandemic in the Republic of Croatia*. In: Accelerated Digitalisation: The impact of the COVID-19 Pandemic on the Land Administration sector. UNECE Webinar. UNECE, 22 March 2021, [https://unece.org/info/events/event/354013]

[139] [https://www.arhitekti-hka.hr/files/file/pdf/2020/Zadovoljstvo%20arhitekata%20sustavom%20e-dozvola.pdf], Accessed 11 April 2023.

[140] *Ibid.*

fact they have to share their private data on e-services.[141] PPIS system will most likely be upgraded, and other challenges may arise.

Certain suggestions for the implementation of the digitalization regarding the administrative procedures are permanent education of the administrative services with an aim of avoiding excessive formalism, and in order to keep up with changes in the PPIS of the Croatia which will strengthen public sector in its transparency, and consequently will result in the better level of citizens' confidence or trust into the digitalized public administration. With the appropriate supervision, permanent education along with the evaluation of the digitalization process, Croatia may have an easily available, transparent and user-centric PPIS which will serve as a tool, not just for the protection of the rights of the citizens, but also for the quality of public services in a domain of spatial planning and construction law which will be respectively elevated to a higher and satisfactory level.

REFERENCES

BOOKS AND ARTICLES

1. Annoni, A.; Craglia, M., *Towards a Directive Establishing an Infrastructure for Spatial Information in Europe (INSPIRE)*, From Pharaohs to Geoinformatics FIG Working Week 2005 and GSDI-8 Cairo, Egypt April 16-21, 2005, [https://fig.net/resources/proceedings/fig_proceedings/cairo/papers/ts_47/ts47_01_annoni_graglia.pdf]
2. Avtar, R. *et al., Utilizing geospatial information to implement SDGs and monitor their Progress,* Environ Monit Assess 192, 35 (2020)., pp. 1-21
3. Bertoncelj, A., *Digital Transformation in the Context of European Union's Green Deal*. Amfiteatru Economic, Vol. 24, No. 59, 2022, p. 5
4. Borzacchiello, M. T.; Boguslawski, R.; Pignatelli, F., *New Directions in Digital Government Using INSPIRE*, International Journal of Spatial Data Infrastructures Research, 2018, Vol. 13, pp. 202-222 [https://core.ac.uk/download/pdf/229314298.pdf]
5. Cetl, V., *et. al., Summary Report of the implementation of the INSPIRE directive in* EU, Publications Office of the European Union, Luxembourg, 2017, p. 7
6. Ciekanowski, Z.; Wyrębek, H., *The Importance of E-administration – Building Information Society*, Rocznik Bezpieczeństwa Morskiego Vol. XIV – 2020, pp. 287-303
7. Craglia, M.; Annoni, A., *INSPIRE: An Inovative Approach to the Development of Spatial Data Infrastructures in Europe*, in: Onsrud, H. (ed.) Research and Theory in Advancing Spatial Data Infrastructure Concepts. ESRI Press, Redlands, California, USA, 2007, pp. 96-106
8. Đanić Čeko, A.; Guštin, M., *Digitalizacija hrvatske javne uprave s posebnim osvrtom na sustav socijalne skrbi*, Zbornik radova Pravnog fakulteta u Splitu, Vol. 59, No. 4, 2022, pp. 793-821

[141] Borzacchiello, M.T.; Boguslawski, R.; Pignatelli, F., *op. cit.*, note 15, pp. 205-206.

9. Duić, D., *Europska politika zaštite okoliša i Europski zeleni plan,* in: Duić, D.; Ćemalović, U. (eds.) Zakonodavstvo zaštite okoliša i održivi ekonomski razvoj u EU, Josip Juraj Strossmayer University in Osijek, Faculty of Law, Osijek, 2022
10. Elgendy, H., *Development and Implementation of Planning Information Systems in collaborative spatial planning processes*, doctoral dissertation, Bauingenieur-, Geo- und Umweltwissenschaften der Universität Fridericiana from Karlsruhe, 2003
11. Getimis, P.; Reimer, M.; Blotevogel. H. H., *Conclusion – Multiple trends of continuity and change*, In: Getimis, P, Reimer, M., Blotevogel. H. H. (eds.) Spatial Planning Systems and Practices in Europe, A comparative perspective on continuity and changes, Routledge, New Your, Abingdon, 2014, pp. 278-305
12. Held, M., *The Development of the Administrative Court Systems in Transition Countries and Their Role in Democratic, Economic and Societal Transition*, Hrvatska komparativna i javna uprava-Croatian and Comparative Public Administration, Vol. 22, No. 2, 2022, pp. 209-236
13. Held, M.; Perkov, K., *Spatial Planning in the EU and Croatia under the Influence of COVID-19 Pandemic*, EU And Comparative Law Issues and Challenges Series (ECLIC) – Issue 6, 2022, pp. 591–624
14. Kaczmarek, I.; Iwaniak, A.; Łukowicz, J., *New spatial planning data access methods through the implementation of the INSPIRE Directive*, Real Estate Management and Valuation, Vol. 22, No. 1, pp. 12-24
15. Koprić, I. *Jedinstveno upravno mjesto (one-stop-shop) u europskom i hrvatskom javnom upravljanju*, in: Koprić, I.; Musa, A.; Giljević, T. (eds.) Građani, javna uprava i lokalna samouprava: povjerenje, suradnja, potpora. Institute for Public Administration, 2017, p. 561-574
16. Koprić, I., *Prilagodbe hrvatske javne uprave europskim standardima*, Godišnjak Akademije pravnih znanosti, 2014, pp. 8-39
17. Koprić, I., *Upravljanje decentralizacijom kao nov pristup razvoju sustava .lokalne samouprave*, Hrvatska javna uprava, Vol. 8, No. 1., pp. 95-133
18. Massers, I.; Cropoets, V., *Progreess on the INSPIRE Implementation*, GeoInformatics. 2015, Vol. 18, No. 1, pp. 22-24 [https://www.proquest.com/scholarly-journals/progress-on-inspire-implementation/docview/1655132939/se-2]
19. Metternicht, G., *Land Use and Spatial Planning, Enabling Sustainable Management of Land Resources*, Springer, Cham, Switzerland, 2018
20. Musa, A., *Informacije za građane: transparentnom i otvorenom javnom upravom prema boljem upravljanju i povjerenju građana*, in: Koprić, I.; Musa, A.; Giljević T. (eds.), Građani, javna uprava i lokalna samouprava: povjerenje, suradnja, potpora. Institute for Public Administration, 2017, pp. 29-72
21. Musa, A., Vrček, N., Jurić, M., *Elektronička uprava kao perspektiva razvoja društva i privatnog sektora*, in: Koprić, I.; Musa, A.; Giljević T. (eds.), Građani, javna uprava i lokalna samouprava: povjerenje, suradnja, potpora. Institute for Public Administration, 2017, pp. 525-560
22. Ofak, L., *Croatia In International Encyclopaedia of Laws*, in: Deketelaere, K. (ed.), Alphen van den Rijn,Environmental Law, NL: Kluwer Law International, 2020, p. 116

23. Omejec, J.; Banić, S., *Diferencijacija propisa i općih akata u budućoj praksi Ustavnog suda i Upravnog suda u povodu Zakona o upravnim sporovima (2010.)*, Zbornik radova Pravnog fakulteta u Splitu, Vol. 49, No. 2, 2012., pp. 309-324
24. Šikić, M.; Crnković, M., *Upravnosudska i ustavnosudska kontrola zakonitosti akata jedinica lokalne i područne (regionalne) samouprave*, Zbornik Pravnog fakulteta Sveučilišta u Rijeci, Vol. 37, No. 1, 2016, pp. 423-447
25. Sjoukema, J-W. *et. al.*, *The Governance of INSPIRE: Evaluating and Exploring Governance Scenarios for the European Spatial Data Infrastructure*, International Journal of Geo-information, MDPI, Vol. 11, No. 141, 2022, pp. 1-17
26. Staničić, F., *Abecedarij upravnog postupka*, Novi informator, no. 6572-6573 from 29 April 2019
27. Staničić, F., *Sudjelovanje javnosti i pristup pravosuđu u procesima prostornog planiranja*, Zbornik radova Veleučilišta u Šibeniku, 2017, No. 1-2, pp. 31-52
28. Staničić, F.; Jurić, M., *Pravni okvir za implementaciju informacijsko-komunikacijskih tehnologija u hrvatsko upravno postupovno pravo*, Zbornik Pravnog fakulteta u Zagrebu, 2015, Vol. 65, No. 5, pp. 635-663
29. van Loenen, B.; Grothe, M., *INSPIRE Empowers Re-Use of Public Sector Information*, International Journal of Spatial Data Infrastructures Research, 2014, Vol. 9, pp. 86-106
30. Vidačak, I.; Đurman, P., *Savjetovanje s javnošću u donošenju propisa: kvaliteta javnog odlučivanja i sudjelovanje građana*, in: Koprić, I.; Musa, A.; Giljević, T., Građani, javna uprava i lokalna samouprava: povjerenje, suradnja, potpora, Institute for Public Administration, 2017, pp. 73-104.

EU LAW

1. Charter on the Fundamental Rights of the European Union, [2012] OJ C 326
2. Commission Regulation (EC) No 1205/2008 of 3 December 2008 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards metadata [2008] OJ L 326, Special edition in Croatian: Chapter 13 Volume 058 P. 240 – 258
3. Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions the European Green Deal, COM/2019/640 final
4. Directive 2003/98/EC on the re-use of public sector information as amended by Directive 2013/37/EU (the 'PSI Directive') [2013] OJ L 175
5. Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community (INSPIRE) [2007] OJ L 108

LIST OF NATIONAL REGULATIONS, ACTS AND COURT DECISIONS

1. Act on State Survey and Real Estate Cadastre, Official Gazette, No. 16/2007
2. Administrative Disputes Act, Official Gazette, No. 20/10, 143/12, 152/14, 94/16, 29/17, 110/21

3. Constitution of the Repbulic of Croatia, Official Gazette, No. 56/90, 135/97, 08/98, 113/00, 124/00, 28/01, 41/01, 55/01, 76/10, 85/10, 05/14
4. Construction Act, Official Gazette, No. 153/13, 20/17, 39/19, 125/19
5. Construction Inspection Act, Official Gazette, No. 153/13
6. Decision of the Constitutional Court U-II-5157/2005 from 5 March 2012
7. Decision of the Constitutional Court U-III/5917/2016 from 5 November 2019
8. Decree on the Physical Planning Information System, Official Gazette, No. 115/2015
9. Electronic Communication Act, Official Gazette, No. 76/2022
10. Electronic Signature Act, Official Gazette, No. 10/2002, 80/2008, 30/2014, 62/2017
11. European Charter of the Local Self-government, Official Gazette – IA No. 14/1997
12. European Convention on Human Rights and Freedoms, Official Gazette, No. – IA 18/97, 6/99, 14/02, 13/03, 9/05, 1/06, 2/10, 13/17
13. General Administrative Procedure Act, Official Gazette, no. 47/09, 110/21
14. Judgement of the High Administrative Court of the Republic of Croatia Usoz-75/21-9 from 31 March 2022
15. Judgement of the High Administrative Court of the Republic of Croatia Usoz-19/22-9 of 26 September 2022
16. Judgement of the High Administrative Court of the Republic of Croatia Usoz-21/22-7 from 26 September 2022
17. Judgement of the High Administrative Court of the Republic of Croatia Usoz-81/22-8 from 26 September 2022
18. Judgement of the High Administrative Court of the Republic of Croatia Usoz-159/20-5 from 29 November 2021
19. Judgement of the High Administrative Court of the Republic of Croatia Usoz-125/20-5 from 29 November 2021
20. Judgement of the High Administrative Court of the Republic of Croatia Usoz-61/21-5 from 25 October 2021
21. Judgement of the High Administrative Court of the Republic of Croatia Usoz-37/20-11 of 11 June 2021
22. National Development Strategy of the Republic of Croatia 2030, Official Gazette, No. 13/21
23. National Spatial Data Infrastructure Act, Official Gazette, No. 56/13, 52/18, 50/20
24. Physical Planning Act, Official Gazette, No. 153/13, 65/17, 114/18, 39/19, 98/19
25. Property Act, Official Gazette, No. 91/96, 68/98, 137/99, 22/00, 73/00, 129/00, 114/01, 79/06, 141/06, 146/08, 38/09, 153/09, 143/12, 152/14, 81/15, 94/17
26. State Information Infrastructure Act, Official Gazette, No 92/2014
27. State Inspectorate Act, Official Gazette, No. 115/18, 117/21
28. Strategy Decision on the adoption of the National Spatial Data Infrastructure Strategy 2020 and the Strategic Plan of the National Spatial Data Infrastructure for the period 2017-2020, Official Gazette, No. 96/17
29. Strategy for Digital Croatia for the Period 2032, Official Gazette, No. 2/2023

REPORTS AND GUIDELINES

1. Comparative Analysis of Territorial Governance and Spatial Planning Systems in Europe, (COMPASS), final report, 2018, 17, [https://www.espon.eu/sites/default/files/attachments/1.%20 COMPASS_Final_Report.pdf], Accessed 6 April 2023
2. European Commission, *Digital Public Administration Fachtsheet,* Croatia, 2022, p. 43, [https://joinup.ec.europa.eu/sites/default/files/inline-files/DPA_Factsheets_2022_Croatia_vFinal_0.pdf] Accessed 6 April, 2023
3. European Commission, *eGovernment 2022 Insight Report, Synchronizing Digital Governments*, Publications Office of the European Union, 2022, pp. 1-38
4. European Commission, *European Interoperability Framework – Promoting seamless services and data flows for European Public Administrations*, Publications Office of the European Union, Luxembourg, 2017, [https://ec.europa.eu/isa2/sites/isa/files/eif_brochure_final.pdf] Accessed 6 April 2023
5. FAO, UNECE and FIG *Digital transformation and land administration* – Sustainable practices from the UNECE region and beyond. FIG Publication No. 80. Rome. 88, 2022,
6. Gašparović, I., *Geospatial Information Managenment in Croatia (Report Croatia)*, 2019, retrieved from: [https://ggim.un.org/country-reports/documents/UN-GGIM_Report_Croatia.pdf] Accessed 5 April 2023.
7. *Guidelines for Citizen Participation Processes*, OECD Public Governance Reviews, OECD Publishing, Paris
8. Three annual INSPIRE country report, 2016, p. 13, [https://cdr.eionet.europa.eu/hr/eu/inspire/reporting/envvznxva/HR_Three_annual_INSPIRE_Country_Report_20160516_FINAL.doc/manage_document] Accessed 6 April 2023

WEBSITE REFERENCES

1. Anketno istraživanje, *Zadovoljstvo arhitekata sustavom E-dozvola* [https://www.arhitekti-hka.hr/files/file/pdf/2020/Zadovoljstvo%20arhitekata%20sustavom%20e-dozvola.pdf] Accessed 11 April 2023
2. Cetl, V. *et. al., Summary Report of the implementation of the INSPIRE directive in EU*, Publications Office of the European Union, Luxembourg, 2017, p. 7, [https://inspire.ec.europa.eu/contact-points/57734] Accessed 10 April 2023
3. Državna geodetsk uprava, Dokumenti NIPP-a [https://www.nipp.hr/default.aspx?id=13] Accessed 6 April 2023.
4. E-Građani, [https://gov.hr/] Accessed 6 April 2023
5. E-usluge, [https://mpgi.gov.hr/eu-sufinanciranja/ispu-i-razvoj-e-usluga/e-usluge/3757] Accessed on 5th April 2023
6. FairShare [https://www.europarl.europa.eu/factsheets/en/sheet/64/digital-agenda-for-europe]Accessed on 4th April 2023.
7. INSPIRE documentation for Croatia is available at: [https://www.nipp.hr/default.aspx?id=14] Accessed 10 April 2023.

8. Metadata Regulation [https://inspire.ec.europa.eu/inspire-directive/2] Accessed 11 April 2023
9. PSI Directive was transposed to Croatia through Act on Right to Information, and General Administrative Procedure Act, [https://digital-strategy.ec.europa.eu/en/library/implementation-psi-directive-croatia] Accessed 10 April 2022
10. Subsidiarity is together with proportionality, listed as one of the twelve interoperability principles of the European Interoperability Framework (EIF), [https://joinup.ec.europa.eu/collection/nifo-national-interoperability-framework-observatory/european-interoperability-framework-detail] Accessed 6 April 2023
11. Vlada RH, [https://mpgi.gov.hr/eu-sufinanciranja/ispu-i-razvoj-e-usluga/13752] Accessed 11 April 2023
12. Vlada RH, [https://mpgi.gov.hr/UserDocsImages//dokumenti/eRAZVOJ//brosura-A5-ispu.pdf] Accessed 11 April 2023

Topic 3

EU law effects in commercial and transport law

UDK 005.584.1(4-67EU):004]:347.795.4
Original scientific paper

NEW EUROPEAN APPROACH ON PASSENGERS' DIGITAL SURVEILLANCE THROUGH ELECTRONIC PLATFORM (ETIAS) – PASSENGERS' AND CARRIERS' PERSPECTIVE

Željka Primorac, PhD, Full Professor
Faculty of Law University of Split
Domovinskog rata 8, Split, Croatia
zeljka.primorac@pravst.hr

Božena Bulum, PhD, Scientific Adviser
Adriatic Institute of the Croatian Academy of Science and Arts
Šenoina 4, Zagreb, Croatia
bbulum@hazu.hr

Marija Pijaca, PhD, Assistant Professor
Maritime Department, University of Zadar
Ulica Mihovila Pavlinovića 1, Zadar, Croatia
mpijaca@unizd.hr

ABSTRACT

On the basis of basic European legal concepts on collecting air passengers' data, as an important mechanism in fight against terrorism and illegal immigration, the authors point to the European legal provisions of Regulation (EU) 2018/1240 on the newly established IT authorisation system, the application of which guarantees more comprehensive security checks of visa-free third-country nationals (non-EU citizens) when they, as passengers, want to travel to EU. The aim of this work is to present, analyse and review the legal issue of new European rules which prescribe digital surveillance of passengers through electronic system – "European Travel Information and Authorisation System" (ETIAS) even before they arrive at the external border of the Schengen area. When ETIAS becomes operational (expected in November 2023), screening requirements for passengers will mean that some category of passengers will need valid travel authorisation to travel to the Schengen area. Authors point out the significance of pre-screening control of passengers' data with special emphasis on passengers' obligation to apply for travel authorisation (through ETIAS) prior to travelling to the Schengen area and carriers' (air carriers, sea carriers and international carriers transporting groups overland by coach) obligation to use ETIAS to verify passengers' possession of a valid travel authorisation and their

liability in case they were transporting third-country nationals (who are exempt from the visa requirement) without valid travel authorisation. Carrying out a theoretical elaboration of the problem in question, in the conclusion the authors clearly indicate the shortcomings of normative legal norms - open legal issues that have not been resolved, such as, for example, the general and insufficiently clear legal regulation of the terms security risk, illegal immigration risk or high epidemic risk in the provisions of the Regulation (EU) 2018/1240 especially considering that these risks represent reasons for profiling of passengers (visa-free third-country nationals) from 60 countries. The authors consider it necessary and justified to adopt a series of delegated acts that will systematically and comprehensively regulate all aspects of the legal and technical issues of the establishment and application of ETIAS.

Keywords: *carriers, ETIAS, passengers' digital surveillance*

1. INTRODUCTION

The Schengen regime (free movement regime) means free movement of persons and is one of the founding principles of EU integration.[1] Every year, there are some 400 million crossing of the Schengen border by EU citizens, and 200 million by non-EU citizens.[2] The total number of regular border crossings in 2025 is forecast to rise to 887 million, of which around one-third are expected to be by third country nationals traveling to Schengen countries.[3] The identities of third-country nationals are often checked at port of entry – airports, seaports and land borders.[4] It is estimated that in 2025 there will be 127 million of border crossing by visa-exempt third country nationals from which 107 million will occurre at air borders.[5] It is important to underline that there is currently no separate, systematic recording of border crossing by visa-holding and visa-exempt third-country nationals.[6] In the past, there were no advance information on visa-exempt third-

---

1 See more Duić, D.; Rošić, M., *Interoperability between the EU information systems – from an idea to the realisation*, Policija i sigurnost, Vol. 31, No. 2, 2022, p. 120.

2 Explanatory Memorandum to COM(2016)731 – *European Travel Information and Authorisation System (ETIAS)*, November 2016 [https://www.eumonitor.eu/9353000/1/j4nvhdfdk3hydzq_j9vvik7m-1c3gyxp/vk9bd6mxr5zn], Accessed 20 September 2022.

3 European Commission, Proposal for a Regulation of the European Parliament and of the Council establishing an Entry/Exit System (EES) to register entry and exit data and refusal of entry data of third country nationals crossing the external borders of the Member States of the European Union and determining the conditions for access to the EES for law enforcement purposes and amending Regulation (EC) No 767/2008 and Regulation (EU) No 1077/201, Bussels, 6.4.2016, COM(2016) 194 final, 2016/0106(COD), p. 1 [https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX-%3A52016PC0194], Accessed 15 November 2022.

4 Bellanova, R.; Glouftsios, G., *Formatting European security integration through database interoperability*, European Security, Vol. 31, No. 3, 2022, p. 466.

5 European Commission, *Technical Study on Smart Borders*, p. 15 [https://home-affairs.ec.europa.eu/system/files/2016-12/smart_borders_executive_summary_en.pdf], Accessed 20 September 2022.

6 Directorate-general for internal policies, *Study for the libre committee – European Travel Information and Authorisation System (ETIAS): Border management, fundamental rights and data protec-*

country nationals (because they were not subject to prior checks) when they travelled to the Schengen Area, so their individual entry conditions were not verified until they arrived at a border-crossing point to the Schengen Area.[7] Althought today we have a mechanism such as Advance Passenger Information (API data) and Passenger Name Record (PNR data) for air passengers' pre-screening control, this paper will point out the legal effects of new European provisions on digital pre-screening control of visa-exempt third country nationals from passengers' and carriers' (air carriers, sea carriers and international carriers transporting groups overland by coach) perspective.

2. EUROPEAN LEGAL BEGINNINGS OF THE DIGITAL SURVEILLANCE OF PASSENGERS THROUGH AIR PASSENGER DATA

Importance of datafication for control and surveillance in security and trans-border activities has been presented as a natural answer from new threats: terrorism, transnational crime, migration and refugee arrivals, and more generally surveillance of anomalies in the patterns of travellers.[8] Travel has emerged as an inherently dangerous activity and mobility operates as a trigger for state surveillance.[9] Freedom of movement is now almost forgotten and replaced by so-called "smart borders" technologies developing in the name of speed and easy freedom to move, increasing tools of surveillance and goals of prevention of suspicious acts ending up with lists of data-suspects.[10]

Less than 20 years ago, the European legislator adopted Directive 2004/82/EC[11] as an important tool in achieving better border control on the EU external borders (borders of the EU Member States with third countries) and very important mechanism for combating illegal immigration. According to Art. 3(1) Directive

---

tion, 2017, p. 29 [https://www.europarl.europa.eu/RegData/etudes/STUD/2017/583148/IPOL_STU%282017%29583148_EN.pdf], Accessed 20 September 2022.

7 European Commission, Feasibility Study for a European Travel Information and Authorisation System (ETIAS), November 2016, p. 9 [https://home-affairs.ec.europa.eu/system/files/2020-09/etias_feasability_study_en.pdf], Accessed 20 September 2022.

8 Bigo, D., *The socio-genesis of a guild of "digital technologies" justifying transnational interoperable databases in the name of security and border purposes: a reframing of the fied of security professionals*, International Journal of Migration and Border Studies, Vol. 6, No. 1-2, 2020, p. 75.

9 Vavoula, N., *The "Puzzle" of EU Large-Scale Information Systems for Third-Country Nationals: Surveillance of Movement and Its Challenges for Privacy and Personal Data Protection*, European Law Review, p. 32 [https://qmro.qmul.ac.uk/xmlui/handle/123456789/60690], Accessed 12 January 2023.

10 Bigo, D., *op.cit.*, note 8, p. 75.

11 Council Directive 2004/82/EC of 29 April 2004 on the obligation of carriers to communicate passenger data, [2004] OJ L261/24-27.

2004/82/EC, an air carrier (which is transporting passengers into the territory of the EU Member States) has an obligation to transmit (until the end of passengers' check-in process) the data from passengers' travel document[12] (regardless of whether the passengers are EU citizens or non-EU citizens). The goal of introducing this carrier's obligation is to process the relevant data and assess the passenger's security risk before his arrival at the border crossing, so the air carrier obligation exists only on request of the authorities responsible for passenger control at external borders. Although the exchange of this data between EU Member states is prohibited, due to the constant threat of cross-border terrorism there is a need for the necessary cooperation of EU Member states in exchanging of information that the competent authorities consider relevant for prevention, detection, investigation and prosecution of terrorist offences and serious crime. Law enforcement authorities were advocating for this measure as they were struggling to track the movement of the foreign terrorist fighters (European citizens who underwent training on IS territory and returned to the EU to organize terrorist acts) in/out and within EU.[13] Collecting, transferring and processing of air passengers' data eg. passenger name record (PNR) data[14] of passengers of extra-EU flights,[15] are the subjects of regulation in the Directive (EU) 2016/681.[16] According to Art. 8(1) Directive (EU) 2016/681, EU Member States shall adopt the necessary measures[17] to ensure that air carriers transfer PNR data to the database of the passenger information unit (PIU)[18] of the Member State on the territory of which the flight will land or from the territory of which the flight will depart.[19] The exchange of information between EU Member States is regulated in Art. 9 of Directive (EU) 2016/681 and

---

12 See more: Rossi dal Pozzo, F., *International and EU legal frameworks of aviation security*, in: Szyliowicz, J. S.; Zamparini, L. (eds.), Air Transport Security Issues Challenges and National Policies, Edward Elgar Publishing, 2018, p. 55.

13 Andreeva, C., *The evolution of information-sharing in EU counter-terrorism post-2015: a paradigm shift?*, Global Affairs, Vol. 7, No. 5, 2021, p. 763.

14 The 18th category of data is being created – see Annex I. Directive (EU) 2016/681 "Passenger name record data as far as collected by air carriers".

15 EU Member State may decide to apply this Directive only to selected intra-EU flights (Art. 2(3) Directive (EU) 2016/681).

16 Directive (EU) 2016/681 of the European Parliament and of the Council of 27 April 2016 on the use of passenger name record (PNR) data for the prevention, detection, investigation and prosecution of terrorist offences and serious crime, [2016] OJ L119/132–149.

17 See more: Abeyratne, R., *Legal Priorities in Air Transport*, Springer, 2019, p. 252.

18 See more Glouftsios, G.; Leese, M., *Epistemic fusion: Passenger Information Units and making of international security*, Review of International Studies, 2022, p. 1-18 [https://www.cambridge.org/core/services/aop-cambridge-core/content/view/D9221B8518A91F9BB18A3CE036A2EA4C/S0260210522000365a.pdf/epistemic_fusion_passenger_information_units_and_the_making_of_international_security.pdf], Accessed 22 November 2022.

19 PIU is responsible for: a) collecting PNR data from air carriers, storing and processing those data and transferring those data to the competent authorities of EU Member States; b) exchanging both PNR

it does not occur exclusively on request of the authorities responsible for passenger control at external borders (as prescribed in Directive 2004/82/EC).

3. DIGITAL SURVEILLANCE OF PASSENGERS THROUGH EUROPEAN TRAVEL INFORMATION AND AUTHORISATION SYSTEM (ETIAS)

Today, around 1.3 billion people from around 60 countries worldwide can benefit from visa - free travel to the EU.[20] Prior travelling to the Schengen Area,[21] travellers/passengers[22] (visa-free third-country nationals)[23] must take to consideration new European rules contained in Regulation (EU) 2018/1240[24] on establishing

---

data and the result of processing those data with the PIUs of other Member States and with Europol (Art. 4 Directive 2016/681).

20 European Commission, State of Schengen Report, Bruxelles, 24.5.2022, COM(2022) 301 final/2, p. 7 [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52022DC0301&qid=1668707809033&from=EN], Accessed 17 November 2022.

21 Schengen Area covers 26 european states: a) 22 EU Member States which are also countries of the Schengen Area (Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden); b) non-EU Member States but countries of the Schengen Area (Iceland, Liechteinstein, Norway i Switzerland) - Europska komisija, *Europa bez granica, Schengenski prostor* [http://publications.europa.eu/resource/cellar/09fcf41f-ffc4-472a-a573-b46f0b34119e.0001.01/DOC_1], Accessed 19 September 2022. From January 1, 2023 – Croatia joined the Schengen Area as a 23rd EU Member State and 27th Schengen Area state.

22 Regulation (EU) 2018/1240 applies to passengers who are travelling by air, sea or land (if international carriers transport groups overland by coach) - see more Art. 45(1) Regulation (EU) 2018/1240); Frontex, *Frequently Asked Questions (FAQ) In support of carriers' public section*, Warsaw, December 2022, p. 12-13 [https://www.eulisa.europa.eu/Organisation/GoverningBodies/Documents/WG%20Carriers/Documents/Carrier_FAQ.pdf], Accessed 11 January 2023.

23 Nationals of third countries (60) who are exempt from the visa requirement (when crossing the external borders of the Member States for stays of no more than 90 days in any 180-day period) are listed in Annex II of the Regulation (EU) 2018/1806 of the European Parliament and of the Council of 14 November 2018 listing the third countries whose nationals must be in possession of visas when crossing the external borders and those whose nationals are exempt from that requirement ([2018] OJ L303/39–58) and in Regulation (EU) 2019/592 of the European Parliament and of the Council of 10 April 2019 amending Regulation (EU) 2018/1806 listing the third countries whose nationals must be in possession of visas when crossing the external borders and those whose nationals are exempt from that requirement, as regards the withdrawal of the United Kingdom from the Union [2019] OJ L103I/1–4.

24 Regulation (EU) 2018/1240 of the European Parliament and of the Council of 12 September 2018 establishing a European Travel Information and Authorisation System (ETIAS) and amending Regulations (EU) No 1077/2011, (EU) No 515/2014, (EU) 2016/399, (EU) 2016/1624 and (EU) 2017/2226, [2018] OJ L236/1–71. More on Amendments to Regulation (EU) 2018/1240 see Art. 61 of the Regulation (EU) 2019/817 of the European Parliament and of the Council of 20 May 2019 on establishing a framework for interoperability between EU information system sin field of border and visa and amending Regulations (EC) No 767/2008, (EU) 2016/399, (EU) 2017/2226, (EU) 2018/1240, (EU9 2018/1726 and (EU) 2018/1861 of the European Parliament and of the Council and Council Decisions 2004/512/EC and 2008/633/HA, [2019] OJ L135/27–84.

a new information system[25] - "European Travel Information and Authorisation System" (ETIAS).[26] Regulation (EU) 2018/1240 constitutes a development of the provisions of the Schengen acquis.[27]

The necessity of the ETIAS has been based on the perceived risk posed by visa-exempt travellers, without, however, substantiating the existence of that risk.[28] ETIAS externalises border control[29] by subjecting visa-free passengers to digitalised advance checks for security and irregular migration.[30] It is automated risk profiling of travellers.[31] Similar type of travel authorisation we can find in Australia,[32] Canada,[33] USA,[34] South Korea[35] etc.[36]

---

25 More on protection of EU external borders through numerous digital systems see Martins, B. O.; Lidén, M.; Gabrielsen Jumbert, M., *Border security and the digitalisaton of sovereignty: insights from EU borderwork*, European Security, Vol. 31, No. 3, 2022, pp. 475-494.

26 More on begginings in consideration of european travel authorisation scheme in 2008 see Bigo, *op.cit.*, p. 87. More on ETIAS see Cesarz, M., *A new type of EU visa? The legal nature of a travel permit issued under the European Travel Information and Authorization System (ETIAS)*, Studia Prawnicze KUL, Vol. 88, No. 4, 2021, pp. 15-16).

27 Michéa; F.; Rousvoal, L., *The Criminal Procedure Out of Itself: A Case Study of the Relationship Between EU Law and Criminal Procedure Using the ETIAS System*, European Papers, Vol. 6, 2021, No 1, p. 475.

28 Vavoula, N., *The "Puzzle" of EU Large-Scale Information Systems for Third-Country Nationals: Surveillance of Movement and Its Challenges for Privacy and Personal Data Protection, op.cit.*, p. 23.

29 More on ETIAS as control measure of "regular" travellers to Schengen and very radical shift in the management of "legal" mobility see Hansen, F.; Pettersson, J., *Contradictory migration management? Differentiated security approaches to visa overstay and irregular border crossing in the European Union*, European Security, Vol. 31, No. 1, 2022, p. 129.

30 Lehtonen, P., Aalto, P., *Smart and secure borders through automated border control systems in the EU? The views of political stakeholders in the Member States*, European security, Vol. 26, No. 2, 2017, p. 208.

31 Martins, B. O.; Lidén, M.; Gabrielsen Jumbert, M., *op.cit.*, p. 476.

32 Electronic Travel Authority – ETA, see more: Australian Government – Department of Home Affairs, *Electronic Travel Authority* [https://immi.homeaffairs.gov.au/visas/getting-a-visa/visa-listing/electronic-travel-authority-601], Accesed 11 January 2023.

33 Electronic Travel Authorisation – eTA, see more: Government of Canada, *Electronic Travel Authorisation – eTA* [https://www.canada.ca/en/immigration-refugees-citizenship/services/visit-canada/eta/apply.html], Accesed 11 January 2023.

34 Electronic System for Travel Authorisation – ESTA, see more: U.S. Customs and Border Protection, *Official ESTA Application* [https://esta.cbp.dhs.gov/], Accesed 11 January 2023.

35 Korea electronic travel authorisation – K-ETA, see more: Ministry of Justice – Korea Immigration Service, *K-ETA*, [https://www.immigration.go.kr/immigration_eng/1832/subview.do?enc=Zm5jdDF8QEB8JTJGYmJzJTJGaW1taWdyYXRpb25fZW5nJTJGMjI5JTJGNTUxMzU3JTJGYXJ0Y2xWaWV3LmRvJTNGcGFzc3dvcmQlM0QlMjZyZ3NCZ25kZVN0ciUzRCUyNmJic0NsU2VxJTNEJTI2cmdzRW5kZGVTdHIlM0QlMjZpc1ZpZXdNaW5lJTNEZmFsc2UlMjZwYWdlJTNEMSUyNmJic09wZW5XcmRTZXElM0QlMjZzcmNoQ29sdW1uJTNEJTI2c3JjaFdyZCUzRCUyNg%3D%3D], Accesed 11 January 2023.

36 See more Cesarz, M., *A new type of EU visa? The legal nature of a travel permit issued under the European Travel Information and Authorization System (ETIAS)*, Studia Prawnicze KUL, Vol. 88, No. 4, 2021, pp. 15-16.

According to the provisions of Art. 15-17 Regulation (EU) 2018/1240, passengers (visa-free third-country nationals / visa-exempt non-EU citizens) must in advance of any intended travel to the Schengen Area (which is a geographical scope of ETIAS),[37] make application[38] for travel authorisation through ETIAS system[39] (via online application form) by providing personal data,[40] which will be cross-checked[41] against a number of databases.[42] ETIAS records alphanumeric and biographic data[43] inserted by person via application[44] and, as a automated IT border control system,[45] helps to estimate whether the presence of those third-country nationals in the territory of the EU Member States would pose a security risk,[46] illegal immigration risk[47] or high epidemic risk[48] (Art.1(1) Regulation (EU) 2018/1240) before they come to

---

37 European Commission, Feasibility Study for a European Travel Information and Authorisation System (ETIAS), November 2016, p. 13 [https://home-affairs.ec.europa.eu/system/files/2020-09/etias_feasability_study_en.pdf], Accessed 20 September 2022.

38 Passengers (aged above 18 and until under 70 at the time of the application), as applicants, need to pay a travel authorisation fee (7 EUR) for each application – Art. 18(2) Regulation (EU) 2018/1240.

39 According to Art. 32(1-2) of the Regulation (EU) 2018/1240, as a rule, a decision on the application will be made no later than 96 hours after the submission of an application.

40 See more Art. 17 Regulation (EU) 2018/1240. More on risks of discriminations in respect of protection of personal data, protection of fundamental rights etc. see Borges Fortes, P. R.; Baquero, P. M.; Restrepo Amariles, D., *Artificial Intelligence Risks and Algorithmic Regulation*, European Journal of Risk Regulation, Vol. 13, 2022, p. 358; Michéa; F.; Rousvoal, L., *The Criminal Procedure Out of Itself: A Case Study of the Relationship Between EU Law and Criminal Procedure Using the ETIAS System*, European Papers, Vol. 6, 2021, No 1, p. 477. On other controversies regarding the Regulation (EU) 2018/1240 see Tiekstra, W., *Free movement threatened by terrorism: an analysis of measures proposed to improve EU border management*, ICCT Policy Brief, 2019, pp. 7-9 [https://icct.nl/app/uploads/2019/10/Free-movement-threatened-by-terrorism.pdf], Accessed 16 November 2022.

41 The delivery o fan authorisation to travel under the ETIAS scheme is conditional upon the automated processing (comparison) of applicant personal data held in existing information systems (Bigo, *op.cit*., p. 88).

42 Brouwer, E., *Schengen and the Administration of Exclusion: Legal Remedies Caught in between Entry Bans, Risk Assessment and Artificial Intelligence*, European Journal of Migration and Law, Vol. 23, 2021, p. 494.

43 If we consider the volume of personal data it will process, ETIAS should be conceived as a platform for mining and profiling personal data rather than a platform for issuing automated or manual travel authorisation decisions (Bigo, *op.cit*., p. 88).

44 Duić, D.; Rošić, M., Interoperability between the EU information systems – from an idea to the realisation, Policija i sigurnost, Vol. 31, No. 2, 2022, p. 136.

45 More on ETIAS as a tool of extraterritorial control see Vavoula, N., *The "Puzzle" of EU Large-Scale Information Systems for Third-Country Nationals: Surveillance of Movement and Its Challenges for Privacy and Personal Data Protection, op.cit.*, p. 14.

46 "Security risk" means the risk of a threat to public policy, internal security or international relations for any of the Member States (Art. 3(1) point 6 of the Regulation (EU) 2018/1240).

47 "Illegal immigration risk" means the risk of a third-country national not fulfilling the conditions of entry and stay as set out in Article 6 of Regulation (EU) 2016/399 see more *infra*, footnote 54 (Art. 3(1) point 7 of the Regulation (EU) 2018/1240).

48 "High epidemic risk" means any disease with epidemic potential as defined by the International Health Regulations of the World Health Organization (WHO) or the European Centre for Disease Preven-

the external borders of Schengen Area.[49] For these purposes, a travel authorisation[50] is introduced (Art. 1(1) Regulation (EU) 2018/1240), so if visa-free third-country nationals want to travel to the Schengen Area, they need to have (prior to their arrival at the border of the Schengen Area)[51] valid travel authorisation.[52] Valid travel authorisation will be mandatory pre-condition for the entry to the Schengen Area.[53] Furthermore, according to Art. 71(1) point m) of the Regulation (EU) 2018/1240, the possession of a valid travel authorisation is a condition for stay that has to be fulfilled during the entire duration of a short stay[54] on the territory of Member States, i.e. Schengen Area countries. Although it is a measure that ensures increased security and protection and strengthening of external border management at the European level, whether or not the person has a valid travel authorisation shall not be regarded as a decision to authorise or refuse entry in accordance with Regulation (EU) 2016/399 (Art. 45(2) Regulation 2018/1240).

While some of ETIAS authorisation goals are impoving EU internal security, preventing of illegal immigration, protecting of public health, enhancing the effectiveness of border control for security purposes, from the passengers' perspective we can say that obtaining the authorisation in question does not guarantee visa-exempt

---

tion and Control (ECDC) and other infectious diseases or contagious parasitic diseases if they are the subject of protection provisions applying to nationals of the Member States (Art. 3(1) point 8 of the Regulation (EU) 2018/1240).

49 To assess whether a person is eligible to enter the EU, three levels of information sorting will be used (Brouwer, E., *Schengen and the Administration of Exclusion: Legal Remedies Caught in between Entry Bans, Risk Assessment and Artificial Intelligence*, European Journal of Migration and Law, Vol. 23, 2021, p. 495).

50 See Art. 3(1), 5 Regulation (EU) 2018/1240.

51 Quintel, T., *Connecting personal data of Third Country Nationals: Interoperability of EU databases in the light of the CJEU's case law on data retention, Faculty of Law*, Economics and Finance, University of Luxembourg, Law Working Paper Series, Paper number 2018-002, p. 8, [https://orbilu.uni.lu/bitstream/10993/35318/1/Teresa%20Quintel%20Interoperability%20of%20EU%20Databases.pdf], Accessed 12 January 2023. More on ETIAS function as "pre-screening travellers" see Casarz, M., *op.cit.*, p. 24.

52 A travel authorisation shall be valid for three years or until the end of validity of the travel document registered during application, whichever comes first, and shall be valid for the territory of the Member States (Art. 36(5) Regulation (EU) 2018/1240).

53 Memo: *Questions and Answers on ETIAS* [https://home-affairs.ec.europa.eu/system/files/2022-07/European%20Travel%20Information%20and%20Authorisation%20System-ETIAS-memo_en.pdf], Accessed 20 September 2022.

54 Short stay means stays in the territory of the Member States within the meaning of Article 6(1) of Regulation (EU) 2016/399 (Regulation (EU) 2016/399 of the European Parliament and of the Council of 9 March 2016 on a Union Code on the rules governing the movement of persons across borders - Schengen Borders Code, [2016] OJ L77/1-52) i.e., intended stays on the territory of the Member States of a duration of no more than 90 days in any 180-day period, which entails considering the 180-day period preceding each day of stay (see more Art. 3(1) point 11 and Art. 80 of the Regulation (EU) 2018/1240).

non-EU citizens automatic rights of entry but it seems that using ETIAS authorisation will make crossing the external borders easier. However, it is important to emphasise that passengers who are EU citizens do not need to have ETIAS authorisation but they, including non-EU citizens who are not subject to the visa-free regime, will benefit from using ETIAS for visa-exempt non-EU citizens. In fact, digital surveillance and pre-authorisation through ETIAS represent collection and sharing of numerous visa-exempt non-EU citizens' personal data and security database check throught numerous EU eletronic databases (IT systems). This pre-entry screening process involves using of improved security actions throught algorithm profiling. Since the mentioned procedure is carried out prior to the visa-exempt non-EU citizens' travel to the Schengen Area (i.e. before they come to the external borders of Schengen Area), we can conclude that these new European requirements for visa-exempt non-EU citizens will contribute to the implementation of more efficient (automated) border control, which will consequently result in an easier and faster passage through all stages of border control for all passengers crossing external borders. At the same time, we can conclude that this will contribute to a better perception of all passengers of their safety during the trip, since for visa-exempt non-EU citizens, who represent security, illegal immigration or high epidemic risk, travel authorisation shall be refused and they would not be able to cross the external borders, so they would be turned away from the border.

Althought ETIAS is not in operation yet, it is estimated that it should be operational from November 2023.[55] When fully operational, ETIAS will be mandatory, pre-screening millions of visa-free third country nationals entering Schengen airports.[56]

4. CARRIER'S OBLIGATION OF USING ETIAS

ETIAS enables national migration and security authorities to use the pre-screening and gives them the possibillity of assessing security and migratory risks prior to arrival at the border, so there will be reducing refusals of entry at the border for visa-exempt third-country nationals.[57] More precisely, the carrier[58] is responsible

---

55 *2022: Last chance to visit Europe before ETIAS*, [https://www.etias.info/2022-last-chance-to-visit-europe-before-etias/], Accessed 20 September 2022.

56 Center for Immigration Studies, *Entry-Exit Biometric Controls Are Coming to Schengen; EU "Smart Borders" Poised to Surpass U.S.*, June 2022 [https://cis.org/Linderman/EntryExit-Biometric-Controls-Are-Coming-Schengen-EU-Smart-Borders-Poised-Surpass-US], Accessed 20 September 2022.

57 European Commission, *Feasibility Study for a European Travel Information and Authorisation System (ETIAS)*, November 2016, p. 12 [https://home-affairs.ec.europa.eu/system/files/2020-09/etias_feasability_study_en.pdf], Accessed 20 September 2022.

58 According to Art. 45(1) Regulation (EU) 2018/1240, questions on access to data for verification by carriers includes air carriers, sea carriers and international carriers transporting groups overland by coach. See more Vavoula, N., "*You (Probably) Are Who I Say You Are" – ETIAS and the Fourhold Shift in*

for ensuring that the passenger has valid and authentic travel document for the country he is traveling to.[59] Currently, carriers only check whether visa-exempt passengers have a travel document.[60]

4.1 Carrier's obligations of verification of passengers' possesion of a valid travel authorisation

In chapter VII "Use of ETIAS by carriers" of the Regulation (EU) 2018/1240 (Art. 45-46) contains decisions on carrier obligation to use ETIAS. According to Art. 45(1) Regulation (EU) 2018/1240, by sending a query[61] (through carrier interface[62]) to the ETIAS Information System, carriers are obliged to verify[63] whether or not third-country nationals (who are exempt from the requirement to be in possession of a visa when crossing the external borders) are in possession of a valid travel authorisation to enter the Schengen Area which they will be able to read electronically[64] based on passenger travel document and indicating the EU Member State of entry. It is important to state that according to Art. 5(1) of the Regulation (EU) 2022/1380, carriers shall provide more passenger data (than data according to Art. 45(1) Regulation (EU) 2018/1240). To be more precise, according to Art. 5(1) Regulation (EU) 2022/1380 stipulates the carrier shall provide

the Operationalisation of Information Systems, in: Immigration and Privacy in the Law of the European Union, Brill Nijhoff, 2022, pp. 498-499. More on derogation from the provision of the Art. 45(1) Regulation (EU) 2018/1240 in regards to international carriers transporting groups overland by coach see Art. 45(9) of the Regulation (EU) 2018/1240. More on carriers which are/are not bound by ETIAS see Frontex, *op.cit.,* pp. 10, 26-30.

59 See more Boccardi, I., *Europe and Refugees: Towards an EU Asylum Policy*, Kluwer Law International, 2002, p. 47.

60 European Commission, *Evaluation of the Council Directive 2004/82/EC on the obligation of carriers to communicate passenger data (API Directive)*, Brussels, SWD(2020) 174 final, p. 44 [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020SC0174&qid=1668776873018&-from=EN], Accessed 18 November 2022.

61 Such a query is to be made by means of secure access to a carrier gateway – Preamble on 3) of the Commission Implementing Regulation (EU) 2022/1380 of 8 August 2022 laying down the rules and conditions for verification queries by carriers, provisions for data protection and security for the carriers' authentication scheme as well as fall back procedures in case of technical impossibility and repealing Implementing Regulation (EU) 2021/1217, [2022] OJ L207/1–11, hereafter: Regulation (EU) 2022/1380 (see more Art. 3(1) and 5(1) Regulation (EU) 2022/1380).

62 Carrier interface means the carrier gateway to be developed by eu-LISA in accordance with Article 73(3) of Regulation (EU) 2018/1240 and consisting of an IT interface connected to a read only database – Art. 2(1) of Regulation (EU) 2022//1380. According to Art. 3(3) of Regulation (EU) 2022/1380, carriers shall ensure that only authorised staff have access to the carrier interface.

63 The verification query shall be sent at the earliest 48 hours prior to the scheduled time of departure (Art. 3(2) of Regulation (EU) 2022/1380).

64 More on electronic travel authorisation see Shachar, A., *Beyond open and closed borders: the grand transformation of citizenship*, Jurisprudence, Vol. 11, No. 1, 2020, p. 10.

the following traveller data: a) data from passenger travel document:[65] aa) surname (family name); first name or names (given names); ab) date of birth, sex and nationality; ac) the type and number of the travel document and the three letter code of the issuing country of the travel document and ad) the date of expiry of the validity of the travel document; and b) data on: ba) the scheduled day of arrival at the border of the Member State of entry; bb) one of the following - the scheduled Member State of entry or where possible to identify the scheduled Member State of entry, an airport in the Member State of entry; and bc) the details (local date and time of scheduled departure, identification number where available or other means to identify the transport) of the means of transportation used to access the territory of a Member State. These are provisions that further determine the rules and conditions for verification queries by carriers.

If carriers transport passengers to the country of the Schengen Area, they shall (prior to the boarding of a passenger) provide the data contained in the machine-readable zone of the travel document, indicate the Member State of entry and verify whether the third-country national is in possession of a valid travel authorisation.[66] Carriers have obligation to verify passenger's possession of a valid travel authorisation except in case when it was technically impossible to proceed with the query referred to in Art. 45(1) Regulation (EU) 2018/1240 because of a failure of any part of the ETIAS Information System (Art. 46(1) Regulation (EU) 2018/1240). In case when third-country nationals subject to the travel authorisation requirement do not have a valid travel authorisation, carriers are not allowed to transport them.

4.2. Carrier's obligations in the case when visa-free third-country nationals (passenger without valid travel authorisation) were refused entry at the border

In the case when carriers transport third-country nationals (who are exempt from the requirement to be in possession of a visa and do not have a valid travel authorisation) they will get refusal of entry at Schengen borders so carriers will be obligeted to return them from borders at carrier's expense and the carrier will also be subject to penalties[67] according to Art. 45(5) Regulation (EU) 2018/1240. The

---

65 Carriers shall be allowed to scan the machine-readable zone of the travel document (Art. 5(2) Regulation (EU) 2022/1380).

66 In the case of airport transit, air carrier shall not be obliged to verify whether the third-country national is in possession of a valid travel authorisation (Art. 45(2) Regulation (EU) 2018/1240).

67 More on carriers' sanctions as standard control mechanisms see Mau, S.; Brabandt, H.; Laube, L.; Roos, C.: *Liberal States and the Freedom of Movement: Selective Borders, Unequal Mobility*, Palgrave Macmillan, 2001, p. 95.

legal basis for the introduction of such type of obligations for carriers (in terms of transportation third-country nationals without valid travel authorisation) can also be found in earlier European legal provisions: Convention Implementing the Schengen Agreement (Art. 26(2)) and Directive 2001/51/EC (Art. 4) referred to in Art. 45(5) Regulation (EU) 2018/1240.

4.2.1. Convention Implementing the Schengen Agreement, Directive 2001/51/EC

Aiming to achieve gradual abolition of checks at borders, on 19 June1990 in Schengen the Convention Implementing the Schengen Agreement (CISA Convention)[68] was signed which entered into force on 26 March 1995.[69] The Contracting Parties of the CISA Convention (Belgium, Germany, France, Luxembourg, Netherlands)[70] have undertaken to implement into their own national legislation provisions on the carrier's[71] duty to: a) take all the necessary measures to ensure that an alien[72] carried by air or sea is in possession of the travel documents[73] required for entry into the territories of the Contracting Parties (Art. 26(1) on b) CISA Convention);[74] and b) if aliens are refused entry into the territory of one of the Contracting Parties, the carrier which brought them to the external border[75] by air, sea or land shall be obliged immediately to assume responsibility for them again, eg. carrier shall be obliged, at the request of the border surveillance

---

68 Convention implementing the Schengen Agreement of 14 June 1985 between the Governments of the States of the Benelux Economic Union, the Federal Republic of Germany and the French Republic on the gradual abolition of checks at their common borders, [2000] OJ L239/19–62.

69 CISA Convention included the abolition of border controls as a legal obligation (Salomon, S.; Rijpma, J., A *Europe Without Internal Frontiers: Challenging the Reintroduction of Border Controls in the Schengen Area in the Light of Union Citizenship*, German Law Journal, p. 13 [https://www.cambridge.org/core/services/aop-cambridge-core/content/view/1E2B43D2B7F58EE752053CD7F10C050E/S2071832221000602a.pdf/a-europe-without-internal-frontiers-challenging-the-reintroduction-of-border-controls-in-the-schengen-area-in-the-light-of-union-citizenship.pdf], Accessed 22 November 2022.

70 Hereafter: Contracting Parties.

71 Carrier means mean any natural or legal person whose occupation it is to provide passenger transport by air, sea or land (Art. 1. CISA Convention).

72 Alien shall mean any person other than a national of a Member State of the European Communities (Art. 1 CISA Convention).

73 There is no definition of travel documents in CISA Convention. More on the list of travel documents which entitle the holder to cross the external borders – see Decision No 1105/2011/EU of the European Parliament and of the Council of 25 October 2011 on the list of travel documents which entitle the holder to cross the external borders and which may be endorsed with a visa and on setting up a mechanism for establishing this list, [2011] OJ L287/9-12.

74 See more Cholewinski, R., *The EU Acquis on Irregular Migration: Reinforcing Security at the Expense of Rights*, European Journal of Migration and Law, No. 2, 2000, p. 382.

75 External borders means Contracting Parties' land and sea borders and their airports and sea ports, provided that they are not internal borders (Art. 1 CISA Convention).

authorities, to return the aliens to the third state[76] (from which they were transported or which issued the travel document on which they travelled) or to any other third state to which they are certain to be admitted (Art. 26(2) on a) CISA Convention).[77] It is important to note that the provisions of Art. 26(2) CISA Convention require that Contracting Parties impose penalties[78] on carriers which transport aliens (who do not possess the necessary travel documents) by air or sea from a third state to their territories.[79] Carrier sanctions constitute a primary tool for ensuring pre-arrival migration control.[80]

The provisions of Art. 26 CISA Convention are supplemented by provisions of Directive 2001/51/EC[81] which harmonises the amount of financial penalties provided by the EU Member States.[82] European legislator prescribed that EU Member States shall take the necessary steps to ensure that the penalties applicable to carriers unuder the provisions of Art. 26(2) CISA Convention are dissuasive, effective and proportionate and that: a) either the maximum amount of the applicable financial penalties is not less than 5 000 EUR, for each person carried; or b) the minimum amount of these penalties is not less than 3 000 EUR, for each person carried; or c) the maximum amount of the penalty imposed as a lump sum

---

76 Third state means any State other than the Contracting Parties (Art. 1 CISA convention).

77 The aforementioned obligations are also prescribed according to the provisions of the Annex V, part A "Procedures for refusing entry at the border", point 2 of the Regulation (EU) 2016/399; Art. 45(8) of the Regulation (EU) 2018/1240.

78 See more Brouwer, A.; Kumin, J., *Interception and Asylum: When Migration Control and Human Rights Collide*, Refuge, Vol. 21, No. 4, 2003, p. 10.; Mcnamara, F., *Member State Responsibility for Migration Control within Third States – Externalisation Revisited*, European Journal of Migration and Law, Vol. 15, No. 3, 2013, p. 331.; Primorac, Ž., *Pravne posljedice provjere putnikovih putnih isprava u zračnim lukama – opravdanost razloga za uskraćivanje ukrcaja na let*, Zbornik Pravnog fakulteta Sveučilišta u Rijeci, Vol. 40, No. 3, 2019, pp. 1142-1143.

79 See more Puntervold Bo, B., *Recent tendencies in immigration control policies in Europe: undermining legal safeguards and refugee protection?*, in: Migration and Mobility in Europe: Trends, Patterns and Control, Edward Elgar Publishing, 2009, p. 280. More on EU Member States (Belgium, Germany, Denmark, Greece, France, Italy, Luxembourg, Netherlands, Portugal) were carriers may be fined see Cruz, A., *Carriers Liability in the Member States of the European Union*, Churches Commission for Migrants in Europe, CCME Briefing Paper No.17, 1994, p. 10-12 [https://ccme.eu/wp-content/uploads/2018/12/Briefing_Paper_17_UK.pdf], Accessed 18 November 2022.

80 Gammeltoft-Hansen, T., *Access to Asylum: International Refugee Law and the Globalisation of Migration Control*, Cambridge University Press, 2011, p. 160.

81 Council Directive 2001/51/EC of 28 June 2001 supplementing the provisions of Article 26 of the Convention implementing the Schengen Agreement of 14 June 1985 entered into force on 9 August 2001 [2001] OJ L187/45-46, hereafter: Directive 2001/51/EC.

82 More on carriers' sanctions in Austra, Greece, France, Italy, Netherlands and Portugal see Amnesty International, *No Flights to Safety, Carrier Sanctions*, ACT 34/21/97, November 1997, pp 3-7 [https://www.amnesty.org/en/wp-content/uploads/2021/06/act340211997en.pdf], Accessed 21 September 2022.

for each infringement is not less than 500 000 EUR, irrespective of the number of persons carried.[83] EU Member States are able to retain or introduce additional measures or penalties for carriers.[84]

4.2.2. Regulation (EU) 2018/1240

Although Regulation (EU) 2018/1240 entered into force at the beginning of October 2019, the previously analysed provisions are still not applied. More precisely, according to Art. 96 of Regulation (EU) 2018/1240 it is prescribed that the European Commission will determine the start of application of the relevant provisions in accordance with Art. 88, i.e. European Commission shall determine the date from which ETIAS is to start operations (by fulfilling the conditions from Art. 88(1) of the Regulation (EU) 2018/1240) and by publishing the relevant decision in the Official Journal of the European Union (Art. 88(4) of the Regulation (EU) 2018/1240).

It is expected that the start of ETIAS application will come from November 2023, so carriers will be subject to penalties in the case of transporting a third-country national who does not have a valid travel authorisation (application of the provisions of the Art. 26(2) CISA Convention and Art. 4 of the Directive 2001/51/EC).[85] Exceptionally, if for the same third country nationals carrier is already subject to penalties provided for in accordance with Art. 26(2) CISA Convention and Art. 4 Directive 2001/51/EC, penalties referred to in Art. 45(5) Regulation (EU) 2018/1240 shall not apply.[86] Also, the penalties referred to in Art 45(5) of the Regulation (EU) 2018/1240 shall not be imposed on carriers in the case of a technical impossibility to access data by carrier because of a failure of any part of the ETIAS Information System (Art. 46(1-2) Regulation (EU) 2018/1240). In that case, if the carrier was not able to access data because of the technical impossibiliy (failure) of any part of the ETIAS Information System, carrier shall be exempted of the obligation to verify passengers' possession of valid travel authorisation and carrier shall not be imposed penalties from Art. 45(5) of the Regulation (EU) 2018/1240. Therefore, the application of penalties to the carrier will only occur if the carrier transports a visa-free third-country national with a valid and authentic passport or other travel document, but without a valid travel authorisation[87] (if the transportation of the mentioned persons without a valid travel authorisation-

83 Art. 4(1) Directive 2001/51/EC.

84 Preamble on 4) Directive 2001/51/EC.

85 Art. 45(5) Regulation (EU) 2018/1240.

86 Art. 45(6) Regulation (EU) 2018/1240.

87 Primorac, Ž., *op. cit.,* p. 1144.

did not occur due to technical impossibility to access data by carrier because of a failure of any part of the ETIAS Information System).

From the carriers' view there is fear that ETIAS authorisation will contribute to an increase in the number of delays, since the amount of work that the carrier's employees will have to undertake will increase. We can conclude that they will need to bear all financial costs that will arise from their obligation to verify visa-free non-EU citizens' possesion of a valid ETIAS authorisation prior to boarding which can cause disruption and possibly have an impact on an obligatory recruitment of new personnel, including costs for taking all technical and technological measures for providing verification of ETIAS authorisation, costs for penalties if they transport visa-free non-EU citizens without a valid travel authorisation etc.

5. CONCLUSION

Passengers can travel within the Schengen Area without being carried out controls at the internal borders, but the strengthening of internal security presupposes the implementation of increased surveillance at the external borders of the Schengen Area (carrying out of border controls). The implementation of the provisions on ETIAS requirements contained in Regulation (EU) 2018/1240, which constitute the Schengen acquis, aims to strengthen external border controls by identifying those visa-free third-country nationals (visa-exempt non-EU citizens) who want to travel to Schengen Area, and who represent a security risk, illegal immigration risk or high epidemic risk. For visa-exempt non-EU citizens, we allready use all available passenger data control mechanisms according to the provisions of Directive 2004/82/EC (regardless of whether the passengers are EU citizens or non-EU citizens, eg. passengers with or without visa; air carriers' data transmission only on request of the authorities responsible for passenger control at external borders; aiming to achieve better border control on the EU external borders; prohibited exchange of this data between EU Member states) and Directive (EU) 2016/681 (for all passengers of extra-EU flights; air carrier transmission to the PIU database of the EU Member State on the territory of which the flight will land or from the territory of which the flight will depart; aiming to achieve prevention, detection, investigation and prosecution of terrorist offences and serious crime; possible exchange of information between EU Member States).

When ETIAS, as a digital pre-travel screening system, becomes operational (expected in November 2023) and a mandatory requirement,[88] prior to travel to

[88] During the period of six months from the date of commencement of the ETIAS, the use of the ETIAS is not mandatory and the obligation to have a valid travel authorization does not apply (Art. 83(1)

the Schengen Area all visa-exempt non-EU citizens will have to make an online application (through ETIAS) for travel authorisation if they want to have short visiting stay (up to 90 days) in Schengen Area. ETIAS authorisation is valid for an unlimited number of entries to 30 European countries on the condition that ETIAS authorisation is valid and that visa-exempt non-EU citizens also fulfill all other entry conditions (valid travel document, but also other accompanying documentation regarding entry conditions required by the state they are planning to visit). ETIAS authorisation is valid for the time period of max. 3 years or shorter if visa-exempt non-EU citizen's travel document expires earlier (in that case, until the end of validity of the travel document). It is important to note that visa-exempt non-EU citizens do not need ETIAS authorisation for the internal travel within the Schengen Area.

ETIAS will help estimate whether the presence of visa-exempt non-EU citizens would pose a security risk, illegal immigration risk or high epidemic risk even before they travel to the Schengen Area. That information will be useful for greater efficiency of external border checks. According to new European rules in Regulation (EU) 2018/1240, visa-exempt non-EU citizens have an obligation to apply for travel authorisation (throught ETIAS) prior to tavelling to the Schengen Area, and carriers (air carriers, sea carriers and international carriers transporting groups overland by coach) have an obligation to verify whether visa-exempt non-EU citizens have a valid travel authorisation (ETIAS authorisation) to enter the Schengen Area which they will be able to read electronically, prior to boarding. In the case when visa-exempt non-EU citizens do not have a valid travel authorisation, carriers are responsible to deny them boarding. Carriers are not allowed to transport them, otherwise, if they get refusal of entry, carriers will have the obligation to return them from borders and they will also be penalised (fined) according to Regulation (EU) 2018/1240, CISA Convention and Directive 2001/51/EC.

Since Regulation (EU) 2018/1240 was adopted on 12 September 2018 and entered into force on 9 October 2018, after more than 4 years since its entry into force to date ETIAS is not operational. Considering the complexity and extensiveness of the measures that necessarily include solving the financial, technological[89] and legal aspects of using ETIAS, the question arises whether it can be expected that ETIAS, as new eletronic platform for digital surveillance and automatic profiling

Regulation (EU) 2018/1240).

89 More on ETIAS which combinas complexity on technological and legal level see Michéa; F.; Rousvoal, L., *The Criminal Procedure Out of Itself: A Case Study of the Relationship Between EU Law and Criminal Procedure Using the ETIAS System*, European Papers, Vol. 6, 2021, No 1, p. 476-477. More on data protection standards, fundamental rights and privacy aspects in case of using multiple EU information systems of pasengers surveillance see Quintel, *op.cit.*, p. 1-19.

of passengers from 60 countries, will truly start being applied by the end of 2023? We can see that there are more questions that need to be answered. This includes the necessity of answering key legal issues regarding verification of passenger data which are given when submitting an online request for travel authorisation, protection of fundamental rights, passengers data protection rules etc. The European Commission is authorised to adopt a series of delegated acts, including an act that defines in more detail the risks related to security or illegal immigration or a high epidemic risk (Art. 33(2) Regulation (EU) 2018/1240) since the standardisation of the terms security risk, illegal immigration risk and high epidemic risk within the provisions of Regulation (EU) 2018/1240 enables their uneven interpretation, which contributes to legal uncertainty, and the risks in question represent reasons for profiling of visa-free non-EU citizens from 60 countries. Considering that the authorisation in question was granted to the European Commission for a period of five years starting from 9 October 2018 (that is, until 9 October 2023),[90] it remains to be seen whether the European Commission, which is responsible for proposing European legal acts, will succeed in formulating appropriate delegated acts, the adoption of which would contribute to the formation of a systematic and complete European legal framework on the establishment and implementation of ETIAS. While legal framework is not yet complete, there is still time to implement provisions which will enable better interoperability between existing and newly established ETIAS information system for security and border control and to find balance between massive visa-free non-EU citizens surveillance, automated processing and profiling of their personal data in numerous information systems (where ETIAS is an instrument for visa-free non-EU citizens control when they are outside the external borders of the Schengen Area!) and data processing protection standards and requirements which must be respected in the EU.

REFERENCES

BOOK AND ARTICLES

1. Abeyratne, R., *Legal Priorities in Air Transport*, Springer, 2019, p. 252
2. Andreeva, C., *The evolution of information-sharing in EU counter-terrorism post-2015: a paradigm shift?*, Global Affairs, Vol. 7, No. 5, 2021, p. 763
3. Bellanova, R.; Glouftsios, G., *Formatting European security integration through database interoperability*, European Security, Vol. 31, No. 3, 2022, p. 466
4. Bigo, D., *The socio-genesis of a guild of „digital technologies" justifying transnational interoperable databases in the name of security and border purposes: a reframing of the fied of security*

[90] Art. 89(2) Regulation (EU) 2018/1240.

professionals, International Journal of Migration and Border Studies, Vol. 6, No. 1-2, 2020, p. 75, 87, 88

5. Boccardi, I., *Europe and Refugees: Towards an EU Asylum Policy*, Kluwer Law International, 2002, p. 47
6. Borges Fortes, P. R.; Baquero, P. M.; Restrepo Amariles, D., *Artificial Intelligence Risks and Algorithmic Regulation*, European Journal of Risk Regulation, Vol. 13, 2022, p. 358
7. Brouwer, E., *Schengen and the Administration of Exclusion: Legal Remedies Caught in between Entry Bans, Risk Assessment and Artificial Intelligence*, European Journal of Migration and Law, Vol. 23, 2021, p. 494, 495
8. Brouwer, A.; Kumin, J., *Interception and Asylum: When Migration Control and Human Rights Collide*, Refuge, Vol. 21, No. 4, 2003, p. 10
9. Cesarz, M., *A new type of EU visa? The legal nature of a travel permit issued under the European Travel Information and Authorization System (ETIAS)*, Studia Prawnicze KUL, Vol. 88, No. 4, 2021, p. 15-16, 24
10. Cholewinski, R., *The EU Acquis on Irregular Migration: Reinforcing Security at the Expense of Rights*, European Journal of Migration and Law, No. 2, 2000, p. 382.
11. Cruz, A., *Carriers Liability in the Member States of the European Union*, Churches Commission for Migrants in Europe, CCME Briefing Paper No.17, 1994, p. 10-12 [https://ccme.eu/wp-content/uploads/2018/12/Briefing_Paper_17_UK.pdf], Accessed 18 November 2022.
12. Duić, D.; Rošić, M., *Interoperability between the EU information systems – from an idea to the realisation*, Policija i sigurnost, Vol. 31, No. 2, 2022, p. 120
13. Gammeltoft-Hansen, T., *Access to Asylum: International Refugee Law and the Globalisation of Migration Control*, Cambridge University Press, 2011, p. 160
14. Glouftsios, G.; Leese, M., *Epistemic fusion: Passenger Information Units and making of international security*, Review of International Studies, 2022, p. 1-18 [https://www.cambridge.org/core/services/aop-cambridge-core/content/view/D9221B8518A91F9BB18A3CE-036A2EA4C/S0260210522000365a.pdf/epistemic_fusion_passenger_information_units_and_the_making_of_international_security.pdf], Accessed 22 November 2022
15. Hansen, F.; Pettersson, J., *Contradictory migration management? Differentiated security approaches to visa overstay and irregular border crossing in the European Union*, European Security, Vol. 31, No. 1, 2022, p. 129
16. Lehtonen, P.; Aalto, P.: *Smart and secure borders through automated border control systems in the EU? The views of political stakeholders in the Member States*, European security, Vol. 26, No. 2, 2017, p. 208
17. Martins, B. O.; Lidén, M.; Gabrielsen Jumbert, M., *Border security and the digitalisaton of sovereignty: insights from EU borderwork*, European Security, Vol. 31, No. 3, 2022, p. 476, 475-494
18. Mau, S.; Brabandt, H.; Laube, L.; Roos, C.: *Liberal States and the Freedom of Movement: Selective Borders, Unequal Mobility*, Palgrave Macmillan, 2001, p. 95
19. Mcnamara, F., *Member State Responsibility for Migration Control within Third States – Externalisation Revisited*, European Journal of Migration and Law, Vol. 15, No. 3, 2013, p. 331

20. Michéa; F.; Rousvoal, L., *The Criminal Procedure Out of Itself: A Case Study of the Relationship Between EU Law and Criminal Procedure Using the ETIAS System*, European Papers, Vol. 6, 2021, No 1, p. 475, 476-477
21. Primorac, Ž., *Pravne posljedice provjere putnikovih putnih isprava u zračnim lukama – opravdanost razloga za uskraćivanje ukrcaja na let*, Zbornik Pravnog fakulteta Sveučilišta u Rijeci, Vol. 40, No. 3, 2019, p. 1142-1143, 1144
22. Puntervold Bo, B., *Recent tendencies in immigration control policies in Europe: undermining legal safeguards and refugee protection?*, in: Migration and Mobility in Europe: Trends, Patterns and Control, Edward Elgar Publishing, 2009, p. 280
23. Quintel, T., *Connecting personal data of Third Country Nationals: Interoperability of EU databases in the light of the CJEU's case law on data retention*, Faculty of Law, Economics and Finance, University of Luxembourg, Law Working Paper Series, Paper number 2018-002, p. 8, 1-19 [https://orbilu.uni.lu/bitstream/10993/35318/1/Teresa%20Quintel%20Interoperability%20of%20EU%20Databases.pdf], Accessed 12 January 2023
24. Rossi dal Pozzo, F., *International and EU legal frameworks of aviation security*, in: Szyliowicz, J. S.; Zamparini, L. (ed.), Air Transport Security Issues Challenges and National Policies, Edward Elgar Publishing, 2018, p. 55
25. Salomon, S.; Rijpma, J., A *Europe Without Internal Frontiers: Challenging the Reintroduction of Border Controls in the Schengen Area in the Light of Union Citizenship*, German Law Journal, p. 13 [https://www.cambridge.org/core/services/aop-cambridge-core/content/view/1E2B43D2B7F58EE752053CD7F10C050E/S2071832221000602a.pdf/a-europe-without-internal-frontiers-challenging-the-reintroduction-of-border-controls-in-the-schengen-area-in-the-light-of-union-citizenship.pdf], Accessed 22 November 2022.
26. Shachar, A., *Beyond open and closed borders: the grand transformation of citizenship, Jurisprudence*, Vol. 11, No. 1, 2020, p. 10
27. Tiekstra, W., *Free movement threatened by terrorism: an analysis of measures proposed to improve EU border management*, ICCT Policy Brief, 2019, p. 7-9, [https://icct.nl/app/uploads/2019/10/Free-movement-threatened-by-terrorism.pdf], Accessed 16 November 2022
28. Vavoula, N., *The „Puzzle" of EU Large-Scale Information Systems for Third-Country Nationals: Surveillance of Movement and Its Challenges for Privacy and Personal Data Protection*, European Law Review, p. 14, 23, 32 [https://qmro.qmul.ac.uk/xmlui/handle/123456789/60690], Accessed 12 January 2023.
29. Vavoula, N., *„You (Probably) Are Who I Say You Are" – ETIAS and the Fourhold Shift in the Operationalisation of Information Systems*, in: Immigration and Privacy in the Law of the European Union, Brill Nijhoff, 2022, p. 498-499

EU LAW

1. Commission Implementing Regulation (EU) 2022/1380 of 8 August 2022 laying down the rules and conditions for verification queries by carriers, provisions for data protection and security for the carriers' authentication scheme as well as fall back procedures in case of technical impossibility and repealing Implementing Regulation (EU) 2021/1217, [2022] OJ L207/1–11

2. Convention implementing the Schengen Agreement of 14 June 1985 between the Governments of the States of the Benelux Economic Union, the Federal Republic of Germany and the French Republic on the gradual abolition of checks at their common borders, [2000] OJ L239/19–62
3. Council Directive 2001/51/EC of 28 June 2001 supplementing the provisions of Article 26 of the Convention implementing the Schengen Agreement of 14 June 1985, [2001] OJ L187/45-46
4. Council Directive 2004/82/EC of 29 April 2004 on the obligation of carriers to communicate passenger data, [2004] OJ L261/24-27
5. Decision No 1105/2011/EU of the European Parliament and of the Council of 25 October 2011 on the list of travel documents which entitle the holder to cross the external borders and which may be endorsed with a visa and on setting up a mechanism for establishing this list, [2011] OJ L287/9-12.
6. Directive (EU) 2016/681 of the European Parliament and of the Council of 27 April 2016 on the use of passenger name record (PNR) data for the prevention, detection, investigation and prosecution of terrorist offences and serious crime, [2016] OJ L119/132–149
7. Regulation (EU) 2018/1240 of the European Parliament and of the Council of 12 September 2018 establishing a European Travel Information and Authorisation System (ETIAS) and amending Regulations (EU) No 1077/2011, (EU) No 515/2014, (EU) 2016/399, (EU) 2016/1624 and (EU) 2017/2226, [2018] OJ L236/1–71
8. Regulation (EU) 2018/1806 of the European Parliament and of the Council of 14 November 2018 listing the third countries whose nationals must be in possession of visas when crossing the external borders and those whose nationals are exempt from that requirement, [2018] OJ L303/39–58
9. Regulation (EU) 2019/592 of the European Parliament and of the Council of 10 April 2019 amending Regulation (EU) 2018/1806 listing the third countries whose nationals must be in possession of visas when crossing the external borders and those whose nationals are exempt from that requirement, as regards the withdrawal of the United Kingdom from the Union, [2019] OJ L103I/1–4
10. Regulation (EU) 2019/817 of the European Parliament and of the Council of 20 May 2019 on establishing a framework for interoperability between EU information system sin field of border and visa and amending Regulations (EC) No 767/2008, (EU) 2016/399, (EU) 2017/2226, (EU) 2018/1240, (EU9 2018/1726 and (EU) 2018/1861 of the European Parliament and of the Council and Council Decisions 2004/512/EC and 2008/633/HA, [2019] OJ L135/27–84

WEBSITE REFERENCES

1. Amnesty International, *No Flights to Safety, Carrier Sanctions*, ACT 34/21/97, November 1997, pp 3-7 [https://www.amnesty.org/en/wp-content/uploads/2021/06/act340211997en.pdf], Accessed 21 September 2022
2. Australian Government – Department of Home Affairs, *Electronic Travel Authority* [https://immi.homeaffairs.gov.au/visas/getting-a-visa/visa-listing/electronic-travel-authority-601], Accesed 11 January 2023

3. Center for Immigration Studies, *Entry-Exit Biometric Controls Are Coming to Schengen; EU „Smart Borders" Poised to Surpass U.S.*, June 2022 [https://cis.org/Linderman/EntryExit-Biometric-Controls-Are-Coming-Schengen-EU-Smart-Borders-Poised-Surpass-US], Accessed 20 September 2022
4. Directorate-general for internal policies, *Study for the libre committee – European Travel Information and Authorisation System (ETIAS): Border management, fundamental rights and data protection*, 2017, p. 29 [https://www.europarl.europa.eu/RegData/etudes/STUD/2017/583148/IPOL_STU%282017%29583148_EN.pdf], Accessed 20 September 2022
5. European Commission, *Evaluation of the Council Directive 2004/82/EC on the obligation of carriers to communicate passenger data (API Directive)*, Brussels, SWD(2020) 174 final, p. 44 [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020SC0174&qid=1668776873018&from=EN], Accessed 18 November 2022
6. European Commission, *Feasibility Study for a European Travel Information and Authorisation System (ETIAS)*, November 2016, p. 9 [https://home-affairs.ec.europa.eu/system/files/2020-09/etias_feasability_study_en.pdf], Accessed 20 September 2022
7. European Commission, *Proposal for a Regulation of the European Parliament and of the Council establishing an Entry/Exit System (EES) to register entry and exit data and refusal of entry data of third country nationals crossing the external borders of the Member States of the European Union and determining the conditions for access to the EES for law enforcement purposes and amending Regulation (EC) No 767/2008 and Regulation (EU) No 1077/201*, Bussels, 6.4.2016, COM(2016) 194 final, 2016/0106(COD), p. 1 [https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52016PC0194], Accessed 15 November 2022
8. European Commission, *State of Schengen Report*, Bruxelles, 24.5.2022, COM(2022) 301 final/2, p. 7 [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52022DC0301&qid=1668707809033&from=EN], Accessed 17 November 2022
9. European Commission, *Technical Study on Smart Borders*, p. 15 [https://home-affairs.ec.europa.eu/system/files/2016-12/smart_borders_executive_summary_en.pdf], Accessed 20 September 2022
10. Europska komisija, *Europa bez granica*, *Schengenski prostor* [http://publications.europa.eu/resource/cellar/09fcf41f-ffc4-472a-a573-b46f0b34119e.0001.01/DOC_1], Accessed 19 September 2022
11. Explanatory Memorandum to COM(2016)731 – *European Travel Information and Authorisation System (ETIAS)*, November 2016 [https://www.eumonitor.eu/9353000/1/j4nvhdfdk3hydzq_j9vvik7m1c3gyxp/vk9bd6mxr5zn], Accessed 20 September 2022
12. Frontex, *Frequently Asked Questions (FAQ) In support of carriers' public section*, Warsaw, December 2022, p. 10, 12-13, 26-30 [https://www.eulisa.europa.eu/Organisation/GoverningBodies/Documents/WG%20Carriers/Documents/Carrier_FAQ.pdf], Accessed 11 January 2023
13. Government of Canada, *Electronic Travel Authorisation – eTA* [https://www.canada.ca/en/immigration-refugees-citizenship/services/visit-canada/eta/apply.html], Accesed 11 January 2023

14. Memo: *Questions and Answers on ETIAS* [https://home-affairs.ec.europa.eu/system/files/2022-07/European%20Travel%20Information%20and%20Authorisation%20System-ETIAS-memo_en.pdf], Accessed 20 September 2022
15. Ministry of Justice – Korea Immigration Service, *K-ETA*, [https://www.immigration.go.kr/immigration_eng/1832/subview.do?enc=Zm5jdDF8QEB8JTJGYmJzJTJGaW1taWdyYXRpb25fZW5nJTJGMjI5JTJGNTUxMzU3JTJGYXJ0Y2xWaWV3LmRvJTNGcGFzc3dvcmQlM0QlMjZyZ3NCZ25kZVN0ciUzRCUyNmJic0NsU2VxJTNEJTI2cmdzRW5kZGVTdHIlM0QlMjZpc1ZpZXdNaW5lJTNEZmFsc2UlMjZwYWdlJTNEMSUyNmJic09wZW5XcmRTZXElM0QlMjZzcmNoQ29sdW1uJTNEJTI2c3JjaFdyZCUzRCUyNg%3D%3D], Accesed 11 January 2023
16. U.S. Customs and Border Protection, *Official ESTA Application* [https://esta.cbp.dhs.gov/], Accesed 11 January 2023
17. *2022: Last chance to visit Europe before ETIAS* [https://www.etias.info/2022-last-chance-to-visit-europe-before-etias/], Accessed 20 September 2022

UDK 346.543:004(4-67EU)
Review article

VARIOUS CONSEQUENCES OF DIGITAL MARKETS ACT ON GATEKEEPERS*

Regina Hučková, PhD, Associate Professor
Faculty of Law, Pavol Jozef Šafárik University in Košice
Kováčska 26, Košice, Slovakia
regina.huckova@upjs.sk

Martina Semanová, PhD Student
Faculty of Law, Pavol Jozef Šafárik University in Košice
Kováčska 26, Košice, Slovakia
martina.semanova@student.upjs.sk

ABSTRACT

On November the 1st, The European Union's new Digital Markets Act (DMA) entered into force. At present, the DMA is at its crucial implementation phase and will come into force in six months, as of 2 May 2023. After that, within two months (and at the latest by 3 July 2023), potential Gatekeepers will have to notify their core platform services to the Commission if they meet the thresholds established by the DMA.

DMA was made with the purpose of improving customers' digital lives, and part of that means reduction of the influence of Gatekeepers by several restrictions. Gatekeepers are defined by DMA as digital platforms that provide an important gateway between business users and consumers – whose position can grant them the power to act as a private rule maker, thus creating a bottleneck in the digital economy.

As the time passes, Gatekeepers should adapt to this new regulation and corresponding restrictions. DMA established a list of rules that Gatekeepers now need to implement in their habitual activities and practices. For instance, among other requirements, the DMA requires companies marked as Gatekeepers to now allow third-party apps to be installed on their devices.

In this article, we will focus on the implementations, in which specific Gatekeepers, had to make or are going to make changes, which will be in accordance with the demands of the DMA. The methodology used to identify the 'situations' cannot be separated from the problems

* This work was supported by the Slovak Research and Development Agency under the Contract no. APVV-19-0424 "Innovative business: intra-corporate transformation, digital challenges, and the advent of artificial intelligence" and APVV-17-0561 Human-legal and ethical aspects of cyber security.

that this regulation seeks to address. We will point out some of the steps that are expected by specific Gatekeepers (members of the GAFAM group) to reconcile with the DMA demands.

In this article we will also outline the role of the European Commission, as the Gatekeepers in question will notice whether they meet the thresholds established by the DMA.

This article reveals the various provisions of the DMA in relation to Gatekeepers and points out some of the consequences of these provisions.

***Keywords**: European Commission, e-commerce, Digital Markets Act, fair business, Gatekeepers*

1. INTRODUCTION

On 12th October 2022, the European Union published the final version of its new Digital Markets Act[1]. In this article we will also apply a shortened version - DMA. The legal basis for the DMA is Article 114 TFEU[2] which ensures the functioning of the single market and is the relevant legal basis for this initiative. Its aim is to ensure future competitiveness and fairness of digital services where so-called gatekeepers are present (Article 1 paragraph 1 DMA and Recital 7, 32, 33 DMA). It is a piece of legislation that regulates the business behaviour of so-called digital gatekeepers – service providers of the core platform on which businesses depend when reaching their customers. Such companies have a strong and permanent market power. Despite its proximity to competition policy, the DMA can at first sight be described as a sector-specific regulation with asymmetric applicability targeting the so-called gatekeepers within the framework of established services of the core platform.[3]

There is a widespread opinion[4] that competition law enforcement in the digital sphere has been too complex and too slow over the former decade. The Commission shares this view too (Rec. 5 DMA).[5] The DMA intends to confront this deficit by transitioning from the enforcement of ex post control (i.e., the traditional instruments of abuse control) to ex ante behavioural regulation.[6]

---

1 Regulation (EU) 2022/1925 of the European parliament and of the Council on contestable and fair markets in the digital sector (Digital Markets Act).

2 Treaty on the Functioning of the European Union.

3 Article 2 paragraph 2 and 3 DMA, see also section 2.2 a Recital 10 DMA.

4 Budzinski, O.; Mendelsohn, J., Regulating Big Tech: From Competition Policy to Sector Regulation? (Updated October 2022 with the Final DMA) Ilmenau Economics Discussion Papers, Vol. 27, No. 168, 2022, pp. 1- 6, Available online at: [http://dx.doi.org/10.2139/ssrn.4248116], Accessed 6 April 2023.

5 and prominently Furman *et al. Unlocking Digital Competition, Report of the digital competition expert panel*. 2019 Available at: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/785547/unlocking_digital_competition_furman_review_web.pdf], Accessed 24 April 2023.

6 *Ibid.*

The final text of the DMA is even more stringent than its proposal was, primarily due to the European Parliament. It has played an indispensable role in expanding the list of services covered by the DMA by adding new rules of conduct and increasing sanctions. In April 2022, Cédric O, the French Minister for the Digital Economy, called the agreed legislation "the most important economic regulation in recent decades".

We presume that the DMA will largely change the way gatekeeper platforms operate in Europe and resolve the shortcomings highlighted in the UK's Furman report, the US's Stigler report and the EU's Vestager report. In particular, all three reports asserted that the core platform markets were globally dominated by one or two of the same five companies: Google, Apple, Facebook, Amazon and Microsoft (The GAFAM group). While jurisdictions such as the United States and the United Kingdom are also considering similar regulations, the EU Digital Markets Act is the first of its kind.

While the Digital Markets Act is not without its imperfections, and a number of issues we will focus on in this article remain to be addressed (such as the very definition of gatekeepers), the legislation is likely to have more potential to maintain the market power of large technologies than the Competition Act. In this article, our attention will be drawn to the issue of the very definition of who should be a gatekeeper according to the DMA (not only the GAFAM group), some introductory provisions of the DMA (for example, Recital 10, 36, 52 of the DMA and others) and, in accordance with the wording of the effective text of the DMA, the provisions of Article 5 – the obligations of access gatekeepers, pointing out some specific actions of market gatekeepers from the GAFAM group that they have carried out.

2. DMA REGULATING THE GATEKEEPERS

By the DMA the Commission reacts to challenges posed by the business practises of large online platforms by the new regulation, which applies to core platform services offered to end users and bussines users by gatekeepers, which are located or established in Euroepan Union.[7] Several authors[8] agree that the legislation in question will mainly regulate the public law aspects of online platforms. DMA

[7] Article 1 paragraph 2 DMA.

[8] Rudohradská, S.; Hučková, R.; Dobrovičová, G. *Present and Future – A Preview Study of Facebook in The Context Of The Submitted Proposal For Digital Markets Act*, in: EU and Comparative Law Issues and Challenges Series (ECLIC), Vol. 6, 2022, pp. 505-506 Available online at: [https://doi.org/10.25234/eclic/22440], Accessed 1 May 2023.

regulation is often referred to as a new instrument of economic competition.[9] The high degree of market concentration is due to an unusual combination of factors that characterise the digital platform market:

- strong network effects,
- high return on data usage,
- economies of scale and ease of utilizing the consumer biases.

These factors make markets prone to tipping in favour of one or two players, and once the market is tipped, high barriers to enter make it difficult for newcomers to compete, even if they had a more remarkable product.

The objective of DMA is twofold. Firstly, to remove barriers to entry in digital markets (to make them more open to competition) and, secondly, to make them fairer for businesses and end-users, by laying down certain basic rules on conditions of use. For this reason, the DMA subjects gatekeepers to a set of strict rules of conduct. The European Commission will first identify market gatekeepers and it is fully expected that GAFAM will be included on the list according to the Article 3 of the DMA. In order to counter the strength of these gatekeepers, a list of obligations under the Articles 5, 6, 7 of the DMA is defined, together with various measures (under the Article 8 of the DMA) for their approval. Additionally, a list of sanctions is also defined, including penalties under the Article 30 of the DMA, to punish non-compliance with the obligations.

According to the DMA defined gatekeepers are obliged to follow defined list of practices that are regarded as limit contestability or to be unfair according to Article 5 of DMA. These obligations of conduct are divided into 3 lists, one headlined "obligations for gatekeepers" (Art. 5 DMA), the second qualified by the supplement "susceptible of being further specified" (Art. 6 DMA), and the third referring to "obligations for gatekeepers on interoperability of number-independent interpersonal communication services" (Art. 7 DMA).

Art. 5 DMA prohibits designated gatekeepers to conduct sixteen strategies. To point out to some of them:

In accordance with Article 5 provision 2 are prohibited:

(a) third-party data-processing for the purpose of online advertising,

[9] Rudohradská, S.; Treščáková, D. *Proposals For The Digital Markets Act And Digital Services Act: Broader Considerations In Context Of Online Platforms.* EU and Comparative Law Issues and Challenges Series (ECLIC), Vol. 5, 2021, p. 497, Available online at: [https://doi.org/10.25234/eclic/18317], Accessed 6 April 2023.

(b) combining personalized data extracted from the core platform service with data from other services of the same company or from third parties,

(c) cross-using personalized data across the services of the gatekeeper

(d) cross-service signing of end users,

These prohibitions are closely connected to the EU's regulation - General Data Protection Regulation (2016/679, "GDPR")[10]and are giving end users a possibility of free choice of the level of providing personal information to a gatekeeper. In these provisions, DMA refers to the definitions given by the GDPR, so only on these personal data can the DMA make restrictions, not on those, which are out of scope of the definition in the GDPR. The other connection with the GDPR are criteria of giving a standard of consent of end users to gatekeeper. The DMA outlined how gatekeepers can meet the consent standard. In Recital 37, according to which:

1. when requesting consent, the gatekeeper should proactively present a user-friendly solution to the end user to provide, modify or withdraw consent in an explicit, clear and straightforward manner,
2. consent should be given by clear and free action or statement, specific, informed and unambiguous indication of agreement by the end user, as defined in the GDPR,
3. only where applicable, the end user should be informed that not giving consent can lead to a less personalized offer, but that CPS will otherwise remain unchanged. Thus, the DMA outlined how gatekeepers can meet the consent standard.)

Some of the gatekeepers are using third-party data processing for the purpose of their online marketing. However, in compliance with GDPR – for example, if the platform acquired datas based on consent, the consent should've included the possibility to transmit the data to other recipients for their own direct marketing. Simply summarized, gatekeepers are using data from end - users in order to benefit on their own services and products by using these data for other of services which they provide or third party. In the end of the day Gatekeepers cannot use their own data about consumers to compete with their business users. Giving as an example Facebook (Meta) it prevents it from harvesting personal data from Instagram and exporting that same data to Facebook so that it could target new advertising to the user in question using the same data.

[10] Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation).

Another range of prohibitions is connected with combining personal data – known as CPS. Following provisions are closely connected to the concept of "core platform service", also shortened as "CPS", which definition needs to meet with the definition of gatekeeper (besides other conditions), who must offer these services. CPS is defined as online intermediation services, online search engines, online social network services, video-sharing platform services, number-independent interpersonal communication services, operating systems, cloud computing services, web browsers, virtual assistant, or online advertising services. Indications of these provisions is explained in the recital 36 DMA as a concern, that gatekeepers are making unfair steps to violate the contestability of CPS.

- In accordance with Article 5 provision 3 the gatekeeper may not restrict business users in the way, price, and conditions they promote and sell their good through other online channels, which means that in certain cases, through the imposition of contractual terms and conditions, gatekeepers are able to restrict the ability of business users of their online intermediation services to offer products or services to end users under more favourable conditions, including price. In the end, where such restrictions relate to third-party online intermediation services, they limit inter-platform contestability. In the end the choice of end user is limited.
- In accordance with Article 5 provision 5 the gatekeeper may not restrict consumers in using software applications of business users through the core platform service - for example mobile phone consumers could use apps that are not approved by Google or Apple.
- In accordance with Article 5 provision 7 exclusivity of platform, i.e., requiring end users to use or business users to use, offer or interoperate with identification services, payment services (including payment systems for in-app transactions), and web browser engines in the context of the core platform service, as for example it will allow end users to install third party apps or app stores that use or interoperate with the operating system of the gatekeeper;
- In accordance with Article 5 provision 8 requiring business or end users to subscribe or register with any further core platform service, so for example Google might be forced to allow users to access some services without subscribing
- In accordance with Article 5 provision 9 and 10, where some publishers do not provide their consent to the sharing of the relevant information with the advertiser, the gatekeeper should provide the advertiser with the information about the daily average remuneration received by those publishers for the relevant advertisements. The same obligation and principles of sharing the relevant information concerning the provision of online advertising services

should apply in respect of requests by publishers. Since gatekeepers can use different pricing models for the provision of online advertising services to advertisers and publishers, for instance a price per impression, per view or any other criterion, gatekeepers should also provide the method with which each of the prices and remunerations are calculated.

- Another important provision might be Article 5 provision 9 and 10 which is associated with the conditions (which are opaque and frequently non- transparent) under which gatekeepers provide online advertising services to business users - both advertisers and publishers. Gatekeepers are obliged to provide of information regarding placed advertisements and advertising services to advertisers, i.e., withholding information about prices and fees etc.[11] The gatekeeper should provide the advertiser with the information about the daily average remuneration received by those publishers for the relevant advertisements. As a result, by providing of this information allows advertisers to receive information that has a satisfactory standard of confidentiality necessary to compare the costs of using the online advertising services of gatekeepers with the costs of alternative online advertising services.

Many of these requirements[12] interfere with the very core of big technology business models, which is why there is a legitimate concern about how the gatekeeper will tackle them. Failure to comply with the rules could lead to a significant financial sanction: a single infringement could result in a fine of up to 10% of the gatekeeper's total worldwide turnover. For repeated offenses, the fine can rise up to 20%, and the gatekeeper may further be prohibited from entering mergers and acquisitions.

3. THE GROUP 'GAFAM'

'Big Tech' or 'Tech Giants', refers to the five most dominant companies in the information technology, industry. It includes the largest American tech companies: Google, Amazon, Meta (Facebook), Apple and Microsoft. These companies are referred also to as the Big Five – GAFAM.

Our personal data threatens a new crossing of the Atlantic."[13] These companies are considered 'access gatekeepers' because their power is so great that they can block the entry of new competitors. They can also easily expand into new seg-

[11] Article 5 provision 9 and 10 DMA.

[12] More obligations and restrictions are defined in the Art. 6 and 7 as already mentioned.

[13] Halpin, P. *Ireland challenges Facebook in threat to cross-border data pac*t, 2017, Available online at: [https://www.reuters.com/article/ctech-us-eu-privacy-facebook-idCAKBN15M1K8] Accessed 23 April 2023.

ments – especially through tied sales or by taking over the competitors. The need for the specific monitoring of the established DMA is therefore a necessity. However, GAFAM group is not intended as a single objective, otherwise the legislation could be labelled as discriminatory due to its focus on only one country - America. The text of the DMA therefore sets out criteria, such as turnover or number of users, which enable to determine whom these 'access gatekeepers' are specifically to monitor. However, on the basis of the quantitative and qualitative criteria[14] established by the DMA, the provisions of the DMA will certainly apply to the GAFAM Group.[15]

Several authors were sceptical or even critical about the definition of market gatekeepers. For example, Kerber was slightly sceptical about this definition, pointing to the question of whether the concept of gatekeepers is adequate and whether it can also serve for definitions from an economic point of view, not just a legal one.[16] Another example is the group of authors Budzinski, Gaenssle & Lindstädt-Dreusicke, who dealt with the issue of services to which DMA only applies partially. These are services providing similar goods to consumers standing between each other at a horizontal level of economic competition. By that they mean video-sharing platform services such as YouTube which are on the list of services of the basic DMA platform, while other types of video sharing and streaming services are not on the list (for example, subscription-based video and audio streaming platforms, such as Netflix, Amazon Prime, Apple Music, Spotify, etc). However, in the end of the day, empirical evidence strongly suggest that services like YouTube are in competition with services like Netflix and co.[17]

Thus, a different treatment of competing services may arise based upon the business models. For now, if you run your provision of video content on demand as a video-sharing platform (advertised-financed), you may end up on the 'gatekeeper' list, if you do so by employing a retail model (subscription-based), you will not. This in turn means that special responsibilities may not always be assigned due to superior market power – as is the case in competition law – but solely based on choice of the business model. The possibility to extend the list of so-called core

14 Article 3 DMA.

15 Cabral, L. *et. al.*, *The EU Digital Markets Act*, Publications Office of the European Union, Luxembourg, 2021, p. 9, Available online at: [https://publications.jrc.ec.europa.eu/repository/handle/JRC122910], Accessed: 4 April 2023.

16 Kerber, W., *Taming Tech Giants with a Per-Se Rules Approach? The Digital Markets Act from the 'Rules vs. Standard' Perspective*, in: Concurrences No. 3, 2021, p. 28-34, Available online at: [http://dx.doi.org/10.2139/ssrn.3861706], Accessed 24 April 2023.

17 Budzinski, O., Gaenssle, S. & Lindstädt-Dreusicke, N. *The battle of YouTube, TV and Netflix: an empirical analysis of competition in audiovisual media markets.* SN Bus Econ 1, 116, [2021]. p. 19-24, Available online at: [https://doi.org/10.1007/s43546-021-00122-0], Accessed 24 April 2023.

platform services opens the scope for both correcting unfortunate service denominations and the addition of services that may be considered 'core' in the future. However, the focus on the business model 'platform' appears to be somewhat set-in stone, meaning that a dominant digital retailer (vertical) cannot become a gatekeeper, only a marketplace service provider can.[18] We believe that this fact creates a space for the possible future repair of services that will be considered basic.

Expetionally vast players, with a key position in the digital market, are the primary object for regulation. On the one hand, because of their economic strength, but also on the grounds of their power in shaping the digital environment. However, there are many more companies like Google, Apple, Facebook, Amazon and Microsoft (GAFAM) whose behaviour has a strong impact on the digital economy. While they are not (yet) dominant in their respective markets, network and tipping effects can rapidly increase their market strenght and may have better bargaining power towards large groups of customers and business partners well below the dominance threshold.

The current legal framework is less than optimal in regard to not only an extensive but also a wider spectrum of digital players. Having gained experience from the regulation currently being implemented, European legislators should extend it to a more complex regulatory framework, including, among others, companies with market power under dominance (potentially according to a context-specific interpretation of the integrated concept of 'relative' market power in the legislation of some EU Member States).[19] In line with its broader scope, such a more conventional regulatory framework should not impose compliance obligations in general as well as obligations regarding the compliance review of others that are as far-reaching as those of gatekeepers. However, it should pay particular attention to the risks of market tilting, oligopolisation and path dependences arising from the data-related activities of non-Gatekeeper companies.[20]

It is also important to note that the EU does not condemn the dominant position of these gatekeepers, but the abuse of dominant position by gatekeepers themselves.

---

18 *Ibid,* p. 2.

19 For an overview on relative market power in EU Member State competition law, cf Eckart Bueren, Anna Wolf-Posch and Peter Georg Picht, 'Relative Marktmacht im D-A-CH-Rechtsraum' [2021] Zeitschrift für Wettbewerbsrecht 173.

20 Picht, P.; Richter, H., *EU Digital Regulation* [*2022*]*: Data Desiderata,* GRUR International, Vol. 71, Issue 5, 2022, pp. 395–402, Available online at: [https://doi.org/10.1093/grurint/ikac021], Accessed 6 April 2023.

4. (POSSIBLE) IMPACT OF DMA ON GAFAM

Unsurprisingly, large tech corporations are actively lobbying against these regulations. In 2021, according to TechCrunch, the big five – Google Apple Facebook Amazon Microsoft – spent more than €27 million together lobbying against DMA and DSA, a sharp increase compared to previous lobbying spending.[21] The contribution of a fair European market for all players is more than welcome, especially for the reason of finding a balance between regulating illegal content and ensuring that freedom of expression is not restricted.

As stated in the DMA,[22] digital service providers will no longer be able to prioritise their own products, use personal data of consumers using services provided by a third party on their platform, use certain linking practices or restrict platform users. However, advertisers will have access to aggregated and non-aggregated data for the ads they run. They will be able to analyse the data themselves using their own set of tools. In practice, these obligations relate to default settings, sideloading, third-party applications, access to business user services, data provision, interoperability of messaging services, combating bundling and circumvention.

In regard to 'bundling' practices, the DMA preamble limits this obligation to 'ancillary services', which means identification systems, payment systems and web browser tools.

A good example of a type of behaviour that is prohibited is Amazon's use of personal data.[23] In 2020, the European Commission accused Amazon of misusing personal data about the activities of third-party vendors in its favour.[24] Executive Vice-President Margrethe Vestager, in charge of competition policy, said: "We must ensure that dual role platforms with market power, such as Amazon, do not distort competition. Data on the activity of third-party sellers should not be used

---

21 Lomas, N. *Report reveals Big Tech's last minute lobbying to weaken EU rules*, 2022, Available online at: [https://techcrunch.com/2022/04/22/google-facebook-apple-eu-lobbying-report/?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLmNvbS8&guce_referrer_sig=AQAAAARM2od8o0qMEvhK4v6iJtzU2VloYv9ytn5bYj7fpNl2qIm5m8VxiQRngx6ClrlSqTzbMkyIrejb80l7S6m9sYr1mdCH78rAZSM0-j-xrVopjS9OU9NPy1uLj3-O4ICyoSg_ilgFKNpBpKX-GEPm1fh7RDbmKNXuNNGUxsW36xbz], Accessed 24 April 2023.

22 Recital 51, 52 and following DMA.

23 Petrov. P, *The European Commission Investigations Against Amazon – A Gatekeeper Saga*, 2020, Available online at: [https://competitionlawblog.kluwercompetitionlaw.com/2020/12/18/the-european-commission-investigations-against-amazon-a-gatekeeper-saga/?fbclid=IwAR1k0vqos1RLEYyVMXityHaZhmqKsyRA4vk7CQw7AxjfTlUh56Pke6weJts#_ftn4], Accessed 4 April 2023.

24 European Comission. Antitrust: *Commission sends Statement of Objections to Amazon for the use of non-public independent seller data and opens second investigation into its e-commerce business practices*, 2020, Available online at: [https://ec.europa.eu/commission/presscorner/detail/en/ip_20_2077], Accessed 6 April 2023.

to the benefit of Amazon when it acts as a competitor to these sellers. The conditions of competition on the Amazon platform must also be fair. Its rules should not artificially favour Amazon's own retail offers or give advantage to the offers of retailers using Amazon's logistics and delivery services. With e-commerce booming, and Amazon being the leading e-commerce platform, a fair and undistorted access to consumers online is important for all sellers."

Until now, the Commission has only sanctioned this practice on the basis of abuse of a dominant position, which has meant a long legal process without the certainty that companies will comply to the rules.[25] The summary of the Commission's final decision sets out the periods within which Amazon has to fulfil its final commitments offered to the Commission.[26]

Amazon has a dual role as a platform:

1) provides a market where independent sellers can sell products directly to consumers; and

2) sells products as a retailer in the same market in competition with those sellers.

As a market service provider, Amazon has access to non-public third-party merchant data such as the number of units of products ordered and shipped, merchant revenues on the market, the number of visits to merchant offers, shipping data, past merchant performance, and other consumer product claims, including activated warranties. Pursuant to the effective wording of the DMA, we refer to Article 5 of the DMA, according to which the access gatekeeper may not link personal data from the respective platform with personal data of any other services it provides.

The Commission's current findings show that Amazon employees have large amounts of non-public vendor data flowing directly into Amazon's automated systems, which they collect and use to facilitate Amazon's retail offerings as well as strategic business decisions. All at the expense of other vendors in the marketplace. Amazon is thus able to target its offers of the best-selling products for different

[25] More information on the investigation will be available on the Commission's competition website, in the public case register under case number AT.40462. Available online at: [https://ec.europa.eu/competition/elojade/isef/case_details.cfm?proc_code=1_AT_40462] Accessed 4 April 2023.

[26] 2023/C 87/05 Summary of Commission Decision of 20 December 2022 relating to a proceeding under Article 102 of the Treaty on the Functioning of the European Union and Article 54 of the EEA Agreement (Cases AT.40462 – Amazon Marketplace and AT.40703 – Amazon Buy Box) (notified under document C(2022) 9442 final) Available online at: [https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv%3AOJ.C_.2023.087.01.0007.01.ENG&toc=OJ%3AC%3A2023%3A087%3ATOC] , Accessed 6 April 2023.

product categories. It also adjusts its offers on the basis of these data, thereby favouring it over competitors.

The Commission's preliminary view outlined in its statement of objections is that the use of non-public seller data in the marketplace allows Amazon to avoid the normal risks of retail competition and to exploit its dominance in the market for the provision of market services in France and Germany – the largest markets for Amazon in the EU. If confirmed, this would be contrary to Article 102 of the Treaty on the Functioning of the European Union (TFEU), which prohibits the abuse of a dominant position on the market.[27] With the DMA, the commitments that have been defined and the powers that have been given to the Commission, the situation will certainly evolve and be rectified more efficiently and quickly.

For example, Google, while expressing concerns about the DMA, has already started to comply with the rules and allowed Spotify to use its own payment system in its Android application in accordance with Article 5 DMA, paragraph 7.

Microsoft, along with many smaller companies, welcomed the DMA. "Open platforms are important to innovate for the future and the new European gatekeeper rules will ensure that large online intermediaries, including Microsoft, do more to adapt and make #TechFit4Europe," Microsoft vice president of European Government Affairs Casper Klynge said. In the past, Google has also had a dispute with the Commission – Google Search Shopping Case.[28]

In addition, the DMA also pays regard to the evolution of technology and the digital market by allowing the Commission to create secondary legislation to impose new obligations, add or remove legal elements after market research.

As we have stated earlier in this article, the DMA prohibits gatekeepers from prioritizing their own services over others.[29] The DMA typically includes examples such as restricting Apple's use of its own app store or certain Google data collection practices. For example, access to search engine data should be granted on fair, reasonable and non-discriminatory terms.

To date, there are no known steps to align these practices with the DMA, especially when it comes to Apple. On these issues, Global Policy Director for Spotify

---

27 *Ibid,* p. 7.

28 Notified under document number C(2017) 4444 Commission Decision of 27 June 2017 in Case AT.39740, *Google Search (Shopping)*. Available online at: [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018XC0112(01)&from=EN], Accessed 4 April 2023.

29 Point 52 of the introductory wording DMA.

- Gene Burrus, mentioned some key changes on the grounds of the European Commission that he believes the DMA must force Apple to comply with:

1. Enable an alternative option for in-app purchases on iOS
2. Enable developers/companies to communicate directly with consumers
3. Restrict Apple from prioritizing its own apps.

At this conference, Apple also had its representative, but it can be said that so far there have been no revolutionary changes that would be consistent with the DMA.[30]

5. IMPLEMENTATION OF THE DMA AFTER ENTERING INTO FORCE

"DMA is here to stay and will be quickly mirrored in a number of countries. The flexibility that Big Tech had will be constrained, as the regulatory 'straitjacket' will get tighter globally," said Ioannis Kokkoris, competition law professor at Queen Mary University in London.[31]The DMA - the uniformed rules of the European Union that will prevent from the fragmentation of internal market - will apply from the beginning of May 2023. Within two months, the companies providing the core platform services will have to inform the Commission and provide all relevant information. The Commission will then have two months to take a decision on the appointment of a specific gatekeeper. The designated gatekeepers will have a maximum of six months after the Commission's decision to comply with the obligations set out in the DMA.

The fact is that once the DMA enters into force, it will make national regulation impossible and leave room only for national competition rules, which require an individual assessment of market power and actual effects of behaviour in each individual case. In its final version, the DMA authorizes national agencies to initiate investigations and gather evidence. However, in the interests of a coherent approach to enforcement, only the Commission is currently competent to assess conduct under the DMA and to issue non-compliance decisions.

---

30 Potuck, M., *Spotify says Apple's DMA compliance must include these changes*. [2023] Available online at: [https://9to5mac.com/2023/03/06/spotify-says-dma-apple-compliance-must-do-this/], Accessed 23 April 2023.

31 Euronews, reteurs and AFP. *The EU's Digital Markets Act: What is it and what will the new law mean for you and Big Tech?*, 2022, Available online at: [https://www.euronews.com/next/2022/03/25/the-eu-s-digital-markets-act-what-is-it-and-what-will-the-new-law-mean-for-you-and-big-tec], Accessed 23 April 2023.

Article 1 paragraph 6 DMA establishes that the DMA is 'without prejudice to the application of': the European competition rules – more specifically, Articles 101 and 102 TFEU and Regulation 139/2004 on merger control, corresponding national competition rules and national competition rules prohibiting other forms of unilateral conduct insofar as they are applied to undertakings other than gatekeepers or amount to the imposition of further obligations on gatekeepers. There are concerns from collective of authors (Drexl, J.,Conde, B., Begoña etc.) which include the possible overly broad blocking effects of the DMA on national rules. These rules may have the unintended consequences of privileging gatekeepers by jeopardizing future national legislative initiatives and ultimately obstructing the achievement of contestability and fairness in digital markets.[32] So in the end, the aim of the DMA in practice (harmonization goal) may result in a different way than it was and is expected. Another risk is a formulation of Article 1 paragraph 5 excluding the national obligations and national laws, which are pursuing the same aim as the DMA (as for example it may not exclude obligations connected to competition laws, contract laws etc.). For that and many other reasons, the narrow interpretation of the concepts of fairness and contestability must be vehement and collaboration of European union and member state is the main key for effective enforcement od the DMA. National antitrust laws must co-exist in harmony with the DMA in order to achieve the desired effect.[33]

On the other hand, the main advantages of the DMA as such lie in the regulator's ability to verify the behaviour of each gatekeeper in order to avoid any detrimental proceedings for the digital market. The measures put in place are intended to ensure that the behaviour of gatekeepers does not create an imbalance in bargaining power. Such imbalance could lead to unfair practices and conditions for business users as well as end-users of the core platform services provided by the gatekeepers, to the detriment of prices, quality, choice and innovation. As pointed out by international law firm Dentons, the DMA likely will become a point of reference for antitrust cases all around the globe.[34]

---

[32] Drexl, J., *et al.., Position Statement of the Max Planck Institute for Innovation and Competition of 2 May 2023 on the Implementation of the Digital Markets Act (DMA*). Max Planck Institute for Innovation & Competition Research Paper No. 23-11, 2023, p. 1-33, Available online at: [http://dx.doi.org/10.2139/ssrn.4437220], Accessed 10 May 2023.

[33] Carugati, Ch., *The Implementation of the Digital Markets Act with National Antitrust Laws*, 2023, Available online at : [http://dx.doi.org/10.2139/ssrn.4072359], Accessed 25 May 2023.

[34] Dentons, *EU Digital Markets Act: next steps and long - term outlook,* 2023, Available online at: [https://www.dentons.com/en/insights/articles/2022/december/7/eu-digital-markets-act-next-steps-and-long-term-outlook], Accessed 25 May 2023.

Currently there are a few ongoing workshops in regard with the provisions of the DMA as for example, The DMA and app store related provisions[35], The DMA and interoperability between messaging services (Article 7 of the DMA)[36], Applying the DMA's ban on self-preferencing: how to do it in practice?[37].

There is one problem to propound, defining the strategies focusing to reduce contestability may motivate gatekeepers to find different strategies to empower their products and services.

6. CAN THE DMA ACHIEVE ITS AIMS?

On 14 April 2023 the first Comissions implementing regulation of the DMA was published.[38] The DMA has a unique institutional concept and its relation to national laws as well as other laws on European level is undoubt. As we already mentioned, it might show some problems in practice (Article 1 paragraph 5 and 6 DMA)

The DMA integrates many basic concepts of the EU General Data Protection Regulation (GDPR) and requires the Commission to work closely with data protection authorities. This is a step forward because the regulation of data-driven business models requires an interdisciplinary and inter-institutional approach that has been neglected in the EU competition law prior to this time. An example is the Meta (Facebook) case, which began to be assessed by the German competition authority - the Bunderkartellamt on 2 March 2016.[39] As one of the main objectives for initiating proceedings was that user and device-related data which Facebook collects when other corporate services or third-party websites and apps are used and which it then combined with user data from the social network. The team

---

35 The recording of the workshop can be accessed online here: [https://webcast.ec.europa.eu/dma-stakeholder-workshop-on-app-stores-23-03-06], Accessed 6 April 2023.

36 The recording of the workshop can be accessed online here [https://webcast.ec.europa.eu/dma-workshop-2023-02-27], Accessed 6 April 2023.

37 The recording of the workshop can be accessed online here [https://webcast.ec.europa.eu/dma-first-workshop-05-12-22], Accessed 6 April 2023.

38 Commission Implementing Regulation (EU) 2023/814 of 14 April 2023 on detailed arrangements for the conduct of certain proceedings by the Commission pursuant to Regulation (EU) 2022/1925 of the European Parliament and of the Council (C/2023/2530) available online here: [http://data.europa.eu/eli/reg_impl/2023/814/oj], Accessed 25 May 2023.

39 Case C-252/21, *Meta Platforms and Others,* Request for a preliminary ruling of 24 March 2021, Available online at:[https://curia.europa.eu/juris/showPdf.jsf?text=&docid=242143&pageIndex=0&doclang=EN&- mode=lst&dir=&occ=first&part=1&cid=1565434], Accessed 4 April 2023.

of authors Dobrovičová, Hučková and Rudohradská dealt with the hypothetical course of the proceedings in the event that the DMA was already effective.[40]

A key criticism of the DMA has been its heavy use of per se rules, i.e., legal rules that do not require proving the actual harmful effects of the investigated conduct but outlaw the conduct as such. We will point out to the some of the advantages and disadvantages:

Advantages:

- they are relatively fast paced, which means that enforcement of DMA could be much more effective than enforcement of the EU competition law - In particular, abuse of the rules of a dominant position requires in-depth economic assessments leading to average investigations of more than five years.

Disadvantages:

- they are austere: they can outlaw behaviour that does not cause any real harm in a particular case (leading to 'false positives'),
- they may not capture behaviour that causes harm ('false negatives').
- Co-existence with national laws and other European legislation
- They can be circumvented by the company - gatekeeper adjusting its business behaviour to achieve an anti-competitive result in a way that is not explicitly prohibited.

Although DMA is likely to reduce (some of) the currently known anti-competitive behaviour and measures by GAFAM-style companies, it is unlikely to fill the competition law enforcement gap against digital services for mainly two reasons. Firstly, due to its ex-ante nature, it is unable to address rapidly and effectively the new anti-competitive behaviour and measures most likely to be developed by regulated companies in response to regulatory divestment of their previous instruments. Secondly, it does not deal with the emergence of new gatekeepers and only tries to control them when they distort effective competition. Finally, there is one problem to mention, defining the strategies focusing to reduce contestability may motivate gatekeepers to find different strategies to empower their products and services.

However, in its final version, the DMA contains many corrective mechanisms that would allow the Commission to correct the rules where necessary. It is to be hoped that the Commission will closely monitor the impact of DMA on both businesses and consumers and that it will not hesitate to intervene if necessary. Some authors

[40] *Ibid,* p.3.

agree that the DMA can render the beginning of a feedback loop that will leisurely but steadily increase contestability in the digital sector.[41]

7. CONCLUSION

It should be borne in mind that the DMA is not anticipated to replace but to supplement competition law (Recital DMA 10). However, if it is true that competition policy in its current form is in fact too lenient because of the shortcomings in enforcement, which is also argued in the academic literature,[42] and too slow to effectively address anti-competitive behaviour, an accompanying reform of European law and competition policy is therefore urgently needed.

The DMA will apply from the beginning of May 2023. Within two months, the companies providing the core platform services will have to inform the Commission and provide all correlative information. The Commission will then have two months to take a decision on the appointment of a specific gatekeeper. The designated gatekeepers will have a maximum of six months after the Commission's decision to comply with the obligations set out in the DMA.

Time will tell whether the scepticism of experts, especially regarding the delineation of market gatekeepers is justified. The obligation of gatekeepers to align specific practices with the DMA will soon take on the seriousness. The actions of the GAFAM group companies and other market gatekeepers identified by the Commission under the DMA should benefit the better functioning of the market economy, the competitive environment and consumer protection. Besides, the DMA will provide end users the choice, which is fundamental for them to balance the conditions of the market. The DMA will do it by boosting their privacy, providing greater options and prices for consumers and secure more respect for them as a partners. Only the future will show us the specific gaps, advantages or disadvantages of DMA.

The impact on the GAFAM and other gatekeepers is not exposed yet, we can only make some long - term assumptions on its effect which is the adoption of new 'platform rules' in different countries. For example, in Germany the platform rules will be the part of the Competition acts or in Great Britain, where it will be adopted as a new codex. Even Australia commence work on platform rules. All of

41 *Ibid,* p. 10.

42 Bougette, P.; Budzinski, O.; Frédéric M., *Self-Preferencing and Competitive Damages: A Focus on Exploitative Abuses*. Forthcoming in the Antitrust Bulletin, GREDEG Working Paper No. 2022-01, 2022, p. 17-23, Available online at [http://dx.doi.org/10.2139/ssrn.4028770], Accessed 24 April 2023.

that is heading to one goal – Protection of competition, or according to the DMA – pure contestability.

One thing, however, remains unquestionable, namely the fact that the work of the European Union should be directed towards a more effective and coherent grasping and revision of competition law at the European level, adapted to modern standards.

REFERENCES

BOOKS AND ARTICLES

1. Akman, P., *Regulating competition in digital platform markets: A critical assessment of the framework and approach of the EU Digital Markets Act*, in: European Law Review, 47 European Law Review, 2022, pp. 85 – 114. Available online at [https://ssrn.com/abstract=3978625], Accessed 6 April 2023
2. Antel, J. *et al., Effective competition in digital platform markets: Legislative and enforcement trends in the EU and the US*, in: European Competition and Regulatory Law Review, Vol. 6, No. 1, 2022, pp. 35 – 55, Available online at: [https://doi.org/10.21552/core/2022/1/7] , Accessed 24 April 2023
3. Bougette, P.; Budzinski, O.; Frédéric M., *Self-Preferencing and Competitive Damages: A Focus on Exploitative Abuses*. Forthcoming in the Antitrust Bulletin, GREDEG Working Paper No. 2022-01, 2022, pp. 1-26, Available online at: [https://ssrn.com/abstract=4028770], Accessed 6 April 2023
4. Budzinski, O.; Gaenssle, S.; Lindstädt-Dreusicke, N., *The battle of YouTube, TV and Netflix: an empirical analysis of competition in audiovisual media markets.* SN Bus Econ 1, 116, 2021, pp. 2-26, Available online at: [https://doi.org/10.1007/s43546-021-00122-0]. Accessed 24 April 2023
5. Budzinski, O.; Mendelsohn, J., *Regulating Big Tech: From Competition Policy to Sector Regulation? (Updated October 2022 with the Final DMA),* Ilmenau Economics Discussion Papers, Vol. 27, No. 168, 2022, pp. 1-38, Available online at: [https://ssrn.com/abstract=4248116], Accessed 6 April 2023
6. Busch, C., *et al., The Rise of the Plat- form Economy: A New Challenge for EU Consumer Law?*, Journal of European Consumer and Market Law Vol. 3, Issue 1, 2016, pp. 3-10. Available online at: [https://ssrn.com/abstract=2754100], Accessed 6 April 2023
7. Cabral, L., *et. al., The EU Digital Markets Act*, Publications Office of the European Union, Luxembourg, 2021, p. 9, [https://publications.jrc.ec.europa.eu/repository/handle/JRC122910], Accessed 4 April 2023
8. Drexl, J., *et al.*, *Position Statement of the Max Planck Institute for Innovation and Competition of 2 May 2023 on the Implementation of the Digital Markets Act (DMA*), Max Planck Institute for Innovation & Competition Research Paper No. 23-11, 2023, p. 1-33, Available online at: [http://dx.doi.org/10.2139/ssrn.4437220] Accessed 10 May 2023

9. Kerber, W., *Taming Tech Giants with a Per-Se Rules Approach? The Digital Markets Act from the 'Rules vs. Standard' Perspective*, in: Concurrences No.3, 2021, pp.28-34, Available online at: [http://dx.doi.org/10.2139/ssrn.3861706], Accessed 24 April 2023
10. Laux, J. *et al., Taming the few: Platform regulation, independent audits, and the risks of capture created by the DMA and DSA*, in: Computer Law and Security Review, 2021, Article No. 105613. Available online at: [https://doi.org/10.1016/j.clsr.2021.105613] Accessed 10 June 2023
11. Picht, P.; Richter, H., *EU Digital Regulation 2022*: *Data Desiderata*, GRUR International, Vol. 71, Issue 5, 2022, pp. 395–402, Available online at: [https://doi.org/10.1093/grurint/ikac021], Accessed 6 April 2023
12. Rudohradská, S.; Hučková, R.; Dobrovičová, G., *Present and Future – A Preview Study of Facebook in The Context Of The Submitted Proposal For Digital Markets Act.* EU and Comparative Law Issues and Challenges Series (ECLIC), Vol. 6, 2022, pp. 498-508. Available online at: [https://doi.org/10.25234/eclic/22440] Accessed 1 May 2023
13. Rudohradská, S.; Treščáková, D., *Proposals For The Digital Markets Act And Digital Services Act: Broader Considerations In Context Of Online Platforms.,* EU and Comparative Law Issues and Challenges Series (ECLIC), Vol. 5, 2021, pp.487–500. Available online at: [https://doi.org/10.25234/eclic/18317], Accessed 6 April 2023

EU LAW

1. Commission Implementing Regulation (EU) 2023/814 of 14 April 2023 on detailed arrangements for the conduct of certain proceedings by the Commission pursuant to Regulation (EU) 2022/1925 of the European Parliament and of the Council (C/2023/2530) available online here: [http://data.europa.eu/eli/reg_impl/2023/814/oj] Accessed 25 May 2023
2. Proposal for a Regulation of the European Parliament and of the Council of 14 September 2022 on contestable and fair markets in the digital sector (Digital Markets Act), COM (2020) 842 final 2020/0374 (COD)
3. Regulation (EU) 2016/679 of the European Parliament and of the Council on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) OJ L119/1
4. Regulation (EU) 2022/1925 of the European parliament and of the Council on contestable and fair markets in the digital sector (Digital Markets Act), OJ L265/1

COURT OF JUSTICE OF THE EUROPEAN UNION

1. Case AT.39740, *Google Search (Shopping)*, ECLI: EU:C:2017:4444
2. Cases AT.40462, *Amazon Marketplace and AT.40703 – Amazon Buy Box*, ECLI:EU.2022/9442

WEBSITE REFERENCES

1. *A Europe fit for the digital age, Empowering people with a new generation of technologies,* [https://ec.europa.eu/info/strategy/priorities-2019-2024/europe-fit-digital-age_en], Accessed 05 April 2023
2. Carugati, Christophe, The Implementation of the Digital Markets Act with National Antitrust Laws [2022], Available at http://dx.doi.org/10.2139/ssrn.4072359
3. Corporate Europe Observatory. *Big Tech's last minute attempt to tame EU tech rules. Lobbying in times of trilogues.* [2022]. Available online at [https://corporateeurope.org/en/2022/04/big-techs-last-minute-attempt-tame-eu-tech-rules] Accesed 25 May 2023
4. Dentons, *EU Digital Markets Act: next steps and long - term outlook* [2023]. Available online at: [https://www.dentons.com/en/insights/articles/2022/december/7/eu-digital-markets-act-next-steps-and-long-term-outlook] Accesed 25 May 2023
5. Euronews, reteurs and AFP. *The EU's Digital Markets Act: What is it and what will the new law mean for you and Big Tech?* [2022], [https://www.euronews.com/next/2022/03/25/the-eu-s-digital-markets-act-what-is-it-and-what-will-the-new-law-mean-for-you-and-big-tec] Accessed 23 April 2023
6. European Comission., Antitrust: *Commission sends Statement of Objections to Amazon for the use of non-public independent seller data and opens second investigation into its e-commerce business practices* [2020], [https://ec.europa.eu/commission/presscorner/detail/en/ip_20_2077], Accessed 6 April 2023
7. Furman, J. *et al., Unlocking digital competition: Report of the Digital Competition Expert Panel*, [2019], pp.127-132 [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/785547/unlocking_digital_competition_furman_review_web.pdf], Accessed: 24 April 2023
8. Halpin, P., *Ireland challenges Facebook in threat to cross-border data pact*, [2017], [https://www.reuters.com/article/ctech-us-eu-privacy-facebook-idCAKBN15M1K8] Accessed 23 April 2023
9. Lomas, N. *Report reveals Big Tech's last minute lobbying to weaken EU rules*. [2022], [https://techcrunch.com/2022/04/22/google-facebook-apple-eu-lobbying-report/?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLmNvbS8&guce_referrer_sig=AQAAAARM2od8o0qMEvhK4v6iJtzU2VloYv9ytn5bYj7fpNl2qIm5m8VxiQRngx6ClrlSqTzbMkyIrejb80l7S6m9sYr1mdCH78rAZSM0-j-xrVopjS9OU9NPy1uLj3-O4ICyoSg_ilgFKNpBpKX-GEPm1fh7RDbmKNXuNNGUxsW36xbz] Accessed 24 April 2023
10. Petrov. P., *The European Commission Investigations Against Amazon – A Gatekeeper Saga*, [2020], [https://competitionlawblog.kluwercompetitionlaw.com/2020/12/18/the-european-commission-investigations-against-amazon-a-gatekeeper-saga/?fbclid=IwAR1k0vqos1RLEYyVMXityHaZhmqKsyRA4vk7CQw7AxjfTlUh56Pke6weJts#_ftn4] Accessed 4 April 2023
11. Potuck, M., *Spotify says Apple's DMA compliance must include these changes*. [2023], [https://9to5mac.com/2023/03/06/spotify-says-dma-apple-compliance-must-do-this/] Accessed 23 April 2023

UDK 316.77:342.7]:004(094)
Professional paper

INDIVIDUALS AND THEIR RIGHTS IN THE MIDDLE OF DIGITALIZATION AND TECHNOLOGICAL PROGRESS OF THE SOCIETY*

Diana Treščáková, PhD, Assistant Professor
Pavol Jozef Šafárik University in Košice, Law faculty
Kováčska 26, Košice, Slovakia
diana.trescakova@upjs.sk

ABSTRACT

The digitalization of the society, which has been going on for many years is considered as a natural process. We are part of processes that change ourselves and based on that change the essence of the functioning of our society every day. Many times we don't even think about the consequences of our activity in the online environment - how we declassify our working and private spheres. Many times we do not even ask what is the fate of our data that we provide on the Internet and what kind of interference in our privacy can cause e.g. simple chatting on a social network. Our simply behaviour can extend to the violation of the protection of our basic rights and freedoms. The more serious is the situation when the above happens without our cause and knowledge, when Big Tech entities whose task is to "monitor" us for various reasons and our data are then passed on to other entities for a commercial purposes. Precisely for the reasons mentioned, it is very important to have these spheres protected by legal acts, adopted in compliance with the principle of technological neutrality, which are completed by court jurisprudence and which can guarantee us the observance of our fundamental rights and freedoms. The task of this article will be to analyse the ongoing digitalization and related legislative activity aimed at protecting the basic rights and freedoms of the individual, especially the protection of personal data of individuals and their privacy in the online environment.

Keywords: *Digital transformation, Digital single market, human rights, personal data protection, privacy*

1. INTRODUCTION

It was not so long ago that the fourth industrial revolution, called Industry 4.0, was intensively mentioned in society. After a few years of technological advancement of the society and its intensive digitalization a higher level of the industrial revolu-

* This article was prepared within the investigation of Grant Project APVV–19–0424 „Innovative corporation: intra-corporate transformations, digital challenges and the rise of artificial intelligence".

tion is already mentioned. It is the fifth industrial revolution (Industry 5.0). What is the difference between the Industry 4.0. revolution and Industry 5.0.? What impact do these industrial revolutions, the base stone of which are digitalization and technological progress, have on society? How do they affect the individuals and their rights? In order not to forget the individuals and their rights in the light-speed technological progress, it will be necessary to focus on finding answers to the above asked questions by using scientific methods as analysis, deduction, synthesis and comparison. As we look at all these processes, we can say that one thing seems to be clear, however, that the society and its character will no longer be the same, and for this reason it will be necessary to adopt a new or update the current legislation to protect the individuals and their rights. On March 9, 2021, the European Commission presented a vision and ways to achieve Europe's digital transformation by 2030.[1] The Commission proposes a Digital Compass for the EU's Digital Decade, which develops around four main points:

1. Skills
2. Business - digital transformation of a business
3. Infrastructures (digital)
4. Digitalization of a Government

All the mentioned areas are interconnected and complement each other. Without skills, especially digital skills, the digital transformation of businesses would not be possible. It would not be possible without a secure and sustainable digital infrastructure and also without digital public services. But all this must take place in compliance with legal rules and strict protection of individual rights.

2. HOW IS BUSINESS CHANGING AND HOW DOES DIGITALIZATION AFFECTS BUSINESS PROCESSES?

In order to address the digital transformation of business, it is appropriate to point out some of the historical aspects of business development. If we look at history of trading, we can briefly define important milestones that gradually changed trading.

First of all, back in the ancient times, at the first signs of trading, there was an exchange of goods, the so-called barter. Subsequently, the international exchange of goods began, which was the first form of international economic relations. The revo-

[1] Communication from the Commission to the European Parliament, the Council, the European and Social Committee and the Committee of the Regions: 2030 Digital compass: the European way for the Digital Decade available at: [https://eur-lex.europa.eu/resource.html?uri=cellar:12e835e2-81af-11eb-9ac9-01aa75ed71a1.0001.02/DOC_1&format=PDF], Accessed 15 April 2023.

lution in the development of world trade was brought about by great geographical discoveries or technical inventions that happened mainly in the Middle Ages.

Subsequently, in the 18th century, the first industrial revolution began in the textile industry, the essence of which consisted in the change of production from manual to mechanical, mainly using steam. Its use for industrial purposes was the biggest breakthrough for increasing human productivity. Instead of hand weaving, steam engines were used for propulsion. Inventions such as the steamboat or (about 100 years later) the steam locomotive brought about other huge changes as people and goods could be transported over long distances in a shorter time.

In the 19th century another industrial revolution began. It was the second industrial revolution, and this advanced manufacturing as well as the international trade associated with it due to the discovery of electricity and based on that assembly line manufacturing.

The third industrial revolution began in the 1970s through the partial automation of manufacturing processes with the help of the first computers.

The fourth industrial revolution is based on the results of the third industrial revolution. Manufacturing systems that already use computer technology are being extended through network connectivity. Using the achievements of Industry 4.0 is the path leading to a digital enterprise, in the framework of which the so-called smart approaches, digital communication within the company, with customers, other business partners, automation of production, distribution, marketing - based on the use of data - collection - evaluation - use - big data.[2] The fourth industrial revolution is changing the current form of industry. The introduction of automation and digital production, the digitalization of control systems and the use of communication networks to ensure the interoperability and flexibility of business processes is becoming a priority for the industry.[3]

At present, despite the fact that many processes that have been predicted, or started by the fourth industrial revolution was not finished yet and the goals that were related to the digital transformation of enterprises within this revolution were not

---

2 Hučkova, R.; Sokol, P.; Rozenfedlova, L., *4th industrial revolution and challenges for European law (with special attention to the concept of digital single market)*, EU and comparative law issues and challenges series (ECLIC 2), EU law in context – adjustment to membership and challenges of the enlargement: Conference book of proceedings. - Osijek: Sveučilište Josipa Jurja Strossmayera u Osijeku, 2018, p. 203, Available at: [https://hrcak.srce.hr/ojs/index.php/eclic/issue/view/313/Vol2], Accessed 15 April 2023.

3 Concept of a smart industry for Slovakia available at: [https://www.mhsr.sk/inovacie/strategie-a-politiky/smart-industry], Accessed 22 April 2023.

fulfilled yet, technology experts started the industrial revolution 5.0. If we pointed out the basic difference between industrial revolution 4.0. and 5.0., we can state that the main difference lies in their goals. While the basic goal of the industrial revolution 4.0. was technological progress, industrial revolution 5.0. focus on people and sustainability.[4]

3. LEGISLATIVE ACTIVITY OF AUTHORITIES ACCORDING TO THE DIGITAL SOCIETY AND ITS BASIC PRINCIPLES AND GOALS

If we proceed from the historical context that we pointed out above, it can be concluded that the digitalization of society is unstoppable. Technological development is moving at such a speed that it is unrealistic for the legislative activity of the relevant authorities to adequately follow up on this development. It is necessary to solve the above on the basis of the principle of technological neutrality, in the sense of which the goal of legislative activity should be the creation of such a legal framework that is flexible enough and that enables the application of the adopted legislation not only to the technologies existing at the time of its adoption, but also to those whose creation often cannot be predicted at the time of admission. In this case, we can talk about the application of the so-called the principle of technological neutrality. It is the effort of the legislator to adopt a legal arrangement that is technologically neutral, i.e. which is not limited to a specific technology, but which is applicable to any newly emerging technology without the need to revise the relevant legislation. One of the ways in which the legislator can achieve the adoption of technologically neutral legal norms is the use of general designation of legal provisions with an open meaning. An example of the above is definition of personal data given in the article 4(1) of Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC[5] (General Data protection regulation – hereinafter referred as GDPR), which simply considers as personal data any information that enables the direct or indirect identification of a natural person through an identifier, regardless of the technology used in the processing of the information in question. The danger in the case of such open definitions, how-

[4] Kajati, E.; Zolotova, I., *Industry 5.0 – revolúcia alebo evolúcia? (2)*, available at: [https://www.atp-journal.sk/rubriky/prehladove-clanky/industry-5.0-revolucia-alebo-evolucia-2.html?page_id=33851], Accessed 22 April 2023.

[5] Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC [2016] OJ L 119/1.

ever, lies in the overly general definition of a specific term, which subsequently also includes facts not originally anticipated by the legislator.[6] The application of the principle of technological neutrality is therefore not without problems, but it nevertheless becomes a standard requirement when adopting new legislation in the context of the law of information and communication technologies.

The essence of digitalization not only of businesses, but of society as a whole is connection and sustainability. For this reason, initiatives are being created within the European area with the task of improving the smooth use of electronic services according to the rules of fair competition and with a high level of consumer protection, regardless of their nationality or place of residence.[7] The effort is to create a Single Digital Market and improve its functioning by removing various barriers. On October 28, 2015, the Commission published a communication entitled Enhancing the Single Market: more opportunities for people and businesses[8], which focused on delivering practical benefits for people in their everyday lives and creating more opportunities for consumers, professionals and businesses. With it, the Commission complemented its efforts aimed at promoting investments, taking advantage of opportunities in the digital single market, increasing competitiveness and improving access to financing.

Even before that, on May 6, 2015, the European Commission presented the Strategy for the Single Digital Market in Europe[9], in which it specified its goals and intention to create and operate a single digital market within the EU. Digital Single Market initiatives cover the following areas, namely:

---

6 See e.g. Purtova, N., *The Law of Everything. Broad Concept of Personal Data and Future of EU Data Protection Law*, Law, Innovation and Technology, Vol. 10, No. 1., 2018, pp. 40-81.

7 Action Plan – Digital Single Market – opportunities for Slovakia available at: [https://www.slov-lex.sk/legislativne-procesy?p_p_id=processDetail_WAR_portletsel&p_p_lifecycle=0&p_p_state=normal&p_p_mode=view&p_p_col_id=column2&p_p_col_count=1&_processDetail_WAR_portletsel_startact=1485786560000&_processDetail_WAR_portletsel_idact=1&_processDetail_WAR_portletsel_action=files&_processDetail_WAR_portletsel_cisloLP=LP%2F2017%2F53_], Accessed 21 April 2023.

8 Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Upgrading the Single Market: more opportunities for people and business available at: [https://eur-lex.europa.eu/legal-content/SK/TXT/?qid=1534172388870&uri=CELEX:52015DC0550], Accessed 21 April 2023.

9 Communication from the Commission to the European Parliament, the Council, the European and Social Committee and the Committee of the Regions from 6th of May 2015: A Digital Single Market Strategy for Europe, available at: [https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A52015DC0192], Accessed on 21 April 2023.

1. digital culture,
2. digital future,
3. digital life,
4. digital credibility,
5. digital shopping,
6. digital connectivity

In the Communication from the Commission to the European Parliament, the Council, the European and Social Committee and the Committee of the Regions from February 19, 2020, the solutions and goals of the European Commission in the field of shaping the digital future were outlined. Commission President Ursula von der Leyen declared that Europe must be at the forefront of the transition towards a healthy planet and a new digital world. The Commission has set as Europe's main goal that our European society is driven by digital solutions that are firmly rooted in our shared values and that enrich the lives of all: people must be able to develop personally, make decisions freely and safely, and participate in the life of society without regardless of age, gender or occupation. Businesses need a framework that allows them to start a business, grow their business, collect data, innovate.[10]

In accordance with the above, the Commission is focusing on three key objectives for the next five years to ensure that digital solutions help Europe find its own path to a digital transformation that benefits people while respecting our values. These are the following objectives:

1. Technology that works for people
2. A fair and competitive economy
3. An open, democratic and sustainable society

On March 9, 2021 the European Commission presented to the European Parliament, the Council, the European and Social Committee and the Committee of the Regions a Communication 2030 Digital compass: the European way for the Digital Decade. Among other things, the announcement also points out the fact that the COVID-19 pandemic has fundamentally changed the role and perception of digitalization in our societies and economies in a single year and has accelerated its pace, but at the same time it has also revealed the vulnerabilities of

[10] Communication from the Commission to the European Parliament, the Council, the European and Social Committee and the Committee of the Regions from 19 February 2020 available at: [https://op.europa.eu/en/publication-detail/-/publication/db95106e-53ca-11ea-aece-01aa75ed71a1/language-en], Accessed 21 April 2023.

our digital space, its dependence on non-European technologies and the impact of misinformation on our democratic societies.[11]

In our opinion the rights of the individual, especially the right to data protection and privacy, are not sufficiently protected in the current digitalization. For this purpose, it is necessary to focus not only on technological development, but also on the protection of the basic values of society and the individuals. In addition, the digital technologies and services that people use must comply with the applicable legal framework and respect the rights and values inherent in the "European way". In addition, a safe and open human-center digital environment should comply with legal regulations, but also allow people to assert their rights, such as the right to privacy and data protection, freedom of expression, children's rights and consumer rights. This European way of digital society is also based on ensuring full respect for EU fundamental rights, namely:

1. freedom of expression, including access to diverse, reliable and transparent information,
2. the freedom to set up and run a business online,
3. protection of personal data and privacy, as well as the right to be forgotten,
4. protection of intellectual property of individuals in the online space.

For this purpose, the Declaration on European Digital Rights and Principles in the Digital Decade[12] was adopted on January 26, 2022. This declaration is primarily based on primary EU law, in particular the Treaty on European Union (TEU)[13], the Treaty on the Functioning of the European Union [14](TFEU), the Charter of Fundamental Rights of the EU[15] and the case law of the Court of Justice of the EU, as well as secondary law. At the same time, it reflects and complements the European Pillar of Social Rights. It has a declarative character, which as such does not affect the content of legal norms or their application.

The European Declaration on Digital Rights and its adoption followed calls by the European Parliament to ensure full compliance between the Union's approach to digital transformation with fundamental rights such as data protection or non-

---

11 Communication from the Commission to the European Parliament, the Council, the European and Social Committee and the Committee of the Regions: 2030 Digital compass: the European way for the Digital Decade available at: [https://eur-lex.europa.eu/resource.html?uri=cellar:12e835e2-81af-11eb-9ac9-01aa75ed71a1.0001.02/DOC_1&format=PDF], Accessed 21 April 2023.

12 Declaration on European Digital Rights and Principles [2023] OJ C 23/1.

13 The Treaty on European Union (2007).

14 The Treaty on the Functioning of the European Union (2009).

15 The Charter of Fundamental Rights of the EU (declared 2000).

discrimination, as well as principles such as technological and network neutrality, but also with inclusiveness. At the same time, Parliament called for increased protection of users' rights in the digital environment. The European Declaration on Digital Rights followed the Tallinn Declaration on e-Government (2017)[16], the Berlin Declaration on Digital Society and Value-Based Digital Governance (2020)[17] and the Lisbon Declaration - Meaningful Digital Democracy (2021).[18]

4. THE RIGHT TO PROTECT PERSONAL DATA AND PRIVACY OF THE INDIVIDUALS IN THE MIDDLE OF THE DIGITAL SOCIETY

As stated in the Preamble of a Declaration on European Digital Rights and Principles, it aims at common policy objectives, not only to recall the rights that are most important in the context of digital transformation, but also to serve as a reference point for businesses and other stakeholders in development and implementation new technologies.[19] And at this point we come to the fundamental difference between the principles of Industrial Revolution 4.0, which is aimed at the digital transformation of enterprises and businesses regardless of the background of the individual and his rights and Industrial Revolution 5.0, which is about focusing on people and their rights.

It is necessary to realize that digitalization and the creation of the Single Digital Market should be implemented for individuals who live in a digital society and use digital conveniences.[20] Also, the transformation of business is not only an advantage for the companies that go through the transformation, but also for the consumer himself, who gets products and services faster, can secure them more conveniently, but for the price of a kind of violation of the integrity of his privacy and basic rights. In connection with the use of electronic communications, there is a massive collection of data about consumers, their privacy and their behaviour, for example during

16 See Tallinn Declaration on e-Government available at: [https://digital-strategy.ec.europa.eu/en/news/ministerial-declaration-egovernment-tallinn-declaration], Accessed 21 April 2023.

17 See Berlin Declaration on Digital Society and Value-Based Digital Governance available at: [https://digital-strategy.ec.europa.eu/en/news/berlin-declaration-digital-society-and-value-based-digital-government], Accessed 21 April 2023.

18 See Lisbon Declaration - Meaningful Digital Democracy, available at: [https://www.lisbondeclaration.eu], Accessed 21 April 2023.

19 Preamble of a Declaration on European Digital Rights and Principles [2023] OJ C 23/1.

20 Rudohradska, S., *Jednotný digitálny trh - výzvy a perspektívy*, Jarná škola doktorandov 2020: zborník príspevkov zo 7. ročníka. Košice: Univerzita Pavla Jozefa Šafárika v Košiciach, 2020, pp. 230-234 available at: [https://unibook.upjs.sk/img/cms/2020/pf/jarna-skola-doktorandov-2020.pdf.], Accessed 21 April 2023.

online shopping or online searching for various information (a Big Data).[21] Merchants' acquisition of information about the customers, whether actual or potential, may adversely interfere with and violate their right to privacy and protection of their personal data. Already in the Universal Declaration of Human Rights from 1948, Art. 12 established rule that "*no one may be subjected to arbitrary interference with private life, family, home or correspondence, nor to attacks on his honor and reputation. Everyone has the right to legal protection against such interference or attacks.*"

Also, the International Covenant on Civil and Political Rights from 1966, where in Art. 17 entrenched prohibition against arbitrary interference in private life. Another important legal document that guarantees the right to privacy is the Convention on the Protection of Human Rights and Fundamental Freedoms. This convention, adopted by the Council of Europe in 1950, is enshrined in Art. 8 "*the right to respect for one's private and family life, home and correspondence.*"

On the territory of the Slovak Republic, the Constitution enshrines the right to the inviolability of a person and his privacy (Article 16, paragraph 1), as well as the right to protection against interference in private and family life, the right to protection against unauthorized collection, publication or other misuse of personal data (Article 19 paragraphs 2 and 3 of the Constitution of the Slovak Republic). In Art. 22 of the Constitution of the Slovak Republic[22] guarantees the right to the secrecy of transmitted messages and the protection of personal data. Fundamental rights are regulated similarly by Art. 7 par. 1, Art. 10 par. 2 and 3 and Art. 13 Charter of Fundamental Rights and Freedoms.

Also, the Charter of Fundamental Rights of the EU as a primary right of the EU in Art. 7 establishes the fundamental right of every person to respect his private and family life, home and communication. In Art. 8 of the Charter is stated a legal basis for the protection of personal data.

The current legal basis for the protection of personal data in the form of secondary law is GDPR, the adoption of which led to a clarification of the legislation in the field of personal data protection of natural persons. At this point, it is also necessary to mention the efforts of the standard-setting authorities, which are trying to improve the current legislation in the area of protecting the rights and privacy of the individual in the digital age. The European Commission drafted a proposal for

---

[21] See e.g. Bania, K., *The role of consumer data in the enforcement of EU competition law*, European Competition Journal, Vol. 14, Issue 1, 2018, p. 40, [https://doi.org/10.1080/17441056.2018.1429555] or Wasastjerna, M.C., *The role of big data and digital privacy in merger review*, European Competition Journal, Vol. 14, Issue 2-3, 2018, p. 420, [https://doi.org/10.1080/17441056.2018.1533364].

[22] The Constitution of the Slovak Republic, Official Gazette No. 460/1992.

Regulation 2017/0003 of the European Parliament and of the Council on respect for private life and protection of personal data in electronic communications in 2017, which should repeal the then-current Directive 2002/58/EC on privacy and electronic communications. However, the proposal has not yet been adopted.

An important document is also the Convention of the Council of Europe No. 108 on the protection of individuals during the automated processing of personal data, which applies not only to the protection of personal data, but also to the protection of privacy. The goal of the convention is to protect the right to privacy recognized in Article 8 of the Convention for the Protection of Human Rights and Fundamental Freedoms. Both the right to privacy and the right to data protection are enshrined in Articles 7 and 8 of the Charter of Fundamental Rights of the European Union and Article 16 of the TFEU.

According to the explanatory report of the Council Decision authorizing the member states to ratify in the interest of the European Union the protocol amending the Council of Europe Convention on the Protection of Individuals with Automated Processing of Personal Data (ETS No. 108), Convention No. 108 ready for ratification in 1981, i.e. long before the era of the Internet and electronic communication. The development of technology and the globalization of information present new challenges in the field of personal information protection. For this reason, an amending protocol was prepared, the purpose of which is to modernize Convention No. 108 in order to provide solutions to these challenges.[23]

The modernized Convention (i.e. Convention No. 108 modified by the Amending Protocol) will have a uniform scope for all parties to the Convention without the possibility to completely exclude sectors or activities (e.g. in the field of national security) from its scope. It will thus cover all types of data processing within the jurisdiction of the parties in both the public and private sectors.

The amendment protocol significantly increases the level of data protection provided under Convention No. 108. In particular, the modernized convention sets out in more detail the principle of lawful processing (especially with regard to consent requirements) and further strengthens the protection of special categories of data (while also expanding the categories that are recognized as special categories of personal data in Union law). In addition, the modernized convention will establish additional guarantees for individuals when their personal data is processed

[23] See Proposal for a Council decision authorising Member States to ratify, in the interest of the European Union, the Protocol amending the Council of Europe Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data (ETS No. 108) available at: [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018PC0451], Accessed 27 April 2023.

(in particular the obligations to examine the possible impact of the intended data processing operation and to implement the relevant technical and organizational measures; the obligation to report serious data protection breaches) and will also strengthen their rights (in particular if it's about transparency and access to data). New data subject rights have also been introduced, such as the right not to be subject to a decision that significantly affects the data subject and is based solely on automated processing, the right to object to processing and the right to redress in the event of a violation of the individual's rights.

It is important to note that the amending protocol is in full compliance with the GDPR regulation and with Directive (EU) 2016/680 of the European Parliament and of the Council of April 27, 2016 on the protection of natural persons in the processing of personal data by competent authorities for the purposes of crime prevention, investigation, disclosure or prosecution or for the purpose of enforcing criminal sanctions and on the free movement of such data (hereinafter referred to as the "Data Protection Directive").[24]

Among the other documents on EU soil in the form of soft law, which are supposed to guide digitalization to be democratic, ethical and to protect basic human rights, is the "Lisbon Declaration - Meaningful Digital Democracy", adopted in 2021.The Lisbon Declaration builds on previous initiatives such as the Tallin and the Berlin declarations and aims to contribute to the ongoing public consultation on digital principles, launched by the European Commission.

It defines common understandings and commitments in three main domains:

1. Upholding human rights, ethical values and democratic participation in the context of the digital era, namely by fighting discrimination, disinformation and other malicious online activities, but also by stating the importance of accessible connectivity and digital skills' training
2. Promoting multi-stakeholder and wider international cooperation in the digital context, in fields such as standards, infrastructure, data flows, R&D and secure and trustworthy online services
3. Recognising the importance of green and digital technologies, as a key element to a new paradigm of economic growth, balancing innovation and competitiveness with social and environmental sustainable development.

The issue of personal data protection and privacy is also being addressed by other organizations whose activities extend beyond EU borders. Such is the case of the

[24] Directive (EU) 2016/680 of the European Parliament and of the Council of April 27, 2016 on the protection of natural persons in the processing of personal data by competent authorities for the purposes of crime prevention, investigation, disclosure or prosecution or for the purpose of enforcing criminal sanctions and on the free movement of such data [2016] OJ L 119/89.

OECD which has adopted a Recommendation of the Council Concerning Guidelines Governing the Protection of Privacy and Transborder Flows of Personal Data (OECD Privacy Guideline)[25]

The aim of the aforementioned texts is to provide a legal environment in which the consumer can be digitally active without fearing a breach by online businesses of his personal data and privacy rights.

The terminological definition of the personal data and privacy is also important for the application practice and for the exercise of individual rights. With the adoption of the GDPR, the concept of personal data was defined (article 4(1) of GDPR), which removed many ambiguities and controversies about what personal data is and what it is not.

As for the definition of privacy, the situation is more complicated. The concept of privacy does not yet have a fixed definition. A historical shift in the perception of privacy occurred at the turn of the 19th and 20th centuries in the United States of America. In one of the most influential articles in American legal history, "The Right to Privacy," authors Louis D. Brandeis and Samuel D. Warren linked the protection of the private sphere to individual freedom in modern history. Brandeis developed the basic ideas as a member of the Supreme Court from 1916 to 1939 in the well-known dissent in the legal case Olmstead v. United States of America in 1928. The result was, from today's point of view, a significantly restrictive perception of the concept of privacy, which was understood as "the right to be left alone", i.e. the right to peace and protection from outside interference, especially at home.[26]

The question of defining privacy and its protection is also dealt with by application practice, which, mainly through jurisprudence, interprets the protection of privacy as well as the data of individuals. According to the Constitutional Court of the Czech Republic "*in the Charter, the right to respect for private life is not guaranteed in one all-encompassing article (as is the case with Article 8 of the Convention). On the contrary, the protection of an individual's private sphere is spread out in the Charter and supplemented by other aspects of the right to privacy, declared in various places of the Charter (e.g. Article 7 paragraph 1, Articles 10, 12 and 13 of the Charter). In the same way, the right to informational self-determination itself can be derived from Article 10, paragraph 3 of the Charter, which guarantees an individual the right to protection*

[25] See Recommendation of the Council Concerning Guidelines Governing the Protection of Privacy and Transborder Flows of Personal Data (OECD Privacy Guideline) available at: [https://www.oecd.org/sti/ieconomy/oecd_privacy_framework.pdf], Accessed 27 April 2023.

[26] Warren, D. S.; Brandeis, L. D, *The Right to Privacy*, Harvard Law Review, Vol. 4, No. 5, available at: [http://faculty.uml.edu/sgallagher/Brandeisprivacy.html], In: Siskovicova, K., Ochrana súkromia a osobných údajov zamestnanca. Trnava: Publisher: Typi Universitatis Tyrnaviensis, 2015, p. 20.

against unauthorized collection, publication and/or other misuse of personal data, in conjunction with Article 13 of the Charter, which protects postal secrecy and secrecy of messages carried, whether kept in private, or sent by post, given by telephone, telegraph, or other similar device, or by any other means. However, the "fragmentation" of the legal regulation of aspects of an individual's private sphere cannot be overestimated, and the list of what must be subordinated under the "umbrella" of the right to privacy or private life in the Charter cannot be considered exhaustive and final. When interpreting the individual fundamental rights, which are the capture of the right to privacy in its various dimensions as stated in the Charter, it is necessary to respect the purpose of the generally understood and dynamically developing right to privacy as such, or it is necessary to consider the right to private life in its contemporary integrity. Therefore, the right to informational self-determination guaranteed by Article 10, paragraph 3 and Article 13 of the Charter must be interpreted especially in connection with the rights guaranteed by Articles 7, 8, 10 and 12 of the Charter. By its nature and meaning, the right to informational self-determination falls among basic human rights and freedoms, because together with personal freedom, freedom in the spatial dimension (domestic), freedom of communication and certainly other constitutionally guaranteed basic rights, it completes the personal sphere of the individual, whose individual integrity as the absolutely necessary condition for the dignified existence of an individual and the development of human life in general must be respected and consistently protected; quite rightly, therefore, respect and protection of this sphere are guaranteed by the constitutional order, because - viewed only from a slightly different angle - it is an expression of respect for the rights and freedoms of man and citizen (Article 1 of the Constitution of the Czech Republic)."[27]

The European Court of Human Rights also dealt with the issue of private life and what this term covers. According to the ECHR, the term "private life" does not even have a restrictive interpretation. The right to informational self-determination also falls under the scope of Article 8 of the Convention - protection against unauthorized collection and storage of data about an individual's private life. The guarantees under Article 8 of the Convention include the protection of both the content of communications (checking the content of mail, interception of calls, and other forms) and the metadata of electronic communications (detection of telephone numbers, telephone connection data, and other data). By analysing metadata about telecommunications traffic, it is possible to create a comprehensive picture of an individual's private life, including his most intimate spheres.[28]

---

[27] See the decision of the Constitutional court of the Czech republic, No. Pl. ÚS 24/10 (22th of March 2011 (*Data retention I*), point 31.

[28] Judgment *Amann v Switzerland*, (2000) Application No. 27798/95, 16th of February 2000, para. 65 and Judgment *Rotaru v Romania* (2000) Application No. 28341/95 para 43.

The collection and processing of personal data in the online environment, which may breach the protection of an individual's privacy, is a common practice of many entities whose task is to monitor consumers in particular and create their profiles by collecting this data. It is also worth thinking about, for example, online stores and the collection of data about consumers, which are subsequently used, for example, in targeted advertising, creating personalized prices, etc.[29] Profiling is based on online identifiers that, in the sense of point 30 of the GDPR, can be assigned to natural persons and that are provided by their devices, applications, tools and protocols such as IP address or cookies. These may leave traces which, in particular in combination with unique identifiers and other information obtained from the servers, may be used to create profiles of natural persons and to identify them.[30]

The technical capabilities to collect, store and search large quantities of data concerning telephone conversations, internet searches and electronic payment are now in place and are routinely used by government agencies and corporate actors alike. For business firms, personal data about customers and potential customers are now also a key asset.[31]

Important for the protection of personal data in the above-mentioned cases is a more precise control by the control authorities, an increase in their competences and stricter sanctions. In essence, the GDPR created a mechanism for greater control over the acquisition and collection of personal data, not only by the controlling authorities, but also by the data subjects themselves. As Zandt stated the regulatory framework of the GDPR aims to give users more control over their data – and lays the groundwork for fining companies offering their services in the EU for breaching its articles. The GDPR was instated on May 25, 2018, as a replacement for the EU's Data Protection Directive from 1995. So far, the GDPR Enforcement Tracker lists 1,546 individual breaches of the GDPR, although the data is most likely incomplete since not all fines are made public.[32] The highest fine got Amazon in amount of EUR 746 million in 2021. On July 16, 2021, the Luxembourg National Commission for Data Protection (CNDP) issued the biggest fine ever for the violation of the GDPR in the amount of €746 million ($888

---

29 Hutchinson, Ch. S.; Trescakova, D., *The challenges of personalized pricing to competition and personal data protection law,* European Competition Journal, Vol. 18, Issue 1, 2022, pp. 105-128.

30 Rozenfeldova, L.; Sokol, P., *New Initiatives and Approaches in the Law of Cookies in the EU*, IDIMT-2018: Strategic modeling in management, economy and society: 26th interdisciplinary information management talks. Linz: TRAUNER Verlag, 2018, pp. 303-310.

31 *Privacy and Information Technology*, Stanford Encyclopedia of Philosophy, available at: [https://plato.stanford.edu/entries/it-privacy/], Accessed on 19 April 2023.

32 Zandt, F., *GDPR BREACHES*, *Big Tech Big Fines*, available at: [https://www.statista.com/chart/25691/highest-fines-for-gdpr-breaches/], Accessed on 25 April 2023.

million) to Amazon.com Inc. The fine was issued as a result of a complaint filed by 10,000 people against Amazon in May 2018 through a French privacy rights group that promotes and defends fundamental freedoms in the digital world- La Quadrature du Net. The CNPD opened an investigation into how Amazon processes personal data of its customers and found infringements regarding Amazon's advertising targeting system that was carried out without proper consent.[33]

Meta Ireland is the other subject that was fined in a huge amount – EUR 405 million in 2022. On September 5, 2022, Ireland's Data Protection Commission issued a €405 million GDPR fine to Meta Ireland concerning the lawfulness of processing children's personal data in accordance with the legal bases of performance of a contract and legitimate interest.

The DPCs' investigation focused on teenagers between the ages of 13 and 17, the operation of Instagram business accounts, and how such accounts automatically displayed the contact information (email addresses and/or phone numbers) of children publicly.

According to DPC, Meta failed to take measures to provide child users with information using clear and plain language, lacked appropriate technical and organizational measures, and failed to conduct a Data Protection Impact Assessment where processing was likely to result in a high risk to the rights and freedoms of child users.[34]

Even the mentioned fines can at least partially help in creating a digital society that protects basic human rights and develops in a democratic society while preserving ethical and moral principles.

5. CONCLUSION

The article points out the aspects of the digitalization of our society that has to be ethical, humane and in accordance with rights of the individuals. By using a scientific methods as analysis, deduction, synthesis and comparison the legislative and other activity of the European Union was analysed. We also compared the activity of other organizations that create the functioning of society in the digital environment through the creation of rules in the form of soft law. European

---

[33] Luxembourg DPA issues €746 Million GDPR Fine to Amazon available at: [https://dataprivacymanager.net/luxembourg-dpa-issues-e746-million-gdpr-fine-to-amazon/], Accessed 25 April 2023.

[34] Kashyap, K., *Meta Fined €405 Million for Mishandling Teenagers' Data on Instagram*, available at: [https://www.spiceworks.com/marketing/customer-data/news/meta-fined-405-million-for-mishandling-teenagers-data-on-instagram/], Accessed 25 April 2024.

Union and other organizations currently focus not only on development of the digital society, but also focus on individuals and their rights what we can denote as steps forward. Also, when we look at the Industry 4.0. and Industry 5.0. we can see the differences between them which lie in the approach to human being. As we can read in a scientific research smart manufacturing is being shaped nowadays by two different paradigms: Industry 4.0 proclaims transition to digitalization and automation of processes while emerging Industry 5.0 emphasizes human centricity.[35] We can also present that Industry 5.0. focuses on collaboration between and machines. When we compare Industry 4.0. and 5.0. the fourth revolution was driven by technological change, the fifth is powered by values and sustainability by preservation of human rights. In the age of massive processing of our data and massive entering to our privacy is very important to define not only the rules of interference in our private and personal sphere, but also to define what all falls under the term of protection of personal data and privacy. And this should be goal of the authorities adopting rules and control its preservation. As already mentioned in this article, the adoption of the GDPR has led to a clarification of the legislation in the area of personal data protection and to the removal of doubts about what is personal data and what is not. A more complicated situation is in the area of privacy protection, which does not have a clear terminological expression. For this reason, it is possible for commercial companies from a private law point of view, as well as for the state from a public law point of view, to dispute whether a certain activity is breaching of privacy and not. On the other hand, however, it is also necessary to realize the fact that irrespective of the rules, rights and duties imposed by the legal regulations on persons handling personal data, i.e. controllers, processors, data protection officers, etc. and protection of our privacy, the data subjects must be aware of the fact that it is them, in the first place, who must protect their personal data from being misused. As noted by Kasl, the prevailing majority of internet users are far from being aware of the digital footprint they leave behind.[36]

---

[35] See e.g. Golovianko, M.; Terziyan, V.;, Branytskyi, V.; Malyk, D., *Industry 4.0 vs. Industry 5.0: Co-existence, Transition, or a Hybrid*, Procedia Computer Science, Vol. 217, 2023, p. 1 [https://doi.org/10.1016/j.procs.2022.12.206], Accessed 5 September 2023.

[36] Kasl, F., *Internet věcí a ochrana dát v europském kontextu*, Revue pro právo a technologie, No. 13, 2016, p. 120, available at:
[https://journals.muni.cz/revue/article/view/5422/pdf], Accessed on 20 April 2023.

REFERENCES

BOOKS AND ARTICLES

1. Bania, K., *The role of consumer data in the enforcement of EU competition law*, European Competition Journal, Vol. 14, Issue 1, 2018, pp. 38-80, [https://doi.org/10.1080/17441056.2018.1429555]
2. Golovianko, M., Terziyan, V., Branytskyi, V., Malyk, D., *Industry 4.0 vs. Industry 5.0: Co-existence, Transition, or a Hybrid*, Procedia Computer Science, Vol. 217, 2023, pp. 102-113, [https://doi.org/10.1016/j.procs.2022.12.206]
3. Hučkova, R., Sokol, P., Rozenfedlova, L., *4th industrial revolution and challenges for European law (with special attention to the concept of digital single market)*, EU and comparative law issues and challenges series (ECLIC 2), EU law in context – adjustment to membership and challenges of the enlargement: Conference book of proceedings. - Osijek: Sveučilište Josipa Jurja Strossmayera u Osijeku, 2018, pp. 201-216, Available at: [https://hrcak.srce.hr/ojs/index.php/eclic/issue/view/313/Vol2], Accessed 15 April 2023
4. Hutchinson, Ch. S., Trescakova, D., *The challenges of personalized pricing to competition and personal data protection law,* European Competition Journal, Vol. 18, Issue 1, 2022, pp. 105-128.
5. Kasl, F., *Internet věcí a ochrana dát v europském kontextu*, Revue pro právo a technologie, No. 13, 2016, pp. 111-146, available at: [https://journals.muni.cz/revue/article/view/5422/pdf], Accessed 20 April 2023.
6. Purtova, N., *The Law of Everything. Broad Concept of Personal Data and Future of EU Data Protection Law*, Law, Innovation and Technology, Vol. 10, No. 1., 2018, pp. 40-81.
7. Rozenfeldova, L., Sokol, P., *New Initiatives and Approaches in the Law of Cookies in the EU*, IDIMT-2018: Strategic modeling in management, economy and society: 26th interdisciplinary information management talks. Linz: TRAUNER Verlag, 2018, pp. 303-310.
8. Rudohradska, S., *Jednotný digitálny trh - výzvy a perspektívy*, Jarná škola doktorandov 2020: zborník príspevkov zo 7. ročníka. Košice: Univerzita Pavla Jozefa Šafárika v Košiciach, 2020, pp. 230-234 available at: [https://unibook.upjs.sk/img/cms/2020/pf/jarna-skola-doktorandov-2020.pdf.], Accessed 21 April 2023.
9. Warren, D. S., Brandeis, L. D, *The Right to Privacy*, Harvard Law Review, Vol. 4, No. 5, In: Siskovicova, K., Ochrana súkromia a osobných údajov zamestnanca. Trnava: Publisher: Typi Universitatis Tyrnaviensis, 2015, p. 20., available at: [http://faculty.uml.edu/sgallagher/Brandeisprivacy.html].
10. Wasastjerna, M.C., *The role of big data and digital privacy in merger review*, European Competition Journal, Vol. 14, Issue 2-3, 2018, p. 420, [https://doi.org/10.1080/17441056.2018.1533364]

ECHR

1. Judgment *Amann v Switzerland*, (2000) Application No. 27798/95, 16th of February 2000
2. Judgment *Rotaru v Romania* (2000) Application No. 28341/95

EU LAW

1. Berlin Declaration on Digital Society and Value-Based Digital Governance available at:
2. [https://digital-strategy.ec.europa.eu/en/news/berlin-declaration-digital-society-and-value-based-digital-government], Accessed 21 April 2023.
3. Communication from the Commission to the European Parliament, the Council, the European and Social Committee and the Committee of the Regions: 2030 Digital compass: the European way for the Digital Decade available at:
4. [https://eur-lex.europa.eu/resource.html?uri=cellar:12e835e2-81af-11eb-9ac9-01aa75ed71a1.0001.02/DOC_1&format=PDF], Accessed 21 April 2023.
5. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Upgrading the Single Market: more opportunities for people and business available at:
6. [https://eur-lex.europa.eu/legal-content/SK/TXT/?qid=1534172388870&uri=CELEX:52015DC0550], Accessed 21 April 2023.
7. Communication from the Commission to the European Parliament, the Council, the European and Social Committee and the Committee of the Regions from 6th of May 2015: A Digital Single Market Strategy for Europe, available at:
8. [https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A52015DC0192], Accessed on 21 April 2023.
9. Communication from the Commission to the European Parliament, the Council, the European and Social Committee and the Committee of the Regions from 19 February 2020 available at:
10. [https://op.europa.eu/en/publication-detail/-/publication/db95106e-53ca-11ea-aece-01aa75ed71a1/language-en], Accessed 21 April 2023.
11. Declaration on European Digital Rights and Principles [2023] OJ C 23/1
12. Directive (EU) 2016/680 of the European Parliament and of the Council of April 27, 2016 on the protection of natural persons in the processing of personal data by competent authorities for the purposes of crime prevention, investigation, disclosure or prosecution or for the purpose of enforcing criminal sanctions and on the free movement of such data [2016] OJ L 119/89.
13. Lisbon Declaration - Meaningful Digital Democracy, available at: [https://www.lisbondeclaration.eu], Accessed 21 April 2023
14. Proposal for a Council decision authorising Member States to ratify, in the interest of the European Union, the Protocol amending the Council of Europe Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data (ETS No. 108) available at:
15. [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018PC0451], Accessed on 27 April 2023.
16. Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC [2016] OJ L 119/1
17. Tallinn Declaration on e-Government available at:

18. [https://digital-strategy.ec.europa.eu/en/news/ministerial-declaration-egovernment-tallinn-declaration], Accessed 21 April 2023.
19. The Charter of Fundamental Rights of the EU (declared 2000)
20. The Treaty on European Union (2007).
21. The Treaty on the Functioning of the European Union (2009).

LIST OF NATIONAL REGULATIONS, ACTS AND COURT DECISIONS

1. The Constitution of the Slovak Republic, Official Gazette No. 460/1992
2. Decision of the Constitutional court of the Czech republic, No. Pl. ÚS 24/10, 22th of March 2011 (*Data retention I*)

WEBSITE REFERENCES

1. Action Plan – Digital Single Market – opportunities for Slovakia available at:
2. [https://www.slov-lex.sk/legislativne-procesy?p_p_id=processDetail_WAR_portletsel&p_p_lifecycle=0&p_p_state=normal&p_p_mode=view&p_p_col_id=column2&p_p_col_count=1&_processDetail_WAR_portletsel_startact=1485786560000&_processDetail_WAR_portletsel_idact=1&_processDetail_WAR_portletsel_action=files&_processDetail_WAR_portletsel_cisloLP=LP%2F2017%2F53], Accessed 21 April 2023
3. Concept of a smart industry for Slovakia available at: [https://www.mhsr.sk/inovacie/strategie-a-politiky/smart-industry], Accessed on 22 April 2023
4. Kajati, E., Zolotova, I., *Industry 5.0 – revolúcia alebo evolúcia? (2)*, available at: [https://www.atpjournal.sk/rubriky/prehladove-clanky/industry-5.0-revolucia-alebo-evolucia-2.html?page_id=33851], Accessed 22 April 2023
5. Kashyap, K., *Meta Fined €405 Million for Mishandling Teenagers' Data on Instagram*, available at:
6. [https://www.spiceworks.com/marketing/customer-data/news/meta-fined-405-million-for-mishandling-teenagers-data-on-instagram/], Accessed 25 April 2024.
7. Luxembourg DPA issues €746 Million GDPR Fine to Amazon available at:
8. [https://dataprivacymanager.net/luxembourg-dpa-issues-e746-million-gdpr-fine-to-amazon/], Accessed 25 April 2023
9. Recommendation of the Council Concerning Guidelines Governing the Protection of Privacy and Transborder Flows of Personal Data (OECD Privacy Guideline) available at: [https://www.oecd.org/sti/ieconomy/oecd_privacy_framework.pdf], Accessed on 27 April 2023
10. *Privacy and Information Technology*, Stanford Encyclopedia of Philosophy, available at: [https://plato.stanford.edu/entries/it-privacy/], Accessed on 19 April 2023.
11. Zandt, F., *GDPR BREACHES*, *Big Tech Big Fines*, available at: [https://www.statista.com/chart/25691/highest-fines-for-gdpr-breaches/], Accessed on 25 April 2023

UDK 347.7(437.6):004(4-67EU)
Review article

HOW THE DIGITALISATION HAS CHANGED THE SLOVAK COMPANY LAW: IMPLEMENTATION OF THE DIRECTIVE 2019/1151 (DIGITALISATION DIRECTIVE) AND WHAT NEXT?*

Žofia Mrázová, PhD, MCL, Assistant Professor
Pavol Jozef Šafárik University in Košice, Faculty of Law
Kováčska 26, Košice, Slovakia
zofia.mrazova@upjs.sk

Dominika Cukerová, PhD, Researcher
Pavol Jozef Šafárik University in Košice, Faculty of Law
Kováčska 26, Košice, Slovakia
dominika.cukerova@upjs.sk

ABSTRACT

Despite the fact that the use of digital technologies has become an intense global trend in various areas of social life, approaches to the legal regulation of this trend vary across European countries. This paper focuses on how the trend of digital technologies transforms the company law and to what extent it affects or has the potential to affect national legal regulations of Member States. Firstly, the authors assess recent legislative developments in European company law that have shifted towards modernisation of corporate law provisions to make them fit more for the digital era. Therefore, partial harmonisation of corporate law provided by the so-called Digitalisation Directive will be discussed. Furthermore, the paper analyses new Slovak company law provisions on the simplified formation and registration of limited liability companies. As the Slovak legislator has introduced various requirements, which must be met to benefit from the simplified online procedure, the authors assess the efficiency of the new provisions and compare them to the standard rules on setting up a limited liability company. In the second part of the paper, the focus is shifted towards digitalisation in the later stages of a company's life cycle as well as the virtual registered office as one of the novelties mentioned by the new European initiative "Upgrading Digital Company Law". Since there is no harmonised regulation at EU level, the defined issues are analysed primarily from the national perspective.

***Keywords**: Digitalisation Directive, Slovak Company Law, Slovak Limited Liability Company, Upgrading Digital Company Law*

* This paper was supported by the Slovak Research and Development Agency under the Contract No. APVV-19-0424 and VEGA No. 1/0259/22.

1. INTRODUCTION

The integration of digital technologies into all areas of law has recently been discussed intensively, with a focus on question whether the current legal regulation is sufficient and able to respond to new digital trends and requirements of legal practice. In company law, several essential aspects have been affected and exposed to the global trend of the increased use of digital tools. To illustrate, issues such as company incorporation, corporate governance, and communication between the company and its shareholders have been progressively addressed. In addition, through the digitalisation of public administration, it can be seen how the means of digital technologies are being implemented in the communication between companies and public authorities.

The practical importance of technological developments in company law and the necessity of adjusting the legal solutions were particularly highlighted during the global pandemic of COVID-19. Member States had to respond quickly and introduce multiple interim measures for the pandemic period, which more than ever made the use of digital tools more accessible during the companies' lifecycle. On the one hand, these temporary measures confirmed the already known importance and benefits offered by digital technologies. On the other hand, they showed to what extent the national legal regulation has been designed to keep up with technological developments, or how the company law legislation has so far been able to adapt to the changing digital requirements.

It is undisputed that efforts to create a harmonised framework on the use of digital tools in company law have been noticeable at EU level for a long time.[1] The first steps towards making digital technologies available in company law were taken by the European legislator over a decade ago in the form of directives harmonising several corporate aspects. For instance, these are the rules on the exercise of certain shareholders' rights in listed companies,[2] the rules on the interconnection of central registers or business registers[3] and a few others. It illustrates that these

---

1 The Informal Company Law Expert Group (ICLEG), *Report on digitalisation in company law*, March 2016, pp. 9 - 12, [https://commission.europa.eu/business-economy-euro/doing-business-eu/company-law-and-corporate-governance_en], Accessed 2 April 2023.

2 Directive 2007/36/EC of the European Parliament and of the Council of 11 July 2007 on the exercise of certain rights of shareholders in listed companies [2007] OJ L184/17.

3 Directive 2012/17/EU of the European Parliament and of the Council of 13 June 2012 amending Council Directive 89/666/EEC and Directives 2005/56/EC and 2009/101/EC of the European Parliament and of the Council as regards the interconnection of central, commercial and companies registers [2012] OJ L156/01 (Implicitly repealed by Directive (EU) 2017/1132), For interconnection of insolvency registers see Sudzina, M., *Insolvenčné konania podľa Nariadenia o insolvenčnom konaní,* Univerzita Pavla Jozefa Šafárika v Košiciach, Košice, 2018, p. 188.

first steps were aimed to modernise only selected issues rather than to adapt the company law to fit the digital age in its complexity. Nevertheless, the European Commission has progressively assessed the potential impact of digitalisation in company law.[4] In this respect, the adoption of the Directive (EU) 2019/1151 of the European Parliament and of the Council of 20 June 2019 amending Directive (EU) 2017/1132 as regards the use of digital tools and processes in company law (hereinafter "Digitalisation Directive")[5] can be identified as a key digital initiative brought to light at EU level.

In this paper, we briefly introduce the Digitalisation Directive legal framework and analyse in more detail those provisions by which the European legislator has defined the common requirements for the online formation of companies. This analysis is followed by the assessment of the new Slovak provisions on the simplified online formation of limited liability company adopted as a result of the transposition of the Digitalisation Directive. The main objective is to assess whether all European requirements have been met and whether unique solutions brought by the Slovak legislator could be identified.

Furthermore, it is important to bear in mind that where a harmonised set of rules is lacking, the national legislative approaches of each Member State differ significantly. Although the Digitalisation Directive does not represent the last step towards the modernisation of company law, it is questionable how further action at EU level will reflect the possibility of using digital tools in further phases of a company's lifecycle, for example, in corporate governance and relations between the company, corporate body members, and shareholders. In this context, the paper assesses new digital initiatives that are currently under way with a focus on planned legislative actions in the use of digital tools. Selected issues on virtual shareholders' meetings and virtual registered seats are discussed in more depth from a Slovak perspective.

---

4 For general principles and recommendations on digitalisation in company law see The Informal Company Law Expert Group (ICLEG), *op. cit.* note 2, pp. 13 – 51., for further assessment see European Commission, *Assessment of the impacts of using digital tools in the context of cross-border company operations. Final Report*, Luxembourg, 2017, [https://op.europa.eu/en/publication-detail/-/publication/7a13b53a-fdc0-11e8-a96d-01aa75ed71a1], Accessed 2 April 2023.

5 Directive (EU) 2019/1151 of the European Parliament and of the Council of 20 June 2019 amending Directive (EU) 2017/1132 as regards the use of digital tools and processes in company law [2019] OJ L186/80.

2. DIGITALISATION DIRECTIVE: THE EUROPEAN SOLUTION TO THE ONLINE FORMATION OF COMPANIES

In order to modernise and strengthen the competitiveness of an internal market, the European legislator established a harmonised set of rules on the use of digital tools and processes in company law.[6] Although it is undoubtedly a fundamental step towards the adaptation of company law to the digital age, the scope of the Digitalisation Directive clearly shows that its impact is limited and does not comprehensively extend to all areas of a company´s life cycle.[7] Three key areas of company law may be identified in which Member States are required to implement its rules into their national regulations, namely:

(a) Online formation of companies;

(b) Online registration of branches;

(c) Online filling of documents and information by companies and branches.[8]

Thus, the Digitalisation Directive reflects on the digital tools primarily used in the external sphere of companies, while questions regarding the company's internal affairs have remained untouched. In the following text, attention will be given to the topic regarding the online formation of companies and the harmonised rules set forth by the Digitalisation Directive including the protective rules connected therewith.

2.1. Online formation of companies

Prior to the adoption of the Digitalisation Directive, Member States' approaches to the use of online company formation procedures varied considerably. A survey of some of them was offered by the Informal Company Law Expert Group in its March 2016 Report.[9] The analysis showed that while some Member States insisted on the traditional requirement of the physical presence of founders at least at the initial company formation stage,[10] others allowed online procedures as an alternative to the traditional one.[11] Moreover, the extent to which online com-

---

6 *Ibid.*, Preamble (2).

7 *Ibid.*, Article 1 (1).

8 ETUC, *Guidelines on the Transposition of the Directive on Digital Tools and Processes in Company Law, Brussels*, 2021, p. 5, [https://www.etuc.org/sites/default/files/2021-06/Guidelines_digital%20tools%20Directive%20EN.pdf], Accessed 13 March 2023.

9 The Informal Company Law Expert Group (ICLEG), *op cit.* note 2, pp. 52 – 84.

10 For example, Italy, Austria.

11 For example, Lithuania, Denmark, Poland.

pany formation procedures were admissible also varied between Member States. While some allowed online procedures for the formation of all legal forms of companies,[12] others restricted online procedures only to some of them.[13]

The Digitalisation Directive harmonises these different approaches to a certain extent. It requires Member States to enable fully online company formation and provide digital templates of articles of association. However, the final outcome of its implementation by individual Member States may differ due to a certain degree of discretion given to national legislators. In this context, several conceptual starting points are offered.

Firstly, as the Digitalisation Directive only prescribes fully online formation as an alternative, founders should continue to have the option of choosing between the already existing incorporation procedures offered by the national regulations of each Member State.[14] The introduction of an online alternative does not preclude Member States from mandatorily introducing fully online procedures. Secondly, the accessibility of online company formation is guaranteed only in relation to founders who are EU citizens by way of the recognition of their means of electronic identification.[15] This does not prevent Member States from offering the online alternative to founders who are not EU citizens. Thirdly, the obligation to enable the establishment of a company fully online is guaranteed only for specific corporate legal forms that are defined for individual Member States in the annex to the Digitalisation Directive. [16] The scope may be expanded, but not narrowed, by each Member State.

Although the Digitalisation Directive guarantees the accessibility of fully online company formation across Member States, it stipulates only minimum sets of requirements that must be met. It does not harmonise incorporation rules in details, e.g., rules on the use of templates, which should be available online, and leaves their regulation to the Member States.[17]

2.1.1. Requirements for fully online company formation rules

Although the rules for the online formation of companies will vary across Member States, at least they should have in common the content which Article 13g

12 For example, Luxemburg, France, Denmark.

13 For example, Lithuania, Spain.

14 Digitalisation Directive, Preamble (8).

15 *Ibid.*, Preamble (10).

16 *Ibid.*, Article 13g (1).

17 *Ibid.*, Article 13 (2).

(3) points a) – f) of the Digitalisation Directive stipulates as mandatory content requirements. Essentially, the European legislator has obliged the Member States to lay down rules including:

- Procedures to ensure that the applicants have the necessary legal capacity and authority to represent the company;
- Means to verify the identity of the applicants;
- Requirements for the applicants to use trust services under eIDAS Regulation;
- Procedures for verifying the legality of the trade name and the object of the business activity, if required by national law;
- Procedures for verifying the appointment of directors.

However, the use of specific means and methods for implementing these rules and their subsequent application in practice are left to Member States to choose.

Moreover, Article 13g (4) of the Digitalisation Directive sets forth another four requirements that Member States may take into consideration when the transposition of the Digitalisation Directive takes place. These requirements are only optional and allow Member States to adopt rules on:

- Procedures to ensure the legality of the company' articles of association, including verifying the correct use of templates;
- Legal consequences of the disqualification of a director by the competent authority in any Member States;
- The involvement of a notary, attorney or any other person in any part of online procedures for strengthening the system of control;
- The exclusion of online formation in cases where the share capital consists of a contribution in kind.

Both mandatory and optional requirements aim to create a system of safeguards that can effectively counteract the misuse of digital tools and fraud in company law.

From the procedural perspective two special requirements set forth by the Digitalisation Directive can be seen:

- Under Article 13g (5) Member States shall not make the online formation of a company conditional on obtaining a license or authorisation before the company is registered in the company register;
- Under Article 13g (7) Member States shall ensure that online company formation is completed within five working days where a company is formed exclusively by natural persons, or in other cases, within ten working days;

Other issues related to both substantive and procedural rules for the online formation of companies, which are not regulated in the Digitalisation Directive, should continue to be governed by national law. Subsidiary effects of national regulations on all unregulated issues are assumed by the Digitalisation Directive in the Recital 19 of the Preamble.

2.1.2. Templates for online company formation

The Digitalisation Directive also obliges Member States to enable the use of templates in the company formation process, make them available online and implement them into practice via the Single Digital Gateway.[18] As a result, such templates could work as a standardised form with a pre-defined set of options. Filling them out by the founders should assure the applicants that they have provided the correct and complete data required to found the company in accordance with national law. This should help to speed up and simplify the company formation. The specific content of the template should correspond to the national law of each Member State.[19] Regarding the question to what extent the founders should be allowed to modify the template, the Digitalisation Directive stays silent. We are of the opinion that Member States may adopt any solution corresponding with the mandatory requirements laid down by the Digitalisation Directive as well as the national law. However, granting founders full contractual autonomy would seem to defeat the purpose of standardising the articles of association.

The national templates should be available not only in an official language of the Member State where the company is being registered, but also in at least one of the official Union languages broadly understood by the largest possible number of cross-border users.[20] The efforts of the Digitalisation Directive to weaken language barriers can also popularise the use of the online company formation, especially by foreign founders. On the other hand, the standardisation is assumed only in relation to the articles of association, therefore the simplification and acceleration of the process by using the online tools could be slightly relativised. Other documents and data will have to be prepared and provided by the founders in electronic form in accordance with the national law of the Member State in which the company is to have its registered office.

Just to briefly mention it, templates were used for online company formation in many European countries prior to the implementation of the Digitalisation Direc-

[18] *Ibid.*, Article 13h (1).

[19] *Ibid.*, Article 13h (4).

[20] *Ibid.*, Article 13h (3).

tive. In this regard, the Digitalisation Directive has only confirmed the standardisation trend in the company formation processes.[21]

2.2. Further provisions to consider before the national transposition

Although the advantages of using digital tools can hardly be denied, it may not be overlooked that there are higher risks of circumventing the law, fraud, and identity theft than in case of acting in person. Apparently, after realising these threats, it was necessary to include various protective rules in order to prevent the misuse of digital tools. In this regard, the protective effects can be seen namely in provisions on the reason to suspect identity falsification, disqualified directors, or recognition of identification means for the purposes of online procedures. We are of the opinion that these provisions should be considered as a minimum standard, regardless of a great leeway in deciding left to the Member States by the Digitalisation Directive.

2.2.1. Reasons to suspect identity falsification

Rules on fully online company formation hinder Member States from adopting such rules and procedures that would require the physical presence of the founders at various stages of the formation process. There is only one exception pursuant to Article 13b (4) of the Digitalisation Directive, when the reasons to suspect identity falsification are stated. We believe that the protective effect of the rule depends on the approach taken by individual Member State to define the situations in which such suspicion arises. The broader the criteria for assessing these situations, the stronger will be the protective effect of the above-mentioned rule. However, a broad approach to this criteria may not be appropriate either, as it naturally creates more space for court' discretion when company formation takes place. This can ultimately lead to legal uncertainty and may deter foreign entities from using digital tools as it may still trigger the requirement of their physical presence before competent authorities.

2.2.2. Disqualified directors

Article 13i of the Digitalisation Directive also partially harmonises the rules on disqualification of directors. It allows Member States to decide whether to take

[21] For more details see Šuleková, Ž., *Na pomedzí kogentnosti a dispozitívnosti korporačného práva*, Právny obzor, Vol. 4, 2014, pp. 383 – 396. or Romashchenko, I., *Online Formation of Companies in Selected Jurisdictions of the European Union: Issues and Challenges*, in: Škrabka, J. (eds.), Law in Business of Selected Member States of the European Union, Proceedings of the 13th International Scientific Conference, Prague, 2021, pp. 99 – 108.

into account information on disqualification available in another Member State and to refuse to appoint a person as a director of a company. In this regard, several rules on the exchange of information on disqualification between Member States are introduced.[22]

2.2.3. Recognition of identification means for the purposes of online procedures

In the context of online company formation, it was necessary to define what means of electronic identification the Member States should actually recognise and allow their use by founders who are EU citizens. According to Article 13b of the Digitalisation Directive, Member States shall accept their own means of electronic identification issued and approved by the Member State and those issued in another Member State and recognised for cross-border authentication in accordance with Article 6 of Regulation (EU) No. 910/2014.

However, Article 13b (2) of the Digitalisation Directive allows for the rejection of those electronic identification means that do not meet the assurance levels set out in Article 6 (1) of the Regulation (EU) No 910/2014. Thus, Member States may allow online company formation only when the use of electronic identification means reaches the assurance levels defined in the Regulation (EU) No. 910/2014.

3. IMPLEMENTATION OF THE DIGITALISATION DIRECTIVE IN SLOVAKIA WITH AN EMPHASIS ON THE FULLY ONLINE COMPANY FORMATION

The Member States were obliged to bring into force the laws and administrative provisions necessary to comply with the Digitalisation Directive by 1 August 2021 except as regards the provisions referred to in Article 13i (Disqualified directors) and Article 13j (2) (Verifying the origin and integrity of the documents filed online) by 1 August 2023. The entitlement to benefit from an extension of the transposition period of up to one year provided for in Article 2 (3) of the Digitalisation Directive due to the particular difficulties in its transposition was exercised by 17 out of 27 Member States, among them also the Slovak Republic.[23] This fact can also indicate how promptly company law is able to respond to digital trends.

---

[22] In detail Jakupak, T.; Bregeš, Ž., *Digitalization: Balance and protection – state – of – the – art,* InterEU-LawEast: Journal for the international and European law, economics and market integrations, Vol. 7, 2020, p. 209.

[23] National transposition measures communicated by the Member States concerning the Digitalisation Directive, [https://eur-lex.europa.eu/legal-content/SK/NIM/?uri=CELEX:32019L1151], Accessed 2 April 2023.

In Slovakia, the implementation of the Digitalisation Directive was provided by Act No. 8/2023 Coll., dated on 20 December 2022, amending Act No. 513/1991 Coll. Commercial Code (hereinafter "Amendment to the Commercial Code"). Since 1 February 2023 the aforementioned Amendment to the Commercial Code has introduced a new set of rules on the simplified formation of limited liability company, registration of branches of foreign legal entity and the exchange of information between the Slovak and other Member States' company registers. Moreover, on 1 August 2023, further rules relating to the recognition of decisions on the disqualification of directors issued by other Member States and the exchange of information regarding the disqualified directors between Member States will come into effect.

3.1. Simplified online formation of limited liability company

Prior to the implementation of the Digitalisation Directive, the Slovak company law was one of the legal regulations allowing the online company formation.[24] However, the Slovak online solution differed from the European legislator's idea in details, especially because there were no templates of articles of association available for founders. Since 1 October 2020 the proposal for registration of any legal form of company to the Slovak company register can be filed solely online. Thus, it was necessary to provide the articles of association as well as all documents needed for registration into the company register in electronic form. Persons taking part in the company formation process could authorise these documents by adding their qualified electronic signature.[25] In practice, however, the necessary documents were much more often prepared first in paper form, signed by acting persons (either with an officially certified or ordinary signature, depending on the type of document) and then converted from paper into electronic form. The authorisation by qualified electronic signature was then provided only by the applicant or person entitled to file a proposal for registration of a company to the company register. Even after the implementation of the Digitalisation Directive in the Slovak legal system, these rules on the standard online procedure may be fully applied when founding and registering a company of any legal form.

---

[24] A comparative overview of national laws before and after implementation of the Digitalisation Directive may be seen in Bitė, V.; Romashchenko, I., *Online Formation of Companies in Lithuania in a Comparative Context, Implementation of the Digitalisation Directive and Beyond*. European Business Organization Law Review, 2023. [https://doi.org/10.1007/s40804-023-00282-6], Accessed 18 May 2023.

[25] Section 23 Act No. 305/2013 Coll. on e-Government.

The novelty brought by the Amendment to the Commercial Code nablees the simplified fully online formation of a limited liability company with a template of articles of association. It is a solution that is conceived as an alternative way of establishing a company. Therefore, it is up to founders to decide whether they will use the new procedure or prefer the current one.[26] Although the European legislator obliged the Member States to enable the fully online formation of limited liability companies with the use of templates of articles of association, the Slovak legislator has reduced the availability of such template to the limited liability company only under certain conditions.

3.1.1. Special substantive conditions on limited liability company formation in a simplified way

Pursuant to Section 110a (2) of the Slovak Commercial Code, the cumulative fulfilment of several special conditions is needed in order to form a limited liability company in a simplified way by means of an electronic template of articles of association.

The first condition limits the maximum number of founders. A limited liability company may be founded by a maximum of five shareholders with the use of an electronic template. It is not decisive whether they are natural or legal persons, domestic or foreign. Should the number of founders exceed five, the use of the simplified incorporation procedure is excluded, and the founders could only use the standard online incorporation procedure. In the explanatory memorandum to the Amendment to the Commercial Code,[27] the Slovak legislator justifies the limitation of the number of founders by the experience from practice, which shows the low frequency of occurrence of a higher number of founders.

Other conditions relate to the activities that the limited liability company may carry out. The company must be set up for the purpose of carrying on business, and the object of its business may be only selected activities corresponding to the list of free trades. The list offers a total of 73 free trades on various subject matters, but the company's business may not consist of more than 15 selected activities.

---

[26] In compliance with Article 13f of the Digitalisation Directive the Slovak Republic provides information covering the rules on the formation of companies, on the website of the Ministry of Justice of the Slovak Republic, [https://www.justice.gov.sk/sluzby/obchodny-register/zmeny-k-1-2-2023/zjednodusene-zalozenie-s-r-o/], Accessed 17 March 2023.

[27] Explanatory memorandum to the Amendment to the Slovak Commercial Code, p. 4, [https://www.nrsr.sk/web/Dynamic/DocumentPreview.aspx?DocID=518244], Accessed 25 March 2023.

It is also required that the company's business name contains a supplement indicating the legal form in a specified form - "s. r. o.". The shareholders may participate in the share capital exclusively in cash, contributions in kind are not allowed. Their administration is carried out until the incorporation of the company by the administrator, who may be only the director of the company. Finally, as a last requirement, the company must not have a supervisory board.

3.1.2. Special procedural conditions on limited liability company formation in a simplified way

Special procedural conditions on the registration of a limited liability company to the Slovak company register are set forth by Act No. 530/2003 Coll. on Company register (hereinafter "Company Register Act"). Apart from the general procedural conditions needed for the standard online registration[28] the Company Register Act requires in Section 7a (1) four additional procedural conditions to be met.

The first of them concerns a director. The court providing the registration of a company checks if the director is a natural person fully capable of legal acts, of full integrity and registered in the natural person register maintained under Act No. 253/1998 Coll. on reporting the residence of the citizens of the Slovak Republic and the residents of the Slovak Republic. Since natural persons meeting only certain conditions may be registered in the natural person register, the range of natural persons who may act as a director, is limited.

Further three conditions concern founders. They are required to have an account maintained by a bank or a branch of foreign bank with a registered seat in a Member State of the European Union or in a contracting state of the European Economy Area Agreement. From the Slovak legislator's view, the above-mentioned condition is of great importance when checking the existence of a person who wants to be registered as a shareholder.[29] Furthermore, an acting of founders is specifically regulated. To grant a power of attorney when forming a company is expressly excluded. A natural person acts as a founder is required to act personally and a legal person through its statutory body. This practically limits the use of simplified online formation to only those founders who have electronic identification means that are recognised by the Slovak law.

---

[28] Section 6 and 7 (3) points a), c), e) - g) of the Company Register Act.

[29] Explanatory memorandum to the Amendment to the Slovak Commercial Code, p. 6, [https://www.nrsr.sk/web/Dynamic/DocumentPreview.aspx?DocID=518244], Accessed 25 March 2023.

Although Article 13g (7) of the Digitalisation Directive requires Member States to ensure that the online formation is completed within five working days where a company is formed exclusively by natural persons, or in other cases within ten working days, Section 8 (1) of the Company Register Act, even before the transposition of the directive, stipulates a uniform two working days period for the registration of any legal form of company. In practice, however, there is only a low frequency of occurrence when the deadline is met. For such cases, the Digitalisation Directive requires Member States to ensure that applicants are informed of the reasons for extending the online process. However, the reflection of this requirement in the national regulation is missing.

Just to briefly mention it, the Slovak legislator has not specified the reasons to suspect identity falsification set forth by Article 13b (4) of the Digitalisation Directive as an exception when the physical presence of the founder can be required during the online formation process.

3.2. Comparison of standard and simplified formation of a limited liability company

As above-mentioned, the Slovak legislator stipulates special substantive conditions in Section 110a of the Commercial Code and special procedural conditions in Section 7a of the Company Register Act which limited liability company must meet when using a simplified online formation. Some of them have the potential to reduce the number of limited liability companies that can be founded in the simplified online manner. In particular, the condition on a maximum of five shareholders who may establish a company with the use of a template can be seen as limiting. In contrast, for the standard online formation process, the maximum number of shareholders is stated to be fifty.

The business activities which the limited liability company may carry out are also limited. Due to Section 110a (2) of the Commercial Code the simplified online formation is excluded in case of company willing to carry out more than fifteen objects of its business, or objects of business corresponding to the list of craft trades or regulated trades. Also, activities carried out on the basis of special legal regulations are excluded, for example practice of attorneys,[30] psychologists, experts, translators,[31] architects, and many others.

[30] Act No. 586/2003 Coll. on Advocacy.

[31] Act No. 36/1967 Coll. on Experts and Translators.

Contrary to the standard online company formation the founders do not have the option of designating a supplement indicating the legal form between "s. r. o.", "spol. s r. o." or "spoločnosť s ručením obmedzeným". Furthermore, the simplified online formation is excluded where the share capital consists of a contribution in kind. However, this exclusion is the only case explicitly foreseen in the Digitalisation Directive.[32] Another difference can also be seen in the position of the administrator. While in standard online formation only a founder, a bank or a branch of foreign bank may be the administrator, in the simplified online formation only a director (a natural person) may administer the contribution. These requirements do not reduce cases when limited liability companies can be formed in a simplified manner, but they rather relate only to the process of formation.

The justification of the special requirements provided by the Slovak legislator is based on the argument that they correspond to the most common model of the limited liability company in practice. Although such an explanation may appear to be sufficient from the practice´s perspective, it may be questionable whether it is sufficient when considering the requirements for the proper implementation of the directives into national laws. On the one hand, we could justify that the above-mentioned conditions are actually rules for the online company formation, the form and wording of which are under Article 13g (2) of the Digitalisation Directive left to Member States to adopt respecting the objectives aimed at therein. On the other hand, if we accept that rules for the online company formation may be formulated as restrictive in comparison to the rules for the standard online company formation, then we necessarily come to the result that not all limited liability companies may be formed online in a simplified way by means of an electronic template. The question arises as to whether the intention of the European legislator was not to enable the simplified online formation of a limited liability company as an alternative wherever the possibility of their standard formation is offered according to national law, except from the situation where the exclusion of this possibility is allowed by the Digitalisation Directive.[33]

The brief comparison of the procedural conditions shows that they place stricter requirements on the integrity of natural persons who are to be directors of a company formed in a simplified way. While a person who has been legally convicted of an economic crime, a crime against property or another crime committed intentionally, the essence of which is related to the object of business, does not fulfil the integrity required in the standard online company formation,[34] in a simplified

[32] Digitalisation Directive, Article 13g (4) point d).

[33] *Ibid.*, Article 13g (4) point d).

[34] Section 6 (2) of the Act No. 455/1991 Coll. Trade Licensing Act.

online formation a definition of criminal offenses is lacking and absolute integrity is required. The Slovak legislator justifies that the stricter integrity regime aims to achieve a simpler, faster, and time and cost-effective start of economic activity. Although cost savings is one of the frequent arguments used to justify the advantage of the online company formation, the court fee paid for registration of a limited liability company to the company register is set at a uniform amount of 150 Euros, regardless of the process used in the company formation.

Finally, we can also mention the disqualification rules. The director of a limited liability company, regardless of process used in the online formation, cannot be a person who was disqualified based on a court decision of the Slovak Republic, while from August 1, 2023, the Slovak court will also take into consideration a decision on disqualification issued by another Member State of the European Union or a contracting state of the European Economic Area Agreement, if it is recognised by the procedure according to Act No. 97/1963 Coll. on international private and procedural law.

To sum up the main differences between the standard and the simplified online company formation, a comparative table of the two types of limited liability company formation in Slovakia is provided.

Table 1. Main features of two types of limited liability company formation

	Formation of limited liability company (*spoločnosť s ručením obmedzeným*)	
	Simplified online formation with a template	Standard online formation
Max. number of shareholders	5 Legal person/Natural person	50 Legal person/natural person
Template of articles of association	Available online	Not available
Supplement to the business name	s. r. o.	s. r. o. spol s r. o. spoločnosť s ručením obmedzeným
Shareholders' contribution	Cash only	Cash/In kind
Shareholders' bank account	Obligatory	-
Administrator of contribution	Director (Natural person only)	Shareholder (Legal person/Natural person) Bank Branch of foreign bank
Representation of founders in company formation	Not possible	Possible
Founder's Authorisation of articles of association	Qualified electronic signature only	Qualified electronic signature/ Handwritten and certified
Number of business activities (trades)	Limited to 73 unregulated trades under Trade Licensing Act	Unlimited (Different types of trades under various Acts)
Max. number of business activities in articles of association	15	Unlimited
Integrity of the director	Full	Limited to specific criminal offences pursuant to the Trade Licensing Act
Obligation to register a director in the Register of Natural Persons	Yes	No
Supervisory board	Not available	Optional
Administrative fee	150 Euros	150 Euros
Prescribed period to register a company	2 working days	2 working days

Source: Authors

4. FURTHER STEPS TOWARDS MORE DIGITAL COMPANY LAW: SELECTED ISSUES

As above mentioned, the digitalisation of company law has taken a considerable leap forward with the implementation of the Digitalisation Directive. Nevertheless, to further adapt company law to fit the digital era, the introduction of new digital regulations and innovative solutions is needed. While digital technologies are rapidly changing our society, it raises the question of how quickly company law digitalisation is progressing throughout Europe and whether recent initiatives and reports at EU level could predict possible future legislative priorities and a significant transformation of national legal provisions.

In 2021, the European Commission launched a new company law initiative "Upgrading digital company law"[35] and started a public consultation focusing on the collection and assessment of legal, economic, and technical data along with stakeholders' opinions related to further digital developments of company law.[36] The overall aim of this new initiative is to uptake digital aspects of company law across Member States, which may encourage cross-border expansion of companies within the European area. Specifically, it seeks to intensify the transparency of company data and their access via Business Registers Interconnection System (hereinafter "BRIS"), remove obstacles and enhance use of company information available through BRIS in cross-border administrative and court procedures, and expand the application of the "once-only principle" through BRIS when setting up of subsidiaries or branches in other Member States.[37] It also assesses the use of other developments, such as digitalisation of corporate processes to ensure the online formation of companies other than those, for which the online procedure is already available via the implementation of the Digitalisation Directive. One of the ground-breaking digital developments introduced by this initiative is the concept of a virtual registered office (virtual corporate seat) which will be discussed further in this paper from a national perspective. However, the initiative does not provide for any detailed measures in this matter. When we were finalising this paper and concluding that predictions on future provisions must be postponed for later, a new proposal for a Directive of the European Parliament and of the Council amending Directives 2009/102/EC and (EU) 2017/1132 as regards fur-

---

35 European Commission, *Inception Impact Assessment, Upgrading digital company law*, pp. 1 - 5, [https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13055-Upgrading-digital-company-law_en], Accessed 2 April 2023.

36 European Commission, *Upgrading Digital Company Law – factual summary report of the contributors received to the public consultation*, [https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13055-Upgrading-digital-company-law/public-consultation_en], Accessed 2 April 2023.

37 European Commission, *op. cit.,* note 36, p. 3.

ther expanding and upgrading the use of digital tools and processes in company law was just adopted by the Commission on 29 March 2023.[38] Proposed rules address issues such as an EU company certificate, a multilingual standard model for a digital EU power of attorney, the application of the once and only principle, and a company´s information availability, mainly aiming to alleviate the administrative burden for cross-border business and improve cross-border transparency. The proposal does not deal with a company's internal affairs, and although the initiative and following consultation addressed the concept of virtual registered offices, difficulties with its definition and doubts raised by stakeholders led to its withdrawal.[39]

Nonetheless, digitalisation in the further stages of a company's lifecycle has recently been addressed by the Informal Company Law Expert Group (ICLEG). In August 2022, the Report on virtual shareholder meetings and efficient shareholder communication (hereinafter "the Report") dealing with the physical appearance of shareholders at general meetings and shareholders' communications was published. It examined the above-stated issues in detail and provides for an assessment of pre-pandemic and post-pandemic national approaches adopted by individual Member States.[40] The Report touches on the concepts of virtual and hybrid shareholders' meetings[41] and their availability for listed companies, occasionally for private companies. As virtual shareholders' meetings have become more common following COVID-19, we further assess the legislative approaches already taken at EU level and analyse whether and to what extent the Slovak national regulation currently in force or planned regulates electronic participation and the possibility to held virtual shareholders' meetings, with an emphasis on private companies.

---

38 COM (2023) 177 final.

39 Commission Staff Working Document, *Impact assessment Report Accompanying the document Proposal for a Directive of the European Parliament and of the Council amending Directives 2009/102/EC and (EU) 2017/1132 as regards further expanding and upgrading the use of digital tools and processes in company law*, SWD (2023) 178 final, p. 150, [https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=SWD%3A2023%3A178%3AFIN&qid=1680277358693], Accessed 2 April 2023.

40 The Informal Company Law Expert Group (ICLEG), *Report on virtual shareholder meetings and efficient shareholder communication*, August 2022, [https://commission.europa.eu/system/files/2022-10/report_on_virtual_shareholder_meetings_and_efficient_shareholder_communication.pdf], Accessed 15 March 2023.

41 To clarify the terms, a purely virtual meeting is the term used for a general meeting that is completely held in virtual space. On the other hand, a hybrid shareholders' meeting is a meeting in which both participation via electronic means and participation in person may take place.

4.1. Rules and perspectives on electronic participation and virtual shareholders' meetings

4.1.1. EU provisions and new recommendations

The voting without physically attending the general meeting has been briefly addressed at EU level. To strengthen the position of shareholders and enhance interaction between the management, the boards, and the shareholders, the Directive (EU) 2007/36[42] has stipulated the requirement for Member States to remove obstacles which hinder the access of shareholders (resident or non-resident) to the exercise of their voting rights without physically attending the shareholders' meeting. Pursuant to Article 8 of Directive (EU) 2007/36 listed companies shall face no legal obstacle in offering shareholders participation rights consisting of real-time transmission, real-time two-way communication, and specific mechanisms for casting votes. This type of virtual participation must only be subject to the requirements necessary to ensure identification of shareholders and the security of electronic communications. However, enabling electronic participation in shareholders' meetings is mandatory only for listed companies and all additional measures must be taken at the national level. While in some Member States the same rules on electronic participation or virtual shareholders' meetings apply to other types of companies, some national regulations are still very inflexible in this regard. As different approaches regarding electronic participation and virtual shareholders' meetings in private companies are taken by individual Member States, two possible scenarios have been outlined by the ICLEG. First, the introduction of new digital tools in the Digitalisation Directive to make electronic participation and virtual meetings available (at least) to limited liability companies. Alternatively, at least a requirement to enable private companies to provide for these digital developments in their articles of association should be addressed at EU level.[43] However, for now, we will have to wait for the European legislator to take the final approach in this matter.

4.1.2. The Slovak perspective on electronic participation at shareholders' meeting

Currently, the Slovak Commercial Code does not contain any general provisions on virtual shareholders' meeting or the possibility to participate at the meeting by means of electronic communication. It is therefore assumed that participation and voting at purely virtual shareholders' meetings are not admissible for private

---

42 Directive 2007/36/EC of the European Parliament and of the Council of 11 July 2007 on the exercise of certain rights of shareholders in listed companies [2007] OJ L184/17, pp. 17 – 24.

43 Recital 57, The Informal Company Law Expert Group (ICLEG), *op. cit.* note 40, p. 28.

companies.[44] However, due to the implementation of Directive 2007/36 into the Slovak Commercial Code, the exception is provided for listed companies. Pursuant to Section 190d of the Slovak Commercial Code, the articles of association of listed companies may[45] allow the possibility of participation in a shareholders' meeting by electronic means.[46] If the listed company allows shareholders to participate in general meeting and cast their votes digitally, each exercise of the shareholders' voting right must be signed by a qualified electronic signature and bear a qualified electronic time stamp.[47] The company itself shall take all measures necessary to ensure the proper and uninterrupted conduct of voting by electronic means of communication. But a recent study on national provisions shows that most listed companies with registered office in Slovakia explicitly excluded the option of holding shareholders' meeting virtually or by electronic means.[48]

Due to the spread of contagious virus COVID-19, many companies have faced the problem of how to organise shareholders' meetings. In response, all Member States updated their regulations and introduced temporary measures which enable electronic participation in shareholders' meetings without the physical presence of shareholders or even board members in order to encourage the use of remote attendance.[49] The Slovak legislator introduced interim measures to allow digital voting at shareholders' meeting as well.[50] In a state of emergency, all types of companies were enabled to allow the participation of shareholders by electronic means, even if not provided for in their articles of association. If the conditions of decision-making did not arise from the articles of association, they could have been determined for the shareholders' meeting by the statutory body. Regarding the choice of electronic means, the proper selection was left to the company itself.

---

44 Csach, K., *Digital corporate governance in Slovakia*, Právny obzor, Vol. 105, Special issue, pp. 3 – 13.

45 Šuleková, Ž., *Elektronizácia v korporačnom práve*, Právo obchod ekonomika VI. Košice: Univerzita Pavla Jozefa Šafárika v Košiciach, 2016, pp. 551 – 559.

46 As the Slovak regulation follows a technically neutral approach, examples of electronic means are not further specified and prescribed in law due to the constant progress in the field of digital technology.

47 Section 190d (2) of the Slovak Commercial Code.

48 Sokol, M., *Elektronické hlasovanie kolektívnych orgánov v obchodných spoločnostiach*, GRANT Journal, Vol. 11, No. 1, 2022, p. 57.

49 For a detailed comparative analysis see Pinior, P., *Impact of the Covid-19 Pandemic on Company Law. Shareholders' Meetings and Resolutions*, European Company and Financial Law Review, Vol. 19, No. 1, pp. 100 - 127, Vutt, M., *Digital opportunities for and Legal Impediments to – Participation in a General Meeting of Shareholders*, Juridica International, Vol. 29, 2020, pp. 34 - 46, Härmand, K., *Digitalisation before and after the Covid-19 crisis*, ERA forum – Journal of the Academy of European Law, Vol. 22, No. 1, 2021, pp. 39 – 50.

50 See Section 5 of Act No. 62/2020 Coll. on Certain Emergency Measures in Relation to the Spread of the Dangerous Contagious Human Disease COVID-19 and in the judiciary. For further details Csach, K., *et al.*, *Správa a riadenie obchodných spoločností počas pandémie COVID-19*, Súkromné právo, No. 2, 2020, pp. 66 – 74.

However, the above-mentioned regulation was of a temporary nature, effective only during the restrictions imposed by the government and is currently not in force. In this context we are of the opinion that the positive practical experience from the pandemic time shall lead to more permanent change and the transformation of strict national rules.

4.1.3. Recodification of Slovak corporate law as a new step forward

Effective solutions for the rigidity of the national rules could be closer than we think. In 2021, the Ministry of Justice of the Slovak Republic has published a proposal of legal framework for the recodification of company law[51] and slightly addressed the concept of digitalisation of processes in company law.[52] Beyond the requirements of the Digitalisation Directive (online formation of limited liability company) it also reflects on the remote exercise of shareholders' voting right. It assumes that new legal regulation will waive the requirements of personal participation at the shareholders' meeting and offer technologically neutral provisions enabling the use of electronic means of communication, if stipulated so in the articles of association of private companies. This new legislative approach of allowing virtual shareholders' meeting will also place a huge responsibility on companies to provide comprehensive instructions on how their shareholders can participate in their shareholders' meetings and to ensure that rights of shareholders are safeguarded to the greatest possible extent. For now, we will have to wait for the paragraphed version of the proposal in order to properly assess whether the new legislation will open doors for digital developments already in use in other Member States.

4.2. Virtual registered office as a new innovative development

With more companies operating in a digital environment, the effectiveness of classic company law requirements for incorporation must certainly be challenged as well. One of the digital developments mentioned in the above-stated initiative on Upgrading the digital company law is the virtual registered office (virtual corporate seat). One can assume that the European Commission was keen to offer companies a new innovative concept of a completely virtual registered office as an alternative to the traditional physical corporate seat. However, the question is

---

51 Ministry of Justice of the Slovak Republic, *Proposal for a recodification of company law*, May 2021, pp. 1 – 25, [https://www.justice.gov.sk/dokumenty/2022/02/Legislativny-zamer-ZoOSaS_2021.pdf], Accessed 1 April 2023.

52 *Ibid.,* p. 11.

what the actual term "virtual registered office" means and whether there are some potential risks associated with this innovative concept. These questions are even more important as this new concept was discarded in the new Proposal for a directive and a deeper assessment is required.

Currently, under Slovak corporate law the registered seat of a legal person refers to the physical address of a company.[53] The address of a legal entity (entrepreneur) is defined in Section 2 (3) of the Slovak Commercial Code rather strictly as "the name of the municipality with its postcode, the name of the street or other public area, and the landmark number or, if the municipality is not subdivided into streets, the enumeration number." Founders, when setting up a company, must demonstrate a proper relationship to the real estate situated at the address concerned, which the entitlement to register it as a registered office derives from.[54]

For instance, there are several service providers (intermediaries) providing the possibility to set up a "virtual office". In general, virtual seat services consist of arranging a company's registered office by setting up a mailbox (postbox) for a company at a certain address (at an attractive location) and administering the company's mails. It may include labelling the mailbox, receiving mail, notifying on received mail, scanning and resending it.[55] A motivation behind a decision to use such a service provider could encompass economic savings, especially for small private companies and companies active in the online sphere, which do not necessarily need to purchase or lease physical office space. Also, it seems to be a solution for securing the jurisdiction of the court without the need to do business from that location.[56] It is common practice that multiple companies are registered at the same address, notably when a foreign majority shareholder is considered.[57] This is well reflected by the fact that many companies are registered at a few prestigious addresses in the capital Bratislava, where they actually do not physically operate,

---

53 See Article 2 (3) of the Slovak Commercial Code.

54 In Slovakia, there is no requirement for a link between the activities of a company and its registered office. It follows the incorporation seat theory.

55 Several websites offer the possibility to set up a virtual registered office at a prestigious location in the capital of the Slovak Republic, Bratislava,
[https://www.davismorgan.com/virtual-offices],
[http://virtualna-adresa.sk/],
[https://www.virtualpoint.sk/], Accessed 15 March 2023.

56 Other advantages of using a virtual address as a registered office may include protection of privacy, attaining space for business meetings, or reputation purposes.

57 See European Commission, Directorate-General for Justice and Consumers, *Letterbox companies: overview of the phenomenon and existing measures*, Final report, July 2021, p. 203,
[https://op.europa.eu/en/publication-detail/-/publication/0334d8fa-5193-11ec-91ac-01aa75ed71a1], Accessed 15 March 2023.

but only purchased the possibility to be registered at the time of setting up a company.[58] On this basis, even the current term virtual office refers to a mailbox that a company uses to receive mail and all other paper documents only, it does not simply indicate any illegal activity.

However, the debate on virtual seat offices is often associated with negative connotations of the highly controversial economic phenomenon called letterbox companies. These companies exist via a mailing address only, do not actually perform any economic activities, and are set up with the intention of circumventing tax and other legal obligations (labour standards, social security, etc.). It is therefore very important to distinguish between this negative phenomenon and the legitimate concept which is available for location-independent companies in many Member States.

Regarding the question, whether there is a possibility to go even further and create a corporate seat available only virtually (with no connection to any physical location), we identify various drawbacks. We presuppose that the transfer of a corporate office to a purely virtual world without sufficient safeguards may cause potential risks and problems. In case of a virtual corporate seat only, the question on applicable national company law may arise as it can cause difficulties in determining the actual place of incorporation. Moreover, technical settings must be clearly assessed so the communication with a company is properly safeguarded.

Currently, the choice of a virtual location only is not available in any Member State. However, the concept of a virtual corporate seat has recently been introduced in the proposed legislative initiative in Lithuania. The proposal entitles founders of a company to choose between a physical and virtual corporate office. In case of a virtual corporate office, the digital address of a corporation (so called e-Delivery box) in the Lithuanian National Electronic Delivery Information System and the administrative unit (such as a municipality) shall be required.[59] The virtual e-Delivery box, which seems to be like an e-mail address, shall be open for any delivery of electronic messages and electronic documents from third parties. Declaration of the wider location - municipality - without necessity of a detailed address shall serve administrative and judicial purposes. The digital address would have to be indicated in the business registry, in correspondence with third parties and on the company website. Although a virtual-only seat could be beneficial

[58] There are hundreds of companies located at the same addresses in Bratislava. For instance, Hlavná, Parková, and Družstevná streets are popular addresses for companies with foreign majority shareholders. *Ibid.*, p. 207.

[59] Mikalonienė, L., *Virtual Corporate Seat: The Lithuanian Perspective*, Journal of the University of Latvia, No. 15, 2022, p. 219.

for many entrepreneurs, there are various imperfections associated with such a proposal. It is emphasized that contacting a company through the state-own electronic system may be available only for domestic users at present.[60]

Despite the fact that a Lithuanian proposal may have some weaknesses,[61] it represents a good starting point for further discussions on virtual corporate seats as no common approach across the EU is seen. The use of virtual seats may have a positive impact on business carried out by small and medium-sized enterprises and start-ups which operate purely in a virtual context. The introduction of this new digital development may decrease the administrative burden by replacing the requirement to preserve physical office, which can be beneficial for new entrepreneurs as well as already existing ones. Definitely, the current business model based on providing physical addresses for forming companies, available in many Member States will be highly affected by this alternative digital approach.

5. CONCLUSION

The ongoing digital transformation of economic and social aspects of life has had a significant impact on companies across Europe and intensively shaped the way of doing business. This paper mentioned several digital initiatives brought to light at EU level in connection therewith. The key step towards making digital tools available in company law is provided by the Digitalisation Directive which requires Member States to enable the fully online formation of limited liability companies in a simplified way by means of an electronic template of articles of association. Its harmonising effect is limited as it stipulates only minimum sets of requirements that must be met, while Member States are left a great leeway in adopting fully detailed rules and processes. The Slovak legislator has introduced the rules including special substantive and procedural conditions which must be met to benefit from the simplified online company formation. The brief comparison of standard and simplified online company formation processes leads to a paradoxical conclusion. When the simplified process is used, more rigid conditions need to be met. Contrary to the standard online company formation, the simplified online way is not available in every case of limited liability company formation. Therefore, it may be questionable if the Slovak solution corresponds to the European legislator´s intention. As questions regarding the company´s internal affairs have remained untouched by the Digitalisation Directive, there is no common approach across the EU to enable virtual shareholders' meeting or electronic participation of shareholders at the general meeting of private companies. Each Member State provides

[60] *Ibid*., p. 224.

[61] *Ibid.,* pp. 224 – 225.

for individual measures, however, the traditional understanding of physical presence at shareholders' meeting is experiencing major digital transformation and shall be fully reflected in national provisions. As regards the virtual registered office we may conclude that the new innovative digital solutions shall be encouraged, however, appropriate safeguard measures must be further researched and assessed.

REFERENCES

BOOKS AND ARTICLES

1. Bitė, V., Romashchenko, I., *Online Formation of Companies in Lithuania in a Comparative Context, Implementation of the Digitalisation Directive and Beyond*. European Business Organization Law Review, 2023.
2. Csach, K., *Digital corporate governance in Slovakia*, Právny obzor, Vol. 105, Special issue, pp. 3 - 13
3. Csach, K., et al., S*práva a riadenie obchodných spoločností počas pandémie COVID-19*, Súkromné právo, No. 2, 2020, pp. 66 - 74
4. Härmand, K., *Digitalisation before and after the Covid-19 crisis*, ERA forum – Journal of the Academy of European Law, Vol. 22, No. 1, 2021, pp. 39 - 50
5. Jakupak, T., Bregeš, Ž., *Digitalization: Balance and protection – state – of – the – art,* InterEULawEast: Journal for the international and European law, economics and market integrations, Vol. 7, 2020, pp. 195 - 227
6. Mikalonienė, L., *Virtual Corporate Seat: The Lithuanian Perspective*, Journal of the University of Latvia, No. 15, 2022, pp. 215 - 227
7. Pinior, P., *Impact of the Covid-19 Pandemic on Company Law. Shareholders' Meetings and Resolutions*, European Company and Financial Law Review, Vol. 19, No. 1, 2022, pp. 100 - 127
8. Romashchenko, I., *Online Formation of Companies in Selected Jurisdictions of the European Union: Issues and Challenges*, in: Škrabka, J. (eds.), Law in Business of Selected Member States of the European Union, Proceedings of the 13th International Scientific Conference, Prague, 2021, pp. 99 – 108
9. Sokol, M., *Elektronické hlasovanie kolektívnych orgánov v obchodných spoločnostiach*, GRANT Journal, Vol. 11, No. 1, 2022, pp. 55 – 59
10. Sudzina, M., *Insolvenčné konania podľa Nariadenia o insolvenčnom konaní,* Univerzita Pavla Jozefa Šafárika v Košiciach, Košice, 2018
11. Šuleková, Ž., *Na pomedzí kogentnosti a dispozitívnosti korporačného práva,* Právny obzor, Vol. 4, 2014, pp. 383 - 396
12. Šuleková, Ž., *Elektronizácia v korporačnom práve*, Právo obchod ekonomika VI. Košice: Univerzita Pavla Jozefa Šafárika v Košiciach, 2016, pp. 551 - 559
13. Vutt, M., *Digital opportunities for and Legal Impediments to – Participation in a General Meeting of Shareholders*, Juridica International, Vol. 29, 2020, pp. 34 – 46

EU LAW

1. Directive 2007/36/EC of the European Parliament and of the Council of 11 July 2007 on the exercise of certain rights of shareholders in listed companies [2007] OJ L 184/17
2. Directive 2012/17/EU of the European Parliament and of the Council of 13 June 2012 amending Council Directive 89/666/EEC and Directives 2005/56/EC and 2009/101/EC of the European Parliament and of the Council as regards the interconnection of central, commercial and companies registers [2012] OJ L156/01 (Implicitly repealed by Directive (EU) 2017/1132)
3. Directive (EU) 2019/1151 of the European Parliament and of the Council of 20 June 2019 amending Directive (EU) 2017/1132 as regards the use of digital tools and processes in company law [2019] OJ L186/80

LIST OF NATIONAL REGULATIONS, ACTS AND COURT DECISIONS

1. Act No. 36/1967 Coll. on Experts and Translators
2. Act No. 513/1991 Coll. Commercial Code
3. Act. No. 455/1991 Coll. Trade Licensing Act
4. Act No. 530/2003 Coll. on Company register
5. Act No. 586/2003 Coll. on Advocacy
6. Act No. 305/2013 Coll. on e-Government
7. Act No. 62/2020 Coll. on Certain Emergency Measures in Relation to the Spread of the Dangerous Contagious Human Disease COVID-19 and in the judiciary

WEBSITE REFERENCES

1. The Informal Company Law Expert Group (ICLEG), *Report on digitalisation in company law,* [https://commission.europa.eu/business-economy-euro/doing-business-eu/company-law-and-corporate-governance_en], Accessed 2 April 2023
2. European Commission, *Assessment of the impacts of using digital tools in the context of cross-border company operations. Final Report*, Luxembourg, 2017, [https://op.europa.eu/en/publication-detail/-/publication/7a13b53a-fdc0-11e8-a96d-01aa75ed71a1], Accessed 2 April 2023
3. ETUC, *Guidelines on the Transposition of the Directive on Digital Tools and Processes in Company Law*, Brussels, 2021, [https://www.etuc.org/sites/default/files/2021-06/Guidelines_digital%20tools%20Directive%20EN.pdf], Accessed 13 March 2023
4. Explanatory memorandum to the Amendment to the Slovak Commercial Code, [https://www.nrsr.sk/web/Dynamic/DocumentPreview.aspx?DocID=518244], Accessed 25 March 2023
5. European Commission, *Inception Impact Assessment. Upgrading digital company law,* [https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13055-Upgrading-digital-company-law_en], Accessed 2 April 2023

6. European Commission, *Upgrading Digital Company Law – factual summary report of the contributors received to the public consultation*, [https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13055-Upgrading-digital-company-law/public-consultation_en], Accessed 2 April 2023
7. Ministry of Justice of the Slovak Republic, *Proposal for a recodification of company law,* [https://www.justice.gov.sk/dokumenty/2022/02/Legislativny-zamer-ZoOSaS_2021.pdf], Accessed 1 April 2023
8. The Informal Company Law Expert Group (ICLEG), *Report on virtual shareholder meetings and efficient shareholder communication*, [https://commission.europa.eu/system/files/2022-10/report_on_virtual_shareholder meetings_and_efficient_shareholder_communication.pdf], Accessed 15 March 2023
9. European Commission, Directorate-General for Justice and Consumers*, Letterbox companies: overview of the phenomenon and existing measures, Final report*, [https://op.europa.eu/en/publication-detail/-/publication/0334d8fa-5193-11ec-91ac-01aa75ed71a1], Accessed 15 March 2023
10. Commission Staff Working Document, *Impact assessment Report Accompanying the document Proposal for a Directive of the European Parliament and of the Council amending Directives 2009/102/EC and (EU) 2017/1132 as regards further expanding and upgrading the use of digital tools and processes in company law*, [https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=SWD%3A2023%3A178%3AFIN&qid=1680277358693], Accessed 2 April 2023
11. [https://www.davismorgan.com/virtual-offices], Accessed 15 March 2023
12. National transposition measures communicated by the Member States concerning the Digitalisation Directive, [https://eur-lex.europa.eu/legal-content/SK/NIM/?uri=CELEX:32019L1151], Accessed 2 April 2023
13. [htps://www.virtualpoint.sk/], Accessed 15 March 2023
14. [http://virtualna-adresa.sk/], Accessed 15 March 2023

UDK 346.546:342.721]:316.77
341.645.5(4-67EU)
Review article

WHEN COMPETITION MEETS PERSONAL DATA PROTECTION*

Simona Rudohradská, Mgr., PhD
Pavol Jozef Šafárik University in Košice, Faculty of Law
Kováčska 26, Košice, Slovakia
simona.rudohradska@upjs.sk

Laura Bachňáková Rózenfeldová, JUDr., PhD
Pavol Jozef Šafárik University in Košice, Faculty of Law
Kováčska 26, Košice, Slovakia
laura.rozenfeldova@upjs.sk

Regina Hučková, Ph.D, Associate Professor
Pavol Jozef Šafárik University in Košice, Faculty of Law
Kováčska 26, Košice, Slovakia
regina.huckova@upjs.sk

ABSTRACT

In the submitted contribution the authors follow up on the case of Facebook, which was assessed by the German competition authority – Bundeskartellamt. Proceedings moved from administrative to judicial phase, as this case was assessed by Düsseldorf Higher Regional Court (Oberlandesgericht Düsseldorf) and also by Federal Court of Justice (Bundesgerichtshof). However, German national courts had adopted differing views in this regard. National German court (Higher Regional Court, Düsseldorf, Germany) rendered a prejudicial question to Court of Justice of the European union (hereinafter referred to as "CJEU"), concerning mainly (1) interpretation of GDPR regulation and (2) question of whether competition authority is entitled to apply this regulation in its investigations. In the corresponding case No. C-252/21, the Opinion of Advocate General (delivered on 20 September 2022) was recently published. The aim of this paper is to assess the interaction between personal data protection in correlation with the competition rules, more precisely, whether the competition authority is entitled to apply GDPR.

***Keywords**: CJEU competition law, dominant position, Facebook, GDPR*

* This paper is funded by the Slovak Research and Development Agency under contract No. APVV-21-0336 within the scope of the project titled "Analysis of Judicial Decisions using Artificial Intelligence" and under contract No. APVV-19-0424 within the scope of the project titled "Innovative corporation: intra-corporate transformations, digital challenges and the rise of artificial intelligence".

1. INTRODUCTION

The interconnection of competition rules with personal data protection regulation continues to provide new challenges to the competent authorities interpreting these rules and applying them in practice towards subjects that fall under the scope of both of these areas of regulation. Specifically, and more prevalently, this issue arises in connection with the operation of digital platforms, the main business strategies of which are oriented on the use and commercialization of user data, whether personal or other. In this regard it is necessary to consider the different scope of competences of the relevant authorities entitled, firstly, to stipulate whether the infringement of data protection obligations took place, and secondly, to consider the impact of these infringements (or in the absence of such infringements consider, in general, the impact of the data policies enacted) on competition and the possible (un)lawfulness of its restriction. Where the former usually falls under the competences of national data protection offices, the latter is included in the exclusive competences of the European Union (Article 3 (1) (b) TFEU[1]) and is implemented in practice by the Commission as its representative or, alternatively, when it comes to issues with exclusively national scope, by the competent national competition authorities (e. g. Antimonopoly office of the Slovak republic).

Following these considerations, the main objective of this paper is to analyse the following question: to what extent competition authorities (whether on national or European level) are allowed to consider personal data protection regulation materialized in the General Data Protection Regulation (hereinafter referred to as 'GDPR') in their investigations with the objective to identify possible infringements of competition rules. To answer this question, the authors consider the recent case No. C-252/21 Meta Platforms and Others brought before the Court of Justice of the European Union (hereinafter referred to as 'CJEU') and the decisions of the German courts that preceded it.

2. THE FACEBOOK CASE – FROM BUNDESKARTELLAMT TO THE CJEU

2.1. National administrative proceeding

Since we have dealt with the German administrative and judicial proceedings regarding Facebook in more detail in our previous paper[2], we will provide only a

[1] Treaty on the Functioning of the European Union, OJ C 326, 26.10.2012, p. 47-390.

[2] Rudohradská, S.; Hučková, R.; Dobrovičová, G., *Present and Future-A Preview Study of Facebook in the Context of the Submitted Proposal for Digital Markets Act*, EU and comparative law issues and challenges series (ECLIC), Vol. 6, 2022, pp. 489-508.

brief summary of the most relevant facts required for answering the research questions defined in this paper. The case of Facebook began to be considered by the German competition authority - Bunderkartellamt on 2nd March of 2016. One of the main determinants for initiating the proceedings concerned user data collected by Facebook from user devices when users used other services or websites or third-party applications, which were later combined with user data from the social network Facebook.[3] After the extensive investigation of the decisive circumstances, the German competition authority issued a decision on 6th February of 2019. It can be marked as a decision of considerable scope, and its shorter summary was also published.[4] The Bundeskartellamt has prohibited and ordered the termination of Facebook's data processing policy and its corresponding implementation in accordance with Sections 19(1) and 32 GWB.[5]

The aforementioned case of the social network Facebook was the subject of extensive discussions, primarily focusing on the significant connection of competition law with the area of personal data protection. In literature, we are also encountering opinions that regulatory tendencies in relation to the gatekeepers are currently found in consumer protection law, personal data protection law and competition law.[6]

Disputed aspect in the proceedings was whether the competition authority, which exercises its powers within the framework of the protection of competition, has the competence to decide on a violation of the GDPR. The Bundeskartellamt argued in favor of its jurisdiction by saying that in the given case there was an abuse of a dominant position, which was abused to force user consent with the platform terms of use, which are questionable from the point of view of the GDPR.

2.2. National judicial proceeding

On 11th February of 2019 a complaint was filed to the Oberlandesgericht Düsseldorf against the administrative decision of the Bundeskartellamt regarding

---

3 Bundeskartellamt, Decision, Facebook case, B6-22/16, [http://www.bundeskartellamt.de/SharedDocs/Entscheidung/EN/Entscheidungen/Missbrauchsaufsicht/2019/B6-22-16.pdf%3F__blob%3DpublicationFile%26v%3D5], Accessed 5 April 2023.

4 Case summary, Facebook, *Exploitative business terms pursuant to Section 19(1) GWB for inadequate data processing*, *B6-22/16,* [https://www.bundeskartellamt.de/SharedDocs/Entscheidung/EN/Fallberichte/Missbrauchsaufsicht/2019/B6-22-16.pdf;jsessionid=1C5BC37B9C63E0D79C3E41545FCBC694.1_cid362?__blob=publicationFile&v=4], Accessed 5 April 2023.

5 German national Competition protection Act.

6 Mazúr, J.; Patakyová, M. T. *Regulatory approaches to Facebook and other social media platforms: towards platforms design accountability*, Masaryk University Journal of Law and Technology, 2019, pp. 219-242.

Facebook, transferring the legal case from the administrative level to the judicial proceedings. Considering the fact that the German judicial authority has quite clearly declared that it is very likely that the administrative decision issued by the Bundeskartellamt will be overturned, as the court did not agree with its conclusions, we agree with the finding that the court's interim decision was issued in favor of Facebook.[7] As the court first emphasized: "...*there are serious doubts about the legality of this decision of the Bundeskartellamt*."[8] Currently, the aspect of doubts about the legality of the administrative decision entitles the acting court to comply with the petitioner's proposal to grant a suspensive effect. Second, the court also commented on data processing issues when it stated that "…*the data processing by Facebook does not cause any relevant competitive harm or any adverse development of competition. This applies both to exploitative abuse at the expense of consumers participating in the social network Facebook, and with regard to exclusionary abuse at the expense of an actual or potential competitor of Facebook*."[9] However, the competent German judicial authorities have not yet issued a final decision on the merits of the case, and the decisions issued so far have been of a preliminary nature. After the hearing, which took place on 24th of March 2021, the court decided to stop the proceedings and submit preliminary questions to the CJEU pursuant to Art. 267 of the TFEU. The Oberlandesgericht Düsseldorf submitted a total of 7 questions to the CJEU, some of which consist of several partial sub-questions.

3. QUESTIONS SUBMITTED TO THE CJEU WITHIN THE PRELIMINARY RULING

The analysis of the opinion of the advocate general should be directed primarily to the first and seventh preliminary questions, which are, from our point of view, the most relevant for the purposes of this paper. The first and seventh questions are derived in the following sub-questions.

The wording of the first preliminary question is:

"(a) Is it compatible with Article 51 et seq. of the GDPR if a national competition authority – such as the Federal Cartel Office – which is not a supervisory authority within the meaning of Article 51 et seq. of the GDPR, of a Member State in which an undertaking established outside the European Union has an establish-

7 Botta, M.; Wiedemann, K., *Exploitative conducts in digital markets: Time for a discussion after the Facebook Decision*, Journal of European Competition Law & Practice, 2019, pp. 465-478, p. 470.

8 Unofficial translation of the decision - Facebook. /. Bundeskartellamt The Decision of the Higher Regional Court of Düsseldorf (Oberlandesgericht Düsseldorf) in interim proceedings, 26 August 2019, Case VI-Kart 1/19 (V), p. 6-7.

9 *Ibid.*

ment that provides the main establishment of that undertaking – which is located in another Member State and has sole responsibility for processing personal data for the entire territory of the European Union – with advertising, communication and public relations support, finds, for the purposes of monitoring abuses of competition law, that the main establishment's contractual terms relating to data processing and their implementation breach the GDPR and issues an order to end that breach?

(b) If so: is that compatible with Article 4(3) TEU if, at the same time, the lead supervisory authority in the Member State in which the main establishment, within the meaning of Article 56(1) of the GDPR, is located is investigating the undertaking's contractual terms relating to data processing?"

With the first question, the German national court basically asks whether the competition authority can find that the platform's terms and conditions are in violation of the GDPR and issue a decision that prohibits their further use. Advocate General deals with the first preliminary question relatively briefly, stating that, in his opinion, the competition authority did not penalised a violation of the GDPR, but assessed actions showing signs of abuse of a dominant position, among other things, also in the context of the GDPR, specifically stating the following: "Subject to verification by the referring court, it seems to me that the Federal Cartel Office, in the decision at issue, did not penalise a breach of the GDPR by Meta Platforms, but proceeded, for the sole purpose of applying competition rules, to review an alleged abuse of its dominant position while taking account, inter alia, of that undertaking's non-compliance with the provisions of the GDPR."[10] We basically agree with the cited statement, because the competition authority in this case did not really limit itself to assessing the general conditions of use in light of the GDPR, but instead considered them primarily in the context of competition rules, specifically the abuse of a dominant position. However, in our opinion it would be an overstepping of the competencies of the competition authority if it would limit itself exclusively to assessing aspects related to the GDPR and did not deal with such proceedings of the platform in connection with the violation of competition rules.

The wording of the seventh preliminary question is:

"(a) Can the national competition authority of a Member State, such as the Federal Cartel Office, which is not a supervisory authority within the meaning of Article 51 et seq. of the GDPR and which examines a breach by a dominant

[10] Opinion of the Advocate General Rantos from 20th of September 2022, Meta Platforms a i. (Conditions générales d'utilisation d'un réseau social), C-252/21, ECLI:EU:C:2022:704, point 18.

undertaking of the competition-law prohibition on abuse that is not a breach of the GDPR by that undertaking's data processing terms and their implementation, determine, when assessing the balance of interests, whether those data processing terms and their implementation comply with the GDPR?

(b) If so: in the light of Article 4(3) TEU, does that also apply if the competent lead supervisory authority in accordance with Article 56(1) of the GDPR is investigating the undertaking's data processing terms at the same time?"

With the seventh preliminary question (and the second in the order addressed by the opinion in question), the national court is practically asking whether the competition authority can incidentally assess whether the platform's terms of use are in conflict with the GDPR and, if so, whether they can be subject to an investigation by this competition authority, whereas those terms are, at the same time, under investigation by the competent lead supervisory authority (taking into account Art. 4 par. 3 of the EU Treaty, which regulates the so-called principle of sincere cooperation).

We agree with the statement that even if the competences of the competition authority will probably not, as a rule, include the possibility to decide on a violation of the GDPR, the regulation does not, in principle, prevent authorities other than supervisory authorities from occasionally taking into account the compatibility of certain practices with provisions of the GDPR. When investigating anti-competitive proceedings, the anti-monopoly authorities basically assess the entire complex of legal and economic aspects of the concerned actions (of platforms or other undertakings). As it is emphasized "….the compliance or non-compliance of that conduct with the provisions of the GDPR, not taken in isolation but considering all the circumstances of the case, may be a vital clue as to whether that conduct entails resorting to methods prevailing under merit-based competition, it being stated that the lawful or unlawful nature of conduct under Article 102 TFEU is not apparent from its compliance or lack of compliance with the GDPR or other legal rules…."[11] In our opinion, therefore, the competition authority can impose a ban on the use of platform terms and conditions containing questionable clauses from the point of view of the GDPR, but only if conditioning access to the platform through these platform terms leads to an abuse of a dominant position.

For completeness, we must refer to other papers in which the question we set out to investigate has already been examined by other authors.[12] To illustrate, Witt in

[11] Opinion of the Advocate General Rantos from 20th of September 2022, Meta Platforms a i. (Conditions générales d'utilisation d'un réseau social), C-252/21, ECLI:EU:C:2022:704, point 23.

[12] WITT, Anne. Facebook v. Bundeskartellamt–May European Competition Agencies Apply the GDPR?. *Bundeskartellamt–May European Competition Agencies Apply the GDPR*, 2022.

this regard states that "competition and data protection agencies working in institutional silos, without regard to the impact of their decisions on the other agency's objectives, risks yielding politically inco-herent and hence undesirable results…"[13]

4. GDPR ASSESSMENT BY COMPETITION AUTHORITIES

4.1. Competition authorities identifying personal data protection infringements?

As the first aspect of the analysed issue, we must consider a question, whether competition authorities are entitled to determine (in the scope of their investigative process) that the investigated subject infringed the provisions of personal data protection regulation.

A simple answer to this question would be no. According to Article 51 GDPR, Member States are obligated to establish one or more independent public authorities responsible for monitoring the application of GDPR with the objective to protect the fundamental rights and freedoms of natural persons in relation to processing and to facilitate the free flow of personal data within the European Union (hereinafter referred to as 'supervisory authorities' or 'data protection authorities). The independence of these supervisory authorities is guaranteed in Article 52 GDPR, which specifies that they are entitled to act with complete independence in performing tasks and exercising their powers in accordance with GDPR and are to remain free from external influence, whether direct or indirect, and shall neither seek nor take instructions from anybody. In our opinion, this exemption of data protection authorities from the influence of any third parties (including state or non-state actors) precludes the possibility of competition authorities to "usurp" one of their obligations specified in Article 57 (1) (a) GDPR – the obligation to monitor and enforce the application of GDPR. This is further evidenced by the wording of Article 87 (1) (h) GDPR, that defines the obligation to conduct investigations on GDPR application as one of the tasks of supervisory authorities. These investigations may, however, be based on information provided by different supervisory or other public authorities, which could possibly include the corresponding competition authorities. It is, however, clear from the wording of these provisions that even if another public authority identifies a possibility of personal data protection regulation infringement, only the data protection authority is entitled to carry out the investigation in this regard and decide whether such an infringement took place.

[13] *Ibid.,* p. 9.

This conclusion is supported by the Advocate General Rantos, who in his recently adopted Opinion delivered on 20th September 2022 to the case C-252/21 Meta Platforms and Others (hereinafter referred to as 'Opinion') states the following: "given that the GDPR provides for the full harmonisation of data protection laws, the central element of which is a harmonised enforcement mechanism based on the 'one-stop shop' principle set out in Articles 51 to 67 of that regulation, it seems obvious to me that an authority other than a supervisory authority within the meaning of that regulation (such as a competition authority) does not have competence to make a ruling, primarily, on a breach of that regulation or to impose the penalties envisaged."[14] Therefore, in order to answer the question defined above, we must conclude that competition authorities are not entitled to adopt such a decision, the verdict of which would identify an infringement of personal data protection regulation.

However, from the competition authorities' point of view, policies regarding the use and commercialization of personal data or other information by controllers (especially digital platforms) may significantly impact the functioning of the internal market (including Digital Single Market) and may influence the competition taking place on it. Consequently, precluding competition authorities from assessing the impact and the relevance of personal data for the existing market and its operation would significantly limit the ability of competition authorities to monitor and, where appropriate, regulate some of the most powerful actors exploiting personal and other data to compensate for the seemingly free provision of different services on the Internet. With this objective in mind, we are of the opinion that competition authorities (whether national or European) should not principally be excluded from assessing the relevant data policies that may influence their decisions, the objective of which is to monitor the application of the corresponding competition rules in practice.

A supporting argument in this regard may be the fact that national data protection authorities are usually not well equipped to consider the overall impact of personal data protection policies on all of the affected subjects, as these authorities usually focus on infringements of personal data protection regulation impacting individual data subjects, the rights of which may have been violated, but do not consider the position of other relevant subjects such as the rights of controllers' competitors or consumers, the protection of which falls under the purview of the relevant competition authorities.

[14] Opinion of the Advocate General Rantos delivered on 20th September 2022 regarding the case C-252/21 Meta Platforms and Others. ECLI:EU:C:2022:704, note 11.

To corroborate our argument that competition authorities should be entitled to consider, to some extent, the relevant data protection aspects with possible impact on competition, we provide a short case study examining the decision-making practice of the competent Slovak data protection and competition authorities. Specifically, we will shortly compare the number of cases decided by the corresponding authorities annually and the fines adopted for the infringements identified in this regard.

The Office for Personal Data Protection of the Slovak Republic sanctions approximately 50 cases of personal data protection infringements per year, which usually result in the issuance of a fine, the summary amount of which represents on average a little over 107.000,- Eur annually. Table 1 provides detailed data in this regard.

Table 1: Number of cases and fines adopted by the Slovak Office for Personal Data Protection in the time period 1.1.2017-31.12.2021[15]

Time period	**Number of fined cases**	**Amount of fines in total**
1.1.2021 – 31.12.2021	53	110.900,- Eur
1.1.2020 – 31.12.2020	54	103.300,- Eur
25.5.2019 – 31.12.2019	9	75.300,- Eur
25.5.2018 – 24.5.2019	38	132.600,- Eur
1.1.2017 – 24.5.2018	57	117.600,- Eur

In comparison, considering the fact that the Slovak Antimonopoly Office investigates a similar number of cases as the Slovak Personal Data Protection Office, the fines adopted in this regard amount to a higher sum presenting on average 4.8 million Eur annually. The amount of fines imposed in individual cases, therefore,

[15] The data presented in Table 1 have been collected from the annual reports published by the Office for Personal Data Protection of the Slovak republic, specifically from the following documents:
- The report on the personal data protection status in 2021. Available online: https://dataprotection.gov.sk/uoou/sites/default/files/sprava_o_stave_ochrany_osobnych_udajov_za_rok_2021.pdf
- The report on the personal data protection status in 2020. Available online: https://dataprotection.gov.sk/uoou/sites/default/files/sprava_o_stave_ochrany_osobnych_udajov_za_rok_2020.pdf
- The report on the personal data protection status in 2019. Available online: https://dataprotection.gov.sk/uoou/sites/default/files/sprava_o_stave_ochrany_osobnych_udajov_za_obdobie_25.maj_2019_az_31.decembra_2019.pdf
- The report on the personal data protection status in 2018. Available online: https://dataprotection.gov.sk/uoou/sites/default/files/sprava_o_stave_ochrany_osobnych_udajov_za_obdobie_25.maj_2018_az_24_maj_2019.pdf
- The report on the personal data protection status in 2017. Available online: https://dataprotection.gov.sk/uoou/sites/default/files/sprava_o_stave_ochrany_ou_od_1_januara_2017_do_24_maja_2018.pdf.

could substantially affect the position of sanctioned subjects and alter their position on the market. Table 2 provides detailed data in this regard.

Table 2: Number of cases and fines adopted by the Slovak Antimonopoly Office in the time period 1.1.2017-31.12.2021[16]

Time period	**Number of fined cases**[17]	**Amount of fines in total**
1.1.2021 – 31.12.2021	46	1 547 392,86 Eur
1.1.2020 – 31.12.2020	25	8 139 306,80 Eur
1.1.2019 – 31.12.2019	37	7 628 651,- Eur
1.1.2018 – 31.12.2018	38	10 628 934,09 Eur
1.1.2017 – 31.12.2017	36	3 604 665,- Eur

The comparison provided above could indicate that the infringements investigated by the Slovak Antimonopoly Office are more severe than the infringements sanctioned by the Slovak Data Protection Office. This conclusion is solely based on the considerably higher amount of fines adopted by the competition authority in a similar number of cases as are investigated by the national data protection authority.

The discrepancy in the amount of fines adopted could not be explained by the statutory limitations, as GDPR and the corresponding Act No. 18/2018 Coll. on personal data protection as amended provide the national data protection authority with the ability to sanction specified infringements with fines of up to 20 000 000 Eur, or in the case of an undertaking, up to 4 % of the total worldwide annual turnover. To illustrate, this category of fines could be imposed with regard to infringements of basic principles of personal data processing (e. g. lawfulness, fairness and transparency, purpose limitation, data minimisation etc.) and the infringement of data subjects' rights, which present most of the cases investigated

[16] The data presented in Table 2 have been collected from the annual reports published by the Antimonopoly Office of the Slovak Republic, specifically from the following documents:
- 2021 Annual Report. Available online: https://www.antimon.gov.sk/data/att/122/3181.85a901.pdf?csrt=17982650428904534330
- 2020 Annual Report. Available online: https://www.antimon.gov.sk/data/att/8c3/2421.290ac0.pdf?csrt=17982650428904534330
- 2019 Annual Report. Available online: https://www.antimon.gov.sk/data/att/386/2108.51baf7.pdf?csrt=17982650428904534330
- 2018 Annual Report. Available online: https://www.antimon.gov.sk/data/att/8a7/2044.3eeb94.pdf?csrt=17982650428904534330
- 2017 Annual Report. Available online: https://www.antimon.gov.sk/data/att/76d/1982.a78d6c.pdf?csrt=17982650428904534330.

[17] The sanctioned cases include fines adopted in connection with investigations regarding mergers, abuse of dominant position, agreements restricting competition, including restrictions of competition by state and local administration authorities and fines imposed for non-cooperation with the Antimonopoly Office of the Slovak Republic.

by the Slovak data protection authority.[18] However, the amount of fines imposed in practice does not correspond to the extensive scope of fines permissible under applicable legislation.

In contrast, the Slovak Antimonopoly Office seems more than willing to adopt fines with discernible impact on the subjects that violate competition rules. Given the complex nature of competition regulation and the complicated process of identifying possible violations of competition rules, we believe that the competition authorities should be able to consider all of relevant facts in this regard that may help to identify competition regulation violations and sanction subjects responsible for them. As the Advocate General summarized in his Opinion: "although a competition authority is not competent to establish a breach of the GDPR, that regulation does not, in principle, preclude authorities other than the supervisory authorities, when exercising their own powers, from being able to take account, as an incidental question, of the compatibility of conduct with the provisions of GDPR (…) without prejudice to the application of that regulation by the competent supervisory authorities."[19] Analogously to the Advocate General Opinion, we conclude that competition authorities should be able to consider the impact of personal data policies on competition, as they are able to analyse, in a complex manner, the individual controller, whereas data protection offices, particularly in Slovakia, predominantly focus on smaller, national controllers without significant impact on the market[20]. However, this conclusion is conditioned on the fact that only competent national data protection authorities are entitled to determine whether an infringement of personal data protected rules took place.

4.2. The possibility of cooperation between competition and personal data protection authorities – the case of Slovakia

Following the conclusions expressed above, in this chapter we will try to consider possible forms of cooperation between the competition and personal data protec-

[18] This statement is based on the preliminary results of the author's ongoing research focusing on the analysis of the decision adopted by the Office for Personal Data Protection of the Slovak republic. From the 180 decisions analysed in this regard, almost all of them established the infringement of one or more basic principles of personal data processing.

[19] Opinion of the Advocate General Rantos delivered on 20th September 2022 regarding the case C-252/21 Meta Platforms and Others. ECLI:EU:C:2022:704. Points 22 and 24.

[20] This statement is also based on the preliminary results of the author's ongoing research focusing on the analysis of the decision adopted by the Office for Personal Data Protection of the Slovak republic. From the 180 decisions analysed in this regard, only a handful of them sanctioned digital platforms for personal data protection infringements, and the fines imposed in this regard had almost no significant impact on the sanctioned controllers (the average amount of fine imposed was 2077,- Eur).

tion authorities that may be needed in competition authorities' investigations that focus on the analysis of the relevant personal data protection aspects. The objective of such a cooperation should be, primarily, the effective application of the competition regulation, and the avoidance of differing interpretations of GDPR by competition and personal data protection authorities.

Although Article 57 (1) (g) of GDPR defines a cooperation obligation, the scope of which includes the sharing of information and providing mutual assistance, this obligation is only applicable between the relevant supervisory authorities with the objective to ensure consistency of application and enforcement of GDPR.

As the Advocate General rightly pointed in his Opinion, the EU law does not define cooperation rules between competition and supervisory authorities, as such a regulation could in principle undermine the uniform interpretation of GDPR,[21] and "in the absence of clear rules on cooperation mechanisms (…), a competition authority, when interpreting the provisions of the GDPR, is subject, at the very least, to a duty to inform and cooperate with the competent authorities within the meaning of that regulation, in accordance with the national provisions that govern its powers (principle of procedural autonomy of the Member States) and in compliance with the principles of equivalence and effectiveness."[22] Therefore, to identify possible forms of cooperation, we have to look closely at national regulation of competition and personal data protection authorities' competences.

To illustrate a possible legal basis for such a cooperation, Article 16 (1) (a) and (f) of the Slovak Act No. 187/2021 Coll. on the protection of competition authorizes the Antimonopoly Office to conduct investigations in individual sectors of the economy for the purpose of obtaining information on the state of competition in a given sector and to act and adopt decisions in matters of competition protection resulting from the provision of this act or from other applicable legislation. To ensure that the Antimonopoly Office has at its disposal all of the information necessary to conduct such investigations and to adopt decisions as a result of these proceedings, Article 16 (6) of this Act empowers the Antimonopoly Office with the right to require that other public offices provide it with any information or documentation necessary for the office's activities in any form. This provision, therefore, establishes an obligation of state institutions, including the national data protection office, to cooperate with the competition authority in its investigations. Such a cooperation could include, for example, the utilization of certain competences of the Slovak Data Protection Office, which cover inter alia the

---

21 See: Opinion of the Advocate General Rantos delivered on 20th September 2022 regarding the case C-252/21 Meta Platforms and Others. ECLI:EU:C:2022:704, Point 26.

22 *Ibid.* Point 29.

provision of consultations in the field of personal data protection as presumed by Article 81 (2) (c) of the Slovak Act No. 18/2018 Coll. on personal data protection.

To conclude, with reference to the above defined legal framework, we believe that in the case of all investigations that include the analysis of the relevant personal data protection aspects that may have decisive influence on the decision, the Antimonopoly Office should request the help of the national data protection office, e. g. in the form of consultations, and in their mutual cooperation with the necessary guidance, a decision in competition matters may be issued.

4.3. Personal data policies resulting in the possible abuse of dominant position?

How the CJEU perceives the possibility of the competition authority to assess the GDPR can only be deduced from the opinion of the Advocate General Athanasios Rantos. The judgment in case C-252/21 has not been issued yet.

In general, the concept of abuse of dominance is built in such a way so as to enable it to capture a wide range of actions. Such a concept can be perceived positively. When we look at the Art. 102 TFEU, we recognize the so-called general clause of abuse of a dominant position contained in Art. 102 TFEU and subsequently letter a), b), c), d), which represent a demonstrative calculation of actions that may constitute abuse of a dominant position. Therefore, if the actions of the specific subject are not capable of being subsumed under the subsections of Art. 102 a), b), c) or d), this action can still represent an abuse of a dominant position, as long as it is capable of fulfilling the cumulative features of the general clause of abuse of a dominant position. It must therefore be an action on the internal market, or on a substantial part of it, by one or more companies and it must be capable of affecting trade between member states.

For instance, the Slovak national Act No.187/2021 Coll. on the protection of competition has a similar concept of abuse of a dominant position. It also regulates the so-called general clause of the abuse of a dominant position and four demonstrative calculations of actions that may constitute an abuse of a dominant position. The four demonstrative calculations of potential action are essentially the same as those contained in the Treaty on the Functioning of the European Union. In addition, the Slovak legislator specifies that the dominant position belongs to the entrepreneur who is not exposed to significant competition and can act independently due to his economic strength.

According to available statistical data, the social network Facebook has a 79.55% share in the European market of social networks. Instagram took the second place with a share of 8.2%.[23] At this point, we would like to add that according to the jurisprudence of the CJEU, a market share of 50% or more is only an indicator of dominance.[24] Without further analytical research including economic analyses, it would be difficult to state whether Facebook really has a dominant position, however, pointing to its market share, it is definitely possible to state that it has strong market position. Conditional use of the platform with conditions that are capable of encroaching on its user's privacy can be perceived as an abuse of a dominant position, as in our opinion it could be subsumed under Art. 102 par. d). The use of data from third parties could be subsumed under the acceptance of additional obligations, which by their nature are not related to the subject of the provision of services by Facebook. On the other hand, the potential user of the platform can still freely decide whether he is willing to use the platform under defined conditions or not. Considering the number of Facebook users representing its user base, as well as its global reach, we are of the opinion that a platform of such scale and reach can be judged all the more strictly in terms of its market power. If it would not be possible to subsume the proceedings under Art. 102 par. d) TFEU, it is still possible to think about fulfilling the general clause on the abuse of a dominant position.

From our point of view, therefore, the competition authority should not assess whether the terms of use of the platform are in accordance with the GDPR, as it is very likely that this authority will not be entrusted to it by the national legislator, but will be entrusted to an institution or office for the protection of personal data. At the same time, however, nothing prevents her from concluding that the abuse of a dominant position consisted, or the specific practice assessed was able to fulfil the definition of abuse of a dominant position and point to a violation of other legal regulations, not only GDPR. Finally, even if the data processing is legal and the user has given consent that has all the requirements required by the law (regulation), this does not rule out that such an action is an abuse of a dominant position. This is primarily related to the fact that the terms of use of the platform could impose various, absolutely unrelated obligations on its users, who often do not even read the long and indistinct terms of use of the platforms or do not understand their content correctly.

---

[23] GlobalStats, available Social Media Stats in Europe - March 2023 at: [https://gs.statcounter.com/social-media-stats/all/europe], Accessed 8 April 2023.

[24] Judgement of Court of Justice, AKZO/Commission, C-62/86, ECLI:EU:C:1991:286.

5. INTERACTION OF DATA PROCESSING AND COMPETITION – DIGITAL MARKETS ACT CONTEXT

Digital Markets Act is a legal act in the form of regulation and together with Digital Services Act were in the frame of European Commission priority „Europe fit for digital age" published in the December 2020. Currently, mentioned regulations are the subject of extensive discussions. With the regard to the thematic focus of this paper, relevant will be primarily Digital Markets Act, concretely article 1 paragraph 1, stating that "„The purpose of this Regulation is to contribute to the proper functioning of the internal market by laying down harmonised rules ensuring for all businesses, contestable and fair markets in the digital sector across the Union where gatekeepers are present, to the benefit of business users and end users."

In our opinion, the regulation in question will primarily have a supplementary nature in relation to competition law. Supplementary character is mainly articulated by the fact that, according to the wording of the regulation, it serves to protect a different legal interest than competition law.[25] It is also necessary to emphasize that the regulation sets specific obligations exclusively for the category of gatekeepers and will focus on the area of digital markets. The concept of the Digital Markets Act is based on the so-called "one size fits all approach", which means that regardless of the diversity of business models of the gatekeepers, their structures or characteristics, all obligations under Art. 5 and 6 of the Act imposed on all gatekeepers and are not customized specifically to the nature of the business model or subject of the platform's activity in any way.

The most significant question is how the Digital Markets Act connects the issue of competition law and personal data protection. The European legislator already expresses this in the preamble, stating that "gatekeepers often directly collect personal data of end users for the purpose of providing online advertising services when end users use third-party websites and software applications. Third parties also provide gatekeepers with personal data of their end users in order to make use of certain services provided by the gatekeepers in the context of their core platform services, such as custom audiences. The processing, for the purpose of providing online advertising services, of personal data from third parties using core platform services gives gatekeepers potential advantages in terms of accumulation of data, thereby raising barriers to entry. This is because gatekeepers process personal data from a significantly larger number of third parties than other undertakings."[26]

---

[25] Point 11 of the Preamble of the Digital Markets Act.

[26] Point 36 of the Preamble of the Digital Markets Act.

From our point of view, this is also reflected in the conception of individual duties and prohibitions for the gatekeepers, contained in Article 5 and article 6 of Digital Markets Act, for instance mainly in article 5 paragraph 2 relating to linking, processing or use of personal data, stipulating that the user must grant consent to such use of his data according to the GDPR regulation provisions, and unless the user gives or withdraws such consent, the gatekeeper may not address a request for consent to the user more often than once in one year.

As can be seen from the wording of the Digital Markets Act itself, the majority of actions disrupting competitiveness in the environment of digital markets consist in the abuse of a dominant position. In our previous paper we also pointed out, that the Digital Markets Act would be able to "capture" for example actions such as those discussed in the case of Facebook and Bundeskartellamt (specifically referring to Art. 5 (a) of the proposal for regulation the Digital Markets Act).[27]

Currently, the regulation (Digital Markets Act) is already in its final form, and in a selected part also in effect.[28] In this regard, we also refer to Art. 5 para. 2 (a) of Digital Markets Act, which prohibits gatekeepers from processing, for the purpose of providing online advertising services, the personal data of end users using third-party services that use its basic platform services without the users' consent.

Establishing quantitative and qualitative criteria for the creation of an aggregate of gatekeepers is an effective way, in contrast to the often-lengthy assessment of the presence of a dominant position of a certain platform, while as we mentioned above, a higher market share does not automatically mean a disposition with a dominant position. The Commission will therefore no longer have to examine whether the said platform has a dominant position at all and subsequently assess whether it has committed an abuse of a dominant position. It will be enough that the platform is in the position of the gatekeeper, which is quite clearly defined. Gatekeepers are required to fulfil the relevant obligations set out in the regulation, or to refrain from certain actions. Since this regulation is ex ante in nature, the entire investigation process will become much more efficient and rapid.

6. CONCLUSION

The objective of this paper was to assess the interaction between personal data protection regulation and competition rules, more precisely, whether the competition authority is entitled to apply the relevant personal data protection regulation. In

[27] Rudohradská, S.; Hučková, R.; Dobrovičová, G., *op.cit.,* note 3, pp. 489-508.

[28] In this regard, we refer to Art. 54 of Digital Markets Act regulating the effectiveness of the regulation and its application.

line with the arguments presented in this paper, we believe that the competition authority is not entitled to determine, by itself, whether the actions of a certain subject are or are not in accordance with GDPR (in the absence of any competition law context), as it lack the necessary competence in this regard. However, when the competition authority analyses the actions of a subject with dominant position on the market who may have abused it, it should be entitled to comment on the analysed practices that may violate legislation in certain areas (including GDPR). As the majority of digital platforms (although not all) operate without respect to state borders, it may be difficult to harmonize conditions for their operation (e. g. consumer protection rules, notwithstanding competition and personal data protection rules). Moreover, these platforms may also be subject to investigations realised by the competent authorities from different countries and be, concurrently, investigated for the practices that have violated numerous regulations. In this case, the corresponding authorities should be able to cooperate, on a common platform, and communicate with each other. Currently, the basis for such a cooperation could be Article 4 (3) TFEU that established the principle of loyal cooperation. In the field of competition, a European Competition Network is also active.

REFERENCES

BOOKS AND ARTICLES

1. Botta, M.; Wiedemann, K., *Exploitative conducts in digital markets: Time for a discussion after the Facebook Decision,* Journal of European Competition Law & Practice, Vol. 10, No. 8, 2019, pp. 465-478, p. 470
2. Mazúr, J.; Patakyová, M. T., *Regulatory approaches to Facebook and other social media platforms: towards platforms design accountability*, Masaryk University Journal of Law and Technology, 2019, pp. 219-242
3. Rudohradská, S.; Hučková, R.; Dobrovičová, G., *Present and Future-A Preview Study of Facebook in the Context of the Submitted Proposal for Digital Marktes Act*, EU and comparative law issues and challenges series (ECLIC), Vol. 6, 2022, pp. 489-508
4. Witt, A., *Facebook v. Bundeskartellamt – May European Competition Agencies Apply the GDPR?*, Bundeskartellamt–May European Competition Agencies Apply the GDPR, 2022

COURT OF JUSTICE OF THE EUROPEAN UNION

1. Opinion of the Advocate General Rantos delivered on 20th September 2022 regarding the case C-252/21 Meta Platforms and Others. ECLI:EU:C:2022:704
2. Judgement of the Court of Justice of the European Union C-62/86 - AKZO/Commission, ECLI:EU:C:1991:286

EU LAW

1. Treaty on the Functioning of the European Union, OJ C 326, 26.10.2012
2. Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation), [2016] OJ L 119, 4.5.2016
3. Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a Single Market for Digital Services and amending Directive 2000/31/EC (Digital Services Act), [2022] OJ L 277, 27.10.2022

LIST OF NATIONAL REGULATIONS, ACTS AND COURT DECISIONS

1. Act No. 18/2018 Coll. on personal data protection as amended
2. Act No. 187/2021 Coll. on the protection of competition changing of certain acts
3. Bundeskartellamt, Decision, *Facebook case*, B6-22/16, [http://www.bundeskartellamt.de/SharedDocs/Entscheidung/EN/Entscheidungen/Missbrauchsaufsicht/2019/B6-22-16.pdf%3F__blob%3DpublicationFile%26v%3D5] Accessed 5 April 2023
4. Case summary, *Facebook, Exploitative business terms pursuant to Section 19(1) GWB for inadequate data processing*, B6-22/16, [https://www.bundeskartellamt.de/SharedDocs/Entscheidung/EN/Fallberichte/Missbrauchsaufsicht/2019/B6-22-16.pdf;jsessionid=1C5BC37B9C63E0D79C3E41545FCBC694.1_cid362?__blob=publicationFile&v=4] Accessed 5 April 2023
5. Gesetz gegen Wettbewerbbeschränkungen – GWB. (The German Competition Act), [https://www.gesetze-im-internet.de/gwb/BJNR252110998.html] Accessed 5 April 2023
6. Unofficial translation of the decision – Facebook, Bundeskartellamt The Decision of the Higher Regional Court of Düsseldorf (Oberlandesgericht Düsseldorf) in interim proceedings, 26 August 2019, Case VI-Kart 1/19 (V), p. 6-7

WEBSITE REFERENCES

1. The report on the personal data protection status in 2021, [https://dataprotection.gov.sk/uoou/sites/default/files/sprava_o_stave_ochrany_osobnych_udajov_za_rok_2021.pdf] Accessed 13 April 2023
2. The report on the personal data protection status in 2020, [https://dataprotection.gov.sk/uoou/sites/default/files/sprava_o_stave_ochrany_osobnych_udajov_za_rok_2020.pdf] Accessed 13 April 2023
3. The report on the personal data protection status in 2019, [https://dataprotection.gov.sk/uoou/sites/default/files/sprava_o_stave_ochrany_osobnych_udajov_za_obdobie_25.maj_2019_az_31.decembra_2019.pdf] Accessed 13 April 2023
4. The report on the personal data protection status in 2018, [https://dataprotection.gov.sk/uoou/sites/default/files/sprava_o_stave_ochrany_osobnych_udajov_za_obdobie_25.maj_2018_az_24_maj_2019.pdf] Accessed 13 April 2023

5. The report on the personal data protection status in 2017, Antimonopoly Office of the Slovak Republic, [https://dataprotection.gov.sk/uoou/sites/default/files/sprava_o_stave_ochrany_ou_od_1_januara_2017_do_24_maja_2018.pdf] Accessed 13 April 2023
6. Antimonopoly Office of the Slovak Republic, *2021 Annual Report*, [https://www.antimon.gov.sk/data/att/122/3181.85a901.pdf?csrt=17982650428904534330 Accessed 13 April 2023
7. Antimonopoly Office of the Slovak Republic, *2020 Annual Report*, [https://www.antimon.gov.sk/data/att/8c3/2421.290ac0.pdf?csrt=17982650428904534330] Accessed 13 April 2023
8. Antimonopoly Office of the Slovak Republic, *2019 Annual Report,* [https://www.antimon.gov.sk/data/att/386/2108.51baf7.pdf?csrt=17982650428904534330] Accessed 13 April 2023
9. Antimonopoly Office of the Slovak Republic, *2018 Annual Report*, [https://www.antimon.gov.sk/data/att/8a7/2044.3eeb94.pdf?csrt=17982650428904534330] Accessed 13 April 2023
10. Antimonopoly Office of the Slovak Republic, *2017 Annual Report*, [https://www.antimon.gov.sk/data/att/76d/1982.a78d6c.pdf?csrt=179826504289045343]0Accessed 13 April 2023
11. GlobalStats, *Social Media Stats in Europe - March 2023*, [https://gs.statcounter.com/social-media-stats/all/europe] Accessed 13 April 2023

Topic 4

EU law as contributing factor in civil and labour law

UDK 347.51:347.451.9(4-67EU)
347.451.9(4-67EU):004
Review article

PRODUCT LIABILITY REFORM IN THE EU*

Marija Karanikić Mirić, PhD, Full Professor
University of Belgrade, Faculty of Law
Bulevar kralja Aleksandra 67, Belgrade, Serbia
marija@ius.bg.ac.rs

ABSTRACT

Following a long discussion among professionals, academics and competent authorities, at the end of September 2022, the European Commission published the Proposal for a directive on liability for defective products. In a practical sense, the most significant innovations in the Proposal are the expansion of the definitions of fundamental terms, such as product, producer, defect and damage, and the new provisions that should make it easier for the injured person to initiate proceedings and prove the fulfillment of the conditions for establishing the strict liability of the producer. The reform has several specific goals: to ensure that the liability rules reflect the nature and risks of products in the digital age and circular economy; to ensure that there is always a business based in the EU that can be held liable for defective products purchased directly from manufacturers outside the EU; to ease the burden of proof in complex cases, for example when the damage originates from pharmaceutical products, medical devices and products with a digital component, in which the injured person usually lacks the scientific and technological knowledge and information necessary to prove the existence of defect and the causal link; to ease restrictions on claims (by abolishing the rule that prevents compensation of property damage valued below EUR 500); and to ensure legal certainty by better aligning the rules on product liability with new product safety rules, and by codifying relevant case law. From the producer's standpoint, all of the changes that have been proposed will lead to an increase in the risk of their liability, which may further cause the rise in liability insurance premiums for the producers. It is reasonable to expect the producers to pass the increased costs of their liability risk on to the consumers.

***Keywords*:** *Circular economy, Digitalization, Product liability reform, Proposal for a directive on liability for defective products (2022)*

* An earlier version of this paper has been printed in Serbian in: *Perspektive implementacije evropskih standarda u pravni sistem Srbije XII*, Belgrade 2022.

1. THE CURRENT EU RULES ON PRODUCT LIABILITY

There are a number of social, political and legal reasons to base liability for a defective product on an objective principle and for them to be considered cumulatively: the producer is best informed about all the characteristics of their product; they reap the economic benefit of placing the product on the market; the producer can socialize the risk of the damage and liability, i.e., pass on the risk to the buyers by increasing the price of the product; the producer can take out liability insurance; the likelihood of damage increases when a product is widely used, which also applies to the scope of the damage that may occur for a large number of potential injured persons.[1]

Of course, general rules on strict liability for defective products are not necessarily limited to damage caused by consumer goods. Product liability may apply also to damage from any object of property, provided that the object was defective, regardless of whether it was produced by craft or industry. However, certain products intended for widespread use and consumption create conditions for the occurrence of serial damage, whose wide spread – which usually entails a large number of injured persons – may create social and economic problems on a new scale.[2]

The development of product liability, as a specific form of strict (or objective) liability, was promoted in Europe and North America by a tragedy that occurred in the 1960s, by the widespread use of thalidomide (sold under brand names such as Thalidomid, Contergan and Kevadon), a pharmaceutical with a teratogenic effect.[3] The Grünenthal company developed a drug that, among other uses, was prescribed as an antiemetic, especially to women suffering from serious morning sickness during the first trimester of pregnancy. The application of this drug led to the birth of several thousand infants with serious deformities. This event stepped up the work at the European Convention on Products Liability in regard to Personal Injury and Death, adopted by the Council of Europe in 1977.[4] The

---

1 Koch, B. A.; Koziol, H., *Comparative Conclusions*, in: Bernhard A. Koch; Helmut Koziol (eds.), Unification of Tort Law: Strict Liability, Kluwer, The Hague, 2002, pp. 402–403.

2 Markovits, Y., *La Directive C.E.E. du 25 juillet 1985 sur la responsabilité du fait des produits défectueux*, L.G.D.J., Paris, 1990, pp. 1–2.

3 Stapleton, J., *Product Liability*, Butterworths, London 1994, pp. 5, 66–67; Cane, P.; Atiyah P., *Atiyah's Accidents, Compensation and the Law*, C.U.P., Cambridge 2013, p. 103; Howells, G. G.; Ramsay, I. M.; Wilhelmsson, T., *Handbook of Research on International Consumer Law*, Elgar, Cheltenham 2010, p. 237. See also: Bernstein A., *Formed by Thalidomide: Mass Torts as a False Cure for Toxic Exposure*, Columbia Law Review, Vol. 97, No. 7, 1997, pp. 2153–2176; Korzec, R., *Dashing Consumer Hopes: Strict Products Liability and the Demise of the Consumer Expectations Test*, Boston College International and Comparative Law Review, Vol. 20, No. 2, 1997, p. 227.

4 Convention européenne sur la responsabilité du fait des produits en cas de lésions corporelles ou de décès, Strasbourg, 27. I 1977, Série des traités européens – n° 91, [https://rm.coe.int/1680077328],

Convention then served as a historical model for the adoption of the Product Liability Directive (hereafter: the Directive or PLD).[5]

The Directive is a maximum directive, meaning that the Member State cannot provide consumers greater protection than the protection granted by the Directive.[6] The aim of maximum directives is not only to protect the consumer, but also to level the terms under which producers are exposed to liability while operating within the internal market. However, there have been critics who have pointed out that such a maximum, i.e., full harmonization, only limits the protection that the consumer may already enjoy according to national rules of certain European states, and that a visible improvement for the European producers is not achieved.[7]

Since the Directive stipulates full harmonization, the EU Member States do not have the freedom to provide greater or lesser protection to the injured person than that imperatively prescribed by the Directive. They are also required to fully harmonize their national law with the requirements of the Directive, and they are free to independently regulate issues not covered by the Directive,[8] of course, in such a manner as not to be in contravention with other requirements placed before them by EU law. Regardless of the question of whether it is justified to reduce the protection enjoyed by consumers in some countries, the maximum harmonization in the domain of consumer rights levels the operating conditions regarding the liability of the producers and reduces the risk that is created for producers arising from the variance in national liability rules.

The Directive rules have been transposed into the national laws of all the Member States and many states that aspire to EU membership. In brief, these rules stipulate that the producer is liable for damage caused by defective products according to

accessed 29 March 2023.

5 Directive 85/374/EEC concerning liability for defective products [1985], OJ L 210, amended by Directive 1999/34/EC concerning liability for defective products [1999], OJ L 141. For a detailed overview and analysis of the Directive see: Micklitz, H. W., *Liability for defective products and services*, in: Micklitz, H. W.; Reich, N.; Rott, P.; Tonner, K. (eds.), European Consumer Law, Intersentia, Cambridge–Antwerp–Portland 2014, p. 239 ff. On the relationship between the Strasbourg Convention and the Directive see: Markovits, Y., 54 ff.

6 CJEU took this stance on at least three occasions (Case C-52/00 *Commission v France* [2000], ECLI:EU:C:2002:252; Case C-154/00 *Commission v Greece* [2000], ECLI:EU:C:2002:254; Case C-183/00 *González Sánchez v Medicina Asturiana* [2000], ECLI:EU:C:2002:255).

7 Schmid, C., *The Instrumentalist Conception of the Acquis Communautaire in Consumer Law*, in: Grundmann, S.; Schauer, M. (eds.), The Architecture of European Codes and Contract Law, Kluwer, Alphen aan den Rijn 2006, pp. 265–267.

8 For example, the Directive does not regulate liability for non-material damage caused by a defective product, nor the liability for damage caused to the product itself; these matters are freely regulated by the Member States. This stems from the provisions in Art. 9 PLD.

the objective principle, i.e. regardless of the producer's fault.[9] The injured person bears the burden of proof of the damage, the defectiveness of the product, and the causal links between the defectiveness and the suffered damage.

Any movable, including movables incorporated into another movable or into an immovable, is considered a product. Electricity is also a product. Defectiveness exists if the product does not provide the level of safety that is expected given the circumstances of the specific case, including advertisement and use of the product that could be reasonably expected at the time when the product was put into circulation. The fact that a higher quality product was marketed subsequently is not reason enough to consider that the product has a defect.

In contrast to product liability in the US, the Directive does not differentiate between design, manufacturing and instruction or warning defects.[10] The same is true for most statutes on product liability in Europe. However, some national courts do make such distinction, and apply different tests to determine the existence of manufacturing defects, on the one hand, and the existence of design and instruction defects, on the other.[11]

Damage entails material damage due to death or personal injury, as well as damage to, or destruction of any item of property that is commonly used for private use or consumption, and that was in fact predominantly used by the injured person for her own private use or consumption. The Directive does not affect national rules on non-material damage. The damage to, or destruction of the defective product itself does not qualify as damage under PLD, and it is generally considered to be better regulated by contract law. The lower threshold of producer's liability is EUR 500, meaning that the injured person has no right to compensation for the first EUR 500 of damage, and if the damage is greater, the producer is required to provide compensation for everything over that sum.

One of the ways that the producer can be exempt from liability is that they prove that the state of scientific and technical knowledge at the time when the product

---

9 In detail: Fairgrieve D.; Howells G.; Møgelvang-Hansen P.; Straetmans G.; Verhoeven D.; Machnikowski, P.; Janssen A.; Schulze R., *Product Liability Directive*, in: Machnikowski P. (ed.), European Product Liability. An Analysis of the State of the Art in the Era of New Technologies, Intersentia, Cambridge – Antwerp – Portland, 2017, pp. 17–108.

10 Reimann, M., *Product Liability*, in: Bussani, M.; Sebok A. J. (eds.), Comparative Tort Law, Edward Elgar Publishing, Cheltenham – Northampton MA, 2021, pp. 236 ff; Wuyts, D., *The Product Liability Directive – More than two Decades of Defective Products in Europe*, Journal of European Tort Law, Vol. 5, No. 1, 2014, p. 10.

11 Santos Silva M. *et al.*, *Relevance of Risk-benefit for Assessing Defectiveness of a Product: A Comparative Study of Thirteen European Legal Systems*, European Review of Private Law, Vol. 29, No. 1, 2021, p. 127. The CJEU can make a binding decision only on whether such test is permitted or not. *Ibidem*., p. 128.

was put on the market was not such as to enable the existence of the defect to be discovered (Art. 7 (1)(e) PLD).[12] In other words, the Member State is free to stipulate that the producer will not be held liable for damage caused by a defect that was not discoverable, based on the most advanced objective knowledge, at the time when the product was put into circulation. If this is stipulated, the Member State effectively passes the development risks to the consumers, which is, at least in theory, supposed to accelerate innovation.[13]

In recent decades there has been a lively discussion on the need to revise the rules of the Directive, i.e., to regulate the product liability domain in a new and contemporary manner. In the years of the Commission's reluctance to engage in a revision of the Directive, some legal scholars have contemplated the use of alternative 'soft law' techniques for promoting greater certainty as to the meaning of some key provisions of the Directive.[14]

In late September 2022 the European Commission finally adopted and published the Proposal for a Directive on liability for defective products (hereafter: the Proposal or DPLD).[15] Therefore, this paper has two aims: (1) to review the reasons why it is necessary to amend the EU rules on product liability, and (2) to examine the prospective new rules proposed by the European Commission.

2. REASONS FOR REFORMING PRODUCT LIABILITY IN THE EU

2.1. Technological development: digital and circular economy

The Product Liability Directive has successfully harmonized the internal regulations of the EU Member States concerning liability for defective products.[16] Clear legal and political reasons for this were pointed out back in 1985: the harmoni-

---

12 The transposition of this provision is not mandatory, as per Art. 15 (1)(b) PLD.

13 Mildred, M., *The development risk defence*, in: Fairgrieve, D. (ed.), *Product Liability in Comparative Perspective*, C.U.P., Cambridge 2005, pp. 167–168; Koch, B. A., *The development risk defence of the EC Product Liability Directive*, Pharmaceuticals Policy and Law, Vol. 20, No. 1–4, 2018, pp. 163–176; Karanikić, M., *Development Risks*, Anali Pravnog fakulteta u Beogradu, Vol. 54, No. 3, 2006, pp. 117–148.

14 Fairgrieve D.; Howells G.; Pilgerstorfer M., *The Product Liability Directive: Time to get Soft?*, Journal of European Tort Law, Vol. 4, No. 1, 2013, pp. 1–33.

15 Proposal for a Directive on liability for defective products, COM(2022) 495. This document contains the Explanatory Memorandum and text of the Proposal for a Directive on liability for defective products.

16 European Commission, Report on the Application of the Council Directive 85/374/EEC concerning liability for defective products, COM/2018/246 final, p. 8.

zation of national regulations on product liability is necessary in order to ensure equal operating terms in the internal market, free competition, equal conditions for movement of goods, and equal level of consumer protection. Furthermore, under conditions of contemporary scientific and technological development, fair appointment of risk of damage caused by the defectiveness of products can be achieved only if the producer is held liable objectively, i.e., regardless of their own fault.

The Directive has been in force for more than 35 years and during that time it has been amended only once, in 1999, following the epidemic of Bovine Spongiform Encephalopathy, also known as Mad Cow Disease. At the time it was necessary for the European legislator to expand the definition of "product" in order to extend the scope of the objective liability of the producer to include primary agricultural products (products of the soil, of livestock farming and of fisheries) and game. It is understood that the amended definition of 'product' also encompasses genetically modified seeds and other genetically modified organisms.[17] In all other matters the Directive has retained its original form.

The Directive was generally appraised as a 'good thing from the consumer perspective': without this instrument it is unlikely that all Member States would have introduced strict liability and certainly it would not have come about in so coherent a form.[18]

However, there have been numerous social, political, economic and technological changes since the adoption of the Directive, which have created the need to update the existing liability regime, as well as political pressure to do so, primarily in a manner that the rules on liability better correspond to the new conditions of the circular and digital economy. The general digitalization of society has enabled the efficient exchange of information and application of modern technologies in product manufacturing and distribution. The aim of a circular economy is for products and materials to remain in use for as long as possible, i.e., to reduce waste accumulation through the reuse, repair, and recycling of products.[19]

---

17 See answers to parliamentary questions P-2383/00, E-2685/00, and E-1724/98, to the European Commission, available at:
[http://europarl.europa.eu], Accessed 29 March 2023.

18 See, instead of many others, Howells G., *Product liability – a history of harmonisation*, in: Fairgrieve D. (ed.), Product Liability in Comparative Perspective, C.U.P., Cambridge, 2005, pp. 215–216.

19 On this path the Commission adopted a new highly-ambitious strategy for economic development, in which the EU "aims to transform the EU into a fair and prosperous society" with a competitive economy and completely green economic growth (without net emissions of greenhouse gases in 2050 and economic growth decoupled from resource use). The European Green Deal, COM/2019/640 final. Of

This brings up the question who should be considered the manufacturer of the modified products, the products that are refurbished and adapted beyond the producer's control, the products with high degree of autonomy, and also those with strong service components. Another aspect to be taken into account are multi-actor and global value chains, as well as the instances of direct online sales from third countries. In addition, many new products can not be used as standalone items, but must be connected to other products or integrated into a system.

In cases of damage caused by defects in complex products like medical devices, pharmaceutical products and products with digital components, the burden of proof is correspondingly very complex, and costs seem to be unevenly distributed between consumers and producers. On top of that, the general and sectoral rules and regulations on product safety and market control have advanced, and so the liability regimes should readjust, to create a more coherent system.

2.2. Practical problems with the application of the existing rules

In the process of evaluating the Directive, which preceded the adoption of the Proposal, it was determined that the existing rules created numerous practical problems for the circular and digital economy.[20]

The Directive was adopted far before the digital revolution, so it is now difficult to apply its provisions to products the likes of which did not exits, and especially to software and products such as smart devices and autonomous vehicles, which cannot function without software and connected digital services. It is also unclear who should be liable for damage caused by the defectiveness of a product that has been modified, or its digital component has been replaced or updated.

The EU consumers are increasingly buying products online directly from the non-EU countries, which means that there is no person established in the EU (producer, importer, distributor, retailer) that could be effectively held liable for damage in accordance with the Directive. The Directive originates from the time when supply chains were mostly organized as 'pipelines', and now we also have digital markets, with online platforms as key players, and new supply chains that directly connect EU consumers with non-EU traders.[21] The regulatory response

course, it is debatable whether it is possible to *globally* decouple economic growth from resource use in such a short period of time (or at all).

[20] All according to: Executive Summary of the Impact Assessment Report, accompanying the Proposal for a Directive on liability for defective products, SWD/2022/317 final.

[21] Busch C., *When Product Liability Meets the Platform Economy: A European Perspective on Oberdorf v. Amazon*, Journal of European Consumer and Market Law, Vol. 8, No. 5, 2019, p. 174.

to this development in the EU has been direct regulation via product safety rules and market surveillance, which should be supplemented by expanding the application of product liability rules to online marketplaces.[22] At this point, online marketplaces are effectively outside the scope of PLD, and the very use of these platforms can make it harder for injured parties to establish liability of other participants in the supply chain under PLD.[23]

Furthermore, according to the Directive, the burden of proof of the existence of defect, and that of the causal link between the defect and the inflicted damage, falls on the injured person. However, the Directive does not define the standard of proof, which causes divergence in the levels of consumer protection within the EU.[24]

It may be very difficult, if not impossible, for the injured person to prove the existence of the defectiveness and causal link in complex situations, for example, when the damage is caused by pharmaceutical products, or products based on machine learning and artificial intelligence, or products with a digital component in general. In such cases the injured person usually does not have technical knowledge and sufficient information on the product necessary to prove the causal link, and the provisions of the Directive do not require the producer to grant access to such information, nor do they allow for the burden of proof to be shifted to the producer in national law.

Finally, the position of the injured person is also inferior because the obligation of the producer to provide compensation in any case expires ten years from the date that the product was put on the market, as well as that, according to the Directive, the producer is not liable for the first EUR 500 of the damages.

At first glance it might seem that the ten-year prescription period is more than sufficient to exercise the right to compensation for damage caused by a defective product. However, if the defectiveness causes a delayed harmful effect, then even a much shorter period, which would not start until the damage occurred, would be more favorable for the injured person than such a long period that starts as soon as the item is put on the market. For example, the harmful effects of a defective pharmaceutical product may become pronounced several years after the use of this product. For the injured person it may be more beneficial for the right to

---

22 Busch, C., Rethinking Product Liability Rules for Online Marketplaces: A Comparative Perspective, 10 February 2021,
[https://ssrn.com/abstract=3784466], Accessed 12 May 2023, *passim*.

23 Ulfbeck V.; Verbruggen P., *Online Marketplaces and Product Liability: Back to the Where We Started?*, European Review of Private Law, Vol. 30, No. 6, 2022, p. 998.

24 Wuyts, *op. cit.* note 10, 23 ff.

compensation to expire five years from the occurrence of the damage, rather than ten years from the time that the drug was put into circulation.

2.3. The role of the courts

Scientific and technological development has made possible new situations and disputes regarding issues that could previously not have been imagined. In order to resolve them, it is necessary for the courts to creatively interpret the old stipulations of the Directive. The courts have done so with variable success. We will present two examples.

In the first one, the ruling of the Court of Justice of the European Union (CJEU) in the Case *Boston Scientific*[25] drew great attention from the legal scholars and professionals, and from the medical industry.[26] At the time the CJEU introduced the concept of 'potential defect' into the domain of product liability, in connection with implantable medical devices, such as pacemakers and cardioverter defibrillators. The CJEU held that an implantable medical device may be classified as defective, on the sole basis that it belongs to a group of products, or to a production series, which has a potential defect, without need to establish that the medical device in the very case has such a defect. In addition, the damage caused by a surgical operation for the replacement of a defective implantable medical device constitutes 'damage caused by death or personal injuries' for which the producer is liable, if such an operation is necessary to overcome the defect in the product in question.

In other words, where an implantable medical device belongs to an abnormally hazardous production series, the device in question should be classified as 'defective' for the mere fact that the existence of a defect in the implanted product can only be established by removing the device from the human body, or in some

---

[25] Joined Cases C–503/13 *Boston Scientific Medizintechnik v Die Gesundheitskasse*, and C–504/13 *Boston Scientific Medizintechnik v. Betriebskrankenkasse* [2015] ECLI:EU:C:2015:148.

[26] Van Leeuwen B., Verbruggen P., *Resuscitating EU Product Liability Law? Contemplating the effects of Boston scientific medizintechnik*, European Review of Private Law, Vol. 23, No. 5, 2015, pp. 899–915; Verdure C., *Arrêt Boston Scientific Medezintechnik : l'appréciation du 'défaut' dans le cadre de la Directive relative aux produits défectueux*, Journal de droit européen, Vol. 240, 2015, pp. 242–244; Reich N., *Produkthaftungsrecht: Haftung für potenziell fehlerhaftes Medizinprodukt*, Europäische Zeitschrift für Wirtschaftsrecht, No. 8, 2015, pp. 318–320; Büyüksagis E., *Et si Dr House évoquait le défaut potentiel de votre pacemaker...*, Aktuelle juristische Praxis, No. 1, 2016, pp. 14–22; Büyüksagis E., *La responsabilité du fait des produits 'défectueux sans défaut' : l'arrêt Boston Scientific du 5 mars 2015*, Droit de la consommation, No. 1, 2016, pp. 15–30; Karanikić Mirić, M., *Odgovornost proizvođača za potencijalni defekt*, in: Ignjatović, Đ. (ed.), Kaznena reakcija u Srbiji, Vol. VIII, Pravni fakultet Univerziteta u Beogradu, Belgrade, 2018, pp. 194–213.

other way involving a violation of the bodily integrity of the patient. Furthermore, the costs of the surgical replacement of a potentially defective implantable medical device qualify as 'damage', provided that such a surgical operation is required for removing the defect. When it comes to the safety standard, it has been pointed out in the literature that while the Directive focuses on 'the safety which a person is entitled to expect', after the *Boston Scientific* such standard shall be understood as safety which 'the public at large is entitled to expect', and it is for the court to decide to which expectations the general public is entitled.[27]

In the second example, the *Sanofi Pasteur* case,[28] the CJEU held that, where medical research neither establishes, nor rules out the existence of a causal link between the administering of the vaccine and the occurrence of the victim's disease, i.e. in the absence of scientific consensus, the courts of the Member States may allow plaintiffs to use circumstantial evidence to prove vaccine harms. However, the courts cannot reverse the burden of proof set in the Directive (as per Art. 4 PLD, the injured person is required to prove the damage, the defect and the causal relationship between defect and damage), nor can they introduce irrebuttable presumption at the expense of vaccine producers.

In certain complex situations it may be practically impossible for the injured person to prove the existence of the causal link between the defect and the damage. In *Sanofi Pasteur*, there was no scientific evidence that either confirms, or refutes the existence of the causal link between the vaccine against hepatitis B and multiple sclerosis. The rule that medical causation can only be proven by scientific evidence would in such cases infringe on the effectiveness and frustrate the purpose of product liability, which includes fair apportionment of development risks and protection of consumer health and safety.

According to CJEU, the principle of effectiveness requires that national evidentiary rules do not render practically impossible or excessively difficult for the injured person to prove causation. Procedural position of the injured person is unjustifiably difficult, if the single admissible proof of causation is nothing less than conclusive scientific research. In the absence of such proof, the injured party may be allowed, by the national rules of evidence, to submit other relevant pieces of evidence, which, when presented together, can confirm that it is more likely that the disease was caused by the administered vaccine than by any other cause. Unlike the vaccine producer, which is not only able to, but is also required to carry out or finance medical studies concerning the side effects of his products, the injured

[27] Santos Silva *et al.*, *op. cit.* note 11, pp. 126–127.

[28] Case C–621/15 *N.W v Sanofi Pasteur* [2017], ECLI:EU:C:2017:484.

party regularly has neither the knowledge, nor the financial means to provide scientific evidence of causation.[29]

The CJEU has repeatedly emphasized that the Directive is fully harmonizing. PLD undeniably aims to create a level playing field, *i.e.* to remove obstacles to the functioning of the internal market, even to the detriment of consumers. This comes from the idea that the applied method of harmonization is determined by the legal grounds for the Directive (Art. 100 of the Rome Treaty (EEC)).[30] However, within this scope, the Directive is meant to ensure protection for the victims of product-related accidents, and so the trend has been noted in the recent CJEU case law to foster the position of the consumer.[31] Moreover, the Court has expressly endorsed the regulatory role of the Directive, especially in relation to implantable medical devices, and has openly interpreted product liability law under the Directive as an additional instrument of product safety regulation.[32]

2.4. Public discussion on the need to modernize the Directive

Competent institutions and the professional and scientific communities have discussed for a long time the needs and ways for the existing rules on product liability to be adapted to the new social circumstances, primarily the processes and effects of the new digital technologies and the green transition.[33]

---

29 Karanikić Mirić, M., *Odgovornost proizvođača vakcine u praksi Evropskog suda pravde*, Srpska politička misao, No. 4, 2017, pp. 137–159. Also see: Haertlein L., *Immunizing Against Bad Science: The Vaccine Court and the Autism Test Cases*, Law and Contemporary Problems, Vol. 75, No. 2, 2012, pp. 211–232; Stapleton, J, *Scientific and Legal Approaches to Causation*, in: Freckelton I., Mendelson D. (eds.), *Causation in Law and Medicine*, Aldershot, Ashgate, 2002, pp. 14–37; Stratton K., Ford A., Rusch E., Wright Clayton E. (eds.), *Adverse Effects of Vaccines: Evidence and Causality: Consensus Study Report*, National Academies of Sciences, Engineering, and Medicine, Washington, 2012.

30 Machnikowski P., *Conclusions*, in: Machnikowski P. (ed.), European Product Liability. An Analysis of the State of the Art in the Era of New Technologies, Intersentia, Cambridge – Antwerp – Portland, 2017, pp. 680–681.

31 Verheyen T., *Full Harmonization, Consumer Protection and Products Liability: A Fresh Reading of the Case Law of the ECJ*, European Review of Private Law, Vol. 26, No. 1, 2018, pp. 119–140; noting at p. 140 that this trend benefits the injured consumers at the detriment of consumers as a class that suffer from increased prices.

32 Reich, N., *Product Liability and Beyond: An Exercise in 'Gap-Filling'*, European Review of Private Law, Vol. 24, No. 3/4, 2016, pp. 624–627.

33 See for example: European Parliament resolution with recommendations to the Commission on a civil liability regime for artificial intelligence, 2020/2014(INL); Commission Staff Working Document, Liability for emerging digital technologies, SWD/2018/137 final; European Commission, Report on the safety and liability implications of Artificial Intelligence, the Internet of Things and robotics, COM/2020/64 final.

For example, in January 2021, the European Law Institute (ELI) published a document titled Guiding Principles for Updating the Product Liability Directive for the Digital Age,[34] which states that the aims of the modernization of the Directive should: simplify the mechanism for exercising the right to compensation; establish a balance between protecting the injured person on one hand, and encouraging innovation and use of digital technologies, on the other; align the rules on product liability with the rules on other forms of liability, as well as insurance and other forms of compensation. Furthermore, it is necessary to expand the notions of 'producer' (to include parties that oversee and update digital content and digital services, as well as to online platforms with an active role in distribution); 'product' (to include items with a digital component, digital content and digital services that are delivered as 'digital products'); 'defect' (bearing in mind the specific characteristics of digital components and products); and 'damage' (so as to also encompass damage to and destruction of digital data, products and components). Also, the burden of proof and defenses available to a producer should be adapted to the specific conditions in the digital environment. Furthermore, the recourse claims between liable parties and their statutes of limitation should be regulated, since the Directive makes no mention of them.[35]

On the official side, the European Commission has submitted regular five-year reports to the EU Council and the European Parliament on the application of the Directive,[36] carried out a formal evaluation of the Directive[37] based on an extensive study that it had commissioned, and organized public consultations. Furthermore, it has formed an expert group for the domain of liability and new

---

[34] ELI, *Guiding Principles for Updating the Product Liability Directive for the Digital Age*, Vienna 2021, [https://europeanlawinstitute.eu/fileadmin/user_upload/p_eli/Publications/ELI_Guiding_Principles_for_Updating_the_PLD_for_the_Digital_Age.pdf], Accessed 29 March 2023. Furthermore, upon publication of DPLD, ELI published general feedback consisting of comments to selected articles of the Proposal. See: ELI, European Commission's Proposal for a Revised Product Liability Directive. Feedback of the European Law Institute (hereafter: ELI Feedback), Vienna 2023, [https://www.europeanlawinstitute.eu/fileadmin/user_upload/p_eli/Publications/ELI_Feedback_on_the_EC_Proposal_for_a_Revised_Product_Liability_Directive.pdf], Accessed 29 March 2023.

[35] In addition to these guiding principles, ELI also published its draft of the new directive on product liability. See: *ELI Draft of a Revised Product Liability Directive*, Draft Legislative Proposal, Vienna 2022, [http://europeanlawinstitute.eu/fileadmin/user_upload/p_eli/Publications/ELI_Draft_of_a_Revised_Product_Liability_Directive.pdf], Accessed 29 March 2023.

[36] The fifth report was submitted in 2018: Report from the Commission on the Application of the Directive on liability for defective products, COM/2018/246 final.

[37] Commission Staff Working Document, Evaluation of Council Directive on liability for defective products, SWD/2018/157 final, accompanying the Report from the Commission on the Application of the Directive on liability for defective products, COM/2018/246 final.

technologies,[38] and published a report on product safety and liability for defective products in the context of artificial intelligence, the Internet of Things, and robotics.[39]

Finally, the Commission has launched proceedings for revising the rules on product liability, in the direction that is suitable for the development of the circular and digital economy, and on 28 September 2022 adopted and published its Proposal for a Directive on liability for defective products.[40]

2.5. Official explanation of the Proposal for a Directive on product liability

The need to revise the rules on product liability in EU law is linked to practical problems that may arise when some of the old rules are applied to certain new situations. Bearing this in mind, the European Commission has formulated the general and the particular objectives of the planned revision, in the Explanatory Memorandum accompanying the Proposal.[41]

The general objective, i.e., the purpose of product liability, remains the same, and in this respect the Proposal does not differ from the Directive: it is still necessary to ensure the functioning of the internal market and a high level of protection of consumers' health and property. However, the Proposal also contains some specific, particular objectives, whose achievement would call for amendments to the existing legal regime, by adapting the old rules to the new political, social, economic and technological conditions. The European Commission has formulated these specific objectives as follows.

First, it is necessary to ensure that the rules of product liability reflect the nature and risks of products in the digital age and circular economy. Second – and much more concretely – it is necessary to ensure that there is always a business

---

38 Expert Group on Liability and New Technologies, *Liability for artificial intelligence and other emerging digital technologies*, Publications Office, 2019, doi/10.2838/573689, accessed 29 March 2023. Also see the critical analysis: Bertolini, A.; Episcopo, F., *The Expert Group's Report on Liability for Artificial Intelligence and Other Emerging Digital Technologies: A critical assessment*, European Journal of Risk Regulation, Vol. 12, No. 3, 2021, pp. 644–659.

39 European Commission, Report on the safety and liability implications of Artificial Intelligence, the Internet of Things and robotics, COM/2020/64 final, [https://*eur-lex.europa.eu*], Accessed 10 October 2022.

40 For more information on the ongoing process visit: European Commission, *Adapting liability rules to the digital age, circular economy and global value chains*, [https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12979-Civil-liability-adapting-liability-rules-to-the-digital-age-and-artificial-intelligence_en], Accessed 29 March 2023.

41 See: FN 16 here.

established in the EU that can be effectively held liable for defective products that consumers purchase directly from manufacturers outside EU. Namely, in the present situation, when consumers increasingly purchase goods directly from non-EU countries, it may be that there is no producer, retailer, importer or distributor based in the EU, to whom the consumer could address his claim for compensation.

Third, it is necessary to ease the burden of proof for the injured person in complex cases, and also to ease restrictions on making claims, while ensuring a fair balance between the legitimate interests of manufacturers, injured persons and consumers in general. Fourth, it is necessary to harmonize the rules on liability for defective products with the newer rules on product safety and to codify the PLD related case law.

3. THE PROPOSAL FOR A DIRECTIVE ON LIABILITY FOR DEFECTIVE PRODUCTS

3.1. The most significant innovations

In the practical sense, the most significant novelties in DPLD are the expansions of the definitions of the fundamental terms, such as 'product', 'producer', 'defect' and 'damage', and the changes intended to facilitate the submission of claim and evidentiary requirements for the injured person.

Also significant is the Commission's proposal to set the level of harmonization at maximum, by expressly prescribing that Member States may not maintain or introduce provisions in their national laws that diverge from the Proposal: neither more, nor less stringent national provisions from those laid down in the Proposal may be permitted (Art. 3 DPLD). So far, maximum harmonization has only been the position of the CJEU on PLD,[42] and now the Commission proposes codification of that position, i.e. explicit clarification that DPLD should operate as instrument of full or maximum harmonization. In addition to not being modifiable by national regulations, the proposed rules would also not be modifiable through contracts: product liability cannot be excluded nor limited by contract, according to the explicit letter of the Proposal (Art. 13 DPLD).

Member States will be required to harmonize their national legislation with DPLD within twelve months of its adoption. PLD will remain in effect during the transition, and subsequently only for products that have been put into service or placed on the market prior to DPLD coming into effect (Art. 17 DPLD).

[42] See: FN 7 here.

3.1.1. The notions of 'product' and 'damage'

First of all, DPLD proposes the notion of 'product' to be expanded to include software as a standalone digital product, or as a digital component of a product, regardless of how it is delivered or used (e.g. on a device, in a cloud, online).[43] The term 'product' should also include digital manufacturing files, i.e. the files that contain functional information for the production of movables. These are digital versions or digital templates of movables, that allow automated control of machines and tools, such as drills, lathes, mills and 3D printers, which produce tangible items according to those instructions (Art. 4 (1)(1–2) DPLD). It would be beneficial to expressly define the exemption for free or open-source software, and not only in Recital 13.

Commentators have pointed out that it is unclear whether or not the revised product liability rules apply to so-called digital product passports (DPPs) and the information these files contain. DDPs are electronic files that change during the lifecycle of the product, and provide product information throughout the value chain. These information concern sustainability, responsible sourcing and manufacturing, environmental and recyclability attributes of the product, but may also relate to it's composition and performance, and if defective, they may cause damage.[44]

ELI proposes to expressly state in DPLD that software as a service is also a 'product', and disapproves of DPLD being silent on whether or not 'product' includes waste, or products based on human body parts, such as blood, cells, or tissue.[45] Others have noted that there are products that merely convey information, and products which use information in their operation, and maintained that where the product is merely a medium, strict liability should not apply. The same goes if the product is digitally stored information. An error in the information constitutes a defect only if such error affects the operation of the product.[46]

In any case, the current revision of product liability rules should be used, among other things, to settle the ongoing debates on whether certain objects qualify as

---

43 Mere information supplied in digital form is presently excluded from the notion of 'product'. Case C–65/20 *Krone* [2021], ECLI:EU:C:2021:471.

44 Dheu O.; De Bruyne J.; Ducuing C, The European Commission's Approach To Extra-Contractual Liability and AI – A First Analysis and Evaluation of the Two Proposals, pp. 39-40, 6 October 2022, [https://ssrn.com/abstract=4239792], Accessed 12 May 2023.

45 ELI Feedback, p. 11–12.

46 Machnikowski P., *Product Liability for Information products?: The CJEU Judgment in VI/KRONE–Verlag Gesellschaft mbH & Co KG, 10 June 2021 [C-65/20]*, European Review of Private Law, Vol. 30, No. 1, 2022, p. 200.

'products' and fall within the scope of the Directive. It should also be stated clearly that 'product' includes both goods produced on an industrial scale, and goods produced individually.

Furthermore, DPLD proposes to expand the term 'damage' so as to explicitly include material losses from 'medically recognized harm to psychological health', as well as 'loss or corruption of data that is not used exclusively for professional purposes'. It would be good to clarify that data loss includes leakage.[47] Also, it is explicitly stated in Recital 18 of the Proposal that DPLD should not affect national rules relating to non-material damage. Therefore, liability for non-material losses can be freely regulated by national laws.

The Proposal enumerates the types of material losses that are recoverable under DPLD. Further express clarification that other material losses are excluded, and that Members States may not regulate liability for those losses as they wish, would be welcome, in order to preserve one of the purposes of this instrument, and that is to limit the financial impact of product liability for the producers.[48] Damage to the defective product itself is excluded, which confirms the existing law. However, damage caused to a product by a defective component of that product should be covered by product liability rules. This is one of the sound critiques of the DPLD.[49]

DPLD leaves to Member States to lay down the rules on calculating compensation. Moreover, the opportunity is missed to address the consequences of the potential insolvency of the liable party, which may leave the victim without compensation, and to examine the possibility of introducing mandatory liability insurance for the manufacturers in some instances.[50]

3.1.2. The notion of 'defect'

DPLD expands and clarifies the notion of 'defectiveness' (Art. 6). It lays down that a product is considered defective if it does not provide the safety that the public at large is entitled to expect,[51] taking all circumstances into account, including the advertisement, instructions for installation, use and maintenance; the reasonably

47 ELI Feedback, p. 13.

48 ELI Feedback, p. 12–13.

49 ELI Feedback, p. 13.

50 Dheu; De Bruyne ; Ducuing, *op.cit.*, note 44 pp. 38–39.

51 In the time of COVID-19 pandemic, legal scholars concluded that producing in an emergency will not by itself provide a defense to product liability, though it might be a factor to be taken into account, for instance, in the sense that 'where regulatory demands are reduced and the processes accelerated, then the entitled expectations of safety might also be lowered'. Fairgrieve D.; Feldschreiber P.; Howells G.;

foreseeable use and misuse of the product; the moment in time when the product was placed on the market or put into service or, where the manufacturer retains control over the product after that moment, the moment in time when the product left the control of the manufacturer.

Furthermore, DPLD prescribes that in assessing whether the product is defective, also taken into consideration will be the specific expectations of the end-users for whom the product is intended; the effect on the product of any ability to continue to learn after deployment, i.e. the machine-learning capability of the product after being put into service; the effect on the product of other products that can reasonably be expected to be used together with the product; product safety requirements, including safety-relevant cybersecurity requirements; subsequent interventions by the producer or regulatory authorities, such as product recall for insufficient safety; significant subsequent modifications that affect the safety of the product.

However, the specific safety expectations of end-users themselves may be lowered due to their lack of knowledge or cognitive deficits.[52] It was pointed out by the commentators that the objective expectations, i.e. reasonable safety expectations of the public at large, should prevail in that case. This is especially true for children as end-users.

In contrast, there is a growing gap between the common expectations about the safety of the new technologies and their actual safety. In other words, the safety expectations of the public at large about the innovative products may be set at unrealistic levels, which may hamper technological development and obstruct access to the new technologies for EU consumers.[53] It has been pointed out that the public at large may easily have safety expectations for modern products which would be considered unrealistic by experts in the given field. Therefore, it would be advisable to stipulate the criteria that control whether a given expectation of safety is reasonable or justified, and consequently to what level of safety the public at large is entitled.[54]

Furthermore, in *Boston Scientific* (para. 42) the Court held that a fair apportionment of the risks inherent in modern technological production between the in-

---

Pilgerstorfer M., *Products in a Pandemic: Liability for Medical Products and the Fight against COVID-19*, European Journal of Risk Regulation, Vol. 11, No. 3, 2020, p. 597.

52 ELI Feedback, p. 16.

53 Santos Silva M. *et al.*, *op. cit.* note 11, pp. 130–131.

54 For instance, the number of accidents involving autonomous vehicles is not significant in relation to the distance travelled, and yet each accident is perceived as confirmation that these vehicles lack in safety. *Ibidem*., p. 130.

jured person and the producer needs to be ensured, bearing in mind the abnormal potential for damage which some products might cause to the person concerned. In the same CJEU case, AG Bot stated that a product should be deemed unsafe if it creates the risk of 'an abnormal, unreasonable character exceeding the normal risks inherent in its use' (para. 30). The Court relied on the principle of fair apportionment of risks, and on the concept of abnormal potential for damage, to clarify the criterion of defectiveness.[55] It seems that DPLD would benefit from enriching the standard of defectiveness in a comparable manner.

The new expanded DPLD definition addresses the control the producer sometimes retains over the product after putting it into circulation, the ability of the product to evolve after being put into service, and the ability of the product to connect and function together with other products. Still, the critics have stated that allowing the defectiveness to be inferred from a product recall may discourage manufacturers from voluntarily recalling products of unsatisfactory quality.[56]

3.1.3. The notion of 'manufacturer'

DPLD stipulates a circle of potentially liable persons to be significantly expanded, compared to the existing liability regime, to include, for example, producers of software and providers of related services, representatives of the non-EU producers, importers, fulfilment service providers, product refurbishers, which all should increase the likelihood of the injured person exercising their right to compensation. The genus-term that covers all potentially liable persons in DPLD is 'economic operator' (Art. 4 (1)(16)).

The PLD notion of 'producer' is substituted in DPLD by a broader notion of 'manufacturer'. For instance, only the latter includes a person who produces a product for their own use. Also, the notion of 'manufacturer' may include providers of software and digital services, as well as online marketplaces. The manufacturer of a defective component can also be held liable for the same damage, along with the manufacturer of the final product, and the component means any tangible or intangible item or a related service, whose integration and interconnection with the product was carried out or approved by the product manufacturer.

Where the manufacturer of the defective product is established outside the EU, the importer of the defective product and the authorized representative of the

---

55 Fairgrieve D.; Pilgerstorfer, M., *European Product Liability after Boston Scientific: An Assessment of the Court's Judgment on Defect, Damage and Causation*, European Business Law Review, Vol. 28, No. 6, 2017, pp. 882, 887 and *passim*.

56 ELI Feedback, p. 16.

manufacturer will be held liable for damage caused by that product. And if the product is purchased directly from manufacturers outside the EU, the fulfilment service provider will be liable for damage caused by the defective product. The fulfilment service provider means any natural or legal person facilitating fulfillment of the manufacturer's obligations towards the consumer, by offering, in the course of their commercial activity, at least two of the following services: warehousing, packaging, addressing and dispatching of a product, without having ownership of the product, and with the exception of postal services and freight transport services.

Furthermore, the person that modifies the product that has already been put into service or on the market is liable for damage like the manufacturer, provided that the modification was significant and that it was carried out outside of the control of the manufacturer. However, this person may be exempt from liability if it proves that the modification did not affect the part of the product that contains the defect (Art. 10 (1)(g) DPLD).

To sum up, the aim of the proposed system is to ensure that there is always a person established in the EU that can be held liable for defective products purchased directly from the manufacturers outside the EU. If the manufacturer is established outside EU, liability for the defective product sits with the importer, or with the manufacturer's representative based in the EU, and if they do not exist (e.g. the consumer has procured the product online directly from a non-EU trader), then the fulfilment service provider will be held liable, namely any person that in the course of their profession enables the non-EU retailer to fulfill his obligation towards the EU consumer.

If there is no one who is established in the EU who could be liable in this order, every distributor that fails to identify the person who supplied the defective product, within a month of receiving such request from the injured person, will be held liable. For instance, an online platform which has enabled the consumer to conclude distance contract with the non-EU trader may be held liable, irrespective of whether or not the platform qualifies as producer, importer, or distributor (Art. 7 (5–6) DPLD). Their liability is not restricted to the distribution of digital products.

The Proposal even makes it possible for the manufacturer to be liable for the defect that did not exist at the time when the product was put into service or on the market, if that defect came into being due to the conducting or failure to conduct any subsequent action, which was conducted or should have been con-

ducted within the control of the manufacturer (the related service, or software installation, functioning, update or upgrade).[57]

The benefits of increased compensation for consumers represent a cost to manufacturers. The expansion of circle of potentially liable persons may lead to an increase in liability insurance premiums, which, according to some predictions, is expected to especially impact the operation of small and medium-sized businesses, more so than it would influence the large companies. Namely, small and medium-sized businesses have fewer resources for legal counsel, and less ability to absorb costs.[58]

Viewed more widely, if legal position of the injured persons truly improves, i.e., if it becomes easier for them to exercise their right to compensation, the risk for the manufacturers will also increase, and they will consequently increase the price of products.[59] In other words, the manufacturers will try to pass the risk insurance premium to the consumers. A separate issue is whether or not the manufacturers will actually obtain liability insurance, i.e., whether or not they will use the increase in the price of product to finance such insurance. By passing on the risk insurance premium to consumers, manufacturers will ultimately disperse (socialize) all the risks for which they are presently not liable, but would be liable according to DPLD.

3.1.4. Restrictions on claims and burden of proof

The Proposal improves legal position of the injured person by removing the Directive's rule according to which the damage must exceed EUR 500 in order for the injured person to make a compensation claim, i.e., according to which the claimant is always liable for the first EUR 500 of damage (Art. 9 (1)(b) PLD). The original purpose of this lower limit was to prevent the filing of small claims, i.e., to unburden the courts. However, most consumer disputes are small claims cases. Elimination of the said limit, together with the improved collective redress mechanisms, vastly improves the concurrent resolution of a large number of small claims.

The Proposal also improves the position of the injured person in the evidentiary proceedings, by relocating the burden of proof to manufacturer in certain cases. As

---

[57] This is the case when the defect is due to a related service, or software, or lack of software updates or upgrades necessary to maintain safety, provided that they were within the manufacturer's control (Art. 10 (2) pertaining to Art. 10 (1)(c) DPLD).

[58] Executive Summary of the Impact Assessment Report, accompanying the Proposal for a Directive on liability for defective products, SWD/2022/317 final.

[59] Polinsky, A. M.; Shavell S., *The Uneasy Case for Product Liability*, Harvard Law Review, Vol. 123, No. 6/2010, pp. 1467–1469., 1472.

mentioned above, the Directive presently states – and the Member States are not allowed to stipulate differently – that the injured person bears the burden of proof that all the conditions for determining the producer's liability have been met. This means that the injured person must prove the damage, the defect, and the causal link between the defect and the damage (Art. 4 PLD). The Directive does not require the producers of exceptionally complex products, such as pharmaceutical products, medical devices and products with digital components, to share technical information about their products to the injured person, so the latter may try to prove causal link.

Unlike the Directive, the Proposal contains special rules on disclosure of evidence (Art. 8 DPLD). Namely, if the injured person presents facts and evidence sufficient to support the plausibility of the claim for compensation, the defendant will be ordered to disclose relevant evidence that is at its disposal, to the extent necessary and proportionate to support the said claim. When determining whether the disclosure is proportionate, the legitimate interests of all parties are considered, including third parties concerned, in particular in relation to the protection of confidential information and trade secrets. And where the defendant is ordered to disclose a trade secret or an alleged trade secret, the specific measures must be taken in order to preserve the confidentiality of the disclosed information.

The Proposal includes the same basic rule on the burden of proof as the Directive: the injured person must prove the defectiveness of the product, the damage suffered and the causal link between the defectiveness and the damage. The existence of the causal link is not presumed in the Directive nor in the Proposal. However, according to the Directive the rule applies without exception, while the Proposal prescribes numerous situations in which, by way of exception, it is presumed that the defectiveness or the causal link exist (Art. 9 DPLD). These presumptions are rebuttable.

First, the defectiveness is presumed if the manufacturer has failed to disclose relevant evidence, as ordered by the court. Second, the defectiveness is presumed if the injured person establishes that the product does not comply with mandatory safety requirements that are intended to protect against the risk of the damage that has occurred. And third, the defectiveness is also presumed if the injured person establishes that the damage was caused by an obvious malfunction of the product during normal use or under ordinary circumstances.

The causal link between the defectiveness of the product and the damage is presumed, where the injured person establishes that the product is defective and the damage caused is of a kind typically consistent with the defect in question. In

addition, where the court determines that the injured person faces excessive difficulties, due to technical or scientific complexity, to prove the defectiveness or the causal link, or both, then the defectiveness or the causal link, or both will be presumed, on condition that the injured person demonstrates, on the basis of sufficiently relevant evidence, that the product contributed to the damage and that it is likely that the product was defective, or that its defectiveness is a likely cause of the damage, or both.

The new possibility to rebuttably presume the defectiveness, or the causal link, or both, in cases where proving either one of them, or both, is excessively difficult for the injured person that lacks the necessary scientific or technical data or expertise – clearly addresses the situations illustrated above, in *Boston Scientific* and *Sanofi Pasteur*.[60]

The proposed rules greatly empower the injured person in the evidentiary proceedings. In the case of damage caused by especially complex products, whose comprehension requires specific technical or scientific knowledge, the presumption would not apply only to the causal link, but also to the existence of the defect. If the injured person proves that the product contributed to the damage, and that it was likely that the cause of the damage was a defect whose existence has not been proven, then it would be up to the producer to refute either of the two presumptions, i.e. to prove that the product is not defective or that the fact that it is defective was not the cause of the damage.

The proposed DPLD rules on limitation periods are the same as in the Directive. However, DPLD introduces one new provision: where an injured person has not been able to initiate proceedings within a limitation period of 10 years due to the latency of a personal injury, the limitation period will extend to 15 years from the date on which the product was placed on the market, put into service or substantially modified (Art. 14 (3) DPLD). The rights of the injured person will be extinguished upon expiry of that period.

3.1.5. Multiple liable persons and multiple causes of damage

Where two or more persons are liable for the same damage caused by defectiveness of the same product, they will be held jointly and severally liable. The Directive contains the same rule (Art. 5 PLD and Art. 11 DPLD).

The recourse claims are not addressed in DPLD, which means that they can be freely regulated by national laws. However, the various stages of modern produc-

[60] See: FNs 20 and 23 here.

tion regularly involve a number of producers, and the new technologies often merge or connect different elements and devices into one complex item. Therefore, it would be sensible to determine the principles for recourse claims among the enterprises involved in production processes.

Sometimes the damage is caused both by the defectiveness of the product and by the act or omission of a third party. DPLD clarifies that contribution from a third party to the occurrence of damage may not be the reason to reduce liability of manufacturer (Art. 12 (1) DPLD). In such cases the third party and the manufacturer will be held jointly and severally liable.

Finally, when the cause of the damage is both the defectiveness of the product and the fault of the injured person, or a person for whom the injured person is responsible, the manufacturer's liability may be reduced or disallowed (Art. 12 (2) DPLD). The contributory act or omission of that person is not sufficient; what is required is their fault.

3.2. Product liability reform as part of broader legislative activity in the EU

Together with DPLD, the Commission adopted and published another instrument: the Proposal for a Directive on adapting non-contractual civil liability rules to artificial intelligence (hereafter: DAILD).[61]

DAILD is a minimum directive intended to regulate non-contractual fault-based civil liability for damage caused by an artificial intelligence system (AI system). AI system means software that is developed with one or more of the techniques and approaches including machine learning, logic- and knowledge-based approaches, statistical approaches, Bayesian estimation, search and optimization methods, and can, for a given set of human-defined objectives, generate outputs such as content, predictions, recommendations, or decisions influencing the environments they interact with.[62]

DPLD and DAILD should be complementary in an effort to adapt the rules on product liability to the conditions and needs of the digital age, circular economy

[61] Proposal for a Directive on adapting non-contractual civil liability rules to artificial intelligence (*AI Liability Directive*), COM(2022) 496.

[62] Art. 2 (1)(1) of DAILD takes this definition from yet another novel instrument, Proposal for a Regulation on artificial intelligence (*Artificial intelligence act*), COM/2021/206 final.

and global value chains.[63] Moreover, they are systemically linked to other legislative and policy initiatives of the EU, primarily in the domains of product safety, circular economy business models, cybersecurity and collective redress mechanisms.

For example, the recently adopted rules on representative actions, i.e. the legal actions brought by representative entities, for the protection of the collective interests of consumers,[64] together with the proposed suppression of the lower threshold for consumer product liability claims (Art. 4(6)(b) DPLD), which is presently set at EUR 500 (Art. 9 (b) PLD), could substantially ease the simultaneous submission of a large number of small consumer claims in damages. And, taking into account the proposal to alleviate the burden of proof for injured persons and to adjust evidentiary rules to better suit their interests (Art. 8 and Art. 9 DPLD), a significant improvement may be expected in the procedural position of a large number of claimants.

Furthermore, the proposed expansion of the definitions of 'product', 'producer', 'defect' and 'damage' could lead to the increase in the number and the total sum of compensation claims. From the producers' standpoint, the proposed product liability reform will increase the risk of their liability, so it is reasonable to expect that the producers will try to socialize that risk, i.e. to pass the increased costs of their liability risk on to the consumers.

Looking at all these processes, the impression is that after decades of talks on the deficiencies of the existing liability regime, steps are now being taken toward the effective tightening of the product liability rules. However, it should also be expected that the increase of the risk premium born by producers will be dispersed, to a certain extent, to the injured persons and consumers at large.

3.3. Some remaining observations

Apart from the specific issues that have already been raised here, such as the need to clarify certain terms in DPLD, and to address the consequences of potential

---

63 The different stages of the production process, i.e. the design, production and marketing of many products, now involve a chain of activities divided among enterprises located across different countries. For example, a smart phone assembled in China includes graphic design elements from the United States, computer code from France, silicon chips from Singapore, and precious metals from Bolivia. Throughout this process, all countries involved retain some value and benefit from the export of the final product. OECD, *The trade policy implications of global value chains,* [www.oecd.org/trade/topics/global-value-chains-and-trade], Accessed 29 March 2023.

64 Directive 2020/1828 on representative actions for the protection of the collective interests of consumers and repealing Directive 2009/22/EC, *OJ L* 409.

insolvency of the liable person, or to regulate recourse claims between liable parties and their statutes of limitation, there are some general observations that can be made with regard to the proposed changes.

First of all, DPLD extends the scope of strict liability for defective products by expanding the fundamental notions of product, producer, defect and damage. It has been pointed out that the same results with at least some of these notions could have been achieved by extensive interpretation of the existing provisions of PLD. And while the courts may develop a concept incrementally, the legislative intervention bears the risk of going too far.[65]

For example, DPLD expands the circle of potentially liable persons to producers of software and providers of related services, representatives of the non-EU producers, fulfilment service providers, product refurbishers and online platforms.[66] Consequently, the regime of product liability will suddenly surpass the scope of what has been so far considered 'production' or 'manufacturing'.[67]

It is important at this point to carefully analyze the potential consequences of such expansions, and to examine whether the rules on product liability should be used in a more balanced manner as an instrument for regulating the effects of new technologies,[68] especially if the risk premium born by producers will be dispersed to the consumers at large.

Second, DPLD recognizes that property is increasingly used for both private and professional purposes, and provides for the compensation of damage to such mixed-use property, but still excludes property used exclusively for professional purposes. The rationale for this exclusion is that the aim of the Directive is to protect consumer (Recital 19 DPLD). However, EU rules on product liability

---

65 Wagner G., *Liability Rules for the Digital Age*, Journal of European Tort Law, Vol. 13, No. 3, 2022, p. 203. Wagner offers an example: The expansion of the concept of product to also include software should start from standard software, which is distributed 'like a product', while bespoke software could continue to be treated as a service for the time being (p. 203). Others have noticed that expanding the notion 'product' so as to include digital content requires a revision of PLD, especially because PLD is based on the assumption that putting a product on the market is a one-off act of the producer. Machnikowski P., *Product Liability for Information products?: The CJEU Judgment in VI/KRONE–Verlag Gesellschaft mbH & Co KG, 10 June 2021 [C-65/20]*, pp. 199–200.

66 They have already been called 'a parade of new defendants'. Wagner, *op. cit*. note 66, p. 212.

67 Dheu; De Bruyne; Ducuing, *op. cit*. note 45, p. 35.

68 The US litigation crisis showed how, together with other features of the US legal system (such as contingency fees, class actions, and punitive damages), the burden of product liability could become so high as to make some products uninsurable. Fairgrieve D. et al., *Product Liability Directive*, in: Machnikowski P. (ed.), European Product Liability. An Analysis of the State of the Art in the Era of New Technologies, p. 25.

also aspire to remove obstacles to the functioning of the internal market. Besides, some national regimes of product liability are not historically rooted in the policy of consumer protection. Therefore, it may be time to consider removing this particular restriction, and to protect all property under DPLD, irrespective of its use and purpose.[69]

Third, a sound proposal has been made to include the rules on liability for failure to comply with obligations under product safety and market surveillance law, in order to provide better consistency with product liability and to create more of a level playing field.[70] It seems that this idea should have been given more attention.

4. CONCLUSION

The ongoing product liability reform in the EU aims to accommodate the existing rules to the new digital technologies, circular economy business models and global value chains. Last year, following a long discussion among professionals, academics and competent authorities, the European Commission published the Proposal for a directive on liability for defective products. The Commission proposes, among other things, the broader concepts of product, producer, defect and damage; addresses the need to ease the burden of proof for consumers; cancels the EUR 500 minimum threshold for consumer claims in damages; introduces new liabilities for online marketplaces and product refurbishers, and strict liability for software and digital services that affect how the product works. This includes cybersecurity and connectivity risks. The reform also plans to compel producers to disclose information where the injured person demonstrates plausibility of their claim for compensation, and aims to ensure that injured persons receive due compensation for defective products procured directly from the non-EU countries.

Having all that in mind, DPLD surely represents a significant step forward in the protection of persons injured by product safety defects. However, there is still some room for improvements, as summed up in this paper, such as, to harmonize the recourse claims between liable parties and their statutes of limitation; to clarify certain terms (for instance, to expressly include waste and products based on human cells and tissue in products, to stipulate an explicit exception for free or open-source software, to clearly state whether an error in the information is a defect if that information does not affects the operation of the product); to stipulate the criteria which control whether a given expectation of safety is reasonable or justi-

[69] Wagner proposes the same. See: Wagner, *op. cit*. note 65, pp. 219–220.

[70] Art. 11 and 12, ELI Draft of a Revised Product Liability Directive.

fied; to clearly state that material losses are recoverable only if they are enumerated in DPLD, etc.

Finally, on a general level, and having in mind that the manufacturers will pass the increased costs of their liability risk on to the consumers at large, it seems that the aim to always have a business established in the EU that can be held liable for defective products, on the one hand, should be carefully balanced, on the other hand, against the rest of conceivable consequences of the proposed vast expansion of the circle of liable persons

REFERENCES

BOOKS AND ARTICLES

1. Bernstein A., *Formed by Thalidomide: Mass Torts as a False Cure for Toxic Exposure*, Columbia Law Review, Vol. 97, No. 7, 1997, pp. 2153–2176
2. Bertolini, A., Episcopo, F., *The Expert Group's Report on Liability for Artificial Intelligence and Other Emerging Digital Technologies: A critical assessment*, European Journal of Risk Regulation, Vol. 12, No. 3, 2021, pp. 644–659
3. Busch C., *When Product Liability Meets the Platform Economy: A European Perspective on Oberdorf v. Amazon*, Journal of European Consumer and Market Law, Vol. 8, No. 5, 2019, pp. 173–174
4. Büyüksagis E., *Et si Dr House évoquait le défaut potentiel de votre pacemaker...*, Aktuelle juristische Praxis, No. 1, 2016, pp. 14–22
5. Büyüksagis E., *La responsabilité du fait des produits 'défectueux sans défaut' : l'arrêt Boston Scientific du 5 mars 2015*, Droit de la consommation, No. 1, 2016, pp. 15–30
6. Cane, P., Atiyah P., *Atiyah's Accidents, Compensation and the Law*, C.U.P., Cambridge 2013
7. Fairgrieve D., Feldschreiber P., Howells G., Pilgerstorfer M., *Products in a Pandemic: Liability for Medical Products and the Fight against COVID-19*, European Journal of Risk Regulation, Vol. 11, No. 3, 2020, pp. 565–603
8. Fairgrieve D., Howells G., Møgelvang-Hansen P., Straetmans G., Verhoeven D., Machnikowski, P., Janssen A., Schulze R., *Product Liability Directive*, in: Machnikowski P. (ed.), European Product Liability. An Analysis of the State of the Art in the Era of New Technologies, Intersentia, Cambridge – Antwerp – Portland, 2017, pp. 17–108
9. Fairgrieve D., Howells G., Pilgerstorfer M., *The Product Liability Directive: Time to get Soft?*, Journal of European Tort Law, Vol. 4, No. 1, 2013, pp. 1–33
10. Fairgrieve D., Pilgerstorfer, M., *European Product Liability after Boston Scientific: An Assessment of the Court's Judgment on Defect, Damage and Causation*, European Business Law Review, Vol. 28, No. 6, 2017, pp. 879–910
11. Haertlein L., *Immunizing Against Bad Science: The Vaccine Court and the Autism Test Cases*, Law and Contemporary Problems, Vol. 75, No. 2, 2012, pp. 211–232
12. Howells G., *Product liability – a history of harmonisation*, in: Fairgrieve D. (ed.), Product Liability in Comparative Perspective, C.U.P., Cambridge, 2005, pp. 202–217

13. Howells, G. G., Ramsay, I. M., Wilhelmsson, T., *Handbook of Research on International Consumer Law*, Elgar, Cheltenham 2010
14. Karanikić Mirić, M., *Odgovornost proizvođača vakcine u praksi Evropskog suda pravde (Liability of Vaccine Manufacturers in ECJ Practice)*, Srpska politička misao, No. 4, 2017, pp. 137–159
15. Karanikić Mirić, M., *Odgovornost proizvođača za potencijalni defekt (Product Liability For Potential Defect)*, in: Ignjatović, Đ. (ed.), Kaznena reakcija u Srbiji, Vol. VIII, Pravni fakultet Univerziteta u Beogradu, Belgrade, 2018, pp. 194–213
16. Karanikić Mirić, M., *Reforma odgovornosti za proizvod s nedostatkom u pravu Evropske unije (Product Liability Reform in the EU)*, in: Lilić, S., Perspektive implementacije evropskih standarda u pravni sistem Srbije, Vol. XII, Pravni fakultet Univerziteta u Beogradu, Belgrade, 2022, pp. 96–116
17. Karanikić, M., *Development Risks*, Anali Pravnog fakulteta u Beogradu, Vol. 54, No. 3, 2006, pp. 117–148
18. Koch, B. A., *The development risk defence of the EC Product Liability Directive*, Pharmaceuticals Policy and Law, Vol. 20, No. 1–4, 2018, pp. 163–176
19. Koch, B. A., Koziol, H., *Comparative Conclusions*, in: Koch, B. A., Koziol, H. (eds.), Unification of Tort Law: Strict Liability, Kluwer, The Hague, 2002, pp. 395–435
20. Korzec, R., *Dashing Consumer Hopes: Strict Products Liability and the Demise of the Consumer Expectations Test*, Boston College International and Comparative Law Review, Vol. XX, No. 20, 1997, pp. 227–249
21. Machnikowski P., *Conclusions*, in: Machnikowski P. (ed.), European Product Liability. An Analysis of the State of the Art in the Era of New Technologies, Intersentia, Cambridge – Antwerp – Portland, 2017, pp. 669–705
22. Machnikowski P., *Product Liability for Information products?: The CJEU Judgment in VI/KRONE–Verlag Gesellschaft mbH & Co KG*, 10 June 2021 [C-65/20], European Review of Private Law, Vol. 30, No. 1, 2022, pp. 191–200
23. Markovits, Y., *La Directive C.E.E. du 25 juillet 1985 sur la responsabilité du fait des produits défectueux*, L.G.D.J., Paris, 1990
24. Micklitz, H. W., *Liability for defective products and services*, in: Micklitz, H. W.; Reich, N.; Rott, P.; Tonner, K. (eds.), European Consumer Law, Intersentia, Cambridge–Antwerp–Portland 2014, pp. 239–284
25. Mildred, M., *The development risk defence*, in: Fairgrieve, D. (ed.), Product Liability in Comparative Perspective, C.U.P., Cambridge 2005, pp. 167–184
26. Polinsky, A. M., Shavell S., *The Uneasy Case for Product Liability*, Harvard Law Review, Vol. 123, No. 6/2010, pp. 1437–1492
27. Reich N., *Produkthaftungsrecht: Haftung für potenziell fehlerhaftes Medizinprodukt*, Europäische Zeitschrift für Wirtschaftsrecht, No. 8, 2015, pp. 318–320
28. Reich, N., *Product Liability and Beyond: An Exercise in 'Gap-Filling'*, European Review of Private Law, Vol. 24, No. 3/4, 2016, pp. 619–644
29. Reimann, M., *Product Liability*, in: Bussani, M., Sebok A. J. (eds.), Comparative Tort Law, Edward Elgar Publishing, Cheltenham – Northampton MA, 2021, pp. 236–262

30. Santos Silva M., Fairgrieve D., Machnikowski P., Borghetti J.-S., Keirse A., Del Olmo P., Rajneri E., Schmon C., Ulfbeck, V., Vallone V., Zech H., *Relevance of Risk-benefit for Assessing Defectiveness of a Product: A Comparative Study of Thirteen European Legal Systems*, European Review of Private Law, Vol. 29, No. 1, 2021, pp. 91–132
31. Schmid, C., T*he Instrumentalist Conception of the Acquis Communautaire in Consumer Law*, in: Grundmann, S.; Schauer, M. (eds.), The Architecture of European Codes and Contract Law, Kluwer, Alphen aan den Rijn 2006, pp. 255–270
32. Stapleton, J., *Scientific and Legal Approaches to Causation*, in: Freckelton I., Mendelson D. (eds.), Causation in Law and Medicine, Aldershot, Ashgate, 2002, pp. 14–37
33. Stapleton, J., *Product Liability*, Butterworths, London 1994
34. Stratton K., Ford A., Rusch E., Wright Clayton E. (eds.), *Adverse Effects of Vaccines: Evidence and Causality: Consensus Study Report*, National Academies of Sciences, Engineering, and Medicine, Washington, 2012
35. Ulfbeck V., Verbruggen P., *Online Marketplaces and Product Liability: Back to the Where We Started?*, European Review of Private Law, Vol. 30, No. 6, 2022, pp. 975–998.
36. Van Leeuwen B., Verbruggen P., *Resuscitating EU Product Liability Law? Contemplating the effects of Boston scientific medizintechnik*, European Review of Private Law, Vol. 23, No. 5, 2015, pp. 899–915
37. Verdure C., *Arrêt Boston Scientific Medezintechnik : l'appréciation du 'défaut' dans le cadre de la Directive relative aux produits défectueux*, Journal de droit européen, Vol. 240, 2015, pp. 242–244
38. Verheyen T., Full Harmonization, Consumer Protection and Products Liability: A Fresh Reading of the Case Law of the ECJ, European Review of Private Law, Vol. 26, No. 1, 2018, pp. 119–140
39. Wagner G., *Liability Rules for the Digital Age*, Journal of European Tort Law, Vol. 13, No. 3, 2022, pp. 191–243
40. Wuyts, D., *The Product Liability Directive – More than two Decades of Defective Products in Europe*, Journal of European Tort Law, Vol. 5, No. 1, 2014, pp. 1–34

COURT OF JUSTICE OF THE EUROPEAN UNION

1. Opinion of Advocate General Bot in Joined Cases C-503/13 and C–504/13, *Boston Scientific* [2014], ECLI:EU:C:2014:2306
2. Case C–154/00 *Commission of the European Communities v Hellenic Republic* [2002], ECR I–03879, ECLI:EU:C:2002:254
3. Case C–183/00 *María Victoria González Sánchez v Medicina Asturiana SA* [2002], ECR I-03901, ECLI:EU:C:2002:255
4. Case C–52/00 *Commission of the European Communities v French Republic* [2002], ECR I–03827, ECLI:EU:C:2002:252
5. Case C–621/15 *N. W and Others v Sanofi Pasteur MSD SNC and Others* [2017], ECLI:EU:C:2017:484
6. Case C–65/20 *VI v KRONE Verlag Gesellschaft mbH & Co KG* [2021], ECLI:EU:C:2021:471

7. Joined Cases C–503/13 *Boston Scientific Medizintechnik v AOK Sachsen-Anhalt – Die Gesundheitskasse*, and C–504/13 *Boston Scientific Medizintechnik v. Betriebskrankenkasse RWE* [2015], ECLI:EU:C:2015:148.

EU LAW AND OFFICIAL DOCUMENTS

1. Directive 2020/1828 on representative actions for the protection of the collective interests of consumers and repealing Directive 2009/22/EC [2020], OJ L 409
2. Directive 85/374/EEC concerning liability for defective products [1985], OJ L 210, amended by Directive 1999/34/EC concerning liability for defective products [1999], OJ L 141 (*PLD*)
3. European Parliament resolution with recommendations to the Commission on a civil liability regime for artificial intelligence, 2020/2014(INL)
4. Evaluation of Council Directive on liability for defective products, SWD/2018/157 final
5. Executive Summary of the Impact Assessment Report, accompanying the Proposal for a Directive on liability for defective products, SWD/2022/317 final
6. Liability for emerging digital technologies, SWD/2018/137 final
7. Proposal for a Directive on adapting non-contractual civil liability rules to artificial intelligence (AI Liability Directive), COM(2022) 496 (*DAILD*)
8. Proposal for a Directive on liability for defective products, COM(2022) 495 (*DPLD*)
9. Proposal for a Regulation on artificial intelligence (Artificial intelligence act), COM/2021/206 final
10. Report from the Commission on the Application of the Directive on liability for defective products, COM/2018/246 final
11. Report on the Application of the Council Directive 85/374/EEC concerning liability for defective products, COM/2018/246 final
12. Report on the safety and liability implications of Artificial Intelligence, the Internet of Things and robotics, COM/2020/64 final
13. The European Green Deal, COM/2019/640 final
14. Treaty of Rome establishing the European Community [1957]

WEBSITE REFERENCES

1. Answers to parliamentary questions P–2383/00, E–2685/00, and E–1724/98, to the European Commission,
[http://europarl.europa.eu], Accessed 29 March 2023
2. Busch, C., *Rethinking Product Liability Rules for Online Marketplaces: A Comparative Perspective* (February 10, 2021),
[https://ssrn.com/abstract=3784466], Accessed 12 May 2023
3. Convention européenne sur la responsabilité du fait des produits en cas de lésions corporelles ou de décès, Strasbourg, 27. I 1977, Série des traités européens – n° 91,
[https://rm.coe.int/1680077328], Accessed 29 March 2023

4. Dheu O., De Bruyne J., Ducuing C, *The European Commission's Approach To Extra-Contractual Liability and AI – A First Analysis and Evaluation of the Two Proposals* (6 October 2022), [https://ssrn.com/abstract=4239792], Accessed 12 May 2023
5. European Commission, *Adapting liability rules to the digital age, circular economy and global value chains*, [https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12979-Civil-liability-adapting-liability-rules-to-the-digital-age-and-artificial-intelligence_en], Accessed 29 March 2023
6. European Law Institute, ELI Draft of a Revised Product Liability Directive, Draft Legislative Proposal, Vienna 2022, [http://europeanlawinstitute.eu/fileadmin/user_upload/p_eli/Publications/ELI_Draft_of_a_Revised_Product_Liability_Directive.pdf], Accessed 29 March 2023
7. European Law Institute, European Commission's Proposal for a Revised Product Liability Directive. Feedback of the European Law Institute, Vienna 2023, [https://www.europeanlawinstitute.eu/fileadmin/user_upload/p_eli/Publications/ELI_Feedback_on_the_EC_Proposal_for_a_Revised_Product_Liability_Directive.pdf], Accessed 29 March 2023 (*ELI Feedback*)
8. European Law Institute, Guiding Principles for Updating the Product Liability Directive for the Digital Age, Vienna 2021, [https://europeanlawinstitute.eu/fileadmin/user_upload/p_eli/Publications/ELI_Guiding_Principles_for_Updating_the_PLD_for_the_Digital_Age.pdf], Accessed 29 March 2023
9. Expert Group on Liability and New Technologies, *Liability for artificial intelligence and other emerging digital technologies*, Publications Office, 2019, [https://data.europa.eu/doi/10.2838/573689], Accessed 29 March 2023
10. OECD, *Global value chains and trade*, [www.oecd.org/trade/topics/global-value-chains-and-trade], Accessed 29 March 2023

UDK 347.23:004
179.3
347.151:616-089.843
Review article

CONTEMPORARY PROPERTY (RIGHTS) CHALLENGES: DIGITAL ASSETS, ANIMALS AND HUMAN BODY PARTS*

Dubravka Klasiček, PhD, Associate Professor
Josip Juraj Strossmayer University of Osijek, Faculty of Law Osijek
Stjepana Radića 13, Osijek, Croatia
dklasicek@gmail.com

Tomislav Nedić, PhD, Assistant
Josip Juraj Strossmayer University of Osijek, Faculty of Law Osijek
Stjepana Radića 13, Osijek, Croatia
tnedic@pravos.hr

ABSTRACT

Contemporary general social development reflects its challenges in inducting into three fundamental categories: digital, green and health. Each of the three categories above has its civil (private) law issues, which primarily concern the concept of property itself. The paper focuses on key stakeholders from three mentioned categories: digital assets, animals and human body parts. Technology has had a significant impact on human life, and as a result, a person, during his/her lifetime, accumulates a huge number of digital assets. The most important questions concerning digital assets are: can they be treated as corporeal things (or incorporeal entities equalized with corporeal things), and what are the users' legal rights over these assets? To a certain extent, the mentioned question is transferred to animals as well, through various animal ethical and biocentric considerations. In a situation where animals also greatly influence human life, the question arises whether the conception of thing(s) in the context of animals has become inadequate. Can we still treat animals as property, or are new concepts needed to understand animals' legal status? Are new concepts also necessary for understanding the (civil) law status of human body parts? Increasing biomedical technological development has led to different ways of preserving human life and health. However, such preservation carries with it a priori various legal and bioethical questions that need to be answered in order to distinguish

* This paper is a product of work that has been fully supported by the Faculty of Law Osijek Josip Juraj Strossmayer University of Osijek under the project no. IP-PRAVOS-7, "Civil law and civil procedural law in the 21st century - current situation and future tendencies"

whether and under what conditions parts of the human body can be the objects of property rights. In observing the mentioned civil law and in certain situations, (bio)ethical and legal philosophical problems and questions, the authors approach analytically, comparatively and casuistically.

Keywords: *animals, bioethics, digital assets, human body parts, ownership, property (rights)*

1. INTRODUCTION

Rapid technological development and parallel problems related to the threat to the human environment and nature pose great challenges to civil and private law, with the increasing use of different interdisciplinary perspectives[1] in looking at the abovementioned problems. One of the branches facing the mentioned challenges is property law, where the entire concept of property and the normative and analytical elaboration of property rights are re-examined[2] through various entities. The entities that are treated in this regard in this paper are digital assets, animals and human body parts. Furthermore, in addition to different civil law doctrinal points of view, normative questioning is also done with the perspectives of bioethics and legal philosophy in the context of Croatian and comparative law.

Technology has had a significant impact on human life, and as a result, a person, during his/her lifetime, accumulates a huge number of digital assets. Today, most of what previously existed only in a physical form (photos, CDs, letters etc.) mainly exists in a digital form. Although the number of such assets, which an average person has, increases daily, the majority need help understanding their rights over these assets and what they can do with them. Currently, one universally accepted definition of these assets does not exist, which is understandable because they constantly change, they can be divided according to many different criteria and a large number of them does not fall only into one group. Precisely because of this, it is currently challenging to determine what rights the users have over these assets – are they their owners or something else; can they freely decide what to do with them or should they consider someone else's rights and interests? Moreover, the most important question concerning digital assets is: can they be treated as corporeal things (or incorporeal entities equalized with corporeal things) or something else?

---

1 In recent writings, the mentioned concept of private law with the use of various interdisciplinary perspectives is called "the new private law". See: *The Oxford Handbook of the New Private Law,* in: Gold, A.S. *et al.* (eds.), Oxford University Press, 2021.

2 One of the comprehensive, recent normative and analytical elaboration of property rights in: Penner, J.E., *Property Rights, A Re-Examination*, Oxford University Press, 2020.

The controversies of the civil law thinghood concept are also present in the issue of the animal's legal status. Through the biocentric thought about animals as non-other participants in the living world, property law confronts new concepts of their legal status. Thus, certain countries' civil codes state that animals are not considered things or are sentient beings. Despite the mentioned provisions, the question arises whether animals can still be treated in (civil) legal transactions as things and as objects of property rights. In the context of animals, can we talk about a new concept of property, the concept of living property?

In the context of living property, it is also an interesting question, how are things that come from a (human) person as a living being legally treated? Specific civil codes have expressly taken a position regarding the above issue on the prohibition of disposing of one's own body if this violates the integrity of a person. Additionally, do we consider human organs and tissue *res in commercio* or *res extra commercium*, and how can the civil law concept of thinghood and property rights be translated to a person's integrity and body parts?

2. DIGITAL ASSETS: OBJECTS OF OWNERSHIP OR SOMETHING ELSE?

Today, there is still no universally accepted definition of digital assets.[3] Defining digital assets is problematic because this term encompasses many different entities. When digital assets are categorized according to various criteria, many of them will not fall in only one category, but will have characteristics of several of them.[4] However, defining and cataloging digital assets is important, because that is the first step in determining people's rights over them. The discussion about a person's rights over digital assets and what they can do with them is significant, because almost all such assets have a certain value. For example, online bank accounts and cryptocurrencies have real monetary value; photos found in online albums have sentimental value; social networks have social value; written and visual material can have an intellectual value.[5] Therefore, it is extremely important to know which rights one has over these assets and whether they can be transferred and protected while a person that has those rights is still alive and *post-mortem*.

---

3 Harbinja, E., *Digital Death, Digital Assets and Post-Mortem Privacy*, Edinburgh University Press, 2023, p. 5.

4 *Ibid*, p. 6.

5 Rycroft, G. F., *Legal Issues in Digital Afterlife*, in: Savin-Baden, M.; Mason-Robbie, V. (eds.), Digital Afterlife: Death Matters in a Digital Age, CRC Press, 2020, p. 130-131.

At this point, the authors will list only a few categorizations of digital assets, in order to show the variety of entities that this term encompasses.[6] Certain authors list digital assets as personal assets (stored on various devices or uploaded to different sites), social media assets (which include e-mail accounts as well), financial assets (bank accounts, Amazon and PayPal accounts, accounts on shopping sites etc.) and business accounts (patient and customer information).[7] Others mention virtual property (PayPal balance, cryptocurrencies, domain names, purchased digital content, game avatars, etc.), intellectual property (photos, literary works and other art), data about property (online financial accounts) and personal data (correspondence with other people, search history logs, geo tracking, music and video playlists, etc.).[8] The same authors have another (similar) categorization: intangible items (cryptocurrencies, domain names, music files, items purchased in online games, etc.); information about the property (online bank accounts); intellectual property (photos) and personal data (all of the data and meta data that do not fall into any of the previous three categories).[9] Another division is into access information (account numbers and log-in information), tangible digital assets (photographs, PDFs, documents, e-mails, online savings account balances, domain names, and blog posts), intangible digital assets ("likes" on Facebook, website profiles, and comments or reviews) and metadata ("data electronically stored within a document or website about the data's access history, location tags, hidden text, author history, deleted data, code, and more").[10] These are just some of the categorizations of these assets found in the literature, which were chosen to show some of the entities that digital assets encompass. Because of that, it is understandable that there is no one-size-fits-all solution when talking about what happens to digital assets and rights people have over them.[11]

Apart from the variety of entities that digital assets encompass, an additional problem associated with many of them is that online platforms control them and those assets are subject to rules dictated by those platforms.[12] For example, when

---

6 Many authors have tried to define this term, with more or less success, see: Harbinja, *op. cit.*, note: 3, p. 5-10.

7 Cahn, N., *Post Mortem Life On-line*, 25 Probate & Property, 2011, p. 36-37.

8 Morse, T.; Birnhack, M., *Digital Remains, The Users' Perspective,* in: Savin-Baden, M.; Mason-Robbie, V. (eds.), Digital Afterlife: Death Matters in a Digital Age, CRC Press, 2020, p.111.

9 Birnhack, M.; Morse, T., *Digital Remains: Property or Privacy?*, International Journal of Law and Information Technology, Vol.30, No. 3, 2023, p. 7-14.

10 Haworth, S. D., *Laying Your Online Self to Rest: Evaluating the Uniform Fiduciary Access to Digital Assets Act*, University of Miami Law Review, Vol. 68, No. 2, 2014, p. 537-538.

11 Harbinja, E., *The 'New(ish)' Property, Informational Bodies, and Postmortality,* in: Savin-Baden, M.; Mason-Robbie V. (eds.), Digital Afterlife: Death Matters in a Digital Age, CRC Press, 2020, p. 93.

12 Banta, N., *Property Interests in Digital Assets: The Rise of Digital Feudalism*, 38 Cardozo Law Review, 2017, p. 1105-1108.

it comes to content on users' profiles or accounts that the user has created, the platform's terms and conditions usually state that the user retains ownership of intellectual property rights.[13] However, online platforms reserve a broad license to use said content.[14] Hence, even if users are considered copyright owners of the content they have created and uploaded on their profiles and accounts, their ownership will always be limited by platforms' licenses, because users cannot opt-out of a license clause.

Furthermore, many online profiles and accounts are used to communicate with other users. As was shown from earlier categorizations of digital assets, a portion of the content on those profiles and accounts comprises of personal data. That data is often comprised of information about users and anyone they communicate with. [15] So, the question arises: do users own such content as well, and if they do, can they do with it whatever they want, like with any other property? If personal data

---

[13] Facebook Terms: „Some content that you share or upload, such as photos or videos, may be protected by intellectual property laws. You retain ownership of the intellectual property rights (things like copyright or trademarks) in any such content that you create and share on Facebook and other Meta Company Products you use." [https://www.facebook.com/legal/terms/update?ref=old_policy], Accessed 30 April 2023Google Terms: „Your content remains yours, which means that you retain any intellectual property rights that you have in your content. For example, you have intellectual property rights in the creative content you make, such as reviews you write. Or you may have the right to share someone else's creative content if they've given you their permission." [https://policies.google.com/terms?hl=en-US#toc-using], Accessed 30 April 2023.

[14] Facebook Terms: „… you grant us a non-exclusive, transferable, sub-licensable, royalty-free, and worldwide license to host, use, distribute, modify, run, copy, publicly perform or display, translate, and create derivative works of your content (consistent with your privacy and application settings). This means, for example, that if you share a photo on Facebook, you give us permission to store, copy, and share it with others (again, consistent with your settings) such as Meta Products or service providers that support those products and services. This license will end when your content is deleted from our systems." [https://www.facebook.com/legal/terms/update?ref=old_policy], Accessed 30 April 2023 Google Terms: „This license is: worldwide, which means it's valid anywhere in the world non-exclusive, which means you can license your content to others royalty-free, which means there are no monetary fees for this license." „This license allows Google to: host, reproduce, distribute, communicate, and use your content — for example, to save your content on our systems and make it accessible from anywhere you go publish, publicly perform, or publicly display your content, if you've made it visible to others modify your content, such as reformatting or translating it sublicense these rights to: other users to allow the services to work as designed, such as enabling you to share photos with people you choose our contractors who've signed agreements with us that are consistent with these terms, only for the limited purposes described in the Purpose section below" [https://policies.google.com/terms?hl=en-US#toc-using], Accessed 30 April 2023.

[15] This was the reason why the court of appeal in 2017 in Berlin refused to grant access to Facebook profile of a deceased girl, to her grieving parents – the reason was the protection of decedent's privacy, but also the privacy of all her contacts. *Berlin court rules for Facebook over grieving parents*, 2017, available at: DW, *Berlin court rules for Facebook over grieving parents*, 2017, [https://www.dw.com/en/berlin-court-rules-grieving-parents-have-no-right-to-dead-childs-facebook-account/a-39064843], Accessed 30 April 2023 (Parents were later granted access to their daughter's Facebook profile. However, the

is not considered to be an object of ownership, what is it than? For more about the legal status of personal data, see *infra*.

The very term "digital assets" implies that such entities are objects of ownership and rules related to tangible things should apply to them, by analogy.[16] However, this term includes many different entities, many of which could not be considered to be objects of ownership.[17] Therefore, authors will try to show that often, some other rules, other than the rules relating to ownership, are more suitable to be applied to various digital assets (for example, copyright and personality rights). When considering rights people have over digital assets, the discussion often turns to inheritance law. Since ownership and certain copyright components can be inherited, it would be logical to think that the same applies to digital assets considered to be objects of ownership and copyright. On the other hand, digital assets that are considered as privacy should not be inheritable, because, at least in Croatia, privacy is a strictly personal right that extinguishes after the death of its holder.[18]

However, this is not as straightforward as it sounds. On the one hand, a digital asset that could be considered as an object of ownership or copyright and therefore should be inheritable, will not always be so, because its inheritability does not depend on the user's will, but primarily on the will of an online platform.[19] For example, regardless of Facebook stating that users own content they put on their profile, access to the profile itself falls under the provisions of Facebook's terms and conditions. As a default rule, Facebook (like most other online platforms) will not normally allow heirs to access the decedent's profile. Therefore, they will not be able to benefit from what the deceased posted on his/her profile, although such content would otherwise be inheritable.[20] On the other hand, when it comes to right to privacy, in Croatia it is a non-inheritable right because it is strictly per-

authors believe that the decision of the court of appeal is important precisely for taking into account the privacy of all of the girl's contacts.).

16 Birnhack, M., Morse, T., *op.cit.*, note: 9, p. 14-15 .

17 Harbinja, *op. cit.*, note: 11, p. 92; Morse, Birnhack, *op.cit.*, note: 8, p. 108.

18 Klarić, P; Vedriš, M., *Građansko pravo*, Narodne novine, Zagreb, 2014, 105; Birnhack, M.; Morse, T., *op.cit.*, note: 8, p. 108.

19 Klasiček, D., *Digital Inheritance,* in: Barković, D. *et al.* (eds), IMR 2018: Interdisciplinary Management Research XIV. Faculty of Economics. Josip Juraj Strossmayer University of Osijek, 2018, p. 1056-1058.

20 Facebook is actually one of the few social networks that offer their users a couple of possibilities on what might happen to their profile and its content after they die. However, if a user has not decided on what will happen to his/her profile *post-mortem*, default rules will apply and heirs will not have access to that profile. See: [https://www.facebook.com/help/1568013990080948], Accessed 30 April 2023.

sonal, and all strictly personal rights extinguish after their holder dies.[21] Therefore, a person's privacy cannot be inherited nor can it be protected after a person death. Because of that, digital assets that are considered as privacy would not be inheritable and would not be protected *post-mortem*. However, some authors advocate that in case of such digital assets, the possibility to protect them should not end with the death of a person, but should be allowed even after it.[22] Authors call this a *post-mortem* privacy, and define it as "the right of the deceased to control his personality rights and digital remains post-mortem" (broadly), or "the right to privacy and data protection post-mortem" (narrowly).[23] The idea is that interests of an individual to decide what will happen to his/her data should be recognized and protected even after that person dies.[24] Since data on the internet can stay there forever, and can, at least theoretically, be accessed by anyone, this idea should not be discarded without further consideration.

This part will end with an analysis of three types of digital assets that many people have and some thoughts on what legal status might apply to them.

2.1. Social network and e-mail content

An often-quoted definition of social networks is the one given by danah boyd and Nicole B. Ellison who define social networks as "web-based services that allow individuals to construct a public or semi-public profile within a bounded system, articulate a list of other users with whom they share connection, and view and traverse their list of connections made by others within the system".[25]

As was said earlier, the users control the content, but the account belongs to the platform. The content users put on social networks is diverse. They often created it themselves (user generated content[26]), but it could have also been created by someone else and shared or forwarded by a user. Accordingly, some of it could, under Croatian law, be considered copyrighted work. Photos that the user took and uploaded to his profile, their status and comments could sometimes be protected

---

21 Klarić, P.; Vedriš, M., *op. cit.*, note: 18, p. 105.

22 Harbinja, *op. cit.*, note: 3, p. 61-78; Davey, T., *Until Death Do Us Part: Post-mortem Privacy Rights for the Ante-mortem Person*, (PhD. thesis, University of East Anglia, 2020, 12-13 [https://ueaeprints.uea.ac.uk/id/eprint/79742/1/TINA%20DAVEY.%20THESIS%20FINAL%20%281%29.pdf], Accessed 30 April 2023; Birnhack, M.; Morse, T., *op.cit.*, note: 8, p. 123.

23 Harbinja, *op. cit.*, note: 3, p. 15.

24 *Ibid*, p. 204.

25 Boyd, D.; Ellison, N. B., *Social Network Sites: Definition, History and Scholarship*, 13 J. Computer-Mediated Comm, 2007, p. 211.

26 Harbinja, *op. cit.*, note: 3, p. 85, 92.

as copyright according to Croatian Copyright and Related Rights Act (further: CA)[27] . Art. 14 of CA states: "An author's work is an original intellectual creation from the literary, scientific and artistic fields that has an individual character, regardless of the manner and form of expression, type, value or purpose" (translated by authors). In Croatia, no additional formalities are necessary, as conditions under which someone's work would be protected by copyright (e.g., fixation, publication or some other formalities).[28] In this regard, copyright law would protect a big portion of the content that users put or share on their profile, (in case it met the prerequisites set out in Art. 14). This content would, therefore, not be protected by the rules applying to ownership, in the sense ownership is considered in Croatia (like in other countries belonging to the civil law systems).

Some content on social networks could not fall into the category of content protected by copyright, but should not be considered an object of ownership either, because it consists of personal data and other information about the user and other people he/she communicated with.[29] Personal data is defined in Art. 4(1) of General Data Protection Regulation as: "...any information relating to an identified or identifiable natural person ('data subject'); (…) such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person".[30]

Regarding the legal status of personal data, the authors agree with the point of view that personal data should certainly be a legal object, but should not be an object of ownership.[31] Without a doubt, many rules relating to ownership and its objects could be applied analogously to personal data. For instance, a person who has rights over data, has the possibility to access, use, exclude others, transfer or delete data, which is the same as what an owner can do with objects of his/her ownership.[32]

---

27 Copyright and Related Rights Act – further Copyright Act (CA), (Zakon o autorskom pravu i srodnim pravima), Official Gazette No. 111/21. For more on application of copyright to social networks see: Harbinja, *op. cit.*, note: 3, p. 92-96.

28 Henneberg, I., *Autorsko pravo*, Narodne novine, Zagreb, 1996, p. 56-57; This might be problematic in the UK and US because fixation and publication are prerequisites for copyright protection. Harbinja, *op. cit.*, note: 3, p. 93.

29 Harbinja, *op.cit.*, note: 3, p. 97.

30 Art. 4 of Regulation (EU) of the European Parliment and of the of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation), OJ L119/1.

31 van Erp, S.; Swinnen, K., *The legal status of co-generated data with particular focus on the ALI-ELI Principles for a Data Economy and the rules on accession, commingling and specification*, Technology and Regulation, 2022, p.61.

32 *Ibid.*

However, the authors of this paper agree with those who believe that equalizing personal data to objects of ownership is not a good way to go.[33] The reason for this is very well explained in ALI-ELI Principles for Data Economy which state: "It is commonly held that such a regime would have the potential of suffocating the European data economy rather than boosting it, and given that consumers would readily contract away their ownership, very much as they are currently contracting away any other rights they have with regard to data, this is not likely to enhance consumer rights."[34] Also the Data Ethics Commission[35] in its Opinion states that, regardless of which party has contributed to generation of data, such contributions should not lead to that party's ownership over generated data, "but rather to data-specific rights of co-determination and participation, which in turn may lead to corresponding obligations on the part of other parties".[36]

It is important to note that, in order for data to be a legal object, it would need to be specified in a certain way. The ALI-ELI Principles state that data must be recorded in a machine-readable format and stored on any medium or be in transmission.[37] Although to be stored on a medium usually means to be stored on a physical carrier (USB) or by means of blockchain technology, for the purpose of this paper, personal data stored on someone's email or social network account (on a cloud) would also be considered to be specified enough.[38] Accordingly, authors agree that personal data should not be considered as an object of ownership and should, therefore, be protected under personal data protection regimes and/or as privacy (at least until it is recognized as a new legal object with its own set of rules).

E-mails are "messages transmitted and received by digital computers through a network. An e-mail system allows computer users to send text, graphics, sounds, and animated images to other users".[39]

---

33 Opinion of the Data Ethics Commission, p. 11, available at: [https://www.bmj.de/SharedDocs/Downloads/DE/Themen/Fokusthemen/Gutachten_DEK_EN.pdf?__blob=publicationFile&v=2], Accessed 4 July 2023.

34 ALI-ELI Principles for a Data Economy – Data Transactions and Data Rights (further in the text: ALI-ELI Principles), p. 197, line 12 (Principle 29), available at: [https://www.europeanlawinstitute.eu/fileadmin/user_upload/p_eli/Publications/ALI-ELI_Principles_for_a_Data_Economy_Final_Council_Draft.pdf], Accessed 4 July 2023.

35 Daten Ethik Kommission, Engl website available at: [https://www.bmi.bund.de/EN/topics/it-internet-policy/data-ethics-commission/data-ethics-commission-node.html], Accessed 4 July 2023.

36 Opinion of the Data Ethics Commission, p. 9.

37 van Erp, Swinnen, *op. cit.*, note:, p. 61-63¸ ALI-ELI Principles, Principle 3, 1, a.

38 van Erp, Swinnen, *op. cit.*, note:, p. 62, 63¸ 64; ALI-ELI Principles, Principle 3, 1, b; Principle 3, Illustration 9, 11, etc.

39 Britannica, [https://www.britannica.com/technology/e-mail], Accessed 30 April 2023.

With e-mail content, the situation is similar to that of social networks. As with content on social networks, a big part of the content contained in e-mails and its attachments is also copyrighted work and can be protected as such.[40] This especially applies to attachments that often consist of various copyrighted works made by the user or others. When it comes to the text of an e-mail itself, it too could, sometimes, be considered as copyrighted "written linguistic work".[41] This type of work is in Croatian CA defined as the author's work expressed in written language.[42] However, with the e-mail itself, there is another possibility. Today, e-mails have often become a substitute for letters; so accordingly, their text could be protected as letters, using rules applicable to personality rights (right to privacy), as is the case with any other letter written on paper.[43]

Regarding the rest of the content of the e-mail, which consists of various information and personal data, the same applies as for such content on social networks - here also, that content would mainly consist of personal non-proprietary assets (personal data) and as such should be protected by rules applying to personal data and privacy.[44]

2.2. Cryptocurrencies

Cryptocurrencies are a type of currency that uses cryptography to enable electronic payments without an intermediary bank or financial institution.[45] In Croatia, cryptocurrencies are not a legal means of payment nor are they considered a foreign currency.[46] In accordance to the definition of electronic money, (Art. 3(7) of the Electronic Money Act[47]) cryptocurrencies are not electronic money and

---

40 Harbinja, *op. cit.*, note: 3, p. 168-176.

41 According to Art. 14/2 of the Copyright Act.

42 Henneberg, *op. cit.*, note: 28, p. 59.

43 VSH Rev 12/80, 14.5.1980, „Pisac pisma koje nije književno djelo zaštićen je od neovlaštenog objavljivanja njegova pisma ali tu se ne radi o zaštiti autorskih prava već o zaštiti osobnih prava. Autorsko-pravnu zaštitu imaju samo pisma koja ispunjavaju kriterije koji se traže za književna djela." [https://www.iusinfo.hr/sudska-praksa/ARHSE201G1980VS015158RHR], Accessed 30 April 2020 (Translated by authors: The writer of a letter that is not a literary work is protected from unauthorized publication of his/her letter, not according to the rules concerning copyright protection, but personal rights protection. Only letters that meet the criteria required for literary works have copyright protection.).

44 Harbinja, *op. cit.*, note: 3, p. 177-178.

45 Carr, D., *Cryptocurrencies as Property in Civilian and Mixed Legal Systems*, in Fox, D., Green S. (eds), Cryptocurrencies and Private Law, Oxford University Press, Oxford, 2019, p. 179.

46 Bodul, D., *O ovrsi na kripto imovini ili o jednoj pravnoj praznini?*, Zbornik radova s VIII. međunarodnog savjetovanja: „Aktualnosti građanskog procesnog prava - nacionalna i usporedna pravnoteorijska i praktična dostignuća" 2022, p. 212.

47 Electronic Money Act (Zakon o elektroničkom novcu), Official gazette No. 64/18, 114/22.

they are not a payment service (according to the provisions of Article 4 of the Act on Payment Transactions).[48] Regarding categorizing cryptocurrencies, it should be noted that the position on their legal status is not uniform in other countries – some countries consider it an asset, some a product, and some a financial instrument.[49]

Because of some of the characteristics of cryptocurrencies, the authors believe that they are, perhaps, the closest to what could be considered an object of ownership, of all the other digital assets discussed in this paper. Regardless, it is still quite controversial whether traditional rules pertaining to ownership can apply to cryptocurrencies.[50] However, what is certain is that privacy rules are not suitable to be applied and especially not copyright rules.[51]

The biggest problem with equating cryptocurrencies with physical objects of ownership is that they are intangible, like all other digital assets.[52] However, the authors here believe that intangibility alone should not be too great an obstacle to equating cryptocurrencies with objects of ownership. For example, in Croatia, certain intangible entities are legally equated with things, as material parts of nature. Something similar exists in other legal systems as well.[53] For instance, in Croatia, dematerialized shares were, although in a digital form, equated with things.[54] The same applies to a co-owner's share and the right to build, which are also considered things.[55] Therefore, the authors believe that intangibility should not be an obstacle when characterizing cryptocurrencies as objects of ownership.

In addition, in support of the point that these assets could be considered as objects of ownership, it must be noted that cryptocurrencies' "owners" have many typical ownership rights (the right to transfer, possess and exclude others, for example).[56] First, the "owner" of cryptocurrencies can transfer them to whomever

---

48 Act on Payment Transactions (Zakon o platnom prometu), Official gazette No. 66/18.

49 Porezna uprava HR, mišljenje, [https://www.porezna-uprava.hr/HR_publikacije/ Lists/mislenje33/ Display.aspx?id=19252], Accessed 30 April 2023. Also see: Omelchuk, O.; Iliopol, I.; Alina, S., *Features of inheritance of cryptocurrency assets*, Ius Humani, Revista de Derecho, Vol.10, No. 1, p. 109, 114-116.

50 Carr, *op. cit.*, note: 45, p. 177.

51 Omelchuk, O.; Iliopol, I.; Alina, S., *op. cit.*, note: 49, p. 110.

52 *Ibid*, p. 180-181.

53 Carr, *op. cit.*, note: 45, p. 184.

54 Gavella, N. et al., *Stvarno pravo*, Narodne novine, Zagreb, 2017, p. 387.

55 Art. 37/3 and 280/2 of Ownership and Other Proprietary Rights Act – Ownership Act (Zakon o vlasništvu i drugim stvarnim pravima), Official Gazette No. 91/96, 68/98, 137/99, 22/00, 73/00, 129/00, 114/01, 79/06, 141/06, 146/08, 38/09, 153/09, 143/12, 152/14, 81/15, 94/17.

56 Similar Banta, *op. cit.*, note: 12, p. 1108-1113.

he/she wants.[57] Aside from mining, that is one of the ways of acquiring cryptocurrencies.[58] This person can transfer cryptocurrencies to anyone by authorizing transfer, or, he/she can leave these currencies to heirs, by giving them access to the electronic wallet in which cryptocurrencies are stored.

Second, the electronic wallet can be considered to be in the possession of its "owner" as well as cryptocurrencies stored there. That wallet and cryptocurrencies are not physical, so one might question the possibility of them being in someone's possession. However, in Croatian law, there are certain exceptions to the rule that a possession is only a "factual (physical) power over a thing"[59] For example, whatever was in a possession of a decedent is inherited by his/her heirs, at the moment of death (because of the principle of *ipso iure* inheritance that applies in Croatia). The decedent might have possessed certain things they borrowed or leased. The decedent did not own these things, they were merely in his/her control for a certain period. After the possessor's death, heirs inherit the possession, even though they might not be aware that the person has died and have no idea what they have inherited. Until they take over their inheritance, they will not be able to realize physical possession over those things. Nevertheless, their possession is protected by law, just like any other factual (physical) possession.[60] Therefore, it is not so farfetched to imagine that a person can possess something that only exists in a digital form, since we already allow the protection of a possession, when there is no physical power over the object.

Third, one needs to have a private key (a password) to access an electronic wallet. By keeping the private key secret, a person can exclude anyone from accessing their cryptocurrencies.[61] This is also one typical right of ownership. Because of all this, the authors believe it would not be such an overreach to consider cryptocurrencies as objects of ownership (maybe not in the traditional sense of the word, but surely as a new object with its own rules and characteristics).[62]

---

57 Carr, *op. cit.*, note: 45, p. 184, 180.

58 Omelchuk, O.; Iliopol, I.; Alina, S., *op. cit.*, note: 49, p. 107.

59 Definition of a possession from art. 10 of Croatian Ownership Act.

60 This is sometimes called „ideal (spiritualized) possession" meaning imaginary possession, the one that is not factual (yet). Klarić, P.; Vedriš, M., *op. cit.*, note: 18, p. 201-202

61 For inheritance of cryptocurrencies, see Omelchuk, O.; Iliopol, I.; Alina, S., *op. cit.*, note: 49, p. 116-119.

62 Bodul, D.; Dešić, J., *Zakonsko reguliranje kriptoimovine - između želje i mogućnosti*, [https://informator.hr/strucni-clanci/zakonsko-reguliranje-kriptoimovine], Accessed 30 April 2023.

3. ANIMALS AS (LIVING) PROPERTY?

The increase in human awareness towards protecting the environment and nature forced man to reconsider his image and attitude towards other stakeholders of the environment and nature. Biocentric and animal ethical tendencies have forced society to develop sympathy and empathy for animals, but also more important - thought of them as non-other living beings. Animal law and ethics itself is becoming an increasingly topical area for numerous lawyers, philosophers, (bio)ethicists, anthropologists and sociologists.[63] However, the debate on animal law and animal rights is not widely represented in Croatian legal science and practice. Therefore, Croatian civil law legislation does not contain explicit provisions relating to the legal status of animals, nor are animals too much legally discussed in general. For example, neither the Civil Obligations Act[64] nor the Ownership Act does not expressly regulate or state how animals should be treated according to status in a certain civil law relationship.[65] Although today the legal status of pets and animals in general is questioned mainly within the framework of legal subjecthood/personhood in (civil) legal relations, Croatian civil law legislation and doctrine[66] are still oriented towards the objectification of the legal status of animals. Historically speaking, the status position of animals as things originates from Roman private law.

Thus, for example, in the context of subjects of civil law relations, Radolović refers to Vodinelić's writings on understanding animals as legal subjects.[67] According to Vodinelić, legal subjects are real "physical persons - people, legal persons - organizations and animals."[68] Vodinelić further explains that animals are legal objects

---

63 The pioneers of the mentioned field are legal and moral philosophers such as Jeremy Bentham, Peter Singer, Tom Regan, David DeGrazia and Gary Francione. In this regard, two fundamental books by Singer and Regan stand out in particular: Singer, P., *Animal Liberation: A New Ethics for Our Treatment of Animals*, HarperCollins, 1975; Regan, T., *The Case For Animal Rights*, University of California Press, Berkley, 1983. In Croatian contexts, the doyen of animal law and ethics is considered to be the legal philosopher, theorist and animal ethicist from the University of Split, Nikola Visković, with his capital work: Visković, N., *Životinja i čovjek, Prilog kulturnoj zoologiji, Književni krug Split,* Split, 1996.

64 Civil Obligations Act (Zakon o obveznim odnosima), National Gazette No. 35/05, 41/08, 125/11, 78/15, 29/18, 126/21, 114/22, 156/22.

65 Although, for example, the legal status of an animal can be indirectly read and deduced from precisely defined legal provisions of real law where the term thing is used precisely in the context of animals. See, for example, Art. 106. paragraph 1. and Art. 132, paragraph 3. of the Ownership Act.

66 Although it is emphasized in the civil law doctrine that animals still need to be treated with consideration in view of the legal regulations on animal protection. See Gavella et al., *op. cit.*, note: 54, p. 509-510.

67 Radolović, A., *Subjekti građanskopravnog odnosa*, 52(1) Pravo u gospodarstvu, 3.

68 Vodinelić, V. V., *Građansko pravo, Uvod u građansko pravo i opšti deo građanskog prava*, Pravni fakultet Univerziteta Union u Beogradu, 2012, p. 325.

sui generis, just as much as legal subjects *sui generis*, i.e. both legal subjects and objects.[69] In this regard, animals, especially pets, should be considered a third type of legal subject (legal subjects *sui generis*) and, therefore, holders of certain subjective legal rights[70], such as personality rights. Still, they are also objects of rights, such as ownership rights, lease and other property rights.[71] The concept above for the continental-European civil law doctrine is problematic for two basic reasons. The first refers to the fact of the holders of subjective legal rights in general due to the application of will-interest theories[72] in continental-European civil law doctrine, where in the absence of a will determinant it is difficult to talk about the holder of subjective legal rights.[73] Another problem is reflected in the impossibility of separating subjective rights from legal subjectivity in continental European civil law doctrine, where only the legal subject is the bearer of subjective rights and *vice versa*.[74]

The legal status of animals, except within the general part and theoretical foundations of civil law, is largely reflected in property law, precisely because of the central issue that invokes the conflict between the issue of animals as legal subjects and the issue of animals as "classic" objects of property rights, primarily ownership right.[75] Although the Croatian civil law legislation does not explicitly mention the status of animals, numerous civil codes deny animals the status that in any way

---

69 *Ibid*., p. 415.

70 On the similar track, the flexibility of the concept of legal personhood advocated by Finish legal philosopher Visa Kurki is based on elaborated claims about the separation of legal personhood and the entity's ability to be the holder of rights (persons-as-right-holders view). The aforementioned concept makes it easier for lawyers to discuss animal rights topics without any need for justification or elaboration of animals as legal persons or legal subjects, where only passive incidents of legal personhood should apply. In: Kurki, V.A.J., *Why Things Can Hold Rights*: *Reconceptualizing the Legal Person* in V. A.J. Kurki; Pietrzykowski, T. (eds.), *Legal Personhood: Animals, Artificial Intelligence and the Unborn*, Springer, Cham, 2017, p. 69-89.

71 Vodinelić, *op.cit*., note: 68, p. 415.

72 About will theories in, Vedriš, M.; Klarić, P., *op. cit.*, note: 18, p. 63 .
More details about will, interest and will-interest theories in civil law doctrine in older literature: Krneta, S, *Subjektivna prava*, in Enciklopedija imovinskog prava i prava udruženog rada, Vol III, Novinsko-izdavačka ustanova, Službeni list SFRJ, Belgrade, 1978, p. 186-201.

73 However, in foreign legal theory writings, the qualification of animals as holders of subjective rights is possible on the basis of the interest theories, whereby numerous important legal theorists advocate precisely for the bearer of legal (subjective) rights by animals. See for example: Kramer, M., *Do Animals and Dead People Have Legal Rights?,* 14(1) Canadian Journal of Law & Jurisprudence, 2001, p. 29-54.

74 More about "orthodox" and "bundle theories of legal personhood" in: Kurki, V.A.J., *A Theory of Legal Personhood*, Oxford University Press, 2019, p. 121-124.

75 The aforementioned debate was initiated a few decades ago by American legal philosopher and animal ethicist Gary Francione. See for example: Francione, G. L., *Animals—Property or Persons?,* in Sunstein, C. S.; Nussbaum, M.C. (eds.), Animal Rights: Current Debates and New Directions, Oxford University Press, 2005, p. 108–142.

enhances objecthood in the view of things. In those codes, in those provisions that refer to general provisions on things as objects of civil law relations, the provision that either explicitly states that animals are not things[76] or explicitly states that animals are considered so-called *sentient beings*.[77] However, certain commentators of the German and Austrian civil legislation state that the provisions on animals as non-things[78] do not imply anything other than a certain (animal) ethical awareness of animals as non-other living beings, not as legal subjects, and that in legal relations the provisions on things will apply, unless otherwise specified by special laws. [79] In this regard, animal legal objecthood does not seem to be disputed. Considering all the above, there is an obvious incoherence in the unique understanding of animal status. Such provisions and considerations bring a cluster of precisely defined questions that re-question the (civil) legal concepts of legal objecthood and subjecthood.

In most countries, including Croatia, it is not explicitly declared that animals are not things nor are they considered as sentient beings.[80] In Croatian property law, animals are categorized as wild, domesticated and domestic. Only wild animals live free in nature[81] and are *res nullius*[82]. Therefore, one acquires ownership over them

---

76 These countries are, for example, Germany, Austria, the Netherlands, the Czech Republic, Moldova, Quebec (Canada).

77 These countries are, for example, Belgium, France, Spain, Colombia and the UK. It is important to emphasize that the provision on animals as sentient beings is contained in Art. 13 of the Treaty on the Functioning of the European Union (The Treaty of Lisbon), which expressly states that "the Member States shall, since animals are sentient beings, pay full regard to the welfare requirements of animals, while respecting the legislative or administrative provisions and customs of the Member States relating in particular to religious rites, cultural traditions and regional heritage." See: *Consolidated version of the Treaty on the Functioning of the European Union*, OJ C 326/47, 26.10.2012, p. 47–390.

78 Art. 285.a of the Austrian General Civil Code (*Allgemeines Bürgerliches Gesetzbuch* (ABGB), 1812) and Art. 90.a of the German Civil Code (*Bürgerliches Gesetzbuch*, BGB, 1896).

79 See: Boemke, B., Ulrici, B., *BGB Allgemeiner Teil*, Springer, Heidelberg, Dordrecht, London, New York, 2009, 437; Bydlinski, P., *Bürgerliches Recht*, *Band I, Allgemeiner Teil*, 4th ed, Springer, Wien, New York, 2007, p. 37, 22.

80 Rules on Croatian property law are based on Roman private law concept regarding animal status and various ways of acquiring ownership over them and have not wandered too far from their source. Gavella, N., *et. al., op.cit*. note: 54, p. 509-510.

81 According to the Nature Protection Act (Zakon o zaštiti prirode), National Gazette No. 80/13, 15/18, 14/19, 127/19, Art.9, Par.1/4: "wild species are those species that did not arise under the influence of man as a result of artificial selection (selection and breeding for the purpose of obtaining breeds of domesticated animals and varieties of cultivated plants) or genetic modification of hereditary material using modern biotechnology techniques".

82 According to the Ownership Act, Art.132, Par. 3, when in doubt, it is considered that the thing does not belong to anyone; however, it is considered that a domesticated animal is nobody's if it is absent on its own for forty-two days, and that a swarm of bees whose owner has not been buzzing for two days is nobody's.

through occupation.[83] Interestingly, in Croatian legislation, there is a difference between wild animals and game. The Animal Protection Act[84] and Nature Protection Act regulate wild animals, while the Hunting Act regulates game.[85]Although game is also considered *res nullius*, there are certain restrictions regarding the right to occupy it: occupation can be done only by those with a valid hunting license.[86] According to the Hunting Act, game is considered as a good that holds special interest for the Republic of Croatia and is, therefore, additionally protected.[87]

Regarding the acquisition of property rights over animals, Vodinelić states, for example, that 1. the animal is the object of property rights, but the above is limited by legal norms on animal welfare; 2. numerous legal obligations are imposed on the owners regarding the way of keeping, raising, transporting, maintaining health and working conditions with animals; 3. hereditary dispositions in favor of the animal are not possible, but upon conversion they become an order to the heir to take care of the animal 4. a series of special provisions on the special relationship between the animal (especially pets) and its owner preventing it from being broken, such as: the inability of animals to be subject to the right of lien, the right of retention, and the impossibility of confiscating the animal during forced execution on the debtor's property, ownership of them cannot be acquired by finding someone else's property, in the case of division of ownership communities (joint ownership, co-ownership, etc.) it will belong to the one who has better conditions for animal according to the rules on animal welfare, the rule of the lessee to keep an animal in the leased apartment if it does not excessively disturb third parties and the like.[88] It is important to point out that animals have personality rights (right to life, health, physical integrity, psychological integrity), but they do not have legal capacity for property rights, for obligations, they do not have business

---

83 Gavella, N., *et. al., op.cit.*, note: 54, p. 509.

84 Animal Protection Act (Zakon o zaštiti životinja), National Gazette 102/17, 32/19.

85 Hunting Act, Official Gazette (Zakon o lovu) National Gazette No. 99/18, 32/19, 32/20.

86 More in: Pichler, D., *Novo stvarnopravno uređenje lovišta*, Zbornik Pravnog fakulteta Sveučilišta u Rijeci, Vol. 40, No. 1, 2019, pp. 481-498.

87 The Hunting Act, Art. 3, Par.1.

88 Vodinelić, V., *op. cit.*, note: 68, p. 416 .
On the same track, in comparative (anglophone) property law frames, Favre proposes a new, fourth (in addition to real property, personal property and intellectual property in the common law system) concept of property for animals. The so-called living property includes the interests of animals (following the interest theory of legal rights) and in every (civil) legal relationship, the following criteria and rights should be taken into account in favor of the animal: "1. Not to be held for or put to prohibited uses.; 2. Not to be harmed; 3. To be cared for; 4. To have living space; 5. To be properly owned; 6. To own property; 7. To enter into contracts; 8. To file tort claims." In: Favre, D., *Equitable self-ownership for animals*, Duke Law Journal, Vol. 50, No. 2, 2000, pp. 473-502; Favre, D., *Living Property: A New Status for Animals Within the Legal System,* Marquette Law Review, Vol. 93, No. 3, 2010, p. 1021-1070.

and delict capacity, nor the capacity to be an heir or a testator.[89] Further challenges of the issue of animal legal subjecthood in civil law relations will be largely reflected in the possibility of separating the concept of legal subjecthood from the concept of subjective rights, whereby it will be possible to freely talk about animals as holders of subjective rights, without any implication of their legal subjecthood.[90]

4. PROPERTY IN HUMAN BODY PARTS

Technological progress in biomedicine has enabled various ways of transplanting parts of the human body, with the ultimate goal of saving and preserving human life and integrity. However, every biomedical technological development leaves a large number of legal, but also moral and ethical issues that must be validly elaborated for legal relations to function smoothly. In connection with the previous chapter on animals, the real example is precisely the process of xenotransplantation[91] (transplantation of organs and tissue of animal origin), in which the concepts of human rights and animal rights clash, but also the issue of the patient's informed consent, the emergence of new epidemics, even the emergence of new creatures, the so-called chimeras.[92]

However, when it comes to the question of parts of the human body, first of all it is necessary to clarify whether it is possible and in what way to dispose of parts of the human body. Any kind of property disposition of human body parts invokes a preliminary question about property rights over human body parts. The issue

---

89 *Ibid.*

90 In this regard, in certain legal theory writings, the concept of "things with rights" is mentioned, which enables animals to exercise their fundamental rights in every (civil)nlaw relationship, without the need to raise the question of their subjecthood *a priori*. See: Kurki, *op. cit.*, note: 70, p. 49-68.

91 Although the process of xenotransplantation is not yet medically or legally established, the Croatian Act on Medically Assisted Fertilization (Zakon o medicinski potpomognutoj oplodnji) National Gazette 86/12, Art. 36, states that: "(1) In the process of medically assisted fertilization, the following is prohibited: … 2. fertilize a female ovum with a sperm cell of any other species than a human sperm cell or an animal ovum with a human sperm cell, 3. change the embryo by transplanting other human or animal embryos, 4. introduce human gametes or human embryos into an animal, 5. introduce animal gametes or animal embryos into a woman."

92 So, for example, according to the Directive 98/44/EC, "processes to produce chimeras from germ cells or totipotent cells of humans and animals" (38) are considered immoral, thus excluding the patentability of such procedures." See: *Directive 98/44/EC of the European Parliament and of the Council of 6 July 1998 on the legal protection of biotechnological inventions*, OJ L 213, 30.7.1998, pp. 13–21.
In addition to the legal status issue of animals, the status of chimeras is also highly questionable, especially in the context of the concept of legal personhood and legal rights, whereby the process of xenotransplantation is a kind of intersection between the issue of animal rights and the issue of transplantation of the human body parts. See more in: Pietrzykowski T., *Personhood Beyond Humanism-Animals, Chimeras, Autonomous Agents and the Law*, Springer, Cham, 2018.

of property rights (primarily the ownership right) over human organs is not only an interesting legal-doctrinal issue, but also a legal-philosophical and bioethical one.[93] This is not an exclusively civil law understanding of the institution of ownership, it is a matter of a normative and bioethical concept of whether the human body can even be considered the subject of property rights and whether parts of the human body can be considered things during life, but also after a person's death.[94] Am I the owner of my body? Can a body be the object of the ownership right? When talking about parts of the human body, it is necessary to emphasize that any civil law discussion must also follow the special regulations that apply to parts of the human body. For example, in the Republic of Croatia, a special regulation regulates the transfer/transplantation of organs[95], tissue[96], blood[97] and sex cells. [98] The paper will pay special attention to organs and tissue whose transplantation is very common in medical practice. [99]One of the fundamental questions in any further (civil) law relationship is whether parts of the body can be considered objects (things) in the legal context and objects of property rights? The biggest challenges of human body parts may be hidden in the abovementioned question. Every unlimited right of ownership over parts of the human body causes new social modalities, such as the buying and selling of human organs and tissue (which

---

93 See more about the mentioned issue in: Campbell, A. V., *The Body in Bioethics*, Routledge-Cavendish, 2009.

94 More in: Wall, J., *Being and owning : the body, bodily material, and the law*, Oxford University Press, Oxford, 2015.; Fabre, C., *Whose body is it anyway?*, Justice and the integrity of the person, Clarendon Press, Oxford, 2009., and in: Ivančić-Kačer, B., *Građanskopravni aspekti transplantacije dijelova ljudskog tijela: doktorska disertacija*, Zagreb, 2013, pp. 52-76.

95 Act on Transplantation of Human Organs for the Purpose of Treatment (Zakon o presađivanju ljudskih organa u svrhu liječenja), Official Gazette No. 144/12.

96 Act on the Use of Human Tissue and Cells (Zakon o primjeni ljudskih tkiva i stanica) Official Gazette No. 144/12.

97 Act on Blood and Blood Products (Zakon o krvi i krvnim pripravcima) Official Gazette No. 79/06, 124/11.

98 Act on Medically Assisted Fertilization (Zakon o medicinski pomognutoj oplodnji), Official Gazette No. 86/12.

99 Organs and tissue have been protected by the same regulation in Croatian medical law for many years, but it should be emphasized that these are quite different procedures. The differentiation of the aforementioned procedures is best explained by the breakdown of the Act on the Removal and Transplantation of Human Body Parts for the Purpose of Treatment (Zakon o uzimanju i presađivanju ljudskih organa u svrhu liječenja) Official Gazette, No. 177/04 and 45/09, 144/12, 144/12) into two separate acts: Act on the Transplantation of Human Organs for the Purpose of Treatment and Act on the Use of Human Tissue and Cells. In medical practice, organ transplantation is a much more frequent procedure, and organ transplantation mainly refers to the transplantation of the so-called "solid organs", such as kidneys, heart, liver, lungs, intestines and pancreas. Other forms of organ transplantation require specialized procedures and are mainly related to skin, cornea and bone marrow transplantation. In: Barbić, J.; Zibar, L., *Ethical principles of organ transplant treatment,* in: Fatović-Ferenčić, S; Tucak, A., (ed.), Medical ethics, Zagreb: Medicinska naklada, 2011, 2 p. 3.

is the case in the Islamic Republic of Iran), the manipulation of gametes in the form of new forms of surrogate parenthood or even the appearance of surrogate grandparents. [100]

In certain systems, there are specific regulations where the ownership of the human body is completely or partially limited. Thus, in the countries of the common law system, the rule of so-called *no property* (*rule*) [101], according to which the human body cannot be the subject of property rights[102], so it cannot be disposed of in a will, regardless of the deceased person's testamentary freedom.[103] However, according to certain authors, the system that completely prohibits market access, that is, the sale and purchase of human body parts, is outside of the legal principles of obligations and property law in which such restrictions do not exist.[104] This very fact can be confusing when it comes to the question of ownership of the body and its parts, because it would mean that if someone is the absolute owner of his body and organs, he can absolutely dispose of it and sell his own body parts, which is not legally allowed in many countries.[105] But people cannot be considered things

---

100 About "babies as property" in: Dickenson, D., *Property in the Body: Feminist Perspectives*, Cambridge University Press, 2017, pp. 65-87.

101 Namely, common law legal systems during the 17th century gave birth to the rule that there is no property in relation to the human body ("*no property in the human body*"). The rule originally comes from Coke's Institutes of the Laws of England from 1664, where it was prescribed that "the burial of the deceased... is not the property of anyone" (lat. *nullius in bonis*, engl. *the property of no one*) and that it belongs to the jurisdiction of the church. But the Anglo-Saxon courts have since made exceptions to the so-called no property rule (e.g. Bazley v Wesley Monash IVF Pty Ltd [2010] QSC 118) which brought additional uncertainty in dealing with the said issue. Wall emphasizes that the result of all this is the fact that the legal status of parts of the human body is still indeterminate and unclear; Wall, *op. cit.*, note: 94, p. 1-2; Nedić, T., *Bioetički aspekti presađivanja organa*, Doctoral disertation, Pravni fakultet u Osijeku, Osijek, 2022, pp. 180-188.

102 Although certain authors refer to the "uncertain origins" of the 'no property' rule and its unsustainability. See: Quigley, M., *Self-Ownership, Property Rights, and the Human Body, A Legal and Philosophical Analysis*, Cambridge University Press, 2018, p. 56.

103 Mimnagh, L.M., *The Disposition of Human Remains and Organ Donation: Increasing Testamentary Freedom While Upholding the No Property Rule*, 7 Western Journal of Legal Studies, 2017, ISS. 1, Art. 3. Also: Hardcastle, R., *Law and the Human Body: Property Rights, Ownership and Control*, Portland: Hart Publishing, Hardcastle, 2007.

104 More in: Dunham IV, C.C., *Body Property: Challenging the Ethical Barriers in Organ Transplantation to Protect Individual Autonomy*, 17 Annals of Health Law, 2008, pp. 39-65; Nedić, *op. cit.*, note: 101, pp. 180-188.

105 For example, in Italian Civil Code, Codice Civile 2023Testo del Regio Decreto 16 marzo 1942, n. 262 aggiornato con le modifiche apportate, da ultimo, dal D.L. n. 19/2023, Art. 5 or, for example, the Croatian medical legislation (Art. 8 of the Act on Transplantation of Human Organs for the Purpose of Treatment and Art. 8 of the Act on the Use of Human Tissue and Cells). On a similar track: Wagner, D., M., *Property Rights in the Human Body: The Commercialization of Organ Transplantation and Biotechnology*, 33 Duquesne Law Review, 1995, pp. 931-958; Nedić, *op. cit.*, note: 101, pp. 180-188. On the other hand, according to the Art. 6 of the Directive 98/44/EC "inventions shall be considered

in the physical sense, but exclusively as beings that attract moral attention. In a certain way, the human body can be regarded as an object (as a "complex combination of several things"), but more importantly, as a subject (attracting moral attention as mental and spiritual beings). Aramini thus states that the extremist understanding of body ownership, according to which the body is understood as something that can be disposed of arbitrarily ("the body is only mine and I use it as I like, even if I sell it for profit"), has no justification. [106] But there is no justification either an opinion according to which the body is a thing that ends in death, as a biological understanding of the body, because the value of the human person is in the inseparableness of his physical dimension from the spiritual one.[107]

One of the most important things that Aramini emphasizes is reflected in the principle of autonomy and the principle of defending bodily life. Thus, Aramini outlines the principle of autonomy in the form of the human body as non-disposable human property, not that his body is at any disposal.[108] Concerning the principle of the defense of physical life, Aramini's deontological and Kantian[109] (concerning the second principle of Kant's categorical imperative) points out that man is "always an end (purpose) and cannot be a means, and that in relation to the giver and the recipient, both should be considered ends in themselves, and never

unpatentable where their commercial exploitation would be contrary to *ordre public* or morality" also stating that "the human body, at the various stages of its formation and development, and the simple discovery of one of its elements, including the sequence or partial sequence of a gene, cannot constitute patentable inventions" (Art.5), but that patentable inventions may refer to "an element isolated from the human body or otherwise produced by means of a technical process, including the sequence or partial sequence of a gene … even if the structure of that element is identical to that of a natural element." In the aforementioned provision, it is evident that a separate "element" of the human body can be considered a patent. However, this is not absolute and is subject to the criterion evaluation of public order and morality. In this regard, Art. 6. expressly states that the following cannot be patented: "a) processes for cloning human beings; (b) processes for modifying the germ line genetic identity of human beings; (c) uses of human embryos for industrial or commercial purposes; (d) processes for modifying the genetic identity of animals which are likely to cause them suffering without any substantial medical benefit to man or animal, and also animals resulting from such processes."

106 Aramini, M., *Uvod u bioetiku*, Kršćanska sadašnjost, Zagreb, 2009, pp. 264, 266.

107 *Ibid.*

108 The above is an excellent argument against those arguments based on the fact that the ban on commercialization violates the principle of autonomy, such as Fabre's in: Fabre, *op.cit.*, note: 94, pp. 126-152; Aramini, *op. cit.*, note: 106, p. 226. The above is based on Kant's view of individual autonomy.

109 "Man cannot dispose over himself, because he is not a thing. He is not his own property - that would be a contradiction; for so far as he is a person, he is a subject, who can have ownership of other things. But now were he something owned by himself, he would be a thing over which he can have ownership. He is, however, a person, who is not property, so he cannot be a thing such as he might own; for it is impossible, of course, to be at once a thing and a person, a proprietor and a property at the same time. (27:387)" Kant, I., Lectures on Ethics, Cambridge University Press, 1997, p. 157.

by means for each other."[110] One of the main questions here is precisely the status of the parts of the human body that are separated from the body, and the question of whether they still attract the moral attention and respect given to the human person and his body as a whole. The above situation is elaborated in continental-European civil law doctrine.

Unlike the Anglo-Saxon one, which gives primacy to precedents, the continental-European legal system contains a legal doctrine that is given great importance. All of the above from a legal-philosophical and bioethical point of view, leads to the issue of separable parts of the human body as objects of property rights, which is not expressly regulated by civil law legislation, and therefore the civil law (property law) doctrine comes to the fore. The preliminary question that arises in this regard is whether we can unconditionally consider a part of the human body as a thing? So Kačer and Pivac sensibly warn that "it is more than clear that the human body is neglected and under-normed in the current civil law norms (primarily in the Ownership and Other Proprietary Rights Act), which *de lege ferenda* should change."[111] For example, the Italian Civil Code in Art. 5. states that "acts of disposal of one's own body are prohibited if they cause a permanent reduction of bodily integrity or if they are otherwise contrary to the law, public order or morality." Provisions on limited disposal of parts of the human body do not exist in Croatian civil legislation, but The Act on Transplantation of Human Organs for the Purpose of Treatment (art. 8) and The Act on the Use of Human Tissue and Cells (art. 7) state that "it is forbidden to give or receive any kind of financial compensation for the taken tissue, and to obtain other financial benefits", except in cases of: 1. "compensation to living donors for lost earnings or any other justified costs caused by taking tissue or related to necessary medical examinations, 2. justified fees for the necessary health or technical services provided in connection with tissue collection, 3. compensation in the event of excessive damage resulting from tissue collection from a living donor."

It is not disputed that inseparable parts of the (living) human body cannot be considered things because they do not meet all the conditions of natural and legal criteria, but the issue of property rights over parts of the human body refers

---

110 Aramini, *op. cit.*, note: 106, p. 254 The above is also based on Kant's view of the means and ends of a human being.

111 Kačer, B., Pivac, D., *Podjele stvari i pravno značenje tih podjela (u Zakonu o vlasništvu i drugim stvarnim pravima), Ljudsko tijelo, Zakon o vlasništvu i drugim stvarnim pravima i Zakon o zemljišnim knjigama,* 1997.-2017., in Kačer, B. (ur.) Hrvatsko stvarno pravo *de lege lata* i *de lege ferenda*, Inženjerski biro, Zagreb, 2017, pp. 122-151.

exclusively to parts of the body separated from the human body[112] and the body of a deceased person. [113] As far as separate parts of the body and substitutes of natural and artificial origin are concerned, in the Croatian civil law doctrine, it is considered that all conditions are met and that they should be legally recognized as things. [114] Parts of the human body can be classified as things limited in legal transactions, movable, indivisible and non-consumable things. Whether parts of the human body can be labeled as replaceable can be labeled controversial. Irreplaceable things come into legal transaction as a strictly defined individuality, such as an artistic painting or a fashion creation. A work of art is unique and has no substitute. If, for example, a person is transplanted with an organ that the body rejects, the same person can be re-transplanted with another organ of the same type and properties, whereby organs can be classified as replaceable things, regardless of their own specificity.[115] When the organ or tissue has not yet been transplanted to the recipient, either based on dereliction or based on donation, the organ is owned by the health institution where the organ or tissue was taken. Furthermore, it is quite clear that the moment the organ is transplanted to the recipient, it ceases to be the institution's property. It should be noted here that an organ or tissue can be considered a thing only when an institution owns it, and once it becomes part of another person's body, it ceases to be a thing. This is precisely where the specificity of the mentioned process is hidden, because a certain entity that was considered a thing becomes part of the personality of a legal subject. In any kind of breach, personality rights are violated in the form of the (personality) right to physical and psychological integrity.

Transplantation of parts of the human body represents a morally high procedure since, in addition to respecting the medico-legal and medical-ethical principle of

---

112 Kačer, H., *Tijelopatija (Pravni status dijelova ljudskog tijela u (hrvatskom) građanskom pravu*, 1 Godišnjak – Hrvatsko društvo za građanskopravne znanosti i praksu, Zagreb, 2002, pp. 313-339.

113 In German civil law doctrine, the authors emphasize that "a human corpse is a thing, but of a special kind because there can be no right of ownership over it, which is also accepted in the Slovenian legal doctrine, where dispositions are not considered dispositions in the sense of real law, but in the sense of the exercise of personal rights" Larenz, K., Wolf, M., Allgemainer teil des Burgerlichen Rechts, Verlag C.H. Beck, Munich, 1997, p. 385. also: Erman, W., Handkommentar zum Burgerlichen Gesetzbuch, I. Band, 9. Aufl Ashendorff Munster, p. 194.; Juhart, M. *et al.*, *Stvarnopravni zakonik s komentarom*, Gv Založba, Ljubljana, 2004, p. 117..; From: Ivančić-Kačer, *op. cit.*, note: 94, p. 54-55., Here it is necessary to point out that the above can be concluded from the Croatian medical regulations as well because The Act on Transplantation of Human Organs for the Purpose of Treatment (art.9) and The Act on the Use of Human Tissue and Cells (art.5) states "when taking organs from a deceased person, it is necessary to act with due respect for the personal dignity of the deceased person and his family." Also: Vedriš, M., Klarić, P., *op. cit.*, note: 18, pp. 72-73.

114 *Ibid.*

115 Compare Nedić, *op. cit.*, note: 101, p. 191.

patient autonomy[116], many human lives are saved by taking healthy organs from a certain person. In addition to a living donor, taking organs from a deceased donor who must not be entered in the Register of Non-Donors is much more common in medical practice. Namely, the Republic of Croatia belongs to opt-out countries[117] where presumed consent is required when taking organs from the deceased donor. The stated means that organs are taken from those who did not expressly object to being a donor during their life after death.[118] This concept is the opposite of the so-called opt-in system for organ transplantation, where the express consent of the donor is required. [119] Although both concepts have their own (bio)ethical and legal advantages and disadvantages, the opt-out concept further expands the circle of organ and tissue donors and the number of organs and tissue. [120]

5. CONCLUSION

This paper aimed to examine whether important social determinants - digital assets, animals and human body parts - can be subsumed under the classical understanding of property and thus be the object of property rights. At this point, the aim of writing about rights over digital assets is to draw the reader's attention to this issue and make readers aware that: a) almost all of us have these assets, b) most of us are not aware what rules apply to them, and therefore, c) we, for the most part, have no idea what we can do with these assets. In this paper, the authors have scratched the surface of only three types of digital assets – social networks, e-mail and cryptocurrencies. Regarding most of the content on social networks and e-mail accounts, it would probably be unrealistic to consider them traditional property and apply property law rules. It might be more appropriate to apply

---

116 See: Beauchamp, T. L.; Childress, J. F., *Principles of Biomedical Ethics*, Oxford: Oxford University Press, 2012, 101; Herring, J., *Medical Law and Ethics*, Oxford: Oxford University Press, 2016, pp. 8-14. Nikšić., S., *Načelo autonomije pacijenta u hrvatskom pravu*, Bioetika i medicinsko pravo: Zbornik radova 9. bioetičkog okruglog stola, Rijeka, 2008, pp. 163-171.

117 In addition to Croatia, the mentioned system is also present in most EU countries: Italy, France, Spain, Belgium, Poland, Austria, Switzerland, Sweden, Norway, Croatia, Slovenia.

118 In The Act on Transplantation of Human Organs for the Purpose of Treatment (art. 17. par. 1) and The Act on the Use of Human Tissue and Cells, state that organs and tissue from a deceased person may be taken for transplantation only if the donor did not oppose the donation in writing during his lifetime.

119 The opt-in system is present in countries such as Germany, Australia, Denmark and the USA, where in Denmark, however, there is a public debate about the transition to the opt-out system. See: A new organ donation system could save more lives, School Of Bussiness and Social Sciences, Aarhus University, [https://bss.au.dk/en/insights/samfund-1/2021/a-new-organ-donation-system-could-save-more-lives], Accessed 30 April 2023.

120 More about the same issue in: Usman Ahmad, M. et al., *A Systematic Review of Opt-out Versus Opt-in Consent on Deceased Organ Donation and Transplantation (2006–2016)*, World Journal of Surgery, 2019, pp. 1–11; Nedić, *op. cit*., note:101, pp. 109-114.

the provisions of copyright law, since much of that content can be considered copyrighted work. Also, the provisions concerning protecting personal data and privacy are applicable for a certain portion of such content. Regarding cryptocurrencies, the authors took the position that these digital assets are closest to the traditional concept of property because the one holding them can transfer them, possess and exclude others, which is generally associated with ownership. Although animals in civil law doctrine are mostly understood as things, with certain exceptions, it is evident that certain comparative legislation recognizes the legal status of animals that refers to non-things and sentient beings. The above shows that the classic concept of things and property is disappearing increasingly in the context of animals and that enabling certain new concepts (e.g. living property, modified subjecthood etc.) can contribute even more to preserving animal integrity, thus the environment and nature. It is also necessary to emphasize that the categorical intention to label animals as classic legal subjects has numerous obstacles. It is questionable how legally and socially acceptable and sustainable such labeling is. Parts of the human body can be considered property when they are separable and those body parts from a dead person whose corpse must be treated with piety and reverence. Their disposal cannot be unlimited and is determined by specific bioethical principles aimed at preserving the life and health of the donor, which is also accepted in certain civil and medical legislations. However, even such a designation is not final and may depend on a specific part of the body that is regulated by special legislation. Also, such a designation will encounter numerous challenges with the parallel development of biomedical engineering and technologies.

REFERENCES

BOOKS AND ARTICLES

1. Aramini, M., *Uvod u bioetiku*, Kršćanska sadašnjost, Zagreb, 2009
2. Banta, N., *Property Interests in Digital Assets: The Rise of Digital Feudalism*, 38 Cardozo Law Review, 2017
3. Barbić, J.; Zibar, L., *Ethical principles of organ transplant treatment,* in: Fatović-Ferenčić, S.; Tucak, A., (ed.), Medical ethics, Zagreb: Medicinska naklada, 2011
4. Beauchamp, T. L.; Childress, J.F., *Principles of Biomedical Ethics,* Oxford: Oxford University Press, 2012
5. Birnhack, M.; Morse, T.*, Digital Remains: Property or Privacy?,* International Journal of Law and Information Technology, Vol. 30, No. 3, 2023
6. Bodul, D., *O ovrsi na kripto imovini ili o jednoj pravnoj praznini?*, Zbornik radova s VIII. međunarodnog savjetovanja: „Aktualnosti građanskog procesnog prava - nacionalna i usporedna pravnoteorijska i praktična dostignuća" 2022

7. Boemke, B., Ulrici, B., *BGB Allgemeiner Teil*, Springer, Heidelberg, Dordrecht, London, New York, 2009
8. boyd, d; Ellison, N. B., *Social Network Sites: Definition, History and Scholarship*, 13 J. Computer-Mediated Comm, 2007
9. Bydlinski, P., *Bürgerliches Recht, Band I, Allgemeiner Teil*, 4th ed, Springer, Wien, New York, 2007
10. Dickenson, D., *Property in the Body: Feminist Perspectives*, Cambridge University Press, 2017
11. Dunham IV, C.C., *Body Property: Challenging the Ethical Barriers in Organ Transplantation to Protect Individual Autonomy*, 17 Annals of Health Law, 2008
12. Cahn, N., *Post Mortem Life On-line*, 25 Probate & Property, 2011
13. Campbell, A. V., *The Body in Bioethics*, Routledge-Cavendish, 2009
14. Carr, D., *Cryptocurrencies as Property in Civilian and Mixed Legal Systems*, in: Fox, D., Green S. (eds), Cryptocurrencies and Private Law, Oxford University Press, Oxford, 2019
15. Erman, W., *Handkommentar zum Burgerlichen Gesetzbuch*, I. Band, 9. Aufl Ashendorff Munster, 2008
16. Favre, D., *Equitable self-ownership for animals*, Duke Law Journal, Vol. 50, No. 2, 2000
17. Favre, D., *Living Property: A New Status for Animals Within the Legal System*, Marquette Law Review, Vol. 93, No. 3, 2010
18. Fabre, C., *Whose body is it anyway? : Justice and the integrity of the person*, Clarendon Press, Oxford, 2009
19. Francione, G. L., *Animals—Property or Persons?,* in: Sunstein, C. S.; Nussbaum, M.C. (eds.), Animal Rights: Current Debates and New Directions, Oxford University Press, 2005,
20. Gavella, N. *et al.*, *Stvarno pravo*, Narodne novine, Zagreb, 2017
21. Harbinja, E., *Digital Death, Digital Assets and Post-Mortem Privacy*, Edinburgh University Press, 2023
22. Harbinja, E., *The 'New(ish)' Property, Informational Bodies, and Postmortality,* in: Savin-Baden, M.; Mason-Robbie V. (eds.), Digital Afterlife: Death Matters in a Digital Age, CRC Press, 2020
23. Hardcastle, R., *Law and the Human Body: Property Rights, Ownership and Control*, Portland: Hart Publishing, 2007
24. Haworth, S. D., *Laying Your Online Self to Rest: Evaluating the Uniform Fiduciary Access to Digital Assets Act*, University of Miami Law Review, Vol. 68, No. 2, 2014
25. Henneberg, I., *Autorsko pravo*, Narodne novine, Zagreb, 1996
26. Herring, J., *Medical Law and Ethics*, Oxford: Oxford University Press, 2016
27. Gary L., *Animals - Property or Persons?,* in: Cass R. Sunstein, and Martha C. Nussbaum (eds.), Animal Rights: Current Debates and New Directions, Oxford University Press, 2005
28. Ivančić-Kačer, B., *Građanskopravni aspekti transplantacije dijelova ljudskog tijela*: doktorska disertacija, Pravni fakultet u Zagrebu, 2013
29. Juhart, M. *et al., Stvarnopravni zakonik s komentarom*, Gv Založba, Ljubljana, 2004
30. Kačer, B., Pivac, D., *Podjele stvari i pravno značenje tih podjela (u Zakonu o vlasništvu i drugim stvarnim pravima), Ljudsko tijelo, Zakon o vlasništvu i drugim stvarnim pravima i Zakon*

o zemljišnim knjigama, 1997.-2017., in: Kačer, B. (ur.) Hrvatsko stvarno pravo de lege lata i de lege ferenda, Inženjerski biro, Zagreb, 2017

31. Kačer, H., *Tijelopatija (Pravni status dijelova ljudskog tijela u (hrvatskom) građanskom pravu*, 1 Godišnjak – Hrvatsko društvo za građanskopravne znanosti i praksu, Zagreb, 2002
32. Kant, I., *Lectures on Ethics*, Cambridge University Press, 1997
33. Klarić, P; Vedriš, M., *Građansko pravo*, Narodne novine, Zagreb, 2014
34. Klasiček, D., *Digital Inheritance,* in: Barković, D. *et al.* (eds), IMR 2018: Interdisciplinary Management Research XIV. Faculty of Economics. Josip Juraj Strossmayer University of Osijek, 2018
35. Kramer, M., *Do Animals and Dead People Have Legal Rights?,* Canadian Journal of Law & Jurisprudence, Vol. 14, No. 1, 2001
36. Krneta, S, *Subjektivna prava,* in: Enciklopedija imovinskog prava i prava udruženog rada, Vol III, Novinsko-izdavačka ustanova, Službeni list SFRJ, Belgrade, 1978
37. Kurki, V.A.J., *A Theory of Legal Personhood*, Oxford University Press, 2019
38. Kurki, V.A.J., *Why Things Can Hold Rights: Reconceptualizing the Legal Person,* in: Kurki V.A.J.; Pietrzykowski, T. (eds.), *Legal Personhood: Animals, Artificial Intelligence and the Unborn*, Springer, Cham, 2017
39. Larenz, K., Wolf, M., *Allgemainer teil des Burgerlichen Rechts*, Verlag C.H. Beck, Munich, 1997
40. Mimnagh, L.M., *The Disposition of Human Remains and Organ Donation: Increasing Testamentary Freedom While Upholding the No Property Rule*, 7 Western Journal of Legal Studies, 2017
41. Morse, T.; Birnhack, M., *Digital Remains, The Users' Perspective*, in: Savin-Baden, M.; Mason-Robbie, V. (eds.), Digital Afterlife: Death Matters in a Digital Age, CRC Press, 2020
42. Nedić, T., Bioetički aspekti presađivanja organa, doktorska disertacija, Pravni fakultet u Osijeku, Osijek, 2022
43. Nikšić, S., *Načelo autonomije pacijenta u hrvatskom pravu*, Bioetika i medicinsko pravo: Zbornik radova 9. bioetičkog okruglog stola, Rijeka, 2008
44. Omelchuk, O.; Iliopol, I.; Alina, S., *Features of inheritance of cryptocurrency assets*, Ius Humani, Revista de Derecho, Vol. 10, No. 1
45. Penner, J.E., *Property Rights, A Re-Examination*, Oxford University Press, 2020
46. Pichler, D., *Novo stvarnopravno uređenje lovišta*, Zbornik Pravnog fakulteta Sveučilišta u Rijeci, Vol. 40, No. 1, 2019
47. Pietrzykowski, T., *Personhood Beyond Humanism- Animals, Chimeras, Autonomous Agents and the Law*, Springer, Cham, 2018
48. Pietrzykowski, T., *The Idea of Non-personal Subjects of Law*, in: Kurki, V.A.J Pietrzykowski, T., (eds.), Legal Personhood: Animals, Artificial Intelligence and the Unborn, Springer, Cham, 2017
49. Quigley, M., *Self-Ownership, Property Rights, and the Human Body*, *A Legal and Philosophical Analysis*, Cambridge University Press, 2018

50. Radolović, A., *Subjekti građanskopravnog odnosa*, Pravo u gospodarstvu, Zagreb, Vol. 52, No. 1, 1/2013
51. Regan, T., *The Case For Animal Rights*, University of California Press, 1983
52. Rycroft, G. F., *Legal Issues in Digital Afterlife,* in: Savin-Baden, M.; Mason-Robbie. V. (eds.), Digital Afterlife: Death Matters in a Digital Age, CRC Press, 2020
53. Singer, P., *Animal Liberation: A New Ethics for Our Treatment of Animals*, HarperCollins, 1975
54. *The Oxford Handbook of the New Private Law*, in: Gold, A.S., *et al.* (eds.), Oxford University Press, 2021
55. Usman Ahmad, M. *et al., A Systematic Review of Opt-out Versus Opt-in Consent on Deceased Organ Donation and Transplantation (2006–2016),* World Journal of Surgery, 2019
56. van Erp, S.; Swinnen, K., *The legal status of co-generated data with particular focus on the ALI-ELI Principles for a Data Economy and the rules on accession, commingling and specification,* Technology and Regulation, 2022
57. Visković, N., *Životinja i čovjek, Prilog kulturnoj zoologiji*, Književni krug Split, Split, 1996
58. Vodinelić, V. V., *Građansko pravo, Uvod u građansko pravo i opšti deo građanskog prava*, Pravni fakultet Univerziteta Union u Beogradu, 2012
59. Wagner, D., M., *Property Rights in the Human Body: The Commercialization of Organ Transplantation and Biotechnology*, 33 Duquesne Law Review, 1995
60. Wall, J., *Being and owning: the body, bodily material, and the law*, Oxford University Press, Oxford, 2015

EU LAW

1. Consolidated version of the Treaty on the Functioning of the European Union, OJ C 326/47
2. Directive 98/44/EC of the European Parliament and of the Council of 6 July 1998 on the legal protection of biotechnological inventions, OJ L 213
3. Regulation (EU) of the European Parliment and of the of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation), OJ L119/1

LIST OF NATIONAL REGULATIONS, ACTS AND COURT DECISIONS

1. Act on Blood and Blood Products, Official Gazette No. 79/06, 124/11
2. Animal Protection Act, National Gazette 102/17, 32/19
3. Act on Medically Assisted Fertilization, National Gazette 86/12
4. Act on Payment Transactions, Official gazette No. 66/18
5. Act on the Removal and Transplantation of Human Body Parts for the Purpose of Treatment , Official Gazette, No. 177/04 and 45/09, 144/12, 144/12
6. Act on the Use of Human Tissue and Cells, Official Gazette No. 144/12

7. Act on Transplantation of Human Organs for the Purpose of Treatment, Official Gazette No. 144/12
8. Austrian General Civil Code (Allgemeines Bürgerliches Gesetzbuch (ABGB), 1812
9. Civil Obligations Act, National Gazette No. 35/05, 41/08, 125/11, 78/15, 29/18, 126/21, 114/22, 156/22
10. Copyright and Related Rights Act – further Copyright Act (CA), Official Gazette No. 111/21.
11. Italian Civil Code, Codice Civile 2023Testo del Regio Decreto 16 marzo 1942, n. 262 aggiornato con le modifiche apportate, da ultimo, dal D.L. n. 19/2023
12. Electronic Money Act, Official Gazette No. 64/18, 114/22
13. German Civil Code (Bürgerliches Gesetzbuch, BGB, 1896
14. Hunting Act, Official Gazette, National Gazette No. 99/18, 32/19, 32/20
15. Nature Protection Act, National Gazette No. 80/13, 15/18, 14/19, 127/19
16. Ownership and Other Proprietary Rights Act, Official Gazette No. 91/96, 68/98, 137/99, 22/00, 73/00, 129/00, 114/01, 79/06, 141/06, 146/08, 38/09, 153/09, 143/12, 152/14, 81/15, 94/17
17. Bazley v Wesley Monash IVF Pty Ltd [2010] QSC 118
18. VSH Rev 12/80, 14.5.1980

WEBSITE REFERENCES

1. School Of Bussiness and Social Sciences, Aarhus University, *A new organ donation system could save more lives*, [https://bss.au.dk/en/insights/samfund-1/2021/a-new-organ-donation-system-could-save-more-lives], Accessed 30 April 2023
2. ALI-ELI Principles for a Data Economy – Data Transactions and Data Rights
3. [https://www.europeanlawinstitute.eu/fileadmin/user_upload/p_eli/Publications/ALI-ELI_Principles_for_a_Data_Economy_Final_Council_Draft.pdf], Accessed 4 July 2023
4. DW, *Berlin court rules for Facebook over grieving parents*, 2017, [https://www.dw.com/en/berlin-court-rules-grieving-parents-have-no-right-to-dead-childs-facebook-account/a-39064843], Accessed 30 April 2023
5. Britannica, [https://www.britannica.com/technology/e-mail], Accessed 30 April 2023
6. Bodul, D.; Dešić, J., *Zakonsko reguliranje kriptoimovine - između želje i mogućnosti*, [https://informator.hr/strucni-clanci/zakonsko-reguliranje-kriptoimovine], Accessed 30 April 2023
7. Davey, T., *Until Death Do Us Part: Post-mortem Privacy Rights for the Ante-mortem Person*, (PhD. thesis, University of East Anglia, 2020, 12-13 [https://ueaeprints.uea.ac.uk/id/eprint/79742/1/TINA%20DAVEY.%20THESIS%20FINAL%20%281%29.pdf], Accessed 30 April 2023
8. Daten Ethik Kommission, [https://www.bmi.bund.de/EN/topics/it-internet-policy/data-ethics-commission/data-ethics-commission-node.html], Accessed 4 July 2023
9. Facebook, [https://www.facebook.com/help/1568013990080948], Accessed 30 April 2023

10. Facebook, [https://www.facebook.com/legal/terms/update?ref=old_policy], Accessed 30 April 2023
11. Google, [https://policies.google.com/terms?hl=en-US#toc-using], Accessed 30 April 2023
12. Opinion of the Data Ethics Commission, [https://www.bmj.de/SharedDocs/Downloads/DE/Themen/Fokusthemen/Gutachten_DEK_EN.pdf?__blob=publicationFile&v=2], Accessed 4 July 2023
13. Porezna uprava HR, mišljenje, [https://www.porezna-uprava.hr/HR_publikacije/ Lists/mislenje33/Display.aspx?id=19252], Accessed 30 April 2023.

UDK 349.22:004]: 342.7
Review article

WORKPLACE PRIVACY IN THE EU: THE IMPACT OF EMERGING TECHNOLOGIES ON EMPLOYEE'S FUNDAMENTAL RIGHTS

Adrienne Komanovics, PhD, Assistant Professor
Corvinus University of Budapest
Budapest, Fővám tér 8. Hungary
adrienne.komanovics@uni-corvinus.hu

ABSTRACT

Over the last decade, several new technologies have been adopted that enable more systematic surveillance of employees, creating significant challenges to privacy and data protection. The risks posed by the new devices and methods were exacerbated with the advent of Covid, with the involuntary introduction of digital tools to measure work output and efforts to get visibility back in the workplace through new means.

Against this backdrop, the article aims to examine the main issues in workplace surveillance. After a brief overview of the range of surveillance methods, such as video surveillance, network and e-mail monitoring, and employee tracking softwares (the so-called "bossware"), as well as the challenges posed by the new technologies, the paper goes on to individually analyse the legal aspects of monitoring employees for security or performance-related reasons. The phenomenon is examined in light of relevant EU legislation (the General Data Protection Regulation of 2016 being the most relevant one), as well as the opinions adopted by the Article 29 Working Party established by Directive 95/46 and the guidelines drawn up by the European Data Protection Board, established by the GDPR and replacing the WP. In doing so, the paper will elaborate on the concept of transparency, consent, purpose limitation, data minimization, data retention, the so-called expectation of privacy, and the lawfulness of processing, especially the issue of balancing the legitimate interests of the employer against the interests or fundamental rights of the data subject.

The results of the analysis suggest that new and emerging technologies developed to monitor employees in order to address productivity issues, security risks, and sexual harassment, combined with the fact that remote and hybrid work becomes the norm inevitably increase the porosity between work and private life and blur the line between public and private. Such an extensive intrusion into privacy calls for enhanced institutional efforts to protect workers from the surveillance overreach of the new digital devices.

***Keywords**: data protection; fundamental rights, GDPR, surveillance, workplace privacy*

1. INTRODUCTION

The spread of modern information technology throughout society, the increasing importance of information, and the transformation of workplace has a strong impact on our life. Although the use of new technologies admittedly results in greater efficiency and productivity, improved healthcare, and increased opportunities for education, they raise a host of privacy and other concerns. Vital information of clients and customers, including names, addresses, emails, phone numbers, health information or bank details, is collected, stored, and processed. Apart from security concerns, the collection of the traces we leave when browsing the Internet can be compiled into a comprehensive digital profile based on the analysis of our behaviour, to be used for targeted advertising or targeted political ads. Our profile might include sensitive data such as health data, financial situation, political orientation, and sexual orientation.

This is no different in the employment complex. With the rise of sophisticated and accessible workplace surveillance techniques, massive amounts of personal data are collected. Employers can implement surveillance measures for purposes such as promoting productivity or improving security. New, increasingly intrusive technologies enable more stringent scrutiny of the employees to monitor the work of staff or to check their presence, creating significant challenges to privacy and data protection. Surveillance intensified with the onset of the pandemic, as employers sought greater control of employees working remotely. However, working from home blurred the contours of public and private spheres.

This paper will not venture to provide a comprehensive analysis of the threats of technology to privacy; it has a narrower scope: it aims to outline the privacy risks of workplace surveillance in the Member States of the European Union. Since at the moment there is no specific EU legislation on the issue, the analysis builds upon GDPR (and its predecessor, Directive 95/46/EC) as well as the guidance provided by the EDPB (and its predecessor, the Article 29 Working Group, the opinions of which have mostly been endorsed upon, and sometimes developed further, by the EDPB). In doing so, the paper will borrow from the case law of the European Court of Human Rights and its interpretation of Article 8 ECHR in the context of workplace surveillance.

The article is structured as follows. The second section outlines the origins of data protection with a focus on Europe and highlights the salient features of data processing in the specific context of employment. The third section examines the various methods used in workplace surveillance and then goes on to analyse the relevant articles of the GDPR. The fourth section gives an overview of the current practice through the lens of the European Court of Human Rights, the CJEU so

far not being seized of this particular aspect of data protection. The fifth section finally addresses some concluding remarks on the legislative framework and the caselaw.

This paper is based on several methods. Desk research included the identification and analysis of relevant treaties and legislation, jurisprudence, and the interpretation provided by the EU data protection bodies. During the literature research, relevant academic publications were collected. The online research focused on several academic blogs and the database of Luxembourg and the Strasbourg Courts.

The research is qualitative and is concerned with the interpretation and assessment of how the interests relating to the protection of personal data could be reconciled with the interests relating to the processing of such data by the employer. Thus, after exploring the problem, i.e., data protection in Europe in general, and workplace surveillance, in particular, the paper goes on to critically describe the relevant legislation and, finally, to explain and interpret how the principles formulated either by the legislator or developed through jurisprudence were applied in cases reaching European tribunals.

It is argued that new and emerging technologies developed to monitor employees in order to address productivity issues, security risks, and sexual harassment, combined with the fact that remote and hybrid work becomes the norm inevitably increase the porosity between work and private life and blur the line between public and private. Such an extensive intrusion into privacy calls for enhanced institutional efforts to protect workers from the surveillance overreach of the new digital devices.

2. HISTORY OF DATA PROTECTION IN EUROPE: A BRIEF OVERVIEW

The authors of the European Convention on Human Rights could not have foreseen the inconceivable variety of situations where Article 8 might be engaged. The spread of evolutive interpretation, of the idea that "the Convention is a living instrument" has, however, allowed the Court to adapt the text of the Convention to legal, social, ethical or scientific developments,[1] thus expanding the scope of the Convention has been extended to scenarios not envisaged in the late 1940s.[2] Thus,

[1] *Tyrer v. the United Kingdom*, Application no. 5856/72, April 1978, para. 31.

[2] The storage of DNA profiles (*Aycaguer v. France*, Application no. 8806/12, 22 June 2017); private health data leaked to journalists (*Biriuk v. Lithuania*, Application no. 23373/03, 25 Nov 2008); protections for journalists and their sources (*Ernst and Others v. Belgium*, Application no. 33400/96, 15 July 2003) or the Court's finding in *López Ostra* that severe environmental pollution may affect indi-

the Court was given the opportunity to pronounce on various aspects of data protection, including, as will be demonstrated in Section 4, workplace surveillance.

As contemporaneous national legislations gave insufficient protection to individual privacy, the Council of Europe decided to draw up a specific instrument with the aim to guarantee adequate protection to the right of personal privacy vis-à-vis modern science and technology. Convention 108 of the Council of Europe[3] provided guarantees in relation to the collection and processing of personal data, contained special safeguards in case of "sensitive" data on a person's race, politics, health, religion, sexual life, criminal record and provided for the right to know and the right to correct. One of the main motivations for the Convention was to replace the predominant non-interference approach of the ECHR with a more positive, proactive and more structural approach.[4] Convention 108 is open to non-members of the Council of Europe and relies on national legislation for its implementation. In 2001, it was complemented by an additional protocol aiming at increasing the protection of personal data and privacy by providing for the establishment of national supervisory authorities, and transborder data flows to third countries, allowing it only if the recipient State or international organisation can provide an adequate level of protection.[5] A thoroughly revised Convention, referred to as Convention 108+, was adopted in 2018,[6] addressing the challenges to privacy resulting from the use of new information and communication technologies, and strengthening the Convention's mechanism to ensure its effective implementation.

The EU's first comprehensive data protection instrument was Directive 95/46/EC on the protection of individuals with regard to the processing of personal data and

---

viduals' well-being and prevent them from enjoying their homes in such a way as to affect their private and family life adversely (*López Ostra v. Spain*, Application no. 16798/90, 9 Dec 1994), just to name a few cases.

3 Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data (ETS No. 108), 1981.

4 Hustinx, P., *Data protection and international organizations: a dialogue between EU law and international law*, International Data Privacy Law, Vol. 11, No. 2, 2021, pp. 77-80. – Parallel to Convention no. 108, the OECD also prepared a document titled Guidelines on the Protection of Privacy and Transborder Flows of Personal Data, which was adopted in 1980 and was updated in 2013, C(80)58/FINAL, as amended on 11 July 2013 by C(2013)79. See also See also: UN Personal Data Protection and Privacy Principles, adopted 11 October 2018, available at: [https://unsceb.org/sites/default/files/imported_files/UN-Principles-on-Personal-Data-Protection-Privacy-2018_0.pdf], Accessed 15 April 2023.

5 Additional Protocol to the Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data, regarding supervisory authorities and transborder data flows (ETS No. 181), 2001.

6 Protocol amending the Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data (CETS No. 223), 2018.

on the free movement of such data (European Data Protection Directive). Over the years, data protection developed into a distinct value, data protection now being recognised as a fundamental right, separate from the right to respect for private life. The main elements of the current *corpus* of EU data protection law include Article 16 of the Treaty on the Functioning of the European Union (TFEU) providing that the EU shall lay down data protection rules for the processing of personal data, Article 8 of the Charter of Fundamental Rights containing an explicit right to the protection of personal data and providing for the establishment of national data protection authorities, Regulation 2016/679 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data (General Data Protection Regulation),[7] and Directive (EU) 2016/680 on the protection of natural persons regarding processing of personal data connected with criminal offences or the execution of criminal penalties, and on the free movement of such data (Data Protection Law Enforcement Directive).[8] In addition, the issue of harmonisation of data protection rules in the employment context was raised, but the Member States could not reach an agreement on the adoption of such sector-specific regulation.[9] In line with Article 98 GDPR requiring the EU legislator to update other Union legal acts, in 2017 the Commission published a proposal[10] a new regulation on privacy and electronic communications, with a view of replacing the so-called ePrivacy Directive.[11]

---

7 Regulation (EU) 2016/679 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation), [2016] OJ L119/1. – In 2012 the European Commission proposed a comprehensive reform of the EU's 1995 data protection rules.

8 Directive (EU) 2016/680 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data by competent authorities for the purposes of the prevention, investigation, detection or prosecution of criminal offences or the execution of criminal penalties, and on the free movement of such data, and repealing Council Framework Decision 2008/977/JHA (Data Protection Law Enforcement Directive), [2016] OJ L119/89.

9 "… a combination of legal, pragmatic, political, cultural, and constitutional factors hindered efforts of adopting such sector-specific legislation at the EU level." Abraha, H.H., *A pragmatic compromise? The role of Article 88 GDPR in upholding privacy in the workplace*, International Data Privacy Law, Vol. 12, no. 4, 2022, pp. 276-296, at p. 277. – See also *Bărbulescu* v. *Romania* [GC], Application no. 61496/08, 5 September 2017 (hereinafter *Bărbulescu*), para. 118, noting that there is no European consensus on the issue of how to regulate the question of the exercise by employees of their right to respect for their private life and correspondence in the workplace.

10 Proposal for a Regulation of The European Parliament and of the Council concerning the respect for private life and the protection of personal data in electronic communications and repealing Directive 2002/58/EC (Regulation on Privacy and Electronic Communications), COM/2017/010 final – 2017/03 (COD).

11 Directive 2002/58/EC of the European Parliament and of the Council of 12 July 2002 concerning the processing of personal data and the protection of privacy in the electronic communications' sector (Directive on privacy and electronic communications), [2002] OJ L 201/37.

Regarding the GDPR, which is at the heart of our investigation, the EU legislature has chosen to use a regulation as the form of legal instrument in order to increase the degree of uniformity of the EU data protection law.[12] The GDPR had been drafted in a technology neutral way, as a "flexible tool to ensure that the development of new technologies is in compliance with fundamental rights".[13] The GDPR has a dual purpose: the protection of natural persons with respect to the processing of personal data, on the one hand, and rules relating to the free movement of personal data in the internal market, on the other.[14] The GDPR requires Member States to legislate in some areas and provides them with the possibility to further specify the GDPR in others, leading to a considerable fragmentation of data protection law.[15]

The implementation costs of the introduction of the GDPR are estimated to have been significant.[16] Compliance with the GDPR is secured via the designation of a Data Protection Officer by the data controller or processor, while external supervision is secured with the establishment of independent national supervisory authorities.[17]

The measure to deal with data protection in the EU institutions and bodies is Regulation 2018/1725 on the protection of natural persons with regard to the pro-

---

12 Opinion of Advocate General Szpunar in Case C-439/19 *Latvijas Republikas Saeima*, ECLI:EU:C:2020:1054, para. 46.

13 European Commission, Commission Staff Working Document accompanying the document Communication from the Commission to the European Parliament and the Council. Data protection rules as a pillar of citizens empowerment and EUs approach to digital transition – two years of application of the General Data Protection Regulation, COM(2020) 264 Final, p. 10.

14 GDPR Art. 1.

15 European Commission, Commission Staff Working Document, *op. cit.*, note 13, p. 7.

16 "The average implementation cost of Fortune 500 companies was estimated to be 16 million USD." Lintvedt, M.N., *Putting a price on data protection infringement*, University of Oslo Faculty of Law Research Paper No. 2022-56, Vol. 12, No. 1, 2022, pp. 1-15, at p. 9.

17 GDPR Arts 37 and 51. – Custers, B.; Louis, L.; Spinelli, M.; Terzidou, K., Quis custodiet ipsos custodes? Data protection in the judiciary in EU and EEA Member States, *International Data Privacy Law*, Vol. 12, No. 2, 2022, pp. 93-112, at p. 96. See, however, the controversy in 2011, in which the Hungarian PM terminated the term of the data protection commissioner, available at: [https://www.reuters.com/article/us-eu-hungary-idUSBREA370TX20140408], accessed 15 April 2023; and Komanovics, A., *Hungary and the Luxembourg Court: The CJEU's Role in the Rule of Law Battlefield*. In: EU and Comparative Law Issues and Challenges Series (ECLIC), Vol. 6, 2022, pp. 122-157. On the enforcement challenges of data protection law, see e.g. Veale, M.; Binns, R.; Ausloos, J., *When data protection by design and data subject rights clash*, International Data Privacy Law, Vol. 8, No. 2, 2018, pp. 105-123, and Kuner, C.; Cate, F.H.; Lynskey, O.; Millard, C.; Ni Loideain, N.; Svantesson, D.J.B., *If the legislature had been serious about data privacy …*, International Data Privacy Law, Vol. 9, No. 2, 2019, pp. 75–77.

cessing of personal data by the Union institutions, bodies, offices, and agencies,[18] also establishing a European Data Protection Supervisor.

It is worth noting that data protection in the employment context displays several specific traits, not apparent in other data protection scenarios. To begin with, employment relationships are characterised by the intrusiveness and scale of technologies introduced under the guise of legitimate interests. Employers are increasingly deploying sophisticated technologies, a trend that has been exacerbated by the COVID-19 pandemic. This has normalized employee monitoring and surveillance in unprecedented ways and has increasingly blurred the line between work and private life. Furthermore, the employer-employee relationship is characterised by legal subordination.[19] The inherent inequality of power discredits consent as a legitimate basis for data processing. Finally, the collective nature of labour law does not easily fit with the individualistic approach of the GDPR, where rights are granted to the person concerned on an individual basis.[20]

Having clarified these differences, it should also be noted that individuals enjoy the right to their private lives, even in the workplace and in public spaces shared with others. In *Bărbulescu*, the European Court of Human Rights held that "an employer's instructions cannot reduce private social life in the workplace to zero".[21] The Court noted that the notion of private life "enshrines the possibility of approaching others in order to establish and develop relationships with them" and added that "it is in the course of their working lives that the majority of people have a significant, if not the greatest, opportunity to develop relationships with the outside world …".[22] For example, employees have a right to private communications in the workplace even if those communications occur on the employer's equipment or happen during work hours.

3. WORKPLACE SURVEILLANCE: THE RELEVANT RULES AND PRINCIPLES

The section starts with an overview of the various technology used in workplace surveillance, followed by the examination of the legitimate reasons set out in Ar-

[18] Regulation (EU) 2018/1725 of the European Parliament and of the Council of 23 October 2018 on the protection of natural persons with regard to the processing of personal data by the Union institutions, bodies, offices and agencies and on the free movement of such data, and repealing Regulation (EC) No 45/2001 and Decision No 1247/2002/EC, [2018] OJ L295/39.

[19] *Bărbulescu* para. 17.

[20] Abraha, *op. cit.* note 9, pp. 278-279.

[21] *Bărbulescu* para. 80.

[22] *Bărbulescu*, para. 71.

ticle 6 GDPR, and the identification of those which can provide a valid basis for data processing at the workplace. After a brief reference to the issue of sensitive data necessitating the application of more stringent rules, the section examines how the principles relating to the processing of personal data apply in the employment context.

3.1. Modern technology and the rise of employee monitoring

The intrusiveness and scale of technologies have increased during the last decades. Employers use a wide and constantly evolving variety of surveillance devices, including keyloggers and other tracking software, closed circuit cameras, radio-frequency identification badges, and methods such as saving screenshots, measuring the frequency of employers' clicks and keystrokes, taking webcam photos of the workers, laptops, or smartphones. Many gadgets contain recorders and cameras that can be remotely activated, while fitness and health tracking devices provided to employees as part of "wellness" programmes collect data on employee physical activity, heart rate, and sleep patterns.[23] The information extracted threatens not only the employees' right to privacy and data protection, but can lead to the violation of anti-discrimination provisions, as such health information could affect the employer's decision about promotion and dismissal.[24]

The proliferation of home-based telework, though already on the rise before Covid,[25] violently imposed on the world due to the pandemic in 2020-2022, accelerated the transition from a regular organisation of work to working from home and "fostered the porosity between work and private life".[26] While the shift to tele-

---

[23] Garden, C., *Labor Organizing in the Age of Surveillance*, Saint Louis University Law Journal, Vol. 63, 2018, pp. 55-68, at p. 56-59. See also Collins, P.; Marassi, S., *Is That Lawful? Data Privacy and Fitness Trackers in the Workplace*, International Journal of Comparative Labour Law and Industrial Relations, Vol. 37, No. 1, 2021, pp. 65-94; Brassart Olsen, C., *To track or not to track? Employees' data privacy in the age of corporate wellness, mobile health, and GDPR*. International Data Privacy Law, Vol. 10, No. 3, 2020, pp. 236–252.

[24] Brassart Olsen, *op. cit.*, note 23, at p. 236. See also Collins, Marassi, *op. cit.*, note 23, at pp. 65-94.

[25] "According to data from the 2015 European Working Conditions Survey, the overall proportion of people teleworking was high in the Nordic countries – Denmark (37%), Sweden (33 %) – and the Netherlands (30%); it was average in countries such as Luxembourg (26%), France (25%), Estonia (24%), Belgium (24%) and Finland (24%); and it was low in half of EU countries, ranging from 12-13% (Germany, Spain, Bulgaria, Lithuania and Romania) to 7-11% (Italy, Czechia, Poland, Slovakia, Portugal and Hungary)." European Economic and Social Committee, Opinion on 'Challenges of teleworking: organisation of working time, work-life balance and the right to disconnect' (Exploratory opinion at the request of the Portuguese Presidency), EESC 2020/05278, [2021] C 220/01, para. 2.11.

[26] Leccese, V. S., *Monitoring working time and Working Time Directive 2003/88/EC: A purposive approach*, European Labour Law Journal, Vol. 14, No. 1, 2022, pp. 21-34, at p. 11.

working proved essential to combating the health crisis, and helped to ensure that the economy has continued to function and has saved jobs, it inherently attracted the application of increased surveillance and control, including measures such as monitoring the websites accessed, monitoring the employee's activity by regular screenshots, webcam surveillance, some of them remaining with us afterward. It is argued that surveillance whilst working from home almost reverses the original problem with workplace privacy: while in normal circumstances data protection at workplace relates to the protection of privacy in a public sphere, monitoring home office activities involves the monitoring of a private sphere which is rendered quasi-public through the surveillance. The employee's home becomes a public place, at least during working hours, leading to the convergence of two usually distinct spaces, namely the workplace and the private sphere.[27] Needless to say, the data protection implications are massive.

3.2. Lawfulness of processing

Before monitoring their workers, employers must determine the lawfulness of processing personal data. Employers do have a legitimate interest to protect their property from theft and engage in a certain level of monitoring to ensure the smooth running of the company.[28] The types of data processing range from application forms, payroll and tax, social benefits information, sickness records, annual leave records, annual assessment records, records relating to promotion, disciplinary matters, etc.[29] While a certain level of privacy should be guaranteed at workplace, employers have lawful reason to scrutinize their employees. However, drawing the line between acceptable and unacceptable data practices is not an easy task.

The lawful reasons for processing data are set out in Article 6(1) of the GDPR as follows.

Processing shall be lawful only if and to the extent that at least one of the following applies:

(a) the data subject has given consent to the processing of his or her personal data for one or more specific purposes;

---

27 Collins, P., *The Right to Privacy, Surveillance-by-Software and the "Home-Workplace"*, 3 September 2020, available at: [https://uklabourlawblog.com/2020/09/03/the-right-to-privacy-surveillance-by-software-and-the-home-workplace-by-dr-philippa-collins/], Accessed 15 April 2023.

28 See e.g. *Bărbulescu* para. 124.

29 Article 29 Data Protection Working Party, Opinion 8/2001 on the processing of personal data in the employment context, 5062/01/EN/Final, WP48, p. 2, fn. 5.

(b) processing is necessary for the performance of a contract to which the data subject is party or in order to take steps at the request of the data subject prior to entering into a contract;

(c) processing is necessary for compliance with a legal obligation to which the controller is subject;

(d) processing is necessary in order to protect the vital interests of the data subject or of another natural person;

(e) processing is necessary for the performance of a task carried out in the public interest or in the exercise of official authority vested in the controller;

(f) processing is necessary for the purposes of the legitimate interests pursued by the controller or by a third party, except where such interests are overridden by the interests or fundamental rights and freedoms of the data subject which require protection of personal data, in particular where the data subject is a child.

From these, four situations might be relevant in the employment context, namely consent, necessity based on the performance of a contract, compliance with legal obligation, and the legitimate interest pursued by the controller.[30] It is possible that there are multiple legal bases on which a controller can rely at the same time ("at least one of the following applies"). There is no hierarchy between the various bases.

As far as *consent* is concerned, it means "any freely given, specific, informed and unambiguous indication of the data subject's wishes by which he or she, by a statement or by a clear affirmative action, signifies agreement to the processing of personal data relating to him or her".[31] The request for consent must be presented in an intelligible and easily accessible form, using clear and plain language,[32] and must be clearly distinguishable from the other matters. The consent of the data subject must be given in relation to "one or more specific" purposes and the data subject must have a choice in relation to each of them. Furthermore, the the consent must be "informed". Therefore, the data subject must be informed, *inter alia*, of the identity of the controller, the purpose of each of the processing operations for which consent is sought, what type of data will be collected and used,

30 GDPR Art 6(1) points points (a), (b), (c) and (f).

31 GDPR Art 2(11).

32 Information must be "easily understandable for the average person and not only for lawyers; controllers cannot use long privacy policies that are difficult to understand or statements full of legal jargon", see European Data Protection Board, Guidelines 05/2020 on consent under Regulation 2016/679. Version 1.1, 4 May 2020, para. 67.

and the existence of the right to withdraw consent.[33] Providing information to data subjects before obtaining their consent is essential in order to allow them to make informed decisions. Unambiguous indication of wishes denotes that "consent requires a statement from the data subject or a clear affirmative act, which means that it must always be given through an active motion or declaration".[34] The controller must demonstrate that it is possible to refuse or withdraw consent without detriment.[35] In addition, data subjects shall have the right to withdraw their consent at any time. Finally, the burden of proof is on the data controller to demonstrate that consent has been given.[36]

However, the Article 29 Working Party, as well as the European Data Protection Board, has consequently maintained that "[e]mployees are almost never in a position to freely give, refuse or revoke consent, given the dependency that results from the employer/employee relationship."[37] In 2017, the Article 29 Working Party adopted specific guidelines on consent (revised in 2018), noting that:

> An imbalance of power also occurs in the employment context. Given the dependency that results from the employer/employee relationship, it is unlikely that the data subject is able to deny his/her employer consent to data processing without experiencing the fear or real risk of detrimental effects as a result of a refusal. It is unlikely that an employee would be able to respond freely to a request for consent from his/her employer to, for example, activate monitoring systems such as camera-observation in a workplace, or to fill out assessment forms, without feeling any pressure to consent. Therefore, WP29 deems it problematic for employers to process personal data of current or future employees on the basis of consent as it is unlikely to be freely given. For the majority of such data processing at work, the lawful basis cannot and should not be the consent of the employees (Article 6(1)(a)) due to the nature of the relationship between employer and employee.[38]

---

33 *Ibid.*, para. 64.

34 *Ibid.*, para. 75.

35 *Ibid.*, para. 46 and recital 42.

36 GDPR Art 7, Conditions for consent.

37 Article 29 Data Protection Working Party, Opinion 2/2017 on data processing at work, 8 June 2017, 17/EN, WP 249, para. 6.2.

38 Article 29 Data Protection Working Party, Guidelines on consent under Regulation 2016/679, 28 November 2017, last revised 10 April 2018, 17/EN, WP 259 rev. 01, at. p. 7. – See also para. 47 of European Data Protection Board, Guidelines 3/2019 on processing of personal data through video devices. Version 2.0, 29 January 2020; or para. 21 of the EDPB Guidelines 05/2020 on consent, *op. cit.* note 32.

In conclusion, workplace surveillance should not be based on consent, given the imbalance of power between employers and employees.

The next two lawful reasons are *contract* and *compliance with legal obligations*. In fact, various personal data, such as date of birth, address, bank details, social security number, are indispensable for the processing of payroll. Additionally, national legislation can require the provision of tax information, data on social security payments or on maternity and paternity leave. The "legal obligation" must have the force of law; soft measures, such as guidelines, are insufficient.[39]

The fourth potential basis, the most probable scenario, and the most interesting from our perspective is the *legitimate interest* of data processing of the employer in relation to a wide range of data. This is a flexible clause, covering all instances which are not covered by the other exceptions. In relation to all other exceptions, it is assumed that balance between interests is satisfied while, in contrast, this last exception contains a balancing test.[40] As the site GDPRhub, set up by European Center for Digital Rights, argues,

> "Article 6(1)(f) GDPR is the 'catch all' balancing test for anything not foreseen by Articles 6(1)(b) to (e) GDPR, where the controller does not seek consent, but takes the view that the rights of the controller or a third party override the rights of the data subject."[41]

The balancing involves a multi-step process and is entirely in the hands of the data controller. Controllers must verify the "legitimate" nature of their interests,[42] then identify the rights and interests of the data subject. Finally, the actual balancing between the two opposed positions must be carried out.[43] In doing so, several issues must be taken into consideration, including the nature of personal data (e.g. sensitive data, like biometric data, genetic information, communication data,

---

39 Article 29 Data Protection Working Party, Opinion 8/2001 on the processing of personal data in the employment context (WP48), *op, cit.*, note 29, at pp. 6-7; Article 29 Data Protection Working Party, Opinion 06/2014 on the notion of legitimate interests of the data controller under Article 7 of Directive 95/46/EC, 9 April 2014, 844/14/EN, WP 217; European Data Protection Board, Guidelines 05/2020 on consent *op. cit.*, note 32, paras. 30 and 31.

40 Indeed, other provisions of the GDPR also contain balancing tests, including the provisions on necessity, proportionality, and purpose limitation, data minimisation, Article 9(2)f), Article 13 and Article 85. Article 29 Data Protection Working Party, Opinion 06/2014 on the notion of legitimate interests of the data controller, *op. cit*. note 39, at p. 11.

41 GDPRhub, European Center for Digital Rights, available at: [https://gdprhub.eu/index.php?title=Article_6_GDPR], Accessed 15 April 2023.

42 The most common examples are the monitoring of employees to improve safety and productivity.

43 See Article 29 Data Protection Working Party, Opinion 06/2014 on the notion of legitimate interests of the data controller, *op. cit.* note 39, at pp. 23-33.

location data), the way the information is being processed (whether the data are made accessible to a large number of persons), the reasonable expectations of the data subjects, as well as the status of the data subject (children and other vulnerable natural persons may require special protection).[44]

If the preliminary analysis, carried out by the data controller, does not give a clear answer as to which way the balance should be struck, the data controller may introduce additional measures to secure appropriate balance, including the possibility for unconditional opt-outs, immediate deletion of data after use, functional separation and anonymisation techniques, or other privacy-enhancing technologies.[45] It should be noted that specific rules apply if the data processed come under the special categories provided for by Art. 9 GDPR.

3.3. Specific rules in case of special categories of data

Article 9 contains a general prohibition for the processing of special categories of data; data that are considered to be particularly sensitive such as those revealing racial or ethnic origin, political opinions, religion or philosophical beliefs, trade union membership as well as genetic data, biometric data, data concerning health or data concerning sex life or sexual orientation. Furthermore, Article 10 of the GDPR contains specific rules on personal data relating to criminal convictions and offences, thus also allowing for derogation from the general rules.

In the case of sensitive data, the GDPR provides for stricter standards: processing is prohibited with a few exceptions. For us, Art. 9(2)(b), (f) and (h) might be of interest, allowing data processing if data are necessary for employment and social security purposes, for the establishment, exercise or defence of legal claims as well as for medicinal purposes, and for the provision of health services.

3.4. Principles relating to the processing of personal data

As noted above, workers have to accept a certain degree of intrusion in their privacy; nevertheless, the level of acceptable interference is circumvented by various principles, set out in Article 5, such as (1) lawfulness, fairness and transparency; (2) purpose limitation; (3) data minimisation; (4) accuracy, (5) storage limitation, and (6) integrity and confidentiality.

---

44 *Ibid*., pp. 36-41. See also GDPR recital 75.

45 Article 29 Data Protection Working Party, Opinion 06/2014 on the notion of legitimate interests of the data controller, *op. cit.* note 39, at pp. 41-42.

(1) Lawfulness, fairness, and transparency. The data subject, workers in our case, must be properly informed about the data processed by their employers. Such processing might violate the GDPR not because the processing in itself is unlawful but because of the lack of information about them. The information must be provided in a concise, transparent, intelligible, and easily accessible form, using clear and plain language.[46]

Article 29 Working Party recommends the use of layered privacy notices. *The first layer*, a warning sign, must set out the purposes of processing, the identity of the controller, a description of the rights of the data subject, and a reference to the second layer. The sign must be placed so that the data subject can easily recognize the circumstances of the surveillance before entering the monitored area. *The second layer*, put at an easily accessible place or accessible easily, shall contain in a detailed manner all the mandatory information set by the GDPR.[47] For instance, in the case of video surveillance, workers should be aware of its existence, the places monitored, and the purposes of the surveillance (security-related, performance-related, etc.). In addition, controllers shall specify the consequences of processing, e.g. whether it might lead to disciplinary or criminal consequences. Transparency is applicable regardless of the legal basis for processing and throughout the processing life cycle.[48]

(2) Purpose limitation. The purpose limitation principle embodies the proportionality principle and serves as a safeguard against function creep. The data collected must not be used for purposes that are incompatible with the specified, predefined original purpose. Therefore, if surveillance is used for security purposes, the data collected in this way cannot be used for performance-related purposes. The aim of data collection must be legitimate and must be specific – broadly defined purposes are incompatible with this requirement.[49]

(3) Data minimisation. Article 5(1)c) is another manifestation of the principle of proportionality, whereby it provides that personal data shall be adequate, relevant, and limited to what is necessary. This is a stricter requirement than its counterpart in the Data Protection Directive (Article 6(1)c)), where the test could be passed

---

46 GDPR Art 12.

47 Article 29 Data Protection Working Party, Guidelines on transparency under Regulation 2016/679, 29 November 2017, last revised 11 April 2018, WP260rev.01, paras. 17, 35-36 and 38. See also European Data Protection Board, Guidelines 3/2019 on processing of personal data through video devices, *op. cit.*, note 38, para. 111.

48 Article 29 Data Protection Working Party, Guidelines on transparency, *op. cit.*, note 47, para. 5.

49 "Video surveillance based on the mere purpose of "safety" or "for your safety" is not sufficiently specific.", European Data Protection Board, Guidelines 3/2019 on processing of personal data through video devices, *op. cit.*, note 38, p. 9. See also Article 8(2) of the EU Charter.

with the collected data not being "excessive". Arguably, data protection law contains "an overarching proportionality principle, meant to even out the power and information asymmetry running between data controllers and data subjects."[50]

(4) Accuracy. Data must be accurate and kept up to date; and, since inaccurate information can have a harmful impact on data subjects, such data must be erased or rectified without delay. Although this principle is applicable to objective facts, as well as forecasts and correlations, value judgments cannot be required to be "corrected".

(5) Storage limitation. The temporal dimension of data minimisation, the principle of storage limitation requires that data shall be kept in a form which permits identification of data subjects for no longer than is necessary for the purposes for which the personal data are processed. This creates a positive obligation for the data controller to delete the data. The GDPR provides for an exception, thus storage in the public interest, scientific or historical research purposes, or statistical purposes is allowed.[51]

(6) Integrity and confidentiality. The last principle stipulates that data shall be processed in a manner that ensures appropriate security of personal data. Data must be protected against unauthorised access and unauthorised processing. In order to comply with this principle, the controller is obliged to introduce appropriate technical or organisational measures, having regard to the substantive and organisational contours specified in Article 32 GDPR.

Finally, it should be noted that Article 88 GDPR expressly authorizes Member States to regulate the processing of data in the context of employment. The list is open-ended and includes processing personal data for the purposes of recruitment, performance of the contract of employment, including management, planning and organisation of work, equality and diversity in the workplace, health and safety at work, protection of the property of the employer or customer. However, such special rules must comply with certain requirements regarding human dignity, legitimate interests, and fundamental rights.[52]

---

50 Dalla Corte, L., *On proportionality in the data protection jurisprudence of the CJEU*, International Data Privacy Law, Vol. 12, No. 4, 2022, pp. 259-275, at p. 264.

51 GDPR Art. 89(1).

52 On the relation between the first and the second paragraph of Art. 88, see Case C-34/21 *Hauptpersonalrat der Lehrerinnen und Lehrer beim Hessischen Kultusministerium v. Minister des Hessischen Kultusministeriums*, judgment of 30 March 2023, ECLI:EU:C:2023:270, paras. 73 and 74.

4. WORKPLACE SURVEILLANCE TESTED: RECENT CASE LAW OF THE STRASBOURG COURT

4.1. Preliminary comments

Before embarking on an analysis of European case law, the following points should be clarified. First, based on the search on the Court's website and EUR-Lex,[53] the Luxembourg Court apparently has not yet had the opportunity to pronounce on workplace surveillance. Several aspects of the GDPR have been addressed, including email marketing, online sale, customers' rights, the systematic recording of biometric and genetic data by the police,[54] the parallel exercise of administrative and civil remedies provided for in the GDPR,[55] the information regarding the recipients of personal data,[56] the identification of the holders of IP addresses suspected of online copyright infringement,[57] the right to erasure,[58] the general and indiscriminate retention of traffic data by operators providing electronic communications services,[59] and general and indiscriminate retention of traffic and location data relating to customers telecommunications,[60] just to name a few from the last year. Workplace surveillance, however, was not raised before the Court. Thus, further examination will focus on the ECHR case law, based on the premise that such an interpretation is also relevant for EU law. The right to protection of personal data is guaranteed by Article 8 of the EU Charter of Fundamental Rights. The Charter provisions are binding on the Member States when they implement Union law, which clearly includes the GDPR. Thus, Member States must have due regard to Article 8 of the Charter when implementing the GDPR. These provisions, read in conjunction with Art. 52(3) of the Charter[61] entails the obligation

---

53 The links:
[https://curia.europa.eu/juris/recherche.jsf?language=en] and
[https://eur-lex.europa.eu/homepage.html], respectively. The text searched was "workplace surveillance". The GDPRhub site was also consulted.

54 Case C-205/21 *Ministerstvo na vatreshnite raboti,* 26 Jan 2023, ECLI:EU:C:2023:49.

55 Case C-132/21 *BE v. Nemzeti Adatvédelmi és Információszabadság Hatóság*, 12 January 2023, ECLI:EU:C:2023:2.

56 Case C-154/21 *RW v. Österreichische Post*, 12 Jan 2023, ECLI:EU:C:2023:3.

57 Case C-470/21 *La Quadrature du Net et al. v. Premier ministre, Ministère de la Culture*; pending.

58 Case C-129/21 *Proximus NV v. Gegevensbeschermingsautoriteit*, 27 October 2022, ECLI:EU:C:2022:833.

59 Case C-339/20 *Criminal proceedings against VD*, *SR* (C-397/20), 20 September 2022, ECLI:EU:C:2022:703.

60 Joined Cases C-793/19 and C-794/19, *Bundesrepublik Deutschland v. SpaceNet AG and Telekom Deutschland GmbH*, 20 Sep 2022, ECLI:EU:C:2022:702.

61 Charter of Fundamental Rights of the European Union, OJ C 202, 7.6.2016, p. 391–407, Art. 52(3): "In so far as this Charter contains rights which correspond to rights guaranteed by the Convention for the Protection of Human Rights and Fundamental Freedoms, the meaning and scope of those rights

that the case law of the European Court of Human Rights be taken into account when interpreting the GDPR.

The most relevant (and recent) ECHR case law is concerned with emails (*Bărbulescu* v. *Romania* [GC]),[62] interception of telephone communications during criminal intelligence investigation (*Adomaitis*),[63] images (e.g. *López Ribalda and Others* v. *Spain* [GC]),[64] computer files (*Libert* v. *France*)[65] and geolocation data (*Florindo de Almeida Vasconcelos Gramaxo* v. *Portugal*).[66]

Second, as mentioned above, it is unreasonable to assume that an employer does nothing private in his workplace during work. The Court is clearly of the view that the right to private life encompasses activities that take place at work,[67] and the reasonable expectation of privacy of workers in those particular circumstances is an important element to be considered during the balancing act.[68]

Third, new technology, the appearance of more intrusive methods, coupled with the (sometimes involuntary) spread of teleworking, poses new challenges to the protection of privacy. Finally, our investigation is limited to one type of data processing, namely, workplace surveillance, more specifically, monitoring employees for security or performance-related reasons. Thus, personal data related to payroll, taxation, social security contributions, etc. do not form part of our investigation.

4.2. The test developed in *Bărbulescu*

The cases lodged with the Strasbourg Court relating to workplace surveillance involved both public authorities and private companies as employers. Therefore, the Court had the opportunity to pronounce on situations involving the State's negative obligations (no interference of a public authority in private life), as well as positive obligations (the positive obligations of States to ensure effective respect

shall be the same as those laid down by the said Convention. This provision shall not prevent Union law providing more extensive protection.".

62 *Bărbulescu*.

63 *Adomaitis v. Lithuania,* Application no. 14833/18, 18 January 2022 (hereinafter: *Adomaitis*).

64 *López Ribalda and Others v. Spain* [GC], Applications nos. 1874/13 and 8567/13, 17 October 2019. (hereinafter: *López Ribalda).*

65 *Libert v. France*, Application no. 588/13, 22 February 2018 (hereinafter *Libert*).

66 *Florindo de Almeida Vasconcelos Gramaxo v. Portugal*, no. 26968/16, 13 December 2022.

67 "The sphere of professional activities and premises does not, therefore, in principle fall outside the protection afforded by Article 8 of the Convention." *Gottfried Niemietz* v. *the Federal Republic of Germany*, no. 13710/88, Report of the Commission of 29 May 1991, para. 56. See also *Bărbulescu* paras. 70-72 and 80.

68 *Bărbulescu*, paras 73-81.

of the rights protected by Article 8).[69] Although in *Bărbulescu*, France argued that States had to enjoy a wide margin of appreciation in this sphere since the aim was to strike a balance between competing private interests, the Court found that "[w]hile the boundaries between the State's positive and negative obligations under the Convention do not lend themselves to precise definition, the applicable principles are nonetheless similar."[70] However, the Court has apparently shown a marked restraint when assessing States' positive obligations.[71]

As has been noted, consent cannot serve as the legal basis for workplace surveillance. The opinions and guidelines adopted by the Article 29 Working Party and the EDPB are consequent in arguing that due to the imbalance in the employment context, consent cannot generally be assumed to form the legal basis,[72] and the most adequate ground is the legitimate interest of the employer to protect its property interests, to guarantee safe working environment, and to monitor employee performance.

Surveillance can be both overt and covert, that is, carried out with or without the subject's knowledge. In the case of overt surveillance, for example, where cameras are visible or the worker is informed that his correspondence is monitored, the crucial issue is the transparency of the employer's policy. Thus, in *Libert*, relating to the opening of personal files stored on a professional computer, the applicant lost the case due to mislabelling his personal files on his computer at work. The User's Charter (the employer's regulation) specifically stated that private information must be clearly identified as such. The employer tolerated the occasional and reasonable use of the computer for personal purposes and could not surreptitiously open files identified as being personal "unless there was a serious risk or in exceptional circumstances". Furthermore, personal files could only be opened in the presence of the employee concerned or after the latter had been duly informed.[73] Here, as the files containing pornographic files and forged certificates drawn up for third persons had not been duly identified as being private, the employer could justify the opening of files based on the protection of the rights

---

69 *Bărbulescu*, para. 108; *Libert*, para. 41.

70 *Bărbulescu*, paras. 106 and 112.

71 See *López Ribalda* below.

72 See e.g. Article 29 Data Protection Working Party Opinion 8/2001on the processing of personal data in the employment context, *op. cit*., note 29, at p. 3, Article 29 Data Protection Working Party, Opinion 2/2017 on data processing at work (WP249), *op. cit.* note 37, para. 6.2.; Article 29 Working Party, Guidelines on consent under Regulation 2016/679, *op. cit.* note 38, at p. 7.; para. 47 of the European Data Protection Board, Guidelines 3/2019 on processing of personal data through video devices, *op. cit*. note 38, or para. 21 of the European Data Protection Board, Guidelines 05/2020 on consent, *op. cit.* note 32.

73 *Libert* para. 48.

of the employer,[74] however, only in the presence of the employee, a condition not satisfied here. Thus, the no-infringement decision was based on the argument that the files at issue had not been duly identified as being private.

In any case, the *Libert* case does not change the rule laid down in *Niemietz* that employees are entitled, even during working time and at the workplace, to respect for their privacy. Even when the computers are provided to the workers for exclusively professional purposes, the employer must tolerate occasional private use. In such circumstances, the employer must demonstrate compelling legitimate grounds underpinning surveillance measures. In *Bărbulescu*,[75] the Court has developed a six-point test to assess whether employee monitoring is justified. The test, relating to notification, extent of surveillance, level of intrusion, consequence for the employee, and the safeguards in place, provides guidance to strike a balance between the employer's interest in supervising its staff and the individual's right to respect for their private life.

In fact, in *Bărbulescu*, the ECtHR set out a six-point test to assess whether the national authorities had struck a fair balance between the competing interests at issue.[76] The test, relating to notification, extent of surveillance, level of intrusion, consequence for the employee, and the safeguards in place, provides guidance in striking a balance between the employer's interest in supervising its staff and the individual's right to respect for their private life.

First, it must be determined whether the employee has been notified of the possibility that the employer might take measures to monitor correspondence. The notification must be clear about the nature of the monitoring and be given in advance. However, the practical significance of the information element is reduced by several factors. First, the underlying assumption of notification is that the workforce makes choices based on a more complete set of information. Indeed, sufficient information about the nature of surveillance may serve as a basis to make an informed employment choice; nevertheless, all too often the feasibility of seeking an alternative job is illusory. Second, the notification factor is a double-edged sword. If failure to inform is contrary to human rights and EU law, is the

---

74 Legitimate aim of guaranteeing the protection of "the rights ... of others", in this case the rights of employers (*Libert* para. 46). The other justification raised – legitimate aim of preventing crime – was refused by the Court since "the opening of the files in question was not done in the context of the criminal proceedings", *Libert* para. 45.

75 *Bărbulescu*, para 121.

76 *Bărbulescu*, para 121.

opposite true? Can it be argued that actual information justifies surveillance?[77] The answer is obviously negative: monitoring harms the worker even when he knows it is happening;[78] and thus, information should be regarded as a threshold, a point of departure for the compatibility analysis.

The second principle focuses on the extent of the surveillance and the degree of intrusion into the employee's privacy, with various elements to be taken into account, including a distinction between the monitoring of the flow of communication and its content, whether all communications or only part of them have been monitored, the temporal and spatial limits of surveillance, and the number of people who had access to the results.

Third on the list, but arguably better positioned before the second criterion, is whether the employer has provided legitimate reasons to justify monitoring of the communications and accessing of their actual content. The fourth criterion is a proportionality-related one: the employer must establish that the monitoring system is implemented in the least intrusive manner possible. The expectation of privacy varies depending on the place scrutinized and surveillance must be tailored accordingly. In the Court's analysis, this expectation is very high in places that are private in nature, such as toilets or cloakrooms, where increased protection or even a complete ban on video-surveillance, is justified. It remains high in closed working areas, such as offices, while it is significantly lower in places that are visible or accessible to colleagues or the general public.[79]

The fifth criterion relates to the consequences of the monitoring for the employee who is subjected to it, while the sixth provides for the assessment of whether the employee had been provided with adequate safeguards to ensure that the employer cannot access the actual content of the communications concerned unless the employee has been notified in advance of that eventuality.[80]

---

77 Collins, P., *The Right to Privacy, Surveillance-by-Software and the "Home-Workplace"*, 3 September 2020, available at:
[https://uklabourlawblog.com/2020/09/03/the-right-to-privacy-surveillance-by-software-and-the-home-workplace-by-dr-philippa-collins/], Accessed 15 April 2023.

78 See e.g. Jervis, C.E.M., *Barbulescu v Romania: Why There is no Room for Complacency When it Comes to Privacy Rights in the Workplace*, 26 September 2017, available at:
[https://www.ejiltalk.org/barbulescu-v-romania-why-there-is-no-room-for-complacency-when-it-comes-to-privacy-rights-in-the-workplace/], Accessed 15 April 2023, or Ramasundaram, A.; Gurusamy, R., George, A., *Employees and workplace surveillance: Tensions and ways forward*, Journal of Information Technology Teaching Cases, 2022, pp. 1-5. Systematic monitoring has a marked impact on the individual's well being, productivity at work, causing anxiety and discomfort.

79 *López Ribalda* para. 125.

80 To this, the Court adds the requirement of adequate judicial remedy (access to a remedy before a judicial body, *Bărbulescu,* para. 122).

4.3. Covert surveillance

The test can also be applied to *covert* surveillance, as evidenced by *López Ribalda* where, after noticing irregularities between the stock in the shop and its sales and finding losses over five months, the manager of a supermarket installed both visible and hidden CCTV cameras. Although the employer had given workers notice of the installation of visible cameras, the employees were not informed for obvious reasons of the hidden ones. Soon afterwards, the manager showed a film of the applicants and other staff participating in the theft of goods in the shop to a union representative. The applicants were dismissed on disciplinary grounds, which they challenged, arguing that the covert video material collected in violation of their privacy rights could not be admitted in evidence.

The Chamber's conclusion was that, having regard to the extent of the surveillance – not being limited in time, affecting all employees working at the tills and covering all working hours – and to the lack of prior information, Spain has violated Article 8.[81] This decision was, however, reversed by the Grand Chamber, which concluded that the national authorities did not fail to fulfil their positive obligations under Article 8.

The Grand Chamber found that since the applicants worked in a supermarket that was a public place, their expectation of protecting their private life was necessarily limited.[82] The Court's analysis was based on the assumption that the principles developed in *Bărbulescu* relating to the monitoring of the correspondence and communications of employees were transposable to the installation of video-surveillance in the workplace.[83] After a rather perfunctory examination, the Court concluded that the Spanish authorities (the Employment Court) had not overstepped the margin of appreciation afforded to them. While the lack of information is in principle not acceptable, there might be certain exceptions, such as in the present case, justified by the existence of reasonable suspicion that serious misconduct has been committed and by the extent of the losses.[84]

In terms of the extent of the surveillance and the degree of intrusion into the employee's privacy, the Court found that the monitoring had been limited to what was necessary in relation to both the area and the employees being monitored. Surveillance took place in an area that was open to the public and involved permanent contact with customers. Therefore, employees' expectation of privacy was lower

81 *López Ribalda* para. 79.

82 *López Ribalda* para. 93.

83 *López Ribalda* para. 116.

84 *López Ribalda* para. 134.

than in places that were private. The duration of surveillance had not been excessive and did not go beyond what was necessary to confirm the suspicions of theft. The recordings had only been viewed by certain individuals before the employees had been informed (the manager, the employer's legal representative, and a trade union representative).[85] Regarding the employer's legitimate reasons, the Court took into account the significant losses recorded over several months and the intention to punish those responsible. The aims of ensuring the protection of its property and the smooth functioning of the company were found to be legitimate.[86]

Unfortunately, the fourth criterion regarding the intrusiveness of the measures was investigated in a rather half-hearted manner. The "European supervision" by the Court of the domestic margin of appreciation was arguably rather unsatisfactory. The Court accepted the assessment of the national authorities without much ado, despite the admission that "it would have been desirable for the domestic courts to examine in a more in-depth manner the possibility for the employer to have used other measures entailing less intrusion into the private life of the employees".[87]

The Court conceded that the consequences of the monitoring for the employees were very serious, nevertheless, it found that the surveillance had not been used for any purposes other than to investigate the thefts and to take the disciplinary measures against those responsible,[88] and the Court was also satisfied with the safeguards prescribed by domestic law.[89]

On the whole, *López Ribalda* is disconcerting inasmuch as the Court seemed to underestimate the risks of digital means of surveillance and its high level of intrusiveness.[90] Although the national courts failed to address the issue of whether a less restrictive measure could have been used by the employer to pursue the same aim, the Court was quick to accept the conclusions of the national authorities without a thorough analysis.

---

85 *López Ribalda* paras. 124 to 126. The monitoring lasted for ten days, which does not appear excessive: even though originally the employer had not set the duration but ceased as soon as the employees responsible had been identified.

86 *López Ribalda* para. 123.

87 *López Ribalda* para. 128. – See pee para. 49 of *Handyside v. the United Kingdom*, no. 5493/72, 7 December 1976, providing that "[t]he domestic margin of appreciation … goes hand in hand with a European supervision.".

88 *López Ribalda*, para. 127.

89 *López Ribalda*, para. 129.

90 Bregiannis, F.; Chatzinikolaou, A., *López Ribalda and Others v. Spain – covert surveillance in the workplace: attenuating the protection of privacy for employees*, 6 December 2019, available at: [https://strasbourgobservers.com/2019/12/06/lopez-ribalda-and-others-v-spain-covert-surveillance-in-the-workplace-attenuating-the-protection-of-privacy-for-employees/], Accessed 15 April 2023.

In *Adomaitis v. Lithuania*, another covert surveillance case, the governor of a prison was suspected of abusing his office in order to offer better conditions for some inmates. In the course of a criminal investigation, during one year his telephone communications were monitored and intercepted. Subsequently, lacking sufficient evidence to charge the applicant, the criminal intelligence investigation was discontinued. However, the information collected was allowed in a disciplinary proceedings that ultimately led to his dismissal. The applicant contested the lawfulness of using the information collected through covert surveillance.

The Court accepted the necessity of covert surveillance, since the applicant was the director of a protected incarceration facility, which significantly reduced other means for a criminal investigation.[91] A different issue is whether the use of that information in the disciplinary proceedings was proportionate. Here, the decisive elements were the applicant's position as the director of a prison, and the seriousness of the acts that were investigated, thus the Court agreed with the conclusions of the national authorities.[92] The Court also noted that the dismissal of the applicant was based not only on the intercepted communications, but also on other evidence, including contracts with the telecommunications company and witness testimony.[93] Even so, one cannot but challenge the accuracy of the Court's finding that the handing-over of the information thus obtained for the purposes of non-criminal proceedings was legitimate.[94]

The Court's assessment of the surveillance measures in *Florindo de Almeida Vasconcelos Gramaxo* v. *Portugal*[95] is also disconcerting. The case was related to data on the mileage of the applicant's company vehicle, collected using a GPS device originally installed by the applicant's employer to his full knowledge. Therefore, workers, including the applicant, were informed of the reasons for the measure (to monitor the distances travelled), as well as that disciplinary measures can be brought against them based on the data thus collected. Employees were not allowed to deactivate the geolocation system. The company allowed the use of the vehicle for private journeys and trips outside work hours, although the expenses associated with private trips had to be reimbursed.

When the employer became aware that the applicant had tampered with the system, a second hidden GPS was installed. The applicant was dismissed when it

---

91 *López Ribalda*, paras. 7 and 85.

92 *Adomaitis*, para. 87.

93 *Adomaitis*, para. 71.

94 See e.g. the partly dissenting opinion of Judge Koskelo.

95 No English translation of the judgment is available, but a the ECtHR's summary is available here: [https://bit.ly/41zwW5W].

was disclosed that he manipulated the device. At first instance, the dismissal was found to be justified, a conclusion supported by the appeal court, but on different grounds. The appeal court found that GPS constituted a means of remote surveillance prohibited by the Portuguese Labour Code. However, although GPS could not be used to monitor the observance of the required working hours, the employer was justified to use it to determine the distances travelled. By interfering with the operation of the GPS, the applicant breached his duty of loyalty to his employer.

The majority of the Strasbourg Court found that the interpretation of the appeal court significantly reduced the extent of intrusion. In these circumstances, the monitoring did not overstep what was strictly necessary to protect the legitimate aim of the employer, namely to monitor expenditure. However, in our view, the Court's assessment of the extent of intrusion continues to be problematic. The Court failed to consider that there had been a permanent 24/7 surveillance for three years, and that the GPS monitored the employees outside of working hours, during their free time as well. This seems hardly to be reconcilable with the principle of proportionality.

5. CONCLUSIONS

In this paper, we have described the European legislative framework and outlined the current practice of the European Court of Human Rights. The principles in the GDPR and the test developed in *Barbulescu*, while not identical, seem to address the same important concerns, including the lawfulness and legitimacy of data processing, notification, and several aspects of proportionality. Furthermore, both regimes appear to be flexible enough to cover a wide range of situations and to adapt to rapid changes in technology.

No doubt, prevention is better than cure. Before the introduction of surveillance measures or the installation of devices, employers should consider whether preventive measures are available, such as the use of filters in the case of monitoring of personal data relating to Internet or intranet pages accessed by the employee.[96] Admittedly, this is not always feasible.

So far, the Court of Justice of the European Union had no possibility to pronounce upon workplace surveillance; nevertheless, it has emphasised that the right

[96] Committee of Ministers, Recommendation CM/Rec(2015)5 to member states on the processing of personal data in the context of employment, April 2015, point 14.2.

to data protection is not absolute, and must be considered in relation to its function in society.[97]

In its judgments of the last few years, the European Court of Human Rights was called upon to assess whether the monitoring of telephone and internet use (*Bărbulescu*, *Adomaitis*), the opening of personal files on a professional computer (*Libert*), video surveillance (*López Ribalda*), and the use of geolocation system (*Florindo*) are compatible with the right to privacy.

Setting out specific factors to assess the proportionality of monitoring activities in *Bărbulescu* is a welcome development. However, in subsequent cases, the Court granted an inexplicably wide margin of appreciation to States, which resulted in insufficient protection to workers. Our research has demonstrated that in *López Ribalda* and *Florindo*, the Strasbourg Court showed an unexplainable restraint in the "supervision" of the domestic margin of appreciation. It is disappointing to see the blow the information criterion has suffered in López Ribalda, where the Court found no violation of Article 8 *even in the absence of notification* of the employees; it simply claimed that the other factors were all the more crucial if no notification had taken place. The employers' interests were deemed a necessary means to achieve legitimate and proportionate purposes of the employer.

Despite the increasing acceptance of surveillance technologies in society, employee monitoring must meet strict requirements and remain within what is legitimate and necessary. National legislators should modernise national regulatory frameworks, including the correct implementation of the GDPR in the case of the EU Member States, and addressing the challenges posed by modern forms of intrusive surveillance. Employers should ensure that their monitoring policy is clear and transparent, complies with national law, and preferably is developed through consultation with employees. Finally, given the imbalance of power between employers and employees, European supervision should show a certain restraint in the application of the margin of appreciation principle, and strike a proper balance between the competing interest.

REFERENCES

JOURNALS

1. Abraha, H.H., *A pragmatic compromise? The role of Article 88 GDPR in upholding privacy in the workplace*, International Data Privacy Law, Vol. 12, no. 4, 2022, pp. 276-296

[97] See e.g. Case C-311/18 *Data Protection Commissioner v. Facebook Ireland Limited and Maximillian Schrems*, 16 July 2020, ECLI:EU:C:2020:559, para 172, Case C-511/18 *La Quadrature du Net*, 6 October 2020, para. 120.

2. Atkinson, J., *Workplace Monitoring and the Right to Private Life at Work*, Modern Law Review, Vol. 81, No. 4, 2018, pp. 688-700
3. Ball, K., *Workplace surveillance: an overview*, Labor History, Vol. 51, 2010, pp. 87-106
4. Brassart Olsen, C., *To track or not to track? Employees' data privacy in the age of corporate wellness, mobile health, and GDPR*. International Data Privacy Law, Vol. 10, No. 3, 2020, pp. 236–252
5. Collins, P.; Marassi, S., *Is That Lawful? Data Privacy and Fitness Trackers in the Workplace*, International Journal of Comparative Labour Law and Industrial Relations, Vol. 37, No. 1, 2021, pp. 65-94
6. Custers, B., Louis, L., Spinelli, M., Terzidou, K., Quis custodiet ipsos custodes? Data protection in the judiciary in EU and EEA Member States, *International Data Privacy Law*, Vol. 12, No. 2, 2022, pp. 93-112
7. Dalla Corte, L., *On proportionality in the data protection jurisprudence of the CJEU*, International Data Privacy Law, Vol. 12, No. 4, 2022, pp. 259-275
8. Garden, C., *Labor Organizing in the Age of Surveillance*, Saint Louis University Law Journal, Vol. 63, 2018, pp. 55-68
9. Gonçalves, M.E., *The risk-based approach under the new EU data protection regulation: a critical perspective*, Vol. 23 No. 2, 2020, pp. 139-152
10. Hustinx, P., *Data protection and international organizations: a dialogue between EU law and international law*, International Data Privacy Law, Vol. 11, No. 2, 2021, pp. 77-80
11. Komanovics, A., *Hungary and the Luxembourg Court: The CJEU's Role in the Rule of Law Battlefield*. In: EU and Comparative Law Issues and Challenges Series (ECLIC), Vol. 6, 2022, pp. 122-157
12. Koops, B.J., *The concept of function creep*, Law, Innovation and Technology, 2021, Vol. 13, No. 1, pp. 29-56
13. Kuner, C., Cate, F.H., Lynskey, O., Millard, C., Ni Loideain, N., Svantesson, D.J.B., *If the legislature had been serious about data privacy …*, International Data Privacy Law, Vol. 9, No. 2, 2019, pp. 75–77
14. Leccese, V. S., *Monitoring working time and Working Time Directive 2003/88/EC: A purposive approach*, European Labour Law Journal, Vol. 14, No. 1, 2022, pp. 21-34
15. Lintvedt, M.N., *Putting a price on data protection infringement*, University of Oslo Faculty of Law Research Paper No. 2022-56, Vol. 12, No. 1, 2022, pp. 1-15
16. Molè, M., *The Internet of Things and Artificial Intelligence as Workplace Supervisors: Explaining and Understanding the New Surveillance to Employees Beyond Art. 8 ECHR*, Italian Labour Law E-Journal, Vol. 15 No. 2, 2022, pp. 87–103
17. Nogueira Guastavino, M., *Geolocalización lícita, probablemente desproporcionada. La necesidad de una vigilancia cualitativa, no cuantitativa*, Revista de Jurisprudencia Laboral, Vol. 5, No. 2, 2023, pp. 1-11
18. Quelle C., *Enhancing Compliance under the General Data Protection Regulation: The Risky Upshot of the Accountability- and Risk-Based Approach*, European Journal of Risk Regulation, Vol. 9, No. 3, 2018, pp. 502-526

19. Ramasundaram, A.; Gurusamy, R., George, A., *Employees and workplace surveillance: Tensions and ways forward*, Journal of Information Technology Teaching Cases, 2022, pp. 1-5
20. Veale, M., Binns, R., Ausloos, J., *When data protection by design and data subject rights clash*, International Data Privacy Law, Vol. 8, No. 2, 2018, pp. 105-123

WEBSITE REFERENCES

1. Bakos, A.C., *The European Court of Human Rights and Workplace Surveillance: Where is Article 31(3)(c) VCLT?*, 14 November 2019, available at: [https://www.ejiltalk.org/the-european-court-of-human-rights-and-workplace-surveillance-where-is-article-313c-vclt/], Accessed 15 April 2023
2. Ball, K., *Electronic Monitoring and Surveillance in the Workplace*, Publications Office of the European Union, Luxembourg, 2021, available at: [https://publications.jrc.ec.europa.eu/repository/handle/JRC125716], Accessed 15 April 2023
3. Bregiannis, F.; Chatzinikolaou, A., *López Ribalda and Others v. Spain – covert surveillance in the workplace: attenuating the protection of privacy for employees*, 6 December 2019, available at: [https://strasbourgobservers.com/2019/12/06/lopez-ribalda-and-others-v-spain-covert-surveillance-in-the-workplace-attenuating-the-protection-of-privacy-for-employees/], Accessed 15 April 2023
4. Chatzinikolaou, A., *Bărbulescu v Romania and workplace privacy: is the Grand Chamber's judgment a reason to celebrate?*, 19 October 2017, available at: [https://strasbourgobservers.com/2017/10/19/barbulescu-v-romania-and-workplace-privacy-is-the-grand-chambers-judgment-a-reason-to-celebrate/], Accessed 15 April 2023
5. Coe, P., *A Brave New Working World or something more sinister? Employer surveillance of employees working at home*, 4 November 2020, available at: [https://inforrm.org/2020/11/04/a-brave-new-working-world-or-something-more-sinister-employer-surveillance-of-employees-working-at-home-peter-coe/], Accessed 15 April 2023
6. Coe, P., *The European Court of Human Rights and the right to privacy in the workplace, Bărbulescu and Lopez Ribalda*, 15 November 2019, available at: [https://inforrm.org/2019/11/15/the-european-court-of-human-rights-and-the-right-to-privacy-in-the-workplace-barbulescu-and-lopez-ribalda-peter-coe/], Accessed 15 April 2023
7. Collins, P., *The Right to Privacy, Surveillance-by-Software and the "Home-Workplace"*, 3 September 2020, available at: [https://uklabourlawblog.com/2020/09/03/the-right-to-privacy-surveillance-by-software-and-the-home-workplace-by-dr-philippa-collins/], Accessed 15 April 2023
8. GDPRhub / European Center for Digital Rights, available at: [https://gdprhub.eu/index.php?title=Welcome_to_GDPRhub], Accessed 15 April 2023
9. Jervis, C.E.M., *Barbulescu v Romania: Why There is no Room for Complacency When it Comes to Privacy Rights in the Workplace*, 26 September 2017, available at: [https://www.ejiltalk.org/barbulescu-v-romania-why-there-is-no-room-for-complacency-when-it-comes-to-privacy-rights-in-the-workplace/], Accessed 15 April 2023
10. Mansoori, S., *Case Law, Strasbourg: Bărbulescu v Romania – Monitoring of an employee's communications held to be violation of Article 8 ECHR*, 2017, available at: [https://inforrm.

org/2017/09/12/case-law-strasbourg-barbulescu-v-romania-monitoring-of-an-employees-communications-held-to-be-violation-of-article-8-echr-sara-mansoori/], Accessed 15 April 2023

11. Molè, M., *Just more surveillance? Rethinking the 'pressing social need' for AI surveillance under the ECHR*, 14 February 2023, available at: [https://cooperante.uni.lodz.pl/2023/02/14/%EF%BB%BFjust-more-surveillance-rethinking-the-pressing-social-need-for-ai-surveillance-under-the-echr/], Accessed 15 April 2023
12. Mukherjee, G.; Wookey, J., *Resuscitating Workplace Privacy? A Brief Account of the Grand Chamber Hearing in Bărbulescu v. Romania*, 20 December 2016, available at: [https://strasbourgobservers.com/2016/12/20/resuscitating-workplace-privacy-a-brief-account-of-the-grand-chamber-hearing-in-barbulescu-v-romania/], Accessed 15 April 2023
13. Peers, S., *Is Workplace Privacy Dead? Comments on the Barbulescu judgment*, 14 January 2016, available at: [http://eulawanalysis.blogspot.com/2016/01/is-workplace-privacy-dead-comments-on.html], Accessed 15 April 2023
14. Richmond, K., *Case Law, Strasbourg: Barbulescu v Romania, Surveillance of Internet Usage in the Workplace*, 17 January 2016, available at: [https://inforrm.org/2016/01/17/case-law-strasbourg-barbulescu-v-romania-surveillance-of-internet-usage-in-the-workplace-kate-richmond/], Accessed 15 April 2023
15. Rojo, E., *La importancia de la jurisprudencia del Tribunal Europeo de Derechos Humanos en el ámbito laboral y de protección social (III). Arts. 8 y 6 del Convenio Europeo de Derechos Humanos. ¿Cuáles son los limites del control por geolocalización del vehículo de trabajo? Notas a la sentencia de 13 de diciembre de 2022. caso Alfonso Florindo de Almeida Vasconcelos Gramaxo contra Portugal (con tres votos radicalmente discrepantes)*, 5 January 2023, available at: [http://www.eduardorojotorrecilla.es/2023/01/la-importancia-de-la-jurisprudencia-del_5.html], Accessed 15 April 2023
16. Sicilianos, L.A., *Interpretation of the European Convention on Human Rights: Remarks on the Court's Approach*, Seminar on: "The Contribution of the European Court of Human Rights to the Development of Public International Law" on the margins of the 59th CAHDI meeting in Prague, Prague, 23 September 2020, available at: [https://rm.coe.int/interpretation-of-the-european-convention-on-human-rights-remarks-on-t/1680a05732], Accessed 15 April 2023

LEGAL ACTS

1. Convention for the Protection of Human Rights and Fundamental Freedoms (ETS No. 005), 1950
2. Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data (ETS No. 108), 1981
3. Additional Protocol to the Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data, regarding supervisory authorities and transborder data flows (ETS No. 181), 2001
4. Protocol amending the Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data (CETS No. 223), 2018

EU TREATIES

1. Treaty on European Union, TEU (Consolidated version 2016) [2016] OJ C202
2. Treaty on the Functioning of the European Union, TFEU (Consolidated version 2016) OJ C 202, 7.6.2016
3. Charter of Fundamental Rights of the European Union, OJ C 202, 7.6.2016, p. 391–407

EU SECONDARY LEGISLATION

1. Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data, [1995] OJ L281/31, ELI: http://data.europa.eu/eli/dir/1995/46/oj
2. Directive 2002/58/EC of the European Parliament and of the Council of 12 July 2002 concerning the processing of personal data and the protection of privacy in the electronic communications' sector (Directive on privacy and electronic communications), OJ 2002 L 201/37, ELI: http://data.europa.eu/eli/dir/2002/58/oj
3. Regulation (EU) 2016/679 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation), [2016] OJ L119/1, ELI: http://data.europa.eu/eli/reg/2016/679/oj
4. Directive (EU) 2016/680 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data by competent authorities for the purposes of the prevention, investigation, detection or prosecution of criminal offences or the execution of criminal penalties, and on the free movement of such data, and repealing Council Framework Decision 2008/977/JHA (Data Protection Law Enforcement Directive), [2016] OJ L119/89, ELI: http://data.europa.eu/eli/dir/2016/680/oj
5. Regulation (EU) 2018/1725 of the European Parliament and of the Council of 23 October 2018 on the protection of natural persons with regard to the processing of personal data by the Union institutions, bodies, offices and agencies and on the free movement of such data, and repealing Regulation (EC) No 45/2001 and Decision No 1247/2002/EC, [2018] OJ L295/39, ELI: http://data.europa.eu/eli/reg/2018/1725/oj

OTHER EU DOCUMENTS

1. European Commission, Proposal for a Regulation of the European Parliament and of the Council concerning the respect for private life and the protection of personal data in electronic communications and repealing Directive 2002/58/EC (Regulation on Privacy and Electronic Communications), COM/2017/010 final – 2017/03 (COD)
2. European Commission, Commission Staff Working Document accompanying the document Communication from the Commission to the European Parliament and the Council. Data protection rules as a pillar of citizens empowerment and EUs approach to digital transition – two years of application of the General Data Protection Regulation, COM(2020) 264 Final

3. European Economic and Social Committee, Opinion on 'Challenges of teleworking: organisation of working time, work-life balance and the right to disconnect' (Exploratory opinion at the request of the Portuguese Presidency), EESC 2020/05278, [2021] C 220/01
4. European Union Agency for Fundamental Rights and Council of Europe, Handbook on European data protection law. Luxembourg: Publications Office of the European Union, 2018
5. Article 29 Data Protection Working Party, Opinion 8/2001 on the processing of personal data in the employment context, 5062/01/EN/Final, WP48
6. Article 29 Data Protection Working Party, Opinion 15/2011 on the definition of consent, 13 July 2011, 01197/11/EN, WP187
7. Article 29 Data Protection Working Party, Opinion 03/2013 on purpose limitation, 2 April 2013, 00569/13/EN, WP 203
8. Article 29 Data Protection Working Party, Opinion 06/2014 on the notion of legitimate interests of the data controller under Article 7 of Directive 95/46/EC, 9 April 2014, 844/14/EN, WP 217
9. Article 29 Data Protection Working Party, Working Document 01/2016 on the justification of interferences with the fundamental rights to privacy and data protection through surveillance measures when transferring personal data (European Essential Guarantees), 13 April 2016, 16/EN, WP237
10. Article 29 Data Protection Working Party, Opinion 2/2017 on data processing at work, 8 June 2017, 17/EN, WP 249
11. Article 29 Data Protection Working Party, Guidelines on Automated individual decision-making and Profiling for the purposes of Regulation 2016/679', 3 October 2017, 17/EN, WP251rev.01
12. Article 29 Data Protection Working Party, Guidelines on consent under Regulation 2016/679, 28 November 2017, last revised 10 April 2018, 17/EN, WP 259 rev. 01 – endorsed by the EDPB
13. Article 29 Data Protection Working Party, Guidelines on transparency under Regulation 2016/679, 29 November 2017, last revised 11 April 2018, WP260rev.01
14. European Data Protection Board, Guidelines 2/2019 on the processing of personal data under Article 6(1)(b) GDPR in the context of the provision of online services to data subjects, Version 2.0, 8 October 2019
15. European Data Protection Board, Guidelines 3/2019 on processing of personal data through video devices. Version 2.0, 29 January 2020
16. European Data Protection Board, Guidelines 05/2020 on consent under Regulation 2016/679. Version 1.1, 4 May 2020
17. European Data Protection Board, Guidelines 10/2020 on restrictions under Article 23 GDPR. Version 2.0, 13 October 2021

CJEU CASE LAW

1. Case C-311/18 *Data Protection Commissioner v. Facebook Ireland Limited and Maximillian Schrems*, 16 July 2020, ECLI:EU:C:2020:559

2. Joined Cases C-511/18, C-512/18 and C-520/18 *La Quadrature du Net and Others v. Premier ministre and Others*, 6 October 2020, ECLI:EU:C:2020:791
3. Joined Cases C-793/19 and C-794/19 *Bundesrepublik Deutschland v. SpaceNet AG and Telekom Deutschland GmbH*, 20 Sep 2022, ECLI:EU:C:2022:702
4. Case C-339/20 *Criminal proceedings against VD*, *SR* (C-397/20), 20 September 2022, ECLI:EU:C:2022:703
5. Case C-34/21 *Hauptpersonalrat der Lehrerinnen und Lehrer beim Hessischen Kultusministerium v. Minister des Hessischen Kultusministeriums*, 30 March 2023, ECLI:EU:C:2023:270
6. Case C-129/21 *Proximus NV v. Gegevensbeschermingsautoriteit*, 27 October 2022, ECLI:EU:C:2022:833
7. Case C-132/21 *BE v. Nemzeti Adatvédelmi és Információszabadság Hatóság*, 12 January 2023, ECLI:EU:C:2023:2
8. Case C-154/21 *RW v. Österreichische Post*, 12 Jan 2023, ECLI:EU:C:2023:3
9. Case C-205/21 *Ministerstvo na vatreshnite raboti,* 26 January 2023, ECLI:EU:C:2023:49)
10. Case C-470/21 *La Quadrature du Net et al.* v *Premier ministre, Ministère de la Culture*; [2021] OJ C462/25
11. Opinion of Advocate General Szpunar in Case C-439/19 *Latvijas Republikas Saeima*, ECLI:EU:C:2020:1054

ECtHR

1. *Adomaitis v. Lithuania,* Application no. 14833/18, 18 January 2022
2. *Bărbulescu v. Romania* [GC], Application no. 61496/08, 5 September 2017
3. *Florindo de Almeida Vasconcelos Gramaxo v. Portugal*, Application no. 26968/16, 13 December 2022
4. *Gottfried Niemietz v. the Federal Republic of Germany*, Application no. 13710/88, Report of the Commission of 29 May 1991
5. *Handyside v. the United Kingdom*, Application no. 5493/72, 7 December 1976
6. *Libert v. France*, Application no. 588/13, 22 February 2018
7. *López Ribalda and Others v. Spain* [GC], Application nos. 1874/13 and 8567/13, 17 October 2019

OTHER COUNCIL OF EUROPE DOCUMENTS

1. Venice Commission, Opinion on video surveillance by private operators in the public and private spheres and by public authorities in the private sphere and human rights protection (Venice, 1-2 June 2007), CDL-AD(2007)027)
2. Committee of Ministers, Recommendation CM/Rec(2015)5 to member states on the processing of personal data in the context of employment, April 2015

MISCELLANEOUS

1. OECD Guidelines governing the protection of privacy and transborder flows of personal data, (2013). C(80)58/FINAL, as amended on 11 July 2013 by C(2013)79, available at: [https://edps.europa.eu/sites/default/files/publication/2013-09-09_oecd-privacy-guidelines_en.pdf], Accessed 15 April 2023
2. OECD, Recommendation on Cross-border Co-operation in the Enforcement of Laws Protecting Privacy, 2007, available at: [https://edps.europa.eu/sites/default/files/publication/2013-09-09_oecd_guidelines_en.pdf], Accessed 15 April 2023

Topic 5

EU law and its impact on criminal law

UDK 343.14:57.088.7(497.5)
342.722:341.645(4-67EU)
Original scientific paper

CORRECTING MISCARRIAGES OF JUSTICE IN CROATIA: ACCESSION AND TIME-LIMITED RETENTION OF DNA PROFILES IN THE JURISPRUDENCE OF THE EUROPEAN COURT OF HUMAN RIGHTS*

Damir Primorac, PhD, Full Professor
Attorney at Law and Full-time Professor at the Faculty of Law University of Mostar and Associate Professor at the University Department of Forensic Sciences at the University of Split, Domjanićeva 25, Zagreb, Croatia
damir.primorac@primorac-partners.com

Andrej Božinovski, LLM, Assistant
Faculty of Law in Zagreb, Croatia
Gundulićeva 10, Zagreb, Croatia
abozinovski1@pravo.hr

ABSTRACT

The emergence of Innocence Projects in Croatia in 2015 sparked an interest in the fate of wrongfully convicted individuals and the potential of post-conviction DNA examination. In 2020, the experimental Innocence Project was established at the Faculty of Law in Zagreb, funded by the Croatian Science Foundation to raise public awareness of miscarriages of justice, advocate for legal changes to make it easier for defendants to reopen their cases, and provide legal representation for those believed to be wrongfully convicted. This article delves into the use and handling of DNA information by law enforcement agencies and its treatment within the jurisprudence of the European Court of Human Rights and in the Croatian national criminal legislation. However, concerns have been raised regarding the retention, use, and time-limited frameworks of DNA data in law enforcement databases, particularly concerning the presumption of innocence for individuals who have not been convicted of a crime. The European Court of Human Rights adopted the "Marper" test to address this issue and to ensure that all DNA data is expunged from

* The research for this publication has been conducted within the framework of the Research Project titled "Innocent Project Croatia" (CROINOP), funded by the Croatian Science Foundation (IP-2019-2104-9893), and Career development project for young researchers - training of new PhDs (DOK-2021-2102-5858), also funded by the Croatian Science Foundation. See: https://croinop.pravo.unizg.hr/.

law enforcement databases when it is not relevant to criminal investigations. This test balances the government's interests in crime prevention and criminal investigation against individual citizens' privacy interests, making it essential in addressing wrongful convictions. Using the theoretical, comparative, case study, and dogmatic method The article examines the legal standards of the Council of Europe and the European Union, the jurisprudence of the European Court of Human Rights, as well as Croatian positive legal standards on the retention and use of DNA data and applicable databases. Finally, the article suggests potential legislative reforms in Croatia to improve the utilization, storage, and ramification of DNA data and the use of forensic DNA databases to address miscarriages of justice, particularly in "cold cases".

Keywords: *DNA, Innocence Projects, Marper Test, Wrongful Convictions*

1. INTRODUCTION

The interest in Innocence Projects started in Croatia in 2015, mainly as a result of academic discussions and conferences about the fate of wrongfully convicted people and the possibilities of post-conviction DNA examination. It culminated in 2020 when for the first time the experimental Innocence Project was established, implemented by the Faculty of Law in Zagreb, and financed by the Croatian Science Foundation. The main purpose of the Croatian Innocence Project is to raise public awareness of miscarriages of justice, campaign for legal changes which ought to lower the threshold for defendants to have their cases re-opened, and provide legal representation for those who are believed to have been wrongfully convicted.[1] This article will shed light on the use of DNA information by law enforcement agencies for crime prevention purposes that has undoubtedly aided in criminal investigations and contributed to the apprehension of perpetrators. The retention, use, and time-limited frameworks of DNA data in law enforcement databases raise concerns regarding the presumption of innocence for individuals who have not been convicted of a crime. When DNA information is collected, retained, and utilized for individuals who have been acquitted, had charges dropped, been arrested for non-violent or non-sexual crimes, or completed their sentence, the presumption of innocence is diminished. In several cases from the jurisprudence of the European Court of Human Rights, it is visible that national laws on expungement often lack clarity or are inadequate, leading to improper use of DNA information.[2] In order to address this issue and prevent the erosion of the presumption of innocence the European Court of Human Rights adopted

[1] See Bozhinovski, A.. *Addressing Wrongful Convictions in Croatia through Revision of the Novum Criterion: Identifying Best Practices and Standards;* Mali, J (eds.), Human Rights in Contemporary Society – Challenges From an International Perspective, Vol. 1 2023, pp. 57-77.

[2] Expungement of DNA data is different in every country and refers to the process of erasing or removing certain records or information from official databases or records. In the context of DNA information, expungement involves the removal of DNA data from law enforcement databases for individuals who have not been convicted of a crime. Expungement is recognized as a legal mechanism to protect

a test – the *Marper* test that would require law enforcement agencies to expunge DNA data from their databases based on the individuals' statuses as arrestees, non-convicts, convicts, or ex-convicts, and taking into account the severity of the alleged offense that justified the extraction of DNA. The essence of the *Marper* test is the balance the interests of the government in crime prevention and criminal investigation against the privacy interests of individual citizens which further ensures that all DNA data is expunged from law enforcement databases in cases where it is not relevant to criminal investigations. This makes the Marper test essential for addressing wrongful convictions. In this article, the first part will examine the binding legal documents promulgated by the Council of Europe and the European Union in the context of retention, storage, and ramification of DNA data pre- and post-conviction. In the second part, the standards of the European Court of Human Rights and the Court of Justice of the European Union will be examined in the context of time-limited retention of DNA data and forensic DNA databases utilizing the *rationale* of the court in recent judgments. The third part will be presented the positive Croatian legal standards in the Law on Criminal Procedure for the retention and use of DNA data and applicable databases. The conclusion part of the article will give an insight into possible implications in the Croatian national legislation in terms of reforms that are needed concerning the utilization, storage, and ramification of DNA data and the use of forensic DNA databases to address the so-called "cold case" correcting miscarriages of justice.

2. LEGAL STANDARDS OF THE COUNCIL OF EUROPE AND THE EUROPEAN UNION FOR THE TREATMENT OF DNA MATERIALS IN THE CRIMINAL JUSTICE SYSTEMS

The scientific and technological development in genetics and molecular biology piques the interest of the states in the application of such methods in forensics and the criminal justice system in general. According to Primorac and Moses in its simplest form, a DNA profile consists of numerical figures that represent the variations of alleles found in each locus, like bar codes. However, cellular samples can provide a lot more information, including health and genetic information that may have deeper privacy implications, such as ethnic and familial tracing and predisposition to genetic diseases.[3] In its practice, the Court has acknowledged this wealth of information and has extended the same protection to both cellular samples and DNA profiles. Despite this, limiting sample collection to DNA pro-

the privacy and rights of individuals who have not been found guilty of a crime and to prevent the misuse of their DNA information.

[3] See Primorac, D. and Schanfield, M, *Forensic DNA applications: An interdisciplinary perspective.* CRC Press, 2023., p. 54-59.

files provides adequate privacy protection given their limited use for identification purposes.[4] Legal safeguards can be implemented by requiring the destruction of cellular samples and DNA extracts after the production of DNA profiles to limit interference to numerical figures representing a person's DNA profile. When handling this information, the relevant laws adhere to the legality test, established by the Court in the *Marper* case that determines the scope and the nature. The test has two main requirements: 1. The interference of the measure should have some basis in the domestic law or a member state; and 2. The law must be clear, foreseeable, and adequately accessible. This is the primary test on which all future cases are adjudged upon.[5] Deviation from this criterion will result in a breach of Article 8 of the European Convention of Human Rights The relevant legislation governing the principles of retention, storage, and utilization of DNA data in Europe is promulgated by the Council of Europe and the European Union. The mutual trait of these legislations is the treatment of DNA data as a special, sensitive type of data that belongs in the group of special categories of personal data.

2.1. Council of Europe

The Council of Europe's Convention for the Protection of Individuals concerning the Automatic Processing of Individual Data, known as ETS No. 108, is a treaty adopted in 1981 that aims to safeguard individuals' fundamental rights and freedoms in the context of automated processing of their data.[6] It sets forth principles and guidelines for data collection, storage, and use, including requirements for data quality, security, and individual rights. Most importantly this convention serves as an important international instrument for protecting privacy and data protection rights in the context of automated data processing. Article 6 of this Convention stipulates that the DNA data may be categorized as a special category of data and that the DNA profiles can be categorized either as genetic data or biometric data attributed uniquely to one person, and the processing of such data is not prohibited if the state law contains the appropriate safeguards. In the *Marper decision, the Gaughran v. the United Kingdom, Petrovic v. Serbia and in Trajkovski and Chipovski* the court cited this convention in terms of the standard *Quality of law.* However, there is nothing in this convention that prohibits the creation of universal DNA databases. In 2018, the

---

4 See Derenčinović, D.; Roksandić Vidlička, S.; Dragičević Prtenjača, M., *'Innocence Projects' and Subsequent DNA Testing in Croatia: a Possible Reality or an Unattainable Desire?.* Zbornik Pravnog fakulteta u Zagrebu, Vol. 67, No. 3-4, 2017, pp. 373–404.

5 See *infra* note. 23. *S. and Marper v the United Kingdom,* no. 30562/04 and no. 30566/04., par. 77.

6 See The Council of Europe's Convention for the Protection of Individuals Regarding the Automatic Processing of Individual Data and Protocols, ETS. No. 108 +, available at: [https://www.coe.int/en/web/data-protection/convention108-and-protocol].

Council of Europe promulgated Convention ETS No. 108 + to enhance the framework on personal data protection. Convention 108+ builds upon Convention 108 by addressing contemporary issues in data protection.[7] It expands the scope of protection to include manual data processing alongside automatic processing, adapting to new technologies. It aligns its provisions with the GDPR, ensuring compatibility and facilitating the transfer of personal data between member states. Convention 108+ strengthens individual rights, emphasizing transparency, accountability, and the right to access, rectify, and erase personal data. It introduces provisions for independent supervisory authorities and international cooperation among data protection authorities.[8] Additionally, it includes mechanisms for monitoring compliance and establishes a monitoring body to assess implementation and provide guidance. Concerning the harmonization with the GDPR, Convention 108+ enables seamless data transfer between the Council of Europe (CoE) member states and the European Union (EU) by adopting similar concepts, definitions, and principles. By incorporating the robust data protection standards of the GDPR, Convention 108+ enhances the level of privacy and security for individuals' personal data. It facilitates international data transfers by adhering to the GDPR's stringent requirements for transfers outside the EU. Additionally, the harmonization strengthens the influence of Convention 108+ on global data protection regulations, as the GDPR has become a global benchmark. Overall, the harmonization with the GDPR elevates data protection within the CoE and fosters consistency and effectiveness in the treatment of personal data.

Another legal instrument promulgated by the Council of Europe is Recommendation No. R(92)1 on the use of DNA analysis in criminal investigations adopted in 1992. The Recommendations provide guidance on the use of DNA analysis in criminal investigations and underscore the primacy of the respect for human rights, including the right to privacy, in the context of DNA analysis by law enforcement authorities. It emphasizes the necessity of the promulgation of clear and transparent legal frameworks and procedures governing the collection, storage, and utilization of DNA samples and profiles.[9] The importance of quality control

---

7 See The Council of Europe's Convention 108 + Convention for the protection of individuals with regard to the processing of personal data, available at: [https://www.europarl.europa.eu/meetdocs/2014_2019/plmrep/COMMITTEES/LIBE/DV/2018/09-10/Convention_108_EN.pdf].

8 General Data Protection Regulation, Official Journal of the European Union, No. L119/1, available at: [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016R0679].

9 See Council of Europe Committee of Ministers. Recommendation No. R (92) 1 of the Committee of Ministers to Member States on the use of analysis of deoxyribonucleic acid (DNA) within the framework of the criminal justice system. Adopted by the Committee of Ministers on 10 February 1992 at the 470th meeting of the Ministers' Deputies. Available at: [https://rm.coe.int/09000016804e54f7].

and data protection measures is also emphasized. Furthermore, the Recommendation promotes cross-border cooperation among member states in DNA data exchanges while stressing the need for robust safeguards to prevent potential misuse or abuse of DNA information. In the context of the criminal procedure, this Recommendation emphasizes the principle of equality of arms, stipulating that the DNA materials must be accessible to both parties, the prosecution as well as to the defense. In the legal text, this recommendation refers to the European Convention of Human Rights and the Convention for the Protection of Individuals about the Automated Processing of Individual Data. In the context of defining DNA data or DNA analysis, this recommendation defines DNA analysis as *"Any procedure that can be applied in the analysis of DNA – the basic genetic material of the human being and all other beings"*; DNA sample is defined as *"Any material stemming from the organic origin which can be used for the DNA analysis"*; and also defines a DNA dossier as *"every structured collection of DNA results regardless in which form they are kept, including print and electronic databases can be categorized as a DNA dossier*. The validity of this recommendation has been confirmed in *Marper* and in *Gaughran* where in both cases, it is evident that the provisions outlined do not prescribe the establishment of universal databases. However, they do prescribe certain safeguards that must be in place to ensure compliance. These safeguards encompass restricting the use of the databases exclusively to the investigation and prosecution of criminal offenses, adherence to domestic law in sample collection procedures, and the deletion of data once their purpose has been fulfilled, as articulated in Provision 8. Moreover, if the databases are employed for research and statistical purposes, it is mandated that the identity of the data sources remain unascertainable, as stipulated in Provision 3.[10]

Recommendation Nm. (87) 15 of the Council of Europe regulates the use of personal data in the police sector. issued in 1987, is a guideline that guides member states regarding the utilization of personal data in the police sector. The recommendation underscores the significance of safeguarding the rights and freedoms of individuals while ensuring the effectiveness of law enforcement efforts.[11] It highlights the need for comprehensive legislation on data protection in the police sector,

---

[10] See Krstulović Dragičević, A. and Sokanović, L., *Načelo zakonitosti pred izazovima europskog kaznenog prava,* Zbornik radova s medunarodnog savjetovanja „Europeizacija kaznenog prava i zaštita ljudskih prava u kaznenom postupku i postupku izvršenja kaznenopravnih sankcpija", Vol. 1, 2017 Split, pp. 25-30.

[11] See Council of Europe, Committee of Ministers. Explanatory Memorandum to Recommendation No. R (87) 15 of the Committee of Ministers to Member States Regulating the Use of Personal Data in the Police Sector. Adopted by the Committee of Ministers on 17 September 1987 at the 410th Meeting of the Ministers' Deputies. Available at:
[https://rm.coe.int/168062dfd4]. See also: Alleyne, L,. *Interpol handbook on DNA data exchange and practice – Recommendations From the Interpol DNA Monitoring Expert Group.,* Vol. 2, 2009.

encompassing lawful processing of personal data, data quality and accuracy, data security, and individual rights such as access, rectification, and erasure of data. The recommendation also underscores the importance of supervisory mechanisms for ensuring compliance with data protection principles and the need for international cooperation in the exchange of personal data for law enforcement purposes. The Recommendation stipulates that retention of DNA data must be limited to what is necessary for the prevention of real danger or the suppression of a specific criminal offense; when storing the DNA data, the storage must be limited to accurate data and to such data as are necessary to allow police bodies to perform their lawful tasks, and deletion of the data once it stops being used for the intended purposes by the police. Also one of the main principles of this Recommendation is the principle of *Equality of Arms* that stipulates DNA analyses should be equally available as evidentiary material to the defense and the prosecutor.[12] Furthermore, the standardization of DNA methods is set as a basic rule at the national and international levels, which inevitably assumes interlaboratory cooperation to unify analytical and control procedures. Although intellectual property rights are tied to certain DNA methods analyses, in this sphere it is strictly required that this is not the case. DNA analysis can be performed in a laboratory or institution from another country and it will be valid in the state where the case is handled if it is an institution that fulfills all criteria defined in this Recommendation. Cross-border communication and exchange of information must be in accordance with international standards and documents for the exchange of information in criminal cases and data protection.

2.2. European Union

The European Union has taken specific steps to regulate the legal aspects of DNA analysis in criminal investigations. In 1997 and 2009, the European Council adopted the Resolution on the Exchange of DNA Results Analysis[13], which emphasizes the significance of exchanging DNA analysis results for successful criminal investigations. Based on the principle of mutual trust the exchange of such information must be limited to the non-coding part of the DNA molecule to prevent the disclosure of sensitive personal data. DNA investigation involves technical, legal, political, and ethical considerations that require attention in future cooperation efforts. The Resolution refers to various European documents such as conventions and recommendations that highlight the use and protection of personal data. Standardizing DNA markers is crucial to ensure that the results of DNA analyses

[12] See Tseloni, A.; Pease, K., *DNA retention after arrest: Balancing privacy interests and public protection*, European Journal of Criminology, Vol. 8, No. 1, 2010, pp. 36–38.

[13] See Council of the European Union. "Council Resolution of 9 June 1997 on the Exchange of DNA Analysis Results." Official Journal of the European Communities L193 (1997).

exchanged between countries are usable.[14] Furthermore, according to the Stockholm Programme and the application of the principle of mutual trust, establishing well-functioning databases is necessary.[15] The Resolution also addresses issues such as creating national databases of DNA data, standardizing DNA technology, providing legal guarantees, and exchanging DNA analysis results at the European level. Furthermore, with efficient cross-border cooperation, legal guarantees, and standardization, the resolution can help prevent errors and misunderstandings that could lead to wrongful convictions or acquittals, and identify perpetrators who might otherwise go undetected.

In 2001, the European Union (EU) Council introduced a Resolution on exchanging DNA analysis results, which was later replaced by a similar act in 2009.[16] The Preamble of the Resolution refers to previous Council of Europe and EU acts, as well as the European Network of Forensic Institutes' efforts to standardize DNA markers and technology. It defines terms such as "DNA marker" and "DNA analysis result," and emphasizes limiting the exchange of DNA results to chromosomal zones without genetic expression, thus avoiding the disclosure of sensitive personal data. The Resolution's Annex[17] provides a list of markers that are considered safe for exchange, but countries must discontinue the use of any markers if new scientific developments allow information on hereditary characteristics to be obtained from them. In 2005, the Prum Convention was introduced to promote cross-border cooperation in the fight against terrorism, cross-border crime, and illegal migration. The decisions that were, adopted in 2008, further address the issue of exchanging DNA profiles, limited to the non-coding part of the DNA molecule, per the EEC and Interpol's ISSOL.[18] DNA data is classified as special categories of personal data and is considered the most sensitive. The Convention

---

14 See Primorac, D.; Primorac, D.; Butorac, S. S., & Adamović, M. *Analiza DNA u sudskoj medicini i njezina primjena u hrvatskome kaznenopravnom sustavu.* Hrvatski ljetopis za kazneno pravo i praksu, Vol. 16, 2009, pp. 3-16.

15 The Stockholm Programme, OJ C 115, 4.5.2010, available at: [https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2010:115:0001:0038:en:PDF].

16 See Council of the European Union. "Council Resolution of 30 November 2009 on the exchange of DNA analysis results (2009/C 296/01)." Official Journal of the European Union, Vol. 52, No. C 296, 1 Dec. 2009.

17 *Ibid.,* p. 5.

18 INTERPOL International Standard Set of Loci (ISSOL) is a set of 10 genetic markers, also known as loci, used for DNA profiling. These markers are commonly used in forensic DNA analysis to compare DNA samples from different sources and determine whether they match. The ISSOL is used by forensic laboratories around the world as a standard for DNA profiling and ensures that results obtained in different labs can be compared and shared with confidence. The markers in the ISSOL were selected based on their high degree of polymorphism, which means that they are highly variable between individuals, making them useful for identifying unique genetic profiles.

aimed to facilitate information exchange, including DNA-related data, to enhance cooperation among these countries. Over time, other EU member states joined the treaty, and in 2007, the Council of the European Union approved many of its provisions as Council Decisions that became part of the EU's acquis communautaire, such as Council Decision 2008/615/JHA[19], the first EU instrument that foresees direct access to the national databases of other countries, requires EU member states to establish national databases and provides rules for competent authorities of other EU member states to search in national DNA, dactyloscopy, and vehicle registration databases. However, It is crucial to distinguish between direct access to a DNA database and direct access to all the data stored in a DNA database. For example, Member State A can search for a DNA profile in Member State B's DNA database and receives either a positive or negative reply regarding the existence of a relevant DNA profile and reference data (the non-coding part of DNA and a reference number). The searching Member State only receives reference data that can be called 'anonymous,' but there is no direct access to data related to the matched DNA profile. To obtain personal data from the DNA database, it must send an additional request to Member State B.[20] Under Council, Decision 2010/616/JHA[21], designated contact points were designated that are usually either forensic science services or law enforcement units responsible for information exchange that can perform searches in the national DNA databases of other countries. Article 4 of the decision allows for the comparison of unidentified DNA profiles from one EU member state with all other EU member states before bilateral consent. The establishment of 'hit' and 'post-hit' stages allows member states to maintain absolute control over the data associated with DNA profiles.

The General Data Protection Regulation (GDPR) was promulgated by the EU in 2016, and it is an extensive data protection regulation that governs the processing of personal data, including biometric and DNA data, and aims to protect individuals' privacy and ensure responsible handling of their data.[22] Under the GDPR, biometric data refers to personal data derived from the physical, physiological, or

---

19 See Council Decision 2008/615/JHA, 23 June 2008, Official Journal of the European Union, L 210/1.

20 See Soleto Muñoz, H. and Fiodorova, A*, DNA and law enforcement in the European Union: tools and human rights protection,* Utrecht Law Review, Vol. 10, 2014 pp. 149-162.

21 Council of the European Union, "Council Decision of 26 July 2010 on the Conclusion of the Agreement Between the European Union and Iceland and Norway on the Application of Certain Provisions of Council Decision 2008/615/JHA on the Stepping up of Cross-border Cooperation, Particularly in Combating Terrorism and Cross-border Crime and Council Decision 2008/616/JHA on the Implementation of Decision 2008/615/JHA on the Stepping up of Cross-border Cooperation, Particularly in Combating Terrorism and Cross-border Crime, and the Annex Thereto." Official Journal of the European Union, Vol. L195, 28 July 2010, pp. 1-16.

22 General Data Protection Regulation, Official Journal of the European Union, No. L119/1, available at: [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016R0679].

behavioral characteristics of an individual that allows for unique identification. This includes DNA data, which is distinctive to each person and can be used for identification purposes. To process biometric and DNA data lawfully, organizations must have a legal basis, such as obtaining explicit consent from individuals or relying on other legal grounds like compliance with legal obligations or the protection of vital interests. The GDPR recognizes that biometric and DNA data is sensitive and, therefore, imposes stricter requirements for its processing. Organizations must implement appropriate security measures to safeguard this data from unauthorized access, loss, or destruction. Individuals have specific rights regarding their biometric and DNA data. These rights include the ability to access, rectify, or erase their data, restrict its processing, and object to certain types of processing. They also have the right to data portability, allowing them to obtain and use their biometric and DNA data for their own purposes. When processing biometric or DNA data presents high risks to individuals' rights and freedoms, organizations are required to conduct a Data Protection Impact Assessment (DPIA). This assessment helps identify and address potential risks associated with the processing of sensitive data. The GDPR also regulates the transfer of biometric and DNA data to countries outside the EU, ensuring that adequate safeguards are in place to protect the data during such transfers.[23] Currently, the GDPR emphasizes the need for explicit consent, enhanced security measures, and individual rights protection. Compliance with the GDPR is essential for organizations handling biometric and DNA data to uphold privacy rights and maintain data security.

As seen above in all legislative documents the quality of law can be evaluated based on its accessibility, clarity, and foreseeability for the persons concerned. Accessibility refers to the availability of the law to citizens, which is usually achieved through publication in a manner specified by national practice. The same dissemination system can be used for universal databases. Clarity of the law relates to the discretion exercised by public authorities in implementing it. There should be a reasonable degree of clarity in the scope and manner of this discretion to provide minimum protection to people, which can be measured through legal safeguards. This ensures predictability in the implementation of the law for everyone involved. The element of foreseeability is closely linked to clarity, where laws must be clear and specific to ensure the predictability of their effects. In *Petrovic v. Serbia*, the Court held that legal provisions should be foreseeable as to their effects, which was not the case in the law allowing for DNA sample collection. Legal protection must therefore be guaranteed to ensure that laws are not applied arbitrarily by law enforcement agencies. These elements are crucial for evaluating the quality of the law and ensuring its effective implementation.

[23] *Ibid.*

3. COLLECTION, RAMIFICATION, AND STORAGE OF DNA MATERIALS IN THE JURISPRUDENCE OF THE EUROPEAN COURT OF HUMAN RIGHTS AND THE COURT OF JUSTICE OF THE EUROPEAN UNION

The use of DNA technology in criminal investigations has raised numerous concerns regarding privacy and human rights. As noted above The European Court of Human Rights (ECtHR) has addressed these concerns in several cases, including the landmark case of *S. and Marper v. United Kingdom*. Starting from this case, The ECtHR has consistently held that the collection, retention, and use of DNA samples and profiles is a serious interference with an individual's right to respect for private life. The Court has also emphasized the importance of ensuring that any such interference is proportionate and necessary and has established a three-pronged test to evaluate the legality, legitimate purpose, and proportionality of DNA collection and retention practices. This section of the article will examine the Court jurisprudence in the cases of S. and *Marper v. the United Kingdom*[24], *Aycauger v. France*[25], *Gaughran v. the United Kingdom*[26], *and Trajkovski and Chipovski v. North Macedonia*[27] in terms of the three-pronged test. Each of the cases promulgated by the court refers to the handling of DNA data in different stages of the criminal procedure. The cases of *Aycauger v. France* and *Petrovic v. Serbia* refer to the pre-trial of the procedure, where accused persons have been sanctioned after denial to undergo biological testing for the purpose of inclusion in the national database. The *Marper* case is important from the aspect of unlimited retention of DNA materials in cases where the accused is not found guilty (pre-sentencing), and *Gaughran v. the United Kingdom and Trajkovski and Chipovski v. North Macedonia* are cases that refer to unlimited retention of DNA materials after the defendants have been found guilty and sentenced.

Starting with *S. and Marper v. the United Kingdom,* in 2008, the Grand Chamber of the European Court of Human Rights (ECtHR) issued a landmark judgment. The case centered on the retention of DNA profiles by police authorities in the UK, specifically the retention of the DNA profiles of individuals who had been arrested but not convicted of any crime. The first applicant in the case was an 11-year-old boy who had been arrested on suspicion of attempted robbery in 2001, and whose

---

24 See Judgment *S. and Marper v United Kingdom* (2008), application no. 30562/04 and no. 30566/04, 4 December 2008, paras 1-25.

25 See Judgment *Aycaguer v France* (2017), application no. 8806/12, 22. June 2017, paras. 15-25.

26 See Judgment *Gaughran v the United Kingdom* (2020), application no. 45245/15, 13 February 2020, paras. 13-18.

27 See Judgment *Trajkovski and Chipovski v North Macedonia* (2021), application no. 53205/13 and no. 63320/13, 13/02/2020, paras. 1-25.

fingerprints and DNA samples were taken by the police.[28] The second applicant had been arrested and charged with ill-treatment of his partner in 2001, and his DNA sample and fingerprints were taken by the police after the proceedings against him were suspended. Both applicants requested that the seized biological material be destroyed, but their requests were refused by the police. The national courts upheld the police's decision, arguing that the retained biological material was of great importance for preventing crime and enabling effective criminal prosecution. However, the ECtHR found that the authority of competent authorities regarding the retention of DNA samples as particularly sensitive personal data was blanket and non-selective. Furthermore, the Court emphasized that the unlimited use of modern technology within the framework of the criminal justice system without weighing the public interest with the interest of protecting individuals could lead to an unacceptable weakening of the protection mechanism under Article 8 of the Convention that regulates the right to privacy.[29]

The Court argued that the almost unlimited encroachment on privacy was particularly unacceptable for individuals given a large amount of information or data contained in the genetic material. Moreover, the retention of personal data of minors who are not legally competent and convicted in criminal proceedings may call into question the reintegration of this vulnerable group in society, which is contrary to the standards of protection of the best interests of children according to international law.[30] The judgment of the Court and the arguments highlighted in it led very quickly to a change of position in the practice of the national judiciary. The Supreme Court, referring to most of the Court's arguments from the S. and Marper judgment, ruled that DNA profiles that were entered into the database after arresting persons, and after they were released from accusations, must be destroyed. What is interesting is that the process of execution of the judgment led to the preparation of the new Law on the Protection of Freedoms[31], which provided for a series of legal reforms following the standards of the Court expressed in the "Marper" case. However, this law applied only in England and Wales, and not Northern Ireland, and has amended the Law on Police and Criminal Evidence. One of the essential changes brought by the new law was the destruction of DNA samples immediately after taking the DNA profile or within six months at the latest months from taking DNA samples.[32] Furthermore, DNA profiles of minors and adult persons arrested for minor criminal offenses are deleted after the

---

28 See *Supra* note 22, p. 23 - 26.

29 *Ibid.,* p. 34.

30 *Ibid.,* p. 102-106.

31 See Law on Protection of Freedoms Act, 2012, UK Government, available at [https://www.gov.uk/government/publications/protection-of-freedoms-bill].

32 See Romeo Casabona, C. M., *La insostenible situación del derecho penal.,* Granada: Comares, 2000, p. 35-43.

suspension decision is made of the procedure, the decision not to file an indictment or to issue an acquittal. It also introduced a three-year limitation on the retention of DNA profiles of persons who have been arrested for a serious crime criminal offense, but who have not been convicted.[33] The law introduced periodic checks of the validity of the reasons for further retention of personal data, and the possibility of rebutting the retention decision and the realization of their deletion or destruction of data. Furthermore, the amendments to the law established the position of the Biometric Retention Office, whose primary function is to oversee the procedure for collecting, ramifications, and storage of biometric data.

The *Aycaguer v. France* case involved a convicted individual who participated in a protest in 2008 and threatened to attack members of public authorities and then attacked them with an umbrella. The applicant was sentenced to a two-month suspended prison sentence for this offense. The prosecutor requested the applicant to provide a biological sample (DNA) as per Article 706-55 of the French Criminal Procedure Act, which lists criminal offenses for which biological samples are taken and stored in the national digital DNA database (FNAEG). The threat, for which the applicant was convicted, is one such offense. However, the applicant refused to provide the DNA sample and was subsequently detained and fined in 2009.[34] The Court of Cassation, including the higher courts, confirmed the decision of the lower courts in 2011 and concluded that it was per Article 8 of the Convention. However, the Court found that the punishment of the applicant was disproportionate and unnecessary interference in an individual's private life, stating that the legitimate establishment of databases for criminal proceedings should be proportionate and justified by the circumstances of each case. The Court also concluded that due to the absence of relevant secondary legislation, the retention of the DNA profile for the maximum duration of 40 years de facto became the standard, which is not per the principle of proportionality.[35] The Court also objected to the procedure for deleting DNA profiles from the database, which is only possible for suspects and not for convicts, contrary to the principles of protection incorporated in Article 8 of the Convention. The state exceeded the margin of judgment in a way that was not necessary for a democratic society due to the apparent absence of mechanisms for fair weighing of public and private interest.[36]

---

33 See Kaye, D.H., *Maryland v. King: Per se unreasonableness, the Golden Rule, and the future of DNA databases*. Harv. L. Rev. F., 127, 2013 p. 39. See also: Tuazon, O.M., *Universal forensic DNA databases: acceptable or illegal under the European Court of Human Rights regime*? Journal of Law and the Biosciences, Vol. 8, No. 1, 2021 pp. 18-21.

34 *Ibid.*, p. 18-24.

35 *Ibid.,* para. 32.

36 See Becker, S.W.; Derenčinović, D.; Primorac, D., *DNA as Evidence in the Courtroom*; Primorac, D. and Schanfield, M., (eds.) *Forensic DNA Applications: An Interdisciplinary Perspective*, 2023, p. 433.

The Aycaguer case highlights the need for proportionality and justification when establishing DNA databases for criminal proceedings and for proper legislation to govern the retention and deletion of DNA profiles.

Gaughran v. the United Kingdom is a consequence of the legal reforms in the English and the Irish judiciary, after the *Marper case*, which did not include Northern Ireland. This case saw the arrest of the applicant in Northern Ireland due to driving a personal vehicle while intoxicated, which is considered a criminal offense punishable by imprisonment. Biometric data, including a DNA sample, was excluded from the applicant after they confessed to the commission of the offense. Despite being fined and banned from driving, the applicant asked the police to destroy or return the exempted biometric data, which was refused with the explanation that their retention was in accordance with national legislation. The applicant's DNA sample was destroyed in 2015, but all other biometric data, including the DNA profile, was retained indefinitely. The national courts found that the retention of the personal data of an adult for a criminal offense punishable by imprisonment was justified, and therefore the applicant's case was unsuccessful.[37] However, a dissenting opinion stated that national legal solutions for retaining DNA profiles should have been more nuanced with the possibility of deleting profiles from the database and that the High Court and the majority decision of the Supreme Court did not sufficiently take into account the principle of proportionality. The applicant argued that their right to privacy was violated disproportionately, and referred to Recommendation No. R(87) 15 Committee of Ministers, which regulates the issue of collection and retention of personal data by the police in the manner and to the extent *necessary to achieve a legitimate goal with the possibility of erasure of these data from the police records if there is no further need for their retention.* The government accepted that this case was about state interference in the applicant's personal life but argued that this interference was very limited in scope and based on the law to achieve the legitimate goal of crime prevention and detection. The Court analyzed the legal solutions and practice of the respondent state from the aspect of "necessity in a democratic society".[38] The Court tested the legal solutions and practice of the respondent state from the aspect of requirements of "necessity in a democratic society". The Court preliminarily indicated that the personal data contained in the DNA profiles differ from the personal data obtained by taking a fingerprint or taking a photo and that personal data contained in DNA profiles, assuming their indefinite retention, may call into question the privacy of persons who are biologically related to the holder linked. The court removed the argument of the defendant stating that there is no difference between retaining the DNA

[37] *Ibid.,* p. 56.

[38] See *Supra* note. 24, p. 44.

profile until the death of the holder (or until someone certain time after his death) and the indefinite retention of those data. The court rejected the defendant state's argument that a greater number and longer duration of data retention correlates with crime prevention. Such an argument could lead to the indiscriminate collection and retention of biometric data from the entire population, which would prima facie contradict Article 8 of the Convention. This is similar to the case of S. and Marper, which concerned the retention of DNA profiles for persons who were not convicted. In the current case, the court concluded that the non-selective, time-limited retention of DNA profiles (including fingerprints and photographs) without taking into account the seriousness of the committed criminal offense and without realistic and effective opportunities for reviewing the further retention of the profile is not per the requirements of Article 8. The court unanimously concluded that the defendant state exceeded the margin of judgment in a manner that cannot be deemed necessary in a democratic society.

Similar to the *Gaughran* case judgment is *Trajkovski and Chipovski v. North Macedonia case*, which was decided in 2020. The case involved two applicants who argued that their right to privacy had been violated by the police taking DNA samples without their consent or a court order. The first applicant had been sentenced to probation for aggravated theft in 2010 and had a DNA sample taken during his arrest and his sample was used as evidence in the proceedings against him. The second applicant was arrested in 2009 on suspicion of theft, and a DNA sample was taken from him during the arrest. The sample was later also used as evidence in his conviction for aggravated theft in 2014.[39] Both applicants complained to the Directorate for the Protection of Personal Data, based on the longevity of the retention period of their DNA materials, which rejected their complaints. The applicants argued that the national legal framework did not provide sufficient clarity and precision regarding the collection, use, and retention of DNA material and that the retention of their DNA samples violated their right to privacy protected by the European Convention of Human Rights and the Constitution of the Republic of North Macedonia. The Court accepted this argument, pointing to the vague provision of Article 5 of the Personal Data Protection Act, which states that *personal data cannot be kept longer than is necessary for the purpose for which they are collected*.[40] The Court found that this provision left room for different interpretations and the unlimited retention of DNA material in practice.

---

[39] See *Supra* note 25, p. 1-15.

[40] See Article 5 of the Law on the protection of personal data, Official Gazette of the Republic of North Macedonia. 2020 (No. 42/20), available at: [https://azlp.mk/azlp/propisi-i-dokumenti/domasni_propisi/], Accessed 23 april 2023.

The Court also noted that the national legislation did not prescribe any additional criteria or gradation concerning the gravity of the committed criminal act, possible restitution, etc., and that there was no prescribed procedure for periodic review of the need for further retention of DNA samples. The Court concluded that the defendant state had failed to proportionately limit the private interest of the individual to the public interest and that by exceeding the margin of judgment, it had violated Article 8 of the Convention. *The Trajkovski and Chipovski case* highlights the need for clear and precise legal frameworks regarding the collection, use, and retention of DNA material to avoid the violation of an individual's privacy rights.

As seen from these cases The Court emphasizes the importance of distinguishing between these different categories of individuals, as the legal framework and margin of judgment for retaining their DNA material may vary. Derencinovic, Primorac, and Becker argue that when it comes to individuals who have been acquitted or had their criminal proceedings suspended, he notes that there is a significant narrowing of the state's judgment, especially about time-limited retention of personal data, particularly for minors.[41] There is a European consensus on this matter, which limits the state's ability to indefinitely retain DNA profiles of individuals who were not ultimately convicted. However, the margin of judgment widens when it comes to individuals who have been legally declared guilty as seen in *Gaughran and Trajkovski and Chipovski*. Also, Derencinovic on this notes that this does not mean that the state has unlimited power to retain its DNA material indefinitely. Rather, the state must adhere to the principle of proportionality, which is derived from a series of guarantees designed to prevent a blanket and indiscriminate restriction of the right to privacy. These guarantees include a model of gradation of the severity of the criminal offense, judicial control of data retention, periodic checks, and expert opinions on the validity of data retention.[42] Furthermore, the Court emphasizes the importance of evaluating additional circumstances, such as the type of final court decision, rehabilitation, served or completed the sentence, amnesty, age of holder, and type of personal data. This is especially important with DNA material, which can affect not only the right to privacy of the data holder but also of persons who are biologically related to the holder. Also, here we can acknowledge the fact that the Court's reasoning in these cases has been subject to criticism, particularly regarding the equalization of the margin of judgment for individuals who have been legally declared guilty versus those who have been acquitted or had their proceedings suspended. Nevertheless, the Court's conclusions should be supported, as they provide essential protections for personal data.

41 See *Supra* note 35, p. 438.

42 See Derenčinović *et al.*, *op. cit.*, note 4, pp. 373–404.

From the jurisprudence of the Court of Justice of the European Union, there is the joined case of "*Volker und Markus Schecke GbR, Hartmut Eifert v Land Hessen*", which emphasized that the right to personal data protection is not absolute but should be evaluated about its role in society.[43] While DNA profiles do not contain personal information beyond identification, the set of identification data should be classified as personal data and protected during the process of adding it to the database, its storage, and its exchange. W Hassemer noted that the databases need to be linked to a purpose to prevent their use for any other purpose than the original one, and this principle should be included among the criminal proceedings' principles to achieve data protection. If DNA analysis is limited to establishing genetic profiles based on non-coding loci, the storage of data does not interfere with the right to privacy. However, strict rules on access, storage, use, and deletion of personal data must be established to protect them. National legislation is often not enough to ensure protection since DNA profiles cross borders. Therefore, trust in the receiving state's data protection mechanism is essential, based on the application of minimum data protection standards established by multilateral agreements, conventions, and EU law.[44]

The one criterion that stands out in the jurisprudence of both courts is the *quality of the law* criterion which is used for testing the legality, the legitimate aim, proportionality, and necessity in a democratic society elements of the case. The Quality of the law criterion understands that when measuring whether the national law truly protects the right to privacy of the individual in terms of a gathering of DNA materials, is based on: a) accessibility; b) clarity; c) foreseeability of the law. The accessibility, clarity, and foreseeability of the law are crucial for protecting the rights of individuals in any society.[45] It's interesting to note that the European Court of Human Rights (ECtHR) has not yet questioned the accessibility of the law in any case. However, member states have developed their systems to make new laws accessible to all citizens, usually through publication in a manner specified by national practice. When it comes to clarity, the scope of discretion exercised by public authorities must be reasonably clear. This means that people should have a minimum degree of protection and legal safeguards in place to prevent arbitrary implementation of the law. In universal databases, legal protections should be in place to ensure that the implementation of the law is predictable for everyone involved. Finally, sufficient foreseeability is essential to ensure that individuals know the circumstances and conditions under which authorities are entitled to act on

---

43 See: Joined Cases C-92/09 and C-93/09, *Volker und Markus Schecke GbR, Hartmut Eifert v Land Hessen,* [2010] ECR 1-11063.

44 *Ibid.,* p. 54.

45 See Primorac *et al.*, *op. cit.* note 12, pp. 3-7.

matters that affect their rights. These elements of accessibility, clarity, and foreseeability work together to protect the fundamental rights of individuals in society.

4. THE TREATMENT OF DNA MATERIALS IN THE CROATIAN CRIMINAL JUSTICE SYSTEM

As we have seen above, the jurisprudence of the ECtHR made quite substantial changes in the treatment of DNA materials in Europe in terms of shaping national and supranational legislation. The case law of the ECtHR and the CJEU has set an important precedent for countries across Europe, guiding how to balance the interests of crime prevention with the protection of personal data in line with the provisions stipulated in Article 8 of the Convention. In the context of Croatia, these judgments are especially significant considering the Constitutional Court's 2012 decision[46] to declare several provisions of the Criminal Procedure Act unconstitutional, including the implementation of molecular genetic analysis in criminal proceedings. Croatia has not been sued before the Court for violating Article 8 of the Convention, which is a very positive trend. However, a comprehensive analysis of the Court's jurisprudence can be useful in identifying potential issues in the country's legislation and practice.

4.1. National Legal Framework

In the Croatian legal system, the collection, ramification, and storage of DNA data are subject to the general principles of data protection and privacy, which are enshrined in the Constitution of the Republic of Croatia[47], the GDPR[48], the Enforcement of Prison Sentence Law[49] and the Law on Criminal Procedure[50]. This legislation requires that the collection, use, and retention of personal data, including DNA data, be lawful, fair, and transparent, and that individuals be provided

---

46 See Constitution of the Republic of Croatia, Official Gazette No. 56/1990, 135/1997, 8/1998, 113/2000, 124/2000, 28/2001, 41/2001, 55/2001, 76/2010, 85/2010, 5/2014.

47 See Constitution of the Republic of Croatia, Official Gazette No. 85/2010, consolidated text, available at:
[https://www.sabor.hr/sites/default/files/consolidated-texts/2010-Constitution%20of%20the%20Republic%20of%20Croatia%20-%20consolidated%20text.pdf].

48 See Regulation (EU) 2016/679, available at:
[https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016R0679], Accessed 23. April 2023.

49 See Act on the execution of the prison sentence, Official Gazette No. 14/21, available at: [https://www.zakon.hr/z/179/Zakon-o-izvr%C5%A1avanju-kazne-zatvora], Accessed 23 April 2023.

50 See Criminal Procedure Code, Official Gazette No. 152/08, 76/09, 80/11, 121/11, 91/12, 143/12, 56/13, 145/13, 152/14, 70/17, 126/19, 130/20, 80/22, available at:
[https://narodne-novine.nn.hr/clanci/sluzbeni/2008_11_152_3484.html].

with adequate information and safeguards to protect their rights. The Constitution of the Republic of Croatia in Article 35 guarantees the right to privacy. Article 37, envisages that personal data protection and safety is guaranteed and personal data can be used only in cases designated by law. The Constitution stipulates that this right can only be limited in cases of national security or for criminal investigations, pending a court order. The General Data Protection Regulation (GDPR) applies to the processing of personal data that relates to an identified or identifiable natural person. Since 2018 the GDPR in Croatia replaced the Law on Privacy and Data Protection. The GDPR include genetic data and is considered to be a type of sensitive personal data. In the context of DNA data privacy, the GDPR imposes specific requirements on organizations that collect, process, and store genetic data. These requirements include obtaining explicit consent from the individual for the processing of their genetic data, ensuring the security and confidentiality of the data, and providing individuals with access to their genetic data. Furthermore, the GDPR establishes the principle of data minimization, which requires organizations to collect only the minimum amount of genetic data necessary for their intended purpose. This means that organizations cannot collect more genetic data than what is necessary for their specific research or medical purposes.

The Enforcement of Prison Sentence Law in Article 58 pertains to the process of collecting and storing biological samples from convicted prisoners. It stipulates that prisoners who have received a minimum prison sentence of six months for a criminal offense are required to provide a biological sample, typically in the form of DNA, to the authorities for storage in a national database. The main objective of the Law is to aid in the prevention of future criminal offenses by the same individual and to assist in the investigation and prosecution of crimes. The collection and storage of these biological samples must adhere to the Personal Data Protection Act and the Criminal Procedure Act, which provide guidelines for processing and storing personal data. It is also noteworthy that the collected samples may only be utilized to identify or verify the identity of a convicted prisoner or for use in criminal proceedings. It is important to bear in mind that the collection and storage of biological samples from prisoners under this law must be carried out by the principles of human dignity and the right to privacy, as outlined in the Croatian Constitution and the Personal Data Protection Act.

The Croatian Law on Criminal Procedure regulates the collection, use, and protection of personal data in criminal proceedings through Articles 186-188. The Law sets conditions for the permitted collection and processing of personal data, such as prohibiting the processing of personal data related to racial or ethnic origin, political beliefs, religious or philosophical beliefs, or trade union membership. Exceptions are made for personal data related to health or sexual life, which may

be processed if necessary for detecting or proving a criminal offense punishable by a prison sentence of five years or more. The law allows for periodic checks to be conducted every five years to assess the need for further retention or storage of personal data. The law also prescribes deadlines for deleting personal data, such as longer storage for legally convicted persons compared to those whose procedures ended with an acquittal, suspension, or dismissal of charges. However, these provisions do not specifically address biological samples and data collected by molecular genetic analysis. The retention of that data or DNA data profiles, according to Article 327 p.2 is dependent on the severity and length of the crimes, with more serious offenses having longer retention periods. Furthermore, the periodic review of data obtained by molecular genetic analysis is indefinite, unlike other personal data that undergo periodic review to determine whether the goal for which they were collected has reached its legitimate aim. There is the concern of lack of control mechanisms related to their collection, use, and retention as the current legal solution is opposite of the *Marper* standards established by the Court. Furthermore, there are no specific provisions that make a difference whether the DNA was taken from an adult perpetrator or a minor, and there is no provision for DNA profile deletion procedures initiated by data holders. Derencinovic argues that this is in direct contradiction to legal provisions relating to other personal data of minors and the standards established by the Court. This is contradictory to the views of the Court, which considers this type of personal data to be particularly sensitive, and therefore stricter control mechanisms related to their collection, use, and retention should be implemented compared to mechanisms for other types of personal data. Also, the provisions do not allow data holders to initiate deletion procedures for DNA profiles from databases. Rehabilitation is meant to restore a person's good name and create a fiction of previous innocence.[51] DNA profiles can be kept in databases even after the deletion of criminal records and rehabilitation, which raises concerns about the rights of innocent persons. DNA profiles can also be retained in databases for victims of criminal offenses for the same period as unconvinced persons. These issues raise questions about compliance with the standards of the European Court of Human Rights, especially after recent decisions in cases *Gaughran and Trajkovski and Chipovski, and Petrovic.* Although these judgments do not impose legal obligations on the Republic of Croatia, the interpretive dimension of the Convention as a living instrument suggests the need to review and potentially revise the legal and institutional framework for the collection, use, and retention of DNA profiles.

[51] See Derenčinović *et al.*, *op. cit.* note 4., p. 375.

4.2. Compliance of the National Legislation with the ECtHR and CJEU Standards

After the significant rulings in *the Gaughran and Trajkovski and Chipovski* cases, it presents an opportune moment to reexamine these matters and rectify any potential legislative shortcomings promptly before they are potentially subjected to scrutiny under the Court's three-part *Marper* test. First and foremost, as mentioned above it is important to highlight the Constitutional Court of the Republic of Croatia's *Decision U-I-448/2009* which declared the unconstitutionality of certain paragraphs of Article 327 of the Criminal Procedure Act due to their violation of Article 3, which pertains to the requirement that laws derive from the principle of the rule of law, in connection with Article 37 of the Constitution and Article 8 of the Convention. The Constitutional Court found the delegation of legislative powers to the heads of administrative departments to regulate the handling of data collected through molecular genetic analysis impermissible. This was especially problematic in terms of the executive power's authority to prescribe a longer storage period for such data than what is prescribed by law. Subsequently, the Criminal Procedure Act was amended in response to the Constitutional Court's decision. However, questions arise regarding the extent to which these new provisions align with the constitutional and convention norms and standards.

The Criminal Procedure Act regulates the collection, use, and protection of personal data for criminal proceedings through Articles 186-188. It outlines the conditions under which the collection and processing of personal data are allowed and specifies the types of personal data that are prohibited or exceptionally allowed. It also addresses the use of personal data in other procedures and mandates periodic reviews every five years to assess the necessity of further data retention or storage. The law is fully compliant with the GDPR and sets deadlines for the deletion of personal data, which vary depending on factors such as the outcome of the proceedings or the age of the individual. However, these provisions do not apply to the taking of biological samples and data obtained through molecular genetic analysis.

According to Article 327a paragraph 2 of the Criminal Procedure Act, data obtained through DNA analysis from a legally convicted person are retained for twenty years after the conclusion of the criminal proceedings. In cases where the offense carries a prison sentence of ten years or more, or if it involves a criminal offense against sexual freedom with a prison sentence exceeding five years, the data can be retained for a maximum of forty years. In the event of a final acquittal, suspension of criminal proceedings, or dismissal of charges, the data is kept for ten years after the conclusion of the proceedings, after which the competent authority must delete it from

the records. These provisions lack several guarantees established in the Court's jurisprudence. Is notable that the legislator distinguishes between crimes based on severity and links the retention period of the DNA profile to the imprisonment term, however, it seems less justified to treat less serious offenses and more serious ones within the same category. It would be preferable, in line with the Court's practice, to establish multiple categories of criminal offenses based on their severity and make the retention period contingent on the gravity of the offense. Moreover, unlike other personal data regulated by Articles 186-188, data obtained through molecular genetic analysis remain in databases until the expiration of the prescribed periods without the possibility of periodic reviews to reassess their continued necessity. This discrepancy contradicts the Court's view on the particularly sensitive nature of this type of data and necessitates stricter control mechanisms compared to other types of personal data. The provisions also fail to differentiate based on the age of the data subject, resulting in the same retention period regardless of whether the holder is an adult or a minor. This contradicts not only the Court's standards, especially those established about cases involving minors but also the legal provisions concerning other personal data of minors. Similarly, these provisions do not grant data subjects the opportunity to initiate procedures for deleting their DNA profiles from the database. It appears illogical and disproportionate to retain this type of personal data even after the rehabilitation period has expired. The purpose of rehabilitation is to restore a person's reputation and create the fiction of a previous conviction to facilitate reintegration and other reasons. Therefore, the current solution, where DNA profiles can be kept in databases even after the deletion of data from criminal records and the onset of rehabilitation, as regulated by the Law on Legal Consequences of Conviction, Criminal Records, and Rehabilitation, seems problematic. Ultimately, the retention of DNA profiles in Croatia's databases for up to ten years, even for individuals who are acquitted or found not guilty, raises concerns about the violation of their rights. The extended retention period for innocent individuals may not meet the test of a pressing social need before the European Court of Human Rights. This provision also raises doubts about the presumption of innocence. Additionally, the retention of DNA profiles of victims for the same duration as individuals who have not been convicted is contentious, especially considering the invasion of privacy. These issues highlight the need for Croatia's legal and institutional framework to align with the human rights standards set by the European Court of Human Rights.

5. CONCLUSION

Without a doubt, DNA analysis is commonly used in criminal investigations for identifying suspects and providing forensic evidence. However, it's crucial to recognize that forensic science is not infallible and cannot determine guilt or inno-

cence with absolute certainty. In recent years, scientific errors have been found to contribute to a concerning number of miscarriages of justice. With the rise of cross-border crime, the exchange of DNA data between countries has become necessary, leading to the establishment of national DNA databases and regulations for data sharing. Nevertheless, variations in the rules for collecting DNA samples and sharing data can create challenges. The European Union (EU) is working towards harmonizing these rules to foster mutual trust and enhance database access. One approach is to apply the requesting state's procedures to ensure the validity of evidence. The case law of the European Court of Human Rights (ECtHR) and the Court of Justice of the European Union (CJEU) has set significant precedents for shaping national and supranational legislation on the handling of DNA materials across Europe. Although Croatia hasn't faced legal action for violating Article 8 of the Convention, the jurisprudence of the ECtHR and CJEU can be instrumental in identifying potential issues within the country's legislation and practices. In Croatia, the collection, use, and retention of personal data, including DNA data, are regulated by the Law on Criminal Procedure. However, concerns arise regarding the lack of control mechanisms for DNA data collection, use, and retention, the absence of specific provisions differentiating between adults and minors regarding DNA data, and the absence of procedures allowing data holders to initiate the deletion of DNA profiles from databases. The retention of DNA profiles even after the deletion of criminal records and rehabilitation raises concerns about the rights of innocent individuals. Croatia must review and amend its legislation to ensure compliance with the standards established by the ECtHR's *Marper* judgment. Stricter control mechanisms should be implemented for the collection, use, and retention of DNA data to safeguard individuals' rights.

REFERENCES

BOOKS AND ARTICLES

1. Alleyne, L. (2009). *Interpol handbook on DNA data exchange and practice – Recommendations From the Interpol DNA Monitoring Expert Group,* Vol. 2, 2009
2. Bozhinovski, A., *Addressing Wrongful Convictions in Croatia through Revision of the Novum Criterion: Identifying Best Practices and Standards*; Mali, J (eds.), Human Rights in Contemporary Society – Challenges From an International Perspective, Vol.1 2023, available at: [https://www.intechopen.com/online-first/86866], Accessed 4 April 2023
3. Becker, S.W., Derenčinović, D., Primorac, D., *DNA as Evidence in the Courtroom*; Primorac, D. and Schanfield, M., (eds.) Forensic DNA Applications: An Interdisciplinary Perspective, 2023, pp. 433- 448
4. Derenčinović, D., Roksandić Vidlička S., Dragičević Prtenjača, M., *'Innocence Projects' and Subsequent DNA Testing in Croatia: a Possible Reality or an Unattainable Desire?*. Zbornik Pravnog fakulteta u Zagrebu, Vol. 67, No. 3-4, 2017 pp. 373–404, available at:

[https://hrcak.srce.hr/clanak/275621], Accessed 3 May 2023

5. Kaye, D.H., *Maryland v. King: Per se unreasonableness, the Golden Rule, and the future of DNA databases*. Harv. L. Rev. F., 127, 2013 p. 39-48
6. Krstulović Dragičević, A., Sokanović, L., *Načelo zakonitosti pred izazovima europskog kaznenog prava.* Zbornik radova s medunarodnog savjetovanja „Europeizacija kaznenog prava i zaštita ljudskih prava u kaznenom postupku i postupku izvršenja kaznenopravnih sankcpija", Vol. 1, 2017, Split, pp. 25-45
7. Soleto Muñoz, H., Fiodorova, A, *DNA and law enforcement in the European Union: tools and human rights protection.*, Utrecht Law Review, Vol. 10, 2014, pp. 149-162
8. Primorac, D., Primorac, D., Butorac, S. S., & Adamović, M., *Analiza DNA u sudskoj medicini i njezina primjena u hrvatskome kaznenopravnom sustavu.* Hrvatski ljetopis za kazneno pravo i praksu, Vol. 16, 2009, pp. 3-26
9. Primorac, D., Schanfield, M., *Forensic DNA applications: An interdisciplinary perspective*. CRC Press, 2023 p. 1-42
10. Romeo Casabona, C.M., *La insostenible situación del derecho penal*., Granada: Comares, 2000., pp. 45-87
11. Tseloni, A., Pease, K; *DNA retention after arrest: Balancing privacy interests and public protection*. European Journal of Criminology, Vol. 8, No. 1, 2010, pp. 32–47. doi: [https://doi.org/10.1177/1477370810372133]
12. Tuazon, O.M., *Universal forensic DNA databases: acceptable or illegal under the European Court of Human Rights regime*?. Journal of Law and the Biosciences, Vol. 8, No. 1, 2021, pp. 18-27

LEGAL DOCUMENTS

1. Act on the execution of the prison sentence, Official Gazette No. 14/21, available at: [https://www.zakon.hr/z/179/Zakon-o-izvr%C5%A1avanju-kazne-zatvora]
2. Constitution of the Republic of Croatia, Official Gazette No. 56/1990, 135/1997, 8/1998, 113/2000, 124/2000, 28/2001, 41/2001, 55/2001, 76/2010, 85/2010, 5/2014
3. Council of Europe, Committee of Ministers, Explanatory Memorandum to Recommendation No. R (87) 15 of the Committee of Ministers to Member States Regulating the Use of Personal Data in the Police Sector. Adopted by the Committee of Ministers on 17 September 1987 at the 410th Meeting of the Ministers' Deputies, available at: [https://rm.coe.int/168062dfd4]
4. Council of the European Union, Council Resolution of 9 June 1997 on the Exchange of DNA Analysis Results" [1997] Official Journal of the European Communities L193
5. Council of Europe Committee of Ministers, Recommendation No. R (92) 1 of the Committee of Ministers to Member States on the use of analysis of deoxyribonucleic acid (DNA) within the framework of the criminal justice system. Adopted by the Committee of Ministers on 10 February 1992 at the 470th meeting of the Ministers' Deputies, available at: [https://rm.coe.int/09000016804e54f7]
6. Criminal Procedure Code, Official Gazette No. 152/08, 76/09, 80/11, 121/11, 91/12, 143/12, 56/13, 145/13, 152/14, 70/17, 126/19, 130/20, 80/22, available at:

[https://narodne-novine.nn.hr/clanci/sluzbeni/2008_11_152_3484.html]

7. The Council of Europe's Convention for the Protection of Individuals about the Automatic Processing of Individual Data and Protocols, ETS. No. 108 +, available at:: [https://www.coe.int/en/web/data-protection/convention108-and-protocol]
8. The Stockholm Programme [2010] OJ C 115 available at: https://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2010:115:0001:0038:en:PDF]
9. Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation), available at: [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016R0679]

ECtHR and CJEU CASES:

1. *Aycaguer v France* (2017), application no. 8806/12, 22 June 2017, available at: [https://hudoc.echr.coe.int], Accessed 3 April 2023
2. *Dragan Petrovic v Serbia* (2020), application no. 75229/10, available at [https://hudoc.echr.coe.int], Accessed 4 April 2023
3. Court of Justice of the European Union, Volker und Markus Schecke GbR, Hartmut Eifert v Land Hessen, Cases C-92/09 and C-93/09, [2010] ECR I-11063
4. *Gaughran v the United Kingdom* (2020), application no. 45245/15, 13 February 2020, available at: [https://hudoc.echr.coe.int], Accessed 3 April 2023
5. *S. and Marper v United Kingdom* (2008), application no. 30562/04 and no. 30566/04, 4 December 2008, available at: [https://hudoc.echr.coe.int], Accessed 3 April 2023
6. *Trajkovski and Chipovski v North Macedonia* (2020) application no. 53205/13 and no. 63320/13, available at: [https://hudoc.echr.coe.int], Accessed 1 April 2023

UDK 343.4(4-67EU)
Original scientific paper

COMPARATIVE AND DOGMATIC ISSUES OF HATE SPEECH-TRADITIONAL AND MODERN ACTS OF COMMISSION*

Ivan Vukušić, PhD, Associate Professor
Faculty of Law Split
Domovinskog rata 8, Split, Croatia
ivan.vukusic@pravst.hr

ABSTRACT

Given that the criminal offense of Public Incitement to Violence and Hatred seeks to protect public order but also certain groups of individuals and limit freedom of speech, the paper provides a comparative legal analysis of this criminal offense through Anglo-Saxon and continental law and especially refers to the law of EU and EU Member States. The paper analyzes some dogmatic principles of criminal law that explain the conditions when Public Incitement to Violence and Hatred can be committed. Especially, the development of modern technology and modern way of communication and influence considered in the paper the possibility to affect different groups of people through incitement to hate speech. Hate crime precedes different riots that in times of social turbulence can lead to different criminal offenses that affect the economic, cultural, and environmental positive development of society. The paper gives a broader insight into the way this criminal offense can be committed, especially taking into account the act of committing Public Incitement to Violence and Hatred, connecting it to forms of committing this criminal offense in a "non-public" way through the traditional act of commission or using modern technologies (Social Networks, AI,...) and the dogmatic issue of special intent.

Keywords*: EU law, hate speech, non-public commission, special intent*

1. INTRODUCTION

It is impossible to assess the importance of freedom of speech in a democratic society. However, determining the limits of freedom of speech is always problematic.[1]

* "This work has been supported in part by Croatian Science Foundation under the project Croatian Misdemeanor Law in the European Context - Challenges and Perspectives (UIP-2020-02-6482)".

1 Herceg Pakšić, B., *Holding All the Aces? Hate Speech: Features and Suppression in Croatia* in: Meškić, Z.; Kunda, I.; Popović, D.V.; Omerović, E. (eds.), Balkan Yearbook of European and International Law, Springer, 2020, pp. 225-248.

When we talk about incitement, we mean encouraging or persuading another to commit a criminal offense. Incitement consists of persuading, encouraging, directing, pressuring, or threatening (under the condition that it is not indirect perpetration) so that another commits a criminal offense. Incitement is defined as influencing others to undertake certain forms of behaviour including committing criminal acts using threats or propaganda.[2] Incitement in international law requires direct and explicit encouragement together with the direct intent to commit a criminal offense or awareness of the likelihood that a criminal offense may be committed and the perpetrator accedes to it.[3] Inciting speech can be implicit where the meaning is undoubtedly given through the social context and the listener's understanding of the message.[4] However, on the issue of hate speech, the author's views, on the world level are not unique.[5]

The Institute of Incitement to Violence and Hatred has a long history. Historically speaking, its development goes back to the crimes against humanity associated with Nazism. History teaches us that the advancement of theories about racial supremacy and their accepted proclamation leads to the inequality of citizens and the physical abuse of members of minority groups.[6] Previous jurisprudence focused primarily on racial hatred and incitement to racial hatred and the fact that such incitement ultimately resulted in genocide.

The challenge for every society is confronting the legal system in defining which speech should be allowed, that is, which speech represents protection from the interference of public authorities. Although there is numerous jurisprudence on what speech is permissible and what speech is not permissible, for example, Anglo-Saxon jurisprudence has not established a clear definition of what speech is permissible and what speech is not permissible.[7] We can say that particularly severe forms of hate speech can be a threat to the functioning of a democratic society and represent a force that can undermine fundamental values such as respect and solidarity. It is a speech that verbally attacks a person or a group of persons because

---

2 Fino, A., *Defining Hate Speech*, Journal of International Criminal Justice, Vol. 18, No. 1, 2020, pp. 31-57.

3 Cassese, A., *International Criminal Law*, Oxford University Press, Oxford, 2003, p. 189.

4 International Tribunal for Ruanda, *The Prosecutor v Jean-Paul Akayesu (Trial Judgement),* ICTR-96-4-T par. 557.

5 Herceg Pakšić, B., *Tvorba novih standarda u slučajevima teških oblika govora mržnje: negiranje genocida pred Europskim sudom za ljudska prava*, Zbornik Pravnog fakulteta u Zagrebu, Vol. 67, No. 2, 2017, p. 230.

6 Hughes, G., *Prohibiting Incitement to Racial Discrimination*, The University of Toronto Law Journal, Vol. 16, No. 2, 1966, pp. 229-253.

7 Crane, J., *Defining the unspeakable: Incitement in Halakhah and anglo-american jurisprudence*, Journal of Law and Religion, Vol. 25, No. 2, 2009, pp. 329-356.

of different origins, races, gender, sexual orientation, religion, or other criteria.[8] It is known that words can cause many things, and one of the effects is that they can cause significant evil. Words can cause direct psychological harm, but they can also directly or indirectly affect causing physical violence. In the context of mass violence, words are used to create and reinforce social relations in a negative sense.[9] It is clear that there is freedom of speech, but there are also some limits to freedom of speech. When defining what hate speech is, the judgment of the public is not always important, and it must be an objective judgment that can encourage listeners to act. On the other hand, denying freedom of speech can lead to frustrations that can affect the sense of honour and value as an image of oneself. If speech is forbidden, then different ideas are also forbidden. If speech is prohibited with the best intentions, then speech with bad intentions can easily be prohibited.[10] Namely, if speech is forbidden, then it is possible that the accumulated frustration later manifests itself in the worst possible way in the form of violence. However, we must not forget that hate speech itself can cause incalculable damage to individuals and society as a whole. When analysing hate speech in continental law, a restrictive understanding is necessary because incitement to violence and hatred must be distinguished from other forms of speech such as Insults and Defamation.

The significance of hate speech for the environment is indirect. In times of prosperity culture and environment can develop, but during a crisis in society, unfortunately, culture and environment aren't a priority. That is the reason why this paper aims to analyse from a comparative perspective hate speech that can be committed in a traditional or modern way. Paper on example of Croatia aims to see whether current legislation is sufficient for fighting traditional and modern acts of commission of hate speech from dogmatic point of view.

2. UNITED STATES OF AMERICA

The American approach is characterized by the understanding that there must be absolute freedom of speech and that the market of ideas will crystallize which idea is correct, thus recognizing all forms of expression. In the US, various laws have been enacted to respond to hate speech, such as the Hate Crime Statistics Act, the Religious Vandalism Act, and the Fair Housing Act, which determine compensation or punishment for various forms of hate crime.

---

8 Alkiviadou, N., *The Legal Regulation of Hate Speech: The International and European Frameworks,* Croatian Political Science Review, Vol. 55, No. 4, 2018, pp. 203-229.

9 Fyfe, S., *Tracking hate speech as incitement to genocide in international criminal law*, Leiden Journal of International Law, Vol. 30, No. 2, 2017, pp. 523-548.

10 Hughes, *op. cit.* note 6, p. 363.

In the US, the Supreme Court found that the limitation of speech is possible if a person uses fighting words,[11] because certain forms of expression do not serve the purpose of exchanging ideas in society therefore, they are not protected by the first amendment. Limitation of speech is possible if it represents an actual threat[12], direct incitement[13], intentional public defamation[14], obscenity[15], and child pornography[16]. Courts in the USA analysed the different forms of speeches, in the case of *Roth v United States*[17] and *Beauharnais v Illinois*[18] and concluded that there is speech that is not protected by the Constitution, but it needs to be analysed in an individual context. Unlike many human rights documents, speech cannot be limited simply because it contains hate in its content.[19]

Incitement law in the US analyses the likelihood that certain speech will lead to the commission of illegal acts. Fighting words are not protected by the First Amendment because they are likely to incite violence in society, not because they express the prejudice of the speaker. Namely, ideas may not be suppressed simply because they are wrong or unpopular.[20] The degree of injury can be considered through direct damage and indirect damage. Direct damage is encompassing those actions that the legal order wants to prevent, while indirect damage to fighting words consists in the fact that they can cause immediate damage. Therefore, the state tries to prevent speech that represents indirect damage to society so that no direct damage occurs. Therefore, in the US, the question arises whether, in times of peace and prosperity, it would be possible to incite violence and hatred in society if it is obvious that no injury will occur. The answer is negative because there is no concrete endangerment.[21] Since US law is based on precedents, the paper will present some important rulings.

---

11 Supreme Court USA, *Chaplinsky v N.H.*, 315 U.S. 568, 572 (1942).

12 In this case, the existence of intent to intimidate is necessary. Supreme Court USA, *Virginia v Black*, 538 U.S. 343 (2003).

13 Supreme Court USA, *Brandenburg v Ohio*, 395 U.S. 444, 447 (1969).

14 Supreme Court USA, *N.Y. Times v Sullivan*, 376 U.S. 254, 279-80 (1964).

15 Supreme Court USA, *Roth v U.S.*, 354 U.S. 476, 484 (1957).

16 Supreme Court USA, *N.Y. v Ferber*, 458 U.S. 747,764 (1942). The welfare of children is the more important and overriding interest.

17 Supreme Court USA, *Roth v United States,* 354 U.S.C. 476 (1957).

18 Supreme Court USA, *Beauharnais v Illinois* 343 U.S.C. 250 (1952).

19 Saslow, B., *Public enemy: The public element of direct and public incitement to commit genocide*, Case Western Reserve Journal of International Law, Vol. 48, No.1-2, 2016, pp. 417-449.

20 Supreme Court USA, *Texas v Johnson*, 491 U.S. 397 (1989); Fisch, W.B., *Hate Speech in the Constitutional Law of the United States*, The American Journal of Comparative Law, Vol. 50, 2002, pp. 463-492.

21 Crane, *op. cit.* note 7, p. 343.

In the case of *R.A.V. against City of St. Paul, Minnesota*,[22] Court found that R.A.V. was a minor and that he with different actions intended to intimidate the immigrant family so that they would not feel welcome in the neighbourhood. R.A.V. was convicted of a criminal offense. If it is a behaviour that represents an injury or is intended to incite immediate violence, then such behaviour is not protected by the First Amendment to freedom of speech.[23] The distinction between action and speech came before the court in the case of the *U.S. v O'Brien*, where the Supreme Court found that prescribing the burning of draft military ID cards as a criminal offense is not a violation of the First Amendment, and such burning does not constitute freedom of speech. O'Brien was an opponent of the war in Vietnam. The US has mandated that all young men over the age of 18 registers and receive a registration card. O'Brien burned his ID card along with three other friends, claiming that he wanted to express his protest against the Vietnam War. Namely, although O'Brien was free to protest, he had to have an ID card. Taking into account the elements of speech and conclusive actions, it is necessary to see if there is a sufficiently important state interest in regulating non-speech elements. Such restriction of freedom of speech and non-speech elements must meet some requirements such as that: the government must be authorized to act following the Constitution; it must be an important or essential governmental interest; such interest must not be connected to speech restriction (for example, if the speech is about neutral content); the ban on speech must be limited only to the extent that it is essential to an important government interest. Congress has the power to mobilize the military, and the ID allowed the whole system to function normally. Registration and mobilization of the army took place independently of freedom of speech. The court did not see an alternative so that the system could function normally without the draft card, and for this reason, its destruction was prohibited. O'Brien was convicted for non-communicative impact. Namely, O'Brien had other means at his disposal and could express his disagreement in another way, and not by burning the card.

In the case of *Beauharnais v Illinois*,[24] the Supreme Court established that a form of speech that represents libellous, insulting, or fighting words is prohibited. In the case of *Chaplinsky v New Hampshire*,[25] fighting words were defined as those the uttering of which would constitute an injury or an attempt to incite an imminent breach of the public peace.

---

22 Supreme Court USA, *R.A.V. v City of St. Paul*, 505 U.S. 377 (1992).

23 Fisch, *op. cit*. note 20, p. 464.

24 Supreme Court USA, *Beauharnais v Illinois,* 343 U.S. 250 (1952).

25 Supreme Court USA, *Chaplinsky v New Hampshire,* 315 U.S. 568 (1942).

In the case of *Brandenburg v Ohio*,[26] the Supreme Court found that only speech that was intended to incite or create an imminent illegal act or was likely to incite or create such an act could be prohibited. The instigator does not have to succeed in intending the audience to commit violence.[27] The Supreme Court ruled that the use of the swastika is a symbolic form of freedom of speech that is protected by the First Amendment and that the swastika itself does not represent fighting words, that is, words spoken or written to incite violence and hatred. The Supreme Court concluded that it was necessary to see whether those listening to such speech were likely to take immediate action in reaction to such speech.[28] A causal link must exist between speech or incitement and potential injury. It is necessary to analyse the speaker, the stated content, and the audience to whom the messages are directed, and if it is not likely that the audience will cause a violation of some legal good, then there is no concrete endangerment.[29]

In US law, speech likely to incite an audience to harm neighbouring persons is properly subject to state interference according to the rights of freedom of speech. As a result of the above, there is a tendency to consider the immediacy of danger through the "clear and present danger test", but this standard does not define "proximity and degree", that is, whether proximity should be interpreted through temporal or spatial immediacy or both.[30] Therefore, it can be concluded that US law protects the primacy of free speech except when there is a clear and imminent danger of illegal action.[31] In addition to the requirement of immediacy, US law also requires the likelihood that the statement will lead to violence.

3. THE UNITED KINGDOM WITH EMPHASIS ON NORTHERN IRELAND

In the UK, incitement to hatred has been banned since 1965 under the Race Relations Act. Incitement to hatred based on religion was prohibited in 2006 under the Racial and Religious Hatred Act, and incitement to hatred based on sexual orientation was made punishable under the Criminal Justice and Immigration Act 2008. Incitement is defined as encouragement or as harassment and stirring

---

26 Supreme Court USA, *Brandenburg v Ohio*, 395 U.S. 444 (1969).

27 Tanenbaum, R.S., *Preaching terror: Free speech or wartime incitement*, American University Law Review, Vol. 55, No. 3, 2006, pp. 785-819.

28 Benesch, S., *Inciting Genocide, Pleading Free Speech*, World Policy Journal, Vol. 21, No. 2, 2004, pp. 62-69.

29 Crane, *op. cit.* note 7, 331.

30 *Ibid*., p. 336.

31 Hughes, *op. cit.* note 6, p. 367.

up hatred.[32] This is especially important in the case of incitement to hatred since it is directed towards a certain group. Therefore, within the framework of hatred, it is necessary to distinguish and understand those words that are threatening, and those words that are offensive or attacking.[33] Therefore, in UK law, an acceptable defence is that the person merely wanted to express insult or aversion to a group. Nevertheless, the term incitement remains dominant in international law. The term incitement has a more serious tone but is also significant in the criminal law literature because using the term incitement still emphasizes the seriousness of criminal offenses that are the subject of public incitement.

Incitement to hatred has been punishable in Northern Ireland since 1970. Despite being punishable, very few proceedings were brought to court.[34] In 1976, there were changes to the law in which incitement to racial hatred was especially emphasized. However, the intent was marginalized so it was enough that there was a sufficient probability that certain words or materials would incite hatred. No intent was specifically required. The Public Order Act of 1987 regulated incitement to hatred. The aforementioned law prohibits stirring up hatred or arousing fear. Unlike earlier regulations, the law no longer uses the term incitement.[35] Actions that are intended or likely to incite hatred or fear concerning groups defined by religious belief, colour, race, nationality, or ethnic or national origin are now regulated. Sexual orientation and disability were added as protected categories by the Criminal Justice (No.2) Order of 2004. The 1987 Act easies the intent criterion in such a way that an offense exists if a person intends to incite hatred or cause fear or, taking into account all the circumstances, hatred under these circumstances is likely to be stirred up or fear to be provoked. Ultimately, the Justice Act of 2011 prescribes the punishment of chanting, which is chanting at football matches, because chanting is indecent, is sectarian, or consists of threats, insults, or insults towards people with common characteristics of skin colour, race, nationality, ethnic or national origin, religious belief, sexual orientation or disability.

Certainly, different authors in the UK and Northern Ireland agree that perhaps some other ways of fighting against incitement to hatred and violence should be taken into account because this kind of legislation has reshaped hate speech in the

---

32 Coliver, S. (ed.), *Striking a balance: Hate Speech, Freedom of Expression and Non-discrimination*, 1992, [https://www.article19.org/data/files/pdfs/publications/striking-a-balance.pdf], Accessed 28 May 2022.

33 Goodall, K., *Incitement Religious Hatred: All Talk and no Substance?,* The Modern Law Review, Vol. 70, No. 1, 2017, pp. 89-113.

34 McVeigh, R., *Incitement to Hatred in Northern Ireland*, Equality Coalition, Northern Ireland, 2018, p. 2.

35 Coliver, *op. cit.* note 32, pp. 267-268.

public and not eradicated it.[36] Namely, the law of Northern Ireland thus erases the difference between hate speech and insults.

4. EUROPEAN LAW

It was previously stated that there are documents of certain bodies that regulate hate speech. Thus, the Recommendation of the Committee of Ministers on Hate Speech from 1997[37] states that hate speech includes expressions that spread, incite, promote or justify a form of hatred based on intolerance, including intolerant expression, discrimination, and hostility.

The Council's Framework Decision 2008/913/PUP for Combating of Certain Forms and Expressions of Racism and Xenophobia from 2008 correctly defines incitement and intent, in opposite to Art. 4. of the International Convention on the Elimination of All Forms of Racial Discrimination (hereinafter: ICERD), which punishes only the spread of ideas. However, the EU has not taken any further measures against the sanctioning of hate speech, for example by civil law. The aforementioned Framework Decision on Racism and Xenophobia determined that all Member States must foresee the following behaviours as punishable by their legislation: 1. public incitement to violence and hatred towards others and members of certain groups based on race, skin colour, religion, national origin, and ethnicity; 2. public incitement to violence with the distribution of leaflets, pictures or other material in public, and 3. public condoning of crimes against humanity, war crimes or aggression, directed against a group, person or member of any of the aforementioned groups, if committed in a manner likely to incites violence or hatred.[38] The Framework Decision foresees the duty to sanction both natural and legal persons. Also, the special maximum for punishing this criminal offense is three years in prison. The Framework Decision on Racism and Xenophobia requires effective, proportionate, and dissuasive sanctions.[39] However,

---

[36] Pesinis, A., *The Regulation of Hate Speech,* Budapest, 2015, p. 98, [www.etd.ceu.hu/2016/pesinisantonios.pdf], Accessed 28 May 2022.

[37] *Council of Europe's Committee of Ministers Recommendation 97 (20) on Hate Speech*, [https://rm.coe.int/1680505d5b], Accessed 28 May 2022.

[38] *212. Tribina Pravnog fakulteta u Zagrebu, Gdje prestaje sloboda izražavanja, a počinje govor mržnje- neke kaznenopravne dileme*, Zagreb, 2017, p. 7, [https://www.pravo.unizg.hr/images/50018419/212%20Surina%20Marton%20Munivrana%20Vajda%20travanj%20L(1).pdf], Accessed 28 May 2022.

[39] On the law of the European Union and the Council of Europe, see more in Herceg Pakšić, B.; Habrat, D., *Comparative Views on a Permanenet Challenge: Hate Speech sanctioning in Poland and Croatia*, ECLIC, 2022, pp. 289-314. Important case law for hate speech are European Court of Human Rights, *Vajnai v Hungary*, App. no. 33629/06, 8 July 2008 and European Court of Human Rights, *Vona v Hungary*, App. no. 35943/10, 9 December 2013.

the Framework Decision also provided the possibility of restrictions for Member States, all following their legal tradition and legal system, which the Republic of Croatia did not take advantage of. Hate speech was implemented in the Criminal Code of the Republic of Croatia (further: CCC) on a broader basis than the Framework Decision required, so the CCC punishes "calls" to violence and hatred towards groups based on their gender, sexual orientation, gender identity or other characteristics, as well as organizing and leading a group as well as an attempt of that criminal offense.[40]

However, hate speech is also present on the Internet today. The fight led by the EU in the framework of the misuse of social networks using Directive 2000/31/EC of the European Parliament and the Council on certain legal aspects of information society services in the internal market is insufficient.[41] Namely, according to this EU document, there is ambiguity about the types of services that are provided, so instead of facilitating the fight against hate speech, there are additional difficulties in that fight.[42] Now when we can see that legal provisions in the EU concerning hate speech can be found in ambiguity, the real conclusion is that parameters for AI technology that would suppress hate speech on the Internet can't be established.[43] European Parliament refers to "smart robots" which function with a degree of autonomy using AI. If AI can be used to replacement of humans in suppressing hate speech then AI can commit damage.[44] Ethics Guidelines for Trustworthy AI with the final version published in 2019 prescribes that the use of AI should be based on legality, ethics, and social and technical resilience in favour of humans. Unfortunately, Ethics Guidelines disregard criminal law.[45] Scientists are working on a project of software that could assist persons (police, editors of websites…) towards suspected criminal offenders connecting relevant data with hypotheses of future action.[46] Still, algorithms that fight AI create humans and control humans

---

40 *212. Tribina Pravnog fakulteta u Zagrebu, Gdje prestaje sloboda izražavanja, a počinje govor mržnje- neke kaznenopravne dileme*, Zagreb, 2017, p. 7 [https://www.pravo.unizg.hr/images/50018419/212%20Surina%20Marton%20Munivrana%20Vajda%20travanj%20L(1).pdf], Accessed 28 May 2022.

41 Roksandić Vidlička, S.; Mamić, K., *Zlouporaba društvenih mreža u javnom poticanju na nasilje i mržnju i širenju lažnih vijesti: Potreba transplantiranja njemačkog Zakona o jačanju provedbe zakona na društvenim mrežama*, Hrvatski ljetopis za kazneno pravo i praksu, Vol. 25, No. 2, 2018, pp. 329-357.

42 *Ibid.*

43 Roksandić, S., Internet sve više postaje svojevrsna arena govora mržnje, [https://www.glas-slavonije.hr/416902/11/Internet-sve-više-postaje-svojevrsna-arena-govora-mrznje], Accessed 19 December 2022 .

44 Vuletić, I.; Petrašević, T., *Is It Time to Consider EU Criminal Law Rules on Robotics?,* Croatian Yearbook of European Law and Policy, Vol. 16, No. 1, 2020, pp. 225-244.

45 *Ibid*., p. 229.

46 *Ibid.,* p. 231.

because of content on the Internet that is ambiguous, ironic, or sarcastic. One of the mechanisms to fight hate speech encompass so-called "hashes", which are part of the metadata of certain content, if it's reported as illegal, such content enters the database of "hashes" and stops such content in the future.[47]

5. GERMANY

The highest courts in Germany have concluded that they strive to protect the truth at all costs and do not look so much at the injury that can result from hate speech in that case. The regulation and prevention of hate speech in Germany are mostly based on bad experiences during the Nazi regime and extremist policies. Germany harmonized its legislation with Art. 19. of the International Covenant on Civil and Political Rights (further: ICCPR) through the limitations of Art. 19 par. 3. of ICCPR. Thus, the StGB proclaims the principle of legality, because each regulation must be precisely determined to enable the addressees to adjust their behaviour. StGB implies the existence of a legitimate aim because it is necessary to protect the rights and reputation of others or to protect national security and public order, health, or morals. Any limitation of freedom of expression must be necessary in a democratic society, that is, it is necessary to prove the necessity and proportionality of individual action, and in particular to prove the direct and immediate connection between expression and a threat to public order. The provision of public incitement to violence and hatred does not require special intent, therefore the court does not need to analyse the motives and aims of the perpetrator and the attitude of the perpetrator that was present in the commission of the specific criminal offense.[48] When the StGB prescribes as punishable hatred directed towards parts of society or specific social groups, it also refers to other groups that are not exhaustively listed in the StGB.[49] Acts of perpetration under the StGB that regulate hate speech are incitement to hatred, incitement to violence or arbitrary measures, defamation through publication or distribution of materials, introducing minors to such materials, or importing, exporting, purchasing, or distributing such materials. In addition to the aforementioned criminal offense, it is also prescribed as punishable in Art. 46 par. 2. of the StGB that a motive that is racist, xenophobic, or of another inhuman or contemptuous nature

---

47 Roksandić, S., Internet sve više postaje svojevrsna arena govora mržnje, [https://www.glas-slavonije.hr/416902/11/Internet-sve-više-postaje-svojevrsna-arena-govora-mrznje], Accessed 19 December 2022.

48 Coliver, *op. cit.* note 32, pp. 164-165.

49 *Country Report: Germany: Responding to „hate speech"*, 2018, p. 13, [https://www.article19.org/wp-content/uploads/2018/07/Germany-Responding-to-%E2%80%98hate-speech%E2%80%99-v3-WEB.pdf], Accessed 28 May 2022.

should be taken into account as an aggravating circumstance when sentencing. StGB punishes Incitement to Hatred according to Art. 130 of the StGB, the attempt to commit a Criminal Offense using Publishing in Art. 130a of the StGB, Dissemination of propaganda material of unconstitutional and terrorist organization in Art. 86 of the StGB and the Use of symbols of the unconstitutional and terrorist organization in Art. 86a of the StGB.

However, as Roksandić and Mamić state, Germany went one step further in regulating hate speech on the Internet by passing a special law, the Network Enforcement Act, which establishes the regulation of social network responsibilities, while prohibited content is defined through the existing StGB.[50] This law recognized the dangers of public insults and defamation, in spreading hate speech.[51]

6. PUBLIC INCITEMENT OF VIOLENCE AND HATRED (ART. 325 OF THE CC IN CROATIA)

Hate speech includes an expression that can include verbal and non-verbal forms of expression. Art. 325 of the Criminal Code in Croatia[52] strives to suppress violence and extremism in society. Currently, the interpretation of Art. 325 of the CCC is that a criminal offense has been committed if there is a call to action, and then a criminal offense under Art. 325 of the CCC should be interpreted as a criminal act of concrete endangerment.

When assessing the likelihood of committing the criminal offense of Public Incitement to Violence and Hatred, we need to analyse the imminence of violence.[53] Nevertheless, Art. 325 of the CCC should be interpreted restrictively, and the existence of a potential disturbance of public order should be required.[54] It is clear that by spreading hate speech according to one of the grounds mentioned in Art. 325 of the CCC, the perpetrator intends at the same time to call public order into question with this statement. Therefore, *ratio legis* is the protection of public order, but also, indirectly, the protection of the rights of a certain group. For the

---

50 See more in Roksandić Vidlička; Mamić, *op. cit.*, note 41, p. 341.

51 *Ibid.,* p. 342.

52 Criminal Code of Croatia, Official Gazette No. 125/11, 144/12, 56/15, 61/15, 101/17, 118/18, 126/19, 84/21.

53 Fyfe, *op. cit.,* note 9, p. 527.

54 Regarding the prevention of crime, in the last few years, the judicial practice has been more restrictive and it is required that there has been very imminent danger of the public disorder, and not only some abstract violation of legal principles. *212. Tribina Pravnog fakulteta u Zagrebu, Gdje prestaje sloboda izražavanja, a počinje govor mržnje- neke kaznenopravne dileme*, Zagreb, 2017, p. 8, [https://www.pravo.unizg.hr/images/50018419/212%20Surina%20Marton%20Munivrana%20Vajda%20travanj%20L(1).pdf], Accessed 28 May 2022.

criminal offense of Art. 325 of the CCC to be realized, it is necessary to connect a certain statement with a potential disturbance of public order and an imminent potential violation of the rights of a certain group. The aim of Art. 325 of the CCC is to prevent radicalization, recruitment, or propaganda. The glorification of a criminal offense must be distinguished from incitement because glorification does not threaten immediate violence or injury.[55] Constitutions protect provocative and insensitive speech when it causes rage or anger, so for that reason, that speech cannot be criminalized just because it is offensive, or because it is spoken with an emotional charge.[56] But if messages are disseminated in society and to the public to incite others to violence or hatred, such behaviour should be prohibited. Therefore, it is necessary to distinguish offensive from hate speech that has threatening content.

Analysing comments on the web is particularly problematic. This is a virtual world. This is where we run into the danger that only the written word is evaluated more severely than the spoken word because it is not always possible to read all the emotions and the entire context in the written text, which can be of importance and help in determining the intent.[57] However, violence and hatred are two close concepts that can be manifested in different ways, and hatred is a feeling that is created and that precedes violence. It is difficult to imagine the violence that is not previously conditioned by hatred, and these two concepts should be connected in legislation.

Despite the multitude of legal sources and the different understanding of hate speech by different authors, we can certainly mention the content of the UN Rabat Action Plan,[58] which sets a six-fold test that will help judges to determine whether a high threshold has been achieved in hate speech. Therefore, it is necessary to analyse: the context, which is of great importance when assessing whether a specific statement is likely to incite discrimination, hostility or violence against the target group; the speaker's position or status in society should be considered, especially whether it is an individual point of view or an organization's point of view from the perspective of the audience to whom the speech is addressed; intent,

---

55 Van Landingham, R. E., *Words We Fear: Burning tweets and politics of incitement*. Brooklyn Law Review, Vol. 85, No. 1, 2019, pp. 37-83.

56 Tsesis, A., *Inflammatory Speech: Offense Versus Incitement*, Minnesotta Law Review, Vol. 97, No. 4, 2013, pp. 1145-1196.

57 More about regulating hate speech on the Internet and problems in European and Croatian legislation, see Roksandić Vidlička; Mamić, *op. cit.* note 41, pp. 329-357.

58 UN Rabat Action Plan, [https://www.ohchr.org/en/documents/outcome-documents/rabat-plan-action], Accessed 06 March 2023.

because negligence and carelessness are not sufficient for the act (conduct) of criminal offense; content and form of speech, so the content of speech constitutes one of the key elements and is a key element of encouragement; extent of the speech, so the scope of the speech includes its reach in terms of the public nature of the speech, the importance of the speech and the size of the audience; and likelihood, including imminence, and reasonable probability of the harm because incitement by definition is a participatory and not perpetration contribution. However, using the Rabat Action Plan when interpreting Art. 325 of the CCC, we should currently focus on concrete endangerment. Namely, the Rabat Action Plan, if we ignore imminence, can be interpreted that it is sufficient an act of an abstract endangerment (...a concrete statement likely to incite to...).

6.1. "Non-public" incitement to violence and hatred

When analysing the act of perpetration, the question arises as to whether the act of incitement must be undertaken in public or whether it can be undertaken secretly, or „not-publicly ". Art. 325 of the CCC states in its name and definition of a criminal offense (being of the criminal offense) that the incitement must be public, but in this case, we must not forget the possibility of substantial contribution and the provision of co-perpetration. For example, printing leaflets but not participating in their public distribution is particularly significant because it represents a substantial contribution, but still, printing leaflets is not an action undertaken in public, but secretly, so the question arises, is it possible to qualify "non-public" action under Art. 325 of the CCC, i.e. for Public Incitement to Violence and Hatred. Also, the question arises in case someone uses AI to create content that will incite violence and hatred but doesn't use it publicly, i.e. in the case when someone else will distribute/activate that content to the public.[59]

Objective theories of criminality, among which the formal-objective theory dominates, start from a restrictive understanding of the concept of the perpetrator of a criminal act, which means that a perpetrator is exclusively a person who has com-

[59] In case the creation of AI material is related with direct connection to public dissemination, without mediator, then rules of criminal responsibility should be applied. According to Vuletić and Petrašević, and Roksandić, Liepina and Ostapchuck, there is possibility of three models of criminal liability for AI. If AI is treated as mere tool, this case enables the liability of indirect offenders (programmer and producer). Second case is possibility of responsibility for the negligence of person for AI, where it is necessary to analyse reasonable foreseeability of the consequence. Third model will represent direct liability model. Vuletić; Petrašević, *op. cit.* note 44, p. 240; Roksandić Vidlička, S.; Liepiņa, L.E.; Ostapchuk, S., *Bioethical and Legal Challenges of Artificial Intelligence and Human Dignity*, in: Jovanović, M.; Virady, T. (eds.), Human Rights in the 21st Century, Eleven International Publishing, 2020, pp. 273-290.

mitted an act of commission, i.e. an act that constitutes the criminal being of a criminal offense.[60] By accepting this theory, the perpetrator of the criminal offense of Public Incitement to Violence and Hatred would be only the person who publicly incites violence and hatred. Persons who act "non-publicly" would commit aiding and abetting according to the formal-objective theory.

Subjective theories, on the other hand, starting from an extensive interpretation, consider a perpetrator to be anyone who, through his actions, in any way contributes to the realization of a criminal offense.[61] The reason for such an interpretation stems from the equalization of the quality of all contributions, that is, the actions by which the criminal offense was committed. In the previous cases, everyone participated in any way in the realization of art. 325 of the CCC, regardless of roles and quality of contribution, are co-perpetrators.

Among the mixed theories of criminality, the most important role is played by the theory of control over the criminal offense (Tatherrschaft). The aforementioned theory was adopted by Croatian legislation from the German legal system.[62] Thus, the theory of power over the criminal offense according to Roxin[63] requires the fulfilment of two assumptions: the existence of a joint decision to commit a criminal offense and the existence of a substantial, essential, noticeable contribution at the stage of the commission of a criminal offense.[64] According to the mentioned characteristics, the power over the action corresponds to direct perpetration, the power over the will of the direct perpetrator corresponds to indirect perpetration, and functional power is the guiding idea for determining co-perpetrators. In this way, Roxin forms the authority over the work of each of the co-perpetrators around the joint plan, given that the plan can only be realized from start to finish if all co-perpetrators fulfil their role. On the other hand, each of the co-perpetrators can ruin the plan if they give up their contribution to the realization of a criminal offense.[65] This means that if the criminal offense could have been committed even without disputed contribution, but the such contribution was valued as substantial during the creation of the plan and the division of roles, this contribution will not lose its

---

60 Grozdanić, V.; Škorić, M.; Martinović, I., *Kazneno pravo, Opći dio*, Pravni fakultet, Rijeka, 2013, p. 150.

61 Horvatić, Ž.; Derenčinović, D.; Cvitanović, L., *Kazneno pravo, Opći dio II*, Pravni fakultet, Zagreb, 2017, p. 160.

62 About control over the criminal offense at forms of perpetration see more in Mrčela, M.; Vuletić, I., *Komentar Kaznenog zakona*, Libertin, Rijeka, 2021, p. 239.

63 The author in his textbook analyses these two elements in all places where power over the work is analysed. Roxin, C., *Strafrecht Allgemeiner Teil, Band II.*, Verlag C. H. Beck., Munich, 2003.

64 Sokanović, L.; Mijanić, V., *Delimitation of co-perpetration from aiding and abetting in the criminal offence of robbery*, ST OPEN, Vol. 1, 2020, pp. 1-19.

65 Mrčela; Vuletić, *op. cit.* note 62, p. 239.

co-perpetrator character. The lack of Roxin's conception is that it requires an important contribution in the stage of commission.[66] Therefore, if someone printed leaflets that someone else will distribute, around the city the next night, or created AI content where the mediator is necessary as a connection to the public, inciting to violence and hatred, he will not be punished as a co-perpetrator.

It is correct to understand that it is not logical to deprive a preparatory act of the quality of co-perpetrator contribution only for the reason that it was not realized at the time of the realization of the criminal offense. It is correct to claim that by governing his function, the co-perpetrator directs and controls the criminal offense as a whole. However, this does not mean that for co-perpetrators it is necessary that the criminal offense could not have been committed without individual contribution, it is necessary only that it could not have been committed in the form in which it was planned.[67] Therefore, the quality and meaning of the contribution must be examined in each case.

This question arises only in the case of a substantial contribution. Therefore, the person who prints leaflets inciting violence should be punished as a co-perpetrators even though he did not publicly undertake the act of incitement. Although Art. 325 of the CCC in criminal being mentions punishment for the person who makes leaflets available to the public, that term should be interpreted restrictively according to the principle *poenalia sunt restringenda*, encompassing only the person that distributes leaflets to the public, and the printing of leaflets secretly or "non-public" or creation of content using AI, should be interpreted as a substantial contribution in the meaning of the provision of co-perpetration. Further proof of the punishment of "non-public" actions is the possibility of punishing an indirect perpetrator for Public Incitement to hatred and Violence, who, for example, uses an organized apparatus of power and acts as such in a non-public manner because he secretly establishes control over the criminal offense, that is, control over a person (direct perpetrator) who will act publicly. Likewise, Public Incitement to Violence and Hatred is not a criminal offense where only the perpetrator must personally commit action (conduct). Therefore, we can conclude that such non-public action can be label as a non-public act of perpetration,[68] because ultimately the perpetrator who acted secretly will be punished for Public Incitement to Violence and Hatred. Here, the intent of the perpetrator who acts

---

66 Sokanović; Mijanić, *op. cit*. note 64, p. 4. On possible important contribution in the stage of preparation, see more in Welzel, H., *Das deutsche Strafrecht*, De Gruyter, Berlin, 1969, p. 111.

67 Novoselec, P., *Opći dio kaznenog prava*, Pravni fakultet Osijek, Osijek, 2016, p. 324.

68 Vukušić, I.; Mišić Radanović, N., *Javno poticanje na nasilje i mržnju kao oblik diskriminacije – kaznenopravni i građanskopravni aspect*, Pravni sistem i zaštita od diskriminacije, Kosovska Mitrovica, 2015, p. 143.

"non-public" is important, because such a perpetrator must have the intent that the result of his action will subsequently manifest itself in public. Here, judicial practice will deal with the content of the term public at, for example, encrypted individual communication between two or more interlocutors, especially if there are perhaps 100 users in a closed group (WhatsApp, Viber, etc.).[69] In this case, we are speaking about incitement to commit a specific criminal offense in the sense of the provision of the General Part of the CCC if members of that group can be individualized,[70] all depending on how "closed type" the group is.

6.2. Intent

To prove the intent to commit Art. 325 of the CCC, it is necessary to see the nature of the propaganda, the persistence, and the ways and methods that were used, considering the facts and circumstances in which they are undertaken.[71] Therefore, the court must analyse what was the true intent of the speaker/instigator. The claim that intent is not required and claim that only the specific circumstances of the case need to be analysed is unacceptable.[72] If the specific circumstances of the case are used to determine the intent of each perpetrator, that is certainly a positive thing, but responsibility based solely on action is unacceptable from the point of view of criminal law. Criminal law should be the *ultima ratio societatis*, and criminal law provisions should be interpreted restrictively, so when analysing the intent, one should pay attention to the seriousness of the stated claim, which must be subsumed under direct or indirect intent. The analysed being of the criminal offense of Public Incitement to Violence and Hatred presupposes intent (direct or indirect), and direct intent may or may not contain an aim. When analysing the direct intent of the first degree, the court can determine, if exists, the aim, that referred to the cause of violence or hatred by its action. Mrčela and Vuletić correctly state that aim isn't necessary for the existence of direct intent and that mo-

---

69 On the issue of the term public on communication platforms and the use of artificial intelligence in the fight against hate speech, see more in Roksandić, S., Internet sve više postaje svojevrsna arena govora mržnje, [https://www.glas-slavonije.hr/416902/11/Internet-sve-više-postaje-svojevrsna-arena-govora-mrznje], Accessed 19 December 2022.

70 Kurtović Mišić, A.; Krstulović Dragičević, A., *Kazneno pravo,* Pravni fakultet, Split, 2014, p. 170.

71 Khan, A.A.; Dickey A.A., *Incitement to racial hatred*, Journal of Criminal Law, Vol. 43, No. 1, 1979, p. 48-60.

72 McBride, J.*, ECRI, General policy recommendation 15 on combating hate speech, Defining Public Duties to Tackle Incitement to Hatred whilst Respecting Freedom of Expression*, 2017, p. 50, [https://rm.coe.int/ecri-general-policy-recommendation-no-15-on-combating-hate-speech/16808b5b01], Accessed 28 May 2022.

tives can be referred to some other criminal situation.[73] When choosing the type and measure of punishment, it is necessary to analyse the degree of culpability and purpose of punishment, so it is necessary to establish with what form of culpability criminal offense is committed.[74]

6.2.1. Special intent

The forms of culpability in Croatia are intention or negligence. Art. 325 of the CCC prescribed that this criminal offense can only be committed with direct or indirect intent.[75] Although the legal description today, unlike the CCC/1997, does not require the existence of special intent, it is necessary to see whether special intent is still punishable by this criminal offense. The definition of intent in the CCC is precise because now the CCC directly refers to the elements of the being of the criminal offense.[76] Direct intent includes the situation when the perpetrator wants the act to be committed (direct intent of the first degree), but it also includes situations when the perpetrator is certain of the realization of material elements of the criminal offense (direct intent of the second degree) when the perpetrator is sure that the consequence will occur and nevertheless undertakes the action, although he does not particularly care about the realization of that consequence. The element of awareness in the case of direct intent is defined as awareness of the act, which implies that the perpetrator is aware of all the elements that contain being of a criminal offense. Regarding the elements of the will, direct intent requires want, so the question arises when the perpetrator wants the occurrence of the realization of the being of the criminal offense.[77] While analysing want, it is important not to equate want with desire because they do not always have to match.[78] Want (as a form of direct intent) exists in the case when committing the criminal offense is the aim of the perpetrator's activity, when the criminal offense is for the perpetrator a means to achieve the ultimate aim he wants to achieve, or when he does not care that a certain consequence occurs but is aware that it will certainly occur if he takes the intended action.[79]

The aim as such is not mentioned in Art. 325 of the CCC. This may wrongly lead us to the conclusion that Art. 325 of the CCC does not allow punishment for aim.

---

73 Mrčela; Vuletić, *op. cit.* note 62, p. 188.

74 *Ibid.*, p. 289.

75 Vukušić; Mišić Radanović, *op. cit.* note 68, p. 143.

76 Mrčela; Vuletić, *op. cit.* note 62, p. 184.

77 *Ibid.,* p. 187.

78 For detail analysis see in Kurtović Mišić; Krstulović Dragičević, *op. cit.* note 70, p. 135.

79 *Ibid.,* pp. 135-136.

Special intent is a subjective feature of the criminal offense, on which the entire wrong depends. According to the older point of view, the being of criminal offense is fulfilled in objective features, while all subjective features belong to culpability. It soon became clear that there is no basis for such a point of view. Being of a criminal offense contains what is typical for a criminal offense, that is, it indicates the reason why a criminal offense is prohibited, then such a conclusion must be made taking into account the perpetrator's subjective attitude towards the offense. With special intent, the action becomes criminal only if there is also a certain orientation of the will which, therefore, becomes a subjective feature of the being of a criminal offense. If we take into account that the being and unlawfulness are two separate elements of a criminal offense in the Croatian legal system along with the action (conduct) and culpability, it is more precise to talk about the subjective features of the being of a criminal offense because these features belong to the unlawfulness because they are part of the being of a criminal offense.[80] Being of a criminal offense in Art. 325 of CCC no longer mentions the aim of the perpetrator for causing violence and hatred, so it follows that for the realization of Art. 325 of the CCC no longer requires special intent. However, we must not forget here that when the criminal offense is committed with the direct intent of the first degree, then the perpetrator may act with the aim of realizing his activity (in this specific case to cause violence in society). It is a situation when want and desire coincide. Then we can claim that the perpetrator acts with an aim, that is, with a special intention, even though the being of the criminal offense does not mention the aim of causing violence and hatred. A person who acts with a special intention has the desire that his behaviour will lead to a certain aim in the future.[81]

Therefore, it can be concluded that if the criminal offense of Public Incitement to Violence and Hatred is committed with the direct intent of the first degree because the perpetrator acts with the aim of causing violence, then the perpetrator is acting with special intent so there is the possibility of two cases. The special aim can be part of the being of the criminal offense when that special intent cannot be taken into account when determining the punishment because the legislator has already taken aim into account when determining the special minimum and maximum punishment for that particular criminal offense (special intent in the formal

[80] Here it is necessary to emphasize that some authors find the aim of acting in the being of a criminal offense described as a subjective feature of being, and some as a subjective feature of unlawfulness. Nevertheless, Novoselec rightly claims that neither understanding is incorrect. Novoselec, *op. cit.* note 67, pp. 147-148.

[81] Ambos believes that if there is an aim or purpose of the perpetrator's actions, then such behaviour should be understood as dolus directus of the first degree. Ambos in Triffterer, O.; Ambos, K., *Rome Statute of the International Criminal Court (Commentary),* Bloomsbury T&T Clark, London, 2016, p. 762.

sense) or that aim with which the perpetrator acts isn't part of being of a criminal offense but will be considered as a part of direct intent of the first degree when determining the punishment, as is the case with Art. 325 of the CCC (special intent in the substantive sense contained in the direct intent of the first degree). CCC prescribes that the degree of culpability is important when considering and applying punishment for the perpetrator. Mrčela and Vuletić correctly claim that the degree of culpability in this case would be the measure, and not the ground of punishment.[82]

7. CONCLUSION

Analysing the criminal offense of Public Incitement to Violence and Hatred, it is evident from the paper that despite international documents that seek to prevent public incitement to violence and hatred, individual countries and organizations view this issue more liberally (for example, the US) or more restrictively (for example, EU countries). Certainly taking into account the principle of *poenalia sunt restrictenda*, which is related to criminal law, when subsuming speech under the criminal offense of Public Incitement to Violence and Hatred, we need to analyse whether there is the immediacy of causing violence, because if there is no immediacy of causing violence then we can talk about misdemeanours. However, as the sources used in the paper emphasized, the consistency in the processing of hate speech as a criminal offense or misdemeanour is problematic. The goal of the misdemeanours is to act preventively, i.e. eliminate more serious forms of hate speech, which in turn need to be interpreted through criminal offense. The paper also states that despite the definition of Public Incitement to Violence and Hatred, the act of committing the criminal offense (conduct) may also be undertaken "non-public", so we can speak about a „non-public" act of commission. The above derives from the principle of dogmatic of criminal law (a substantial contribution) but also from the general clause used by the criminal offense of Public Incitement to Violence and Hatred in CCC when prescribing conduct, which refers to the expression "or in another way".

Analysing the intent at this criminal offense, the concept of special intent is introduced in the formal and substantive sense (which enables punishment for acting with an aim within the framework of direct intent). We can conclude that there is no change regarding the punishment of special intent concerning the punishment of Art. 174. Racial and Other Discrimination according to the CCC of 1997, because the framework for punishment at that time is the same as today for the basic form of Public Incitement to Violence and Hatred (the special maximum is three

[82] Mrčela; Vuletić, *op. cit.* note 62, p. 289.

years in prison). Namely, according to CCC97, the legislator took into account the behaviour of the perpetrator if he/she acts with the aim of causing hatred or violence already in the being of a criminal offense, and the current CCC enables the evaluation of the behaviour of the perpetrator with the aim of causing violence or hatred through the degree of culpability, and we know that degree of culpability is the measure of punishment.

It is a positive understanding of the legislator of the Republic of Croatia that in the case of Public Incitement to Violence or Hatred, a general clause is used and that attacks on individuals of different social groups are punished based on their characteristics. In this way, the law of the Republic of Croatia objectively evaluates and punishes hate speech. Still, from the criminal law dogmatic, we can see that the Croatian legal system is prepared for traditional and modern acts of commission of hate speech.

Speech that represents the truth and states the facts should be protected so that it can never fall under the category of incitement to violence and hatred.

REFERENCES

BOOKS AND ARTICLES

1. Alkiviadou, N., *The Legal Regulation of Hate Speech: The International and European Frameworks*, Politička misao : časopis za politologiju, Vol. 55, No. 4, 2018, pp. 203–229
2. Barnes, A., Ephross, P.H., *The Impact of Hate Violence on Victims, Emotional and Behavioral Responses to Attacks*, Social Work, Vol. 39, No. 3, 1994, pp. 247-251
3. Benesch, S., *Inciting Genocide, Pleading Free Speech*, World Policy Journal, Vol. 21, No. 2, 2004, pp. 62-69
4. Cassese, A., *International Criminal Law*, Oxford University Press, Oxford, 2003
5. Crane, J., *Defining the unspeakable: Incitement in Halakhah and anglo-american jurisprudence*, Journal of Law and Religion, Vol. 25, No. 2, 2009, pp. 329-356
6. Fino, A., *Defining Hate Speech*, Journal of International Criminal Justice, Vol. 18, No. 1, 2020, pp.31-57
7. Fisch, W.B., *Hate Speech in the Constitutional Law of the United States*, The American Journal of Comparative Law, Vol. 50, 2002, pp.463-492.
8. Fyfe, S., *Tracking hate speech as incitement to genocide in international criminal law*. Leiden Journal of International Law, Vol. 30, No. 2, 2017, pp. 523-548.
9. Goodall, K., *Incitement Religious Hatred: All Talk and no Substance?,* The Modern Law Review, Vol. 70, No. 1, 2017, pp. 89-113
10. Grozdanić, V., Škorić, M., Martinović, I., *Kazneno pravo, Opći dio*, Pravni fakultet, Rijeka, 2013

11. Herceg Pakšić, B., *Holding All the Aces? Hate Speech: Features and Suppression in Croatia* in: Meškić, Z.; Kunda, I.; Popović, D.V.; Omerović, E. (eds.), Balkan Yearbook of European and International Law, Springer, 2020, pp. 225 - 248.
12. Herceg Pakšić, B., *Tvorba novih standarda u slučajevima teških oblika govora mržnje: negiranje genocida pred Europskim sudom za ljudska prava*, Zbornik Pravnog fakulteta u Zagrebu, Vol. 67, No. 2, 2017, pp. 229 – 253
13. Herceg Pakšić, B., Habrat, D., *Comparative Views on a Permanenet Challenge: Hate Speech sanctioning in Poland and Croatia*, ECLIC, 2022, pp. 289-314
14. Horvatić, Ž., Derenčinović, D., Cvitanović, L., *Kazneno pravo, Opći dio II*, Pravni fakultet, Zagreb, 2017
15. Hughes, G., *Prohibiting Incitement to Racial Discrimination*, The University of Toronto Law Journal, Vol. 16, No. 2, 1966, pp. 361-381
16. Khan, A. A., Dickey A. A., *Incitement to racial hatred*, Journal of Criminal Law, Vol. 43, No. 1, 1979, pp. 48-60
17. Kurtović Mišić, A.; Krstulović Dragičević, A., *Kazneno pravo,* Pravni fakultet, Split, 2014
18. McVeigh, R., *Incitement to Hatred in Northern Ireland*, Equality Coalition, Northern Ireland, 2018
19. Mrčela, M., Vuletić, I., *Komentar Kaznenog zakona*, Libertin, Rijeka, 2021
20. *Münchener Kommentar zum Strafgesetzbuch,* Band I, par 1-49, StGB, C.H.Beck, München, 2003
21. Novoselec, P., *Opći dio kaznenog prava*, Pravos, Osijek, 2016
22. Roksandić Vidlička, S., Liepiņa, L.E., Ostapchuk, S., *Bioethical and Legal Challenges of Artificial Intelligence and Human Dignity*, in: Jovanović, M., Virady, T. (eds.), Human Rights in the 21st Century, Eleven International Publishing, 2020, pp. 273 - 290
23. Roksandić Vidlička, S., Mamić, K., *Zlouporaba društvenih mreža u javnom poticanju na nasilje i mržnju i širenju lažnih vijesti: Potreba transplantiranja njemačkog Zakona o jačanju provedbe zakona na društvenim mrežama*, Hrvatski ljetopis za kazneno pravo i praksu, Vol. 25, No. 2, 2018, pp. 329 – 357
24. Roxin, C., *Strafrecht Allgemeiner Teil, Band II*., Verlag C. H. Beck., Munich, 2003.
25. Saslow, B., *Public enemy: The public element of direct and public incitement to commit genocide*, Case Western Reserve Journal of International Law, Vol. 48, No.1-2, 2016, pp. 417-449
26. Sokanović, L., Mijanić, V., *Delimitation of co-perpetration from aiding and abetting in the criminal offence of robbery*, ST OPEN, Vol. 1, 2020, pp. 1-19
27. Tanenbaum, R.S., *Preaching terror: Free speech or wartime incitement*, American University Law Review, Vol. 55, No. 3, 2006, pp. 785-819
28. Triffterer, O., Ambos, K., *Rome Statute of the International Criminal Court (Commentary),* Bloomsbury T&T Clark, London, 2016
29. Tsesis, A., *Inflammatory Speech: Offense Versus Incitement*, Minnesotta Law Review, Vol. 97, No. 4, 2013, pp.1145-1196
30. Van Landingham, R. E., *Words We Fear: Burning tweets and politics of incitement*. Brooklyn Law Review, Vol. 85, No. 1, 2019, pp.37-83.

31. Vukušić, I., Mišić Radanović, N., *Javno poticanje na nasilje i mržnju kao oblik diskriminacije – kaznenopravni i građanskopravni aspect*, Pravni sistem i zaštita od diskriminacije, Kosovska Mitrovica, 2015, pp. 137-156
32. Vuletić, I., Petrašević, T., *Is It Time to Consider EU Criminal Law Rules on Robotics?,* Croatian Yearbook of European Law and Policy, Vol. 16, No. 1, 2020, pp. 225-244.
33. Welzel, H., *Das deutsche Strafrecht*, De Gruyter, Berlin, 1969

EU LAW

1. Council Framework Decision 2008/913/JHA of 28 November 2008 on combating certain forms and expressions of racism and xenophobia by means of criminal law, *OJ L 328, 6. December 2008*

CASE LAW

1. European Court of Human Rights, *Vajnai v Hungary*, App. no. 33629/06, 8 July 2008
2. European Court of Human Rights, *Vona v Hungary*, App. no. 35943/10, 9 December 2013
3. International Tribunal for Ruanda, *The Prosecutor v Jean-Paul Akayesu (Trial Judgement)* ICTR – 96 – 4 – T (1998)
4. Supreme Court USA, *Beauharnais v Illinois*, 343 U.S. 250 (1952)
5. Supreme Court USA, *Brandenburg v Ohio*, 395 U.S. 444, 447 (1969)
6. Supreme Court USA, *Chaplinsky v N.H.*, 315 U.S. 568, 572 (1942)
7. Supreme Court USA, *N.Y. v Ferber*, 458 U.S. 747,764 (1942)
8. Supreme Court USA, *N.Y. Times v Sullivan*, 376 U.S. 254, 279-80 (1964)
9. Supreme Court USA, *R.A.V. v City of St. Paul*, 505 U.S. 377(1992)
10. Supreme Court USA, *Roth v U.S.*, 354 U.S. 476, 484 (1957)
11. Supreme Court USA, *Virginia v Black*, 538 U.S. 343 (2003)

LIST OF NATIONAL REGULATIONS, ACTS AND COURT DECISIONS

1. Criminal Code of Croatia, Official Gazette No. 125/11, 144/12, 56/15, 61/15, 101/17, 118/18, 126/19, 84/21, 114/22.

WEBSITE REFERENCES

1. Coliver, S. (ed.), *Striking a balance: Hate Speech, Freedom of Expression and Non-discrimination*, 1992, [https://www.article19.org/data/files/pdfs/publications/striking-a-balance.pdf] Accessed 28 May 2022
2. *Council of Europe's Committee of Ministers Recommendation 97 (20) on Hate Speech*, [https://rm.coe.int/1680505d5b] Accessed 28 May 2022
3. *Country Report: Germany: Responding to „hate speech"*, 2018, [https://www.article19.org/wp-content/uploads/2018/07/Germany-Responding-to-%E2%80%98hate-speech%E2%80%99-v3-WEB.pdf] Accessed 28 May 2022

4. McBride, J., *ECRI, General policy recommendation 15 on combating hate speech, Defining Public Duties to Tackle Incitement to Hatred whilst Respecting Freedom of Expression*, 2017, [https://rm.coe.int/ecri-general-policy-recommendation-no-15-on-combating-hate-speech/16808b5b01], Accessed 28 May 2022
5. Pesinis, A., *The Regulation of Hate Speech,* Budapest, 2015, [www.etd.ceu.hu/2016/pesinisantonios.pdf], Accessed 28 May 2022
6. Roksandić, S., Internet sve više postaje svojevrsna arena govora mržnje, [https://www.glas-slavonije.hr/416902/11/Internet-sve-više-postaje-svojevrsna-arena-govora-mrznje], Accessed 19 December 2022
7. UN Rabat Action Plan, [https://www.ohchr.org/en/documents/outcome-documents/rabat-plan-action], Accessed 06 March 2023.
8. *212. Tribina Pravnog fakulteta u Zagrebu, Gdje prestaje sloboda izražavanja, a počinje govor mržnje- neke kaznenopravne dileme*, Zagreb, 2017, [https://www.pravo.unizg.hr/images/50018419/212%20Surina%20Marton%20Munivrana%20Vajda%20travanj%20L(1).pdf], Accessed 28 May 2022

UDK 343.98:342.722
Original scientific paper

FACIAL RECOGNITION TECHNOLOGY IN EU CRIMINAL JUSTICE - HUMAN RIGHTS IMPLICATIONS AND CHALLENGES*

Ante Novokmet, PhD, Associate Professor
Josip Juraj Strossmayer University of Osijek, Faculty of Law Osijek
Stjepana Radića 13, Osijek, Croatia
ante.novokmet@pravos.hr

Zvonimir Tomičić, PhD, Associate Professor
Josip Juraj Strossmayer University of Osijek, Faculty of Law Osijek
Stjepana Radića 13, Osijek, Croatia
tomz@pravos.hr

Ivan Vidaković, Master of Laws, Teaching Assistant
Josip Juraj Strossmayer University of Osijek, Faculty of Law Osijek
Stjepana Radića 13, Osijek, Croatia
ivan.vidakovic@pravos.hr

ABSTRACT

This paper considers the legal justification for the application of various advanced systems of facial recognition technology for the purpose of initiating and conducting criminal proceedings. Therefore, the theoretical foundations and minimum European standards are first analyzed as a basis for the deployment of various facial recognition technology (hereinafter: FRT) systems in practice of law enforcement agencies. Then the legislative framework of selected European countries that have already established certain forms of FRT in criminal proceedings are presented. The experiences and legal consequences of the application of such systems are analyzed, and the first decisions of the judiciary on the admissibility of the results of actions and measures based on FRT as evidence in criminal proceedings are presented. Finally, the existing normative solutions are critically reviewed and, based on common European standards established to protect citizens from the repressive power of state bodies, the minimum conditions that must be

* This article is a product of work that has been fully supported by the Faculty of Law Osijek Josip Juraj Strossmayer University of Osijek under the project IP-PRAVOS-18 'Artificial intelligence and criminal law'.

met in order to harmonize the use of FRT with the basic principles of contemporary European criminal proceedings are proposed.

***Keywords**: artificial intelligence, criminal proceedings, Facial recognition, fair trial, in dubio pro reo, presumption of innocence*

1. INTRODUCTION

In recent years, various systems of biometric technology based on artificial intelligence have settled into the daily reality and become a part of generally accepted everyday living.[1] Today, due to their mostly benign nature and ease of use, various biometric technologies are widely used in order to carry out the identification and verification of a specific person based on a verifiable and unique set of data, among which fingerprint recognition, signature recognition, voice recognition, etc. can be mentioned.[2] Among them, facial recognition technology (FRT) has become particularly popular in everyday life as a biometric technology aimed at verification (matching the passport photo during border control), identification (comparison of a photo of a certain person with a large database of photos) and categorization of individuals taking into account their personal characteristics such as age, gender, etc.[3]

All the mentioned techniques aim to profile a person, taking into account the facial appearance in order to determine the identity, gender, age, and race, but also to determine certain gestures or the emotional state of a person.[4] Although the FRT technology itself is not so new, it has gained importance with the development of modern software solutions that, through the use of advanced artificial intelligence systems, enable a computer program to search a large amount of data precisely and almost instantly in order to achieve the set purpose. At the same time, with the prior and informed consent of a person, such a simple and benign way of profiling is used to facilitate and speed up a series of regular private and

---

1 Yassin, K.; Jridi, M.; Al Falou, A.; Atri, M., *Face Recognition Systems: A Survey*, Sensors Vol. 2., No. 2., 2020, pp. 1-36, [https://doi.org/10.3390/s20020342].

2 Kak, A., *The State of Play and Open Questions for the Future*, in: Kak, A. (ed) Regulating Biometrics: Global Approaches and Urgent Questions. AI now Institute, pp. 16-43, available at: [https://ainowinstitute.org/regulatingbiometrics.html], Accessed 20 June 2022.

3 Buolamwini, J.; Ordóñez, V.; Morgenstern, J.; Learned-Miller, E., *Facial Recognition Technologies: A Primer*, Algorithmic Justice League., 2020, p. 5, available at: [https://assets.websitefiles.com/5e027ca188c99e3515b404b7/5ed1002058516c11edc66a14_FRTsPrimerMay2020.pdf.], Accessed 28 July 2022.

4 Park, SJ.; Kim BG.; Chilamkurti, N., *A Robust Facial Expression Recognition Algorithm Based on a Multi-Rate Feature Fusion Scheme*, Sensors Vol. 21, No. 21., 2021, p. 2, [https://doi.org/10.3390/s21216954].

business activities such as various consumer applications, business and payment applications, and surveillance and access control in different areas.[5]

However, contemporary development of FRT has opened up space for a new, faster, and more advanced way of acting, on the basis of which law enforcement agencies, using the advantages of FRT based on artificial intelligence, solve criminal offenses and discover perpetrators of criminal offenses. A typical example of this progress can be seen on the basis of surveillance camera footage that the police regularly take at the crime scene to discover the perpetrator of criminal offenses.[6] With the classic method of search, a police officer examines the footage in question and tries to determine the identity of the person from the footage based on a manual comparison of the footage with the pictures in police databases. On the other hand, the use of advanced FRT solutions based on artificial intelligence allows the recording to be reviewed by a computer program using advanced review capabilities and much faster than a human is capable of.[7] Therefore, it is common to hear today that many law enforcement agencies in certain countries have already developed highly sophisticated solutions aimed at the faster identification of previously known perpetrators of criminal offences as well as solutions by which FRT is used as a predictive method in the detection of other, previously unknown perpetrators of criminal acts.[8]

On the one hand, it is a completely legitimate expectation of the community that the state must have at its disposal effective means for deterring, detecting and finding the perpetrators of criminal offences, the question of compliance of the FRT with the unquestionable standards of protection of fundamental human rights and freedoms appears to be a stumbling block for its implementation in contemporary criminal proceedings.[9] Since the FRT system is based on a specially programmed software solution that uses a given database, the key question is how

---

5 Rowe, EA., *Regulating Facial Recognition Technology in the Private Sector*. Stanford Technology Law Review Vol. 24, No. 1. 2020, pp. 9-19.

6 Raposo, VL*, The Use of Facial Recognition Technology by Law Enforcement in Europe: a Non-Orwellian Draft Proposal*, European Journal on Criminal Policy Research, 2022, p. 14., [https://doi.org/10.1007/s10610-022-09512-y].

7 Dushi, D., *The use of facial recognition technology in EU law enforcement: Fundamental rights implications*, Policy Briefs, 2020, available at: [https://tinyurl.com/3dnc69j3], Accessed 28 July 2022.

8 Kayser-Bril, N., *At least 11 police forces use face recognition in the EU*, AlgorithmWatch, 2020, available at: [https://algorithmwatch.org/en/face-recognition-police-europe/], Accessed 15 July 2022.

9 Sarabdeen, J., *Protection of the rights of the individual when using facial recognition technology*, Heliyon, Vol. 8, No. 3., 2022, pp. [https://doi.org/10.1016/j.heliyon.2022.e09086]; Ritchie, KL., Cartledge, C., Growns, B., Yan, A., Wang, Y., *et al.*, *Public attitudes towards the use of automatic facial recognition technology in criminal justice systems around the world*. PLOS ONE, Vol. 16, No. 10, 2022., p. 2, [https://doi.org/10.1371/journal.pone.0258241].

this data was collected, systematized and adapted to a specific purpose. This is important because wrongly pre-set instructions on the basis of which the system performs certain operations can produce incorrect identifications that result in biased decisions on the basis of which groups of people can be discriminated[10] and also consequently make decisions that can result in initiating and conducting criminal proceedings against an innocent person.[11] The question arises, under what conditions and circumstances can such profiling systems be used for the purposes of initiating and conducting criminal proceedings? Is such profiling necessary and appropriate in a democratic society? How can independent and objective control over the use of such systems be ensured? Does the legal system provide control of the legal consequences that have occurred as well as effective legal means by which the affected person can *ex post facto* request an independent and objective judicial review of the legality of the actions taken? The above questions are based on the democratic legal standards of legitimacy, necessity and proportionality as fundamental common values of the European judicial area developed in the practice of the ECtHR and accepted in EU law.

Despite the strong opposition of numerous non-governmental organizations[12] requesting to ban FRT and the very restrictive stance of the European Parliament[13], it is simply not realistic to expect that the EU will prohibit FRT technologies for the purposes of criminal proceedings.[14] Even if this were to happen, it would not be possible to provide solid guarantees or preventive mechanisms that would make it impossible for law enforcement bodies to secretly and covertly use such advanced systems in order to fight against modern criminal offences. For this reason, it is necessary to establish a solid normative framework that, while appreciating European legal standards for the protection of fundamental human rights and freedoms, will determine an acceptable limit of minimum conditions that must be

---

10 Bacchini, F.; Lorusso, L., *Race, again: how face recognition technology reinforces racial discrimination*, Journal of Information Communication and Ethics in Society, Vol. 17, Issue 3, 2019, pp. 321-335, [http://dx.doi.org/10.1108/JICES-05-2018-0050].

11 Stoykova, R., *Digital evidence: Unaddressed threats to fairness and the presumption of innocence*, Computer, Law & Security Review, Vol. 42, 2021, pp. 1-20, [https://doi.org/10.1016/j.clsr.2021.105575].

12 Big Brother Watch, *Stop Facial Recognition,* 2020, available at: [https://bigbrotherwatch.org.uk/campaigns/stop-facial-recognition/#breadcrumb], Accessed 15 June 2022.

13 European Parliament, *Artificial intelligence in criminal law and its use by the police and judicial authorities in criminal matters*, 2020/2016(INI), 2021, available at: [https://www.europarl.europa.eu/doceo/document/TA-9-2021-0405_EN.html], Accessed 18 June 2022.

14 Wired, *Europe Is Building a Huge International Facial Recognition System*, 2020, available at: [https://www.wired.com/story/europe-police-facial-recognition-prum/], Accessed 16 June 2022.

met in each specific case in order to secure that FRT for the purposes of criminal proceedings would be legitimate, necessary and balanced in democratic society.

Therefore, this paper first theoretically considers the legal justification of the application of FRT in the operation of law enforcement agencies and analyzes the current normative framework established at the EU level that governs the application of FRT for the purposes of criminal proceedings. Then it presents the legislative framework of selected European countries that have already established certain forms of FRT in criminal proceedings, analyzes the experiences and legal consequences of the application of such systems, and presents the first reactions of the judicial system on the permissibility of using the results of actions and measures based on FRT as evidence in criminal proceedings. Finally, the existing normative solutions are critically reviewed and, based on common European standards established to protect citizens from the repressive power of state bodies, the minimum conditions that must be met in order to harmonize the use of FRT with the basic principles of contemporary European criminal proceedings are proposed.

2. MINIMUM EUROPEAN STANDARDS AS A GUIDE FOR REGULATING FRT FOR THE PURPOSES OF CRIMINAL PROCEEDINGS

The way in which contemporary criminal procedural law is going to shape the legal basis for the permitted use of FRT in the investigation of criminal offenses is directly related to the standards developed in the law of the Council of Europe and the law of the European Union. These standards, on the one hand, refer to the right to protection of personal and family life prescribed in Art. 8. ECHR and Art. 7 CFR, and on the other hand, they refer to the protection of personal data guaranteed in accordance with Art. 7. CFR and Art. 8. ECHR. Simultaneously, Directive (EU) 2016/680 addresses the protection of natural persons with regard to the processing of personal data by competent authorities for the purposes of the prevention, investigation, detection or prosecution of criminal offences or the execution of criminal penalties, and on the free movement of such data.[15]

---

[15] Directive (EU) 2016/680 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data by competent authorities for the purposes of the prevention, investigation, detection or prosecution of criminal offences or the execution of criminal penalties, and on the free movement of such data, and repealing Council Framework Decision 2008/977/JHA, available at: [https://eur-lex.europa.eu/legal content/EN/TXT/HTML/?uri=CELEX:32016L0680&from=HR.], Accessed 18 June 2022.

2.1. Right to respect for private and family life and data protection in ECHR

As already mentioned, the use of FRT presupposes the collection and processing of the biometric data of a specific person, which may consequently lead to interference with the right to private and family life and the protection of personal data prescribed in Art. 8. ECHR.[16] In general, Art. 8. of the ECHR excludes government interference in respecting private and family life except when it is in accordance with the law and when it is necessary in a democratic society in the interest of national security, public safety or the economic well-being of the country to prevent disorder or crime, to protect health or morality or to protect the rights and freedoms of others.[17] For this reason, certain minimum standards have been developed in the practice of the ECtHR in order to establish minimum preconditions for its deployment. In addition to respect for the rule of law, predictability is an important requirement.[18] In order for this requirement to be fulfilled, it is necessary that the legislative solution clearly prescribes the preconditions under which restrictions can occur so that the individual is informed of the circumstances and conditions under which the state authorities are authorized to take such measures that limit his rights and freedoms. Therefore, it is precisely why the use of FRT in the process of detection, investigation and prosecution of criminal offenses has come under the recent supervisory activity of the ECtHR. One of the first cases in which the ECtHR considered the legality and proportionality of the use of FRT in criminal proceedings is the case of *Gaughran v. The United Kingdom*.[19] Starting from unquestionable criteria such as the specific context in which the information at issue has been recorded and retained, the nature of the records, the way in which these records are used and processed and the results that may be obtained, the Court found that domestic authorities violated the applicant's right to privacy guaranteed by Art. 8. ECHR because the photograph obtained during the arrest was retained indefinitely in the police database, and the police were able to subject the photograph to advanced facial recognition and facial mapping techniques. Therefore, the Court found that the taking and retention of the applicant's photograph amounted to an interference with the right to one's image.[20] It went on

---

16 Callanan, G., *Does the Right to Privacy Apply to Facial Biometrics? Specifically, When Analyzed Under the European Convention on Human Rights*, Georgia Journal of International & Comparative Law, Vol. 49, 2021: pp. 358-368.

17 European Court of Human Rights, *Guide on Article 8 of the European Convention on Human Rights - Right to respect for private and family life, home and correspondence*, 2022, available at: [https://www.echr.coe.int/documents/guide_art_8_eng.pdf.], Accessed 15 June 2022.

18 *Ibid.*

19 Judgment *Gaughran v The United Kingdom* (2020) EHRR, No. 45245/15, 13 February 2020, § 40-49.

20 Judgment *Gaughran v The United Kingdom* (2020) EHRR, No. 45245/15, 13 February 2020, § 70.

to find that the interference was not necessary in a democratic society[21], following the reasoning that the right to the protection of one's image is one of the essential components of personal development and presupposes the right to control the use of that image.[22] The ECtHR took a somewhat different position regarding the retention of an individual's photograph in police records in the case of *P.N. v. Germany*[23], pointing out that there was no violation of the right from Art. 8. ECHR. Namely, the court made such a conclusion after previously determining that the retention of the photograph was limited to a period of five years, that the domestic court conducted an individual assessment of the probability that the applicant could commit a criminal offense again in the future, and that it was ensured control (review) of the need for further retention of the data in question.[24]

The European Court of Human Rights already encountered issues in its practice of using algorithms and artificial intelligence as important technological steps forward in the detection of criminal offenses and, accordingly, the interception, collection and storage of private data for crime-prevention purposes.[25] Therefore, considering the scope of the powers of state authorities to encroach on the rights and freedoms of individuals, it pointed out that with regard to fingerprints, biological samples and DNA profiles of persons suspected or convicted of criminal offenses, the use of modern scientific techniques cannot be authorized at any cost or without carefully balancing the potential benefits of the extensive use of such techniques against important private-life interests.[26] For this reason, every newly developed technology obliges the state to first conduct a test of the proportionality of its use for crime prevention and prosecution purposes.[27] The court particularly highlighted this in relation to FRT. Besides, it emphasized that facial recognition and facial mapping techniques represent an undoubted encroachment on the rights and freedoms of individuals, which has multiple effects because it affects not only the taking of their photographs, but also the storage and possible dissemination of the resulting data. That is why domestic courts must take these factors into account when weighting the necessity and proportionality of any interference that

---

21 Judgment *Gaughran v The United Kingdom* (2020) EHRR, No. 45245/15, 13 February 2020, § 90.

22 Judgment *Reklos and Davourlis v Greece* (2009) EHRR, No. 1234/05, 15 January 2009 § 40-43.

23 Judgment *P. N. v Germany*, (2020) EHRR, No. 74440/17, 11 June 2020.

24 Judgment *P. N. v Germany*, (2020) EHRR, No. 74440/17, 11 June 2020, § 76-90.

25 European Court of Human Rights, *Guide to the Case-Law of the European Court Human Rights – Data protection*, 2022, available at: [https://echr.coe.int/Documents/Guide_Data_protection_ENG.pdf.], Accessed 20 June 2022.

26 Judgment *S. and Marper v. the United Kingdom* (2008) EHRR, No. 30562/04 and 30566/04, 4 December 2008, § 112.

27 Judgment *S. and Marper v. the United Kingdom* (2008) EHRR, No. 30562/04 and 30566/04, 4 December 2008, § 112.

facial recognition and facial mapping techniques represent for the private life and private data of the person concerned.

There are multiple possible ways in which Art. 8 of the ECHR can be infringed, as elucidated by the court in the case of *Peck v. United Kingdom*. In this particular instance, it was determined that the act of conducting video surveillance in public areas, wherein visual information is captured, subsequently stored, and disclosed to the public, falls within the purview of Article 8.[28]

2.2. Right to respect for private and family life and data protection in CFR

Just like in Convention law, the processing of personal data for the purpose of prevention, investigation, detection and prosecution of serious crime, such as organized crime and terrorism, interferes with the fundamental rights guaranteed in the CFR, primarily, respect for private life and communications under Article 7 and 8 of the Charter.[29] Simultaneously, it is important to point out that the data processing calls into question the compliance of the performed action with the requirements of Art. 7 and 8, regardless of whether it led to a "positive outcome", and even when, after a comparison with the police databases, the personal data was deleted from the records.[30] It follows that the CFR does not exclude the possibility of using FRT as an advanced investigative technique to detect criminal offenses and perpetrators but sets minimum standards that must be met in each specific case. Thus, Art. 52 (1) CFR provides that any limitation on the exercise of the rights and freedoms recognized by this Charter must be provided for by law and respect the essence of those rights and freedoms. Subject to the principle of proportionality, limitations may be made only if they are necessary and genuinely meet objectives of general interest recognized by the Union or the need to protect the rights and freedoms of others.[31] Therefore, four fundamental conditions must be met for any measure or action based on the application of the FRT in criminal

---

[28] Judgment *Peck v. United Kingdom* (2003) EHRR, No. 44647/98, 28 January 2023, § 57-63; see also Bu, Q. *The global governance on automated facial recognition (AFR): ethical and legal opportunities and privacy challenges*, International Cybersecurity Law Review, Vol. 2, p. 117, 2021, [https://doi.org/10.1365/s43439-021-00022-x].

[29] O'Flaherty, M., *Facial Recognition Technology and Fundamental Rights*, European Data Protection Law Review, Vol. 6, Issue 2, pp. 170-173, [https://doi.org/10.21552/edpl/2020/2/4].

[30] European data protection board, *Guidelines 05/2022 on the use of facial recognition technology in the area of law enforcement*, 2020, available at: [https://edpb.europa.eu/system/files/2022-05/edpb-guidelines_202205_frtlawenforcement_en_1.pdf.], Accessed 20 June 2022.

[31] Nesterova, I., *Mass data gathering and surveillance: the fight against facial recognition technology in the globalized world*, The 19th International Scientific Conference Globalization and its Socio-Economic

proceedings to be considered compliant with EU law: such a measure or action must be based on law; respect the core of guaranteed rights; have a legitimate aim; and fulfill requirements for necessity and proportionality.[32]

"Based on the law" implies not only the obligation to prescribe a specific FRT measure or action, but the prescribed measure must be sufficiently clearly defined so that citizens are informed in advance of the conditions under which state authorities are authorized to collect and process their data.[33] Setting up from the fact that FRTs are based on artificial intelligence and that each such system has its own specifics regarding the processing of personal data, the requirement of the clearly determined legal norm presupposes the obligation to prescribe the conditions and methods of its application in order to ensure sufficient guarantees of respect for the fundamental rights of citizens.

Respect for the core of guaranteed rights presupposes the obligation of domestic authorities that the prescribed FRT measure. Even though its implementation legitimately encroaches on the fundamental right, domestic authorities must essentially ensure respect for the essence of that right. Thus, for example, a violation of the core of the guaranteed right would exist through a provision that imposes restrictions regardless of the individual behavior of the person or exceptional circumstances[34] when the person affected by the measure would not have the guaranteed right to access the court in order to demand a review of the applied measure due to non-compliance with the basic principles of personal data protection, i.e., protection of the security of personal data.[35]

Legitimate aim implies that an intervention in the rights and freedom of an individual can be accepted in the community as legitimate only if it is aimed at protecting beliefs about the value on which rests the legal norm that justifies the intervention.[36] Therefore, the application of the FRT for the purposes of initiating and conducting criminal proceedings can achieve this legitimate goal only if they protect values such as the interest of state security, public order and peace, the economic well-being of the country, the prevention of disorder and crime, the protection of health or morals, and the protection of rights and the freedom of

Consequences 2019 – Sustainability in the Global-Knowledge Economy, 2020, SHS Web Conferences Vol. 74, pp. 1-8, [https://doi.org/10.1051/shsconf/20207403006].

32 Madiega, T.; Mildebrath, H., *Regulating facial recognition in the EU. European Parliamentary Research Service, 2020*, p. 10., available at: [https://www.europarl.europa.eu/RegData/etudes/IDAN/2021/698021/EPRS_IDA(2021)698021_EN.pdf], Accessed 15 August 2022.

33 European data protection board, *loc. cit.*, note 30.

34 *Ibid.*

35 *Ibid.*

36 Krapac, D., *Kazneno procesno pravo*, Narodne novine, 2015, Zagreb, pp. 304-305.

other people. Therefore, it is about the general interests of the European Union, that is, the rights and freedoms of individuals protected by the law of the EU and individual member states.[37]

The criteria of *necessity and proportionality* set the requirement that the specific legislative activity aimed at implementing the FRT must be suitable for the achievement of a legitimate goal.[38] Namely, no matter how vehemently the public expresses interest in the need to apply the FRT in a specific case, this does not justify encroaching on the rights and freedoms of an individual at any cost. Therefore, any limitation of freedoms and rights must be evaluated taking into account the nature of the need for limitation in each specific case and only as far as it is absolutely necessary. Hence, the application of FRT for the purposes of criminal proceedings should be proportional to the severity of the criminal offense in such a way as to determine a narrow catalogue of criminal offenses in which the application of such a measure is justified and necessary.[39] Therewith, the person whose rights and interests are affected by the application of such a measure must be provided with sufficient guarantees that his personal data will be protected against any form of abuse and other unauthorized access. This, in turn, means that the national legal order must clearly prescribe the material and procedural prerequisites for the application of the FRT in order to be able to carry out an objective and independent control of the legality and justification of restrictions on individual rights for the purposes of initiating and conducting criminal proceedings.

2.3. Law enforcement directive (Directive (EU) 2016/680)

Taking into account the abstract legal standards established at the level of the ECHR and CFR, it is clear that any use of the FRT for the purposes of initiating and conducting criminal proceedings against a specific person leads to an encroachment on the rights and freedoms of the individual, which consequently manifest as interferences of Art. 7. CFR (right to data protection) and Art. 8. CFR (right to private life). Equally, the standards specified in Art. 52(1) CFR represent the minimum conditions that must be met in any case in order for advanced technological solutions based on FRT to be considered compliant with European legal standards.

When it comes to the processing of personal data by competent authorities for the purpose of initiating and conducting criminal proceedings, the basic regulation

37 European data protection board, *loc. cit.* 30.

38 *Ibid.*

39 *Ibid.*

that elaborate the abstract requirements established at the CFR level is Directive (EU) 2016/680 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data by competent authorities for the purposes of the prevention, investigation, detection or prosecution of criminal offenses or the execution of criminal penalties and on the free movement of such data, repealing Council Framework Decision 2008/977/JHA (hereinafter: LED). It is a fundamental regulation that determines the minimum European standards for the processing of personal data from competent state authorities for the purposes of the prevention, investigation, detection or prosecution of criminal offenses or the execution of criminal penalties, including the safeguarding against and the prevention of threats to public security (Art. 1(1) and 2(1) LED). However, it should be noted that the scope of application of the LED directive is wider; it not only includes prevention, investigation, detection and prosecution of criminal offenses, but also police activities that are undertaken without prior knowledge as to whether an incident is a criminal offense or not (LED, rec. 12). In this sense, it should be noted that the LED directive provides basic principles that must be respected in each member state in relation to the processing of personal data[40], and they shall be respected equally when it comes to different FRT systems that must be a) lawful, fair and transparent; b) follow a specific, explicit and legitimate purpose; c) comply with the requirements of data minimization, data accuracy, storage limitation, data security and accountability.[41]

2.3.1. Lawful

In order to secure the legal application of the FRT for the purposes of criminal proceedings, it is necessary that the legislative solution is established on the law of the European Union or the law of a member state and that its application is necessary and reaches only to the extent necessary for the competent authority to perform the tasks which achieve the purpose of personal data processing (Art. 8(1) LED). However, since the use of FRT processes data related to the physical, psychological and behavioural characteristics of a person, it is mandatory to follow Art. 10 LED, which determines the criteria for processing special categories of data only if it is strictly necessary and subject to appropriate safeguards for the

---

40 Leiser, MR.; Custers; BHM., *The Law Enforcement Directive: Conceptual Issues of EU Directive 2016/680*. European Data Protection Law Review, Vol. 5, Issue 3, pp. 367-378, [https://doi.org/10.21552/edpl/2019/3/10].

41 Madiega; Mildebrath, *op. cit.* note 32, pp. 15-17.

rights and freedoms of the data subject.[42]The application of FRT in the framework of law enforcement agencies primarily infringes on the highest values of the community. The violation of these values is protected by criminal law, which criminalizes certain behaviours that violate these values. Thus, it is clear that the legal basis for regulating FRT for the purposes of criminal proceedings is domestic legislation which prescribes the conditions and prerequisites for initiating and conducting criminal proceedings (i.e., criminal procedure code), legislation that regulates the organization and scope of authority of various bodies participating in criminal proceedings (i.e. the police), special laws that regulate the procedure for certain groups of the most serious criminal offenses (i.e. organized crime). However, the legal foundation for the application of FRT in criminal proceedings is not sufficient in itself. It is necessary for the domestic regulation to be clear, precise and concrete in order to avoid complaints of excessively broad discretionary powers of the police in the application of the FRT for the purposes of initiating and conducting criminal proceedings.[43]

2.3.2. Fair

Ensuring the principle of fairly conducted procedure refers to the ubiquitous tendency to limit the excessive repression of state bodies by prescribing guarantee forms and minimum rights of defence in various stages of the criminal procedure.[44] Therefore, it can be claimed that the fairness of the procedure primarily refers to contriving the right balance between powers of state criminal justice bodies (state attorney's office and police) and procedural rights of suspects or defendants in criminal proceedings. In the context of the application of the FRT for the purpose of initiating and conducting criminal proceedings, it is crucial that the suspect or defendant be informed in a timely, clear and comprehensible manner about the results of the FRT actions carried out in this way. That moment coincides with the moment when the suspect acquires the procedural position in accordance with Art. 2(1) of the Directive on the right of access to a lawyer in criminal proceedings in accordance with procedural solutions after the transposition of the Directive (hereinafter: Directive 2013/48/EU). At that moment, the suspect realizes

---

42 Neroni Rezende, I., *Facial recognition in police hands: Assessing the 'Clearview case' from a European perspective*, New Journal of European Criminal Law, Vol. 11, Issue 3, p. 387, [https://doi.org/10.1177/2032284420948161].

43 Madiega; Mildebrath, *op. cit.* note 32, pp. 18-21.

44 De Hert, P.; Sajfert, J, *The Role of the Data Protection Authorities in Supervising Police and Criminal Justice Authorities Processing Personal Data*. In: Brière C, Weyembergh A (eds) The Needed Balances in EU Criminal Law, Hart, Oxford and Portland, Oregon, 2018, pp. 243-257; Hacker, P., *Teaching fairness to artificial intelligence*, Common Market Law Review Vol. 55, Issue 4, 2018, pp. 1143 – 1185, [https://doi.org/10.54648/cola2018095].

the right to be informed about the criminal offense he is charged with, as well as the reasons from which arose the grounds for suspicion that he has committed a criminal offense.[45] Thereby, the suspect acquires the procedural rights of defence and the possibility to contradict the implemented actions based on the FRT as well as to use other procedural rights to contest the possible illegality of its results. Although the real implementation of FRT technology is still rudimental in most countries, the principle of procedural fairness must be a fundamental binding factor that must be followed in order to prevent any abuse of FRT to the detriment of the procedural rights of the defence.

2.3.3. Transparent

The question of the transparency of the criminal justice system is reflected in the quest for an ideal balance between the aspiration for the efficiency of the criminal proceedings and the aspiration for the protection of fundamental rights and freedoms of the individual.[46] Namely, excessive tightness and secrecy of law enforcement agencies' actions opens the door to arbitrary and malicious treatment. On the other hand, the excessive openness of the judiciary and the disclosure of all information in the earliest stages of criminal proceedings calls into question the possibility and ability of the state to successfully fight against various forms of criminal offences.[47] The FRT is primarily applied within the framework of the police's research and investigative activities. In the earliest phases of criminal proceedings, which are by nature secret, any unilateral insisting on the disclosure of all information about the type and nature of police actions and measures would lead to the paralysis of the justice system. Therefore, the provision of Art. 13. LED that imposes an obligation on the controller to inform in advance the data subject is meaningful and applicable in the situation when FRT is used in public places (streets, squares, stadiums, etc.) where a large fluctuation of people is expected. FRT is used in these cases primarily as a means of deterring the commission of criminal offenses or as an aid in the subsequent detection of perpetrators of criminal offenses.[48] Therefore, the request for ex ante information is acceptable,

---

45 Novokmet, A., *The Europeanization of the Criminal Proceedings in the Republic of Croatia through the Implementation of the Directive 2013/48/EU*. European Journal Crime Criminal Law and Criminal Justice, Vol. 27, No. 2., pp. 112-115, [https://doi.org/10.1163/15718174-02702002].

46 Bibas, S., *Transparency and Participation in Criminal Procedure*. New York University Law Review, Vol. 81, No. 3, 2006, pp. 911-966.

47 De Hert, P.; Papakonstantinou, V., *The New Police and Criminal Justice Data Protection Directive, A first analysis*. New Journal of European Criminal Law Vol. 7, Issue 1, 2016, pp. 7-19., [https://doi.org/10.1177/203228441600700102].

48 Kotsoglou KN.; Oswald M., *The long arm of the algorithm? Automated Facial Recognition as evidence and trigger for police intervention*, Forensic Science International: Synergy, Vol. 2, pp. 86-89. [https://

and citizens should be aware that video surveillance is being carried out in certain public spaces, which can later be used for automatic data processing in accordance with Art. 13 (1) (2) LED. On the other hand, in a situation where the police, in the process of investigating criminal offenses, use photographs or recordings obtained from the surveillance system to identify perpetrators of criminal offenses by comparing the obtained photograph/recording with police databases in order to identify a specific person as a possible perpetrator of a criminal offense, such prior notification is not possible and falls under the regime of Art. 13 (3) (b) LED in which situation it is possible to delay, restrict or omit the information to the data subject to avoid prejudicing the prevention, detection, investigation or prosecution of criminal offenses or the execution of criminal penalties. However, in such a situation, it is absolutely necessary to ensure that the aforementioned delay in the notification of rights is carried out only as a necessary and proportionate measure with due regard for the fundamental rights and the legitimate interests of the natural person concerned (Art. 13 (3) LED). In these cases, notification may follow ex post at the moment when a person acquires the position of a suspect in criminal proceedings in accordance with Art. 2 (1) of Directive 2013/48/EU on the right of access to a lawyer in criminal proceedings. In any case, subsequent notification entails the necessity of establishing an adequate ex post control mechanism of the legality of the implemented measures and the need to ensure the right to an effective legal remedy in order to respect the fundamental rights of defence.

2.3.4. Specific, explicit and legitimate purpose

One of the key standards for the validity and legal use of FRT for the purposes of criminal proceedings is strict compliance with the principle of legality (*nullus actus sine lege*). It specifically prescribes the requirement that any interference by state authorities in the rights and freedoms of individuals must be based on the norm of legal rank.[49] Therefore, this principle prohibits the introduction of new restrictions on the fundamental rights and freedoms of citizens in criminal proceedings by referring to "necessity", "purposefulness", etc. However, it is not enough to prescribe the possibility of using some FRT measure for the purposes of criminal proceedings only by a norm of legal rank. It is absolutely necessary that the legal provision determines, with a sufficient degree of precision, the scope and manner of exercising the authority of state bodies while respecting the legitimacy of the goal that is to be achieved.[50] Therefore, the provision of Art. 4(1) b LED that data collected with the help of FRT can only be collected if they are collected for

doi.org/10.1016/j.fsisyn.2020.01.002].

49 Krapac *op. cit.* note 36, p. 306.

50 Madiega; Mildebrath, *op. cit.* note 32, p. 33.

specified, explicit and legitimate purposes and not processed in a manner that is incompatible with those purposes should be interpreted in such a way that the domestic legal order must more precisely determine not only the prerequisites for the application of FRT, but also its content and scope of application. This is the only way to avoid discrimination on any basis, ensure the equality of all citizens before the law, and simultaneously ensure that the person to whom the application of the FRT measure applies can foresee with a sufficient degree of certainty the purpose for which his data is being processed.[51]

2.3.5. Adequate, accurate, time-limited, data security and accountability

The LED directive in Art. 4(1)c prescribes an important requirement that the data collected is adequate, relevant and not excessive in relation to the purposes for which they are processed. In other words, emphasis was placed on the sufficiency of data collection in a manner that only those data which are relevant are collected, taking into account the purpose that will be achieved in collecting data. This specifically means, when it comes to a photo or video images, that for the purposes of criminal proceedings, only the part of the recording that is absolutely necessary should be used, and everything that is not useful should be blurred or anonymized in a way such as to prevent the subsequent use of that data.[52]

Like any other technology developed and operated by humans, FRT can produce reliable and accurate results only to the extent that the input data on which FRT performs its activity is accurate and reliable.[53] Therefore, the directive in Art. 4(1) d sets an important requirement that data must be accurate and, where necessary, kept up to date; every reasonable step must be taken to ensure that personal data that are inaccurate, having regard to the purposes for which they are processed, are erased or rectified without delay. This is particularly significant in the context of criminal proceedings since the FRT, based on wrong or incorrectly entered data, could discriminate against certain persons with regard to race, skin color, gender, age, etc.[54] It should not be forgotten that FRT does not always produce a 100% accurate result but operates on the basis of a certain degree of probability that, for example, the face from the photo and the face in the police database would

---

51 *Ibid.*

52 *Ibid.*

53 Hill, D.; O'Connor, CD.; Slane, A., *Police use of facial recognition technology: The potential for engaging the public through co-constructed policy-making*, International Journal of Police science & management, Vol. 24, Issue 3., pp. 327-331, [https://doi.org/10.1177/14613557221089558].

54 Dessimoz, D.; Champod, C., *A dedicated framework for weak biometrics in forensic science for investigation and intelligence purposes: The case of facial information*. Security Journal, Vol. 29, 2016, pp. 603–617. [https://doi.org/10.1057/sj.2015.32].

correspond to the same person. Therefore, it is necessary to ensure ex post human supervision in order to eliminate the danger of possible bias in the treatment based on the results produced by the FRT.

The directive also contains an important provision on the time limit for data storage and stipulates that collected data must not be kept in a form which permits identification of data subjects for any longer than is necessary for the purposes for which they are processed (Art. 4(1)e). In this way, the directive introduces a kind of proportionality in the time retention of personal data and sets a requirement to establish a system of weighing the interests of data retention for the purposes of criminal proceedings and the interest of a person that his/her data is not affected by the data retention measure more than is absolutely necessary. In practice, for example, time limits for data retention have already been established at the level of recommendations, so it is emphasized that a period of three days, or 72 hours, is sufficient to reach a conclusion on whether the collected data should be retained for a longer period of time.[55] On the other hand, it is legitimate and quite understandable that in the case of more serious criminal offences that threaten organized life in society (human trafficking, drug smuggling), the retention of data may be prolonged, taking into account the need to implement special investigative techniques (secret monitoring, wiretapping etc.) in the detection of the criminal offence and the perpetrator.

One of the most sensitive challenges that needs to be resolved in order to ensure the credibility of the results obtained using FRT for the purposes of criminal proceedings is certainly the proper level of data processing security. Namely, it is necessary to ensure that the data is processed in a manner that ensures the appropriate security of the personal data, including protection against unauthorized or unlawful processing and against accidental loss, destruction or damage, using appropriate technical or organizational measures (Art. 4(1)f LED). This request can only be met by a concrete procedural norm that will determine the persons authorized to act and deal with the collected data as well as the legal consequences of their disclosure to unauthorized persons. Certainly, it is necessary to take into account that any previous or subsequent manipulation of the data obtained through FRT technology entails the invalidity of the evidence collected in this way, and as a result, exclusionary rule on illegally obtained evidence is applied; such results cannot be used as evidence in criminal proceedings. Therefore, it is necessary to provide sufficient guarantees during the entire data processing that the collection, transfer and processing of data is protected from any external influences that could

[55] Madiega; Mildebrath, *op. cit.* note 32, p. 15.

compromise these data, which would result in the impossibility of using it as evidence in criminal proceedings.[56]

The last but not least important standard is the question of the responsibility of the data controller for compliance with the basic principles for the processing of personal data. The directive thus expressly prescribes the obligation to implement appropriate technical and organizational measures to ensure and to be able to demonstrate that processing is performed in accordance with this directive (Art. 19(1) LED). In doing so, it is necessary to place special emphasis on the assessment of the impact on the protection of personal data when it comes to systems that represent a high risk for the rights and freedoms of individuals. There is no doubt that such a high risk is indeed represented by FRT systems developed for the purposes of criminal proceedings, because not only does their application represent a significant encroachment that limits fundamental human rights and freedoms, but also, the results of such actions can be used as evidence in criminal proceedings[57], before the implementation of the FRT itself, for the purposes of criminal proceedings, it is necessary to carry out a targeted risk assessment for the rights and freedoms of the respondents, foreseen risk measures, protective and security measures, and mechanisms to ensure the protection of personal data and proof of compliance with this directive (Art. 27(2) LED).

3. CONTEMPORARY FRT SYSTEMS IN EUROPE – RECENT DEVELOPMENTS

The presence, testing, and use of FRT is not new in Europe. Many countries have been using this technology for many years, primarily applied in the area of criminal law, but examples of the use of FRT in other areas of everyday life such as education and transport are becoming more and more common.[58] However, some countries are leading the way in terms of the use of new technologies, both in quality and quantity. One of the indicators is certainly the use of mass surveillance systems that can easily apply FRT. China and the USA continue to dominate in terms of the presence and use of mass surveillance and FRT, but European countries, following the trends of global leaders, have significantly increased the presence of the aforementioned technologies.[59]

---

56 *Ibid.*

57 *Ibid.*

58 Gentzel, M., *Biased Face Recognition Technology Used by Government: A Problem for Liberal Democracy*, Philosophy & Technology, Vol. 34, 2021, p. 1639.

59 See: Bischoff, P., *Facial Recognition Technology (FRT): 100 countries analyzed*, available at: [https://www.comparitech.com/blog/vpn-privacy/facial-recognition-statistics/], Accessed 15 July 2022.

3.1. Wales

The UK is one of the countries with the largest number of CCTV cameras in relation to the number of inhabitants in the world; London is one of the most surveilled cities in the world and one of the first that connected CCTV cameras to facial recognition software.[60] Therefore, it is not surprising that Wales and other countries of the UK followed the aforementioned trends and tested FRT. South Wales Police is the leading UK national authority in testing and conducting trials of automated facial recognition (hereinafter: AFR), and after the procurement process and tender, AFR software developed by NEC, called NeoFace Watch software, was chosen based on quality and money-for-value criterion.[61] AFR Locate software is a type of FRT used by the South Wales police that attracted a lot of public attention and ultimately led to a court epilogue. Deployment of AFR Locate includes usage of CCTV cameras that police mount on vehicles (mostly vans), poles, or posts that are suitable for capturing images of faces of people that are passing within range of the mounted cameras. Those digital pictures are processed in real-time to extract facial biometric information and compare it with facial biometrics of persons that are placed on a watchlist that is specifically composed for every deployment *in concreto*.[62] According to South Wales Police official reports, the AFR locate system was deployed and applied 70 times in the period from 2017-2019, resulting in several hundred thousand scanned faces and 59 arrests based on the results of the AFR Locate and NeoFace Watch software.[63]

---

60 Zalnieriute, M., *Burning Bridges: The Automated Facial Recognition Technology and Public Space Surveillance in the Modern State*, The Columbia Science & Technology Law Review, Vol. 22, No. 2, 2021, pp. 286-287; see also, Brandl, R., *The world´s most surveilled citizens*, 3 February 2021, available at: [https://www.tooltester.com/en/blog/the-worlds-most-surveilled-countries/], Accessed 3 July 2022, Bischoff, P., Surveillance camera statistics: which cities have the most CCTV cameras?, 17 May 2021 available at: [https://www.comparitech.com/vpn-privacy/the-worlds-most-surveilled-cities/], Accessed 3 July 2022.

61 Davies, B.; Innes, M.; Dawson, A., *An Evaluation of South Wales Police's Use Of Automated Facial Recognition. Universities',* Police Science Institute Crime & Security Research Institute, pp 1-45, available at: [https://static1.squarespace.com/static/51b06364e4b02de2f57fd72e/t/5bfd4fbc21c67c2cdd692fa8/1543327693640/AFR+Report+%5BDigital%5D.pdf.] Accessed 15 July 2022; *R (on the application of Edward Bridges) v The Chief Constable of South Wales Police,* [2020] EWCA Civ 1058, §10.

62 For more details on how AFR locate is functioning see: Kotsoglou; Kyriakos, *op. cit.* note 48, p. 87; South Wales Police, Facial Recognition Technology, available at: [https://www.south-wales.police.uk/police-forces/south-wales-police/areas/about-us/about-us/facial-recognition-technology/], Accessed 4 July 2022; *R (on the application of Edward Bridges) v The Chief Constable of South Wales Police,* [2020] EWCA Civ 1058, §12.

63 South Wales Police, *Facial Recognition Technology*, 2020, available at: [https://www.south-wales.police.uk/police-forces/south-wales-police/areas/about-us/about-us/facial recognition-technology/], Accessed 4 July 2022.

The substantial criticism of the use of such systems comes from NGOs, whose objections can be divided into general and specific categories, the latter of which relates to individual systems, their specific use, and specific events. The lack of systematic legal regulation and the inadequacy of the same in the UK are some of the most serious objections of a general nature, with the emphasis on the problem of the lack of adequate supervision outside the police system over the use of such systems as well as the lack of a strategic approach to the usage and development of facial recognition systems as pointed at by Big Brother Watch.[64] The use of facial recognition systems has direct implications for the realization of the rights to privacy, family life, and freedom of expression, but it also has an impact on the issue of equality for all, i.e., discrimination.[65] One of the more specific objections to the AFR Locate system regards the large number of incorrectly identified innocent persons, which amounts to about 91% in the period from 27 May 2017 to 27 March 2018, calling into question the precision of this technology.[66] Another specific objection relates to the usefulness of such systems considering that in the same period, based on the use of the AFR Locate and NeoFace Watch software, a total of 15 people were arrested, which is about 0.005% of the total number of people covered by the work of the previously mentioned systems according to the data provided by Big Brother Watch and South Wales Police.[67]

Many of these objections were addressed first by the High Court and then by the Court of Appeal in the landmark case of Edward Bridges.[68] In the *case of Edward Bridges v. The Chief Constable of South Wales Police* (2019) EWHC 2341, Mr. Bridges first tried to challenge, before the High Court, the use of the AFR Locate system on two occasions, namely, on 21 December 2017 at Queen Street, a busy shopping area in Cardiff; and on 27 March 2018 at the protest in front Defense

---

64 Big Brother Watch, *Face off: The lawless growth of facial recognition in the UK policing*, May 2018, pp. 9-10, available at: [https://bigbrotherwatch.org.uk/wp-content/uploads/2018/05/Face-Off-final-digital-1.pdf], Accessed 5 July 2022.

65 *Ibid.*, pp. 13-19; see also Gentzel, M., *op. cit.* note 58, p. 1645 *et seq*.

66 Purshouse, J.; Campbell, L., *Privacy, Crime Control and Police Use of Automated Facial Recognition Technology,* Criminal Law Review, Vol. 2019, Issue 3, 2019, pp. 191-192.

67 Big Brother Watch, *op. cit.* note 7, p. 4. For comparison of listed figures, that are in accordance with further available data on the use of the AFR locate the system in the period from 2017 to 2019 and even in 2022 see also South Wales Police, Smarter Recognition, Safer Community, Deployments 2017-2019, available at: [https://www.south-wales.police.uk/SysSiteAssets/media/downloads/south-wales/about-us/frt/FRT deployments.pdf], Accessed 5 July 2022.

68 *Edward Bridges v The Chief Constable of South Wales Police* [2019] EWHC 2341, For a detailed analysis of the case see Gordon, BJ., *Automated Facial Recognition in Law Enforcement: The Queen (On Application of Edward Bridges) v The Chief Constable of South Wales Police, Potchefstroom Electronic Law Journal,* Vol. 24., No. 1, pp. 4-15, [http://dx.doi.org/10.17159/1727-3781/2021/v24i0a8923].

Procurement, Research, Technology and Exportability Exhibition ("the Defense Exhibition"), which was held at the Motorpoint Arena. In its decision, the High Court did not accept the claims of Mr. Bridges that the use of AFR Locate on the two previously mentioned occasions violated his right to privacy and private life under Art. 8 of the European Convention on Human Rights and breached both the UK's data protection law and public sector equality duty.[69]

Mr. Bridges appealed against the decision of the High Court on five grounds of appeal, and the Court of Appeal, in the case of *R (on the application of Edward Bridges) v. The Chief Constable of South Wales Police* EWCA Civ 1058, accepted three of those grounds and overturned the decision.[70] The Court of Appeal accepted the first ground of appeal in which it was stated that the existing legal framework governing the use of the AFR Locate system is insufficient. The two biggest objections of the Court of Appeal are that the legal framework did not define who can be put on the watchlist and where the AFR Locate system can be deployed. The latter issue is decided by the police on the basis of discretion, and the fact that there is a high degree of discretion is shown by the various types of events where the AFR Locate system was installed; Surveillance was carried out on various types of events from the Champion League Final, Antony Joshua's boxing match, various concerts, boat races and the Defense Exhibition.[71] The second accepted ground of the appeal refers to the issue of compliance with section 64 of the Data Protection and Freedom of Information (hereinafter: DPA) 2018; the Court of Appeal concluded that the "DPA failed properly to assess the risks to the rights and freedoms of data subjects and failed to address the measures envisaged to address the risks arising from the deficiencies they have found". Regarding the final ground of appeal, the Court held that the South Wales Police were deficient in fulfilling their public sector equality duty because they failed to recognize the risk that automatic facial recognition profiling could disproportionately impact women and minorities.[72]

Although this landmark case provided answers to certain questions about the use of FRT, it also opened up several other questions and issues that will certainly be the subjects of judicial decisions and interpretations in the foreseeable future. Firstly, although the Court of Appeal indicated that the legal framework govern-

---

69 Zalnieriute, M., *op. cit.* note 60, pp. 290-292.

70 *R (on the application of Edward Bridges) v. The Chief Constable of South Wales Police,* [2020] EWCA Civ 1058, §129-130; see also *supra*, note 61.

71 South Wales Police, *Facial Recognition Technology*, 2021, available at: [https://www.south-wales.police.uk/police-forces/south-wales-police/areas/about-us/about-us/facial-recognition-technology/], Accessed 4 July 2022; Davies; Innes; Dawson *loc. cit.* note 60.

72 Zalnieriute, M., *op. cit.* note 60, p. 295-296.

ing the use of the AFR Locate system was insufficient, the same Court nevertheless concluded that the use of such a system was acceptable, proportionate, and in line with the legitimate aims that South Wales Police wanted to achieve. Such a point of view paves the way for increased use of the AFR Locate system when the conditions specified by the Court of Appeal are met by amendments to the existing legal framework. The second question of the impact of the use of the FRT on the realization of the rights to freedom of expression, assembly, and association under Arts. 10 and 11 of the European Convention on Human Rights remained unanswered because it was withdrawn before the first instance of court.[73] The use of FRT certainly affects the realization of the previously mentioned convention rights, and the concept of positive and negative obligations of the state will have to be adapted to new technologies. Thirdly, the court pointed to the problem of the relationship of safeguards that are required, which significantly complicates the assessment of the results of using FTR systems and their potential bias. The aforementioned issue will certainly be at the center of the future regulation of the use of FRT systems.

3.2. Netherlands

The Netherlands, known for securing the realization of individual rights and freedoms, is another European country experimenting the most with FRT as well as with other forms of using AI systems in police work and in relation to criminal prosecution.[74] CATCH is one of the many systems used by the Dutch police since 2016, which includes the use of FRT software. The main purpose of the CATCH system is to identify suspects or convicts by comparing the biometric data from the camera footage with a database containing persons who have been suspected or convicted of serious crimes since 2010 as well as persons who refused to identify themselves during arrests. According to data from 2019, the CATCH database contained 2.3 million pictures taken by the Dutch police.[75] Despite the deletion of 218,434 photos from the database in 2020, the total number of photos in the CATCH database in the same year grew to 2.653,038 photos, which indicates the trend of covering an increasing number of people with FRT.[76]

---

73 Gordon *loc. cit.* note 68.

74 For more see: Fair Trials, *Automating injustice: The use of artificial intelligence & automated decision-making systems in criminal justice in Europe*, pp. 8-14, 17-20, available at: [https://www.fairtrials.org/app/uploads/2021/11/Automating_Injustice.pdf], Accessed 13 July 2022-

75 Montag, L.; Mcleod, R.; De Mets, L.; Gauld, M.; Rodger, F; Pełka M., *EDRi report: The rise and rise of biometric mass surveillance in the EU: A legal analysis of biometric mass surveillance practices in Germany, The Netherlands, and Poland*, 2019, pp. 61-62.

76 See more: Politie, Centrale Automatische TeChnologie voor Herkenning (CATCH), Jaarcijfers 2020, available at:

In addition to the use of photos and footage obtained by recorded cameras for comparison with photos from the CATCH database, there are a number of other possibilities for the police to use the CATCH system on photos obtained from other sources. The CATCH system can be applied to photos and videos obtained through body cameras used by the police, videos sent by citizens, and videos and images obtained by private cameras installed and used by citizens.[77] The use of different ways to obtain images or recordings to which the CATCH system is applied is one of the fundamental objections to using such systems, especially in relation to photographs and recordings obtained by private cameras. In this regard, the project of the Dutch police called *Camera in Beeld* can be problematic. Through this project, the police invite private individuals and business entities to include the cameras they use in their private lives or business activities in their system; the registration is quite simple and straightforward, and the intention is that the recordings of these cameras are used only when it is necessary for added value to the investigation and detection of the perpetrators of criminal acts.[78] This way of expanding the police surveillance network to cameras of private entities circumvents the provisions of the Act on police data[79] and the LED Directive[80], which regulates biometric data as a special type of data, the processing of which imposes the standards of strict necessity and sufficient protection. Also, in accordance with the provisions of the GDPR, data collected by private cameras do not fall into the category of special data from Art. 9 but rather the processing of usual data from Art. 6.[81] Although, in the Netherlands, it is not allowed for the cameras of private entities to record public areas; however, it is possible that when it is necessary or cannot be avoided due to the specifics of the property, part of the public area

[https://www.politie.nl/binaries/content/assets/politie/onderwerpen/forensische-opsporing/catch-jaarcijfers-2020-hr-online.pdf], Accessed 13 July 2022.

77 Montag; Mcleod; De Mets; Gauld; Rodger; Pełka *loc. cit.* note 75.

78 Politie, Camera in Beeld, available at: [https://www.politie.nl/onderwerpen/camera-in-beeld.html], Accessed 13 July 2022.

79 Wet politiegegevens, Art. 5., available at: [https://wetten.overheid.nl/BWBR0022463/2020-01-01/0], Accessed 13 July 2022.

80 Directive (EU) 2016/680 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data by competent authorities for the purposes of the prevention, investigation, detection or prosecution of criminal offences or the execution of criminal penalties, and on the free movement of such data, and repealing Council Framework Decision 2008/977/JHA, [2016], *OJ L 119,* Art. 10.

81 Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) [2016] *OJ L 119,* Art. 6 and 9.

may be recorded.[82] Taking into account that the *Camera in Beeld* system in 2019 included 220,000 cameras and that 87% of them recorded parts of public areas, it can be considered a potentially large source of images and recordings for the police outside their own system of surveillance.[83] Considering the announcements that such a system may include over 1.5 million cameras[84], the issue of the legal regulation of the use of CATCH and other FRTs will be of imperative importance for the protection of the rights guaranteed by the Convention. With a slightly smaller reach, the same problems can occur regarding smart doorbell projects.[85]

The fundamental problem that appears with numerous FRT systems is the question of the proportionality of the success of such a system in relation to the goals that should be accomplished and the degree of violation of fundamental human rights and freedoms. CATCH is not an exception; according to available police data, in 2019, out of a total of 1,249 images, only 98 resulted in a positive match, which amounts to 8%. In 2020, out of a total of 1,142 images, only 96 resulted in a positive match, and that is a slight increase to 10% success.[86] Data on the actions of the police and criminal prosecution authorities on the actions taken in this 8% and 10% of positive matches are not known, nor is information regarding to what extent the recognition by the CATCH system contributed to the prosecutions and convictions. Taking into account the aforementioned percentages as well as the extremely small percentages of arrestees recognized by the AFR deployed by the South Wales Police (see section 3.1.), the question of the justification and effectiveness of using such a system in relation to the level of potential violations of individual rights naturally arises. This is supported by the jurisprudence of the Rechtbank Zeeland-West-Brabant in case No. 02-665274-18[87], in which the court concluded that the mere fact that the person was recognized by the CATCH system and that the identification was confirmed by two investigators as a human

---

82 Autoriteit Persoonsgegevens, Stappenplan camera bij huis, available at: [https://autoriteitpersoonsgegevens.nl/sites/default/files/atoms/files/stappenplan_camera_bij_huis.pdf], Accessed 13 July 2022.

83 Dutch police can access 200,000 private security cameras, campaign for more, 2019, available at: [https://www.dutchnews.nl/news/2019/01/dutch-police-can-access-200000-private-security-cameras-campaign-for-more/], Accessed 13 July 2022; considering the announcements that such a system should include over 1.5 million cameras, the issue of legal regulation of the use of CATCHA and other FRTs will be of imperative importance for the protection of the rights guaranteed by the Convention.

84 *Ibid.*

85 Montag; Mcleod; De Mets; Gauld; Rodger; Pełka *op. cit.* note 75, pp. 72-74.

86 Politie, *Centrale Automatische TeChnologie voor Herkenning (CATCH)*, *loc. cit.* note 75, see also: Waarlo, N.; Verhagen, L., *De stand van gezichtsherkenining in Nederland, de Volkskrant*, available at: [https://www.volkskrant.nl/kijkverder/v/2020/de-stand-van-gezichtsherkenning-in-nederland~v91028/?referrer=https%3A%2F%2Fwww.google.com%2F], Accessed 14 July 2022.

87 *Rechtbank Zeeland-West-Brabant [2019] case No. 02-665274-18, ECLI:NL:RBZWB:2019:2191.*

factor in making a decision (i.e., a safeguard) is not sufficient to convict a person; that is, additional evidence is necessary.

3.3. Germany

Germany is not an exception to the growing trend of mass surveillance and the use of FRT systems in Europe. Such a trend has certainly been accelerated by contemporary and recent socio-political events. Taking into account that Germany is one of the leaders in the establishment of mass surveillance in Europe, both at local levels through the established systems in Bielefeld and Coesfeld in 2003, in Mönchengladbach in 2004, and Düsseldorf in 2009, as well as those established on the basis of national projects such as the mass surveillance of the Südkreuz train station in Berlin in 2017, it is not surprising that FRT systems are applied in Germany.[88] The vast majority of cameras that have been installed are ready for biometric identification, especially in the last-mentioned project; but even if they aren't capable of applying biometric identification in real-time, it is possible afterward. In the case of *Gaughran v. United Kingdom Application no. 45245/15*, the European Court of Human Rights warned that the storage of recordings and images that are not subject to the direct use of facial recognition software but can be subsequently placed in a database to which the aforementioned programs can be applied represents a direct interference with Art. 8(1) of the Convention.[89]

The application of FRT in Germany is not only potentially related to mass surveillance; there are a number of projects, events, and examples of direct use of such systems. The use of the facial recognition software Videmo 360, with a real-time facial recognition function, by the Hamburg police for the investigation of criminal offenses in connection with the G20 meeting that took place at the Hamburg summit, is one relatively recent example of the usage of FRT in Germany. For this purpose, a database was created containing 100 terabytes of recordings and images that were collected from various sources such as police video surveillance material, footage from the public transport and tram stations, material from the 'Boston infrastructure' portal of the Federal Criminal Police Office, private footage uploaded by citizens for the police, and video and image files taken from media sources.[90] Seventeen terabytes were used for facial recognition by Videmo 360, including

88 Montag; Mcleod; De Mets; Gauld; Rodger; Pełka *op. cit.* note 75, pp. 19-22.

89 The ECtHR warned that the storage of recordings and images that are not subject to the direct use of facial recognition software but can be subsequently placed in a database to which the aforementioned programs can be applied represents a direct interference with Article 8(1) of the Convention, see more: Judgment *Gaughran v The United Kingdom* (2020) EHRR, No. 45245/15, 13 February 2020, § 69-70.

90 Raab, T., *Video Surveillance and Face Recognition: Current Developments, Reports: Germany*, European Data Protection Law Review (EDPL), Vol. 5, Issue 4, 2019, p. 544.

around 15,171 videos and 16,480 images.[91] In this case, The Hamburg Commissioner for the DPA concluded that the police do not have the authority to make a decision on the application of biometric identification, especially taking into account the level of intrusion into human rights, and accordingly ordered the deletion of the aforementioned database. A number of objections were raised by the DPA, considering that the use of Videmo 360 was not selective and violated the rights of individuals who were never even suspected of committing a crime; the second part of the complaint referred to the fact that the persons were not aware or informed that the FRT technology was being applied to them and, accordingly, could not even file a complaint; one of the objections is the lack of a legal framework regulating the collection of data from different sources and the creation of a database for processing through FRT technology, which has proven to be a general problem in European countries that use FRT.[92]

The Hamburg Administrative Court, in *case no. 17 K 203/19*[93] concluded that the DPA did not have the authority to conduct a legal analysis and ordered the deletion of the database, which led to the annulment of the order issued by the DPA. Therefore, due to procedural and formal reasons and the lack of DPA authority, the Court did not consider the legality and validity of the use of Videmo 360; the Court stated that biometric data is a special type of data and that their processing must meet the condition of strict necessity.

The DPA appealed against the said decision; the appeal was allowed, and the case is pending. The Hamburg Police publicly announced that it had deleted the database from the G20 summit, considering that there was no longer a reason for the appeal. According to the DPA's point of view, considering the importance of legal regulation in the field of FRT and biometric identification and the use of these systems in the future, especially in the context of endangering a democratic society, it values further judicial interpretation and clarification.[94] Taking into ac-

---

91 *Ibid.*; See also: Monroy, M., *Security Architectures in EU: G20 in Hamburg: Data protection commisioner considers face recognition illegal*, 2018, available at: [https://digit.site36.net/2018/08/15/g20-in-hamburg-data-protection-commissioner-considers-face-recognition-illegal/], Accessed 15 July 2022.

92 Der Hamburgische Beauftragte für Datenschutz und Informationsfreiheit, *Einsatz der Gesichtserkennungssoftware „Videmo 360" durch die Polizei Hamburg zur Aufklärung von Straftaten im Zusammenhang mit dem in Hamburg stattgefundenen G20- Gipfel*, 2018, available at: [https://datenschutz-hamburg.de/assets/pdf/Anordnung_HmbBfDI_2018-12-18.pdf], Accessed 15 July 2022.

93 Verwaltungsgericht Hamburg, Urteil [2019] case no. 17 K 203/19.

94 See more: The Hamburg Commissioner for Data Protection and Freedom of Information, *PRESS RELEASE, Hamburg Police deletes the biometric database for facial recognition created in the course of the G20 investigations*, 28 May 2022, available at:

count the recent jurisprudence regarding the surveillance of Breslauer Platz and its side streets in Cologne in the cases *VG Köln 20 L 2340/19*[95] and *OVG Nordrhein-Westfalen 5 B 137/21*[96], as well as recent research that shows that the approval rate regarding the FRT system in Germany is lower than in the UK, USA, and China and that the opposition rate is the highest concerning the citizens of the aforementioned countries[97] the court's interpretation regarding the aforementioned issues will be significant not only for legal regulation but for society in general.

4. CHALLENGES AND DOUBTS FOR THE IMPLEMENTATION OF FRT IN EUROPE – BETWEEN UNQUESTIONABLE PRINCIPLES OF CRIMINAL PROCEDURAL LAW AND THE RENAISSANCE OF MODERN TECHNOLOGY

The great potential for the application of facial recognition technology (FRT) for criminal proceedings is primarily demonstrated in the facilitation and acceleration of activities that the police carry out. The use of FRT can facilitate the clarification of a criminal offense and the preventive actions of police officers. In particular, the improvement and acceleration of the process of identifying individuals enable the police to respond in real time, immediately, whether it is a matter of stopping and arresting someone or taking preventive action to increase the readiness of police officers in a particular area due to the presence of suspicious individuals. In addition to ordinary face-to-face matching, or discovering a specific face among a crowd of people on recordings or live cameras, FRT can also be used for the detection of certain emotions and affections. In this sense, FRT can be used to detect "strange behavior", which can also be a trigger for stopping someone and directing further proceedings toward them.

In addition to the above, the result of FRT processing has a certain potential for use in the evidentiary context.[98] The result or "output" of FR processing is only a data point that shows a certain percentage or probability of the existence or non-existence of a certain fact, or the making or not making of a certain decision. It is not difficult to imagine that an FR tool could be used to verify the results of iden-

[https://datenschutz-hamburg.de/assets/pdf/2020-05-28-Press-Release_Biometric_Database.pdf], Accessed 15 July 2022.

95 VG Köln [2020] 20 L 2340/19.

96 OVG Nordrhein-Westfalen [2022] 5 B 137/21.

97 Kostka, G.; Steinacker, L.; Meckel, M., *Between security and convenience: Facial recognition technology in the eyes of citizens in China, Germany, the United Kingdom, and the United States*, Public Understanding of Science 2021, Vol. 30, No. 6, pp. 671–690.

98 Kotsoglou; Oswald, *loc. cit.* note 48.

tification as a procedural action, in which the tool would confirm or question the recognition result. Any data that affect the assessment of the level of suspicion that a particular person has committed a criminal offense can be of crucial importance in deciding on the formal initiation of criminal proceedings, ordering some evidentiary actions, or adjudicating on pre-trial detention or bail. In this context, the question also arises as to whether and to what extent FRT should be used to assess the credibility of statements, e.g., from witnesses or defendants. It is increasingly common practice for the statements of individuals at different stages of the proceedings to be recorded and therefore become suitable for subsequent FR analysis. The credibility of the statement of an individual is of crucial importance, and such an assessment is made by law enforcement authorities based on direct observation, life experience, and logical conclusion.[99] How credible, advisable, or acceptable it would be to use FRT to supplement or even replace human judgment in the assessment of credibility is a complex and multifaceted issue that raises numerous legal, ethical, and social questions.[100] It is not easy to answer the aforementioned questions; the response depends primarily on the stage of the criminal process and the nature of the decision being made. It is not an equal situation if it is about an early stage of the proceedings and the decision is made in favor of the suspect or if the procedure is already in the trial phase and such an assessment becomes a basis for a verdict on the defendant's guilt.

Although potentially useful, the employment of AI for the purposes of deciding on criminal prosecution can lead to numerous unwanted phenomena. The same can be applied to FRT, which can result in incorrect facial matching or identification. The rights at stake include the rights to dignity, privacy, protection of personal data, non-discrimination, freedom of assembly, effective legal remedy, and the right to a fair trial.[101] Therefore, it is appropriate to consider AI systems in the context of their use in criminal proceedings as high-risk systems, as classified by the proposal for a regulation of the European Parliament and of the Council laying down harmonised rules on artificial intelligence (Artificial Intelligence Act)

---

99 Krapac *op. cit.* note 36, p. 102.

100 The complexity of utilizing Facial Recognition Technology and exploring its potential positive applications necessitates a comprehensive and balanced approach. By addressing technical challenges, privacy concerns, and ethical considerations, we can strive towards leveraging FRT's capabilities while upholding individual rights and societal well-being. See more in: Roksandić S; Protrka N.; Engelhart M., *Trustworthy Artificial Intelligence and its use by Law Enforcement Authorities: where do we stand?*, 45th Jubilee International Convention on Information, Communication and Electronic Technology (MIPRO), Opatija, Croatia, 2022, pp. 1227-1229, doi: [10.23919/MIPRO55190.2022.9803606].

101 Kritikos, M., *Artificial Intelligence ante portas: Legal & ethical reflections*, European Parliamentary Research Service, Scientific Foresight Unit (STOA), pp. 4-5, available at: [https://www.europarl.europa.eu/RegData/etudes/BRIE/2019/634427/EPRS_BRI(2019)634427_EN.pdf], Accessed 13 July 2023.

and amending certain union legislative acts (hereinafter: Proposal).[102] This applies in particular to AI systems for remote biometric identification as well as those used for individual risk assessments, assessment of the reliability of evidence in criminal proceedings, polygraphs, or other similar tools for determining an individual's emotional state, and predicting the occurrence or reoccurrence of a criminal offense based on the creation of an individual profile. All of the above also applies or may apply to FRT.

Technical errors, discrimination, violation of freedom of assembly, protection of personal data, and impact on dignity and privacy have already been discussed extensively.[103] Therefore, this chapter focuses on issues related to the use of FRT for the purposes of criminal proceedings, such as the impact on the rights to a fair trial and fair legal procedure and, above all, on the presumption of innocence.

Considering many forms of the use of FRT for the purposes of criminal proceedings, it is necessary to first establish criteria or parameters for analyzing each specific situation of FRT use in order to detect potential problems and points that need to be carefully legally regulated.

Through regulation, it is necessary to differentiate preventive and investigative activities of law enforcement authorities, especially its evidentiary activities. Furthermore, the judicial bodies and stages of the proceedings at which FRT is applied vary widely. Attention must be directed to the potential bias of the court or decision-maker, the right to a legal remedy against the decision, and the duty to inform the individual that FRT has been applied.

4.1. FRT and the Presumption of Innocence

FRT can be applied to a specific person with or without suspicion that he/she has committed a specific criminal offense. It is important to consider a situation in which there is a suspicion that a specific person has committed a criminal offense. It should be noted here that there is a difference between the use of FRT in relation to criminal proceedings regarding the crime for which the person is suspected and the preventive use of FRT on that person in order to prevent other criminal offenses. While the use of FRT in the first case is almost self-evident, in the second situation, it may be quite questionable. Such preventive use should be accompanied by the fulfillment of certain additional conditions with a limited scope of interference with rights and freedoms. Moreover, the fact that someone

[102] The use of biometric data is also prescribed as risky by the Law Enforcement Directive (Recital 51).

[103] Leslie, D., *Understanding bias in facial recognition technologies: and explainer*, The Alan Turing Institute, 2020., pp. 1-50., [https://doi.org/10.5281/zenodo.4050457].

is suspected of committing a certain criminal offense must not affect his/her private everyday life as if they had already been definitively convicted of the specific criminal offense. They must be able to continue to live normally and enjoy all their rights and freedoms like any other person. The aforementioned regards the effects of the presumption of innocence which do not concern the criminal proceedings against the accused but rather his everyday functioning in society. This should be kept in mind when deciding whether and to what extent FRT should be applied against certain individuals.[104]

The implications of the presumption of innocence on the use of FRT for the purposes of specific criminal proceedings can be multiple. On the one hand, it can affect the admissibility of the use of FRT with regard to a specific person, while on the other hand, it can be relevant to the legality of the results obtained. Above all, it is necessary to distinguish investigative activity from evidentiary activity, and then the question of the legality of the obtained results arises in each of the previously mentioned activities.

For the analysis of these issues, the nature of the results obtained through the use of FRT is of key importance. In fact, the result of the application of FR tools is a certain percentage or probability.[105] However, the language of probability is only a language of speculation and, as such, is not applicable in those stages or phases of criminal proceedings in which the *in dubio pro reo* principle is a key component (or, more accurately, a consequence) of the presumption of innocence.[106] A clearly expressed percentage probability of the existence of a certain phenomenon or fact also provides a clearly expressed percentage probability of the non-existence of the same phenomenon or fact. In this way, the accused is provided with a strong argument to challenge a decision that is not in his or her favor, and it highlights the fact that the decision-maker is not completely certain in their decision and that the decision being made is objectively problematic.[107]

Special problems are situations in which we encounter borderline cases determined by a few percentile points, which could be the boundary between the status of a citizen and the status of a suspect, and even positive or negative decisions on, for example, initiating a criminal procedure, determining pre-trial detention,

---

104 Identifying or locating a potentially dangerous person in a certain space does not necessarily have to trigger an arrest but can be a reason for raising the operational readiness of police forces.

105 Kotsoglou; Oswald, *loc. cit.* note 48.

106 The presumption of innocence in criminal proceedings is expressed through the principle *in dubio pro reo* and the rule that the burden of proof is on the prosecutor.

107 Damaška M, *Dokazno pravo u kaznenom postupku: oris novih tendencija*, Pravni fakultet u Zagrebu, Zagreb, 2001, pp. 32-33.

deciding on the discontinuation of proceedings or even deciding on one's guilt or innocence. However, these situations are not equal. These decisions are made by different subjects at different stages of the procedure, and the consequences of the above errors are not equally severe.

In the early stage of discovering and clarifying a criminal offense, the stage of the investigation, and even in the filing of the indictment, the principle *in dubio pro reo* does not apply, and the presumption of innocence does not directly hinder the use of FRT or the use of AI in general.[108] The percentages of the probability for the existence of a certain fact are extremely valuable and applicable in the work of the police in the stage of detecting a suspect, as well as for the prosecutor when deciding on the undertaking of certain investigative actions or on moving forward with an investigation against a certain person. In this stage of criminal proceedings, the activity of the law enforcement authorities is reduced to weighing the probabilities, or whether there are grounds for reasonable suspicion that the criminal offense has been committed or there is already probable cause that a specific person has committed a criminal offense. In this sense, the application of FR tools and AI tools, in general, seems more than justified for the activities of the police. It can lead to the identification and arrest of the suspect and help in deciding on the need to take some other investigative or evidentiary action. Any error in the application of FR tools could be compensated for by activating additional guarantees and rights of the accused, thereby eliminating the error (in recognition) quickly.

There is a slightly more complex situation with the application of FR tools in the work of the prosecutor. As mentioned, the part related to the inquiry of criminal offenses and deciding on the undertaking of (urgent) investigative and evidentiary actions is actually the same as in the work of the police. However, caution should be exercised in decisions on the formal initiation of criminal proceedings, indictment, and determination of pre-trial detention and other coercive measures. Namely, the undertaking of these actions leads to serious interference with the rights and freedoms of the individual, that is, the accused, all because of the probability jump caused by the application of AI or FRT tools. The situation is particularly sensitive if the prosecutor, using FRT tools, is to come to the result that there is a 51% probability that someone is the perpetrator of a criminal offense, which would actually activate his obligation to initiate criminal proceedings in accordance with the principle of legality (mandatory) prosecution; at this percentage, it is considered that there is probable cause that a specific person has committed a

[108] Novokmet, A., Tomičić, Z., Vinković, Z., *Pretrial risk assessment instruments in the US criminal justice system—what lessons can be learned for the European Union*, International Journal of Law and Information Technology, Vol. 30, Issue 1, 2022, pp. 1–22, [https://doi.org/10.1093/ijlit/eaac006].

criminal offense. Namely, the prosecutor should not initiate criminal proceedings under the same principle of legality if the percentage is lower than 51%.[109] Therefore, from the aspect of the presumption of innocence, there is no direct obstacle to the application of FRT here. At this stage of the proceedings, the principle *in dubio pro reo* does not yet apply. The application of FRT is undoubtedly for the purposes of criminal proceedings because there is suspicion of the commission of a criminal offense by the person in relation to whom the FRT is applied. The question is only the context in which FRT is applied and how the result of its application contributes to the overall assessment of the prosecutor about the probability of committing a criminal offense. This could be a question of the identity of the person recorded[110] or the assessment of the credibility of a particular piece of evidence or personal statement.

The question of evaluating the reliability of a particular piece of evidence using FRT is a slippery slope. This question can be encountered by both the prosecutor and the court. Using FRT, for example, one could check the result of the identification against the results of recognition by the witness. Their results could match or differ significantly. It goes without saying that the result of such an action could be important for the prosecutor or court's decision on further proceedings. Furthermore, the development of technology has led to the frequent, and sometimes mandatory, audio-video recording of certain evidentiary actions, i.e., interrogations of suspects. Such recordings are used by the court and the prosecutor for evidentiary purposes, and by reviewing them, they are becoming familiar with their content, but they are also assessing the reliability of the statements themselves. For example, such could include recorded statements of witnesses and defendants as well as the evidentiary action of confrontation that is carried out. The question arises as to whether the prosecutor or the court can subject such a recording to FRT and obtain the relevant data on the probability that the statement of a particular person is reliable or not. The fact is that the judicial bodies are not bound by specific formal evidentiary rules regarding the proven or unproven nature of a fact and that they evaluate the evidence based on the principle of free evaluation of evidence. In other words, the judiciary carries out this evaluation following their legal knowledge and life experience, logical conclusions, and analysis of all the evidence individually and in connection with any other evidence.[111] One can

---

109 *Ibid.*

110 We can imagine a hypothetical example in which we have evidence that person A has committed a criminal offense, but after the arrest and the expiration of the maximum detention period, we cannot with 100% certainty determine that the arrested person is indeed person A. By applying the FRT tool, we get the result that there is a 75% probability that it is indeed person A. Can we impose investigative detention on the arrested person? The answer is addressed below.

111 Krapac *op. cit. note* 36, pp. 102, 124-127.

ask whether judicial bodies carry out the analysis of a particular piece of evidence in such a way that FRT points out to them some signal or gesture that the judge or prosecutor did not notice in their observation, but which would indicate the statement of a person as true or false. Such verification of reliability comes with numerous challenges.

The consideration of verifying the reliability of a person's statement using FR tools has certain similarities with polygraph testing. The results of polygraph testing are not recognized by almost any legal system as evidence in criminal proceedings but are only applicable informally, in the cognitive sense, in the preliminary proceedings.[112] The next important circumstance is that it is necessary to obtain the consent of the examinee for polygraph testing. Since there is no request for consent for the use of FR, logic dictates that FR should not be used in a wider scope than a polygraph. Therefore, the use of FR for the purposes of verifying the reliability of a person's statement should definitely remain outside the scope of verifying the reliability of the evidence on which the final verdict is based, or outside the trial stage in which the principle *in dubio pro reo* also applies. Namely, in order to deliver a guilty verdict, the court must be certain of the defendant's guilt, that is, the guilt must be fully proven. It must be certain that the defendant is guilty, that is, proven beyond any reasonable doubt. These formulated highest standards of proof do not tolerate any numerical expression in percentages, nor any eventual grading. It is difficult to imagine that FR would ever provide a result that would with 100% certainty declare a certain piece of evidence reliable or unreliable, and any other number, even if it were 90% or more, would lead to doubt or the application of the principle *in dubio pro reo.*[113] Clearly expressing a percentage in the reasoning of the judgment would provide the defense with a strong argument for contesting the judgment through legal remedies.

Taking technical problems into account, such as the accuracy of the FR tool itself and the possibility of evaluating the credibility of the whole statement, the conclusion is that the verification of the credibility of evidence through the FR tool in the trial stage should be explicitly prohibited. The explicit prohibition should eliminate any surreptitious use of the FR tool by the court. It is possible to imagine the court using the FR tool without the knowledge of the parties in the proceedings and not mentioning such use anywhere in the reasoning of the judgment despite its significant effects on the formation of its position on the credibility of certain evidence.

---

112 Novokmet; Tomičić; Vinković, *op. cit.* note 108, p. 18.

113 Damaška *op. cit.* note 107, p. 33.

4.2. FRT and other elements of the right to a fair trial

The application of FRT in criminal proceedings, as well as AI tools in general, can also significantly affect some other aspects of a right to a fair trial. Below, we present those that we considered most important for the assessment of the admissibility of the use of FRT for the purposes of criminal proceedings.

The use of FR tools in the decision-making process could significantly affect the objectivity of the court, as well as any other authority making the decision in criminal proceedings. There is a justified fear that decision-makers might excessively and uncritically rely on the results of FRT and AI tools in general and that, ultimately, the results of such processing would become the deciding factor in the decision-making process.[114] Even the very impression from the objective and impartial side that decisions are actually made by someone else, rather than the body responsible for decision-making, can significantly damage the perception of the criminal proceedings as fair. Due to the danger that such evidence will be predominant, care must be taken in what purposes for which it can be allowed to use FRT.

Transparency and reliability of the functioning of FR tools can represent a significant problem in terms of ensuring the fairness of proceedings in relation to the accused. Namely, the accused has the right for the decision to be minutely and clearly reasoned so that he can challenge it with legal remedies and request its review by a competent court. Similarly, the accused must be allowed to challenge the results of FRT processing during criminal proceedings, similar to the right of confrontation as one of the minimum rights of defense. If the mechanism of functioning of the FR tool is too complex, it is not possible to adequately meet these minimum standards of fairness of proceedings. Therefore, not only should the accused be aware that FRT has been applied for the purposes of the criminal proceedings in order to be able to challenge the decision with legal remedies in that direction, but he should also be familiar with the technical fundamentals of the functioning of the FR tool and the way in which the results of FR processing are created. The use of a tool whose functioning is a mystery represents an unacceptable lack of transparency and certainly does not meet the standards of fair proceedings.

The prohibition of the use of illegally obtained evidence is an essential standard that arises from the requirement for fair proceedings and must therefore be represented in the use of FRT. In this sense, it is necessary to clearly specify in which cases the use of FR tools is not allowed. For example, the face represents biometric data or personal data that can be protected and considered data that must not be

[114] Kotsoglou; Oswald, *loc. cit.* note 48.

processed under certain conditions. As previously pointed out, it is important to prohibit the use of FRT in the trial phase of criminal proceedings.

Due to all of the above, it is necessary to seriously consider introducing mandatory defense for all cases in which FRT is applied. These are cases involving the use of high-risk new technologies. The rights of the accused may be seriously tested, and assistance from a defense lawyer should be provided even when the accused does not recognize such a need.

As stated in the previous chapter, not all of these rights are equally at risk throughout the entire process. The level of threat depends on the stage of the criminal proceedings, the purpose of using FRT, and the authority that uses it. Therefore, it is necessary to return to the question of the verification of the credibility of statements using FRT. As we already undoubtedly expressed a negative opinion on the use of FRT in a trial phase due to the application of the principle of *in dubio pro reo*, the focus won't be on problematizing the use in a trial from the perspective of the other elements of the right to a fair trial. However, when it comes to the decisions of the prosecutor and the court with regard to initiating criminal proceedings or deciding on, for example, pre-trial detention, the application of the principle of *in dubio pro reo* is not directly affected. On the other side, the use of FR tools for the purpose of verifying the credibility of statements would be questionable.[115] Namely, these are decisions that heavily affect the accused. His status is significantly changed, he is deprived of freedom or formally has a criminal procedure against him, and the decision is founded on the FR tool calculation whose results are questionable from the standpoint of the fair trial principle. Here, we primarily have in mind the previously ascertained insufficient transparency and reliability of the use of FRT for the purpose of verifying the credibility of statements but also its potential predominance and possibility of being uncritically relied upon by the decision maker. It is not equal to applying an FR tool for the identification of a person, which is relatively safe, transparent, and easily verifiable by the decision maker, as it is to apply an FR tool for the assessment of the credibility of statements. If such use should be allowed, it would require clearly specified additional guarantees such as the obligation of a competent authority to the accused that FRT is used for the stated purpose in the specific case. Furthermore, the accused should be informed about the basic principles of the functioning of the FRT, and a regulation on obtaining the accused's consent as a prerequisite for use of FRT, similar to polygraph testing, should be considered.

Given the identified problems, the proposal for the utilization of FRT for the purpose of verifying the credibility of statements could be regulated in the direction

[115] Novokmet; Tomičić; Vinković, *op. cit.* note 108, pp. 16-18.

of allowing such use in earlier stages of the criminal proceedings, but only if the result would be in favor of the accused. There is nothing preventing the prosecutor, for example, from using an FR tool to verify the credibility of a statement given by a suspect to the police in a formal manner when reviewing the recording of the statement and ultimately explaining his decision to discontinue the criminal proceedings by stating that the accused's statement denying guilt is credible, whereas, for example, the statement of a witness accusing him is not credible. This analogy is drawn from the exceptional possibility of using even illegally obtained evidence if it is for the benefit of the accused.[116] Namely, if we have technology at our disposal that can be helpful, but its use is questionable for the protection of the rights of the accused or the fairness of proceedings, the interests of protecting justice require us to apply this technology in order to establish the truth in favor of the accused.

4.3. Critical points for regulating the use of certain types of FRT

The main problem with the use of FRT is the risk of incorrect recognition or obtaining false positive and false negative results. Such errors lead to further risks. The police will stop people for whom a certain level of matching has been obtained, and some of these people will be arrested or otherwise unjustly treated, leading to potential tensions and discomfort, not to mention violations of the rights and freedoms of innocent citizens. Avoiding and reducing these risks is the primary task of both the legislator and the authorities that carry out specific actions. Besides the possible technical sources of errors, discrimination, restriction of freedom of assembly, protection of personal data, and impact on dignity and privacy, here are highlighted some key critical points that legislators should consider when regulating this issue. Firstly, as already stated, it is not acceptable to equate preventive and investigative activities of law enforcement officials, and it is especially necessary to distinguish preliminary investigation from formal investigation.

When speaking about the risks of using FRT for identification purposes, it is acceptable to bear a greater risk for serious criminal offenses that need to be clarified or prevented. Similarly, in general, it is more acceptable to bear a higher risk when it is necessary to immediately identify and arrest the perpetrator of a specific criminal offense as opposed to a situation where we only act preventively to deter the perpetrator from committing a crime. Eventually, it is certainly necessary to emphasize that the risks in the use of FRT are much higher when identification using FRT is carried out live, in real-time, and an immediate reaction by police

[116] Krapac *op. cit.* note 36, pp. 102, 457-463.

officers follows rather than when such identification and reaction are delayed. Namely, real-time identification is much more prone to incorrect identification. The quality of the recording is much poorer than when identification is carried out under controlled conditions based on better-quality recordings or photographs. The police officer has much less time to check the results, and there is a greater risk that he will react to the identified person only based on the results of the FR tool, which puts us at risk of having the decision on the reaction not made by a person, an authorized officer, but by the FR tool.

Every legal system recognizes the situation in which the police verify and determine the identity of a certain person suspected of committing a criminal offense whose identity is unknown. This type of identification is the least controversial. General databases can be used in this situation, and the identity of the person will be quickly determined by comparing face images one on one. This type of identification is carried out with better-quality photographs, and the possibility of incorrect pairing is minimal. In this case, FRT can significantly shorten the time needed for identification, which is of great help here, as otherwise, the deadlines, i.e. for the detention of the arrested person, could expire. With the use of FRT, such a situation is possible but still harder to imagine.[117]

FRT can further significantly contribute to the quickness of clarification of the criminal offense and to finding the perpetrator in cases of identification of people from footage obtained after the commission of the criminal offense.[118] It can involve the identification of people recorded at the place of commission or in the vicinity, as well as the pairing of faces that are on footage taken at critical times at locations where the perpetrator could be found. It should be possible to use all available databases in this case as well, regardless of potential limitations imposed by the requirement to protect personal data. Reducing the time it takes to find and identify the perpetrator is of enormous importance for the final outcome of the criminal investigation, as expressed through the old criminalistic saying that 'time passing is truth running away'.

---

[117] Can pre-trial detention be determined against a person for whom all conditions are fulfilled, but there is not 100% assurance of their identity? For example, FRT says there is a 75% chance that this is person A., but there is still a 25% chance that it is not that person. This shows the fact that FRT assessment is just data that the decision maker needs to verify and put in relation to other data to make a decision. There is a trap of the predominance of such data or "evidence", which will be of great practical influence on the decision maker. In any case, we consider it justified to insist on the obligation to inform the person of the fact that they have been recognized by FRT and on the right to a lawyer and legal remedy against the decision on pre-trial detention. In the specific case, the weight of the criminal offense being charged would certainly be of significance, and the determination of pre-trial detention would only be possible for the most serious criminal offenses.

[118] Kotsoglou; Oswald, *loc. cit.* note 48.

There are no special barriers to the use of the FRT in the case of the enforcement of criminal sanctions against convicted perpetrators. This refers to convicts for criminal offenses whose freedom of movement is restricted by a court decision. As such, they are included in tracking and identification databases by FRT at locations where, according to a final judgment, they should not be. They are not protected by the presumption of innocence, and on top of that, they knowingly and directly violate legally imposed prohibitions. The only thing to be careful of is the high level of recognition by the FR tool and the need for the police officer to personally verify such a result and make a specific decision on an appropriate response.

Definitely, the most controversial case is live identification, that is, real-time identification.[119] The Proposal specifically draws attention to this type of recognition and calls it the use of AI systems for the remote biometric identification of individuals in real-time in public places for the purposes of criminal prosecution. As such, it considers it a significant violation of the rights and freedoms of the involved individuals to the extent that it can affect the private life of a large part of the population, create a feeling of constant surveillance, and indirectly deter the exercise of the freedom of assembly and other fundamental rights.[120]

It is particularly controversial when such identification is carried out for preventive purposes. However, it should also be emphasized that the reaction of the police officers to recognition does not necessarily have to be a stop and arrest or a search of the person. Other preventive reactions in the form of determining and carrying out certain secret preliminary investigations, and potentially certain secret surveillance measures, are also possible. The key problem with this type of identification is actually the database on which the identification or recognition is based. Namely, there must be a clear reason and legal basis to justify why a certain person is on the surveillance list. Who will be on such a list must be accurately determined by the legislator. Questions also arise as to whether the person on such a list is aware of this fact and whether and under what conditions he/she could request removal from the list.

Due to the high risks it poses, the use of live FRT should be subject to judicial review, i.e., each user should be pre-approved by a court in a strictly limited area

---

119 Leslie *loc. cit.* note 103.

120 The European Commission (2021) Proposal for a Regulation of the European Parliament and of the Council laying down harmonized rules on artificial intelligence (Artificial intelligence act) and amending certain Union legislative acts COM(2021) 206 final, available at: [https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A52021PC0206.], Accessed 6 July 2022, Recital 18.

for specifically defined purposes. The content of the database or surveillance list should also be determined for each specific case.[121] The Proposal explicitly advocates for the prohibition of the use of these systems for criminal prosecution, except in the three thoroughly mentioned and narrowly defined situations in which such use is necessary to achieve a significant public interest, the importance of which outweighs the risks. These situations include the search for potential victims of criminal offenses, including missing children, certain threats to the life or physical safety of natural persons, threats of terrorist attack, and the detection, location, identification, or prosecution of perpetrators or suspects of criminal offenses or offenses referred to in Council Framework Decision 2002/584/JHA38 if those offenses are punishable in the Member State by a maximum sentence of imprisonment or detention of at least three years.[122]

5. CONCLUSION

Various state-of-the-art artificial intelligence systems are increasingly fortifying their place in contemporary criminal justice. Regardless of the seriously expressed scepticism due to the fear that such modern tools represent threats to the finely balanced system of protection of fundamental human rights and freedoms, it is not to be expected that criminal law will remain immune to the multiple benefits that artificial intelligence offers in the fight against modern forms of crime. Although criminal law slowly and relatively passively adapts to new social circumstances and technological development, there is no doubt that the number and variety of different forms of criminal offences, and especially the technologically equipped perpetrators, greatly exceeds the current capabilities of law enforcement agencies. Thus, it is reasonable to expect that society must have at its disposal certain means that will be able to respond to all the challenges of modern criminality. Since various advanced algorithmic systems have already infiltrated all spheres of social life for the purpose of efficient and quick action by law enforcement agencies in the revealing of criminal offenses and detecting perpetrators, it will be necessary to adopt advanced AI systems that will support the technological (r) evolution of criminal law.

One of these advanced AI tools is facial recognition technology. Facial recognition is a well-known technique for determining the identity of a person using their

---

121 Kotsoglou; Oswald, *loc. cit.* note 48.

122 The European Commission (2021) Proposal for a Regulation of the European Parliament and of the Council laying down harmonized rules on artificial intelligence (Artificial intelligence act) and amending certain Union legislative acts. COM(2021) 206 final, available at: [https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A52021PC0206.], Accessed 6 July 2022, Recital 19.

face. However, modern tools that use specially developed algorithms for fast facial recognition in a predefined database, even when it comes to recognition in difficult conditions (e.g. a darkened or concealed face), show all the benefits of using advanced technologies in the daily operation of law enforcement agencies. Those tools show their advantages not only in the proactive phase of the procedure, when it is necessary to discover and identify the perpetrator of a criminal offense in the shortest time, but also in the preventive reaction which aims to prevent the commission of a criminal offense and save human lives from direct loss by noticing and recognizing possible excessive situations in a timely manner.

However, despite the aforementioned benefits, facial recognition technology has recently been subjected to serious criticism that due to the risk of incorrect results (false positive or false negative) and possible discrimination, violations of the right to privacy and personal data, the unquestionable fundamental values that are the core of human dignity could be jeopardized. Contemporary European criminal procedural law truly inherits the general and specific fair trial guarantees (Art. 6. ECHR) that are the cornerstone of modern criminal justice. Among them, the presumption of innocence, the *in dubio pro reo* rule (Art. 6 (2) ECHR), and minimal rights of the defence (Art. 6 (3) ECHR) represent the European minimum standards for the protection of the defendant against the excessive power of state bodies in criminal proceedings. This minimum threshold of fundamental rights is a "litmus test" for every bold attempt directed to the incorporation of modern solutions that are intended to infringe upon human rights and freedoms, and facial recognition technology must not be an exception.

This paper discusses some critical aspects that European legislators must take into account when implementing FR tools based on the use of advanced and modern AI technology. Those aspects not only include defining the conditions for their application, form of action, scope of application and bodies authorized to use them, they also presuppose the correct positioning of judicial review as a key guarantor of the legality and proportionality of the application of facial recognition technology. Only properly established protective mechanisms through preventive and/or subsequent judicial review for the justification of the application of the FRT for the purposes of criminal proceedings can create legitimate preconditions for a well-balanced framework between the aspiration for the fast, modern and efficient investigation of criminal offenses and the aspiration for the protection of fundamental human rights and freedoms, which, as a civilizational achievement of modern society, reflects the basic orientational criteria of the rule of law and represents a barrier to arbitrary and malicious actions of state bodies.

This paper went into a detailed analysis of the risks involved in the application of FR technology for the purposes of criminal proceedings. Attention is drawn to

the fact that, when regulating FR, it is important to distinguish activities aimed at prevention and detection as well as probative activities of law enforcement agencies. In principle, we can say that we are ready to bear greater risk according to the seriousness of the crime that we want to detect or prevent. Likewise, we are willing to bear a greater risk when it is necessary to immediately identify and arrest the perpetrator of the specific criminal offense that we are trying to solve than when we only want to act preventively. It should certainly be pointed out that the risks in the application of FRT are far greater when identification using FRT is performed live in real time and the reaction of police officers immediately follows than when such identification and reaction are undertaken with a delay once the criminal offences have been committed.

Special attention is paid to the potential of FR technology to provide law enforcement authorities with evidence to support the credibility of a person's statements since FRT could be useful in the detection of emotions and affects. This kind of application encroaches on the unquestionable principles of criminal procedural law, such as the principle of free evaluation of evidence and the right to a fair procedure, and the paper calls for increased caution when standardizing this issue. The reliability of the results is still not at a satisfactory level, and even when it reaches such a level, there are still significant barriers regarding its application in criminal proceedings. The use of the FR tool for the purposes of verifying the credibility of statements by persons should definitely remain outside the sphere of verifying the credibility of the evidence on which the final verdict is based, that is, outside of the trial in which the *in dubio pro reo* rule applies. Namely, in order to pass a guilty verdict, we need to be sure of the defendant's guilt, guilt must be fully proven beyond reasonable doubt. Formulated in this way, the highest standards of evidence do not tolerate any numerical expression in percentages, nor any possible gradation. Therefore, it is necessary to insist on the consistent application of traditional and firmly rooted European legal standards, which must play a key role in shaping modern tools aimed at coping with contemporary criminal offenses, in order to protect the painstakingly built system of human rights from collapse under the guise of strengthening the efficiency of criminal proceedings.

REFERENCES

BOOKS

1. Damaška, M., *Dokazno pravo u kaznenom postupku: oris novih tendencija*. Pravni fakultet u Zagrebu, Zagreb, 2001
2. Krapac, D., *Kazneno procesno pravo*. Narodne novine, Zagreb, 2015

BOOK CHAPTERS

1. De Hert, P., Sajfert, J., *The Role of the Data Protection Authorities in Supervising Police and Criminal Justice Authorities Processing Personal Data*, in: Brière C, Weyembergh A (eds) The Needed Balances in EU Criminal Law. Hart, Oxford and Portland, Oregon, 2018, pp. 243-257

JOURNAL ARTICLES

1. Bacchini, F., Lorusso, L., *Race, again: how face recognition technology reinforces racial discrimination*, J Inf Commun Ethics Soc 17:321-335, 2019 [http://dx.doi.org/10.1108/JICES-05-2018-0050]
2. Bibas, S., *Transparency and Participation in Criminal Procedure*, N. Y. Univ. Law Rev. 81:911-966, 2006
3. Callananm G., *Does the Right to Privacy Apply to Facial Biometrics? Specifically, When Analyzed Under the European Convention on Human Rights*, Ga. J. Int'l & Comp. L. 49:351-369, 2021
4. De Hert, P., Papakonstantinou, V., *The New Police and Criminal Justice Data Protection Directive, A first analysis,* New J. Eur. Crim. Law 7:7-19, 2016, [https://doi.org/10.1177/203228441600700102]
5. Dessimoz, D., Champod, C., *A dedicated framework for weak biometrics in forensic science for investigation and intelligence purposes: The case of facial information*, Secur. J. 29:603–617, 2016, [https://doi.org/10.1057/sj.2015.32]
6. Gentzel, M., *Biased Face Recognition Technology Used by Government: A Problem for Liberal Democracy*, *Philos. Technol.* 34:1639–1663, 2021, [https://doi.org/10.1007/s13347-021-00478-z]
7. Gordon, BJ., *Automated Facial Recognition in Law Enforcement: The Queen (On Application of Edward Bridges) v The Chief Constable of South Wales Police*, Potchefstroom Electronic Law Journal, 24:1–29, 2021, [https://doi.org/10.17159/1727-3781/2021/v24i0a8923]
8. Hacker, P., *Teaching fairness to artificial intelligence*, Common Mark. Law Rev. 55:1143 – 1185, 2018, [https://doi.org/10.54648/cola2018095]
9. Hill, D., O'Connor, CD., Slane, A., *Police use of facial recognition technology: The potential for engaging the public through co-constructed policy-making*, Int. j. police sci. manag. 24: 325-335, 2022, [https://doi.org/10.1177/14613557221089558]
10. Kostka, G., Steinacker, L., Meckel, M., *Between security and convenience: Facial recognition technology in the eyes of citizens in China, Germany, the United Kingdom, and the United States*, Public Understanding of Science 30:671–690, 2021, [https://doi.org/10.1177/09636625211001555]
11. Kotsoglou, KN., Oswald, M., *The long arm of the algorithm? Automated Facial Recognition as evidence and trigger for police intervention*, Forensic Sci. Int.: Synergy. 2:86-89, 2022, [https://doi.org/10.1016/j.fsisyn.2020.01.002]
12. Leiser, MR., Custers, BHM., *The Law Enforcement Directive: Conceptual Issues of EU Directive 2016/680*, Eur. Data Prot. Law Rev. 5:367-378, 2019, [https://doi.org/10.21552/edpl/2019/3/10]

13. Leslie, D., *Understanding bias in facial recognition technologies: and explainer*, The Alan Turing Institute. 1-50, 2020, [https://doi.org/10.5281/zenodo.4050457]
14. Neroni Rezende, I., *Facial recognition in police hands: Assessing the 'Clearview case' from a European perspective*, New J. Eur. Crim. Law. 11:375-389, 2020, [https://doi.org/10.1177/2032284420948161]
15. Nesterova, I., *Mass data gathering and surveillance: the fight against facial recognition technology in the globalized world, The 19th International Scientific Conference Globalization and its Socio-Economic Consequences 2019 – Sustainability in the Global-Knowledge Economy*, SHS Web Conf 74:1-8, 2020, [https://doi.org/10.1051/shsconf/20207403006]
16. Novokmet, A., *The Europeanization of the Criminal Proceedings in the Republic of Croatia through the Implementation of the Directive 2013/48/EU*, Eur. J. Crime Crim. Law Crim. Justice. 27:97-125, 2019, [https://doi.org/10.1163/15718174-02702002]
17. Novokmet, A., Tomičić, Z., Vinković, Z., *Pretrial risk assessment instruments in the US criminal justice system—what lessons can be learned for the European Union. International* Journal of Law and Information Technology, 30: 1–22, 2022, [https://doi.org/10.1093/ijlit/eaac006]
18. O'Flaherty, M., *Facial Recognition Technology and Fundamental Rights*, Eur. Data. Prot. Law. Rev. 6:170-173 2020, [https://doi.org/10.21552/edpl/2020/2/4]
19. Park, SJ., Kim, BG., Chilamkurti, N., *A Robust Facial Expression Recognition Algorithm Based on a Multi-Rate Feature Fusion Scheme*, Sensors 21:1-26, 2021, [https://doi.org/10.3390/s21216954]
20. Purshouse, J., Campbell, L., *Privacy, Crime Control and Police Use of Automated Facial Recognition Technology*, Criminal Law Review 3:188-204, 2019, [ISSN 0011-135X]
21. Raab, T., *Germany Video Surveillance and Face Recognition: Current Developments*, Eur. Data. Prot. Law. Rev. 5:544-547, 2019, [https://doi.org/10.21552/edpl/2019/4/14]
22. Raposo, VL., *The Use of Facial Recognition Technology by Law Enforcement in Europe: a Non-Orwellian Draft Proposal*, Eur J Crim Pol Res, 2022, [https://doi.org/10.1007/s10610-022-09512-y]
23. Ritchie, KL., Cartledge, C., Growns, B., Yan, A., Wang, Y., *et al.*, *Public attitudes towards the use of automatic facial recognition technology in criminal justice systems around the world*, PLOS ONE 16:1-28, 2021, [https://doi.org/10.1371/journal.pone.0258241]
24. Roksandić, S., Protrka, N., Engelhart, M., *Trustworthy Artificial Intelligence and its use by Law Enforcement Authorities: where do we stand?*, 45th Jubilee International Convention on Information, Communication and Electronic Technology (MIPRO), Opatija, Croatia, pp. 1227-1229, 2022, [doi: 10.23919/MIPRO55190.2022.9803606]
25. Rowe, EA., *Regulating Facial Recognition Technology in the Private Sector*, Stan. Tech. L. 24:1-54, 2020
26. Sarabdeen, J., *Protection of the rights of the individual when using facial recognition technology*, Heliyon, 2022, [https://doi.org/10.1016/j.heliyon.2022.e09086]
27. Stoykova, R., *Digital evidence: Unaddressed threats to fairness and the presumption of innocence*, Comput Law Secur Rev 42:1-20, 2021, [https://doi.org/10.1016/j.clsr.2021.105575]
28. Yassin, K., Jridi, M., Al Falou, A., Atri, M., *Face Recognition Systems: A Survey*, Sensors 20:1-36, 2020, [https://doi.org/10.3390/s20020342]

29. Zalnieriute, M., (2021) *Burning Bridges: The Automated Facial Recognition Technology and Public Space Surveillance in the Modern State*, Science and Technology Law Review, 22:284–307, 2021, [https://doi.org/10.52214/stlr.v22i2.8666]

ONLINE DOCUMENTS

1. Autoriteit Persoonsgegevens, *Stappenplan camera bij huis*, 2020, available at: [https://autoriteitpersoonsgegevens.nl/sites/default/files/atoms/files/stappenplan_camera_bij_huis.pdf], Accessed 13 July 2022
2. Big Brother Watch, *Face off: The lawless growth of facial recognition in the UK policing*, pp 1-51, 2018, available at: [https://bigbrotherwatch.org.uk/wp-content/uploads/2018/05/Face-Off-final-digital-1.pdf], Accessed 5 July 2022
3. Big Brother Watch, *Stop Facial Recognition*, 2022, available at: [https://bigbrotherwatch.org.uk/campaigns/stop-facial-recognition/#breadcrumb], Accessed 15 June 2022
4. Bischoff, P., *Facial Recognition Technology (FRT): 100 countries analyzed*, 2021, available at: [https://www.comparitech.com/blog/vpn-privacy/facial-recognition-statistics/], Accessed 15 July 2022
5. Bischoff, P., *Surveillance camera statistics: which cities have the most CCTV cameras?*, 2021, available at: [https://www.comparitech.com/vpn-privacy/the-worlds-most-surveilled-cities/], Accessed 3 July 2022
6. Brandl, R., *The world´s most surveilled citizens*, 2021, available at: [https://www.tooltester.com/en/blog/the-worlds-most-surveilled-countries/], Accessed 3 July 2022
7. Buolamwini, J., Ordóñez, V., Morgenstern, J., Learned-Miller, E., *Facial Recognition Technologies: A Primer*, Algorithmic Justice League. pp 2-16, 2020, available at: [https://assets.websitefiles.com/5e027ca188c99e3515b404b7/5ed1002058516c11edc66a14_FRTsPrimerMay2020.pdf], Accessed 28 July 2022
8. Davies, B., Innes, M., Dawson, A., *An Evaluation of South Wales Police's Use Of Automated Facial Recognition*, Universities' Police Science Institute Crime & Security Research Institute, pp 1-45, 2018, available at: [https://static1.squarespace.com/static/51b06364e4b02de2f57fd72e/t/5bfd4fbc21c67c2cdd692fa8/1543327693640/AFR+Report+%5BDigital%5D.pdf], Accessed 15 July 2022
9. Der Hamburgische Beauftragte für Datenschutz und Informationsfreiheit, *Einsatz der Gesichtserkennungssoftware „Videmo 360" durch die Polizei Hamburg zur Aufklärung von Straftaten im Zusammenhang mit dem in Hamburg stattgefundenen G20-Gipfel*, 2018, available at: [https://datenschutz-hamburg.de/assets/pdf/Anordnung_HmbBfDI_2018-12-18.pdf], Accessed 15 July 2022
10. Directive (EU) 2016/680 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data by competent authorities for the purposes of the prevention, investigation, detection or prosecution of criminal offences or the execution of criminal penalties, and on the free movement of such data, and repealing Council Framework Decision 2008/977/JHA, available at:

[https://eurlex.europa.eu/legalcontent/EN/TXT/HTML/?uri=CELEX:32016L0680&from=HR], Accessed 18 June 2022

11. Directive 2013/48/EU of the European Parliament and of the Council of 22 October 2013 on the right of access to a lawyer in criminal proceedings and in European arrest warrant proceedings, and on the right to have a third party informed upon deprivation of liberty and to communicate with third persons and with consular authorities while deprived of liberty, available at:
[https://eurlex.europa.eu/legalcontent/EN/TXT/HTML/?uri=CELEX:32013L0048&from=HR], Accessed 17 June 2022
12. Dushi, D., *The use of facial recognition technology in EU law enforcement: Fundamental rights implications*, Policy Briefs 2020, available at:
[https://tinyurl.com/3dnc69j3], Accessed 28 July 2022
13. DutchNews.Nl, *Dutch police can access 200,000 private security cameras, campaign for more*, 2019, available at:
[https://www.dutchnews.nl/news/2019/01/dutch-police-can-access-200000-private-security-cameras-campaign-for-more/], Accessed 13 July 2022
14. European Court of Human Rights, *Guide on Article 8 of the European Convention on Human Rights - Right to respect for private and family life, home and correspondence*, 2021, available at: [https://www.echr.coe.int/documents/guide_art_8_eng.pdf], Accessed 15 June 2022
15. European Court of Human Rights, *Guide to the Case-Law of the European Court of Human Rights – Data protection*, 2022, available at: [https://echr.coe.int/Documents/Guide_Data_protection_ENG.pdf], Accessed 20 June 2022
16. European data protection board, *Guidelines 05/2022 on the use of facial recognition technology in the area of law enforcement*, 2022, available at:
[https://edpb.europa.eu/system/files/2022-05/edpb-guidelines_202205_frtlawenforcement_en_1.pdf], Accessed 20 June 2022
17. European Parliament, *Artificial intelligence in criminal law and its use by the police and judicial authorities in criminal matters 2020/2016(INI)*, 2021, available at: [https://www.europarl.europa.eu/doceo/document/TA-9-2021-0405_EN.html], Accessed 18 June 2022
18. Fair Trials, *Automating injustice: The use of artificial intelligence & automated decision-making systems in criminal justice in Europe*, pp. 1-47, 2021, available at:
[https://www.fairtrials.org/app/uploads/2021/11/Automating_Injustice.pdf], Accessed 13 July 2022
19. Kak, A., *The State of Play and Open Questions for the Future*, in: Kak A (ed) Regulating Biometrics: Global Approaches and Urgent Questions, AI now Institute, pp. 16-43, 2020, available at:
[https://ainowinstitute.org/regulatingbiometrics.html], Accessed 20 June 2022
20. Kayser-Bril, N., *At least 11 police forces use face recognition in the EU*, AlgorithmWatch, 2020, available at:
[https://algorithmwatch.org/en/face-recognition-police-europe/], Accessed 15 July 2022
21. Kritikos, M., *Artificial Intelligence ante portas: Legal & ethical reflections*, European Parliamentary Research Service, Scientific Foresight Unit (STOA), available at: [https://www.europarl.

europa.eu/RegData/etudes/BRIE/2019/634427/EPRS_BRI(2019)634427_EN.pdf], accessed 13 July 2023

22. Madiega, T., Mildebrath, H., *Regulating facial recognition in the EU*. European Parliamentary Research Service, 2021, available at: [https://www.europarl.europa.eu/RegData/etudes/IDAN/2021/698021/EPRS_IDA(2021)698021_EN.pdf], Accessed 15 August 2022
23. Monroy, M., *Security Architectures in EU: G20 in Hamburg: Data protection commissioner considers face recognition illegal*, 2018, available at: [https://digit.site36.net/2018/08/15/g20-in-hamburg-data-protection-commissioner-considers-face-recognition-illegal/], Accessed 15 July 2022
24. Montag, L., Mcleod, R., De Mets, L., Gauld, M., Rodger, F., Pełka, M., *The rise and rise of biometric mass surveillance in the EU: A legal analysis of biometric mass surveillance practices in Germany, The Netherlands, and Poland*, pp. 1-158, 2019, available at: [https://edri.org/wp-content/uploads/2021/11/EDRI_RISE_REPORT.pdf], Accessed 3 July 2022
25. Politie, *Centrale Automatische TeChnologie voor Herkenning (CATCH)*, Jaarcijfers, 2020 available at: [https://www.politie.nl/binaries/content/assets/politie/onderwerpen/forensische-opsporing/catch-jaarcijfers-2020-hr-online.pdf], Accessed 13 July 2022
26. Politie, *Camera in Beeld*, 2022, available at: [https://www.politie.nl/onderwerpen/camera-in-beeld.html], Accessed 13 July 2022
27. South Wales Police, *Facial Recognition Technology*, 2020, available at: [https://www.south-wales.police.uk/police-forces/south-wales-police/areas/about-us/about-us/facial-recognition-technology/], Accessed 4 July 2022
28. The European Commission (2021) Proposal for a Regulation of the European Parliament and of the Council laying down harmonized rules on artificial intelligence (Artificial intelligence act) and amending certain Union legislative acts. COM(2021) 206 final, available at: [https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A52021PC0206], Accessed 6 July 2022
29. The European Parliament and the Council (2016) Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) OJ L 119, available at: [https://eur-lex.europa.eu/eli/reg/2016/679/oj], Accessed 6 July 2022
30. Waarlo, N., Verhagen, L., *De stand van gezichtsherkenining in Nederland, de Volkskrant*, 2020, available at: [https://www.volkskrant.nl/kijkverder/v/2020/de-stand-van-gezichtsherkenning-in-nederland~v91028/?referrer=https%3A%2F%2Fwww.google.com%2F], Accessed 14 July 2022
31. Wet politiegegevens, *BWBR0022463*, 2020, available at: [https://wetten.overheid.nl/BWBR0022463/2020-01-01/0], Accessed 13 July 2022
32. Wired, *Europe Is Building a Huge International Facial Recognition System*, 2022, available at: [https://www.wired.com/story/europe-police-facial-recognition-prum/], Accessed 16 June 2022

CASE LAW

1. High Court of Justice (Queen's Bench Divison) Division Court (2019) Edward Bridges v The Chief Constable of South Wales Police. Case No: CO/4085/2018. EWHC 2341, available at: [https://www.judiciary.uk/wp-content/uploads/2019/09/bridges-swp-judgment-Final03-09-19-1.pdf], Accessed 6 July 2022
2. Judgment *Gaughran v The United Kingdom* (2020) EHRR, No. 45245/15, 13 February 2020, available at: [https://hudoc.echr.coe.int/fre?i=001-200817], Accessed 17 June 2022
3. Judgment *P. N. v Germany*, (2020) EHRR, No. 74440/17, 11 June 2020, available at: [https://hudoc.echr.coe.int/rus?i=001-202758], Accessed 17 June 2022
4. Judgment *Peck v. United Kingdom* (2003) EHRR, No. 44647/98, 28 January 2023
5. Judgment *Reklos and Davourlis v Greece* (2009) EHRR, No. 1234/05, 15 January 2009, available at: [https://hudoc.echr.coe.int/eng?i=001-90617], Accessed 17 June 2022
6. Judgment *S. and Marper v. the United Kingdom* (2008) EHRR, No. 30562/04 and 30566/04, 4 December 2008, available at: [https://hudoc.echr.coe.int/fre#{%22itemid%22:[%22002-1784%22]}], Accessed 17 June 2022
7. OVG Nordrhein-Westfalen (2022) 5 B 137/21, available at: [https://www.justiz.nrw.de/nrwe/ovgs/ovg_nrw/j2022/5_B_137_21_Beschluss_20220516.html], Accessed 5 July 2022
8. Rechtbank Zeeland-West-Brabant (2019) case No. 02-665274-18. ECLI:NL:RBZWB:2019:2191, available at: [https://uitspraken.rechtspraak.nl/#!/details?id=ECLI:NL:RBZWB:2019:2191], Accessed 8 July 2022
9. The Court Of Appeal (Civil Division) (2020) R (on the application of Edward Bridges) v The Chief Constable of South Wales Police. Case No: C1/2019/2670. EWCA Civ 1058, available at: [https://www.judiciary.uk/wp-content/uploads/2020/08/R-Bridges-v-CC-South-Wales-ors-Judgment.pdf], Accessed 6 July 2022
10. Verwaltungsgericht Hamburg (2019) Urteil. case no. 17 K 203/19, available at: [http://justiz.hamburg.de/contentblob/13535554/cc5a1e8c70c95088220147f57921d22d/data/17-k-203-19.pdf], Accessed 5 July 2022
11. VG Köln (2020) 20 L 2340/19, available at: [http://www.justiz.nrw.de/nrwe/ovgs/vg_koeln/j2020/20_L_2340_19_Beschluss_20201210.html], Accessed 5 July 2022

UDK 343.123:004.8]:342.738
Preliminary communication

DATA PROTECTION, PRIVACY AND SECURITY IN THE CONTEXT OF ARTIFICIAL INTELLIGENCE AND CONVENTIONAL METHODS FOR LAW ENFORCEMENT

Simona Strmečki, M.Sc., Senior Lecturer
University of Applied Sciences in Criminal Investigation
and Public Security
Ministry of the Interior
Avenija Gojka Šuška 1, Zagreb, Croatia
sstrmecki@fkz.hr

Silvija Pejaković-Đipić, PhD, Lecturer
University of Applied Sciences in Criminal Investigation
and Public Security
Ministry of the Interior
Avenija Gojka Šuška 1, Zagreb, Croatia
spdjipic@fkz.hr

ABSTRACT

Unlike conventional methods and technologies of collecting, processing and analysing the personal data of natural persons as part of law enforcement activities, the broader use of different artificial intelligence methods brings into focus the need for specific rules regulating the application of various artificial intelligence methods to protect two independent fundamental rights as regulated by EU Charter of Fundamental Rights, Art. 7 and 8 – data protection and privacy.

Privacy, the protection of personal data and the security of their processing and transmission within law enforcement activities, whether it is non-automated, partially or fully automated, is prescribed by Directive (EU) 2016/680 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data by competent authorities for the purposes of the prevention, investigation, detection or prosecution of criminal offences or the execution of criminal penalties, and the free movement of such data. When considering personal data protection in the context of Directive 2016/680 it is referred to the protection of information on the confirmed identity of a natural person (data protection) and the protection of all information by which identity can be confirmed

(privacy). Thus, this information should not be part of the defined personal data category, and all methods and technologies that can be used for direct and indirect confirmation of the identity of a natural person should be taken into account.

The paper aims to determine whether there is relationship between privacy and security and whether there are differences in the personal data collection, processing and analysis methods by law enforcement authorities, when used methods are conventional or artificial intelligence.

The first hypothesis emphasises causality between privacy and security when collecting, processing and analysing their personal data by conventional methods and artificial intelligence methods for law enforcement purposes. The second hypothesis implies a statistically significant difference in making personal data available to law-enforcement bodies in cases they are collected, processed and analysed by conventional methods and in cases they are collected, processed or analysed by artificial intelligence methods.

The methods used are: descriptive method for describing the process of collecting, processing and analysing personal data in law enforcement activities, as well as for describing the differences between conventional and artificial intelligence methods and evaluating hypotheses; induction for creating hypothesis; deduction for observing specific relations; content analysis and synthesis in the evaluation phase; survey method; statistical and comparative method in the testing phase and for determining the compliance with the hypotheses.

***Keywords**: artificial intelligence methods, data protection, law enforcement, privacy, security*

1. INTRODUCTION

Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) determines that "the right to the protection of personal data is not an absolute right; it must be considered in relation to its function in society and be balanced against other fundamental rights, in accordance with the principle of proportionality. This Regulation respects all fundamental rights and observes the freedoms and principles recognised in the Charter as enshrined in the Treaties, in particular the respect for private and family life, home and communications, the protection of personal data, freedom of thought, conscience and religion, freedom of expression and information, freedom to conduct a business, the right to an effective remedy and to a fair trial, and cultural, religious and linguistic diversity." *Rodotà* stated that the right to personal data protection could be described as a result of widening of the right to privacy.[1] Similar to that, *Fuster* states that data protection could be interpreted as an ele-

[1] Rodotà, S., *Data Protection as a Fundamental Right*. In: Gutwirth, S., Poullet, Y., De Hert, P., de Terwangne, C., Nouwt, S. (eds) Reinventing Data Protection? Springer, Dordrecht, 2009, p- 79 [https://doi.org/10.1007/978-1-4020-9498-9_3], Accessed 7 July 2023.

ment of privacy, even in the context of EU Charter of Fundamental Rights.[2] This research takes into account that data protection could be interpreted as an element of privacy. Therefore, the personal data were the basis of the survey research in which respondents had to decide whether or not to give it and for what reason - security (personal and general) or privacy. For the purposes of this research general data protection issues such as principles of processing, legal basis and limitations of data processing right, confidentiality and integrity of data (GDPR Article 5f) were not specified. However, it was studied whether there is a difference in the respondents' attitude towards their personal data when it is collected using traditional methods and when it is collected using artificial intelligence methods. The difference was determined according to the particles that represented providing or non-providing of personal data for security (personal and general) and privacy reasons.

Relevant expert and scientific research (*Dragu*[3]; *Brandimarte*, *Acquisti* and *Loewenstein*[4]; *Goold*[5]; *Himma*[6]) focusing on the relationship between the right to security and the right to privacy are based on the axiomatic method, i. e. on an immediate increase in security by reducing privacy, as well as on an even more significant reduction of the right to privacy when using artificial intelligence methods to increase the right to security. The protection of the right to privacy when using artificial intelligence methods was recognised in 2015. At that time, the United Nations Special Rapporteur for the right to privacy compiled reports and recommendations to protect privacy and monitor relevant right-to-privacy trends in the context of new technologies, especially Open Data and Big Data.[7] In 2018, the EU recognised the need to regulate the field of artificial intelligence while respecting the right to privacy. The European Commission thus invited experts to create guidelines for the ethical development and the use of artificial intelligence based on the EU's fundamental rights under independent supervision by the European

---

2 Fuster, G. G., *The emergence of personal data protection as a fundamental right of the EU*, Springer Science & Business, Vol. 16, 2014, p. 260.

3 Dragu, T., *Is there a trade-off between security and liberty? Executive bias, privacy protections, and terrorism prevention*, American Political Science Review, Vol. 105(1), 2011, pp. 64-78.

4 Brandimarte, L.; Acquisti, A.; Loewenstein, G., *Misplaced Confidences Privacy and the Control Paradox*, Social Psychological and Personality Science, Vol. 4, 2013, pp. 340-347.

5 Goold, B. J., *Privacy, Identity and Security* in: Goold. B. J.; Lazarus, L., eds, Security and Human Rights, Portland, Hart Publishing, 2007, p. 45.

6 Himma, K. E., *Privacy Versus Security: Why Privacy is Not an Absolute Value or Right*, 44 San Diego L. Rev., 2007, pp. 857-919.

7 United Nations Human Rights Office of the High Commissioner. Special Rapporteur on the right to privacy: Purpose of the mandate, 2023, [https://www.ohchr.org/EN/Issues/Privacy/SR/Pages/SRPrivacyIndex.aspx], Accessed 15 March 2023.

Group on Ethics in Science and New Technologies.[8] In the same year, the European Commission introduced the AI Alliance to promote trust in using artificial intelligence methods. The idea was to encourage Trustworthy AI by sharing best practices among the members and help developers of AI to apply essential requirements through the ALTAI tool, a practical *Assessment List for Trustworthy AI*.[9] In 2020, *White Paper on Artificial Intelligence* listed substantial risks. The difficulty of tracing back potentially problematic decisions taken by AI systems referred to above in relation to fundamental rights applies equally to security and liability-related issues and specific requirements for remote biometric identification.[10] *White Paper* presented the basis for the Proposal for an AI Liability Directive[11], which intends to ensure that persons harmed by artificial intelligence methods enjoy the same level of protection as persons harmed by traditional technologies. General Data Protection Regulation (GDPR)[12] defines personal data protection and prohibits specific AI methods, such as the processing of biometric data, to uniquely identify a natural person. The Scientific Foresight Unit (STOA) of European Parliamentary Research Service in its study *The impact of the General Data Protection Regulation (GDPR) on artificial intelligence* states:

"In particular, AI and big data systems can fall subject to cyberattacks (designed to disable critical infrastructure, or steal or rig vast data sets, etc.), and they can even be used to commit crimes (e.g., autonomous vehicles can be used for killing or terrorist attacks, and intelligent algorithms can be used for fraud or other financial crimes). Even beyond the domain of outright illegal activities, the power of AI can be used to purse economic interests in ways that are harmful to individuals and society: users, consumers, and workers can be subject to pervasive surveillance,

---

8 European Commission. Artificial intelligence: Commission kicks off work on marrying cutting-edge technology and ethical standards, 9.3.2018, [https://ec.europa.eu/commission/presscorner/detail/en/IP_18_1381], Accessed 22 March 2023.

9 European Commission. The European AI Alliance: Promoting Trustworthy AI, [https://digital-strategy.ec.europa.eu/en/policies/european-ai-alliance], Accessed 22 March 2023.

10 European Commission. White Paper On Artificial Intelligence - A European approach to excellence and trust. COM/2020/65 final, 19.2.2020, [https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52020DC0065&from=EN], Accessed 22 March 2023.

11 European Commission. Proposal for a Directive on adapting non-contractual civil liability rules to artificial intelligence (AI Liability Directive), 28.9.2022 COM(2022) 496 final 2022/0303(COD), [https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52022PC0496], Accessed 22 March 2023.

12 Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) [2016] OJ L 119/1.

controlled in their access to information and opportunities, manipulated in their choices."[13]

Law enforcement authorities also use AI methods, especially for predictive purposes. However, it is not the GDPR that applies to the law enforcement authorities, but the Directive 2016/680,[14] the so-called Police Directive, which determines the partial or complete automatic collection and processing of personal data for particular, explicit and lawful purposes and the explicit prohibition of their processing in a way that is not in accordance with these purposes. Identifying natural persons is allowed only as much as necessary for these purposes. *Kuziemski* and *Przemyslav* state the same and recommend the creation of permanent groups facilitating dialogue between different regulatory agencies and policy-making bodies.[15] There are three inter-related legal initiatives at the European legislative level promoting trust in AI based on a safe and innovation-friendly environment: a European legal framework for AI to address fundamental rights and security risks specific to the AI systems, a civil liability framework - adapting liability rules to the digital age and AI - and a revision of sectoral security legislation.[16]

In the Republic of Croatia, at the time of this research, there is an intention to improve trustworthy AI through clarifications of the regulations on data protection and in information security. *Katulić* emphasizes the benefits of AI methods "for the development of more efficient public services … by providing tools and services to ensure a higher level of security".[17] *Vojković* and *Katulić* note that GDPR also addresses the transfer of personal data outside the EU and EEA areas when required for electronic commerce, information society services such as cloud ser-

---

13 Sartor, G.; Lagioia, F, *The Impact of the General Data Protection Regulation (GDPR) on Artificial Intelligence*, Scientific Foresight Unit (STOA), European Parliamentary Research Service EPRS, 2020, p. 19 [https://www.europarl.europa.eu/RegData/etudes/STUD/2020/641530/EPRS_STU(2020)641530_EN.pdf], Accesed 6 July 2023.

14 Directive (EU) 2016/680 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data by competent authorities for the purposes of the prevention, investigation, detection or prosecution of criminal offences or the execution of criminal penalties, and on the free movement of such data, and repealing Council Framework Decision2008/977/JHA [2016] OJ L 119/89.

15 Kuziemski, M.; Przemyslaw, P., *AI Governance Post-GDPR: Lessons Learned and the Road Ahead*, European University Institute, 2019/07, p. 5, [doi:10.2870/470055].

16 European Commission. Shaping Europe's digital future: A European approach to artificial intelligence/A European approach to trust in AI, [https://digital-strategy.ec.europa.eu/en/policies/european-approach-artificial-intelligence], Accessed 22 March 2023.

17 Katulić, T., *Towards the Trustworthy AI: Insights from Data Protection and Information Security Law*, Medijska istraživanja, 26 (2020), 2, p.13, [doi:10.22572/mi.26.2.1].

vices, on-demand streaming, and other content services or for more traditional purposes such as civil aviation traffic, cargo and passenger shipping etc.[18]

Croatian national framework in this area is based on the Act on the Protection of Natural Persons in Connection with the Processing and Exchange of Personal Data for the Purposes of Prevention, Investigation, Detection or Prosecution of Criminal Offenses or Execution of Criminal Sanctions from 2018.[19] In the national legislation of the Republic of Croatia, there is no strategy related to applying artificial intelligence methods that would include norms related to privacy protection. Therefore, this paper provides insight into the respondents' relation to their privacy and security when using artificial intelligence.

The causal relationship between the right to security and the right to privacy was tested to verify the internal validity by examining the relation of whether an increase in the right to security causes a decrease in the right to privacy and whether these rights vary consistently. It should be noted that in terms of the right to privacy, personal data (name and surname, personal identification number, credit card number, password), biometric data (fingerprint, face scan, pupil scan) and special categories of personal data (information about racial and ethnic origin, political viewpoint, religious belief, union membership, health data and data on criminal or misdemeanour proceedings) were considered. Data whose collection, processing and analysis may also significantly violate the right to privacy and related to behavioural characteristics, habits, social contacts and communication data were not considered. Control variables refer to providing personal data without possible initial perception of a threat to personal or general security (for commercial services, not law enforcement purposes).

The purpose of the research is to study whether there is a difference in the attitude of respondents in the Republic of Croatia towards the right to privacy and the right to security when it comes to conventional methods of collecting, processing and analyzing personal data and when law enforcement authorities use AI methods at a time when there is no national AI strategy.

The research question is whether there is a difference related to the right to security and the right to privacy when using conventional methods of collecting, processing and analysing personal data and when using artificial intelligence methods.

---

[18] Vojković, G.; Katulić, T., *Data Protection and Smart Cities*, in: Augusto, J.C. (eds) Handbook of Smart Cities. Springer, Cham, 2020, p. 1, [https://doi.org/10.1007/978-3-030-15145-4_28-1], Accessed 6 July 2023.

[19] Zakon o zaštiti fizičkih osoba u vezi s obradom i razmjenom osobnih podataka u svrhe sprječavanja, istraživanja, otkrivanja ili progona kaznenih djela ili izvršavanja kaznenih sankcija, Official Gazette No 68/2018.

The assumption is that there is a causality between the relation to privacy and the relation to security of natural persons when collecting, processing and analysing their personal data using conventional and artificial intelligence methods.

The second assumption is that there is a statistically significant negative difference between providing personal data to law enforcement authorities when it is collected, processed and analysed by conventional methods and when it is collected, processed and analysed by artificial intelligence methods.

2. THE RELATIONSHIP BETWEEN PRIVACY AND SECURITY AS A RESEARCH SUBJECT

The measurement of the relationship between the right to privacy and the right to security was carried out based on personal data: personal identification number, name and surname, credit card number, password, biometric data (fingerprint, facial scan, pupil scan), and a special category of personal data (racial and ethical origin, political viewpoint, religious belief, union membership, health data and data on criminal or misdemeanour proceedings). It was measured in which situations the reasons for providing personal data were related to security and in which they were not. Data on behavioural characteristics, habits, communication data and the like, essential to privacy, especially when collected, processed and analysed using artificial intelligence methods, were not considered. Respondents had to decide in which situations and for what reasons they would provide their data or not provide it at all.

In cases the respondents have decided that they never provide personal data in certain situations or always provide it when someone asks for it, it was determined that their right to privacy is not affected by the level of their right to security. Namely, respondents were offered the option of choosing to provide personal data if it concerns their personal security or for general security, where security reasons imply that law enforcement authorities collect personal data. The situations were divided into conventional methods of data collection (airport, ship, earthquake, social contact, travel reservation, entering the cinema and theatre) and artificial intelligence data collection methods (autonomous vehicle, robot vacuum cleaner, facial recognition on social networks and personalised product and service recommendations).

3. RESEARCH METHODS AND SAMPLE DESCRIPTION

The research on providing personal data when using conventional methods and artificial intelligence methods from the aspect of the right to privacy and the right

to security was carried out with a closed questionnaire as a means of measuring the frequency of choosing the right to security in situations when there is a greater need for general and personal security. Situations related to consumer services were taken as control ones. The testing was completely anonymous and voluntary, and a positive opinion of the Ethics Committee of the University of Applied Sciences in Criminal Investigation and Public Security was obtained. The correlation between the right to privacy and the right to security was examined with regard to the correlation coefficient (r). By virtue of induction, assumptions were made that there is a negative correlation between the right to privacy and the right to security and the assumption that there is a statistically significant negative difference between the providing of personal data to law enforcement authorities in the case when they are collected, processed and analysed by conventional methods and in the case when they are collected, processed or analysed by artificial intelligence methods. The deduction method was used to observe the specificity of the relationship between the right to privacy and the right to security regarding the type of personal data, but not the category. The obtained results were interpreted through analysis and synthesis. MS Excel statistical tools were used for statistical methods. The questionnaire did not examine respondents' attitudes but measured in which situations and in relation to which personal data the respondents decided to provide personal data ("giving privacy") to exercise the right to security. Collected empirical data were tested by comparative analysis to determine compliance with conditional hypotheses.

The measurement was conducted on 309 subjects (N=309) from the Republic of Croatia, and the sample was probabilistic. The majority of respondents (35%) were between the ages of 26 and 35, and the least (10%) were over 55 (Table 1). Respondents were informed about the research objectives and their voluntary and anonymous participation, and the results were presented cumulatively.

Table 1: Distribution of respondents by age (N=309)

Age	N	%
less than 25 years	66	21
26 - 35 years	109	35
36 - 45 years	59	19
46 - 55 years	45	15
more than 55 years	30	10

Regarding the distribution of respondents by gender, 58% were female, and 42% were male (Table 2).

Table 2: Distribution of respondents by gender (N=309)

Gender	N	%
female	179	58
male	130	42

According to the level of education, most respondents (54%) have completed high school, and the least (2%) have a doctorate (Table 3).

Table 3: Distribution of respondents by the level of education (N=309)

Level of education	N	%
high school	170	54
undergraduate studies	38	12
graduate studies	76	24
master of science	18	6
doctorate of science	7	2

4. RESULTS OF THE RESEARCH

In the questionnaire, respondents could choose in which situations they would provide personal data due to the right to security (personal and general) and when that right does not determine the reason for providing personal data. Thirteen different situations were offered, five of which implied the need to exercise a greater right to personal or general security (at the airport, when boarding a ship, after an earthquake, when driving an autonomous vehicle and when recognising faces using artificial intelligence methods), five of those related to various service activities (getting a discount in a store, booking a trip, in the cinema, social contacts on the Internet and using a robot vacuum cleaner) and the final three related to product recommendations, personalised content recommendations and communication with the robot. The situations were classified into two groups: seven were collected by conventional methods, and six were collected, processed and analysed by artificial intelligence methods.

Table 4 shows that 79% (31,811) of responses did not refer to providing individual personal data to law enforcement authorities for personal or general security reasons but that they would **always** or **never** be provided when requested by anyone, regardless of personal or general security. Security-related privacy was determined in 21% of cases (8,359 responses), i. e. providing personal data was related to security.

Table 4: Providing of personal data with regard to the right to security

Right to security	N	%
yes	31811	79%
no	8359	21%

As regards the distribution of situations in which personal data can be collected, the data from Table 5 show that if the situation does not imply the need for security, less (0.64 : 1) personal data would be provided for the right to security reasons.

Table 5: Providing of personal data with regard to the implication of the right to security

Situation	privacy regardless of security	privacy with respect to security
implies the right to security	14628	5457
does not imply the right to security	17183	2902

The results presented in Table 6 show the relationship between the right to privacy and the right to security with regard to the methods of collection, processing and analysis of personal data. There is a fairly strong positive correlation (r = 0.87) in the respondents' attitude towards the right to privacy and the right to security if personal data is collected, processed and analysed using conventional or artificial intelligence methods. So it is evident that there is a willingness to provide more personal data if conventional methods are used.

Table 6: Providing of personal data with regard to the collecting methods

Right to security	conventional methods	methods of AI
no	21181	21705
yes	6938	2397

The distribution of the results according to the type of personal data and respondents' commitment to security is shown in Table 7. Concerning the type of data, the personal data the respondents were least willing to provide in situations where their personal or general security was in question was the password (2%). The personal data they chose most likely to provide in personal and general security cases was their name and surname (17%). After that, personal identification numbers and health data (12%) followed. Interestingly, the subsequent data respondents were least likely to share was their political viewpoint (3%).

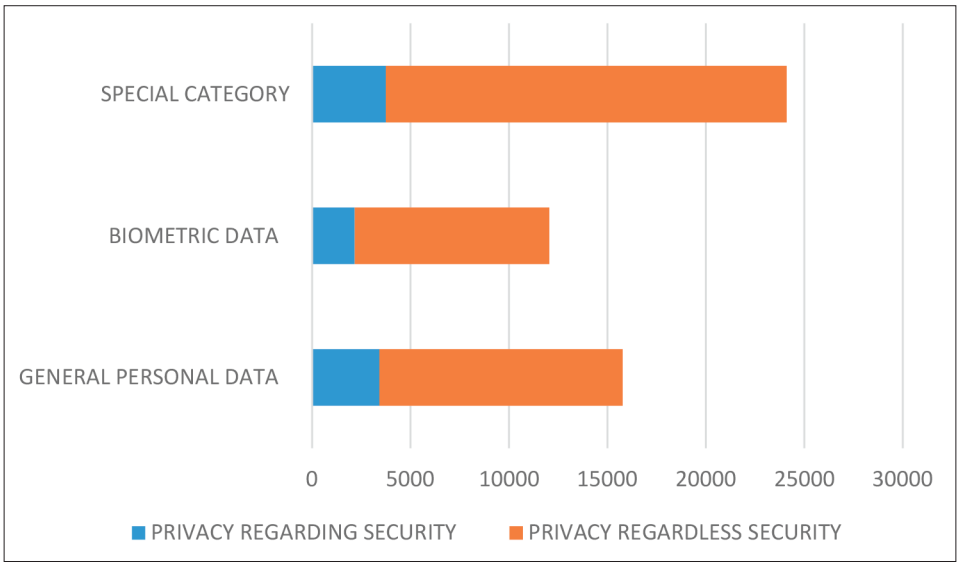
Regarding the distribution of results in situations that are not perceived as security-related, the respondents were equally inclined to provide their personal data, whether general personal, biometric or a special category of personal data are in question (range from 6 to 9%).

Table 7: Distribution of results according to the type of data and respondents' commitment to security

Data category	**Type of personal data**	**Privacy, regardless of security**		**Privacy with respect to security**	
general personal data	personal identification number	2855	7%	1162	12%
	name and surname	2385	6%	1632	17%
	credit card number	3554	8%	463	5%
	password	**3564**	8%	**163**	**2%**
biometric data	fingerprint	3301	8%	716	8%
	face scan	3120	7%	897	10%
	pupil scan	3460	8%	557	6%
special category of personal data	racial and ethnic origin	3187	7%	830	9%
	political viewpoint	3697	9%	320	3%
	religious belief	3580	8%	437	5%
	union membership	3581	8%	436	5%
	health data	2935	7%	1082	12%
	data on criminal or misdemeanour proceedings	3377	8%	640	7%
TOTAL		42596		9335	100%

Providing personal data with regard to the category and security or non-security reasons is shown in Chart 1.

Chart 1: Providing of personal data with regard to the category



5. DISCUSSION

The research shows that most personal data in the majority of observed situations (79%) would not be provided to law enforcement authorities to exercise a greater right to personal or general security. This is supported by the results that show that the slightest concern for the right to privacy will be in situations that do not imply the need for a greater right to security. The said reveals that the regulatory authorities have a greater responsibility when establishing a collection, processing and analysis system of personal data, which should include privacy protection. Prediction is mentioned as one of the most important areas of regulating the use of AI methods by law enforcement authorities. Thus *Chen*, *Ahn* and *Wang* state:

"Predictive analytics is another popular use of AI that helps prioritize resource allocation in the public sector for services such as public safety and the prevention of fraud. Humans are still responsible for enforcing public safety rules and determining the subjects of fraud investigations. In the cybersecurity area, AI can fulfill the functions of security analytics and threat intelligence, while humans exercise judgment on the parameters of threat analysis and responses."[20]

[20] Chen, Y.-C.; Ahn, M.; Wang, Y.-F., *Artificial Intelligence and Public Values: Value Impacts and Governance in the Public Sector*, Sustainability 2023, 15, 4796, p. 4, [https://doi.org/10.3390/su15064796], Accessed 6 July 2023.

Kingston stands out that area where AI technology might be of use to organisations during their data processing activities is in the identification and assessment of potential or actual breaches.[21] He states that the monitoring of data security is a key task.

Results in this research show a greater willingness to provide personal data when collected using conventional methods compared to artificial intelligence methods, it is imperative to protect the right to privacy with adequate legal regulation regarding the use of artificial intelligence methods. Also, a fairly strong positive correlation (r = 0.87) in respondents' attitudes toward the right to privacy and the right to security in situations where personal data is collected using conventional and artificial intelligence methods shows that the decision to provide personal data depends more on the type of personal data than on collecting method. This indicates that the particular focus of regulatory authorities should be on situations that do not imply the need for privacy protection. This particularly applies to private or public services, including artificial intelligence methods most people use. Legal regulation of the use of artificial intelligence methods in individual areas of its application should also exist at the national level. At the national level, there is no specifically regulated privacy protection in the context of artificial intelligence methods at the strategic level. There is no assessment of the effects of systems using artificial intelligence methods on human rights. In his recommendations, the *Commissioner for Human Rights of the Council of Europe* assumes that in circumstances where a risk of violating human rights has been identified in relation to an AI system that has already been deployed by a public authority, its use should be immediately suspended and where it is not possible, the AI system should not be deployed or otherwise used by any public authority.[22] *Etzioni* points out that nations face several entirely legitimate, competing claims regarding privacy and security, which cannot be mutually maximised.[23] He also advocates balancing individual rights with social responsibilities and individuality with community.[24] The exact position took *Stalla-Bourdilon, Philips and Ryan*: "To engage in the balancing of privacy and security interests, it is crucial to start with defining the concepts at stake…What remains is to clarify the notion of security and distinguish

---

21 Kingston, J., *Using Artificial Intelligence to Support Compliance with the General Data Protection Regulation*, Artificial Intelligence and Law, 2018, p. 10.

22 Council of Europe: Commissioner for Human Rights. Unboxing Artificial Intelligence: 10 steps to protect Human Rights, May 2019, p. 8, [https://rm.coe.int/unboxing-artificial-intelligence-10-steps-to-protect-human-rights-reco/1680946e64], Accessed 6 April 2023.

23 Etzioni, A., *Privacy in a Cybver Age: Policy and Practice*, New York, NY, Palgrave Macmillan, 2015, p. 101.

24 Etzioni, A., *The Limits of Privacy*, New York, NY, Basic Books, 2008, p. 198.

between distinct but closely related terms such as national security, public security, the prevention of crimes and cybersecurity."[25]

The results of this research show that respondents are the least inclined to provide biometric data for security reasons (personal and general security). The correlation between its providing when collected by conventional methods and methods of AI is fairly strong positive (r = 0.87). This indicates that the type of personal data, not the collecting method, is decisive for people in terms of privacy and security. This can also be interpreted as insufficient knowledge of possible privacy implications when using artificial intelligence methods. In general, the results point to the great responsibility of regulatory bodies in the field of privacy protection when applying artificial intelligence methods. When it comes to AI methods for law enforcement activities, the results support *Mironenko Enerstvedt's* point that it is crucial that "both the regulation and the technologies can protect both security – and the right to life – along with other rights of the individual and that the law has a potential to define both the amount of desired privacy as well as data protection requirements and the amount limits of the security measure involved".[26] *Mironenko Enerstvedt* further states: "… if no proper limits on surveillance are set in the earlier stages, privacy and other human rights may ultimately be affected to an undesirable extent."[27]

As for the protection of individual personal data, there are different approaches. Some authors look at protecting personal data in their totality, which is the speciality of the legal approach. In contrast, technology experts approach them from the aspect of collecting technology. *Solova* considers that we do not need to accept the claim that information is inherently public or private.[28] However, he also states that "the interests aligned against privacy – including national security – are often cached out in larger social terms".[29] A similar approach has *Floridi,* who considers that agents do not need to be persons; they can be organisations, artificial constructs, or hybrid syntheses.[30]

---

25 Stalla-Bourdillon, S.; Phillips, J.; Ryan, M. D., *Privacy vs. Security*, Springer London, Springer Briefs in Cybersecurity, 2014, p. 65.

26 Mironenko Enerstvedt, O., *Aviation Security, Privacy, Data Protection and Other Human Rights: Technologies and Legal Principles,* Law, Governance and Technology Series Sub-series: Issues in Privacy and Data Protection, Vol. 37, 2017, p. 422.

27 *Ibid.*

28 Solove, D. J., *The Meaning and Value of Privacy*, Social Dimensions of Privacy, Cambridge, Cambridge University Press, 2015, p. 75.

29 Solove, D. J., *Understanding Privacy*, Cambridge, MA., Harvard University Press, 2008, p. 89.

30 Floridi, L., *Four Challenges for a Theory of Informational Privacy*, Ethics and Information Technology, Vol. 8, No. 3, 2006, p. 115.

6. PERSONAL DATA AND RIGHT TO PRIVACY IN THE CASE LAW OF THE EUROPEAN COURT OF HUMAN RIGHTS

When it comes to the right to privacy and the use of personal data, regardless of what type of personal data is in question and what method of collection is involved, some case law of the European Court of Human Rights has been studied. Namely, misuse of personal data in the context of the right to privacy violates Article 8 of the European Convention on Human Rights.[31] In the *Case of S. and Marper v. the United Kingdom,* the Court finds that:

"… the protection of personal data is of fundamental importance to a person's enjoyment of his or her right to respect for private and family life, as guaranteed by Article 8 of the Convention. The domestic law must afford appropriate safeguards to prevent any such use of personal data as may be inconsistent with the guarantees of this Article … The need for such safeguards is all the greater where the protection of personal data undergoing automatic processing is concerned, not least when such data are used for police purposes. Domestic law should notably ensure that such data are relevant and not excessive in relation to the purposes for which they are stored and preserved in a form which permits identification of the data subjects for no longer than is required for the purpose for which those data are stored … The domestic law must also afford adequate guarantees that retained personal data was efficiently protected from misuse and abuse … ."[32]

In the *Case of Big Brother Watch and Others v. The United Kingdom*, the Court clearly stated that "even the mere storing of data relating to the private life of an individual amounts to an interference within the meaning of Article 8 … and that the need for safeguards will be all the greater where the protection of personal data undergoing automatic processing is concerned." The Court further stated that the fact that the stored material is in coded form, intelligible only with the use of computer technology and capable of being interpreted only by a limited number of persons, has no effect on that finding. If information about a person are analysed or if the content of the communications is being examined by an analyst, the need for safeguards is the greatest.[33]

In the *Case of Breyer v. Germany,* the Court stated that private life is a broad term and that Article 8 protects as well as "the right to identity and personal devel-

---

31 European Convention on Human Rights (Convention for the Protection of Human Rights and Fundamental Freedoms) as amended by Protocols Nos. 11 and 14, 4 November 1950.

32 Judgement S. and Marper v. the United Kingdom, Applications nos. 30562/04 and 30566/04, Strasbourg, 4 December 2008, Art. 103.

33 Judgement Big Brother Watch and Others v. The United Kingdom, Applications nos. 58170/13, 62322/14 and 24960/15, Strasbourg, 25 May 2021, Art. 330.

opment and the right to establish and develop relationships with other human beings and the outside world". When it comes to the use of personal data, the Court further stated "that the term 'private life' must not Be Interpreted Restrictively".[34] When data has been collected on a specific person, the processing or use of personal data or its publication to the degree beyond what is usual, considerations of private life arise. In that way, Article 8 provides for "the right to a form of informational self-determination, allowing individuals to rely on their right to privacy as regards data which, albeit neutral, are collected, processed and disseminated collectively and in such a form or manner that their Article 8 rights may be engaged".[35] The same Court views can be found in the *Case of M. L. and W. W. v. Germany*[36] and the *Case of Satakunnan Markkinapörssi oy and Satamedia oy v. Finland.*[37]

In the *Case of Magyar Helsinki Bizottság v. Hungary,* the Court, inter alia, specified personal data relating to the most intimate and personal aspects of an individual, such as health status, attitude to religion and sexual orientation, stating that "such categories of data constituted particular elements of private life falling within the scope of the protection of Article 8 of the Convention".[38]

7. CONCLUSION

This research did not confirm the first conditional hypothesis that there is a causality between the perception of privacy and the perception of security of natural persons when collecting, processing and analysing their personal data using conventional and artificial intelligence methods. Namely, no negative correlation was found between providing personal data for security reasons and those unrelated to security, so causality could not be measured in the experiment. A recommendation for further research is to create a preliminary questionnaire in which respondents would be individually asked which specific situations they consider sufficiently security relevant and in which they would consider their privacy from the aspect of security. It is also recommended that, in future research, the situations in which "giving privacy" for security reasons is measured are divided into those that are

[34] Judgement Breyer v. Germany, Application no. 50001/12, Strasbourg, 30 January 2020, Art. 73-76

[35] *Ibid.*

[36] Judgement M. L. and W. W. v. Germany, Applications nos. 60798/10 and 65599/10, Strasbourg, 28 June 2018, Art. 87.

[37] Judgement Satakunnan Markkinapörssi oy and Satamedia oy v. Finland, Application no. 931/13, Strasbourg, 27 June 2017, Art. 137.

[38] Judgement Magyar Helsinki Bizottság v. Hungary, Application no. 18030/11, Strasbourg, 8 November 2016, Art. 192.

extremely dangerous (terrorism, epidemics and disasters) and those that are not perceived as huge security threats (common crime).

The second conditional hypothesis that there is a statistically significant negative difference between providing personal data to law enforcement authorities in the case when it is collected by conventional methods compared to those cases when artificial intelligence methods collect it was rejected because a fairly strong positive correlation (r = 0.87) was found when providing personal data for security reasons using conventional methods and artificial intelligence methods. It follows from this that the respondent's decision to provide personal data to law enforcement authorities was based on the type of personal data and not on the method of its collection. Given that at the time of the research, there is no legally regulated privacy protection in the context of artificial intelligence methods at the national level of respondents, there is a possibility that the wider population is not aware of the possible effects of artificial intelligence methods on the right to privacy. There is also the possibility that respondents consider privacy protection solely with regard to the type of personal data that may be compromised and its consequences.

The answer to the research question of whether there is a difference in the relation to the causality of the right to security and the right to privacy when using conventional methods of collecting personal data in relation to the use of artificial intelligence methods conditionally is that in the territory of the Republic of Croatia at the time of the research, there is not.

REFERENCES

BOOKS AND ARTICLES

1. Brandimarte, L.; Acquisti, A.; Loewenstein, G., *Misplaced Confidences Privacy and the Control Paradox*, Social Psychological and Personality Science, Vol. 4, 2013, pp. 340-347
2. Chen, Y.-C.; Ahn, M.; Wang, Y.-F., *Artificial Intelligence and Public Values: Value Impacts and Governance in the Public Sector*, Sustainability 2023, 15, 4796, [https://doi.org/10.3390/su15064796], Accessed 6 July 2023
3. Dragu, T., *Is there a trade-off between security and liberty? Executive bias, privacy protections, and terrorism prevention*, American Political Science Review, Vol. 105(1), 2011, pp. 64-78
4. Etzioni, A, *Privacy in a Cyber Age: Policy and Practice*, New York, NY, Palgrave Macmillan, 2015
5. Etzioni, A., *The Limits of Privacy*, New York, NY, Basic Books, 2008
6. Floridi, L., *Four Challenges for a Theory of Informational Privacy*, Ethics and Information Technology, Vol. 8, No. 3, 2006, pp. 109-119
7. Fuster, G. G., *The emergence of personal data protection as a fundamental right of the EU*, Springer Science & Business, Vol. 16, 2014

8. Goold, B. J., *Privacy, Identity and Security* in: Goold. B. J.; Lazarus, L., eds, Security and Human Rights, Portland, Hart Publishing, 2007, pp. 45-72
9. Himma, K. E., *Privacy Versus Security: Why Privacy is Not an Absolute Value or Right*, 44 San Diego L. Rev., 2007, pp. 857-919
10. Katulić, T., *Towards the Trustworthy AI: Insights from Data Protection and Information Security Law*, Medijska istraživanja, 26 (2020), 2; p. 9-28, doi:10.22572/mi.26.2.1
11. Kingston, J., *Using Artificial Intelligence to Support Compliance with the General Data Protection Regulation*, Artificial Intelligence and Law, 2018
12. Kuziemski, M., Przemyslaw, P., *AI Governance Post-GDPR: Lessons Learned and the Road Ahead*, European University Institute, 2019/07, doi:10.2870/470055
13. Mironenko Enerstvedt, O., *Aviation Security, Privacy, Data Protection and Other Human Rights: Technologies and Legal Principles,* Law, Governance and Technology Series Sub-series: Issues in Privacy and Data Protection, Vol. 37, 2017
14. Rodotà, S., *Data Protection as a Fundamental Right,* in: Gutwirth, S., Poullet, Y., De Hert, P., de Terwangne, C., Nouwt, S. (eds) Reinventing Data Protection? Springer, Dordrecht, 2009 [https://doi.org/10.1007/978-1-4020-9498-9_3], Accessed 7 July 2023
15. Solove, D. J., *The Meaning and Value of Privacy*, Social Dimensions of Privacy, Cambridge, Cambridge University Press, 2015
16. Solove, D. J., *Understanding Privacy*, Cambridge, MA., Harvard University Press, 2008
17. Stalla-Bourdillon, S.; Phillips, J.; Ryan, M. D., *Privacy vs. Security*, Springer London, Springer Briefs in Cybersecurity, 2014
18. Vojković, G., Katulić, T., *Data Protection and Smart Cities*, in: Augusto, J.C. (eds) Handbook of Smart Cities. Springer, Cham, 2020, [https://doi.org/10.1007/978-3-030-15145-4_28-1], Accessed 6 July 2023

ECHR

1. *Big Brother Watch and Others v. The United Kingdom*, Applications nos. 58170/13, 62322/14 and 24960/15, Strasbourg, 25 May 2021
2. *Breyer v. Germany*, Application no. 50001/12, Strasbourg, 30 January 2020
3. *M. L. and W. W. v. Germany*, Applications nos. 60798/10 and 65599/10, Strasbourg, 28 June 2018
4. *Magyar Helsinki Bizottság v. Hungary*, Application no. 18030/11, Strasbourg, 8 November 2016
5. *S. and Marper v. the United Kingdom*, Applications nos. 30562/04 and 30566/04, Strasbourg, 4 December 2008
6. *Satakunnan Markkinapörssi oy and Satamedia oy v. Finland*, Application no. 931/13, Strasbourg, 27 June 2017
7. European Convention on Human Rights (Convention for the Protection of Human Rights and Fundamental Freedoms) as amended by Protocols Nos. 11 and 14, 4 November 1950

EU LAW

1. Directive (EU) 2016/680 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data by competent authorities for the purposes of the prevention, investigation, detection or prosecution of criminal offences or the execution of criminal penalties, and on the free movement of such data, and repealing Council Framework Decision2008/977/JHA [2016] OJ L 119/89
2. Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) [2016] OJ L 119/1
3. EU Charter of Fundamental Right

LIST OF NATIONAL REGULATIONS, ACTS AND COURT DECISIONS

1. Zakon o zaštiti fizičkih osoba u vezi s obradom i razmjenom osobnih podataka u svrhe sprječavanja, istraživanja, otkrivanja ili progona kaznenih djela ili izvršavanja kaznenih sankcija, Official Gazette No 68/2018

WEBSITE REFERENCES

1. Council of Europe: Commissioner for Human Rights. Unboxing Artificial Intelligence: 10 steps to protect Human Rights, May 2019, [https://rm.coe.int/unboxing-artificial-intelligence-10-steps-to-protect-human-rights-reco/1680946e64], Accessed 6 April 2023
2. United Nations Human Rights Office of the High Commissioner. Special Rapporteur on the right to privacy: Purpose of the mandate, 2023, [https://www.ohchr.org/EN/Issues/Privacy/SR/Pages/SRPrivacyIndex.aspx], Accessed 15 March 2023
3. European Commission. Artificial intelligence: Commission kicks off work on marrying cutting-edge technology and ethical standards, 3 April 2018, [https://ec.europa.eu/commission/presscorner/detail/en/IP_18_1381], Accessed 22 March 2023
4. European Commission. Proposal for a Directive on adapting non-contractual civil liability rules to artificial intelligence (AI Liability Directive), 28.9.2022 COM (2022) 496 final 2022/0303(COD), [https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52022PC0496], Accessed 22 March 2023
5. European Commission. Shaping Europe's digital future: A European approach to artificial intelligence/A European approach to trust in AI, [https://digital-strategy.ec.europa.eu/en/policies/european-approach-artificial-intelligence], Accessed 22 March 2023
6. European Commission. The European AI Alliance: Promoting Trustworthy AI, [https://digital-strategy.ec.europa.eu/en/policies/european-ai-alliance], Accessed 22 March 2023
7. European Commission. White Paper on Artificial Intelligence - A European approach to excellence and trust. COM/2020/65 final, 19.2.2020, [https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52020DC0065&from=EN], Accessed 22 March 2023
8. Sartor. G., Lagioia, F., *The Impact of the General Data Protection Regulation (GDPR) on Artificial Intelligence*, Scientific Foresight Unit (STOA) EPRS, European Parliamentary Research Service 2020, [https://www.europarl.europa.eu/RegData/etudes/STUD/2020/641530/EPRS_STU(2020)641530_EN.pdf], Accessed 6 July 2023

Topic 6

EU law and economic progress

UDK 338.2:502.131.1(4-67EU)
Review article

EXPECTED CONTRIBUTIONS OF THE EUROPEAN CORPORATE SUSTAINABILITY REPORTING DIRECTIVE (CSRD) TO THE SUSTAINABLE DEVELOPMENT OF THE EUROPEAN UNION

Rajko Odobaša, PhD, Full Professor
University of Josip Juraj Strossmayer in Osijek, Faculty of Law
Stjepana Radića 13, Osijek, Croatia
rodobasa@pravos.hr

Katarina Marošević, PhD, Associate Professor
University of Josip Juraj Strossmayer in Osijek, Faculty of Law
Stjepana Radića 13, Osijek, Croatia
kmarosev@pravos.hr

ABSTRACT

In January 2023, the European Corporate Sustainability Reporting Directive (CSRD) came into power, and its application from the fiscal year 2024 becomes mandatory for all large European companies with over 500 employees, as well as for medium and small companies, except for micro-enterprises, whose securities are listed for trading on a regulated market in the European Union. The directive also covers non-European trading companies that generate more than EUR 150 million in net income per year in the Union and have at least one daughter company or subsidiary that exceeds this income threshold. The directive adapts the deadlines, areas and standards of application of the new sustainability reporting rules to the capacities and resources of individual categories of companies. Businesses covered by the directive will have to submit publicly available and detailed non-financial reports on a number of aspects of sustainability in their operations, as well as on the impact of external sustainability factors on current operations, market position and development of companies. The directive represents a strengthening of the existing European rules for the creation and publication of sustainability reports introduced by the Non-Financial Reporting Directive (NFRD) from 2014, which are no longer adequate for the realization of the goals of the European Green Plan and the successful transition of the EU to a sustainable economy and society.

This paper analyzes the historical and legal context of the creation of the Directive, goals and the scope of the Directive's application, the indicators of reporting by companies with regard to the economic, social and ecological dimensions of sustainability covering also limitations bonded with theoretical and empirical circular economy perspective and the expected benefits

of standardized reporting on aspects of sustainability of important stakeholders of the society. Besides, the possible burdens and costs are going to be presented, ocuuring when preparing sustainability reports and during practical application of the Directive.

The purpose of the paper is to point out possible contributions of the Directive to strengthening the responsibility of companies for an accelerated and easier transition to a sustainable economy and society as a key development goal of the Union, and the potential positive impacts of a broader reduction of the negative environmental and social footprint on the sustainable operations of companies and the economy as a whole. Historical, legal normative and political economic methods are most often used in the analysis of the provisions and effects of the new legislative solution regarding the quantification of the effects of business operations on the sustainability of the European environment and society and the feedback effects of progress in wider sustainability on the operations and market position of businesses.

***Keywords**: contributions to the sustainability of the economic and financial system, Corporate Sustainability Reporting Directive, European Green Plan, quantification of business effects on sustainability, sustainability information standards,*

1. INTRODUCTORY NOTES

In the globally dynamic economic, environmental and security conditions, at the beginning of 2023, the European Corporate Sustainability Reporting Directive (CSRD), which regulates the future framework and rules of mandatory, regular and public non-financial reporting of European and non-European companies operating in a more comprehensive and thorough manner than previous European regulations was introduced on the European market. The directive provides that these reports contain relevant, reliable, comparable and verifiable information about risks and opportunities in all aspects of sustainability. The new regulatory framework envisages the rapid creation of standards for information on the environmental, social and management dimensions of sustainability (ESG information), expands the circle of those obliged to submit reports and introduces studio audits of reports. The sustainability reports will be freely available to the public through the central registers, the registers of companies of the Member States or on the websites of the companies. It is the intention of the Union that through a solid framework of reports, coherent standards of information on sustainability and reliable quantification of effects, companies gain a thorough insight into the impact of their own business on the sustainability of nature and society, but also on the impact of all aspects of sustainability in the wider environment on their own business risks and opportunities. Sustainability reports will also be very useful for investors, consumers, non-governmental organizations and public policy makers, as well as for the Union and Member States. The companies' periodic reports on sustainability will enable everyone to see the results achieved in solving sustainability problems within the economy more realistically and progress in achieving the goals outlined in the Paris Agreement, the UN Agenda for sus-

tainable development, the European Green Deal, the Action Plan on Financing Sustainable Growth and other delegated acts that regulate social just transition to a sustainable economy and society.

Regardless of the extremely short period of application of CSRD, the purpose of this work is to determine and point out the possible contributions of the newly established legal framework, an organized set of reporting rules and standards of information on sustainability to the strengthening of responsibility and the creation of new corporate policies for a faster and more efficient transition to a sustainable economy and society as key development goals of the Union. Through an early analysis of the solutions foreseen in the CSRD, an attempt is made to determine the circle of otherwise increasingly numerous users of information on sustainability, as well as the benefits they can expect from information on socially responsible and sustainable business operations of companies. It also lists some burdens and costs for companies that may arise during the preparation of sustainability reports and their practical application.

The research was conducted through several separate units and separate parts of the work.

After the Introductory Remarks, the second part of the paper analyzes the socio-economic context of the creation of the CSRD, the features of the current European regulation of non-financial corporate reporting, the reasons and goals of the new regulation, the circle of taxpayers and other important changes introduced by the CSRD in sustainability reporting. The third part of the paper analyzes the standards according to which the reports should be compiled and the standards of ESG information on sustainability that the reports should contain. The fourth part of the paper is devoted to the analysis of the expected contributions of CSRD to a stronger and faster sustainable development of the economy and society, as well as the potential challenges associated with the implementation of CSRD. In the concluding remarks, the synthesized results of previously conducted research point to the initial evaluation of CSRD as an indispensable legal tool for strengthening the sustainable way of operating companies and accelerating the transition to a sustainable European economy and society.

During the analysis of the new European regulation of reporting on the sustainability of companies and standards for quantifying the effects of companies on the sustainability of the European environment and society, comparisons and analysis of legal regulation is the most often used, with sociological, economic and historical approach as a certain auxiliary methods of analysis.

2. PURPOSE, GOALS, NORMATIVE SOLUTIONS AND OBLIGEES OF THE APPLICATION OF THE EUROPEAN CORPORATE SUSTAINABILITY REPORTING DIRECTIVE (CSRD)[1]

Based on the Paris Climate Agreement and the 2030 UN Agenda for sustainable development from 2015, the European Green Deal 2019, the EU Climate Law from 2021 and the EU Biodiversity Strategy 2030 from 2020, the Commission's program outlines the Union's green transition towards a resource-efficient and competitive economy without net greenhouse gas emissions until 2050. In addition to the effective protection, preservation and increase of natural capital, the transition to a model of sustainable development in all sectors of the economy and society should enable inclusive and socially just economic and social development that protects and increases the health and well-being of current and future generations that will not endanger social and environmental risks. The success of the transition to development that balances the economic, environmental and social dimensions depends to a considerable extent on the establishment of a comprehensive and mandatory European framework for non-financial reporting by companies and the standardization of information on sustainability in all three dimensions of sustainability. According to the new CSRD, commercial companies will be required to include relevant, reliable, comparable and verifiable ESG (Environmental, Social, Governance) information[2] about their own adaptation

---

1 The full name is Directive (EU) 2022/2464 of the European parliament and of the Council of 14 December 2022 amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting (OJ L 322, 16.12.2022, p. 15–80).

2 At the meeting of the parties to the UNFCCC (United Nations Framework Convention on Climate Change) in 2015, the Paris Climate Agreement was adopted, which, within the framework of sustainable development of the economy and society, defines three basic groups of goals that will be sought to be achieved at the global level. These are environmental, social and governmental goals, for which the abbreviation ESG is used in practice. Following the Paris Agreement, the European Commission published its European Green Deal (EGD) which directs European sources of funding towards encouraging the development of a sustainable economy and society, recovery and strengthening resilience to crises, green and digital transition and balanced regional development. As a component of EGD, the 2020 Sustainable Europe Investment Plan (European Green Deal Investment Plan) was adopted, and sustainable development financing measures based on the EU Taxonomy for sustainable activities encourage investments in green and sustainable projects. In addition to financial assistance, the EGD envisages expanding the scope and elaboration of information related to the environment and climate that should be published by companies and financial institutions as guidelines for sustainable investments. European Commission, Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions - European Green Plan, 2019, p. 17, [https://eur-lex.europa.eu/legal-content/HR/ALL/?uri=CELEX:52019DC0640], Accessed 14 November 2022, Odobaša, R., *Refleksije Europskog zelenog plana i strategije „Od polja do stola" na nacionalne strateške planove održivog razvoja poljoprivred-*

to the model of sustainable development in all its dimensions (the "inside-out" aspect), in their annual sustainability reports as well as about the impact of sustainable development issues from the company's environment on its organization, management and business policy ("outside-in" aspect). The obligation of double assessment is very significant because it expands the scope and complexity of reporting. In addition to information on the state and policies, reports should contain goals and an assessment of progress towards these goals (retrospectively and in the future).

As a way of encouraging the business sector in the direction of strengthening sustainability, the Union has already made a significant step forward in sustainability reporting in 2014 with the introduction of the Non-Financial Reporting Directive (NFRD) in 2014.[3] Despite some progress in the transparency of sustainability reporting, expert analyzes and consultations in the Union's bodies determined its inadequacy as a tool for realizing the goals of the transition of the Union to a sustainable economy and society. Gaps were identified in all major topics related to sustainability, including information on greenhouse gas emissions and negative impacts on biodiversity. Deficiencies were also found in information about intangible assets within society, although in developed economies investments in these assets are predominant in the private sector (eg. in human capital, brand, intellectual property and assets related to research and development). A number of companies did not publish sustainability reports at all, and the published information was limited in terms of relevance, reliability and comparability. Although in 2017 the Commission published non-binding guidelines[4] for reporting non-financial information and in 2019 additional guidelines for improved reporting of climate-related information[5], the quality of sustainability information in the reports of the included categories of companies has not increased.[6]

---

no-prehrambenog sektora i ruralnih prostora – primjer Republike Hrvatske, u: Duić, D.; Ćemalović, U., Zakonodavstvo zaštite okoliša i održivi ekonomski razvoj u EU, Osijek, Pravni fakultet Osijek, 2022, p. 33-34.

3 Directive 2014/95/EU of the European Parliament and of the Council of 22 October 2014 amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups (OJ L 330, 15.11.2014, p. 1–9).

4 Communication from the Commission — Guidelines on non-financial reporting (methodology for reporting non-financial information) (OJ C 215, 5.7.2017, p. 1–20).

5 Communication from the Commission — Guidelines on non-financial reporting: Supplement on reporting climate-related information (OJ C 209, 20.6.2019, p. 1–30).

6 Hummel, K.; Jobst, D., *The Current State of Corporate Sustainability Reporting Regulation in the European Union*, SSRN, 2022, p. 3-12, [https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3978478], Accessed 10 March 2023; Opferkuch, K., *et al., Circular economy in corporate sustainability reporting: A review of organisational approaches*, Business Strategy and the Environment, 2021, p. 4017-4018, [https://doi.org/10.1002/bse.2854], Accessed 3 March 2023.

In order to strengthen and speed up the transition to sustainable development, the Union adopted the EU Action Plan on Financing Sustainable Growth in 2018, in which measures were determined to redirect the flow of capital towards sustainable investments, sustainable management of financial risks arising from climate change, resource depletion, environmental and social destruction issues and to encourage transparency and long-termism in financial and economic activities[7]. For its accelerated implementation, the European Parliament and the Council adopted the Disclosure Regulation and Taxonomy Regulation[8], which together much more broadly define the new standards of sustainable social and ecological aspects of development, dealing with sustainability risks and sustainable investments, but also encourage credit institutions and other participants in the financial markets to update their reports on sustainability issues. From 2021, the Sustainable Finance Disclosures Regulation (SFDR)[9] will be applied in the Union, which introduces an obligation for the financial services sector to publish transparent information about sustainable financial services and sustainable financing. Sustainability reports will increase the transparency of the financial sector regarding sustainable financial practices, but also redirect their investment capital towards companies with a higher ESG rating[10]. For the achievement of ESG goals of sustainable development at all levels of social organization and the entire economy, the financial industry has a key role to play by redirecting capital flows towards

---

7 Communication from the Commisssion to the Parliament, the European Council, the Council, the European Central bank, the European economic and social commitee and the Communtee of the Regions, Action Plan: Financing Sustainable Growth (COM/2018/097),Switch2green, *The EU Action Plan on Financing Sustainable Growth*, [https://www.switchtogreen.eu/the-eu-action-plan-on-financing-sustainable-growth/], Accessed 20 March 2023.

8 Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on sustainability-related disclosures in the financial services sector (OJ L 317, 9.12.2019, p. 1–16), Regulation (EU) 2020 /852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (OJ L 198, 22.6.2020, p. 13–43). Taxonomy is a classification tool that provides precise information about sustainable activities and investments and is therefore useful for companies and investors when deciding on investments in environmentally and socially acceptable economic activities and investments.

9 By publishing ESG reports, companies open up to greater financing opportunities, since the SFDR obliges large investors to evaluate ESG factors in company reports. Large investors will consequently be able to reduce their exposure to companies that do not publish ESG reports, and ESG rating agencies will be able to reduce the ESG rating of irresponsible companies. Greenly.resources, *What is the Sustainable Finance Disclosure Regulation (SFDR)?*, 2023, [https://greenly.earth/en-us/blog/company-guide/what-is-the-sustainable-finance-disclosure-regulation- sfdr], Accessed 15 March 2023.

10 A high ESG rating also means that companies do not carry out greenwashing as an irresponsible practice of false claims about the acceptability of products for the environment, most often through the presentation of filtered or partial information.

sustainable investments[11]. The scope of the necessary sustainable investments can be seen from the preliminary assessment of the Commission from 2019. In order to reach the goals in the field of climate and energy by 2030, which is only a part of the necessary investments, additional annual investments in the amount of 260 billion euros, or about 1.5 percent, will be required of European GDP in 2018.[12]

Despite the efforts made to improve sustainability reporting, the Commission, in its report that critically reviewed the solutions and from other NFRD-related directives (2013/34/EU and 2013/50/EU), had to determine the inadequacy of the existing framework of rules for non-financial reporting and the necessity of revising the NFRD.[13] Therefore, in April 2021, it presented a proposal for a new directive on corporate sustainability reporting, for which the Union member

---

11 The Croatian Financial Services Supervisory Agency (HANFA) adopted the 2021 Guidelines for the creation and publication of ESG-relevant non-financial information of issuers to be published by companies financed through the capital market. It is a document intended for issuers on the regulated market in the Republic of Croatia who are obliged to provide non-financial reporting according to the Accounting Act, but also for those who voluntarily decide to publish a non-financial annual report for the purpose of better future financing, investment and a stronger demonstration of the sustainability of their business and positive impact on the environment, community and protection of human rights. The guidelines also served as a preparation for companies for mandatory reports on sustainability in the period before the entry into force of new rules and standards from CSRD. From March 2021, all financial institutions (banks, pension funds, investment companies) in Croatia and the EU must also apply the SFDR (Sustainable Finance Disclosures Regulation). After the entry into force of CSRD, HANFA is expected to develop new guidelines for sustainability reporting in accordance with the new rules and standards. Hanfa adopted Guidelines for non-financial reporting of companies according to environmental, management and social (ESG) goals, 2021, [https://www.hanfa.hr/vijesti/hanfa-donijela-smjernice-za-nefinancijsko-izvje%C5%A1tavanje- the company-according-to-its-environment-manages-and-other-esg-goals/#], Accessed 25 January 2023. From Hanfa's annual report on corporate governance for 2021, it can be seen growing trend in the number of companies listed on the Zagreb Stock Exchange that publish ESG reports. When it comes to non-financial reports, issuers on the Leading Market of the Zagreb Stock Exchange lead the way (100 percent), and companies on the Official Market (83 percent) and Regular Market (89 percent) also have a high percentage of ESG reports. Among those who published sustainability information, 60 percent adapted their reports to the Taxonomy Regulation. Žigman, A., *Raste svijest o koristi ESG izvještavanja*, Business outlook 22/23, Jutarnji list, 2022, p. 22.

12 European Commission, Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions - European Green Plan, 2019, p. 15, [https://eur-lex.europa.eu/legal-content/HR/ALL/?uri=CELEX:52019DC0640], Accessed 14 November 2022.

13 It was estimated that by the time the CSRD came into effect, only 20 percent of large companies were fully implementing some sustainability information standards, and only 30 percent required some form of verification. European Commission, Proposal for a Directive of the European Parliament and the Council amending Directive 2013/34/EU, Directive 2004/109/EC, Directive 2006/43/EC and Regulation (EU) no. 537/2014 regarding corporate sustainability reporting, 2021, [https://eur-lex.europa.eu/legal-content/HR/TXT/PDF/?uri=CELEX:52021PC0189&from=EN], p. 10, Accessed 14 March 2023.

states reached a unanimous agreement during the first half of 2022. After that, the Council approved the position of the European Parliament on 16 November 2022, which meant that the legislative act was adopted.

The application of CSRD[14] started in January 2023, and its application is mandatory for all-inclusive companies from fiscal year 2024, according to the prescribed order.[15]

CSRD must be applied by all large European trading companies with over 500 employees, as well as medium and small trading companies (SMEs), except for micro-enterprises whose securities are listed for trading on a regulated market in the Union. Small and medium-sized companies whose securities are not listed for trading can apply proportional standards voluntarily. The directive also covers non-European companies that generate more than EUR 150 million in net income per year in the Union and have at least one subsidiary company that exceeds the income threshold of more than EUR 40 million or a subsidiary that is subject to the thresholds according to which the company is considered large, medium or a small company whose securities are listed for trading on the market in the Union.[16] This expansion of the circle of obligees will lead to a significant increase in the number of companies that will have to publish sustainability reports, approximately 11,700 to approximately 49,000 companies and groups across the Union.

---

14 CSRD introduced changes in a) Regulation no. 537/2014 on special requirements regarding the legal audit of entities of public interest and the repeal of Commission Decision 2005/909/EC, b) Directive 2004/109/EC on the harmonization of transparency requirements regarding information on issuers whose securities are listed for trading on a regulated market and amending Directive 2001/34/EC, c) Directive 2006/43/EC on statutory audits of annual financial statements and consolidated financial statements, amending Council Directives 78/660/EEC and 83/349/EEC and repeals Council Directive 84/253/EEC and d) Directive on annual financial statements, consolidated financial statements and related reports for certain types of companies, amending Directive 2006/43/EC of the European Parliament and of the Council and repealing Council Directive 78/ 660/EEC and 83/349/EEC.

15 Baumüller, J.; Grbenic, S., *Moving from non-financial to sustainability reporting: analyzing the EU Commission's proposal for a Corporate Sustainability Reporting Directive (CSRD)*, Facta Universitatis, Series: Economics and Organization, 18(4), 2021, p. 370-371, [https://doi.org/10.22190/FUEO210817026B], Accessed 22 February 2023.

16 Reporting is mandatory in 2025 for the financial year 2024 for companies to which the NFRD already applies. Then reporting becomes mandatory in 2026 for the 2025 financial year for large companies not currently subject to the NFRD. In 2027, the reporting for the financial year 2026 must be published by SMEs listed on the stock exchange (except micro-enterprises), small and simple credit institutions and their own insurance companies. Finally, in 2029 for the financial year 2028 reporting becomes mandatory for companies from third countries. Directive (EU) 2022/2464 of the European parliament and of the Council of 14 December 2022 amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting (OJ L 322, 16.12.2022), p. 19–21.

3. ENVIRONMENTAL, SOCIAL AND GOVERNANCE STANDARDS (ESG INFORMATION) OF SUSTAINABILITY REPORTING

In addition to the areas and deadlines for the application of the new sustainability reporting rules, the Commission has the mandate to determine sustainability reporting standards and their adaptation to the capacities and resources of individual categories of companies. Although SMEs listed on regulated markets are obliged to apply proportional standards, most of them that are not listed on stock exchanges will be able to apply them voluntarily. Incorporated SMEs will be able to use the opt-out during the transition period and will be exempted from CSRD application until 2028.[17] The Commission will also adopt delegated acts that will complement the CSRD.

Regular annual reports in digital format are compiled by the companies themselves and posted on their own and other websites of certain central registers, and the members of the administrative, management and supervisory bodies of the companies that are responsible for the preparation and publication of the reports of the subsidiary companies. Reports on achieved sustainability should be aligned with the Taxonomy Regulation (EU 2020/852) which establishes a system of environmental objectives, classifications of environmentally sustainable economic activities and a common understanding of what "sustainable"[18] means. The reports will be prepared according to the European Sustainability Reporting Standards (ESRS), the draft of which was prepared by EFRAG[19], and the first set

---

17 European Commission, Proposal for a Directive of the European Parliament and the Council amending Directive 2013/34/EU, Directive 2004/109/EC, Directive 2006/43/EC and Regulation (EU) no. 537/2014 regarding corporate sustainability reporting, [https://eur-lex.europa.eu/legal-content/HR/TXT/PDF/?uri=CELEX:52021PC0189&from=EN], Accessed 12 February 2023, p. 1-2.

18 According to Art. 9. Taxonomy Regulation has six environmental goals: mitigation of climate change, adaptation to climate change, sustainable use and protection of water and marine resources, transition to a circular economy, prevention and control of pollution, and protection and restoration of biodiversity and ecosystems. According to Art. 3. there are four comprehensive conditions that an economic activity must meet in order to be qualified as ecologically sustainable: if it significantly contributes to one or more environmental objectives established in Article 9, if it does not significantly harm any environmental objective established in Article 9, if it is carried out in accordance with the minimum protective measures established in Article 18, and if it is harmonized with the technical verification criteria established by the Commission in accordance with Article 10, paragraph 3, Article 11, paragraph 3, Article 12, paragraph 2, Article 13 paragraph 2, article 14 paragraph 2 or article 15 paragraph 2.

19 EFRAG (European Financial Reporting Advisory Group) is a private association founded in 2001 with the encouragement of the European Commission, and after 2022 and the adoption of CSRD as a delegated organization, it provides technical advice to the Commission regarding European sustainability reporting standards. In this regard, EFRAG is a world-renowned center of expertise. EFRAGA's participation at the technical level in the adoption of standards will be coordinated by the Commission with a number of European bodies and member states in order to avoid conflicts of interest, and will hold

of standards should be adopted by the Commission by mid-2023. in which the company operates. These reporting standards will be particularly important in the case of sectors associated with high environmental sustainability risks or impacts on the environment, human rights and governance[20].

Sustainability reporting standards should include environmental, social and governance (ESG) information on sustainability risks and opportunities and in line with applicable guidelines, a wider range of Union acts and internationally undertaken commitments to guide sustainable development. Depending on the specifics of the economic sector, sustainability reporting should contain standardized information on the main environmental factors, including companies' effects on the environment and dependence on climate, air, water, land and biodiversity. Information on the carbon footprint of products, production water pollution, electronic waste, packaging and other types of waste, toxic emissions, etc. will enable an in-depth understanding of companies' effects on sustainability issues and the main risks for companies arising from sustainability issues. Climate information will refer to physical and other risks associated with climate change, but also to society's resilience to different climate scenarios and climate change adaptation plans. Information on the extent of carbon and other greenhouse gas emissions by the company and the extent of their removal, including the extent to which the company applies offsets and the source of these offsets, will also be useful. Among the reporting standards, energy information should be appropriately represented, especially with regard to reducing energy consumption, increasing energy efficiency and consumption of renewable energy sources. Standardized information will also cover the topics of investments in clean technologies and renewable energy, as well as investments in green construction and biodiversity protection.

In the social pillar of sustainability, the standards should include information on working conditions, involvement of social partners in business, works councils and collective bargaining (exchange of relevant information, ways of obtaining and verifying information on sustainability), gender and other forms of equality, non-discrimination in terms of wages, gender diversity at management levels,

annual consultations with the European Parliament and other expert bodies. ESMA, EBA and EIOPA also participate in the development of reporting standards. More about the EFRAG organization at [https://www.efrag.org/], Accessed 12 February 2023.

[20] All economic sectors and branches have their specificities, due to which the same indicators will differ significantly between them. The tourism and energy sectors, for example, will have significantly worse indicators of carbon footprint and greenhouse gas emissions than companies in the service sector. For this reason, the importance of certain environmental and social indicators will be weighted depending on the sector and branch in which the company operates. For recommended weights of indicators, see more in Štriga, T., *Novi regulatorni okvir – Nema više manipulacija i zamagljivanja stvarnosti*, Business outlook 22/23, Jutarnji list, 2022, p. 51.

inclusivity (e.g. on the involvement of workers in management and supervisory boards), on human rights (e.g. including information on forced and child labor) and to include other effects of the company on employees, the community and human health. The information from this pillar of sustainability should be aligned with the principles of the European Pillar of Social Rights Action Plan (The European Pillar of Social Rights Action Plan, 2021) that relate to commercial companies, as well as with other international documents and plans, for example the fundamental conventions of the ILO.

For the governance pillar of sustainability, the standards should include information on the role and contribution of the company's administrative, management and supervisory bodies with regard to sustainability issues, the professional knowledge and skills necessary to fulfill that role or the access of such bodies to the professional knowledge and skills regarding sustainability, the existence of company policies to encourage the members of these bodies to focus on sustainability and information on the company's internal control and risk management systems in relation to the sustainability reporting process. There is a general need for standards that will provide information on the company's corporate culture and business ethics, including information on the fight against corruption and bribery, and on the company's political influence and lobbying activities and efforts. Standards in all three pillars of sustainability should include all established sustainability goals and the progress made in achieving them.[21]

The commission will review progress in the development of reporting standards no later than April 2029, and every three years thereafter.[22] Along with regular annual

---

[21] Directive (EU) 2022/2464 of the European parliament and of the Council of 14 December 2022 amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting *(*OJ L 322, 16.12.2022), p. 30-32.

[22] The Commission should submit a report to the European Parliament and to the Council on the implementation of this amending Directive including (...): „an assessment of the achievement of the goals of this amending Directive, including the convergence of reporting practices between Member States; an assessment of the number of small and medium-sized undertakings using sustainability reporting standards voluntarily; an assessment of whether and how the scope of the reporting requirements should be further extended, in particular in relation to small and medium-sized undertakings and to third-country undertakings operating directly on the Union internal market without a subsidiary undertaking or a branch on the territory of the Union; an assessment of the implementation of the reporting requirements on subsidiary undertakings and branches of third-country undertakings introduced by this amending Directive, including an assessment of the number of third-country undertakings which have a subsidiary undertaking or a branch subject to reporting requirements in accordance with Directive 2013/34/EU; an assessment of the enforcement mechanism and of the relevant thresholds set out in Directive 2013/34/EU; an assessment of whether and how to ensure the accessibility for people with disabilities to the sustainability reporting published by undertakings falling under the scope of this amending Directive". Along with the report, the Commission should also attach proposals for legislative changes. Ibid., p. 40.

consultations, this should ensure continuous consideration of relevant changes in standards, including changes to international standards in the process of creation of which the Union participates.[23]

The level of verification of the reliability of information in sustainability reports should be similar to the seriousness of the verification of financial reports, and efficient audit practice depends on the adoption of common standards for verification, which should be in accordance with the reporting requirements from Art. 8. Taxonomy Regulation. Reports will be able to be checked by special authorized auditors or audit companies that already audit financial reports, which would enable the sensitive connection and harmonization of financial and sustainability information, thus avoiding double keeping of different reports and green manipulative marketing. Standardized information on sustainability facilitate their verification and comparison, without which there is no precise ESG rating of companies. In order to ensure a uniform practice of verification of sustainability reporting throughout the Union, the Commission is authorized to adopt standards for verification of information and sustainability reports by delegated acts until October 2026. In the meantime, national standards, procedures or verification requirements will apply. Comprehensive changes from the CSRD, together with future harmonized changes and regulation of sustainability information standards, should ensure that sustainability information in companies' reports is at a significantly higher level of relevance, reliability, verifiability and comparability than under the previous regulation.

[23] The reporting standards efforts undertaken by the Commission and EFRAG are not alone in terms of convergence and global harmonization of sustainability reporting standards. The G20 and G7 initiatives, the Financial Stability Board, the Sustainability Accounting Standards Board (SASB), the International Integrated Reporting Council (IIRC), the Climate Disclosure Standards Board (CDSB), The Global Reporting Initiative's (GRI) etc. The latter recently presented revised universal standards which, in addition to a slightly changed structure, also introduce in-depth analysis (due diligence). Through this analysis, companies identify their profound negative impacts on the environment, as well as their own responsible business management policies and strengthened human rights reporting components. These changes are consistent with major intergovernmental frameworks related to human rights and sustainability due diligence, including the UN Guiding Principles on Business and Human Rights, the OECD Guidelines for Multinational Enterprises, the OECD Due Diligence Guidelines for responsible business conduct, international labor standards of the ILO, ICGN principles of global management, ISO 26000 norm, etc. It is evident that sustainability reporting is the subject of increasingly strong public interest and regulatory interventions in jurisdictions around the world. More about GRI in de Villiers, Ch., La Torre, M., Molinari, M., The Global Reporting Initiative's (GRI) Past, Present and Future: Critical reflections and a research agenda on sustainability reporting (standard-setting), Pacific Accounting Review, forthcoming., 2022, DOI: 10.1108/PAR-02-2022-0034, accessed 5 March 2023.

4. EXPECTED CONTRIBUTIONS TO THE SUSTAINABLE DEVELOPMENT OF THE ECONOMY AND SOCIETY AND POTENTIAL CHALLENGES IN THE PRACTICAL APPLICATION OF CSRD

In accordance with the objectives of the EGD and related international documents, the Union strives to make stronger use of the potential of the European economy's contribution to the transition to a fully sustainable, inclusive and fair economic-financial and soocial system. In order to strengthen environmental, social and managerial sustainability, this system will be obliged to regularly publish reports that will include two groups of sustainability information, those that are important for understanding the effects of this system on sustainability issues and those that are relevant for understanding the impact of sustainability issues in the environment on business results, market position and development of entities in the system.

In the atmosphere of an increasingly pronounced global socio-ecological crisis and the necessity of a transition towards sustainability in all aspects, it is expected that the number of interested users of information on sustainability will grow with a tendency to further increase. The main users of sustainability information are two primary user groups: investors and civil society actors, including non-governmental organizations and social partners (trade unions, workers' representatives). Investors such as credit institutions and insurance companies will be able, based on corporate information on sustainability, to better understand the risks and opportunities for their investments and the impact of these investments on people and the environment, and non-governmental organizations, social partners and all other stakeholders will gain better insight and the possibility of influencing the strengthening of corporate responsibility in terms of their effects on the sustainability of the environment and society.[24] Information on sustainability will be increasingly useful for other social actors who demand greater responsibility of companies for the harmful effects of their operations on human health, environmental quality and the well-being of society - aware citizens as consumers and savers, supervisory state agencies, competent ministries, etc. For example, the reports

[24] The importance of sustainability information for investors and asset managers is also evident from the fact that many of them already purchase sustainability information from third-party data providers, who also collect information from public company reports. With the implementation of the CSRD, the practices of third-party information providers are expected to improve and expertise in the field will increase, providing a good incentive for job creation. Investors' interest in sustainable investments is also growing because such investments reduce their return risks and increase returns on invested capital. Compared to the period twenty years ago, today such investment has increased tenfold, and it is expected that it will increase to 33.9 trillion dollars or more by 2026. HANFA, *Od 2024. tvrtke u svoje izvještaje moraju uključiti i dio o održivosti*, Business outlook 22/23, Jutarnji list, 2022, p. 51.

will be used by citizens who want to consider the opinions of financial advisors and non-governmental organizations about the sustainability of their investments or choose products whose production and consumption do not harm nature or human rights. Holders of public policies and bodies for environmental protection and social cohesion at the European and national levels, as well as certain parts of society (e.g. the scientific and business community) will use the reports to monitor ecological, economic and social trends and include the data obtained in the processes of shaping various public policies. Of course, private and public companies, regardless of the sector or branch in which they operate, can expect growing benefits from ESG reporting and practices: raising the level of awareness of their own risks and opportunities related to climate change and other environmental problems and the degree of responsibility towards nature, employees, other entrepreneurs and the community, productivity and income growth, reduction of business costs, optimization of investment and capital expenditures and minimization of regulatory and legal intervention.[25] ESG reports will expand the social dialogue with new actors within the community, raise the reputation of companies and improve their perception, which will no longer be dominantly based on realized profit, but will also reflect the company's contribution to the sustainability of the economy, nature and society. With more extensive, structured, verifiable and accessible reports, companies will prove that they have directed their business towards green and digital and that they do not have a harmful impact on the environment, social cohesion and people's health. Therefore, standardized and quantified reporting on sustainability will speed up the resolution of environmental and social problems that threaten the achievement of sustainable goals from the Paris Agreement, the EGD and the Action Plan on financing sustainable growth and contribute to a more efficient functioning of the social market economy.[26]

---

[25] Directive (EU) 2022/2464 of the European parliament and of the Council of 14 December 2022 amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting (OJ L 322, 16.12.2022), p. 3, Štriga, T., *Novi regulatorni okvir – Nema više manipulacija i zamagljivanja stvarnosti*, Business outlook 22/23, Jutarnji list, 2022, p. 52.

[26] Today, non-governmental organizations, social partners, communities affected by the activities of companies and other stakeholders are insufficiently able to influence the transformation of unsustainable business policies of companies, and therefore the trust of citizens in companies and the functioning of the social-market economy is not at a satisfactory level. The earlier lack of generally accepted parameters and thresholds for measuring, evaluating and managing sustainability-related risks not only represented an obstacle to the efforts of companies to ensure the sustainability of their business models and activities, but also limited the ability of all social actors to enter into a dialogue with companies regarding sustainability issues. Directive (EU) 2022/2464 of the European parliament and of the Council of 14 December 2022 amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting (OJ L 322, 16.12.2022, p. 17-18).

Although companies that previously published sustainability reports had associated costs, the new reporting standards are likely to create additional administrative, personnel and other costs for them, particularly burdensome for medium and small businesses. This could lead to an increase in their production costs and product prices, and consequently to a decrease in market competitiveness in the global framework. In order to prevent the growth of reporting costs and the dissatisfaction of companies, the technical assistance of national professional institutions will be very important, as well as the financial participation of national states in the costs of preparing the report, at least in the first years of application of the Directive.[27]

Exposure to a complex network of regulations that regulate sustainability reporting, as well as the gradual elaboration of ESG information standards and their application, which will depend on different categories of companies, will be a another challenge for companies. When adopting ESG standards, it is possible that companies will encounter difficulties in gathering relevant information from actors throughout their value chain, especially from suppliers belonging to the category of small and medium enterprises and suppliers in emerging markets and economies. In the development of reporting rules and standards, care should also be taken to clarify the still insufficiently clear connection between information on sustainability and components in the annual financial reports of companies. Implementation of CSRD will be particularly challenging due to the still insufficiently clearly developed relationship between the aspects of double materiality, i.e. between the effects of the company's activities on people and the environment and the impact of sustainability issues on the company. With all of the above, it would be very useful for companies to have more detailed information on sanctions for not publishing sustainability reports.

---

[27] The total estimated costs of the option that is more useful for the reporting parties (less detailed reporting requirements, lighter verification requirement and narrower scope) are EUR 1,200 million in one-off costs and EUR 3,600 million in annual reporting costs. The costs could be even higher without the expected new standards and reporting rules, for example the costs of uncoordinated user requests for additional information, the costs caused by the lack of consensus on indicator standards, those that would arise due to the difficulty of obtaining sustainability information from suppliers, clients and companies in which is invested, etc. The future practice of submitting sustainability reports with the application of coherent rules and uniform information standards could bring annual savings of 24,200 to 41,700 EUR per company. This is a total saving of between 280 and 490 million EUR per year for current CSRD taxpayers, or between 1,200 and 2,000 million EUR per year if the standards completely eliminate the need for additional requests for information sent to reporters. European Commission, Proposal for a Directive of the European Parliament and the Council amending Directive 2013/34/EU, Directive 2004/109/EC, Directive 2006/43/EC and Regulation (EU) no. 537/2014 regarding corporate sustainability reporting, 2021, [https://eur-lex.europa.eu/legal-content/HR/TXT/PDF/?uri=CELEX:52021PC0189&from=EN], Accessed 12 February 2023, p. 10-11.

Furthermore, in the process of verifying sustainability reports by authorized auditors or audit firms, there is a risk of further concentration of the audit market, "which could threaten the independence of auditors and increase audit fees or fees related to the verification of sustainability reporting."[28] Therefore, the Commission will need to continuously work to create a more open and diverse trans-European audit market, for example through the inclusion in the verification of authorized, independent and theoretically and practically qualified auditors in the field of sustainability who do not audit the financial reports of companies.

5. CONCLUDING CONSIDERATIONS

As a global leader in the regulation and standardization of the reporting process in all dimensions of sustainability, the Union adopted the CSRD in November 2022 with the aim of filling the undoubtedly identified gaps in the previously existing European sustainability reporting rules and standards. The creation and adoption of CSRD was preceded by expert analyzes and political consultations, on the basis of which the Commission concluded that the common European framework for sustainability reporting needs to be strengthened, standardized in more detail and applied to a wider range of business entities. Mandatory reports will include relevant, quantified, comparable and verifiable data on sustainability in all aspects, and will be divided according to dual materiality - "inside out" and "outside in". The professional and technical development of new sets of standards has been entrusted to EFRAG and other related European and international bodies and organizations, and the first set of ESG standards should be completed and adopted by mid-2023, and the additional pillar by mid-2024. Since they differ from each other according to the ecological and social footprint they leave, the new normative solutions of rules and reporting standards adapt to companies of different sizes, sectors and branches of business and thus facilitate the comparison of ESG information and increase the relevance of ESG ranking of companies.

The changes that the application of the Directive should bring to around 50,000 European and non-European companies and groups would accelerate and strengthen the processes of transformation of the European economy and society towards sustainability in all ESG aspects. Positive changes resulting from standardized, comparable and verifiable sustainability reports will take place primarily in the companies themselves, which will implement more sustainable business policies and financial risk management, discover new business opportunities, reduce costs

[28] Directive (EU) 2022/2464 of the European parliament and of the Council of 14 December 2022 amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting (OJ L 322, 16.12.2022), p. 34-38.

and increase revenues, facilitate access to commodity and capital markets, minimize regulatory and legal interventions, and increase business transparency and reputation in the public. Information on sustainability from company reports will be extremely useful for shaping the attitudes and policies of non-governmental associations, trade unions, citizens as consumers and investors, supervisory national and Union agencies, national ministries responsible for sustainable development, public policy holders at the European and national levels, etc. The application of the Directive will have a particularly significant impact on institutional public and private investors and insurers because, based on sustainability reports, they will effectively reduce their exposure to irresponsible companies and business groups, and strongly redirect capital flows towards sustainable investments and highly ESG-ranked business entities. According to the prevailing opinion, the financial industry should play a key role in achieving the goals of European sustainable development, and it will fulfill it through a deeper understanding of sustainable business opportunities associated with their investments as well as harmful consequences for the sustainability of the environment and society.

Challenges in the application of CSRD that could slow down the process of transformation to a sustainable European economy and society are: possible additional financial and personnel costs of business related to the collection of informations and preparation of reports, resistance from the business sector in the event of an assessment of falling profit rates and a decrease in global competitiveness, continuous changes in information standards and auditing standards, an insufficiently elaborated relationship between financial and sustainability reports, an underdeveloped network of auditors, as well as an unclear regime of sanctions in case of publication of low-quality reports or non-publication of reports.

The interest in standardized, relevant, comparable and verifiable reporting on all aspects of sustainability within the business sector at the global level is increasingly pronounced and results in more widespread and tighter legal regulation. This is a reaction to the fact that the concept of sustainable development is recognized today as the only development model that simultaneously ensures economic growth, preservation and protection of nature, and social justice. In the context of an increasingly pronounced socio-ecological crisis, ESG reports are expected to be one of the fundamental instruments in the future for building a higher level of environmental and social awareness, for a deeper understanding of the risks and opportunities associated with climate and other environmental and social problems, and for taking measures and policy to accelerate sustainable development within the business sector and the wider community. All other economic, financial, political, activist and other initiatives for the realization of the goals of sustainable development outlined in the Paris Climate Agreement, the UN Agen-

da for Sustainable Development 2030, the European Green Deal, the EU Action Plan for Financing Sustainable Growth, the Disclosure Regulation and Taxonomy Regulation would be significantly less effective without the existence of a comprehensive, standardized and solid framework for ESG reporting by business entities.

The analysis carried out showed that the short period of application of the Directive prevents a more thorough understanding and evaluation of its potentially positive effects on the expansion and strengthening of sustainable business projects and the acceleration of the transition to more sustainable business policies of companies, more thorough respect for basic human rights and the rights of nature. Therefore, it is necessary to continuously conduct analyzes and evaluations of the positive effects of the Directive, as well as the challenges that will arise on the way to its application, especially since the rules and standards of reporting will be changed and supplemented through new delegated acts of the Union. A more grounded and relevant assessment of the positive contributions of the Directive to the sustainable development of the EU economy and society and the obstacles on the way to the realization of the Directive's goals will be possible only after the completion and adoption of the ESG information standards on sustainability and the first audits and analyzes of the submitted sustainability reports.

REFERENCES

BOOK AND ARTICLES

1. Baumüller, J.; Grbenic, S., *Moving from non-financial to sustainability reporting: analyzing the EU Commission's proposal for a Corporate Sustainability Reporting Directive (CSRD)*, Facta Universitatis, Series: Economics and Organization, 18(4), 2021, [https://doi.org/10.22190/FUEO210817026B], Accessed 22 February 2023
2. de Villiers, Ch.; La Torre, M.; Molinari, M., *The Global Reporting Initiative's (GRI) Past, Present and Future: Critical reflections and a research agenda on sustainability reporting (standard-setting)*, Pacific Accounting Review, forthcoming., 2022, [https://doi.org/10.1108/PAR-02-2022-0034], Accessed 5 March 2023
3. Hummel, K.; Jobst, D., *The Current State of Corporate Sustainability Reporting Regulation in the European Union*, SSRN, 2022, [https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3978478], Accessed 10 March 2023 p. 3-1
4. Odobaša, R., *Refleksije Europskog zelenog plana i strategije „Od polja do stola" na nacionalne strateške planove održivog razvoja poljoprivredno-prehrambenog sektora i ruralnih prostora – primjer Republike Hrvatske*, in: Duić, D.; Ćemalović, U., Zakonodavstvo zaštite okoliša i održivi ekonomski razvoj u EU, Osijek, 2022, Pravni fakultet Osijek, pp. 26-60
5. Opferkuch, K, *et al., Circular economy in corporate sustainability reporting: A review of organisational approaches*, Business Strategy and the Environment, 2021, p. 4017-4018, [https://doi.org/10.1002/bse.2854], Accessed 3 March 2023

6. Štriga, T., *Novi regulatorni okvir – Nema više manipulacija i zamagljivanja stvarnosti*, Business outlook 22/23, Jutarnji list, 2022., pp. 50-52
7. Žigman, A., *Raste svijest o koristi ESG izvještavanja*, Business outlook 22/23, Jutarnji list, 2022., p. 22

EU LAW

1. Directive 2014/95/EU of the European Parliament and of the Council of 22 October 2014 amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups (OJ L 330, 15.11.2014, p. 1–9)
2. Directive (EU) 2022/2464 of the European parliament and of the Council of 14 December 2022 amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting (OJ L 322, 16.12.2022, p. 19–21)
3. Communication from the Commission — Guidelines on non-financial reporting (methodology for reporting non-financial information) (OJ C 215, 5.7.2017, p. 1–20)
4. Communication from the Commission — Guidelines on non-financial reporting: Supplement on reporting climate-related information (OJ C 209, 20.6.2019, p. 1–30)
5. Communication from the Commisssion to the Parliament, the European Council, the Council, the European Central bank, the European economic and social commitee and the Communtee of the Regions, Action Plan: Financing Sustainable Growth (COM/2018/097)
6. Europska komisija, Komunikacija Komisije Europskom parlamentu, Europskom vijeću, Vijeću, Europskom gospodarskom i socijalnom odboru i odboru regija – Europski zeleni plan, 2019, str. 17, [https://eur-lex.europa.eu/legal-content/HR/ALL/?uri=CELEX:52019DC0640], Accessed 14 November 2022
7. Europska komisija, Prijedlog Direktive Europskog parlamenta i Vijeća o izmjeni Direktive 2013/34/EU, Direktive 2004/109/EZ, Direktive 2006/43/EZ i Uredbe (EU) br. 537/2014 u pogledu korporativnog izvještavanja o održivosti, 2021, [https://eur-lex.europa.eu/legal-content/HR/TXT/PDF/?uri=CELEX:52021PC0189&from=EN], Accessed 14 March 2023
8. Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on sustainability-related disclosures in the financial services sector (OJ L 317, 9.12.2019, p. 1–16)
9. Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (OJ L 198, 22.6.2020, p. 13–43

WEB REFERENCES

1. Greenly.resources, *What is the Sustainable Finance Disclosure Regulation (SFDR)?*, 2023, [https://greenly.earth/en-us/blog/company-guide/what-is-the-sustainable-finance-disclosure-regulation-sfdr], Accessed 15 March 2023
2. HANFA, *Hanfa donijela Smjernice za nefinancijsko izvještavanje poduzeća prema okolišnim, upravljačkim i društvenim (ESG) ciljevima*, 2021, [https://www.hanfa.hr/vijesti/hanfa-

donijela-smjernice-za-nefinancijsko-izvje%C5%A1tavanje-poduze%C4%87a-prema-okoli%C5%A1nim-upravlja%C4%8Dkim-i-dru%C5%A1tvenim-esg-ciljevima/#], Accessed 25 January 2023

3. HANFA, *Od 2024. tvrtke u svoje izvještaje moraju uključiti i dio o održivosti*, Business outlook 22/23, Jutarnji list, 2022., str. 51
4. Switch2green, *The EU Action Plan on Financing Sustainable Growth*, [https://www.switchtogreen.eu/the-eu-action-plan-on-financing-sustainable-growth/], Accessed 20 March 2023

UDK 330.342(497.5):502.131.1
Review article

THE FINANCIAL AND SOCIAL IMPACTS OF THE APPROVED PROJECTS IN THE AREA OF DIGITAL AND GREEN TRANSITION ON THE CROATIAN SMES

Dražen Ćućić, PhD, Associate Professor
Josip Juraj Strossmayer University of Osijek, Faculty of Economics and Business in Osijek
Trg Ljudevita Gaja 7, Osijek, Croatia
drazen.cucic@efos.hr

Mladen Pancić, PhD, Associate Professor
Josip Juraj Strossmayer University of Osijek, Faculty of Economics and Business in Osijek
Trg Ljudevita Gaja 7, Osijek, Croatia
mladen.pancic@efos.hr

Hrvoje Serdarušić, PhD, Assistant Professor
Josip Juraj Strossmayer University of Osijek, Faculty of Economics and Business in Osijek
Trg Ljudevita Gaja 7, Osijek, Croatia
hrvoje.serdarusic@efos.hr

ABSTRACT

On our way of living and doing business digital technologies have a profound impact. The research and innovation strategy is crucial to a more productive, sustainable and green economy. Digital solutions that put people first will open up new opportunities for businesses, encourage the development of trustworthy technology, foster an open and democratic society, enable a vibrant and sustainable economy, help fight climate change and achieve the green transition.

The aim of this paper is to research the literature about digital and green transition, hers financial and social impacts on Croatian economy across of the approved projects (for the period 2019 – 2023) to the Croatian micro, small and medium entrepreneurs. Based on these results, the author(s) will contribute to the new knowledge about the green and digital transition and offer recommendations for a sustainable green and digital transition in Croatian and potential finance benefits on Croatian economy.

For the purposes of this work, the author(s) used secondary data, analyzing them using the following methods: descriptive research methods, deductive research methods, analysis methods and compilation methods. Obtained results are visible in the number of approved projects proposal and the total value of the projects. The impacts of project proposals on strengthening the sustainability and competitiveness of project holders and their partners is manifested through the number of newly introduced technological solutions related to green and/or digital goals in the year m+2, the projection of the newly employed persons as a result of the implementation of project activities in the year m+2, projected increase in sales revenue in year m+2, predicted increase in exports revenues in the year m+2. On the basis of research of literature and previously conducted secondary data research, the author(s) provide recommendations for the further sustainability of the digital and green transition in micro, small and medium-sized enterprises in Croatia.

***Keywords**: economic growth, green and digital transition, micro, small and medium size entrepreneurs*

1. INTRODUCTORY CONSIDERATIONS

The paper is structured through 5 chapters, three sub-chapters and literature review.

First chapter was structured by the author(s) through three sub-chapters. The first sub-chapter relates to the Research subject, in which the author(s) introduce readers to the genesis of the green transition assessment and the transformation of the analog to the digital economy.

The focus of this research is on SMEs.[1] Namely, SMEs are the engine of Europe's economy. Therefore, a quick and efficient transformation of them is necessary, all with the aim of reducing negative impacts on the environment and mitigating climate change in accordance with Europe an Green Deal,[2] Sustainable Europe to 2030.[3] Low-carbon development strategy of the Republic of Croatia until 2030 with a view to 2050,[4] National development strategy of the Republic of Croatia until 2030.[5]

---

1 Accounting Law (Zakon o računovodstvu), Official Gazette No. 78/15, 134/15, 120/16, 116/18, 42/20, 47/20, 114/22.

2 European Commission, Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions, The European Green Deal COM/2019/640 Final, available at: [https://eurlex.europa.eu/legalcontent/EN/TXT/?qid=1588580774040&uri=CELEX-%3A52019DC0640], Accessed 04 May 2023.

3 European Commission, Towards a Sustainable Europe by 2030, available at: [https://commission.europa.eu/system/files/2019-02/rp_sustainable_europe_30-01_en_web.pdf], Accessed 03 May 2023.

4 Low-carbon development strategy of the Republic of Croatia until 2030 with a view to 2050 (Strategija niskouglјičnog razvoja Republike Hrvatske do 2030. s pogledom na 2050. godinu), Official Gazette No. 63/21.

5 National development strategy of the Republic of Croatia until 2030 (Nacionalna strategija razvoja Republike Hrvatske do 2030.godine) Official Gazette No. 13/21.

The second sub-chapter relates to the Research goals, in which the author(s) introduce readers to the main goals of this paper. First goal is to introduce the readers about the sustainable theory and hers effects on environment. The second goal is main goal, during that goal author(s) analyze the financial and social impact of approved projects to the Croatian SMEs projects holders based on the following indicators: the rate of utilization of co-financing of project activities and the number of newly introduced technological solutions related to green and/or digital goals in the year m+2, the projection of the newly employed persons in the year m+2, projected increase in sales revenue in year m+2, predicted increase in exports revenues in the year m+2.

Based on these results, the author(s) will contribute to the new knowledge about the green and digital transition and offer recommendations for a sustainable green and digital transition in Croatian SMEs. Author(s) recommendations will also be applicable to consumers in the public sector.

The third sub-chapter relates to the Research methodology. For the purpose of this paper author(s) were analyzed 274 approved projects proposal to the Croatian SMEs projects holders. They analyzed the collected data according to the following indicators: number of newly introduced technological solutions related to green and/or digital goals in the year m+2, the projection of the newly employed persons in the year m+2, projected increase in sales revenue in year m+2, predicted increase in exports revenues in the year m+2. For the purpose of this paper author(s) were used the following methods: descriptive research methods, deductive research methods, analysis methods and compilation methods.

The second chapter refers to Existing knowledge and hypothesis.

One of the central priorities of the European Commission is to make sure that people and businesses can take full advantage of the new opportunities that this green trans and digital revolution offers. The European Commission invests significant efforts in the form of drafting strategic documents, engaging human resources, and financial resources in the green and digital transition. Following guidelines and recommendations of the European Commission, membership countries in cooperation with contractual bodies, and within the framework of the program periods, announce public calls in the specified areas for the SMEs.

The current linear economic model is unsustainable, and the necessity of introducing innovative sustainable business models is the priority of the current generation. For the purpose of more effective introduction of innovative sustainable models in EU SMEs, European Commission create a several key strategic documents for the implementation of the green and digital transition until 2050.

Under this chapter author(s) form 1 main and 2 auxiliary hypotheses.

The third chapter is structured through three sub-chapters. First sub-chapter refers to the challenges of the green and digital transition of Croatian society and economy. In this sub-chapter the author(s) provide an overview of strategic goals: SG 8. Ecological and energy transition for climate neutrality and his performance index (Greenhouse gas emission, Municipal waste recycling rate, Share of renewable energy sources in gross total energy consumption), SG 9. Self-sufficiency in agriculture and the development of the bio-economy and his performance index (Labor productivity in agriculture), SG 10. Sustainable mobility and his performance index (Global Competitiveness Index (GCI), Infrastructure component), SC 11. Digital transition of society and economy and his performance index (DESI index of economic and social digitization) and Development directions (Sustainable economy and society, Strengthening resistance to crisis, Green and digital transition, Balanced regional development).

Second sub-chapter refers to the analysis of the digital transition of Croatian society and economy from 2019 to 2023. In this sub-chapter author(s) provide some statistical data on the position of Croatia in the category Integration of digital technology, position of Croatian SMEs in level of digital intensity, percentage of using e-innovice etc.

Third sub-chapter refers to the analysis of financial and social impacts approved projects in the area of digitization and green transformation on the Croatian SMEs. In this sub-chapter author(s) provide the main financial and social indicators that affected and still affect on Croatian SMEs. The subject of analysis were: Number of approved projects Total value of projects (in euros) Amount of grants (in euros) in sector of Manufacturing on the sample of 274 SMEs. They also analyzed these parameters: Number of newly introduced technological solutions related to green and/or digital goals, Increased income from exports (in euros), Increased sales revenue (in euros) and Employment growth (estimated number of new employees as a direct consequence of project implementation).

The fourth chapter refers to the Conclusion remarks. Author(s) are convinced that SMEs are important for green growth as key drivers of eco-innovation and key players in new green industries. In this chapter author(s) define key limitations in this research and pose several research questions. Further, in this chapter author(s) test the main and auxiliary hypotheses, gave a detailed overview of the scientific contribution of this paper and recommendations for Croatian SMEs and other stakeholders who are directly or indirectly related to the green and digital transition.

Last chapter in this paper is References.

1.1. Research subject

In this paper the subject of research are Croatian SMEs projects holder, in the area of green and digital transition, and the direct and indirect impacts of approved projects on the applicant's financial and social component. The total number of active SMEs (according to NKD 2007)[6] in Croatia 2023 was 177,582[7] with 178,892[8] employs. For the purpose of this research author(s) analyze sector C (Manufacturing). In 2023 in Croatia was 23,772[9] active SMEs in that sector. The author(s) analyzed the data on a sample of 274 active SMEs.

1.2. Research goals

The aim of this paper is to research the literature about digital and green transformation, hers financial and social impacts on Croatian economy across of the approved projects (for the period 2019 – 2023) to the Croatian SMEs.

Based on these results, the author(s) will contribute to the new knowledge about the green and digital transition and offer recommendations for a sustainable green and digital transition in Croatian SMEs. Author(s) recommendations can also be consumed in the public sector.

1.3. Research methodology

For the purposes of this work, the author(s) used secondary data. Secondary data are collected by the author(s) in cooperation with the Ministry of Economy and Sustainable Development[10] and Croatian Agency for Small Business, innovations

---

6 Decision on the National Classification of Activities 2007 - NKD 2007 (Odluka o Nacionalnoj klasifikaciji djelatnosti 2007. - NKD 2007.), Official Gazette No. 58/07.

7 Bureau of Statistics, Broj i struktura poslovnih subjekata u ožujku 2023, pp. 1-8, available at: [https://podaci.dzs.hr/2023/hr/58271], Accessed 3 May 2023.

8 *Ibid.*

9 *Ibid.*

10 Ministry of Economy and Sustainable Development, Jačanje konkurentnosti poduzeća ulaganjima u digitalnu i zelenu tranziciju, Referentna oznaka: KK.11.1.1.01., available at: [https://mingor.gov.hr/jacanje-konkurentnosti-poduzeca-ulaganjima-u-digitalnu-i-zelenu-tranziciju-referentna-oznaka-kk-11-1-1-01/8188], accessed 4 May 2023.; *Ibid.*, Jačanje održivosti te poticanje zelene i digitalne tranzicije poduzetnika u sektoru turizma, available at: [https://mint.gov.hr/javni-pozivi-i-natjecaji-22753/jacanje-odrzivosti-te-poticanje-zelene-i-digitalne-tranzicije-poduzetnika-u-sektoru-turizma/23234], accessed 4 May 2023.; *Ibid.*, Poboljšanje konkurentnosti i učinkovitosti MSP-a kroz informacijske i komunikacijske tehnologije (IKT) – 2, Referentna oznaka: KK.03.2.1.19., available at:

and investments[11] (HAMAG BICRO) through a written request for access to information and publicly available data on the web site of contracting authority. The author(s) were used the following methods for data analysis: descriptive research methods, deductive research methods, analysis methods and compilation methods. Obtained results are visible in the number of approved projects proposal and the total value of the projects.

2. LITERATURE REVIEW AND HYPOTHESIS CREATION

Digital technology is changing our lives, she revolutionized almost every aspect of our daily life, from basic shopping, through banking, to security, education and the way we work.[12] One of the central priorities of the European Commission is to make sure that people and businesses can take full advantage of the new opportunities that this digital revolution offers – in other words, building a Europe fit for the digital age.[13] Commission priorities for 2019-2024 are: European Green Deal, Europe fit for the digital age, Economy that works for people, stronger Europe in the world, Promoting our European way of life, New push for European democracy.[14] In this paper author(s) are primarily focus on first and second priority.

The EU's digital strategy aims to make this transformation work for people and businesses, while helping to achieve its target of a climate-neutral Europe by 2050.[15]

Sustainability transition and digitization constitute cornerstones of the European policy agenda prioritizing the digital transformation, especially of the SMEs.[16]

[https://mingor.gov.hr/poboljsanje-konkurentnosti-i-ucinkovitosti-msp-a-kroz-informacijske-i-komunikacijske-tehnologije-ikt-2-referentna-oznaka-kk-03-2-1-19-15-studenog-2018/7664], Accessed 4 May 2023.

11 Croatian Agency for SMEs, Innovations and Investments - HAMAG-BICRO, available at: [https://hamagbicro.hr/], Accessed 4 May 2023.

12 European Commission, Analogue to digital - and back, available at: [https://culture.ec.europa.eu/hr/creative-europe/projects/priorities-2019-2024/digital-europe], Accessed 4 May 2023.

13 European Commission, A Europe fit for the digital age, available at: [https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age_en], Accessed 4 May 2023.

14 *Ibid.*

15 *Ibid.*

16 European Commission, Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions, The European Green Deal COM/2019/640 Final, available at: [https://eurlex.europa.eu/legalcontent/EN/TXT/?qid=1588580774040&uri=CELEX-%3A52019DC0640], Accessed 4 May 2023.

Specifically, the digital transformation through the Digital Europe Programme brings digital technology to businesses.[17]

The EU's long-term budget, coupled with NextGenerationEU (NGEU), the temporary instrument designed to boost the recovery, form the largest stimulus package ever financed in Europe.[18] The EU wants to step up investment in areas such as research and innovation, digital transformation, strategic infrastructure and the single market, as they will be key to unlocking future growth. Programmes under this heading will help tackle shared challenges such as decarbonation and demographic change, and boost the competitiveness of enterprises, including small and medium-sized companies.[19]

Over the almost last two decade, a frequent claim has been that the linear economic models need to be reformed in order to address climate change and at the same time daily key economic and social challenges. The current linear economic model takes energy or materials, transforms them into goods or services, and then passes them to businesses or consumers who use them. The outcome is financial gain for the agents involved, but the original resources disappear and waste is generated as a by product. Take-make-waste is not a sustainable model because economic growth is outpacing available resources while the constant depletion of non-renewable energy sources leads to natural, economic and social breakdown.[20]

Aware of the unsustainability of the linear model, the European Union and its members, together with the supporting bodies (European Parliament, Council of the European Union of the EU, European Commission) created the strategic document European Green Deal.

The Green Plan is an integral part of the Commission's strategy for the implementation of the United Nations Program to 2030 and the Sustainable development goals and other priorities. The European Commission will with the Green Plan

---

17 Chatzistamoulou, N., *Is digital transformation the Deus ex Machina towards sustainability transition of the European SMEs?*, Ecological Economics, Volume 206, 2023, available at: [https://www.sciencedirect.com/journal/ecological-economics], Accessed 4 May 2023.

18 European Commission, Recovery plan for Europe, available at: [https://commission.europa.eu/strategy-and-policy/recovery-plan-europe_en], Accessed 4 May 2023.

19 Publication Office of the European Union, The EU's 2021-2027 long-term budget and NextGenerationEU, available at: [https://op.europa.eu/en/publication-detail/-/publication/d3e77637-a963-11eb-9585-01aa75ed71a1], Accessed 4 May 2023.

20 Net impact, Trash the Take-Make-Waste Model of Industry and Embrace the Regenerative Economy, available at: [https://netimpact.org/blog/Regenerative-Economy-Model], Accessed 4 May 2023.

redirect the macroeconomic coordination process within the European Semester[21] to integrate the United Nations Sustainable Development Goals[22] and placed the sustainability and well-being of citizens at the heart of economic policy and sustainable development goals at the heart of EU policy-making and action.[23]

The first reasonable definition of the "Green New Deal" was the idea that with "green" (clean and sustainable) technologies and products, a thorough structural change of the global economy that could prevent dangerous climate change and mitigate the consequences of climate change.[24]

The concept of the Green New Deal was formulated on the basis of a figurative rhetorical question: "Do we want to justify overcoming the crisis by reviving the existing 'brown' global economy, or do we want to promote global revitalization toward a 'green' economy that avoids ecological damage in the first place?".[25]

The European Climate Law[26] writes into law the goal set out in the European Green Deal for Europe's economy and society to become climate-neutral by 2050. The law also sets the intermediate target of reducing net greenhouse gas emissions by at least 55% by 2030, compared to 1990 levels.

SMEs are also important for green growth as key drivers of eco-innovation and key players in emerging green industries. Reducing the environmental impact of

---

21 Council of the EU and the European Council, How the European Semester works, available at: [https://www.consilium.europa.eu/en/policies/european-semester/how-european-semester-works/], Accessed 4 May 2023.

22 United Nations, What are the Sustainable Development Goals?, available at: [https://www.undp.org/sustainable-development-goals?gclid=CjwKCAjw9pGjBhB EiwAa5jl3EGm6dn4Rq_afbUuK8AJPLqn6GBkKg2KjABqJyMGaKYpV7aMSN_U-hoCJgAQAvD_Bw], Accessed 4 May 2023.

23 European Commission, The European Commission and the SDGs, available at: [https://s3platform.jrc.ec.europa.eu/documents/20125/585217/Carlos+Berrozpe+Garcia+2021+11+09+SDGs+and+VdL+Commission+INTPA.pdf/78cd18fe-af9c-5d64-85bc-9778fafa60a5?t=1636989890132], Accessed 4 May 2023.

24 Galvin, R.; Healy, N., *The Green New Deal in the United States: What it is and how to pay for it*, Energy Research & Social Science, Volume 67, 2020, available at: [https://www.sciencedirect.com/science/article/pii/S2214629620301067], Accessed 4 May 2023.

25 Barbier, E., *A Global Green New Deal: Rethinking the Economic Recovery*, Cambridge: Cambridge University Press, 2010, pp. 1-2.

26 European Commission, European Climate Law, available at: [https://climate.ec.europa.eu/eu-action/european-green-deal/european-climate-law_en], Accessed 4 May 2023.

SMEs through achieving and going beyond environmental compliance in both manufacturing and services is a key success factor in greening the economy.[27]

Understanding the opportunities and challenges of green/sustainable entrepreneurship is the key to finding new business solutions for this development. Sustainability and technological entrepreneurship are strongly interrelated, e.g., by using technology and innovation to create new products, services, and processes that address environmental and social sustainability challenges.[28] A significant body of scientific evidence shows how companies tackle climate change by implementing innovative and advanced technologies, including digitizing business processes. Companies are increasingly investing in renewable energy, energy efficiency, and carbon capture and storage technologies [8,9]. Additionally, companies are implementing innovative technologies such as electric vehicles, battery storage, and green buildings to reduce greenhouse gas emissions.[29]

Such being the case, author(s) form and test the following hypothesis:

H1: The financial intensity of the support of the reference call KK.11.1.1.01 granted to micro and small entrepreneurs was used for the maximum intensity of the call
H2: The financial intensity of the support of the reference call KK.11.1.1.01 granted to micro and medium entrepreneurs was used for the maximum intensity of the call

3. DIGITALIZATION AND GREEN TRANSFORMATION - CASE OF CROATIAN SMES

3.1. Challenges of digitalization and green transformation

Digital technologies surround us every day and have a profound impact on our way of life and business. A visionary research and innovation strategy is crucial for a sustainable, more productive and greener economy. The fight against climate change and the green transition can only be achieved with digital solutions and developing novel business models. Digital solutions will open up new opportuni-

---

27 Council of the EU and the European Council, Greening SMEs: Opportunities and challenges in EaP countries, available at: [https://consiliumeureka.primo.exlibrisgroup.com/discovery/fulldisplay?docid=cdi_oecd_books_10_1787_9789264293199_4_en&context=PC&vid=32CEU_INST:32CEU_VU1&lang=en&search_scope=MyInst_and_CI&adaptor=Primo%20Central], Accessed 4 May 2023.

28 Kekkonen, A.; Pesor, R.; Täks, M., Stepping towards the Green Transition: Challenges and Opportunities of Estonian Companies, Sustainability 2023, Vol. 15, No. 5., 4172, available at: [https://www.mdpi.com/2071-1050/15/5/4172], Accessed 4 May 2023.

29 *Ibid.*

ties for micro, small and medium-sized enterprises (SMEs),[30] encourage the development of reliable technology, encourage an open and sustainable economy.

SMEs are the engine of Europe's economy. They represent 99% of all businesses in the EU, account for more than half of Europe's GDP and employ around 100 million people. SMEs bring innovative solutions to challenges like climate change, circular economy, sustainability and resource efficiency resource, social cohesion and help spread this innovation throughout Europe's regions. They are key factor to the EU's twin transitions to a sustainable and digital economy. They are crucial to Europe's competitiveness and sustainability economic and technological sovereignty, industrial ecosystems and resilience to external challenges.

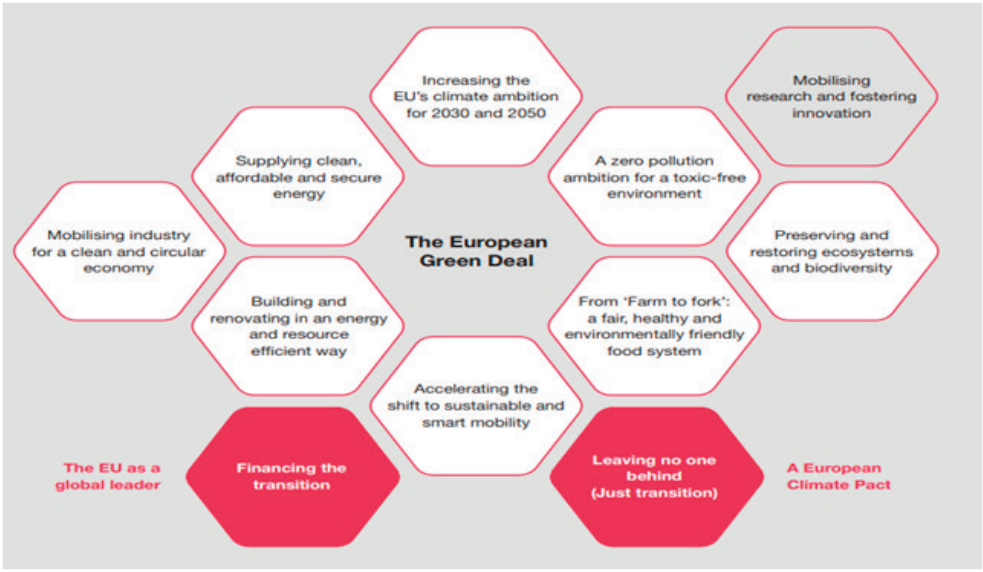
SMEs have the potential to become eco-innovators by enhancing their environmental performance through lean and green improvement measures.[31] Environmental and resource issues become a very challenging when we talk about of the sustainable theory and hers effects become very challenge for the sustainability of human community. In addition to humans, the main source of carbon pollution and environmental pollution are companies (micro, small, medium and large companies).

In order to implement the transformation of the economy for a sustainable future, Croatia, like other member states of the European Union, is implementing structural reforms directing its economy towards the fulfillment of all 9 strategic goals (for more details see Picture 1.).

[30] The Croatian Chamber of Economy - Centar za EU, Vodič za definiciju malog i srednjeg poduzetništva u natječajima za dodjelu sredstava iz fondova EU, p. 3., available at: [https://www.hgk.hr/documents/vodiczadefinicijumalogisrednjegpoduzetnistvaunatjecajimazadodjelusredstavaizfondovaeuhgkanaliza0120144457b5747dec0a7.pdf], accessed 5 April 2023.

[31] Dey, P.K.; Malesios, C.; Chowdhury, S.; Saha, K.; Budhwar, P.; De, D., *Adoption of Circular Economy Practices in Small and Medium-Sized Enterprises: Evidence from Europe*. Int. J. Prod. Econ., 2022, pp. 248.

Picture 1. Transforming the EU's economy for a sustainable future



Source: Author(s) processed and adapted to: PWC PwC EU, *Green Deal Survey. Are Europe's Businesses Ready for the EU Green Deal?,* pp. 3-22., available at:

[https://www.pwc.com/gx/en/tax/publications/assets/eu-green-deal-tax-report.pdf], accessed 5 April 2023.

According to the National Development Strategy of the Republic of Croatia until 2030, Croatia has defined four development directions (for the more details see Picture 2.), and the focus of this paper is Development direction 3. Green and digital transition and on Strategic Goals:

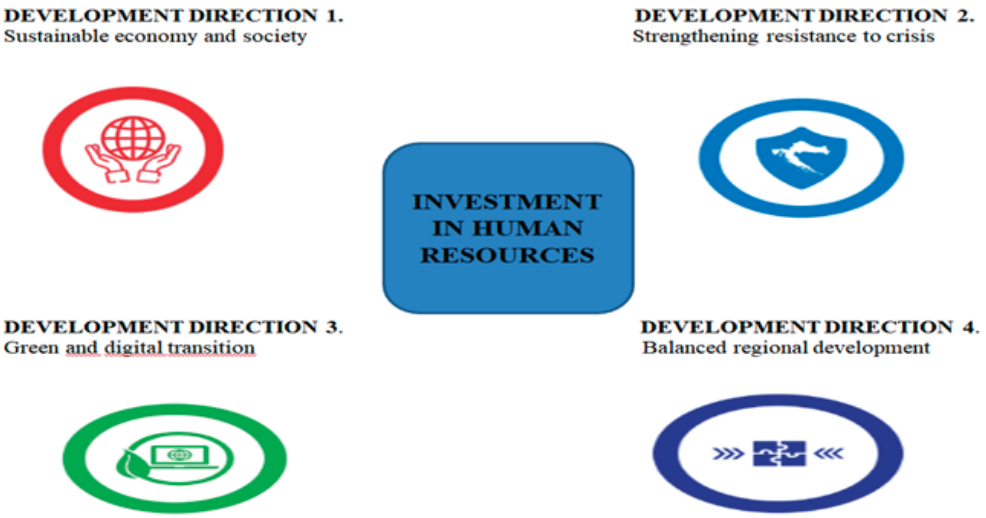
SG 8. Ecological and energy transition for climate neutrality

SG 9. Self-sufficiency in food and the development of the bio economy

SG 10. Sustainable mobility

SG 11. Digital transition of society and economy

Picture 2. Development directions - case of Croatia



Source: Author(s) processed and adapted to: National development strategy of the Republic of Croatia until 2030 (Nacionalna strategija razvoja Republike Hrvatske do 2030.godine) Official Gazette No. 13/23, available at:

[https://hrvatska2030.hr/#rs], Accessed 5 April 2023.

Creating a regulatory, investment and tax environment that stimulates technological development and innovation, investing in digital competences frameworks for citizens and increasing the number of experts in information and communication technologies, joint synergy of private and public, and by applying advanced technologies in public and market activities, Croatia in 2032 wants to be a country of digitally and economically competitive companies and digitized public administration with personalized public services.[32]

Strategy for Digital Croatia until 2032 defines the guidelines for achieving the targeted transformation of Croatia towards a green and digital way of life as prerequisites for future sustainable economic growth and social development.[33]

[32] Digital Croatia strategy for the period until 2032 (Strategija digitalne Hrvatske za razdoblje do 2032. godine), Official Gazette No. 13/23.

[33] *Ibid.*

Table 1. Development direction 3. Green and digital transformation

STRATEGIC GOAL OF NDS - 2030	PERFORMANCE INDICATORS	INITIAL VALUE	TARGET VALUE 2030	EU AVERAGE
SG 8. Ecological and energy transition for climate neutrality	Greenhouse gas emissions (base year 1990)	75,23% (2018)	65%	79,26% (2018)
	Municipal waste recycling rate	25,30% (2018)	55%	47,40% (2018)
	Share of renewable energy sources in gross total energy consumption	28,02% (2018)	36,40%	18,88% (2018)
SG 9. Self-sufficiency in agriculture and the development of the bio-economy	Labor productivity in agriculture	6.107 euro/GJR (2019)	10.000,00 euro/GJR*	20.120 euro/GJR (2019)
SG 10. Sustainable mobility	Global Competitiveness Index (GCI), Infrastructure component	32nd position	< 28th position	-
SC 11. Digital transition of society and economy	DESI index of economic and social digitization	47,60 (20th position in EU) (2020)	Reach the EU average	52,57% (2020)

GJR (eng. Annual Work Unit)

Source: Author(s) processed and adapted to: Digital Croatia strategy for the period until 2032 (Strategija digitalne Hrvatske za razdoblje do 2032. godine), Official Gazette No. 13/23.

According to the Table 1. Development direction 3. Green and digital transformation, Croatia strives to achieve Target value 2030 in Strategic goal of NDS 2030;[34] SG 8. Ecological and energy transition for climate neutrality and his performance index (Greenhouse gas emission, Municipal waste recycling rate, Share of renewable energy sources in gross total energy consumption), SG 9. Self-sufficiency in agriculture and the development of the bio-economy and his performance index (Labor productivity in agriculture), SG 10. Sustainable mobility and his performance index (Global Competitiveness Index (GCI), Infrastructure component), SC 11. Digital transition of society and economy and his performance index (DESI index of economic and social digitization).

In accordance with the above, we are aware of the impact of external factors such as the post-pandemic period, current climate changes, continuous negative impacts on the environment and human health, the turbulent environment for the work and business of legal entities, the war environment (Russia against Ukraine), the high rate of inflation, demographic policies and constant outflow of the working-age population, sustainable management of the green and digital transition in

[34] NDS is National Development Strategy 2030.

Croatia primarily requires comprehensive solutions, long-term planning, significant financial investments, and adequate human resources.

3.2. Analysis of the digital transition of the Croatian society and economy from 2019 to 2023

According to the latest available data regarding the Index of Economic and Social Digitization - DESI, which refers to the year 2022, the Republic of Croatia in the category "Integration of digital technology" was above the point average of EU countries, in the middle position on the list among EU countries (in 14th place out of 27 countries). Namely, DESI indicates that among Croatian SMEs, 50% of them have at least a basic level of digital intensity, which is slightly below the EU average of 55%. When it comes to the application of ICT for the purpose of environmental sustainability, 75% of Croatian companies record a medium/high intensity of green measures using ICT, which is significantly higher than the EU average (66%).[35]

Croatia records worsens results for the sub-objectives "Electronic sharing of information" (24%) and "Use of social networks for business purposes" (24%), which indicates a weaker acceptance of highly advanced and integrated IT solutions in the work of companies.[36]

Croatian companies take advantage of the opportunities offered by online commerce: 29% of SMEs sell online (above the EU average of 18%), while 13% of all small and medium-sized companies sell across borders, and 13% of turnover comes from the online sales segment. Advanced digital technologies are increasingly popular among Croatian SMEs, so 35% of them use cloud solutions, 43% use e-invoices, and 9% use disruptive technologies based on artificial intelligence (AI), according to which Croatia is above all three indicators of the EU average.[37]

According to the IMD (World Digital Competitiveness Rankings) for 2020, Croatia ranked 52nd out of 63 countries. According to the same source, Croatia lags behind other countries, especially in the field of international experience, employee training, the regulatory framework for the development and application of technology, and the ability of companies to quickly respond to opportunities and threats. In the "e-Invoices" subcategory, Croatia surpassed the EU average by 10.8% points in 2021, which was significantly influenced by the con tactless way

[35] Digital Croatia strategy for the period until 2032 (Strategija digitalne Hrvatske za razdoblje do 2032. godine), Official Gazette No. 13/23.

[36] *Ibid.*

[37] *Ibid.*

of doing business during the Covid-19 pandemic, as well as the beginning of the application of the Law on Electronic Invoicing in public procurement ("Narodne novine", number 94/18.).[38]

Also, very important economic factor in the further digitization of Croatian society is the strength of the national IT industry. Namely, the Croatian IT industry is continuously growing and, according to the latest available data, in 2019 it accounted for 4.48% of the national GDP, and in 2021 it contributed 5.8% to the total exports of the Republic of Croatia.[39]

3.3. Analysis of approved projects in the area of digitization and green transformation on the Croatian SMEs from 2019 to 2023

According to the calls KK.03.2.1.19 and KK.11.1.1.01 the projection of number of new jobs, sales revenue, export revenue in year m + 2 the projection of new jobs) through the KK.03.2.1.19 call is 2.631 new employees, while the projection through the KK.11.1.1.01 call is 2.105 new employees. The projection of realized revenues in the approved 1018 project proposals from the KK.03.2.1.19 call is 317,875,438.38 euros while the projection of realized revenues in the approved 596 project proposals from the KK.11.1.1.01 call is 303,448,150.19 euros. According to the call KK.11.1.1.01 projection of export revenu is 110,315,682.83 euros. Share of private contribution according to the KK.03.2.1.19 call is 42,497,141.88 euros and under the KK.11.1.1.01 call is 294,605,544 euros. The total value of grants Strengthening the competitiveness of companies by investing in digital and green transformation, KK.11.1.1.0 earmarked for this call for proposals is 132,569,125 euros, and we estimate that the investment cycle worth more than 427,174,669 euros will be completed with the beneficiaries funds. It follows that 0,13 cents of non repayable funds of this type of calls will increase the investment cycle by another 0,40 cents to the original value.[40]

The subject of this analysis are digital and green transition, hers financial and social impacts on Croatian economy across of the approved projects (for the period

---

38 *Ibid.*

39 *Ibid.*

40 Ćućić, D.; Pancić, M.; Zavišić, Ž., Green and digital transition in the function of growth and development of Croatia, Economic and Social Development, 88 th International Scientific Conference on Economic and Social Development – "Roadmap to NetZero Economies and Businesses", 2022, p. 400, available at: [https://www.esdconference.com/upload/book_of_proceedings/Book_of_Proceedings_esdDubai2022_Online.pdf], Accessed 4 May 2023.

2019 – 2023) to the Croatian SMEs. The analysis includes a data sample of 274[41] Croatian SMEs in the sector of Manufacturing that is co-financed under reference call KK.11.1.1.0 and is publicly available by Ministry of Economy and Sustainable Development.

The authors have expanded the available data in terms of the location of the headquarters of small and medium-sized enterprises, they have also divided them into categories of small and medium-sized enterprises and tried to show the geographical dispersion of cofinancing in terms of the category of entrepreneurs and NUTS2 or NUTS3 region.

A detailed presentation of the impacts is visible in Table 2., Table 3., Table 4., Table 5 and Table 6.

[41] Pursuant to the State aid award program for strengthening the competitiveness of companies through investments in digital and green transition from April 20, 2021 (CLASS: 910-04/21-01/98, UR NO: 517-
11-03-01-01-21-3) state grants were awarded to micro, small and medium enterprises in the form of grants through:
1) Regional investment grants referred to in Article 14 of Commission Regulation (EU) no. 651/2014
2) Aid for process innovation and business organization referred to in Article 29 of Commission Regulation (EU) no. 651/2014
3) Grants for training referred to in Article 31 of Commission Regulation (EU) no. 651/2014
4) Subsidies for advisory services for the benefit of SMEs referred to in Article 18 of Commission Regulation (EU) no. 651/2014
Pursuant to the Program for granting small-value grants to strengthen the competitiveness of companies through investments in digital and green transition from April 16, 2021 (CLASS: 910-04/21-01/110, UR NO:
517-11-03-01-01-21-1) small-value grants were awarded to SMEs in the form of grants as a supplement to private financing.
The subsidies were granted in accordance with the Regulation of the European Commission (EU) no. 1407/2013 of December 18, 2013 on the application of Articles 107 and 108 of the Treaty on the Functioning of the European Union to small aid values. Detalis on: Ministry of Economy and Sustainable Development, Jačanje konkurentnosti poduzeća ulaganjima u digitalnu i zelenu tranziciju, available at:
[https://strukturnifondovi.hr/natjecaji/jacanje-konkurentnosti-poduzeca-ulaganjima-u-digitalnu-i-zelenu-tranziciju/,Informacije-o-potpisanim-ugovorima-22.2.2022.pdf], Accessed 4 April 2023.

Table 2. Distribution of approved projects of small and medium-sized enterprises from the call (KK.11.1.1.01) by NUTS2 regions

NUTS2 Region	Micro and small enterprise	%	Medium enterprise	%	Total	%	$\lambda_{\text{micro and small}}$	λ_{medium}
	1	2	3	4	5	6	7(2-6)	8(4-6)
North Croatia	56	28.28	31	40.79	87	31.75	-3,47	9,04
City of Zagreb	53	26.77	16	21.05	69	25.18	1,59	-3,68
Panonian Croatia	52	26.26	15	19.74	67	24.45	1,81	-4,71
Adriatic Croatia	37	18.69	14	18.42	51	18.61	0,08	-0,19
Total	**198**	**100**	**76**	**100**	**274**	**100**	**0**	**0**

Source: Author(s) calculation

The regional distribution by the number of signed co-financing contracts (see Table 2), shows that most contracts were signed by entrepreneurs in North Croatia 87 (31.75%), followed by entrepreneurs in the City of Zagreb with 69 (25.18%), in Panonian Croatia 67 (24.45%) and entrepreneurs in Adriatic Croatia 51 (18.61%). Looking at the categories of entrepreneurs by the total number of approved projects, the results differ somewhat from the average. Thus, the absolute number of small entrepreneurs in the sample of 56 is highest in North Croatia. However, if we consider their relative ratio to the average of the region, we find a negative deviation of $\lambda_{\text{micro and small}}$ -3.47%. In all other regions, the share of the leader Panonian Croatia is relatively higher, $\lambda_{\text{micro and small}}$ +1.81%, followed by the City of Zagreb $\lambda_{\text{micro and small}}$ +1.59% and Adriatic Croatia $\lambda_{\text{micro and small}}$ +0.08%. Medium entrepreneurs by absolute number also follow the trend of the sample so that the North Croatia region has the most 87 of them (40.79%) and records the highest deviation in relation to the overall structure of the sample of λ_{medium} +9.04%, in the region of Adriatic Croatia the deviation is negligible λ_{medium} -0.19%, while all other regions record significant deviations from the relative average in the sample, City of Zagreb λ_{medium} -3.68% Panonian Croatia λ_{medium} -4.71%. Thus, we can conclude that the region of Adriatic Croatia is the most balanced when considering the relative shares and their deviations according to the number of SME entrepreneurs, followed by the City of Zagreb, Panonian Croatia and North Croatia.

Table 3. Distribution of total value in € of approved projects of small and medium-sized enterprises from the call (KK.11.1.1.01) by NUTS2 regions

NUTS2 Region	Micro and small enterprise	%	Medium enterprise	%	Total	%	$\lambda_{\text{micro and small}}$	λ_{medium}
	1	2	3	4	5	6	7(2-6)	8(4-6)
North Croatia	24.777.624	28,39	19.035.091	42,01	43.812.714	33,05	-4,65	8,96
City of Zagreb	24.046.518	27,56	11.728.205	25,89	35.774.723	26,99	0,57	-1,10
Panonian Croatia	20.803.457	23,84	8.686.223	19,17	29.489.680	22,24	1,60	-3,07
Adriatic Croatia	17.633.430	20,21	5.858.577	12,93	23.492.007	17,72	2,49	-4,79
Total	**87.261.028**	**100**	**45.308.097**	**100**	**132.569.125**	**100**	**0**	**0**

Source: Author(s) calculation

Looking at the total amount of co-financing achieved, €132,569,125 (see Table 3), one third was awarded to entrepreneurs in North Croatia: €43,812,714 (33.05%), €24,777,624 to micro and small enterprises $\lambda_{\text{micro and small}}$ -4.65% and €19,035,091 to medium enterprises λ_{medium} +8.96%, followed by the City of Zagreb €35,774,723 (26.99) €24,046,518 to micro and small enterprises $\lambda_{\text{micro and small}}$ +0.57% and 11,728,205 to medium enterprises λ_{medium} -1.1%. The value of support in Panonian Croatia is €29,489,680 (22.24%), with the following structure: €20,803,457 (27.56%) for micro and small enterprises $\lambda_{\text{micro and small}}$ +1.6% and €8,686,223 (19.17%) λ_{medium} -3.07. The lowest amount of co-financing in absolute terms was achieved in Adriatic Croatia with €23,492,007 (17.72). Micro and small enterprises accounted for € 17,633,430 (20.21%) $\lambda_{\text{micro and small}}$ +2.49% and € 5,858,577 for medium enterprises λ_{medium} -4.79%. Looking at the value, the most balanced region is the City of Zagreb, followed by Panonian Croatia, Adriatic Croatia and North Croatia.

The total value allocation in the call (KK.11.1.1.01) was € 151,304,002. According to the information on the concluded contracts Table 4, the approved co-financing amount was € 132,569,125, i.e. 87.62% of the total allocation, and € 18,734,877 (12.38%) of the planned funds from the call remained unused. Looking at the value of co-financing, € 87,261,028 (65.82%) was allocated to projects of small entrepreneurs and € 45,308,097 (34.18%) to projects of medium-sized entrepreneurs. Under this call for proposals, the co-financing of a total of 274 projects was approved, of which 198 (72.18%) of the total financed projects, worth € 256,404,407, were awarded to small entrepreneurs and 76 projects (27.82%), worth € 170,770,262, were awarded to medium-sized entrepreneurs.

According to the data the relative ratio of the average amount of realized subsidies in relation to the value of the project is 31.03% in the category of micro and small enterprises 34.03%, while for medium enterprises it is 26.53%.

Table 4. Approved SMEs projects proposal (in 2022 year - reference call KK.11.1.1.0)

Size of SMEs	Number of approved projects	%	Total value of projects (€)	%	Amount of grants (€) SL Average subvention level %	%
Micro and small enterprise	198	72.18	256,404,407	59.10	87,261,028 (34.03%)	65.82
Medium enterprise	76	27.82	170,770,262	40.90	45,308,097 (26.53%)	34.18
Grand Total	**274**	**100.00**	**427,174,669**	**100.00**	**132,569,125 (31.03%)**	**100.00**

Source: Author(s) calculated and adapted to: Ministry of Economy and Sustainable Development,, *Jačanje konkurentnosti poduzeća ulaganjima u digitalnu i zelenu tranziciju*, available at: [https://strukturnifondovi.hr/natjecaji/jacanje-konkurentnosti-poduzeca-ulaganjima-u-digitalnu-i-zelenu-tranziciju/, Informacije-o-potpisanim-ugovorima-22.2.2022.pdf], Accessed 4 May 2023.

According to the call KK.11.1.1.0, all SME entrepreneurs may receive grants in the following categories: Regional Grants, Support for Process Innovation and Business Organization, Support for Training, Grants for Consulting Services, and De Minimis aid. The maximum limit for co-financing micro and small enterprises was regional grants (45%), support for process innovation and business organization (50%), support for training, grants for advisory services (70%), and de minimis state aid (75%). The ceiling for co-financing of medium enterprises was regional grants (35%), support for process innovation and business organization (50%), support for training, grants for advisory services (70%), and de minimis aid (75%).

Grants to micro and small enterprises (see Tables 5 and 7) averaged €440,712 (median: €350,413) and regional grants averaged Avg. 362,788, median €270,192, Avg. 24,786, median €11.878 Support for process innovation and business organization, Avg. €10,552, median €763 Support for training, Avg. €17,863, median €13,936 Grants for advisory services and €24,722, median €16,176 in the de minimis aid category.

Medium-sized companies (see Tables 6 and 7) received an average of €596,159, median €573,190. The funding structure is as follows Support for regional grants, Avg. 482.240, median €395,753, mean €51,841, median €18,199 Support for process innovation and business organization, mean €14,802, median €1,818 Support for training, mean €20,456, median €17,851 Grants for consultancy services and €26,821, median €19,447 in the de minimis aid category.

Table 5. Data for small enterprises (in 2022 year - reference call KK.11.1.1.0)

NUTS 2 Region	NUTS 3 County	Total value of the project (€)	Grants awarded (€)	Regional grants (€)	Support for process innovation and business organization (€)	Support for training (€)	Grants for advisory services (€)	De minimis aid (€)
		SUM OF						
NORTH CROATIA	KOPRIVNICA-KRIŽEVCI	1.490.422	516.868	440.026	0	219	21.301	55.323
	KRAPINA-ZAGORJE	14.412.337	4.989.130	4.389.557	64.126	122.698	207.299	205.450
	MEĐIMURJE	17.077.701	6.136.518	5.447.269	165.422	64.915	176.654	282.259
	VARAŽDIN	4.867.763	1.749.520	1.415.377	85.265	52.447	95.793	100.638
	ZAGREB	33.202.067	11.385.588	9.479.100	692.226	360.322	334.291	519.648
CITY OF ZAGREB	THE CITY OF ZAGREB	73.925.318	24.046.518	18.990.743	2.199.508	544.187	1.140.653	1.171.428
PANONIAN CROATIA	BJELOVAR-BILOGORA	3.267.858	1.130.373	988.540	67.608	0	44.462	29.763
	BROD-POSAVINA	10.963.423	3.812.656	3.192.991	233.450	16.907	176.951	192.358
	KARLOVAC	9.291.506	2.723.956	2.377.154	26.942	102.913	101.837	115.110
	OSIJEK-BARANJA	9.913.641	3.570.820	2.837.797	97.222	154.580	146.311	334.910
	POŽEGA-SLAVONIA	4.892.434	1.689.329	1.468.989	41.296	12.078	77.177	89.788
	SISAK-MOSLAVINA	6.670.952	2.438.341	2.091.252	119.874	20.233	105.006	101.976
	VIROVITICA-PODRAVINA	689.698	257.927	218.868	0	5.574	18.183	15.302
	VUKOVAR-SRIJEM	14.725.828	5.180.055	4.061.998	149.425	81.659	178.203	708.770
ADRIATIC CROATIA	DUBROVNIK-NERETVA	387.332	138.139	125.862	0	5.110	3.783	3.384
	ISTRA	9.906.039	3.472.335	2.716.600	191.745	258.818	180.523	124.650
	LIKA-SENJ	6.341.333	2.223.587	1.947.567	24.326	1.059	49.204	201.431
	PRIMORJE-GORSKI KOTAR	8.632.295	2.993.446	2.517.614	85.701	41.185	128.648	220.297
	SPLIT-DALMATIA	15.400.685	5.417.473	4.231.759	464.565	163.113	264.899	293.137
	ŠIBENIK-KNIN	1.657.817	516.351	369.704	103.975	1.594	13.207	27.872
	ZADAR	8.687.959	2.872.099	2.523.283	95.028	79.746	72.500	101.543
Grand Total €		**256.404.407**	**87.261.028**	**71.832.050**	**4.907.704**	**2.089.355**	**3.536.884**	**4.895.035**

Source: Author(s) calculated and adapted to: Ministry of Economy and Sustainable Development, Jačanje konkurentnosti poduzeća ulaganjima u digitalnu i zelenu tranziciju, available at:

[https://strukturnifondovi.hr/natjecaji/jacanje-konkurentnosti-poduzeca-ulaganjima-u- digitalnu-i-zelenu-tranziciju/, Informacije-o-potpisanim-ugovorima-22.2.2022.pdf], accessed 4 May 2023.

Table 6. Data for medium-sized enterprises (in 2022 year - reference call KK.11.1.1.0)

		SUM OF						
NUTS 2 Region	**NUTS 3 County**	**Total value of the project (€)**	**Grants awarded (€)**	**Regional grants (€)**	**Support for process innovation and business organization (€)**	**Support for training (€)**	**Grants for advisory services (€)**	**De minimis aid (€)**
NORTH CROATIA	KOPRIVNICA-KRIŽEVCI	5.954.009	1.601.271	1.495.726	0	2.113	39.427	64.006
	KRAPINA-ZAGORJE	20.766.521	5.952.610	4.948.684	296.228	211.916	255.163	240.619
	MEĐIMURJE	20.231.646	5.057.792	4.414.983	267.074	37.906	141.514	196.316
	VARAŽDIN	9.892.822	2.713.454	2.465.749	54.134	70.674	33.048	89.849
	ZAGREB	13.992.897	3.709.964	2.884.460	422.479	183.814	115.602	103.609
CITY OF ZAGREB	THE CITY OF ZAGREB	43.387.217	11.728.205	9.305.905	1.142.975	421.579	416.800	440.946
PANONIAN CROATIA	BJELOVAR-BILOGORA	14.036.528	3.485.705	2.634.139	531.217	2.703	105.378	212.269
	BROD-POSAVINA	1.993.679	538.874	364.255	91.719	32.586	18.712	31.603
	KARLOVAC	5.781.890	1.512.089	1.043.825	274.655	33.977	68.551	91.081
	OSIJEK-BARANJA	3.219.090	857.483	585.763	58.620	29.990	60.055	123.054
	POŽEGA-SLAVONIA	3.690.524	995.421	914.792	0	0	40.812	39.817
	SISAK-MOSLAVINA	2.569.627	683.665	556.716	72.759	0	5.335	48.855
	VIROVITICA-PODRAVINA	0	0	0	0	0	0	0
	VUKOVAR-SRIJEM	2.277.204	612.985	540.550	0	10.360	20.240	41.835
ADRIATIC CROATIA	DUBROVNIK-NERETVA	0	0	0	0	0	0	0
	ISTRA	795.225	213.728	138.221	48.299	0	7.300	19.908
	LIKA-SENJ	0	0	0	0	0	0	0
	PRIMORJE-GORSKI KOTAR	6.664.611	1.684.656	1.236.386	203.527	35.003	89.906	119.834
	SPLIT-DALMATIA	6.879.251	1.835.210	1.297.194	327.339	28.748	49.937	131.993
	ŠIBENIK-KNIN	2.068.081	626.238	429.139	77.783	18.713	68.462	32.142
	ZADAR	6.569.441	1.498.745	1.393.736	71.122	4.840	18.392	10.655
Grand Total €		**170.770.262**	**45.308.097**	**36.650.222**	**3.939.928**	**1.124.923**	**1.554.634**	**2.038.390**

Source: Author(s) calculated and adapted to: Ministry of Economy and Sustainable Development, *Jačanje konkurentnosti poduzeća ulaganjima u digitalnu i zelenu tranziciju*, availablet at:

[https://strukturnifondovi.hr/natjecaji/jacanje-konkurentnosti-poduzeca-ulaganjima-u-digitalnu-i-zelenu-tranziciju/, Informacije-o-potpisanim-ugovorima-22.2.2022.pdf], Accessed 4 May 2023.

Table 7. Descriptive statistics of small enterprise and medium-sized enterprise (in 2022 year - reference call KK.11.1.1.0)

		Total value of the project (€)	Grants awarded (€)	Regional grants (€)	Support for process innovation and business organization (€)	Support for training (€)	Grants for advisory services (€)	De minimis aid (€)
Small entrepreneurs	Mean	1.294.972	440.712	362.788	24.786	10.552	17.863	24.722
	Standard Error	67.667	20.864	18.668	2.971	1.611	1.007	2.067
	Median	1.033.996	350.413	270.192	11.878	763	13.936	16.176
	Mode	#N/A	995.421	74.657	-	-	14.467	-
	Standard Deviation	952.163	293.585	262.684	41.804	22.671	14.172	29.091
	Range	7.188.827	928.399	918.634	340.040	132.607	77.477	175.194
	Min	163.191	67.022	54.649	-	-	-	-
	Max	7.352.019	995.421	973.283	340.040	132.607	77.477	175.194
	Sum	256.404.407	87.261.028	71.832.050	4.907.704	2.089.355	3.536.884	4.895.035
	Count	198	198	198	198	198	198	198
	N of the supported subject		**198**	**198**	**116**	**104**	**191**	**192**
	Max Intensity of support (%)		-	**45.00**	**50.00**	**70.00**	**50.00**	**75.00**
	Average intensity of the support achieved (%) (Average intensity of the support achieved All subject)		**34.03**	**44.79** (44.79)	**49.74** (29.14)	**67.87** (35.65)	**50.00** (49.59)	**74.03** (71.79)
Medium-sized entrepreneurs	Mean	2.246.977	596.159	482.240	51.841	14.802	20.456	26.821
	Standard Error	139.675	35.989	33.639	8.536	3.499	1.683	3.613
	Median	2.170.573	573.190	395.753	18.199	1.818	17.851	19.447
	Mode	#N/A	995.421	995.421	-	-	8.627	-
	Standard Deviation	1.217.659	313.743	293.259	74.416	30.504	14.675	31.496
	Range	4.285.610	926.729	948.753	346.008	132.628	80.961	185.812
	Min	284.702	68.692	46.668	-	-	-	-
	Max	4.570.312	995.421	995.421	346.008	132.628	80.961	185.812
	Sum	170.770.262	45.308.097	36.650.222	3.939.928	1.124.923	1.554.634	2.038.390
	Count	76	76	76	76	76	76	76
	N of the supported subject		**76**	**76**	**45**	**39**	**74**	**69**
	Max Intensity of support (%)		-	**35.00**	**50.00**	**70.00**	**50.00**	**75.00**
	Average intensity of the support achieved (%) (Average intensity of the support achieved All subject)		**26.53**	**34.33** (34.33)	**49.03** (29.19)	**57.96** (29.75)	**49.38** (48.08)	**73.86** (67.05)

Source: Author(s) calculation

According to the given data, it is evident that Micro and small entrepreneurs are more represented in this call and make up almost 72,18%, in contrast to Medium-sized entrepreneurs which were 27,82%. Comparing the degree of utilization of the co-financing amount of the project activities, the calculated data (see Table 7) show that the average intensity of support for micro and small enterprises in the category of regional grants (44.79%: max. 45%), support for process innovation and business operation of organizations (49.74%: max. 50%), support for training (67.87%: max. 70%), grants for consulting services (50%: max. 50%), de minimis grants (74.03%: max. 75%). At the same time, data for medium enterprises show that the average intensity of support was achieved in the category of regional support (34.33%: max. 35%), support for process innovation and business organization (49.03%: max. 50%), support for training (57.96%: max. 70%), grants for consulting services (49.38%: max. 50%), de minimis grants (73.86%: max. 75%).

Table 8. Estimated financial and social impact of approved SME project proposals (in m+2 year for 2022 year - reference call KK.11.1.1.0)

Size of SMEs	Number of newly introduced technological solutions related to green and/or digital goals	Increased income from exports (in euros)	Increased sales revenue (in euros)	Employment growth (estimated number of new employees as a direct consequence of project implementation)
Micro, small and Medium enterprises	1,076	110,484,579	304,961,279	2,118
Grand Total	**1,076**	**110,484,579**	**304,961,279**	**2,118**

Source: Author(s) calculated and adapted to: Ministry of Economy and Sustainable Development, *Jačanje konkurentnosti poduzeća ulaganjima u digitalnu i zelenu tranziciju*, availablet at:

[https://strukturnifondovi.hr/natjecaji/jacanje-konkurentnosti-poduzeca-ulaganjima-u-digitalnu-i-zelenu-tranziciju/, Informacije-o-potpisanim-ugovorima-22.2.2022.pdf], accessed 4 May 2023.

According to the Table 8. Estimated financial and social impact of approved SME project proposals (in m+2 year) the Number of newly introduced technological solutions related to green and/or digital goals is 1076, Increased income from exports is 110.484.579,01 euros, Increased sales revenue is 304.961.279,17 euros and Employment growth (estimated number of new employees) as a direct consequence of project implementation is 2118.

The impacts of project proposals on strengthening the sustainability and competitiveness of project holders and their partners is manifested through the number of newly introduced technological solutions related to green and/or digital goals in the year m + 2, the projection of the net number of jobs as a result of the implementation of project activities in the year m + 2, projected increase in sales revenue in year m+2, predicted increase in export revenues in the year m+2.

Which leads to the conclusion that we will be able to read the first official information about the achieved indicators from the applicant's final report in the second half of 2025.

4. CONCLUDING REMARKS

Reducing the environmental impact of SMEs through achieving and going beyond environmental compliance in both manufacturing and services is a key success factor in greening the economy. SMEs are important for green growth as key drivers of ecoinnovation and key players in emerging green industries. Growing opportunities exist in the services associated with greener manufacturing.[42]

However, the willingness and capability of SMEs to adopt sustainable practices and seize green business opportunities generally face size-related resource constraints, skill deficit and knowledge limitations. SMEs are often unaware of many financially attractive opportunities for environmental improvement.[43]

A coherent strategy to reshape supply chains and access funding will require cooperation between all business functions and departments, as well as close collaboration and transparency between companies, suppliers and distributors. In particular, the heads of procurement, finance, tax, manufacturing, ESG, HR and other departments must work together to reshape their supply chains, minimize the impact of carbon taxes and other levies, and access funding opportunities.[44]

In addition to the above, and in accordance with the research of other authors; lack of capital is also a very frequently cited barrier (50%) in the sample, which in many cases refers to lack of initial capital, lack of financial opportunities or alternatives to private funds and traditional bank funding. Under "lack of capital" we also include the indirect (time and human resources) costs related to extra R&D effort needed for the development or improvement of a new green good or service.[45] The administrative burden and lack of technical know-how are mentioned by around one in five SMEs (21%). The former barrier includes complex systems and long

---

42 OECD, Greening SMEs: Opportunities and challenges in EaP countries, availablet at: [https://www.oecd.org/environment/outreach/Greening-SMEs-policy-manual-eng.pdf], Accessed 4 May 2023.

43 *Ibid.*

44 PWC PwC EU, Green Deal Survey. Are Europe's Businesses Ready for the EU Green Deal?, pp. 3-22, available at: [https://www.pwc.com/gx/en/tax/publications/assets/eu-green-deal-tax-report.pdf], Accessed 5 May 2023.

45 Rizos, V.; Behrens, A.; van der Gaast, W.; Hofman, E.; Ioannou, A.; Kafyeke, T.; Flamos, A.; Rinaldi, R.; Papadelis, S.; Hirschnitz-Garbers, M.; *et al. Implementation of Circular Economy Business Models by Small and Medium-Sized Enterprises (SMEs)*: Barriers and Enablers, Sustainability, 2016, pp. 8.

procedures that businesses face to obtain certifications and labels, as well as to meet standards and legal obligations. The latter barrier includes a gap in employee skills and lack of knowledgeable people in matters related to circular economy business practices. Lack of information and company environmental culture were two other barriers mentioned by 13% and 8% of SMEs, respectively.[46]

Beyond the above mentioned categories, SMEs note a number of additional barriers, including the absence of a reference point to which SMEs can turn for support, the economic sector in which the SME operates being extremely conservative and reluctant to make the "green" transition, as well as the existence of exogenous factors such as the economic downturn, which dampened interest in green business initiatives.

According to the above, Croatian SMEs share almost the same fate as other EU transition countries. Based on the analyzed reference call (KK.11.1.1.0), the author(s) has been researched the potential benefits of this call, first of all financial and social impacts, but also recognized certain limitations in this research. Limitations are visible in a partial calls for tenders/grants, limited amount of financial resources, limited amount of co-financing rate (Micro and small enterprises up to 45%, medium enterprises up to 35%). Also author(s) have no information about the year of establishment of legal entities, age structure of employees, their level of education and other demographic parameters.

Within the framework of the goals set by the strategic documents until 2030 and 2050, and based on currently available EU financial resources, the authors define the following research questions: are the Croatian SMEs enough financially independent for an effective digital and green transition in future, are the Croatian supporting institutions sufficiently agile, and do the Croatian SMEs responding number of human resources to implement the digital and green solutions?

During the period since 2013 and 2023 Croatian SMEs has opportunity to apply just on three[47] call for the green and digital transition. First call was open 2019 (Improving the competitiveness and efficiency of SMEs through Informa-

46 *Ibid.*

47 The fourth call for Digitization Vouchers (Reference number: NPOO.C1.2. R3-I2.01) has been published at the time of writing this paper. This Call will encourage SME investments aimed at implementing digitization and digital transformation of business through training and services to improve digital skills (among others related to cloud technologies), strategies for digital transformation, digital marketing, increasing cyber resilience through system security checks and application of complex digital solutions. The purpose of this Call is to contribute to increasing the level of digital maturity of SMEs through the development of digital business models, strengthening the capacity to implement digitization and digital transformation or improving cyber security, which will ultimately increase the competitiveness and resistance of companies to the use of digital technologies. Deatalis on: Ministry of

tion Communication Technologies (ICT) – 2, Reference code: KK.03.2.1.19),[48] second call was open 2021 (Strengthening the competitiveness of companies by investing in digital and green transition, Reference code: KK.11.1.1.0), and third call was open 2023 (Strengthening sustainability and encouraging green and digital transition of entrepreneurs in the tourism sector", Reference code: NPOO. C1.6.R1-I2 .01).

In this paper, author(s) focused their research on the call Strengthening the competitiveness of companies by investing in digital and green transition, Reference code: KK.11.1.1.0., within which they came to the following scientific knowledge.

Regarding hypothesis H1: The financial intensity of support of the reference call KK.11.1.1.01 granted to micro and small entrepreneurs was almost entirely used for the maximum intensity of the call, with minor variations for the support of training of 2.13%

Hypothesis H2: The financial intensity of support of the reference call KK.11.1.1.01 granted to micro and medium entrepreneurs was partially demonstrated for the maximum intensity of the call with the identification of the area of support for training, where the use was recorded at the level of 57.96% with a maximum intensity of support of 70.00% and a relative difference of the average intensity of support of 12.04% (see Table 7).

The scientific contribution of this paper is reflected in the detection of financial impacts (The rate of utilization of co-financing of project activities, Total value of projects, Amount of grants, Increased income from exports, Increased sales revenue), social impacts (Employment growth) and digital and green impacts (Number of newly introduced technological solutions related to green and/or digital goals), which directly and indirectly affect on Croatian SMEs and the Croatian economy and society.

Economy and Sustainable Development, Objava javnog poziva "Vaučeri za digitalizaciju" (Referentni broj: NPOO.C1.1.2. R3-I2.01), available at: [https://mingor.gov.hr/javni-pozivi-i-natjecaji-7371/javni-pozivi-i-natjecaji-ministarstva/otvoreni-javni-pozivi-i-natjecaji/1-6-2023-objava-javnog-poziva-vauceri-za-digitalizaciju-referentni-broj-npoo-c1-1-2-r3-i2-01/9289], Accessed 2 July 2023.

[48] Ćućić, D.; Pancić, M.; Zavišić, Ž., Green and digital transition in the function of growth and development of Croatia, Economic and Social Development, 88 th International Scientific Conference on Economic and Social Development – "Roadmap to NetZero Economies and Businesses", 2022, pp. 389 – 403, available at: [https://www.esdconference.com/upload/book_of_proceedings/Book_of_Proceedings_esdDubai2022_Online.pdf], Accessed 4 May 2023.

Analyzing the topic of green and digital transition, the author(s) suggest further primary and secondary research on this topic, directing researchers to towards continuous knowledge about the degree of progress of implemented strategies and compliance of SMEs. Also, future research should be focused on detecting the number of introduced digital solutions and obtaining results on the number of optimized processes. Author(s) suggest to the important stakeholders in Croatian SMEs and to contracting authorities finding a new model of access funding at the national or EU level, building capacity and expertise to understand all the implications of the Green Deal, a coherent strategy to reshape supply chains and tax transparency.

Micro, small and medium-sized enterprises (SMEs) play a central role in the European and Croatian economy. Author(s) think that radical green and digital transition is possible with young SMEs, because they often exploit technological or commercial opportunities which have been neglected by more established companies.

REFERENCES

BOOK AND ARTICLES

1. Barbier, E., *A Global Green New Deal: Rethinking the Economic Recovery*, Cambridge: Cambridge University Press, 2010, pp. 1-2
2. Dey, P.K., Malesios, C., Chowdhury, S., Saha, K., Budhwar, P., De, D., Adoption of Circular Economy Practices in Small and Medium-Sized Enterprises: Evidence from Europe. Int. J. Prod. Econ., 2022
3. Ćućić, D., Pancić, M., Zavišić, Ž., *Green and digital transition in the function of growth and development of Croatia*, Economic and Social Development, 88 th International Scientific Conference on Economic and Social Development – "Roadmap to NetZero Economies and Businesses", 2022, pp. 389-403, available at: [https://www.esdconference.com/upload/book_of_proceedings/Book_of_Proceedings_esd-Dubai2022_Online.pdf], Accesed 4 May 2023
4. Galvin, R., Healy, N., *The Green New Deal in the United States: What it is and how to pay for it*, Energy Research & Social Science, Volume 67, 2020, available at: [https://www.sciencedirect.com/science/article/pii/S2214629620301067], Accessed 4 May 2023
5. Kekkonen, A., Pesor, R., Täks, M.,*Stepping towards the Green Transition: Challenges and Opportunities of Estonian Companies,* Sustainability 2023, 15(5), 4172, available at: [https://www.mdpi.com/2071-1050/15/5/4172], Accessed 4 May 2023
6. Rizos, V., Behrens, A., van der Gaast, W., Hofman, E., Ioannou, A., Kafyeke, T., Flamos, A., Rinaldi, R., Papadelis, S., Hirschnitz-Garbers, M. *et al. Implementation of Circular Economy Business Models by Small and Medium-Sized Enterprises (SMEs): Barriers and Enablers,* Sustainability, 2016; 8(11):1212, [https://doi.org/10.3390/su8111212]

LIST OF NATIONAL REGULATIONS, ACTS AND COURT DECISIONS

1. Accounting Law (Zakon o računovodstvu), Official Gazette No 78/15, 134/15, 120/16, 116/18, 42/20, 47/20, 114/22
2. Decision on the National Classification of Activities 2007 - NKD 2007 (*Odluka o Nacionalnoj klasifikaciji djelatnosti 2007. - NKD 2007.)*, Official Gazette No. 58/07
3. Digital Croatia strategy for the period until 2032 (Strategija digitalne Hrvatske za razdoblje do 2032. godine), Official Gazette No. 13/23
4. Low-carbon development strategy of the Republic of Croatia until 2030 with a view to 2050 (Strategija niskouglјičnog razvoja Republike Hrvatske do 2030. s pogledom na 2050. godinu), Official Gazette No. 63/21
5. National development strategy of the Republic of Croatia until 2030 (Nacionalna strategija razvoja Republike Hrvatske do 2030.godine) Official Gazette No. 13/21

WEBSITE REFERENCES

1. Croatian Agency for SMEs, Innovations and Investments - HAMAG-BICRO, *Predstavljeni rezultati Javnog poziva "Jačanje konkurentnosti poduzeća ulaganjima u digitalnu i zelenu tranziciju"*, available at: [https://hamagbicro.hr/predstavljeni-rezultati-javnog-poziva-jacanje-konkurentnosti-poduzeca-ulaganjima-u-digitalnu-i-zelenu-tranziciju/], Accessed 4 May 2023
2. Croatian Agency for SMEs, Innovations and Investments - HAMAG-BICRO, available at: [https://hamagbicro.hr/], Accessed 4 May 2023
3. Bureau of Statistics, *Broj i struktura poslovnih subjekata u ožujku 2023*, available at: [https://podaci.dzs.hr/2023/hr/58271], Accesed 3 May 2023.
4. Chatzistamoulou, N., *Is digital transformation the Deus ex Machina towards sustainability transition of the European SMEs?,* Ecological Economics, Volume 206, available at: [https://www.sciencedirect.com/journal/ecological-economics], 2023, Accessed 4 May 2023
5. Council of the EU and the European Council, *How the European Semester works*, available at: [https://www.consilium.europa.eu/en/policies/european-semester/how-european-semester-works/], Accessed 4 May 2023
6. Council of the EU and the European Council, *Greening SMEs: Opportunities and challenges in EaP countries,* available at: [https://consiliumeureka.primo.exlibrisgroup.com/discovery/fulldisplay?docid=cdi_oecd_books_10_1787_9789264293199_4_en&context=PC&vid=32CEU_INST:32CEU_VU1&lang=en&search_scope=MyInst_and_CI&adaptor=Primo%20Central], Accessed 4 May 2023
7. European Commission, Towards a Sustainable Europe by 2030, available at: [https://commission.europa.eu/system/files/2019-02/rp_sustainable_europe_30-01_en_web.pdf], Accessed 3 May 2023
8. European Commission, Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions, *The European Green Deal COM/2019/640 Final*, available at:

[https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52019DC0640], Accessed 4 May 2023

9. European Commission, *A Europe fit for the digital age,* available at: [https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age_en], Accessed 4 May 2023
10. European Commission, *The European Commission and the SDGs,* available at: [https://s3platform.jrc.ec.europa.eu/documents/20125/585217/Carlos+Berrozpe+Garcia+2021+11+09+SDGs+and+VdL+Commission+INTPA.pdf/78cd18fe-af9c-5d64-85bc-9778fafa60a5?t=1636989890132], Accessed 4 May 2023
11. European Commission, *Recovery plan for Europe*, available at: [https://commission.europa.eu/strategy-and-policy/recovery-plan-europe_en], Accessed 4 May 2023
12. European Commission, *The 2030 Agenda for sustainable development*, available at: [https://commission.europa.eu/strategy-and-policy/international-strategies/sustainable-development-goals/eu-and-united-nations-common-goals-sustainable-future_en], Accesed 5 April 2023
13. European Commission, *European Climate Law,* available at: [https://climate.ec.europa.eu/eu-action/european-green-deal/european-climate-law_en], Accessed 4 May 2023
14. European Commission, *Communication from the commission to the european parliament, the council, the european economic and social committee and the committee of the regions 2030 Digital Compass: the European way for the Digital Decade COM/2021/118 final*, available at: [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52021DC0118], Accessed 4 May 2023
15. European Commission, *Analogue to digital - and back,* available at: [https://culture.ec.europa.eu/hr/creative-europe/projects/priorities-2019-2024/digital-europe], Accessed 4 May 2023
16. European Commission, *SME Strategy for a sustainable and digital Europe*, available at: [https://eur-lex.europa.eu/legalcontent/HR/TXT/?qid=1593507563224&uri=CELEX%3A52020DC013], Accesed 15 April 2023
17. European Commission *COMMISSION REGULATION (EU) No 651/2014,* available at: [https://eur-lex.europa.eu/legal-content/HR/TXT/PDF/?uri=CELEX:32014R0651&from=ES], Accessed 4 May 2023
18. European Parliament, *Green Deal: key to a climate-neutral and sustainable EU*, available at: [https://www.europarl.europa.eu/news/en/headlines/society/20200618STO81513/green-deal-key-to-a-climate-neutral-and-sustainable-eu?&at_campaign=20234-Green&at_medium=Google_Ads&at_platform=Search&at_creation=RSA&at_goal=TR_G&at_audience=green%20deal&at_topic=Green_Deal&at_location=HR&gclid=CjwKCAjw04yjBhApEiwAJcvNoQIWD3SIg5kOzSXg3cKblXI6duNNKCBkL4UemChFcINfxPL8T3tHwxoCflkQAvD_BwE], Accessed 12 May 2023
19. Ministry of Economy and Sustainable Development, J*ačanje konkurentnosti poduzeća ulaganjima u digitalnu i zelenu tranziciju*, Referentna oznaka: KK.11.1.1.01., available at:

[https://mingor.gov.hr/jacanje-konkurentnosti-poduzeca-ulaganjima-u-digitalnu-i-zelenu-tranziciju-referentna-oznaka-kk-11-1-1-01/8188], Accessed 4 May 2023

20. Ministry of Economy and Sustainable Development, *Poboljšanje konkurentnosti i učinkovitosti MSP-a kroz informacijske i komunikacijske tehnologije (IKT) – 2, Referentna oznaka: KK.03.2.1.19.*, available at:
[https://mingor.gov.hr/poboljsanje-konkurentnosti-i-ucinkovitosti-msp-a-kroz-informacijske-i-komunikacijske-tehnologije-ikt-2-referentna-oznaka-kk-03-2-1-19-15-studenog--2018/7664], Accessed 4 May 2023
21. Ministry of Economy and Sustainable Development, *Jačanje konkurentnosti poduzeća ulaganjima u digitalnu i zelenu tranziciju*, available at:
[https://strukturnifondovi.hr/natjecaji/jacanje-konkurentnosti-poduzeca-ulaganjima-u-digitalnu-i-zelenu-tranziciju/], Accessed 4 May 2023
22. Ministry of Economy and Sustainable Development, *"Vaučeri za digitalizaciju" (Referentni broj: NPOO.C1.1.2. R3-I2.01),* available at:
[https://mingor.gov.hr/javni-pozivi-i-natjecaji-7371/javni-pozivi-i-natjecaji-ministarstva/otvoreni-javni-pozivi-i-natjecaji/1-6-2023-objava-javnog-poziva-vauceri-za-digitalizaciju-referentni-broj-npoo-c1-1-2-r3-i2-01/9289], Accessed 2 June 2023
23. Net impact, *Trash the Take-Make-Waste Model of Industry and Embrace the Regenerative Economy*, available at:
[https://netimpact.org/blog/Regenerative-Economy-Model], Accessed 4 May 2023
24. OECD, *Greening SMEs: Opportunities and challenges in EaP countries*, availablet at:
[https://www.oecd.org/environment/outreach/Greening-SMEs-policy-manual-eng.pdf], Accessed 4 May 2023
25. Publication Office of the European Union, *The EU's 2021-2027 long-term budget and NextGenerationEU*, available at:
[https://op.europa.eu/en/publication-detail/-/publication/d3e77637-a963-11eb-9585-01aa75ed71a1], Accessed 4 May 2023
26. PWC PwC EU, *Green Deal Survey. Are Europe's Businesses Ready for the EU Green Deal?,* available at:
[https://www.pwc.com/gx/en/tax/publications/assets/eu-green-deal-tax-report.pdf], Accessed 5 May 2023
27. The Croatian Chamber of Economy - Centar za EU, Vodič za definiciju malog i srednjeg poduzetništva u natječajima za dodjelu sredstava iz fondova EU, available at:
[https://www.hgk.hr/documents/vodiczadefinicijumalogisrednjegpoduzetnistvaunatjecajimazadodjelusredstavaizfondovaeuhgkanaliza0120144457b5747dec0a7.pdf], Accessed 5 April 2023
28. United Nations, W*hat are the Sustainable Development Goals?, available at:*
[https://www.undp.org/sustainable-development-goals?gclid=CjwKCAjw9pGjBhBEiwAa5jl3EGm6dn4Rq_afbUuK8AJPLqn6GBkKg2KjABqJyMGaKYpV7aMSN_UhoCJgAQAvD_Bw], Accessed 4 May 2023

UDK 339.732(4): 502.14(4-67EU)
Review article

THE EU CLIMATE OBJECTIVES AND THE LEGAL MANDATE OF THE EUROPEAN CENTRAL BANK

Ana Vargek Stilinović, Master of Laws, PhD candidate
Croatian National Bank/Legal Counsel
Trg hrvatskih velikana 3, Zagreb, Croatia
anavargek@gmail.com

ABSTRACT

The EU ratification of the Paris Agreement initiated extensive political and legislative activities within the EU to reach agreed climate objectives. The declaration of the climate crisis, the publication of the European Green Deal, and the obligation to reduce greenhouse gas emissions by at least 55% by 2030 compared to 1990 levels created the foundations for establishing an ambitious climate legal framework at the EU level. At the center of that legal framework is the European Climate Law, which obliges the EU to achieve climate neutrality by 2050. Completing the set goals requires a strong climate transition, which includes, among other actions, a change to a low-carbon economy.

At the EU level, the obligation to fulfill the goals of the Paris Agreement and the related goals of the European Climate Law is primarily on the institutions of executive and legislative power that have the democratic legitimacy to act actively to achieve climate neutrality. However, the international agreements concluded by the EU (including the Paris Agreement) are binding upon all EU institutions, i.e., the European Central Bank, as explicitly prescribed in the TFEU.

The European Central Bank, simply put, represents the supranational central bank of the eurozone. With regard to its legal nature, the European Central Bank is often defined as an EU institution sui generis, which reflects its unique position given by the TFEU and the Statute of the ESCB and the ECB. Apart from the fact that the European Central Bank has a legal personality and regulatory powers and that its financial resources are separated from those of the EU, the ECB's unique position derives from the fact that the TFEU strictly limits its legal mandate. The primary mandate of the European Central Bank is to maintain price stability within the eurozone. The secondary mandate of the European Central Bank is to support, without prejudice to its price stability objective, the general economic policies in the EU, with a view to contributing to the achievement of the objectives of the EU, including a high level of protection and improvement of the quality of the environment. Considering its strictly prescribed goals, addressing the climate objectives could contradict the European Central Bank's legal mandate.

Even though the European Central Bank has already decided to take into consideration climate-related objectives, there is still an ongoing debate in academic and central banks' circles whether the European Central Bank could or must address climate objectives in its activities

or, following the rule of law principle, is precluded in doing so. This paper aims to contribute to this debate by giving the legal perspective of the European Central Bank's price stability mandate and its secondary mandate, as well as their relation to EU climate objectives.

Keywords: *climate objectives, ECB, legal mandate, price stability, secondary mandate*

1. INTRODUCTION

Climate change is one of the pressing issues worldwide, with devastating consequences for the environment, the economy, and society. Within the EU, climate change was recognized as a specific environmental issue linked to various EU policies in 1993*, even before combating climate change was explicitly included in the EU environmental policy framework under the Treaty of Lisbon[1]. Environmental protection, which includes the protection against climate change, is one of the EU's essential objectives[2] and one of the fundamental interests of the EU society[3]."

The recent substantial paradigm shift about climate change led to structural changes in the EU policies, accompanied by intensive legislative activities. In 2019, the European Parliament proclaimed a climate emergency in the Union.[4] This was followed by the adoption of the European Green Deal[5] in the same year and the European Climate Law in 2021, both aiming to achieve a long-termed climate goal of carbon neutrality by 2050.

The crucial impetus for such a course of action was the adoption of the legally binding Paris Agreement[6], ratified by the EU in 2016.[7] Under the Paris Agreement, the EU has committed to align its policies with the Agreement by reduc-

---

* Views expressed herein are personal to the author and not necessarily attributable to the Croatian National Bank.

** This paper is based on the on-going research which will be a part of PhD dissertation.

European Community programme of policy and action in relation to the environment and sustainable development [1993] OJ C 138/7, point 5.1.

1 Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community [2007] OJ C 306, Article 174(1) indent 4.

2 Case 240/83 *Procureur de la République v Association de défense des brûleurs d'huiles usagées (ADBHU)* [1985] ECLI:EU:C:1985:59, par 13.

3 Opinion of Advocate General Jacobs delivered on 14 June 2001 in Case C-377/98 *Kingdom of the Netherlands v. European Parliament and Council of the European Union*, par. 109.

4 European Parliament Resolution on the climate and environment emergency [2019] OJ C 232.

5 Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic And Social Committee and the Committee of the Regions [2019] COM/2019/640 (European Green Deal).

6 Paris Agreement to the United Nations Framework Convention on Climate Change [2015] Treaty Series, Vol. 315 (Paris Agreement).

7 Council Decision (EU) 2016/1841 on the conclusion, on behalf of the European Union, of the Paris Agreement adopted under the United Nations Framework Convention on Climate Change [2016] OJ L 282.

ing carbon emissions and increasing the ability to adapt to the adverse impacts of climate change. Moreover, the EU has committed to making financial flows consistent with a pathway towards low carbon emissions and climate-resilient development.

Realization of the Paris Agreement climate goals falls squarely within the competence of the EU political institutions, i.e., the European Parliament and the Council, as they have the legitimacy to create the Union's environmental policy.[8] However, the climate goal of steering the finance to low carbon emissions raised considerations about the possible role of the European central bank (hereinafter: the ECB) in climate transition. Indeed, the mentioned climate goal implicates the need to reallocate investments from carbon-intensive industries to green or carbon-neutral ones. This requires a significant transformation of the EU financial system, and the ECB is at its center.

The considerations about the ECB's role in climate transition were quite a novelty. The ECB was traditionally seen as a technocratic and conservative institution with only one goal – to keep the euro stable. However, while pursuing its price stability mandate, the ECB has created monetary policy measures under which it finances the carbon-intensive sectors, including utilities and energy sectors.[9] Namely, the ECB steers finance to the carbon-intensive sectors either directly (by buying debt instruments of the mentioned sectors under the asset purchase programmes) or indirectly (by accepting the debt instruments of the mentioned sectors in the collateral pool for the purpose of conducting credit operations with banks).[10] For example, between 2016 and 2018, 62.1% of the ECB corporate bond purchases took place in the sectors responsible for 58.5 % of euro area carbon emissions.[11]

---

8 Article 192(1) Consolidated version of the Treaty on the Functioning of the European Union OJ C 326 (TFEU).

9 See more: Solana, J., *The Power of Eurosystem to Promote Environmental Protection*, European Business Law Review 30, No 4, 2019, pp. 547-576, pp. 556-557.

10 The ECB can directly finance the carbon-intensive sector through its asset purchase programmes (by buying debt instruments issued by carbon-intensive sector) and indirectly through its credit operations with banks conducted against adequate collateral (as the debt instruments of carbon-intensive sectors could also be eligible for collateral purposes). See more about the ECB's corporate debt instrument purchases under the Corporate Sector Purchase Programme*:* Solana, J., *op. cit.*, note 10, p. 556. Moreover, the ECB's data on eligible collaterals used for the purpose of performing credit operations with banks shows that the eligible collateral pool still includes debt instruments of companies with high carbon emissions (e.g., Henkel AG & Co. KGaA, Shell International Finance BV, etc.), ECB, Eligible assets: download area [https://www.ecb.europa.eu/paym/coll/assets/html/list-MID.en.html] Accessed 23 April 2023.

11 European Parliament resolution on the European Central Bank Annual Report for 2018 [2020] OJ C 294, point 23.

As the EU institution, the ECB is bound by the Paris Agreement, under the Treaty on Functioning of the European Union (hereinafter: TFEU)[12]. It is, therefore, bound by its goal of making financial flows consistent with a pathway toward low carbon emissions and climate-resilient development. However, the ECB is a creation of the EU primary law, which entrusted it with a specific central-banking legal mandate. The ECB's legal mandate does not explicitly include the duty to pursue climate objectives. This puts the ECB in a quite paradoxical situation: if it pursues the climate objective it could overstretch its legal mandate and act *ultra vires*, but if it disregards the climate objectives, the ECB would be in breach of the commitment undertaken under the Paris Agreement. Nonetheless, in 2021, the ECB declared that it "fully takes into account, in line with the EU's climate goals and objectives, the implications of climate change and the carbon transition for monetary policy and central banking."[13]

This paper aims to elaborate on why the EU climate objectives fall squarely within the ECB's legal mandate and why the ECB has a legal duty to calibrate its monetary policy measures in the manner which is most supportive to the EU climate objectives, provided that such calibration does not negatively affect its responsibility to maintain stable prices. Special attention will be given to the ECB's secondary objective to support general economic policies in the Union with a view to contributing to the broad EU objectives. The ECB's secondary objective is still insufficiently explored in academic circles; however, as it will be elaborated, it allows the more progressive role of the ECB in supporting the EU climate objectives.

2. THE EU CLIMATE OBJECTIVES AND THE ECB – GENERAL OBSERVATIONS

The EU climate objectives are outlined in the European Climate Law[14]. These objectives include the long-term climate goal of achieving climate neutrality in the Union by 2050 and the intermediate climate goal of reducing the EU greenhouse gas emissions by at least 55 % by 2030, compared to 1990.[15] The European Climate Law does not specify how will the EU precisely meet the set goals. However, the intended path toward meeting these goals can be derived from the European Green Deal, under which the EU has committed to achieve a comprehensive

[12] Article 216(2) TFEU.

[13] ECB, *Monetary policy strategy statement*. 2021.[https://www.ecb.europa.eu/home/search/review/html/ecb.strategyreview_monpol_strategy_statement.en.html], Accessed 23 April 2023.

[14] Regulation (EU) 2021/1119 of the European Parliament and of the Council establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 [2021] OJ L 243 (European Climate Law).

[15] Articles 2 and 4 European Climate Law.

transformation of the Union's economy to reach carbon neutrality by 2050. The EU, moreover, declared that the general climate goals of the Paris Agreement must be included in all EU policies, which must aim to meet the specific targets, such as "decarbonizing the energy system," "achieving a climate neutral and circular economy," and "pursuing green finance and investment." Finally, it emphasized that all EU actions and policies must contribute to realizing the European Green Deal.[16]

Should the EU monetary policy also contribute to realizing the European Green Deal, and is the ECB obliged to pursue the EU climate objectives provided in the European Climate Law? The EU monetary policy is specific, as the authority for its creation is not given to the EU political institutions but to the ECB[17], often defined as the EU institution *sui generis*.[18] The *sui generis* character of the ECB derives from its specific constitutional characteristics. Unlike any other EU institution, the ECB has a legal personality and its own decision-making bodies. This indicates that the ECB does not act as an "extended arm" of the Union, as all of its acts are of its own and not of the EU.[19] The ECB is tasked with meeting the specific central-banking objectives under the EU primary law, by conducting monetary policy. The ECB enjoys broad discretion in setting concrete monetary policy goals and adjusting monetary policy instruments.[20] While doing so, the ECB must be independent of any political influence, which is explicitly guaranteed under Art. 130 TFEU. This indicates that the instructions of the EU political institutions cannot guide the ECB's actions.[21]

---

16 European Green Deal, points 2.1.1., 2.1.2., 2.1.3. and 2.1.2.

17 More precisely, the TFEU entrusted monetary policy to the Eurosystem comprising of the ECB and the euro-area central banks, on the basis of the Art. 127 TFEU in connection with Art. 139(2)(c) TFEU. As the Eurosystem does not have a legal personality, and in order to ensure the singleness of the monetary policy, the monetary policy of the euro area is created exclusively by the ECB. See more: Lastra, R. M., *The Evolution of the European Central Bank*, Fordham International Law Journal, Vol. 35, No. 5, 2012, pp. 1260-1281, p. 1268.

18 Zilioli, C.; Selmayr, M., *European Central Bank: An Independent Specialized Organization of the Community Law*, The Common Market Law Review, Vol. 37, No. 3, 2000, pp. 591-644, p. 619; Louis, J.V., *Monetary Policy and Central Banking in the Constitution* in: Zamboni Garavelli, P., The Legal Aspects of the European System of Central Banks, 2005, pp. 27-42, p. 33 [https://www.ecb.europa.eu/pub/pdf/other/legalaspectsescben.pdf], Accessed 15 April 2023; Krauskopf, B.; Steven, C., *The Institutional Framework of the European System of Central Banks: Legal Issues in the Practice of the First Ten Years of its Existence*, Common Market Law Review, Vol. 46, Issue 4, 2009, pp. 1143-1175.

19 The special status of the ECB also arises from the fact that the ECB itself, under Article 340(3) TFEU, must bear liability for damages caused by the ECB or its servants in performing their duties, and not the EU.

20 Case C-62/14, *Peter Gauweiler and Others* [2015] ECLI:EU:C:2015:400, paras. 68-75; Case C-493/17, *Heinrich Weiss and Others* [2018] ECLI:EU:C:2018:1000, paras. 7, 91 and 92.

21 Smits, R., *The European Central Bank's Independence and Its Relation with Economic Policy Makers, Fordham International Law Journal*, Vol 31, No. 6, 2008, pp. 1614-1636, p. 1627.

The ECB's special status in the EU constitutional order and, more specifically, its guaranteed independence does not, however, have the consequence of exempting it from rules of the EU law outside of the Monetary Union legal framework. The Court of Justice already confirmed this in the judgment rendered in the Case *Commission of the European Communities v. European Central Bank* (OLAF judgment) and pointed out that "the ECB, pursuant to the EC Treaty, falls squarely within the Community framework."[22] In the OLAF judgment, the Court confirmed that even the EU secondary legislation, unrelated to the Monetary Union legal framework, can also apply to the ECB, as long as it does not undermine the ECB's ability to perform independently the central-banking tasks conferred to it by the EU primary law.

The European Climate Law, however, binds member states and the relevant EU institutions. The European Climate Law does not define which EU institutions should be considered the "relevant" ones. The term "relevant" could be interpreted in a way that it encompasses all EU institutions whose activity could be detrimental to the EU climate objectives defined in the Law or which could support those objectives within its competences. Moreover, the omission in the European Climate Law concerning the definition of the relevant institutions could be seen as intentional, as the term "relevant" may vary over time, i.e., at some point in time, different EU institutions could fall within the scope of the European Climate Law. Both approaches position the ECB squarely within the European Climate Law framework. Some authors do not question the ECB's obligation to act pursuant to the European Climate Law,[23] while others oppose such a conclusion. The opponents of such conclusion stress, among others, that the European Climate Law allows the Commission to assess the consistency of the Union's measures, including any draft measures, with the defined EU climate objectives. Any such assessment would contradict the ECB's accountability regime provided in the TFEU, under which the ECB is only accountable to the European Parliament.[24] These concerns

---

22 Case C- 11/00, *Commission of the European Communities v. ECB* (OLAF case) [2003] ECLI:EU:C:2003:395, paras. 92, 135 and 137.

23 For example, Smits, R., *Elaborating a Climate Change-Friendly Legal Perspective for the ECB*, SSRN, 2021, p. 21 [https://ssrn.com/abstract=3913653] Accessed 15 April 2023: „*to this author, it is clear that the ECB, with its balance sheet equal to 60% of the euro area GDP, is among the 'relevant' institutions addressed in this provision.*"; Dafermos, Y., *et. al.*, *The Price of Hesitation: How the Climate Crisis Threatens Price Stability and What the ECB Must Do About It*, Greenpeace, the German Institute for Economic Research and the Centre for Sustainable Finance at SOAS, University of London, 2021, p. 18. [https://eprints.soas.ac.uk/35496/1/The%20Price%20of%20Hesitation_FINAL-New.pdf], Accessed 15 April 2023.

24 Zilioli, C.; Ioannidis, M., *Climate Change and the Mandate of the ECB: Potential and Limits of Monetary Contribution to European Green Policies*, Common Market Law Review, 59, 2022, pp. 363-394, p. 383.

are indeed convincing. In addition, it should also be pointed out that any *ex-ante* assessment of the ECB's draft measures concerning monetary policy would also be problematic from the aspect of confidentiality[25], as such measures contain market-sensitive information. The confidentiality requirements are set to prohibit political actors from actively using or capitalizing on such information.

A thorough analysis of the applicability of the European Climate Law on the ECB extends the limits of this paper. However, even if the European Climate Law indeed does not apply to the ECB, it does not mean that the ECB can disregard it. The EU climate objectives in the European Climate Law merely concretize the Paris Agreement's general climate goals that already bind the ECB under Art. 216(2) TFEU. The EU climate neutrality objective was derived from Art. 4(1) of the Paris Agreement[26], while the EU climate objective of reducing the net greenhouse gas emissions by at least 55% compared to 1990 levels by 2030 was determined within the EU nationally determined contribution provided under the Paris Agreement already in 2020.[27]

The ECB's obligation to support the EU climate objectives also arises from Art. 11 TFEU, under which environmental protection requirements must be integrated into the definition and implementation of the Union's policies and activities, particularly to promote sustainable development. Art. 11 TFEU represents the horizontal provision applicable to all EU institutions, including the ECB. The European Climate Law should guide the ECB in fulfilling its obligation from Art 11 TFEU.[28] Moreover, the mentioned obligation to integrate environmental protection requirements in all EU policies is enshrined in Art. 37 of the EU Charter of Fundamental Rights.[29] The ECB, as the EU institution, is obliged under the Art. 51(1) of the Charter to respect the rights, observe the principles, and promote the application of the Charter in accordance with its respective powers. It should be

---

25 Protocol (No 4) on the Statute of the European System of Central Banks and of the European Central Bank [2016] OJ C 202, Article 10(4).

26 Article 4(1) Paris Agreement: „In order to achieve the long-term temperature goal set out in Article 2, Parties aim to reach global peaking of greenhouse gas emissions as soon as possible, recognizing that peaking will take longer for developing country Parties, and to undertake rapid reductions thereafter in accordance with best available science, so as to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century (…)."

27 Submission by Germany and the European Commission on behalf of the European Union and its Member States, The update of the nationally determined contribution of the European Union and its Member States, 17 December 2020 [https://unfccc.int/sites/default/files/NDC/2022-06/EU_NDC_Submission_December%202020.pdf], Accessed 15 April 2023.

28 Zilioli, C.; Ioannidis, M., *Climate Change and the Mandate of the ECB: Potential and Limits of Monetary Contribution to European Green Policies*, *op. cit*., note 25, p. 384; see also: Solana, J., *The Power of the Eurosystem to Promote Environmental Protection*, *op. cit*., note 10.

29 Charter of Fundamental Rights of the European Union [2016] OJ C 202.

noted that the Court of Justice has already taken an expansive approach concerning the ECB's obligations under the Charter.[30]

All mentioned legal sources indicate that the EU climate objectives bind the ECB. However, the ECB can only support the EU climate objectives if such support falls within the limits of its legal mandate provided in the EU primary law. The ECB's legal mandate does not refer (at least not directly) to climate objectives or environmental protection. Therefore, the ECB can address the EU climate objectives only if and only to the extent that the legal interpretation of its legal mandate allows such a course of action.

3. INTERLINKAGE BETWEEN THE ECB'S LEGAL MANDATE AND THE EU CLIMATE OBJECTIVES

The term legal mandate comes from the Latin word *mandare* which means to "order", or "to command"[31] and it should be understood as the assignment that the government has given to a particular public law entity under the law. The ECB's legal mandate is provided in Chapter 2, Title VIII of the TFEU, which regulates the EU Monetary policy, and in the Statute of the European System of Central Banks and of the ECB (hereinafter: the ECB's Statute)[32]. It encompasses three essential elements: the ECB's objectives (the purpose of the ECB), the ECB's functions (the main tasks of the ECB aiming at the realization of its objectives), and the ECB's instruments (instruments under which the ECB's performs its tasks).

The ECB's objectives are defined in Art. 127(1) TFEU and Art. 2 of the ECB's Statute. These objectives are two-fold. While the primary aim of the ECB is maintaining price stability in the Eurozone, i.e., safeguarding the value of the euro, the TFEU and the ECB's Statute also instruct the ECB to support the general economic policies in the Union with a view of contributing to EU objectives laid down in Art. 3 of the Treaty on the European Union (hereinafter: TEU)[33]. Both the TFEU and the ECB's Statute limit the ECB's mandate to support the general economic policies in the Union by stipulating that such support can only be exercised "without prejudice" to the ECB's primary objective of maintaining stable prices. This implies that the ECB's objectives, although two-fold in principle, are not balanced as, for example, the objectives of the USA Federal Reserve (hereinafter: FED), which is entitled to pursue both the economic goals of maximum em-

30 Case T-107/17 *Frank Steinhoff et. al. v. European Central Bank* [2019] ECLI:EU:T:2019:353.

31 LatDict Latin Dictionary and Grammar Resources [https://latin-dictionary.net/search/latin/mandare], Accessed 15 April 2023.

32 Protocol (No 4) on the Statute of the European System…*loc. cit.*, note 26.

33 Consolidated version of the Treaty on European Union [2012] OJ C 326.

ployment and price stability, without a hierarchy between these two objectives.[34] Therefore, while exercising its legal mandate, the ECB, unlike FED, cannot make trade-offs to the detriment of price stability. The ECB must always give priority to safeguarding the value of the euro.[35]

The ECB is tasked with creating a single EU monetary policy to achieve its objectives.[36] TFEU and the ECB's Statute do not define the monetary policy. However, according to the settled case law of the Court of Justice, a policy measure will be treated as monetary policy if it aims to fulfill the monetary policy objectives (e.g., price stability) and if it is executed by the monetary policy instruments provided in the ECB's Statute. Furthermore, any indirect effects of a monetary policy measure on other policies (e.g., economic policy or environmental policy) cannot lead to the conclusion that a measure falls outside the scope of the monetary policy. [37]

Following the principle of conferral provided for in Art. 5(1) and (2) TEU, the ECB must act within the limits of the powers conferred upon it by the EU primary law. The ECB can, therefore, only pursue objectives outlined in its legal mandate and cannot conduct policies other than monetary policy. With regard to EU climate objectives, the ECB can address them only if they fall within the scope of its central-banking objectives.

3.1. The ECB's primary objective and climate change

Maintaining price stability is the *raison d'etre* of the ECB and the "Grundnorm"[38] of the Monetary Union legal framework. Price stability is indeed at the center of the ECB's area of activity and has precedence over any other objectives that can be attributed to it.

---

34 Federal Reserve Act, 12 U.S. Code § 226, Section 2A: "The Board of Governors of the Federal Reserve System and the Federal Open Market Committee shall maintain long run growth of the monetary and credit aggregates commensurate with the economy's long run potential to increase production, so as to promote effectively the goals of maximum employment, stable prices, and moderate long-term interest rates."

35 Egidy, S., *Proportionality and Procedure of Monetary Policy-Making*, International Journal of Constitutional Law, Vol. 19, Issue 1, 2021, pp. 285–308, p. 291.

36 Article 127(2) indent 1 TFEU and Article 3(1) indent 1 of the ECB's Statute.

37 Case C-493/17 *Heinrich Weiss and Others* [2018] ECLI:EU:C:2018:1000, par. 53; Case C-62/14 *Peter Gauweiler and Others* [2015] ECLI:EU:C:2015:400, par. 46; Case C-370/12 *Thomas Pringle v. Government of Ireland* [2012] ECLI:EU:C:2012:756, paras. 53-55.

38 Zilioli, C.; Selmayr, M., *European Central Bank: An Independent Specialized Organization of Community Law*, *op. cit.*, note 19, pp. 628-629.

TFEU does not define price stability or which criteria must be fulfilled to maintain the euro stable. However, maintaining price stability should be understood as safeguarding purchasing power and the internal value of the euro.[39] The concretization of stable prices falls within the discretion of the ECB's Governing Council, which is only limited by the "manifest error in assessment" test, as confirmed by the Court of Justice.[40] The ECB's Governing Council decided to define stable prices by quantification of the desired inflation target within the euro area. In 2021, the ECB's Governing Council described price stability as a year-on-year increase of the Harmonized Index of Consumer Prices (HICP), i.e., the inflation rate for the euro area of 2%.[41]

The War in Ukraine and the consequent energy crisis in the EU demonstrated how external, unanticipated shocks can disrupt the euro's stability and lead to inflation way above the targeted one.[42] Both climate change and climate policies could have the same effect. Recent empirical studies show that the detrimental effects of climate change are already putting significant pressure on prices in the euro area.[43]

Namely, the extreme weather events caused by anthropogenic climate change, such as high temperatures, floods and droughts, can impair production and disrupt the supply chains in specific industries (e.g., agriculture, fisheries, forestry). Such events could reduce the availability of particular products, consequently leading to price increases. Specific industries could increase production costs by adapting the production infrastructure to severe weather events to mitigate the risk of extreme events. These costs may eventually be passed on to the consumers through higher prices. Moreover, extreme temperatures may increase energy prices as they can impact energy demand and supply. The rise in stranded assets and asset repricing following anticipated climate change policies could impair the value of the bank's balance sheet and disable banks from providing liquidity to the economy, which could eventually affect the smooth transmission of the ECB's monetary policy.

---

39 Häde, U., AEUV Art. 127, Rn 6, in: Calliess, C.; Ruffert, M., EUV – AEUV, 6 ed., C.H. Beck, München, 2022.

40 Case C-493/17 *Heinrich Weiss and Others* [2018] ECLI:EU:C:2018:1000, par. 56.

41 ECB's Press Release, ECB's Governing Council approves its new monetary policy strategy, 2021, [https://www.ecb.europa.eu/press/pr/date/2021/html/ecb.pr210708~dc78cc4b0d.en.html], Accessed 15 April 2023.

42 The eurozone heavily relied on natural gas imports from Russia and supply chain disruptions led to higher energy prices. This eventually led to high inflation in the eurozone of 6.9% in March 2023. See more: Arce, O; Koester, G., Nickel, C., *One year since Russia's invasion of Ukraine – the effects on euro area inflation*, The ECB blog, 2023 [https://www.ecb.europa.eu/press/blog/date/2023/html/ecb.blog20230224~3b75362af3.en.html], Accessed 15 April 2023.

43 Dafermos, Y., *et. al.*, *op. cit.,* note 24, pp. 9-14.

Finally, in the same manner, the climate change risks could be seen as financial risks for the ECB itself, as their materialization could negatively affect the value of its own balance sheet.[44]

As illustrated above, climate change already adversely affects prices which means that the ECB must consider climate change risks in its monetary policy decision-making process. Otherwise, it will be disabled from delivering its primary objective of maintaining stable prices. The ECB has already taken concrete steps in this direction. In 2022, the ECB amended its Corporate Sector Purchase Programme under which it has been buying corporate sector bonds as of 2016.[45] The amendments of the mentioned programme aim at increasing the share of assets on the Eurosystem's balance sheet issued by companies with a better climate performance than those with a poorer climate performance. The climate performance shall be measured by reference to the carbon emissions of the bond issuers.[46] Furthermore, the ECB decided to amend its collateral framework which serves the purpose of conducting credit operations with banks by limiting the debt instruments of the carbon-intensive sector within its collateral pool.[47] The incentive for implementing both measures mentioned above is primarily to protect the Eurosystem balance sheet from climate-related financial risk (and consequently to ensure stable prices). These measures should positively impact environmental policy and the EU climate objectives as they would reduce financing (direct or indirect) of the carbon-intensive sector.

3.2. ECB's secondary objective and climate change

The ECB's secondary objective derives from the second sentence of Art. 127(1) TFEU,[48] according to which the ECB shall support, without prejudice to the ob-

---

44 See more: Dikau, S.; Volz, U., *Central Banking, Climate Change and Green Finance*, ADBI Working Paper 867, Asian Development Bank Institute [https://www.adb.org/sites/default/files/publication/452676/adbi-wp867.pdf] Accessed 15 April 2023; Faccia D.; Parker, M.; Stracca, L., *Feeling the heat: extreme temperatures and price stability*, ECB Working Paper Series No. 2626, 2021 [https://www.ecb.europa.eu/pub/pdf/scpwps/ecb.wp2626~e86e2be2b4.en.pdf]; Network for Greening the Financial System, *The Macroeconomic and Financial Stability Impacts of Climate Change Research Priorities*, 2020 [https://www.ngfs.net/sites/default/files/medias/documents/ngfs_research_priorities_final.pdf], Accessed 15 April 2023.

45 Decision (EU) 2022/1613 of the European Central Bank amending Decision (EU) 2016/948 on the implementation of the corporate sector purchase programme [2022] OJ L 241.

46 *Ibid*., Recitals 1 and 4.

47 ECB Press Release, *ECB takes further steps to incorporate climate change into its monetary policy operations*, 4 July 2022, [https://www.ecb.europa.eu/press/pr/date/2022/html/ecb.pr220704~4f48a72462.en.html], Accessed 15 April 2023.

48 The same objective of the ECB is repeated in Article 282(2) TFEU and Article 2 of the ECB's Statute.

jective of price stability, the general economic policies in the Union, with a view to contributing to the achievement of the Union's goals, as laid down in Art. 3 TEU.[49]

TFEU does not refer explicitly to the term "secondary objective", as opposed to the term "primary objective". Nonetheless, this term has been widely accepted since the inception of the ECB's legal mandate in the Maastricht Treaty.[50] It aims to emphasize that supporting the general economic policies in the Union represents the ECB's objective alongside the price stability objective. Therefore, the second sentence of Art. 127(1) TFEU is not a mere proclamation but a concrete legal basis stipulating the specific ECB's duty. This indicates that monetary policy is not only intended as a means of ensuring stable prices but also has a broader purpose.[51] Furthermore, the term "secondary objective" emphasizes that the ECB's legal duty to support general economic policies in the Union applies only to the extent that this can be done without compromising the price stability objective.[52]

3.2.1. Evolution of the ECB's secondary objective

The ECB's secondary objective was already foreseen in the "Delors Report" from 1989,[53] which outlined the future features of the intended Economic and Monetary Union and served as a guideline during the negotiations of the ECB's legal mandate before the adoption of the Maastricht Treaty.[54] The vision of the second-

[49] Article 3 TEU sets forth the following EU objectives: "security and justice without internal frontiers", "free mvement of persons", "internal market. that shall work for the sustainable development of Europe based on balanced economic growth and price stability, a highly competitive social market economy, aiming at full employment and social progress, and a high level of protection and improvement of the quality of the environment", "promoting scientific and technological advance", "combating social exclusion and discrimination", "social justice and protection", "equality between women and men", "solidarity between generations", "protection of the rights of the child", "eradication of poverty"; "protection of human rights", etc.

[50] For example, term "secondary objective" was used by Dr. Willem F. Duisenberg, the first president of the ECB, even before the ECB became operational on 1 June 1998. In his speech given on 16 February 1998, in the capacity of the president of the European Monetary Institute, the predecessor of the ECB, Dr. Duisenberg referred to ECB's obligation of providing support to the general economic policies in the Community as the ECB's secondary objective: Speech delivered by Dr. Willem F. Duisenberg, President of the European Monetary Institute, at the Bankers' Club Annual Banquet in London, 16 February 1998 [https://www.ecb.europa.eu/press/key/date/1998/html/sp980216.en.html], Accessed 15 April 2023.

[51] Häde, U., AEUV Art. 127, Rn 5, *op. cit.*, note 40.

[52] Häde, U., AEUV Art. 127, Rn 6*, op. cit.*, note 40.

[53] Delors, J., Report on the Economic and Monetary Union in the European Community [1989] (Delors Report) presented by the Committee for the Study of Economic and Monetary Union. [EU Commission - Working Document], par. 32, [http://aei.pitt.edu/1007/], Accessed 15 April 2023.

[54] Van den Berg, C. C. A., *The Making of the Statute of the European System of Central Banks, An Application of Checks and Balances*, Dutch University Press, 2004, p. 60-66.

ary objective from the "Delors Report" was strongly influenced by the legal mandate of the German Bundesbank stipulated in Art. 12 of the German Bundesbank Act from 1957 that tasked the Bundesbank with supporting the general economic policies of the Federal Government.[55] Namely, the proposal from the Delors Report provided that "subject to the preceding (i.e., price stability objective), the System should support the general economic policy set at the Community level by the competent bodies."[56]

The final content of the ECB's secondary objective, eventually stipulated in the Maastricht Treaty, contained two minor but significant additions. The first referred to supporting "general economic policies in the Community" and not "the general economic policy set at the Community level."[57] Even more important, the "last minute" revision made by the Dutch government during the negotiation before adopting the Maastricht Treaty explicitly linked the ECB's obligation to support general economic policies in the Community with the broad Community objectives.[58] This addition is not negligible and should be interpreted as the clear intention of the member states to integrate the ECB more firmly into the Community constitutional order.[59]

Community goals linked with the ECB's secondary objective under the Maastricht Treaty included "promotion of a harmonious and balanced development of economic activities," "sustainable and non-inflationary growth respecting the environment," "a high degree of convergence of economic performance," "a high level of employment and social protection," "the raising of the standard of living and quality of life," "economic and social cohesion" and "solidarity among Member States."[60]

---

55 The Bundesbank and its back-then president Karl Otto Pöhl had a decisive role in defining the ECB's objectives within the Delors Committee. The Bundesbank presented the first draft of the future ECB's legal mandate which, besides the price stability objective, included the objective of supporting, without prejudice to its primary objective, the general economic policy at the Community. This proposal was influenced by the Bundesbank's legal mandate stipulated in Article 12 of the German Bundesbank Act from 1957. Gesetz über die Deutche Bundesbank, 26 July 1957 (Bundesgesetzblatt, Teil I, Nr. 33).: "*Die Deutsche Bundesbank ist verpflichtet, unter Wahrung ihrer Aufgabe die allgemeine Wirtschaftspolitik der Bundesregierung zu unterstützen.*" *See* more: Van den Berg, C. C. A., *The Making of the Statute of the European System of Central Banks, An Application of Checks and Balances*, *op. cit.*, note 55, pp. 60-61.

56 Delors, J., *Report on economic and monetary union in the European Community*, *op. cit.*, note 54., par. 32.

57 Article 105(1) Treaty on European Union [1992] OJ C 191 (Maastricht Treaty).

58 Van den Berg, C. C. A., *op. cit.*, note 55, p. 70.

59 See also: Case C- 11/00, *Commission of the European Communities v. ECB* (OLAF case) [2003] ECLI:EU:C:2003:395, paras. 91-92; cf. Dietz, S., *Green Monetary Policy Between Market Neutrality and Market Efficiency*, Common Market Law Review, 59, 2022, pp. 395-432, pp. 423-424.

60 Article 105(1) in connection with Article 2 Maastricht Treaty.

The content of the ECB's secondary objective was eventually broadened in 2007 by adopting the Lisbon Treaties. While the wording of the ECB's secondary objective remained the same, the EU goals linked to this objective were significantly broadened. As of the adoption of TEU, they include, e.g., "high level of protection and improvement of the quality of the environment," "technological advances," "equality between women and men," "protection of the rights of the child," "contribution to the sustainable development of the Earth," etc.

It is clear from the evolution of the ECB's secondary objective that it includes, from the very beginning, at least indirectly, the protection of the environment. As the EU climate objectives are an integral part of environmental protection, they are also indirectly included in the ECB's secondary objective of supporting general economic policies in the Union.

3.2.2. Legal interpretation of the ECB's secondary objective in the context of the EU climate objectives

As explained above, the ECB's secondary objective, from the legal point of view, represents the ECB's legal duty as it stipulates that the ECB "shall" support general economic policies in the Union.[61] Moreover, it is clear that this legal duty is only limited by the ECB's primary objective of maintaining price stability, as the provision stipulates that the ECB shall support the general economic policies in the Union "without prejudice to its primary objective."

However, the remaining part of the provision is ambiguous, as the EU primary law does not define what would be "general economic policies in the Union" and what is the scope of the ECB's supporting role in this regard. Finally, the provision links the ECB's supporting role regarding the general economic policies in the Union with numerous EU goals provided in Art. 3 TEU. It is, therefore, unclear which general economic policies the ECB should support in the Union (those that aim, e.g., to a high level of protection and improvement of the quality of the environment or those that aim to full employment or technical advances). The latter ambiguity complicates the ECB's role within its secondary objective even

[61] The explicit legal duty derives also from the French text of the second sentence of Article 127(1) TFEU: "le SEBC apporte son soutien aux politiques économiques générales dans l'Union", the German text: "unterstützt das ESZB die allgemeine Wirtschaftspolitik in der Union" and the Italian text:: "il SEBC sostiene le politiche economiche generali nell'Unione". *See also:* Zilioli, C.; Ioannidis, M., *Climate Change and the Mandate of the ECB: Potential and Limits of Monetary Contribution to European Green Policies*, *op. cit.*, note 25, p. 369; Steinbach, A., *The Greening of the Economic and Monetary Union*, Common Market Law Review, 59, pp. 329-362, p. 345; van 't Klooster; J., De Boer, N., *What to do with the ECB's Secondary Mandate*, Journal of Common Market Studies, 2022, pp. 730-746, p. 738; Solana, J., *The Power of the Eurosystem to Promote Environmental Protection*, op. cit., note 10, p. 557.

more if the EU goals from Art. 3 TEU are mutually incompatible (e.g., supporting general economic policies in the Union with a view to a high level of protection and improvement of the quality of the environment could be incompatible with the general economic policies that aim to full employment).[62]

The described ambiguity of the ECB's secondary objective poses significant legal and reputational risks for the ECB if it intends to address the EU climate objectives through its secondary objective. This calls for careful legal analysis of the Art. 127(1) TFEU in the context of Art 3 TEU.

3.2.2.1. General economic policies in the Union and the EU climate objectives

While establishing the Economic and Monetary Union, member states intentionally decided to retain sovereignty with regard to their national economic policies.[63] The Economic and Monetary Union was, therefore, established as an asymmetric union that does not comprise a single economic policy of the EU, as opposed to a single monetary policy.[64]

The term "general economic policies in the Union" is contained in TFEU provisions defining the ECB's secondary objective and in Art. 119 TFEU, defining guiding principles of the Economic and Monetary Union. The latter provision refers both to the term "general economic policies in the Union" and also to the term "economic policies of the member states."[65] This indicates that these two terms are not identical and that the content of the former term is broader.

Member states should not necessarily pursue the same economic policies. However, they do not enjoy complete autonomy in creating and conducting their economic policies. According to Art. 121(1) TFEU, national economic policies are a matter of common concern and must be coordinated within the Council. For this purpose, the Council adopts broad guidelines for the economic policies of the member states and of the EU.[66] Such broad guidelines aim to "enable the Member States' economic policies to be coordinated in order to achieve joint objectives."[67]

---

62 For example, general economic policies that aim to address the EU climate objectives (i.e., environmental protection policies with an economic dimension) could pose significant limitations to the businesses of the carbon-intensive sector that could lead to the loss of jobs in the mentioned sectors.

63 Cf. Häde, U., AEUV Art. 119, Rn 15, *op. cit.,* note 40.

64 This is also evident from the wording of Article 127(1) TFEU referring to the general economic policies „in" the Union and not „of" the Union.

65 Cf. Häde, U., AEUV Art. 119, Rn 4, *op. cit.,* note 40.

66 Article 121(2) TFEU.

67 See: Publications Office of the European Union, Summaries of EU legislation: Broad guidelines for economic policies [https://eur-lex.europa.eu/EN/legal-content/summary/broad-guidelines-for-economic-policies.html], Accessed 15 April 2023.

Having all this in mind, the general economic policies in the Union should be understood as a common tendency of both national governments and the EU to encourage and develop, in a harmonious manner, those economic phenomena that are considered as socially desirable.[68] They should not, therefore, be understood as a mere sum of the national economic policies of the member states.

The question arises whether the EU climate policies that address the EU climate objectives and which are not the economic policies *stricto sensu* (e.g., fiscal policies, policies that strictly aim at economic growth) fall within the scope of the general economic policies in the Union.

The EU climate objectives could be an integral part of the general economic policies in the Union if they indeed affect the economy and if they represent the joint objectives of coordinated economic policies of the member states. As mentioned, the joint objectives of the member states' economic policies are articulated in the Council's broad guidelines of economic policies of the member states and of the EU (hereinafter: BGEPs). The EU has only adopted two BGEPs (in 2010 and in 2015). These BGEPs are the cornerstone of the national economic policies coordination in the yearly European semester project, which has been a part of the Union's economic governance framework since 2010.[69] The BGEPs 2010 explicitly instructed the member states to promote sustainable growth and implement necessary reforms to reduce greenhouse gas emissions.[70] The BEGPs 2015 stressed the importance of removing critical barriers to sustainable development and instructed the member states to pursue a transition to a competitive, resource-efficient low-carbon economy.[71]

For the purpose of monitoring whether member states are indeed coordinating their economic policies around the joint objectives, they submit to the Commission, under Art 121(3) TFEU, their national reform programmes. It should be stressed that national reform programmes of all member states that were submitted during the European semester 2022 contained, without exception, the objectives of meeting the climate goals and achieving the green transition.[72] This

---

68 Cf. Smits, R., *Elaborating a Climate Change-Friendly Legal Perspective for the ECB*, *op. cit.*, note 24.

69 See more: Verdun, A.; Zeitlin, J., *Introduction: the European Semester as a new architecture of EU socioeconomic governance in theory and practice*, Journal of European Public Policy, Vol. 2, No. 2, 2018, pp. 137-148.

70 Council Recommendation on broad guidelines for the economic policies of the Member States and of the Union [2010] OJ L 191, Recital 9 of the Preamble.

71 Council Recommendation (EU) 2015/1184 on broad guidelines for the economic policies of the Member States and of the European Union [2015] OJ L 192, Guideline 3.

72 European Commission, 2022 European Semester: National Reform Programmes and Stability/Convergence Programmes [https://commission.europa.eu/content/2022-european-semester-national-reform-programmes-and-stabilityconvergence-programmes_en] Accessed 15 April 2023.

is in line with the European Climate Law under which it was declared that "all sectors of the economy – including energy, industry, transport, heating and cooling and buildings, agriculture, waste and land use, land-use change and forestry (…) should play a role in contributing to the achievement of climate neutrality within the Union by 2050"[73] and that "the transition to climate neutrality requires changes across the entire policy spectrum and a collective effort of all sectors of the economy and society, as highlighted in the European Green Deal."[74] The mentioned declarations are already transposed in the recent EU climate legislation, e.g., the Taxonomy Regulation,[75] Directive on corporate responsibility reporting,[76] and in the intended proposal for Regulation on European Green Bonds[77].[78]

It follows that the duty to meet the EU climate objectives affects the economy and influences the direction of general economic policies in the Union. Currently, the general economic policies in the Union are indeed coordinated, among others, around the EU climate objectives. Therefore, the general economic policies in the Union should encompass not only economic policies *stricto sensu*, but also all other policies, including the environmental and climate change policies that directly affect the economy.[79] The ECB took the same stance in its Opinion as of 19 March 2021 on the Magyar Nemzeti Bank's mandate and tasks relating to environmental sustainability.[80] This view is also supported by the wording of Art 119 (1) TFEU, which stipulates that the coordination of national economic policies serves the purpose of fulfilling the broad EU goals from Art. 3 TFEU, including, therefore, a high level of protection and improvement of the quality of the environment.

---

73 Regulation (EU) 2021/1119 of the European Parliament and… *loc. cit.*, note 15, Recital 7 of the Preamble.

74 *Ibid.*, Recital 25 of the Preamble.

75 Regulation (EU) 2020/852 of the European Parliament and of the Council on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088 (Text with EEA relevance) [2020] OJ L 198.

76 Directive (EU) 2022/2464 of the European Parliament and of the Council amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting (Text with EEA relevance) [2022] OJ L 322.

77 Proposal for a Regulation of the European Parliament and of the Council on European green bonds [2021] (COM/2021/391 final).

78 Zilioli, C.; Ioannidis, M., *Climate Change and the Mandate of the ECB: Potential and Limits of Monetary Contribution to European Green Policies*, op. cit., note 35, pp. 373-374.

79 *Ibid*.

80 Opinion of the European Central Bank of 19 March 2021 on the mandate and tasks of the Magyar Nemzeti Bank relating to environmental sustainability (CON/2021/12): "The ECB notes that supporting the general economic policies of the government, without prejudice to its primary objective of achieving and maintaining price stability, is already part of the mandate of the MNB. Policies contributing to a high level of environmental protection that have an economic dimension or qualify as general economic policies of the government are implicitly covered by the current mandate of the MNB."

EU climate objectives are, therefore, integral part of the general economic policies in the Union.

3.2.2.2. ECB's supporting role with regard to climate-oriented general economic policies in the Union

TFEU does not explain the ECB's supporting role within the meaning of its secondary objective. There is, however, a common understanding that the ECB's supporting role excludes the ECB's authority to create its own economic policy based on its secondary objective.[81] The ECB is, namely, a policymaker solely with regard to monetary policy.

Although the scope of the ECB's supporting role is unclear, its potential could be determined through the lens of the consistency principle outlined in Art. 7 TFEU. The consistency principle is a constitutional, horizontal clause applicable to all EU institutions and bodies, including the ECB. The consistency principle requires the EU to ensure consistency between its policies and activities, taking all of its objectives into account and in accordance with the principle of conferral of powers.

The principle of consistency is twofold, as it has both intra-institution and inter-institutions dimension. The former can be seen as a duty of an EU institution to align all its actions with its own policies[82], while the latter implies that an EU institution's actions and policies, which are adopted within the bounds of its competences, cannot contradict the actions and policies of other EU institutions. The described inter-institutions dimension of the consistency principle is in line with the narrow understanding of the notion of "consistency," which should be understood as a requirement for the absence of contradictions between policies and actions of the EU institutions.[83] The requirement of consistency from Art. 7 TFEU is complementary to Art. 13(1) TEU, under which the EU institutional framework must ensure the consistency, effectiveness, and continuity of the EU policies and actions. The principle of consistency should also be read together with the principle of sincere cooperation between EU institutions enshrined in Art. 13(2) TEU. As stated by Advocate General Sharpston, the principle of sincere cooperation obliges the EU institutions to cooperate in achieving Union's objectives,

---

81 Van 't Klooster J.; De Boer, N., *What to do with the ECB's Secondary Mandate*, *op. cit.*, note 62, p. 731.; Zilioli, C., Ioannidis, M., *Climate Change and the Mandate of the ECB: Potential and Limits of Monetary Contribution to European Green Policies*, op. cit., note 35, pp. 369 -370.

82 Cf. Case T-512/12 *Popular Front for the Liberation of Saguia el-Hamra and Río de Oro (Polisario Front) v. Council of the European Union* [2010] ECLI:EU:T:2015:953, par. 153.

83 Franklin, C. N. K., *The Burgeoning Principle of Consistency in EU Law*, Yearbook of European Law, Vol. 30, No. 1, 2011, pp. 42–85, p. 46.

to abstain from undermining such action, and to ensure consistency between the Union's different policies.[84]

The European Climate Law that set forth EU climate objectives also enshrined the consistency principle. Namely, under the mentioned Act, "improving climate resilience and adaptive capacities to climate change requires shared efforts by all sectors of the economy and society, as well as policy coherence and consistency in all relevant legislation and policies."[85]

Regardless of whether the European Climate Law applies to the ECB, it evidently stresses the necessity of concerted actions within the Union to meet the EU climate objectives. Even if the European Climate Law does not encompass the monetary policy, the ECB is still bound by the principle of consistency. The ECB should, therefore, refrain from any action that would contradict other EU institutions' climate-oriented actions and policies. At the very least, it needs to ensure that its monetary policy does not undermine climate-oriented general economic policies.[86] However, it should be borne in mind that the described ECB's duty can be performed only to the extent that it does not jeopardize the ECB's primary objective of maintaining price stability.[87]

3.2.2.3. Prioritization of supporting climate-oriented general economic policies in the EU

The most remarkable ambiguity of the ECB's secondary objective lies in the fact that the ECB should support the general economic policies in the Union with a view to contributing to the numerous EU goals laid down in Art. 3 TEU. The goal of "a high level of protection and improvement of the quality of the environment" is only one of them.

As already explained, the EU climate objectives are an integral part of the general economic policies in the Union. But the EU goals of full employment and technological advances are also reflected in the general economic policies in the Union. Moreover, the secondary objective obliges the ECB to support the general

---

84 Opinion of Advocate General Sharpston delivered on 26 November 2015 in Case C-660/13, *Council of the European Union v. European Commission*.

85 Regulation (EU) 2021/1119 of the European Parliament and… *loc. cit*., note 15, Recital 31 of the Preamble.

86 Ioannidis, M; Murphy, S.J; Zilioli, C., The mandate of the ECB: Legal considerations in the ECB's monetary policy strategy review, ECB's Occasional Paper Series, No 276/September 2021, p. 14 [https://www.ecb.europa.eu/pub/pdf/scpops/ecb.op276~3c53a6755d.en.pdf], Accessed 15 April 2023.

87 Häde, U., AEUV Art. 119, Rn 7, *op. cit.,* note 40.

economic policies in the Union with a view to contributing, among others, to the equality of women and men and the protection of human rights. Why should the ECB prioritize calibrating its monetary policy in a manner consistent only with the EU climate objectives? The ECB should, for example, calibrate its relevant monetary policy measure to steer the finances to the IT sector or to those corporations that demonstrate that its management functions reflect the equality between women and men.

The second sentence of Art. 127(1) TFEU does not provide criteria to which, among all EU goals, the ECB should give priority while supporting the general economic policies in the Union. Although this makes it hard for the ECB to act according to its secondary objective, this ambiguity could be justified because the importance of a particular EU goal may change over time. Indeed, climate neutrality and green transition became a top priority of the EU policies only recently.

Some authors have already pointed out numerous recent EU strategies and legislations aiming to address the EU climate objectives, indicating that tackling climate change is currently at the center of EU actions. Therefore, this should be one of the reasons why the ECB should prioritize supporting general economic policies to contribute to the EU climate objectives within its secondary mandate.[88]

Apart from the abovementioned reason, one powerful instrument can also justify the prioritization of climate-oriented general economic policies in the Union within the ECB's secondary mandate. Namely, the ECB is accountable to the European Parliament. This accountability manifests itself through the ECB's obligation to submit to the Parliament its annual reports and the Parliament's authority not only to review and assess the ECB's annual reports but also to raise its concerns and give proposals concerning the ECB's activities.[89] This is done through the Parliament's resolutions on the ECB's annual reports.

The European Parliament's resolutions strongly indicate that the ECB should, at least at the moment, align its monetary policy with the EU climate objectives. Namely, as of 2020, the Parliament continuously signals that the EU climate objectives must be integrated into the ECB's monetary policy because the Paris Agreement binds the ECB. All these Parliament's resolutions paid particular attention to climate change considerations within the monetary policy. Namely, the Parliament singled out "actions against climate change" as a special point of these resolutions. The Parliament called on the ECB, e.g., "to implement the environ-

---

88 Zilioli, C.; Ioannidis, M., *Climate Change and the Mandate of the ECB: Potential and Limits of Monetary Contribution to European Green Policies*, *op. cit.*, note. 35, pp. 387-388.

89 Article 284(3) TFEU.

mental, social and governance principles (ESG principles) into its policies", "to make the question of how central banking and bank supervision can contribute to a sustainable economy and the fight against climate change one of its research priorities" and "to conduct a study investigating the impact of the asset purchase programmes on climate change and, in particular, the corporate sector purchase programme as a preliminary step towards redesigning the CSPP in a socially and environmentally sustainable manner". Moreover, it called on the ECB for "a proactive and qualitative risk management approach which integrates climate change-related systemic risks", emphasised that "tackling the climate and biodiversity emergency requires the ECB to take an integrated approach that should be reflected in all its policies, decisions and operations, together with adhering to its mandate of supporting the general economic policies of the Union, specifically, in this case, the achievement of a climate-neutral economy by 2050 at the latest, as outlined in the European Climate Law" and considered that "the ECB needs to use all the tools at its disposal to fight and mitigate climate-related risks."

The described dialogue between the Parliament and the ECB could be seen as similar to the Bank of England's monetary policy decision-making process under which the Treasury instructs the Bank of England on the government's current economic policy that it must support within its legal mandate.[90] This resemblance may raise concerns about whether the guide provided by the Parliament jeopardizes the ECB's independence guaranteed by Article 130 TFEU. Namely, as opposed to the Bank of England, the ECB enjoys broad independence, including goal independence. The goal independence implies that the central bank has full discretion to set the final goals of its monetary policy[91], i.e., to specify its primary mandate (by determining the desired inflation target) and to decide how to act upon its secondary mandate. Considering its secondary objective, this indicates that the ECB could not rely upon instructions given by political bodies, including the Parliament, on what general economic policies in the Union to support and to which EU objective to indirectly contribute. On the contrary, the Bank of

[90] Bank of England Act, UK Public General Acts, 1998 c.11, Part II, Section 12: (1)The Treasury may by notice in writing to the Bank specify for the purposes of section (a) what price stability is to be taken to consist of, or (b)what the economic policy of Her Majesty's Government is to be taken to be. (2) The Treasury shall specify under subsection (1) both of the matters mentioned there (a) before the end of the period of 7 days beginning with the day on which this Act comes into force, and (b) at least once in every period of 12 months beginning on the anniversary of the day on which this Act comes into force.

[91] Debelle, G.; Fischer, S., *How Independent Should a Central Bank Be?:* in Goals, Guidelines, and Constraints Facing Monetary Policymakers, proceedings of a conference held in North Falmouth, Massachusetts, Federal Reserve Bank of Boston, pp. 195-221., p. 197.

England is legally obliged to follow the UK Treasury's instructions on what price stability consists of and what the government's economic policy is to be taken.[92]

The Parliaments' resolutions should not be seen as instructions that would contradict the guarantee of the ECB's independence. Namely, the Parliament's resolutions are not legally binding (as opposed to instructions of the UK Treasury with regard to the Bank of England), which means that the ECB is not obliged to follow them. However, as the ECB's obligation under its secondary mandate is indeterminate, and given the strong democratic legitimacy of the Parliament, its resolutions should serve as an instrument for bridging the mentioned gap.[93]

3.2.3. ECB's secondary objective: a mere consequence of maintaining stable prices or a standalone legal basis for conducting monetary policy?

Until very recently, the sole focus of the ECB was on its primary objective of maintaining stable prices. The ECB's secondary objective was utterly neglected. The ECB's obligation to support the general economic policies in the Union was only occasionally mentioned in the speeches of the Governing Council members[94], but only as a logical consequence of maintaining price stability[95] or as a "general wish"[96] that low interests shall eventually support economic growth and contribute to other EU objectives.[97] This point of view indicated that the secondary objective could only be pursued passively by maintaining stable prices without any concrete action aiming to fulfill the secondary objective directly.[98] Namely, there is a still prevailing view that only by assuring stable prices would the ECB success-

92 Bank of England Act, *op. cit.*, note 91.

93 Cf. Smits, R., *The European Central Bank's Independence and Its Relation with Economic Policy Makers, Fordham International Law Journal*, op. cit., note 22., pp. 1626-1627.

94 Van 't Klooster J.; De Boer, N., *What to do with the ECB's Secondary Mandate*, *op. cit.,* note 62, p. 733.

95 *Ibid*., p. 734.

96 Van den Berg, C. C. A., *op. cit.,* note 55, p. 55.

97 Speech delivered by Dr. Willem F. Duisenberg, President of the European Monetary Institute, at the Bankers' Club Annual Banquet in London, 16 February 1998: "Sustainable growth of income and employment – the best way to pursue them is to pursue price stability (...) price stability is a pre-condition for their achievement", [https://www.ecb.europa.eu/press/key/date/1998/html/sp980216.en.html] Accessed 15 April 2023.

98 Speech delivered by Eugenio Domingo Sanso at the Wilton Park conference on "EMU: Economic and Political Implications for the "ins", "outs" and European Business" at Wiston House, West Sussex, on 24 May 1999: "There is clearly no greater fertilizer for economic growth than price stability, and nothing is more refractory to the economic growth than inflation (...) Provided that stability exists in connection with the implicit secondary objective of supporting the general economic policies of the European Union, the monetary policy of the Eurosystem contributes to creating the economic conditions which are essential for exploiting the growth potential of the euro area. However, let me stress that it does so in a passive way, without any activism: like the air we breathe, rather than air from an

fully, and only indirectly, fulfill its secondary objective.[99] Moreover, the possible proactive role of the ECB in supporting general economic policies was sometimes even considered detrimental to its primary objective of price stability.[100]

Indeed, the ECB referred to its secondary objective for the first time in 2022[101], when it amended its Decision on implementing the corporate sector purchase programme.[102] The secondary objective was mentioned in the context of climate change, as amendments to the said decision reflected the ECB's intention to incorporate climate consideration into its monetary policy framework.[103] Therefore, it was climate change that very recently shifted focus to the ECB's secondary objective as it was seen as a remit to address climate change considerations in its monetary policy by supporting general economic policies in the Union with a view of contributing to a high level of protection and improvement of the quality of the environment.[104]

The mentioned Decision, however, is not based solely on the ECB's secondary objective. The Decision's primary goal is to reduce the climate-related financial risk to the Eurosystem's balance sheet by reducing the carbon intensity of the Eu-

---

oxygen tank.", [https://www.ecb.europa.eu/press/key/date/1999/html/sp990524.en.html], Accessed 15 April 2023.

99 Gortsos, C.V., *European Central Banking Law, The role of the European Central Bank and National Central Banks under European Law*, Palgrawe MacMillan, 2020.

100 See more: Clarifying the nature of ECB support for general economic policies in the Community, European Central Bank, Directorate General Economics, SEC/GovC/X/02/32, 29 January 2002 [https://www.ecb.europa.eu/ecb/access_to_documents/document/pa_document/shared/data/ecb.dr.par2021_0007_clarifyingmonpol2002.en.pdf], Accessed 15 April 2023.

101 By searching the terms "general economic policies", "general economic policies in the Union" and "secondary objective" in the database containing ECB documents, it was determined that not a single decision of the ECB on implementing monetary policy contained any reference to the secondary objective of supporting the general economic policies in the Union, except the Decision (EU) 2022/1613 of the European Central Bank amending Decision (EU) 2016/948 on the implementation of the corporate sector purchase programme [2022] OJ L 241, [https://eur-lex.europa.eu/browse/institutions/bank.html] Accessed 15 April 2023.

102 Decision (EU) 2022/1613 of the European Central Bank… *loc. cit.*, note 46.

103 *Ibid.*, recital 3 of the Preamble: "As the European Climate Law affects every conceivable aspect of economic policy in the Union, it forms part of the general economic policies in the Union, which the ECB is required to support. In light of the above, when adjusting its monetary policy instruments, the Governing Council will choose the configuration that best supports the general economic policies in the Union, provided that two configurations of the instrument set are equally conducive and not prejudicial to price stability."

104 *Ibid.,* recital 3 of the Preamble: "(…) without prejudice to the objective of price stability, the Eurosystem shall support the general economic policies in the Union with a view to contributing to the achievement of the objectives of the Union, as laid down in Article 3 of the Treaty on European Union. These objectives include a high level of protection and improvement of the quality of the environment."

rosystem's corporate holdings and, by this, to maintain price stability. The measure addressed in the Decision "also serves to support the general economic policies in the Union."[105] This indicates that the ECB's secondary objective was, again, even in practice, seen as a mere consequence of maintaining price stability, or, more precisely, of protecting the Eurosystem's balance sheet from climate-related financial risks.

However, it should be stressed that nothing in the wording of Art. 127(1) implies that the ECB's supporting role with regard to general economic policies should only be incidental. On the contrary, TFEU sets forth the legal duty of the ECB to support the general economic policies in the Union, the same as it sets forth the ECB's legal duty to maintain stable prices. TFEU only limits the ECB's supporting role by the primacy of the price stability objective. And as *per* Advocate General Wathelet's Opinion in *Weiss* case, stable prices are "the only limitation on that support."[106]

The underlying reason for the recent ECB's amendments to the Corporate Sector Purchase Programme and the intended amendments of its collateral framework is the protection of the ECB's balance sheet from climate-related financial risks connected to its price stability objective. This indicates that the extent to which the ECB will contribute by those measures to the EU climate objective could be relatively small. For example, concerning the intended amendments of the ECB's collateral framework, the ECB could decide to put minimal constraints regarding the debt instruments issued by the carbon-intensive sector if that would be enough to protect its balance sheet from climate-related financial risks (e.g, it could only apply additional value haircuts and not limit the portion of such instruments that could serve as the collateral). But the ECB is bound by the EU climate objectives and should use all possible venues to contribute more to address them. The ECB's secondary objective could and should serve as a standalone legal basis for creating specific climate-oriented monetary policy measures as long as such measures do not impair stable prices (e.g., as already proposed by van 't Klooster and Rens van Tilburg, the ECB could adopt Green Targeted longer-term refinancing operations under which the ECB could apply lower or even negative interest rate on credit operations with banks if their lending contributes to the EU climate objectives).[107] By adopting such measures, the ECB would more strongly align its monetary

105 *Ibid.*, recitals 2 and 3 of the Preamble.

106 Opinion of Advocate General Wathelet, delivered on 4 October 2018 in Case C-493/17, *Heinrich Weiss and Others* [2018] ECLI:EU:C:2018:1000, para. 113.

107 Van't Klooster, J.; van Tilburg, R., *Targeting a sustainable recovery with Green TLTROs*, Positive Money Europe & Sustainable Finance Lab, 2020 [https://www.positivemoney.eu/wp-content/uploads/2020/09/Green-TLTROs.pdf], Accessed 2023.

policy with the climate objective of steering the financial flows toward low carbon emissions and climate-resilient development. The ECB should, therefore, take a more proactive role and even bolder steps to address the EU climate objectives beyond merely protecting its balance sheet from climate-related financial risks.

4. CONCLUSION

The ECB is bound by the Paris Agreement and the EU climate objectives. The ECB's monetary policy should serve for supporting the EU climate objectives, as they fall squarely within the ECB's legal mandate. The detrimental effects of climate change are already affecting the ECB's primary objective of maintaining stable prices. This leads to the conclusion that the ECB must take into account climate risks while calibrating its monetary policy measures aiming at stable prices. But the ECB's role in the climate change arena goes beyond merely considering climate risks while maintaining the value of the euro. Within its secondary objective, the ECB has a legal duty to support climate-oriented general economic policies in the Union, i.e., policies aiming at a high level of protection and improvement of the quality of the environment. This duty arises not only from the legal interpretation of the EU primary law regulating its secondary mandate but also from the recent resolutions of the European Parliament on the ECB's annual reports. The ECB's secondary objective implies that the ECB should take a more proactive role in supporting the EU climate objectives, for example, by creating specific monetary policy measures that would foster steering the financial flows towards green sectors. The only limit to such a course of action is the ECB's primary objective of maintaining price stability. As stated by David Cobham in his paper "The past, present, and future of central banking": "while a world in which central banks need to address only one objective with only one instrument would be neat and tidy, and largely ruled-based, monetary policy strategy needs to be designed for a world in which there may be (known and unknown) unknowns around the corner, and central banks need both the alertness and the discretion to confront them."[108]

REFERENCES

BOOKS AND ARTICLES

1. Cobham, D., *The past, present, and future of central banking*, Oxford Review of Economic Policy, Vol. 28, No. 4, 2012, pp. 729–749
2. Dafermos, Y., *et. al., The Price of Hesitation: How the Climate Crisis Threatens Price Stability and What the ECB Must Do About It*, Greenpeace, the German Institute for Economic

[108] Cobham, D., *The past, present, and future of central banking*, Oxford Review of Economic Policy, Vol. 28, No. 4, 2012, pp. 729–749, pp. 734-735.

Research and the Centre for Sustainable Finance at SOAS, University of London, 2021 [https://eprints.soas.ac.uk/35496/1/The%20Price%20of%20Hesitation_FINAL-New.pdf], Accessed 4 April 2023

3. Debelle, G.; Fischer, S., *How Independent Should a Central Bank Be?*: in Goals, Guidelines, and Constraints Facing Monetary Policymakers, proceedings of a conference held in North Falmouth, Massachusetts, Federal Reserve Bank of Boston, pp. 195-221
4. Dietz, S., *Green Monetary Policy Between Market Neutrality and Market Efficiency*, Common Market Law Review, 59, 2022, pp. 395-432
5. Dikau, S.; U. Volz, *Central Banking, Climate Change and Green Finance*, ADBI Working Paper 867, Asian Development Bank Institute [https://www.adb.org/sites/default/files/publication/452676/adbi-wp867.pdf], Accessed 4 April 2023
6. Egidy, S., *Proportionality and Procedure of Monetary Policy-Making*, International Journal of Constitutional Law, Vol. 19, Issue 1, 2021, pp. 285–308
7. Faccia D.; Parker, M.; Stracca, L., *Feeling the heat: extreme temperatures and price stability*, ECB Working Paper Series No. 2626, 2021 [https://www.ecb.europa.eu/pub/pdf/scpwps/ecb.wp2626~e86e2be2b4.en.pdf], Accessed 4 April 2023
8. Franklin, C. N. K., *The Burgeoning Principle of Consistency in EU Law, Yearbook of European Law*, Vol. 30, No. 1, 2011, pp. 42–85
9. Gortsos, C. V., *European Central Banking Law, The role of the European Central Bank and National Central Banks under European Law*, Palgrawe MacMillan, 2020
10. Häde, U., AEUV Art. 127, in: Calliess, C.; Ruffert, M., EUV – AEUV, 6 ed., C.H. Beck, München, 2022
11. Ioannidis, M; Murphy, S.J; Zilioli, C., *The mandate of the ECB: Legal considerations in the ECB's monetary policy strategy review*, ECB's Occasional Paper Series, No 276/September 2021, p. 14 [https://www.ecb.europa.eu/pub/pdf/scpops/ecb.op276~3c53a6755d.en.pdf], Accessed 4 April 2023
12. Krauskopf, B.; Steven, C., *The Institutional Framework of the European System of Central Banks: Legal Issues in the Practice of the First Ten Years of its Existence*, Common Market Law Review, Vol. 46, Issue 4, 2009, pp. 1143-1175
13. Lastra, R. M., *The Evolution of the European Central Bank,* Fordham International Law Journal, Vol. 35, No. 5, 2012, pp. 1260-1281
14. Louis, J.V., *Monetary Policy and Central Banking in the Constitution* in: Zamboni Garavelli, P., The Legal Aspects of the European System of Central Banks, 2005, pp. 27-42
15. Smits, R., *Elaborating a Climate Change-Friendly Legal Perspective for the ECB*, SSRN, 2021 [https://ssrn.com/abstract=3913653], Accessed 4 April 2023
16. Smits, R., *The European Central Bank's Independence and Its Relation with Economic Policy Makers*, Fordham International Law Journal, Vol 31, No. 6, 2008, pp. 1614-1636
17. Solana, J., *The Power of Eurosystem to Promote Environmental Protection*, European Business Law Review 30, No 4, 2019, pp. 547-576
18. Steinbach, A., *The Greening of the Economic and Monetary Union, Common Market Law Review*, 59, pp. 329-362

19. Van den Berg, C. C. A., *The Making of the Statute of the European System of Central Banks, An Application of Checks and Balances*, Dutch University Press, 2004
20. van't Klooster; J., De Boer, N., *What to do with the ECB's Secondary Mandate*, Journal of Common Market Studies, 2022, pp. 730-746
21. Verdun, A.; Zeitlin, J., *Introduction: the European Semester as a new architecture of EU socio-economic governance in theory and practice*, Journal of European Public Policy, Vol. 2, No. 2, 2018, pp.137-148
22. Zilioli, C.; Ioannidis, M., *Climate Change and the Mandate of the ECB: Potential and Limits of Monetary Contribution to European Green Policies*, Common Market Law Review, 59, 2022, pp. 363-394
23. Zilioli, C.; Selmayr, M., *European Central Bank: An Independent Specialized Organization of the Community Law*, The Common Market Law Review, Vol. 37, No. 3, 2000, pp. 591-644

EU LAW

1. Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic And Social Committee and the Committee of the Regions [2019] COM/2019/640 (European Green Deal)
2. Consolidated version of the Treaty on the Functioning of the European Union [2012] OJ C 326
3. Council Decision (EU) 2016/1841 on the conclusion, on behalf of the European Union, of the Paris Agreement adopted under the United Nations Framework Convention on Climate Change [2016] OJ L 282
4. Council Recommendation (EU) 2015/1184 on broad guidelines for the economic policies of the Member States and of the European Union [2015] OJ L 192
5. Council Recommendation on broad guidelines for the economic policies of the Member States and of the Union [2010] OJ L 191
6. Decision (EU) 2022/1613 of the European Central Bank amending Decision (EU) 2016/948 on the implementation of the corporate sector purchase programme [2022] OJ L 241
7. Decision (EU) 2022/1613 of the European Central Bank amending Decision (EU) 2016/948 on the implementation of the corporate sector purchase programme [2022] OJ L 241
8. Directive (EU) 2022/2464 of the European Parliament and of the Council amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting (Text with EEA relevance) [2022] OJ L 322
9. European Community programme of policy and action in relation to the environment and sustainable development [1993] OJ C138/7
10. European Parliament resolution on the climate and environment emergency [2019] OJ C 232
11. European Parliament resolution on the European Central Bank Annual Report for 2018 [2020] OJ C 294
12. Opinion of the European Central Bank of 19 March 2021 on the mandate and tasks of the Magyar Nemzeti Bank relating to environmental sustainability (CON/2021/12)

13. Proposal for a Regulation of the European Parliament and of the Council on European green bonds [2021] (COM/2021/391 final).
14. Protocol (No 4) on the Statute of the European System of Central Banks and of the European Central Bank [2016] OJ C 202
15. Regulation (EU) 2020/852 of the European Parliament and of the Council on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088 (Text with EEA relevance) [2020] OJ L 198.
16. Regulation (EU) 2021/1119 of the European Parliament and of the Council establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 [2021] OJ L 243 (European Climate Law)
17. Submission by Germany and the European Commission on behalf of the European Union and its Member States, The update of the nationally determined contribution of the European Union and its Member States, 17 December 2020
18. Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community [2007] OJ C 306
19. Treaty on European Union [1992] OJ C 191 (Maastricht Treaty)

EU CASE LAW

1. Case 240/83 *Procureur de la République v Association de défense des brûleurs d'huiles usagées (ADBHU)* [1985] ECLI:EU:C:1985:59
2. Case C- 11/00, *Commission of the European Communities v. ECB* (OLAF case) [2003] ECLI:EU:C:2003:395
3. Case C-370/12 *Thomas Pringle v. Government of Ireland* [2012] ECLI:EU:C:2012:756
4. Case C-493/17, *Heinrich Weiss and Others* [2018] ECLI:EU:C:2018:1000
5. Case C-62/14, *Peter Gauweiler and Others* [2015] ECLI:EU:C:2015:400
6. Case T-107/17 *Frank Steinhoff et. al. v. European Central Bank* [2019] ECLI:EU:T:2019:353
7. Opinion of Advocate General Jacobs delivered on 14 June 2001 in Case C-377/98 *Kingdom of the Netherlands v. European Parliament and Council of the European Union*
8. Opinion of Advocate General Sharpston delivered on 26 November 2015 in Case C-660/13, *Council of the European Union v. European Commission*
9. Opinion of Advocate General Wathelet, delivered on 4 October 2018 in Case C-493/17, *Heinrich Weiss and Others* [2018] ECLI:EU:C:2018:1000

OTHER REGULATIONS

1. Bank of England Act, UK Public General Acts, 1998 c.11
2. Federal Reserve Act, 12 U.S. Code § 226
3. German Bundesbank Act 1957, Gesetz über die Deutche Bundesbank, 26 July 1957 (Bundesgesetzblatt, Teil I, Nr. 33)
4. Paris Agreement to the United Nations Framework Convention on Climate Change [2015] Treaty Series, Vol. 315 (Paris Agreement)

WEB SITE REFERENCE:

1. Arce, O; Koester, G., Nickel, C., One year since Russia's invasion of Ukraine – the effects on euro area inflation, The ECB blog, 2023 [https://www.ecb.europa.eu/press/blog/date/2023/html/ecb.blog20230224~3b75362af3.en.html], Accessed 15 April 2023.
2. Clarifying the nature of ECB support for general economic policies in the Community, European Central Bank, Directorate General Economics, SEC/GovC/X/02/32, 29 January 2002
3. Delors, J., Report on the Economic and Monetary Union in the European Community [1989] (Delors Report) presented by the Committee for the Study of Economic and Monetary Union. [EU Commission - Working Document], par. 32, [http://aei.pitt.edu/1007/], Accessed 15 April 2023
4. ECB Press Release, ECB takes further steps to incorporate climate change into its monetary policy operations, 4 July 2022 [https://www.ecb.europa.eu/press/pr/date/2022/html/ecb.pr220704~4f48a72462.en.html], Accessed 15 April 2023
5. ECB, Eligible assets: download area [https://www.ecb.europa.eu/paym/coll/assets/html/list-MID.en.html], Accessed 23 April 2023
6. ECB, *Monetary policy strategy statement*, 2021 [https://www.ecb.europa.eu/home/search/review/html/ecb.strategyreview_monpol_strategy_statement.en.html], Accessed 23 April 2023
7. ECB's Press Release, ECB's Governing Council approves its new monetary policy strategy, 2021, [https://www.ecb.europa.eu/press/pr/date/2021/html/ecb.pr210708~dc78cc4b0d.en.html], Accessed 15 April 2023
8. European Commission, 2022 European Semester: National Reform Programmes and Stability/Convergence Programmes [https://commission.europa.eu/content/2022-european-semester-national-reform-programmes-and-stabilityconvergence-programmes_en], Accessed 15 April 2023
9. Network for Greening the Financial System, *The Macroeconomic and Financial Stability Impacts of Climate Change Research Priorities*, 2020 [https://www.ngfs.net/sites/default/files/medias/documents/ngfs_research_priorities_final.pdf], Accessed 15 April 2023
10. Publications Office of the European Union, Summaries of EU legislation: Broad guidelines for economic policies [https://eur-lex.europa.eu/EN/legal-content/summary/broad-guidelines-for-economic-policies.html], Accessed 15 April 2023
11. Speech delivered by Dr. Willem F. Duisenberg, President of the European Monetary Institute, at the Bankers' Club Annual Banquet in London, 16 February 1998 [https://www.ecb.europa.eu/press/key/date/1998/html/sp980216.en.html], Accessed 15 April 202
12. Speech delivered by Eugenio Domingo Sanso at the Wilton Park conference on "EMU: Economic and Political Implications for the "ins", "outs" and European Business" at Wiston House, West Sussex, on 24 May 1999 [https://www.ecb.europa.eu/press/key/date/1999/html/sp990524.en.html], Accessed 15 April 2023
13. Van't Klooster, J.; van Tilburg, R., Targeting a sustainable recovery with Green TLTROs, Positive Money Europe & Sustainable Finance Lab, 2020 [https://www.positivemoney.eu/wp-content/uploads/2020/09/Green-TLTROs.pdf], Accessed 15 April 2023

ISBN 978-953-8109-46-1