THE ROLE AND PLACE OF CUSTOMS IN PORT COMMUNITY SYSTEM - EXPERIENCES FROM POLAND

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Abstract

Seaports are natural bottlenecks in the transport chain, yet they are logical places to carry out customs and other services controls. Port Community Systems have played a major role in facilitating the more efficient movement of goods while allowing Customs and other government departments to maintain effective controls. This article concentrates on qualification and assessment of the role and place of Customs Office in the PCS organization. In so doing, the role that such Customs can play in terms of implementing the "Ports 24h" programme. The article presents some of the problems in creating the Polish port community system which has to integrate three Polish seaports: Gdańsk, Gdynia and Szczecin-Świonujście. Unfortunately, there is currently no port community system operating in Polish seaports. There are, however, certain single windows created by the Polish Customs Service, Maritime Administration and Main Container Terminal Operators, and they can be used to develop the PCS. There is a major problem concerning how to use those windows to create the PCS. Moreover, the Polish Customs Service has developed system called the "Ports 24h" programme. The article analyses the role and place the Polish Customs in creating integrated port community systems.

Interviews conducted with prominent representatives of ports' stakeholders has made it possible to evaluate the role of Customs Service and indicate the benefits of adopting the system than just improving speed. Such advantages include more efficient control and supervision (risk analysis), costs reduction and increased competitiveness. All of these initiatives have jointly incentivised some of the former importers to return to Polish seaports; however, the situation is believed to change in the near future.

Key words: port community system, seaports, Customs Office

1. INTRODUCTION

The container growth of the Polish trade, together with the emergence of global sea shipping and terminal operators, has resulted in increased demand for seaports and their related services, divided into competing nodal points in the entire global logistics chain. In an effort to improve their competitive position, in Poland, we have commenced planning, implementing and developing the Polish National Port Community System (PNPCS), which constitutes an electronic platform that connects the multiple systems operated by a variety of organizations making up the seaports

community, and which is believed to be a significant contributing factor to the more efficient movement of cargo across Polish sea borders. Seaports have always been clusters of economic activity. The arrival of vessels and cargo in seaports have always been seen as attractive for same trade participants, such as vessel operators, forwarders, marine and land terminal operators, and other transport and logistics operators. These activities are located in seaports precisely because the main transport nodes are found there. Furthermore, seaports are attractive locations for logistics acts, such as storage, assembling, repacking, consolidating, configuring, countrylizing, quality controlling, customizing, packaging, finishing, merging, testing, barcode labeling, tracking and tracing, and so on. Seaports are also industrial zones. Because of the storage and transport commodities such as: oil, coal, iron ore, grain, containers and pallets units and some production activities, including steel production and chemical products, seaports very often accomodate manufacturing activities. Seaports are additionally centers of seaborne trade. Some commodities - such as steel, grains, oil, timber, chemical, trading – occur in the same places as storage or warehouses because buyers and sellers want to inspect the products, or because forecasting on shipping prices is either increasing or decreasing. In the marine logistics, a crucial question is the issue of integration between the various parties engaged in the supply chain. The Council of Logistics Management, in its definition of supply chain management, includes coordination and collaboration with the channel parties, which can refer to suppliers, intermediates, third-party service providers. The Customs Service is crucial to marine supply chain operators. So, integrating the Customs Service with the remaining participants of marine logistics is essential, and may lead to improved operational and economic performance.

At the beginning, many important participants used to take place in seaborne trade (ocean and feeder ship owners/operators, marine container terminal operators, marine forwarders, port authorities, maritime authorities, depot containers operators, pilots firms, mooring companies, stevedoring companies, customs agents, coast-guard service, Customs Office, chambers of commerce, consignor, consignee, rail (multimodal) transport operators, in-land container terminals operators, truck companies, truckers, veterinary office, fishery office, sanitary office, phytosanitary office, government authorities, inland railway terminals operators, inland shipping companies, port control, shipchandlers and store suppliers companies, fleet management companies, tugs and towing services companies, logistics centers, and so on) used individual (internal) closed information systems. The internal information systems are those employed solely by marine logistics service providers (MLSP) and they do not directly interact with the outside world. Internal information systems are used in a variety of ways to assist the MLSP and their management to track sailings, shipments and equipment inventory, and to monitor financial, operational and market share performances. The systems have not allowed the transfer of data and information among the above-mentioned participants. Therefore, they had to use electronic mail or other communication system to transfer data and information, the so-called external system. The external information systems are integrated with or are linked to upstream and downstream contact points. These links include upstream suppliers, like truckers, rail operators, marine and in-land container terminals operators, depots operators, and customers such as shippers, Customs Office, custom

agencies and other governmental bodies. The external information systems also allow for the electronic interchange of data between the MLSP and its various customers. Moreover, all the participants had to draft paper documents and they had to physically transport them to the consigner. To ship a container, Polish marine forwarders need to know all the systems used by different marine container terminals operators. In Poland, there are three main seaports, i.e. Gdynia, Gdańsk (located in Gdańsk Bay, on the southern Baltic) and the port complex Szczecin-Świnoujście situated in the western part of Poland's coastal area. The Gdynia seaport has agreements three marine container terminals operators: Baltic Container Terminal Ltd. (belonging to ICTSI – International Container Terminal Services Inc. – Manila), Gdynia Container Terminal Inc. (belonging to Hutchinson Port Holding – Hong Kong) and OT Logistics Group Inc. (belonging to Polish Capital – with a diversified commodity portfolio – included container operations). The Port of Gdańsk included the following container terminals: Deepwater Container Terminal Inc. (owned by The Macquarie Pension Funds), Gdansk Container Terminal Inc. (owned by Gdansk Port Authority). The port complex Szczecin-Świnoujście, meanwhile, embraces only one container terminal, and that is OT Port Świonujście Inc. (owned by OT Logistic Group). The Polish container operations are increasing rapidly. Every year, we observe a growing container turnover, and investing in new stores, warehouses, trucks, intermodal equipment's, and finally new and sophisticated information systems.

For that reason, the Polish National Port Community System must be created in Poland. The creation of a port community system (Figure 1) should consist of three stages: (1) individual (non-integrated) information systems; (2) many different integrated information systems (TOS, single windows and so on); and (3) port community system. For the purpose of this paper, the author does not limit the scope to one Polish port community system, but opts for the Polish National Port Community System that could apply to all the three main Polish seaports.

Figure 1: Port community system creation stages
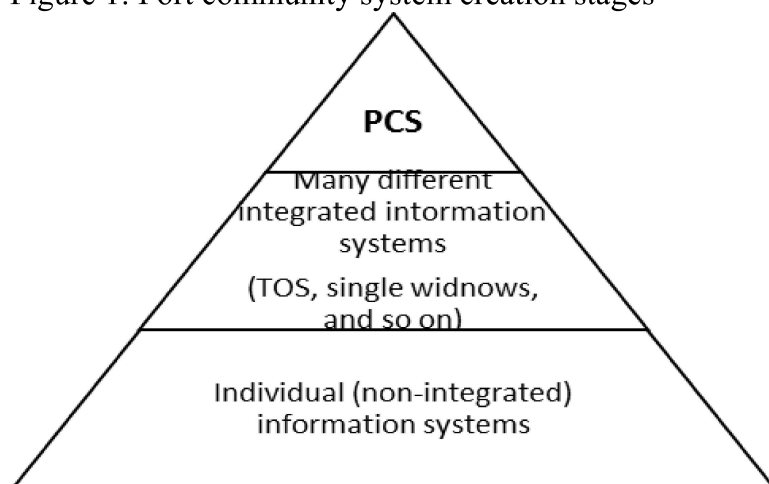
Source: Own elaboration

Currently, some participants of seaport activities are developing their own integrated information systems – "micro-pcs". Such "micro-pcs" have been constructed by the Polish Custom Service (the "Ports 24h" programme, one-stop-shop

platform and single window), Maritime Authority (SWIBŻ system) and Marine Container Terminals Operators (Terminal Operating System – TOS). These systems allow to transfer data and information among dedicated customers. Such sophisticated integrated systems provide the foundation for the Polish National Port Community System, in which all logistics service providers will use one integrated electronic platform for three main Polish seaports mentioned above.

2. METHODOLOGY

In the face of greater competition, managers of seaports have to take advantage of the seaport community system offers. Creating and developing an efficient and integrated port community system for the entire seaport community is one of the ways that managers of seaports can meet the demands of the new situation. Establishing a general PCS frame is therefore of great interest.

An empirical study on depth personal interviews addressed to customers, officers, maritime authorities officers, seaport employees, and other seaport community managers. These surveys were then used to evaluate how the Polish National Port Community System should be developed. Basically descriptive in approach, the research was designed to provide a clear picture of the PCS. It was also conceived as an exploratory report, using a series of open questions to obtain managers' opinions on the system to be used in the future and the risks it entailed.

It is also a co-relational study employing a hypothetical, deductive methodology seeking to identify relations between PCS and SW. The principal component analysis was used to identify Customs' data and information which could be used in the PNPCS. The main idea was that the study could be followed up by similar reports in the future to analyze the way the main areas studied here have developed. However, this review is qualitative and limited to the three main Polish seaports communities (Gdynia, Gdańsk and Szczecin-Świnoujście).

The study is subject to a number of limitations. First, the analysis has not covered other highly important areas of the PNPCS development, among them: legal framework, its interfaces and technologies, its detailed of offering services and methods of financing, and so on. Second, the analysis focused mainly on the Customs Office level and therefore it did not take into account the role of the other participants of the PNPCS acting in seaports communities. Future research could address these issues, especially interactions and co-operation at public and private business unit level within seaport communities and between seaports in these electronic platform networks. In addition, future research could extend the analysis to cooperation of the public and private business units after the PCS is implemented and how the Customs' role will be helping in seaports and trade.

3. LITERATURE SURVEY

Literature review revealed there was a wide range of PCS setups and each had its own characteristics. Perusal of the literature shows that existing research embraces

five scientific areas, namely: (1) description of PCS (Srour et al., 2008; Rodon & Ramis-Pujol, 2006; Durán & Córdova, 2014, pp. 35-44; GIL, 2012, Marek, 2016, pp. 35-50). These descriptions focus on the general benefits offered by each electronic platform, the functionalities that they provide and under which type of port governance they are applied. However, little attention was paid to revealing the exact benefits that each type of PCS users (e.g. marine terminal operators, carriers, marine forwarders, ship operators) benefits from after joining such platform, or even less to quantifying these advantages. PCS users are logistics stakeholders seeking to improve their productivity and/or reduce their costs through sharing data; (2) cooperation amongst logistics stakeholders often refers either to vertical integration or to horizontal collaboration of actors (Van de Voorde & Vanelslander, 2014; Leitner, 2011, pp. 332-337; Wang, 2014, pp. 253-257; Cruijssen et al., 2007, pp.129-142; Leitner et al., 2011, pp. 332-337; Keceli et al., 2011, pp. 151-167). These collaboration studies demonstrate particular benefits gained by each actor who has joined the electronic platform. Moreover, results of their studies show that PCS integrates both types of cooperation – vertical and horizontal - and therefore their cumulated range of benefits for all actors operating within the port community system; (3) PCS design and functionality (Rodon & Ramis-Pujol, 2006; PORTEL, 2009; EPCSA, 2011; van Oosterhout et al., 2007; Keceli, 2011, pp. 151-167; Durán & Córdova, 2014, pp. 191-208; Srour et al., 2008; Verhoeven, 2010, pp.247-270; Van de Voorde, Meersman & Vanelslander, 2011, pp. 822-843; Heaver et al., 2001, pp. 293-305). The studies referred to PCS functionalities or application modules when presenting the PCS platforms. According to the authors, PCSs are individual electronic platform developments that incorporate different functionalities of one specific port. Furthermore, these functionalities are being supported by applications of different modules which deal with more specific tasks. A PCS has therefore a multilayer structure characterized by different functionalities that are put into practice through a set of separate modules. The stakeholders involved in the port activity (whether they are private shareholders, customs officers or port authority) can either make use of all the functionalities of the PCS, or only some part of them, as well as make use of individual modules only. Moreover, results of their studies directly indicate that all PCSs are modular; (4) costs of PCS (Southon et al., 1999, pp.33-46; Baalen & Beije, 1998; De la Guia, 2013; Sweeney & Evangelista, 2006, pp. 27-43; Miranda, 2003; Tijan, 2009, pp. 557-568; Tijan et al., 2009, pp. 305-315). These studies note that the term *cost* goes beyond its financial meaning, and it can refer to the barriers that need to be overcome so that the collaboration relations between port stakeholders can be established; (5) PCS benefits (Cuadro & Cervera, 2004, pp. 320-330; van Oosterhout et al., 2007; Cordova & Duran, 2014, pp. 191-208; Mila, 2007; Gustafsson, 2007, pp. 14-20; Durán & Córdova, 2012, pp. 35-44; Keceli, 2011, pp. 151-167; Keceli et al., 2008; Aydogdu & Aksoy, 2013, pp. 1-10; OECD, 2012; Srout et al., 2007; Cišic et al., 2009, pp. 3; De la Guia, 2013). Results of the scientific studies may be divided into the following categories: economic benefits, increase quality of information, increase performance, increase competitiveness and increase efficiency (Carlan et al., 2015). These criteria should be taken into consideration by the port authorities in order to improve the competitiveness of a particular seaport.

These researches do not concentrate on the role and place of Customs Office in port community system but it should be taken into account by the PCS creators in order to improve the competitiveness of particulars seaports.

4. FORMS OF PORT COMMUNITY SYSTEMS IN THE EUROPEAN UNION AND POLAND

Legislation in force and economy forms of port community system are strictly related to the type of local organisation fostering the PCS development in the business-reperesented nature of the stakeholders of the PCS managers/supervision company. In that respect, three main types of PCS operators may be identified (MED-PCS, 2013, pp. 19):

- Private.
- Public.
- Mixed public/private (PPP).

The first solution concerns "private stakeholders implementing a bottom-up approach, or in other words, if private operators boost development of the PCS, it would be quite straightforward to expect the same of private stakeholders such as: shipping companies, marine forwarders, shipping agents, sea container terminal operators, stevedore companies, multimodal transport operators, brokers, and so on. Sometimes, private associations of entrepreneurs (e.g. chamber of commerce) and financial institutions (e.g. commercial banks) act as relevant stakeholders" (MED-PCS, 2013, pp. 19).

"The public stakeholder scheme is instead coupled with the top-down implementation approach, which normally envisages the port authorities and possibly other public bodies as main shareholders. In countries with proactive participation of national public authorities (such as Poland currently – there is a trend towards centralisation of economic activity), the presence of state-owned corporations as main stakeholders is also common" (MED-PCS, 2013, pp. 19).

"The mixed public/private scheme is aimed at achieving a full acceptance and/or an active participation of private companies in top-down PCS implementation. In that respect, probably the most advanced and complex scheme of public-private partnership is represented by the SOGET experience in France" (MED-PCS, 2013, pp. 19).

"An interesting analysis can be carried out by comparing the focal organisation and the business model of some PCS implementation" (MED-PCS, 2013, pp. 19), as reported in some remarkable case studies presented in Table 1 below.

Table 1. Main characteristics of port community systems in the EU.

| Country	Port	Name of system	Type of system	Name of focal organiz ation	Type of focal organiz ation	Business model
France	Le Havre	AP +	PCS + SW	SOGET SA	mixed	PPP
Germany	Hamburg	Dacosy	PCS + SW	Dacosy	private	Bottom-up
Belgium	Antwerp	Porthus.net	PCS + SW	Port-I-Com	mixed	PPP
Netherlands	Rotterda m	Portbase	PCS + SW	Portbase	public	Top-down
Italy	Livorno	TPCS	PCS + SW	Port authority	public	Top-down
Italy	Venice	LOGis	PCS	Port authority	public	PPP
Italy	Genoa	E-Port	PCS + SW	Port authority	public	PPP

Source: MED – PCS, 2013, pp.20.

In Poland, there are some discussions regarding business model of the Polish National Port Community System. In these areas, there are two bottom-up initiatives to develop, implement and maintain this electronic platform. One proposition is a private model within which a vehicle purpose company VPC was set up and the project's main financing source was UE funds. That company is called HTPCS (High Technology Port Community System) Ltd. The second initiative has been proposed by the Logistics and Warehouse Institute and Baltic Container Terminal Gdynia Ltd. Unfortunately, the latter solution is not neutral for other stakeholders of the Polish seaports. Anyway, the most important vision on business model of PNPCS should come from the Polish Ministry of Maritime Economy and Inland Navigation. The Polish Ministry should set up a company – a PCS operator. Every Port Authority (Gdynia, Gdańsk and Szczecin-Świnoujście) should have 33% of shares in the new company. The Polish Ministry of Maritime Economics and Inland Navigation should have a 1% share (Figure 2). The capital structure of the PCS operator is, of course, still being discussed. The Polish Ministry should indicate the leader of the PCS, e.g. the Gdynia Port Authority, who will be responsible for creation, implementation and maintenance of this electronic platform. The leader Port Authority may create a cluster of companies that will be participating in a venture of this calibre.

When creating the Polish National Port Community System in Poland, one should examine organizational aspects such as (IPA, 2014, pp. 69-70):

- "Which governmental authorities and agencies should be involved?
- Which governmental authority/agency, or private organization should lead the running of the PCS - government, private owner under government contract or completely privately-owned by business (service provider)?
- Whether the Port Community System should be centralized or decentralized?

- Should it be an active or passive system?
- Should a payment system be part of the PCS?
- Should participation be voluntary or mandatory?
- Should common risk profiles/compliance assessments be part of the system and should they be developed and/or shared?
- Who bears the risk if/when something goes wrong?"

Figure 2. Proposed structure of post community system in Poland
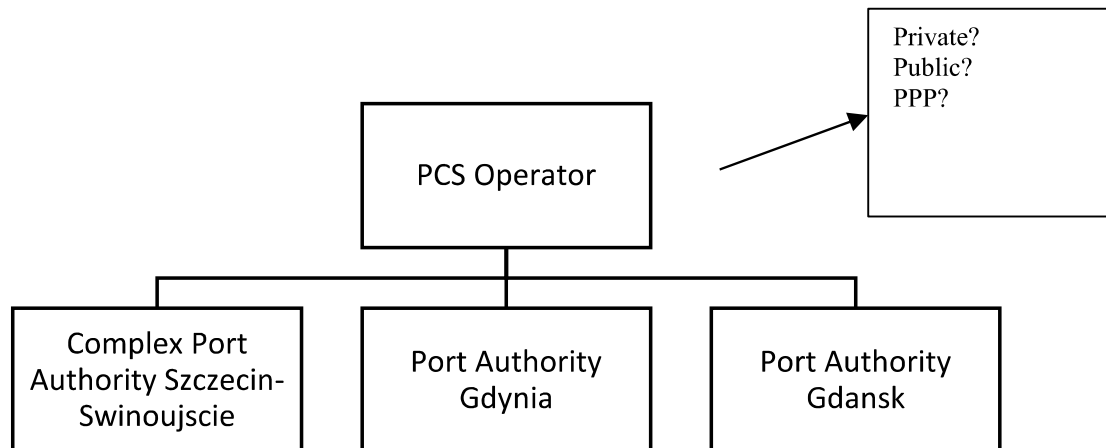
Source: own elaboration

The next steps, in turn, which must be taken into account is examining the existing requirements, procedures, and processes for the submission of import, export and transit documents and information. Many of these documents and information have to be standardised for all participants of the PNPCS. The creator of PNPCS, however, must find answers to the following questions (IPA, 2014, pp. 69):

- "Identify key private companies and governmental authorities that can potentially be involved in the system.
- Determine the extent to which it is possible to harmonize and simplify these requirements, procedures, information flows and documents.
- Explore possibilities for ensuring the single submission of documents and information.
- Consider the potential of the Port Community System to address trade security issues.
- Identify the needs of potential users, especially regarding the design of the eventual service and associated interfaces (either electronic or physical).
- Consider "best practice" methods in existing Port Community System. This may involve visits to operational Port Community Systems.
- Consider the need for and approach to generating the required political support for the project".

The description of the PNPCS as any other information system is primarily a tool to increase the present and future efficiency of the organizations directly engaged

in marine container logistics, to utilize their resources more effectively in order to reduce costs and increase profits. Comparing this advanced system with the traditional manner (paper documents) of data collection and processing, the benefits achieved are obvious. The range of data reporting is enlarged and its faster processing is enabled, which translates into more and more actual data and information concerning basic operations on performance being continuously at the disposal of the PNPCS users. Aside from status reports based on e- stock information, which can be easily reduced to essentials, re-grouped etc., special figures can be compiled with a view to forecasting and planning.

The Polish National Port Community System should cover the key functional components and associated constituent data flows reveal the operational aspects of the PCS. The PNPCS should comprise the following functional components: documentation origin, logistics transactions, sensing network, freight risk management, credentials identity, traffic information integration and electronic payment.

However, suggestions to obtain standardized and simplified documents in order to facilitate international trade relations do exist. The PNPCS should mainly rely on the European Union Derivatives' standards methods of data presentation (including codes and formats), but the implementation of these useful documentation procedures will take a couple of years. Moreover, the replacement of traditional maritime documents in order to promote electronic data exchange by the Polish National Port Community System could prove difficult due to the fact that documents for sea carriage (mainly bill of lading) have the additional status of a negotiable files, thus awarding a legal title to the owned goods.

In the long run, the development of standardized electronic data and information system may lead to the concept of data interchange not only within Polish seaports, but also between trade participants and seaports located all over the world, i.e. electronic data interchange is possible with regard to vessel and cargo movement in the whole container logistics chain.

A modernized Polish National Port Community System should be the key element of logistics chains which go through seaports, where sea transport is directly linked with other modes of transport such as: road, rail and river. Unfortunately, some processes of transshipments, storages, warehouses and controls, as well as some business relations of all stakeholders involved in the PNPCS creation, are becoming increasingly complex since all public and private operators of seaport activities are hard-pressed for lack of time, growing customer expectations, plus increasing costs and commodity quantities.

5. ROLE OF CUSTOMS OFFICE IN CARGO EXPORT AND IMPORT

The Polish Customs Service controls and inspections are those exercised over the process of international seaborne trade with relation to specific control over the following areas (Rowbotham, (2007), pp 15):

- "Imports of goods.
- Exports of goods.

- Illicit trade i.e. contrabanding, smuggling.
- Prohibitions and restrictions of the import or export of certain commodities and products.
- Direct (duties) and indirect taxes, and
- Seaborne trade statistics".

The above-mentioned areas of the Customs duties should play an extremely important role in the PCS given the influence on the speed of controls and inspections of all Polish public control services. The export or import of element of Polish Customs Service controls, with regard to maritime movements, has become more automated and electronic along with the implementation of e-customs, although it is still required to submit the full cargo manifest of the Customs Office by the ship's agents prior to the vessel being cleared by Customs for sailing. The cargo manifest involves, however, the issuing a marine bill of lading for each consignment, coupled with the raising of e-customs export and import declarations by the clearing customs agent/freight forwarder. The submission of each set of documents rests with different parties, as the following summary presents (Rowbotham, (2007), pp 15):

- The cargo manifest is submitted to Customs Office by the vessel's agents or the port agents or forwarders.
- The declarations are submitted by the freight agents.
- The bill of lading is raised by the carrier (the shipping line or/and marine container terminal operators).

The bill of lading is submitted by the shipping line to the freight forwarder responsible for the organization of the shipment, and some agreed copies with the parties should also be held by the ship's agent or import container terminal operator who submits the cargo manifest on behalf of the shipping line to the Customs. There are some cases that indirectly indicate who is responsible for loading cargo aboard a vessel, owing to the absence of specific incoterms in the contract of delivery. In this case, the Customs Office is not aware that the consignment has been loaded aboard the vessel, and consequently has not been correctly declared. There are also some problems in the case of hazardous or dangers cargoes which are incorrectly declared for customs (i.e. improper IMO class indicated) could prove disastrous in the event of an accident aboard the vessel or a collision, or another disastrous occurrence (Rowbotham, (2007), pp 15). This is because "a trader, i.e. exporter or importer, could be held liable for the consequences of such accident. Further consequences of a failure to correctly declare a consignment for customs is that the trader is liable for VAT on the value of the consignment and equally a civil penalty on the grounds of a false declaration being made to the Customs Service" (Rowbotham, (2007), pp 15). Unfortunately, traders would like to gain better terms of VAT settlements and that is why they prefer German or Dutch seaports over Polish ones (Montwiłł, (2011), pp. 859-868). Therefore, the Port of Hamburg in Germany, used to be called the "biggest Polish port" for many years (Klopott, Miklińska (2016), pp.107-114).

The vessel notifies the port of its impending arrival. The cargo manifest (in its electronic UN/EDIFACT CUSAR format; Long (2013), pp. 63-67) is submitted electronically by the port agents representing the shipping line to the Polish Customs computer. The port agents also submit the IMO FAL forms detailing the following information:

- IMO General Declaration (FAL form 1).
- Cargo Declaration (FAL form 2).
- Ship's Stores Declaration (FAL form 3).
- Crew's Effects Declaration (FAL form 4).
- Crew List (FAL form 5).
- Passenger List (FAL form 6).
- Dangerous Goods (FAL form 7).

"Based on this electronically submitted information, a customer officer may decide to travel to the port to board the vessel and examine the details referring to the crew or its passengers" (Rowbotham, (2007), pp 15). One system which has facilitated the electronic submission of the cargo manifest is CELINA, an electronic cargo processing system originally developed by the Polish Customs Service under the maritime cargo processing. This e-customs platform facilities submission of the cargo manifest to the port authorities and the Customs to select in advance those containers which require examination or scrutiny when unloaded from the vessel. The Polish Customs Service, unfortunately, has complained about the lack of necessary data and information on the containers and commodities prior to its arrival into the Polish seaports. Such data and information are highly important for risk assessment as they enable the identification of containers and commodities in transit and traders (importer/exporter) contract. The lack thereof has led to a problem aimed particularly at producing better-targeted customs controls and inspections of containers and commodities, and thus increase the time and costs of Customs Office controls and all public inspections. The Polish Customs Service has to identify restricted areas and monitor them in order to prevent unauthorised access, and also implement measures to prevent weapons, dangerous substances and devices being taken into vessels or into seaports facilities. It also enables the marine container terminal operators to move containers from the vessel in short time petiods and facilities the Customs and port clearance by the marine forwarders or clearing agents by streamlined means, as the system also facilitates electronic import clearance directly to the Celina Customs computer. However, the system still relies on the accuracy of the data and information supplied in the cargo manifest, and those data and information may not be sufficient to provide the exact details of every cargo contained in every container, especially groupage/consolidated LCLs. Only that data and information supplied as a result of the information, which is also used for the purpose of the issuing of a bill of lading, will be found on the cargo manifest. This information may be insufficient for Customs purposes, and may result in greater numbers of containers being selected for security by Customs at the port of arrival. The authorised economic operators (AEO) or Customs Agencies submit electronic online import declarations directly to the Celina computer' system, which sends back an acknowledgement along with the calculation of import duty and VAT in the form of an entry acceptance advice. Each import declaration represents the cargo in each container, which may be further detailed on the Celina cargo manifest.

Apart from organizational and financial restraints, the development of a uniform PCS is hampered by the input, i.e. the trade related information itself. Data which usually involves trade and transport documentation is not standardized, or it is only to a certain extent. As demonstrated, the Polish Customs Service are considered to be

the perfect authority to deal with security. For this reason, the Customs Service should be the key player in the Polish National Port Community System, given they have the necessary risk management techniques to target high-risk containers and commodities, they are able to collect and analyse the necessary data and information for controls and inspections, and most probably, have the necessary equipment. Anyway, the Polish Customs Service now fulfils a new upgraded role when a few years ago their main task was to collect import duties and taxes. Currently, they also have a tendency to act as security inspectorates of imported and exported containers and commodities.

6. PROBLEMS CONCERNING CUSTOMS AND BORDER CONTROLS IN POLISH PORTS

According to the Polish and EU law, imported containers and commodities have to be controlled and inspected by Customs Office, but – in the case of fresh products – they are also subject to phytosanitary, sanitary, veterinary and others public units controls and inspections. In Poland, the main authorities responsible for exercising control and conducting inspections are: the Polish Customs Service, the Veterinary Inspection, the State Sanitary Inspection, the Plant Health and Seed Inspection, and the Agriculture and Food Inspection. The importers have to deliver the cargo physically to have it checked by Customs Officers and to assure direct access to the inspected container. Nowadays, this importer's obligation generate serious difficulties for Customs Offices when a very large vessel calls at the Polish seaport with a large number of customs clearance orders.

To solve the above-mentioned problem, the Polish Customs Service prepares for electronic customs clearance when containers and cargoes are still aboard the vessel at sea. The Polish Customs Service currently guarantees an efficient customs clearance for such instances, although all necessary data and information must be first provided electronically by the importer or their representative e.g. the forwarder. Such solution makes it possible to prepare some containers' operators into a proper service container unit when containers and cargoes are still on board the vessel at sea. All crucial data and information are contained in the cargo manifest, which is delivered by the vessel operator and the last marine container terminal operator as well. The data and information are then entered into the terminal operating system of marine container terminal operator and receive their "expecting" status, as long as the container unit stays aboard the vessel. Moreover, the same data and information pertain to public inspections, including Custom Service. Thanks to the prior-obtained data and information by the Customs Office, the customs officer may conduct risk analysis of the container and commodities earlier, planning reactions and the method of control and inspection once the container unit has come to the Polish seaport onboard the vessel. The most extensive knowledge, however, concerns: type of cargo, its quantities, its value and its place of destination for traders – the exporter and the importer. Under such circumstances, the importer, who is well aware of all of the above-mentioned trade parameters, may submit customs clearance before vessel with cargo on board comes to the marine container terminal - of course, if there is no need

to exercise controls and conduct inspections by such public units as veterinary, fishery, phytosanitary and so on. Such solution is called customs clearance at sea, because the primary idea relies on submitting customs clearance into the Customs Office, when cargo is still onboard the vessel at sea. This solution allows the Customs Office to prepare for the clearing of goods through the customs based on data and information delivered by the importer. Anyway, data and information must provide full accuracy and reliability and allow to be filled in a SAD document, using the data and information completed and confirmed by transport and trade documents. In this situation, the submitted custom clearance is effective. When a vessel has entered the seaport with cargo and the cargo is being unloaded in the marine container terminal - and the data and information are sent to the customs information system (e-customs), accounting for any customs objections - then the cargo is automatically released by the Customs system from the procedure of free turnover in the UE area. This solution allows the importer or their marine forwarder be vested with cargo after directly calling the vessel into the Polish seaport. By doing so, the above-mentioned problem of the accumulation of custom clearance orders after the vessel's entering in the Polish seaport. Moreover, all operators of the marine logistic process may well be prepared to serve the cargo, and it should allow to cut the costs and time for all marine logistics chains providers whose operate in the Polish seaports (Florczyk (2015), pp. 14-15).

7. POLISH E-CUSTOMS SOLUTIONS AS A PCS FOUNDATION

In Poland, Customs Service has developed two very modern information solutions, namely: a control system based on one-stop-shop platform (System of Control's Coordination – SCC) and the "Ports 24" programme. The first information system concerns permissions granted by the Customs Office on running a temporary storage warehouse, which is used by the marine container terminal operators to manage and count containers that come in and out of the terminal, or that are stored in it. According to the requirement of the "Ports 24h" programme (Figure 3), this information system has provided access for all Governmental Inspections and private companies to directly engage in container and commodity-related operations. Using the system, the Governmental Inspections may make a note on every controlled and/or inspected container/commodities or on every decision made regarding the proper destination of the cargo.

Every note is entered in the online information system by public inspectors. The information in the system is available to all authorized persons immediately after entering it into the electronical platform. By "authorized persons", the author means: Customs officers, importers, customs agents and forwarders, and so on. It allows immediately make a customs clearance using all imported needed data for such inspections.

Figure3. Simplifying statement circulation used by different public control inspections
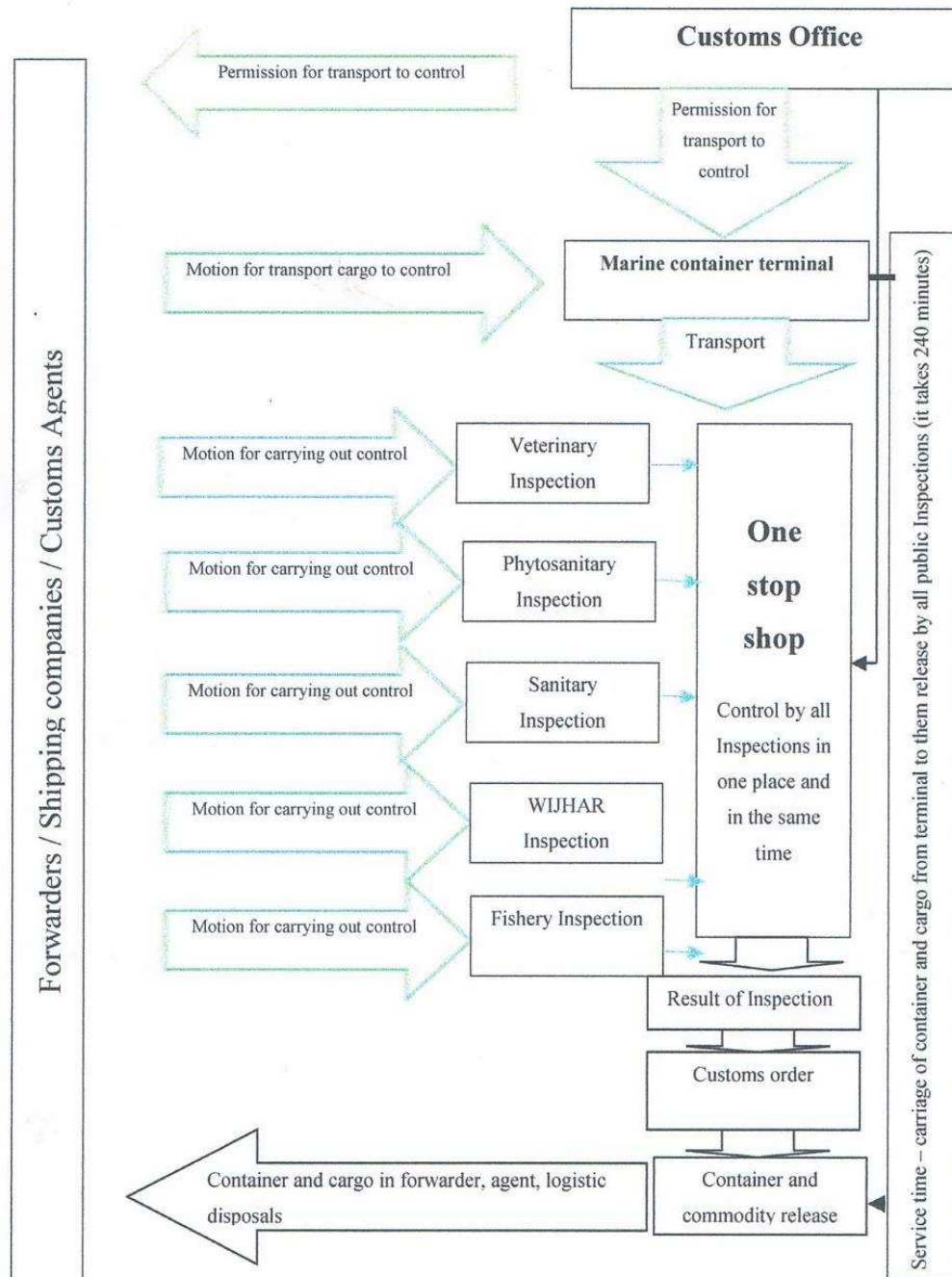
Source: Florczyk (2015), pp. 14-15.

The one-stop-shop platform is a tool to control containers or commodities in one time and in one place by all governmental inspections. To conduct an inspection, one needs to appoint a specific time and place. The terms and conditions of such inspections are presented for clients in regulations of the marine container terminal

operator. The marine forwarders, after ordering cargo inspections, ask the Customs Office for the permission for their container carriage to fix place and they submit a transport order to the marine container terminal operator.

In the process of cargo inspections, there are two places of one-stop shop. If there is fresh cargo, then the place of such control is indicated by Sanitary Inspections. If there are other cargoes than the fresh ones, then the place of control is indicated by the marine container terminal operator. Every place of control and inspection is properly marked and in the area of cargo control there are no ongoing operations on commodities.

In the process of control directly participating are the following parties: control institutions, marine container terminal operator and marine forwarders whose are representing importer's interests. The participation of these persons in control process guarantees prompt access to containers and commodities so as to control and properly supervise the cargo. Under the control, the participation of marine container terminal operator' representative is very important because he or she runs temporary storage warehouse and is responsible for proper conditions of the commodities.

Nowadays, there are large facilities for marine forwarders because they can order control by single terminal window on-line ("mini-pcs" – TOS) and they can read results of such control or inspection on their computer screens. Fixing one place and one time for control and/or inspection give opportunities to run all logistics operations during one shift of a marine container terminal operator.

Thanks to the modern information system and effective acts of all Governmental Inspections and representatives in cargo operations, it means that time between cargo transport from marine container terminal for control and/or inspection all public units lasts between 3 and 4 hours (Florczyk (2015), pp. 14-15). After this period of time, the Customs Office releases the container and the commodities.

Anyway, the importer makes a decision on when the container unit will be transported outside the marine container terminal. The decision is based on his or her economic account and the effectiveness of some of his or her logistics operations, e.g. using the just-in-time rule. The importer may leave the container with cargo inside the marine container terminals located in Poland for up to 45 days. During this time, the cargo may be stored inside the terminal without any customs-tax payments.

The importer may transport cargo from the marine container terminal at any moment. Thanks to joint control of all inspections in one time and one place, and having the guarantee of prompt and effective acts in the marine container terminal, the importer archives additional value for his or her international activity.

Highly facilitating for container services in the marine container terminal area is AEO and local solutions called first-out-first cleared. The AEO status allows to use some facilitations concerns customs control in respect to safety and security of the cargo and/or the use of certain according to customs procedures. If the Customs Office would like to control the cargo, it must be done very quickly. The essence of AEO relies on some facilitations when all participants of the logistic chain have it. It means that when the AEO status involves the following parties: the producer, all carriers, marine container terminal operators, marine forwarders, importer, then the facilitations are highly efficient.

In turn, the first-out-first cleared solution (first out from the marine container terminal – first to be cleared) is used when there are a lot of customs orders. By using such solution, there is some possibility to discharge bottleneck in the sea container terminal area. New solutions of integrated information system in the Polish administration can help facilitate the effective service of containers in the Polish seaports (Florczyk (2015), pp. 14-15).

8. CONCLUSIONS

In the above-discussed broad scope of activities of the Polish Customs Service and other Governmental Inspections in Poland, the Customs Service should play a very important role in developing the Polish National Port Community System. In this new electronical platform, the following data and information should be entered: cargo declaration that provides detailed information about freight avoiding repetitive input of the same data; electronic customs tariff; single customs declaration, customs summary (supplementary customs declaration), summary declaration, simplified procedures, transit, dispatch and receipt, customs warehouse, inward processing, processing under customs control, customs taxes declaration, creates import inventory, record for writing off Customs entries and record for scrutiny by all Government Inspections, and so on.

In the tradition of the port community system, it is tempting that Port Authorities and also Customs Service should act as "facilitators" in the Polish National Port Community System. Anyway, the Customs Service should constantly rethink and broaden their role as facilitator. The Polish Port Authorities should work together with Customs Service and a number of other stakeholders (carriers, shippers, transport operators, and other logistics providers) to identify and address issues affecting port community system performance.

The scope of port authorities and Customs Service should go beyond that of traditional facilitators. Both public units can play an important role through an active engagement in developing the Polish National Port Community System, which will make the same facilitations for inland container distribution and intermodality. Direct and indirect forms of cooperation with notes and market players in port community system constitute probably the most important role for Polish port authorities and Polish Customs Service since gaining competitive benefits will become increasingly a matter of going beyond the Polish seaports boundaries, both in terms of physical container/commodities movements and data and information flows.

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