

Port Community System: Opportunities for the development of logistics and efficiency of the ports of Odessa Region and foreign trade in Ukraine

The transition from a planned economy to a market one has created great opportunities for creative economic initiatives. At the same time, this forced the Eastern European countries to face serious challenges. Lack of experience, proven rules and the legislative framework for the adequate functioning of the business had a negative impact on the development of economic and social relations. The new economic freedom has sometimes led not to an increase in efficiency but to deepening the impact of individual and group interests and the related negative phenomenon. Negative image demonstrated in the *Lord of War* movie may affect the countries; maybe the next stage of development within the region will be associated with the introduction of rules and systems for more efficient market economy.

In this sense, this article proposes the concept of local Single Window in Odessa ports called Port Community System (PCS), as a tool for improving the organizational structure of the Ukrainian economy. This type of single window aimed at collection of information about the goods, not only significantly increases the efficiency of foreign trade, but also leads to significant improvements in control of goods. It reduces the preconditions for corruption and other negative phenomena. For several years already, the government of Ukraine is considering the introduction of single window as a tool to facilitate and automate trade and to increase the efficiency of the economy. Thus, the possible local single window is considered both by business and state authorities responsible for international trade as a pilot project - a step towards a national single window.

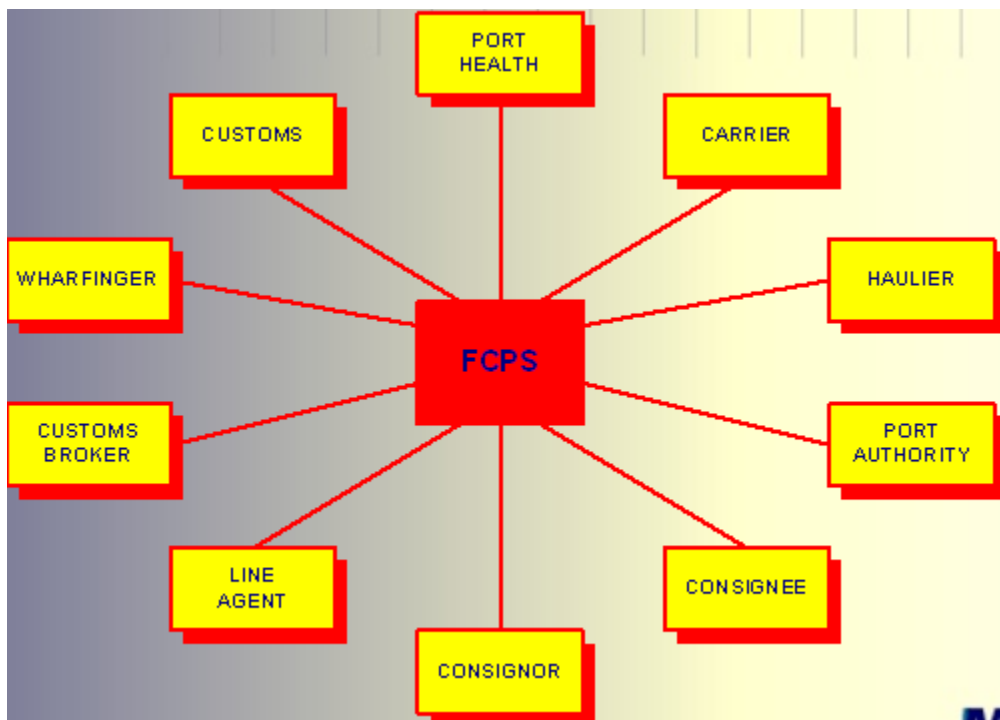
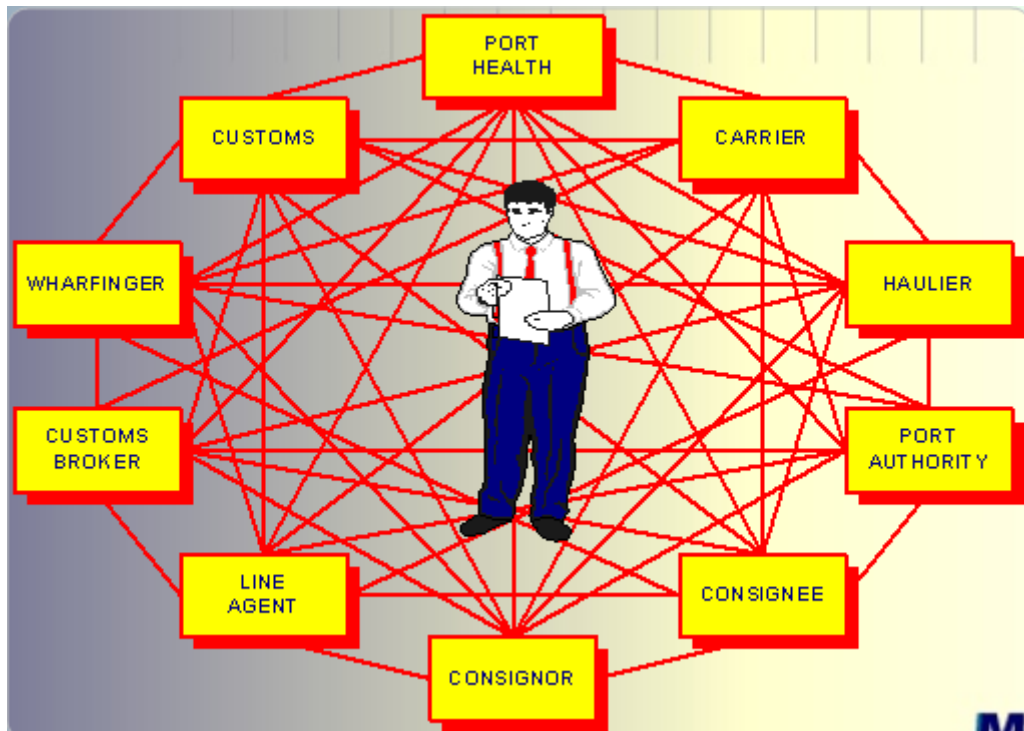
Today, Odessa Commercial Sea Port offers this initiative. The protocol decision made by port offers to implement the so-called "e-order." This instruction regulates the coordination of electronic documents into a single port community system to get the permit for the appropriate customs treatment for the export of import / transit goods from the port area.

Recommendation and Guidelines on establishing a Single Window to enhance the efficient exchange of information between trade and government perfectly describes what Single Window is (**author's note:** http://www.unece.org/fileadmin/DAM/cefact/recommendations/rec33/rec33_trd352e.pdf). Single Window is a system whereby trade related information and/or documents need only be submitted once at a single entry point. Recommendation 33 gives two types of Single Window. On the one part, there are national (regulative and customs) mechanisms: a program that allows traders to submit standard data only once and the system processes and distributes the data to the agencies that have an interest in the transaction. Another type of the Single Window is a Port Community System. A PCS is an electronic platform that connects the multiple systems operated by a variety of organisations that make up a seaport or airport community. It is shared in the sense that it is set up, organised and used by firms in the same sector – in this case, a port community. Western Europe operates this exactly Single Window: ports of Hamburg (Dakosy Company), Rotterdam, Antwerp, Felixstowe, Havre, Marseille, Barcelona, Bilbao and airports of Frankfurt, Amsterdam, etc. Eastern Asia has public-private systems at the governmental level.

The catalyst for Port of Felixstowe's daily operations is The Felixstowe Cargo Processing System (FCPS) which was developed to deliver uniformity of information between all port sectors. Previously, clearance took 4-5 days, there were paper mountains and 30% error rate. Now clearance times reduced to one hour or less.

Implementation of the system, first at the local level, with a view to use the experience to create a national single window will bring Ukraine closer to European Union trade development strategy, which adopted a program of development of a network of national mechanisms for the single window (**author's note** —

http://ec.europa.eu/taxation_customs/customs/policy_issues/electronic_customs_initiative/index_en.htm), that will share information based on the standards of the United Nations and the World Customs organization.



Pic. 1. The benefits from FCPS port community system of Felixstowe in the UK.

Port Community System (PCS) is a neutral and open electronic platform enabling **intelligent** and **secure** exchange of information between public and private stakeholders in order to improve the competitive position of the sea and air ports' communities; it **optimises, manages** and **automates** port and logistics efficient processes through a single submission of data and connecting transport and logistics chains..

A PCS provides for the electronic exchange of information between all port and logistics sectors and is acknowledged as the most advanced method for the exchange of information within a single or national port community infrastructure. The development and implementation of Port Community Systems (PCS) have been significant contributing factors to the more efficient movement of cargo across international borders. These systems vary in both technical and functional design and operation and in coverage in terms of users and locations. Some are effectively message switches, others incorporate messaging with a database, some are designed for specific ports and others try to offer a generic solution. It is interesting to note that, in recent years, they have been held up as examples of Single Windows and in many respects, this is true. The most effective PCS also provide services which most government Single Windows do not, that is, Business-to-Business information exchange.

PCSs in general provide a huge range of services and key features which can be summarised as follows: Easy, fast and efficient EDI information exchange, re-use and centralisation; Customs declarations; Electronic handling of all information regarding import and export of containerised, general and bulk cargo; Status information and control, tracking and tracing through the whole logistics chain; Processing of dangerous goods; Processing of maritime and other statistics. With all of these services come many advantages. The core benefits for all parties involved are higher efficiency and speed regarding port processes, particularly through automatisisation and the reduction of paperwork. In this way, PCSs contribute to sustainable transport logistics and support the ambitions to meet global carbon reduction requirements.

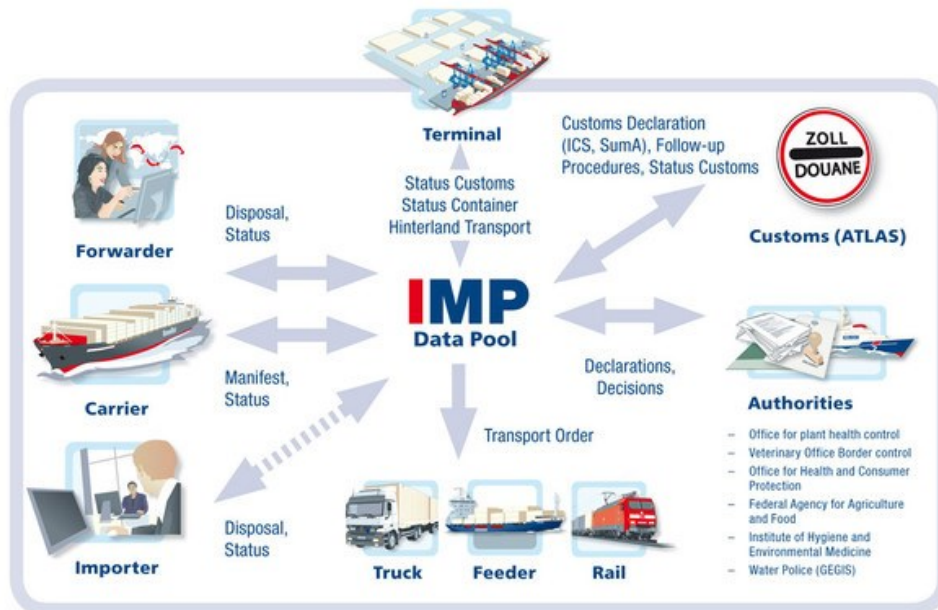


Fig. 2. Dakosy PCS in Hamburg Port.

E-order project by Odessa Sea Commercial Port

Odessa Sea Commercial Port offers the initiative, which can be regarded as the first step to build a technical port community system. In accordance with the regulations of the Customs Service of Ukraine, the customs authority to control how the port authority performs the discharge of the vessel, the documents (including orders), which reflect the intent and / or unloading of goods results in the customs control zone or in vehicles. Order in accordance with Southern Customs technological features technological features, is used for recording and accounting for goods exported outside the customs control zone and the port, as well as the evidence of the passage of all necessary forms of control (customs, technical, border, environmental, radiological, sanitary, phytosanitary, epidemiological, etc.). To modernize this procedure, the port of Odessa proposed Regulations, which provides only the process of order endorsement in e-format by all agencies and stakeholders concerned (container terminals, shipping lines). Further sequence of processing of documents is in accordance with the technological schemes, which include registration of customs declarations (for imports) or document delivery control (for internal or pass-through transit). This step can include customs clearance of cargo and take most of the time compared to the "electronic phase". For a full-fledged integration into port community system (PCS) and the construction of a local "single window" initiative should be expanded until the date when the vehicle submerged in the territory of the border crossings and ports (from the vessel to the port gate). To make this system work on the base of single window concept it is necessary to enter data elements only once, and then they will slowly move from one document to another.

According to the instructions on the use of "e-order" Odessa Sea Commercial Port procedure involves several steps:

1. The preparatory stage: the documents required to regulatory agencies are filled in an electronic format. They are: order, bill of lading and invoice.

2. Completion of order: the freight forwarder prepares a standard paper order for goods. He enters the specified data into a single information system (EIS), as well as electronic copies of the bill of lading and invoice, and then sends the information to the web portal. From that moment it becomes available to customs, veterinary, quarantine and sanitary-epidemiological and environmental services, stevedoring companies and line agents. Control authorities have three hours to reconcile information. If, after three hours from the time of publication of the order in the EIS the information is not verified by the control authority, a system will verify it automatically (the principle of "tacit consent").

3. Endorsement by the control authorities: first veterinary, quarantine, environmental and sanitary-epidemiological services check information freight forwarder has entered in real time in the EIS. If there are no comments, they put down the resolution to load the container on the vehicle. If there are comments, they inform the freight forwarder (if adjustment is necessary) or the customs service, using the column "Note" of EIS. Then the Customs Service in real-time examines the comments made by control authorities and then either allow the loading of the container/vehicle, or blocks it. Given there are no comments, customs

inspector verifies the information record check without any notes in the system, which means customs clearance under certain customs treatment is permitted. If, after three hours from the time the order was published in EIS port information has not been verified by Customs, the system automatically verifies it (the principle of "tacit consent"). If there are comments, customs inspector appoints means of technical control: X-rays, weighing, or examination. After passing the technical inspection the freight forwarder provides the results to the customs. If necessary, freight forwarder sends inspection results electronically to the EIS. When the results are in the EIS Customs Service has additional three hours for examination and decision-making. Customs Inspector may block a container in EIS, indicating the reason. Freight Forwarder in real-time sees the block generated by Customs. Control authorities are entitled to remove the block at every stage of goods handling.

4. Release of container by liner agent: includes agent fees and the provision of original bill of lading by freight forwarder and verification of the documents by liner agent, who affixes (if there are no comments) the necessary permissions and further confirms the release of a container to forwarder in the EIS.

5. To register the entry into the port: there is an order of filing and registration of entry into port. The freight forwarder enters data related to the order *in advance*, i.e.: the number of vehicle; number of trailer, series and number of driver's passport; name of driver. After the freight forwarder resorts to the stevedoring company for registration of proforma disbursement voucher, and the driver of a vehicle refers to transit cargo terminal management team and receives an electronic pass to enter the port. Further sequence of processing of documents is in accordance with the technological schemes.

All users connected to the system can track of the results of control and processing procedures in real-time.

As regards to the data flow diagrams (Author's note - see "Capital Express" Journal No. 4/2011 Article "Single Window Concept: A key instrument for trade facilitation and good governance"), which defines the basic purpose and prospects of proximal development of Single window, it is obvious that:

— in the first place EIS creation would mean a continuous flow of data B2G and G2B (in the direction of "business-government agencies" and vice versa);

— the types of documents to be transferred to the EIS (invoice, bill of lading), may mark the beginning of the shift to the Single Window elements of other data streams - B2B (business-to-business).

Backgrounds for PCS

The functioning of the PCS is stipulated by the following backgrounds. First of all, this is the large area, which is served by this port: a large part of the country, several countries or transport corridor. For example, the port of Rotterdam serves not only for the adjoining part of the Netherlands, but for most of the Germany economy, and across the river Rhine – for the whole of Central Europe. The ports of Odessa Region serve the major part of Ukraine (**Author's note - For eleven months of 2011 Port of Odessa imported and exported 22.6% (23,283.7 tons) of cargo that passed through the ports of Ukraine (102,992.7 tons). Three ports of Odessa (Odessa, Yuzhniy and Illichivsk) handles 54.4% of Ukrainian cargo**), as well as a corridor from the Black Sea to central Europe. The importance of this corridor has increased with the development of the VIKING train project (Klaipeda-Minsk-Kyiv-Odessa/Illichivsk). The concept and program of Ukraine's development as a transit country is also a strong argument for the development of the PCS project in the key port of the country - at the crossroads between Europe and Asia, from Turkey to Russia, Eastern and Central Europe. Moldova is also interested in the development of Single Window in Odessa, and may even participate in it. Geographically, the most convenient port for the Republic of Moldova is Odessa, however Moldova puts the development of the port on the Danube Giurgiulești as its priority. Moldova's participation in the possible future of Port Community Systems in Odessa Region will provide conditions for more efficient collection and share of information between the Ukrainian and Moldovan authorities and business partners.

To make PCS project viable, we need strong political support and active driver, i.e. organization or company on the spot. Support is needed at the highest level - for example, a minister or ministry that would understand the purpose, benefits and principles of the Single Window, that would actively lobby this project in the government and demand regular reports on its implementation.

An important prerequisite is the creation of favourable legal environment for the smooth exchange of trade information between the agencies for the legal equality between paper and electronic data carriers (so that both have equal legal force), for a working system of digital signatures, etc. It is necessary to analyze the legal framework within which PCS will work (for example, acts to protect the data, the sea trade law, customs law and procedures). However, much of the preparation of favourable legal environment is made at the national level by national legislative and executive authorities. In this context, the preparation of the legal framework for a local Single Window can be very useful at the future stage, when a country shifts from a pilot project to a national Single Window.

However, the most important prerequisite for a successful project is the efficient cooperation between all participants of the future PCS. The active participation of the business is extremely important for local PCS, while in the context of the national Single Window the most important role is played by the seamless data exchange between state regulators. In this sense, the positive element is the active position taken by the business community of Odessa, in particular, by PLASKE JSC and other organizations that provide freight forwarding and logistics services. Establishment of cooperation between stakeholders of the future system - Customs, the business community, port authorities, shipping companies and foreign participants, etc. - is a priority. At the political level working group to support a pilot project in Odessa has already been established

in Kiev. At the working level, Odessa Sea Commercial Port is already engages the different agencies to its e-order project: customs, veterinary, quarantine and sanitary-epidemiological and environmental services, stevedoring companies and liner agents. However, this is only the beginning. Information exchange system should be strengthened both organizationally and technically.

From the very beginning, you need to create the concept of the business model of public-private partnership that justifies one or another way to invest in a system, as well as its pay-off period.

Viability (return on investment) of PCS

The current PCS experience points to several possibilities of payment settlements for the services. First, services may be provided for regular customers, based on subscription. The advantage of this system is that it institutionalizes the relationship between regular customers and regulators. Similar relationships are created during the introduction of the Authorized Economic Operator, which creates tangible benefits for the business of law-abiding traders. Second, PCS services can be paid by the piece - for each container, bill of lading or any other document prepared within the system.

On the basis of one of the payment settlements I present here a simple model for the possible return of the draft local Single Window in the ports of Odessa region. We take the flow of containers as a basis, and the prices for services provided by Felixstowe PCS in the UK as an example of pricing: £1.8 (EUR 2,2) per container for import and £0.8 (EUR 0.98) per container for export. We calculate that the handling of one empty container costs EUR 0.40. On the basis of (1) of the above prices for container handling, and (2) data on the container handling at the ports of Odessa and Illichivsk in 2011 we can calculate the pay-off period for PCS in the port of Odessa. If the system will be established and will be used for all container traffic, the ports of Odessa and Illichivsk will be able to collect the EUR1053837 per year from fees for container handling:

	Export containers		Import containers		Empty containers		Total
Odessa	102539		227123		125877		
Illichivsk	41493		144312		112945		
Two ports	144032	x0,98	371435	x2, 2	238822	x0,40	
Amount	EUR1411 51	+	EUR81715 7	+	EUR95529	=	EUR10538 37

According to the European Association of Port Community Services, EAPCS the cost of creation of the existing systems in the world varies between EUR2 million (in Barcelona) and EUR100 million (in Japan). If the PCS value in Barcelona is taken as a basis for the PCS project in the Odessa region, and even increase it twice (EUR4 million), the PCS system can pay off in about 4 years. In fact, container shipping and payment per container is only part of the PCS income, investments can be paid-off even more quickly. Keeping in mind the significant benefits from the introduction of Single Window for the private and public sector, investments in PCS may be very beneficial.

PCS concept

The concept of any PCS is based on the strategic importance of rapid and high-quality exchange of information for businesses and government agencies. If earlier it was possible to assert that the information is power, now it is quality exchange of information. In this sense, the Single Window is a "smart" system of collecting information within the supply chain. Some researchers of the business processes say that in future the information in the information flow will be entered not by the intermediaries, but by those who packed the goods and load the container. Thus, parallel to the supply chain there will be "information pipeline" to provide data that will be accessible by authorized regulatory bodies and business partners. The pipeline concept is associated with the term "cloud computing". The difference lies primarily in the level of control over data and information security (pipeline provides more control and security) (**Author's note** — *Cloud computing is the delivery of computing as a service rather than a product, whereby shared resources, software, and information are provided to computers and other devices as a utility (like the electricity grid) over a network (typically the Internet). Cloud computing entrusts services (typically centralized) with a user's data, software and computation on a published application programming interface over a network. It has considerable overlap with software as a service. Cloud computing offers tremendous potential for efficiency, cost savings and innovations to government, businesses and individuals alike. These benefits will improve government services and citizen access; transform businesses; provide new innovations to consumers; improve important services, such as health care and government-provided services; and create energy savings).*

Experience of Europe's major ports shows that the electronic exchange of data within the PCS eliminates the subjective intervention of the human factor in the process of regulation of international trade and thus eliminates the corruption. Seamless data exchange within the PCs also gives push to the development of intermodal and multimodal transport, as the functioning of the system lies in a smooth transition of data between sectors, linked into the supply chain and between different modes of transport.

The Single Window gets three kinds of information, used by businesses and partners: preliminary - for better risk analysis, regulatory - for the regulatory control agencies, and the trade information. The high-quality collection of preliminary information within PCs greatly helps with the analysis of risks. At the next stage, the system will create a combined analysis of the risks when one agency (e.g., Customs) collects information for others, and its computer system combines methodology for risk identification when checking this product (**Author's note** — *UNCTAD, in the framework of ASYCUDA - Automated SYstem for CUstoms*

Data, created the Module for combined risk analysis). The system usually works with the registered customers, enabling to automatically identify them.

Preparation stage

Preparation of the PCS project includes the creation of interagency, public-private working group to coordinate the project (it was founded in 2011 in Ukraine) and several studies:

(a) Analysis of business processes at the ports of Odessa Region using the existing methodologies for such analysis. This fundamental step will focus on identifying unnecessary or duplicating data and documents collected during international trade operations. The result of business processes analysis will be simplified and streamlined procedures for the collection and inter-exchange of trade information;

(b) Amend existing legislation, regulations, decrees, etc., if necessary, to address the identified legal issues and gaps. The main parameters of this study are listed in recommendation No. 35 of the Economic Commission for Europe (**Author's note** — http://www.unece.org/fileadmin/DAM/cefact/recommendations/rec35/Rec35_ECE_TRADE_401_Establishing_LegalFrameworkforSingleWindow_E.pdf). Analyze whether there are problems for the normal exchange of data between government agencies, between them and the private sector, is there a legal equality between paper and electronic documents, what contractual and legal basis for cooperation between the participants / users of PCS may be created. As a result of this study will be embodied into recommendations: Has the legal basis for the implementation of the Single Window facility been examined/established?

(c) compatibility analysis of technical information systems operated by different agencies and business communities. The aim of this study is to formulate specific recommendations for the harmonization of the interaction of these systems with the use of international standards;

(d) fourth study may include the possibilities of public-private partnership to build a local Single Window. It may take the form of a structured action plan for identifying goals and objectives of each party. It will also reveal which local structures must be interconnected.

At this stage, the general concept of the project with a list of possible functions and scope of the system, with an analysis of costs and revenues (using the experience of European ports, and an analysis of processes in the ports of Odessa) is usually elaborated. On the basis of this work, carried out by an external expert, a feasibility study and Master Plan which will be followed by all project participants are elaborated. Economic Commission for Europe has also created a guide to Single Window project management architecture.

PCS is usually created step-by-step (**Author's note** — *Description of the general steps are in Guide of EPCSA*). The following stages for Odessa Region project:

1. Create a general concept of a local Single Window. It is a document, that will define the system and answer some basic questions. What ports, which processes, which partners will be covered? How to argue a payback period and the business model? What is the geographic coverage of services (Central and Western Ukraine, VIKING train corridor in Eastern and Northern Europe, Moldova, the Danube transport corridor, i.e. Central Europe)? What is the volume of PCS (only the processing of documents for containers, cargo, Single Window for service payment, the combined risk analysis, etc.)? At the initial stage, it may be decided to build the system step by step, and assign only the first specifications, then the system will expand the services offered.

2. Feasibility of PCS. The system is created to deal with inefficiency and other negative phenomena, to facilitate the smooth flow of electronic data and the growth of trade through the ports served.

3. Creating such a system will also help Ukraine's integration into the European Union, which adopted a program to create a network of national mechanisms for the Single Window, as well as other initiatives and projects to change the management of information sharing in supply chains. So, for example, Import Control System was created for all types of cargo, the first phase of which began on January 1, 2011. The second phase envisages PCS to improve its quality of data collected for establishing the correspondence between the data provided by the carrier and the shipper. Directive 2010/65, which points to the formality of the report of the vessel, described PCS as the treatment centers that operate as a trusted third party. The directive points to the need to avoid duplication of data submitted by traders, as well as the need to further process optimization in ports.

4. Where to start? The biggest problem in the construction of Single Window in the port - an association of community stakeholders: port authorities, customers, shipping lines, customs and other agencies of government and business.

5. Next, define the leading organization for the project; the business model of system financing as "a reliable and trustworthy broker" between members of the PCS. Identify the supporters (or "messengers") for the promotion of PCS in the country and abroad, and most of all, enlist the support at the high-level: one or more ministries, the Prime Minister or his deputies. One of the PCS features as a kind of Single Window is that different structures and international traders from the private sector play a significant role in the construction and operation of the system.

6. On this basis establish a network of regular information exchange and decision-making. These channels of communication will provide regular discussion of the main elements and issues that arise during the implementation of the project, with all interested parties.

7. Based on the analysis of business processes define how the simplification and computerization help to achieve greater business and state agencies efficiency, as well as what are the key business processes

and problems to solve to be included in the project. Proceed from the specifics of country or place of Single Window establishment.

8. The process usually begins with customs procedures, and then covers all the regulatory bodies and processes, business partners in the supply chain and, finally, the information share across the borders. Thus, the reform and integration of customs procedures in co-operation between customs authorities and other project participants are important elements in the PCS establishment. Link it to the introduction of the concepts of authorized economic operator and integrated border management. Single Electronic Window System, which integrates, optimizes, organizes and secures business processes and supply chains, allows Customs to focus on high risk cargo.

9. Create favourable legal framework. Analyze the legal and regulatory framework (the Data Protection Acts, marine trade law, customs legislation and procedures) and clarify what issues may be dealt at the port level, and which at the national level. Preparing the legal framework, the problems revealed in the process of PCS creating, can help to detect and solve problems at the national level, and it will help to establish national Single Window later.

10. Decide and prepare the PCS organizational model: whether the structure would be private, public or public-private partnership. Determine the status of member company and user.

11. Create working groups aimed at: development of common solutions for electronic data interchange (Business Processes); to harmonize data; to manage risk, etc. Analysis of business processes and harmonization of data required between the PCs parties is needed to eliminate unnecessary or duplicating data and documents that are required in business processes and procedures to establish Single Window and enable the electronic exchange between data and documents (**Author's note** — *UN/CEFACT Recommendation and Guidelines on establishing a Single Window to enhance the efficient exchange of information between trade and government, Recommendation No. 33: http://www.unece.org/fileadmin/DAM/cefact/recommendations/rec33/rec33_trd352e.pdf; UNCTED classifier: www.unece.org/fileadmin/DAM/trade/untdid/UNTDDED2005.pdf; WCO Data Model; Core Components; Data Harmonization (Recommendation 34): www.unece.org/fileadmin/DAM/cefact/recommendations/rec34/ECE_TRADE_C_CEFAC2010_13R_r1.pdf; Establishing a Legal Framework for an International Trade Single Window, Recommendation 35: www.unece.org/fileadmin/DAM/cefact/recommendations/rec35/Rec35_october2010_REV2_Final_Russian.pdf). UN/CEFACT Recommendation No. 34 defines the stages of data harmonization:*

- (1) collect the data (the working group calls and categorizes the data elements required by agencies);
- (2) identify the purpose (what information the element transmits);
- (3) analyze and compare the corresponding names and definitions;
- (4) reconcile, i.e., agree to use one name, one definition, one classification (code).

12. Tackle the issues of PCS long-term development prospects: financing and management of the system. Will there be a mixed stream of income / revenue of port systems in the development of systems based on an annual or monthly subscription fees for its services; contributions from members; price per unit of goods handled (tonnage, customs declarations, TEU, barrels, container, hour) or the number of transactions using EDI. Then the system should be constantly developed in line with international, European and national standards and guidelines.

PCS in one port, in fact, may be considered as a way to establish a national Single Window. In such countries, where there is no automated process within different agencies and private business, PCS can create the conditions that become the basis for the Single Window in the state. The integration of information systems creates benefits for all participants in the supply chain. PCS can be easily extended to other air, sea or river ports, and customs declaration may be made at the port.

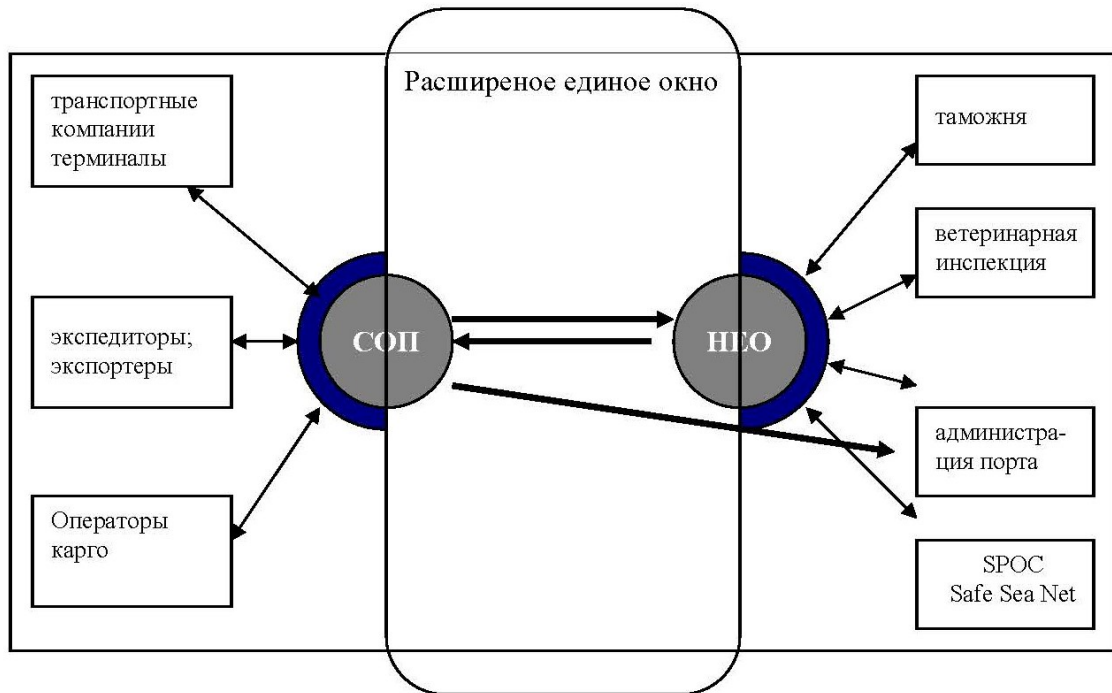


Fig. 3: Possible interaction between the local and national Single Window

* транспортные компании - Shipping companies

Терминалы - Terminals

Экспедиторы - Freight forwarders

Экспортеры - Exporters

Операторы карго - Cargo operators

СОП - PCS

НЕО - NEO

Расширенное единое окно - Extended Single Window

Таможня - Customs

Вет.инспекция - Veterinary inspection

Администрация порта - Port authority

If the Odessa system is created, it will be able to use the current experience and best practices of European ports. European ports, which have created Port Community Systems, founded the European Association of Port Community Services (EAPCS) (**Author's note** — European Association of Port Community Services (EAPCS). Founders: SOGET (Havre, France), Portbase (Rotterdam, the Netherlands); dbh (Bremen, Germany); MCP (Felixstowe, UK); PORTIC (Barcelona, Spain); DAKOSY (Hamburg, Germany). Associated members: APCS (Antwerp, Belgium); Hamburg port authorities (Hamburg, Germany); Bilbao port authorities (Bilbao, Spain); Venice port authorities (Venice, Italy). mission is to influence public policy in the European Union level in order to achieve e-logistics throughout all European ports, operating as a key element of the EU maritime, shipping and logistics industry. The Association represents the sector of PCS for ports and airports to European institutions and the need for PCS to consult with them on important decisions that affect them. The Association encourages all users of the ports in Europe to actively build the PCS.

Creating a Port Community System for Odessa Region will be extremely beneficial for the business community and regulatory authorities. It will have a positive impact on the development of Odessa as the center of the European logistics network between the southern and northern Europe (corridor No. 9), and between Europe and Asia. At the level of the whole Ukraine the establishment of such system will encourage the development of favourable legal environment, harmonization of data exchange between different agencies on the basis of international standards and, thus, will become the first step to a national Single Window, with all positive changes to limit the red-tape, fighting corruption and real integration with Europe at the level of international supply chains.

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