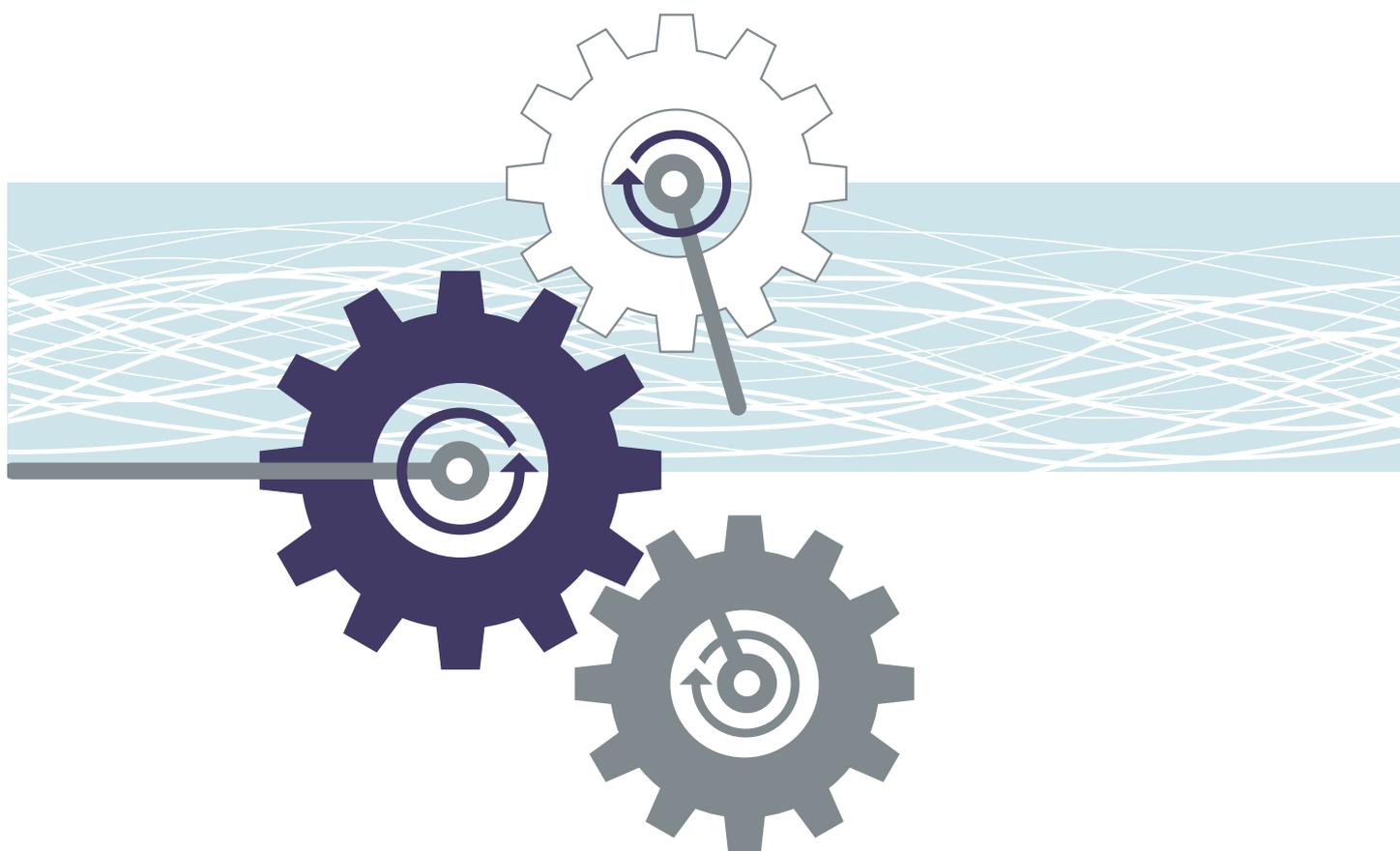




# EPCSA

European Port  
Community Systems  
Association



## WHITE PAPER

The role of Port Community Systems in  
the development of the Single Window

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# **WHITE PAPER EXECUTIVE SUMMARY**

## **The role of PCS in the development of the National Single Window**

The vision for a Single Window system must go beyond the standards recommended by expert international organisations or best practices examined from existing systems. Competitiveness remains an essential element for motivation and differentiation. This principle applies to Single Window systems regardless of the standardisation and harmonisation achieved between Port Community Systems, Cargo Community Systems or other national or international Single Windows.

### **A 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;
- optimises, manages and automates port and logistics efficient processes through a single submission of data and connecting transport and logistics chains.

### **A Single Window:**

A Single Window is a complex community undertaking which facilitates trade. Various business and functional models can be used for the design of a successful Single Window system. Whether implemented at the regional, national or international level, a major factor in accomplishing a Single Window project is a strong leading body to promote its benefits. These efforts, combined with strong political support and the appropriate project-centric organisation and resources, are the elements required for a Single Window project to succeed.

### **The Strategic Alliance – Port Community Systems and Single Window**

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. Europe is home to some of the most efficient Port Community Systems in the world. This development could only take place under competitive conditions. Business to Business areas should not be placed under state control. This safeguard will ensure that new technologies enter the logistics sector as quickly as possible, and that Europe remains the market leader in global logistics know-how and the development of Single Window.

# **WHITE PAPER**

## **The role of PCS in the development of the National Single Window**

### **1. The Purpose of the White Paper**

‘Port Community Systems can, and will, play a major role as Europe moves towards the Single Window concept; the members of the European Port Community Systems Association EEIG (EPCSA) will be working together to provide expert opinion on proposed new regulation and contribute to the harmonisation and coordination of reporting formalities, processes and procedures.’

EPCSA has produced this White Paper in order to provide a clear and concise direction about how the ambitions of the European Commission to develop the Single Window can be implemented.

In order to develop the EPCSA vision on the alliance between PCS and National Single Window (NSW) development, it is necessary to have a clear view on the concept of ‘National Single Window’ on one side and PCS, as a strategic partner, on the other.

The White Paper clearly sets out what a PCS is, the background to Single Window ambitions and how these may combine to promote trade facilitation within the European Union.

EPCSA will work with the European Commission, Member States, Government departments, international organisations and agencies, and the logistics and maritime sector to ensure the successful implementation of the Single Window.

#### **1.1 EPCSA Purpose and Objectives**

Until now, Port Community Systems Operators (PCSOs) have not had a common lobbying position at the European Union. The European Commission is currently developing a number of initiatives and directives such as e-customs, e-freight and e-maritime. In order to have a common lobbying position, in September 2010 six of the leading PCSOs in Europe agreed to work together and form the basis of the European Port Community System Association EEIG.

The six Founding Members have agreed the EPCSA mission.

## **1.2 EPCSA Mission Statement**

“EPCSA’s 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.”

## **1.3 EPCSA’s key objectives are:**

- i) To ensure that the importance of Port Community System Operators is recognised in the EU and its Member States and that the sector is consulted substantively on any measure likely to affect it;
- ii) To ensure that European Port Community System Operators play their full part in delivering e-freight throughout Europe;
- iii) To promote the highest possible standards in European Port Community Systems;
- iv) To encourage all European port communities to be proactive in PCS development.

EPCSA has six Founding Members and its core membership will consist of Port Community System Operators.

## **1.4 EPCSA Founding Members**

The six founding members of EPCSA are SOGET, dbh, MCP, Portbase, PORTIC and DAKOSY.

### **SOGET, Le Havre, France**

Headquartered in Le Havre, France, SOGET is the leading Port Community System Operator in France and a public-private partnership between the Port Community of Le Havre, Port of Le Havre Authority and French Customs. SOGET PCS is in operation throughout French ports as well as overseas.

SOGET is recognised as an expert by the European Commission, International Association of Port and Harbors, United Nations, World Customs Organization, Caribbean Law Enforcement Council, Organization of American States, International Association of Ports and Cities, World Bank, Inter-American development Bank, European Investment Bank and French Development Bank.

### **dbh, Bremen, Germany**

dbh's core competence is the combination of logistics and IT know-how. As an international software and consulting company, dbh Logistics IT AG offers ideal solutions in the areas of Customs clearance and export control, freight forwarding, SAP®-Consulting and Port Community Systems.

Headquartered in Bremen, Germany, dbh employs 120 members of staff. With over 35 years of IT experience, dbh serves its clients as a competent partner.

With its longstanding expertise in national and international projects, dbh supports innovative developments in the IT environment and is a competent partner for research, economic and public authorities in the fields of Customs, ports and logistics.

### **MCP Plc, Felixstowe, United Kingdom**

MCP plc's Destin8 Port Community System handles and processes huge volumes of data and information relating to international trade – collecting, storing, exchanging and distributing it among and between almost 750 companies and Government agencies involved in international trade and transport.

Destin8 operates in 17 UK ports and 50+ inland clearance locations, representing some 75% of UK container throughput and a major proportion of general (non-unitised) cargo. It provides for the electronic exchange of information between all port sectors, including shipping lines/agents, Port Authorities, terminal operators, Customs and other Government agencies, clearing agents/Customs brokers and road and rail hauliers/operators. Electronic Data Interchange (EDI) is used extensively.

MCP is also heavily involved in assisting and promoting trade facilitation through involvement with organisations such as SITPRO in the UK and internationally at the World Customs Organization and the International Association of Ports and Harbors, as well as undertaking consultancy projects in this field.

### **PORTBASE, Rotterdam / Amsterdam, Netherlands**

Portbase – home of logistics intelligence

Portbase is the neutral and reliable hub for all logistics information in the ports of Rotterdam and Amsterdam. Via the Portbase Port Community System, companies can benefit from a multitude of intelligent services for simple and efficient information exchange, both between companies and between the public and private sector. This enables all the participants to

optimise their logistics processes, thereby improving their own competitive position and that of the ports. Portbase belongs to and serves the port community and is a non-profit organisation.

Portbase was created by a merger between Rotterdam's Port infolink (est 2002) and Amsterdam's PortNET (est 2000). The new organisation was set up in 2009 by the Port of Rotterdam Authority and the Port of Amsterdam and enjoys wide support amongst the port business community. Its aim is to make the logistics chains of the ports of Rotterdam and Amsterdam as attractive as possible by offering a one-stop-shop for logistics information exchange.

Portbase is the national Port Community System for the Netherlands and also wants to play a key role in port-related logistics networks both in the Netherlands and abroad.

### **PORTIC, Barcelona, Spain**

Headquartered in Barcelona, PORTIC is a private partnership between the Port Community of Barcelona, Port Authority of Barcelona, financial institutions (La Caixa, Banc Sabadell) and the Chamber of Commerce of Barcelona. PORTIC PCS is in operation in Barcelona. PORTIC has also developed PCS networks in Alexandria (Egypt) and Buenos Aires (Argentina).

### **DAKOSY, Hamburg, Germany**

As one of the leading IT and software service providers for the transportation industry, DAKOSY AG, headquartered in Hamburg, has been providing port communication services and solutions for international freight forwarding and Customs clearance since 1982. DAKOSY was established as the Port Community System for the Port of Hamburg by members of the seaport industry. DAKOSY remains a 100% privately owned company, owned in three one-third shares by forwarders, liner agents/shipping lines and terminal operators.

As a system vendor and clearing centre, DAKOSY provides a wide range of IT and data centre services for its customers. More than 2,000 companies across Europe use DAKOSY AG's state-of-the-art data centres for their electronic business communication. These companies include world famous trading houses, branded companies, industrial enterprises, freight forwarders, shipping companies, liner agents, carriers (sea and air), trucking companies and various authorities (Customs, harbour police, etc.).

## **2. Port Community Systems**

### **2.1 Introduction to Port Community Systems**

“Port Community Systems can, and will, play a major role as Europe moves towards the Single Window concept; the members of EPCSA will be working together to provide expert opinion on proposed new regulation and contribute to the harmonisation and coordination of reporting formalities, processes and procedures.”

Port Community Systems provide the opportunity to save the European Community time, money and effort by demonstrating and explaining the role, benefits and objectives of these systems.

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.

A good collaboration between all the parties involved is one of the success factors of a PCS. Distinctive for all PCSs is the link to Customs and port authorities and other institutions such as veterinary offices or coastguard, for example.

PCSs in Europe have a long tradition. The first to be established in ports in Germany, France and UK began to operate in the late 70s or early 80s. Countries such as the Netherlands and Spain started their PCSs in the 1990s or at the turn of the century.

Key drivers for the establishment of Port Community Systems were, on the one hand, the need for a standardised communication platform in order to improve the systems in terms of punctuality, reliability or costs and, on the other hand, the need to increase competitive position among ports.

A good collaboration with the key authorities, as well as with stakeholders, potential customers and local trade associations, was critical in the setting up of the respective PCS which were – and still are – implemented by means of special training and workshops with the end users.

While target market areas differ widely in terms of existing IT infrastructure and use of functionality, it is arguable that where little or no automated processes are in place either at frontier, port or fiscal and regulatory level, the PCS is ideally placed to form the foundation or backbone of the Single Window vision.

The number of ports connected to a PCS varies from one to 20. Smaller ports in particular often join forces to set up a PCS or connect to an already existing PCS of a larger port or ports.

## **2.2 Port Community System definition**

A Port Community System:

- 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
- optimises, manages and automates port and logistics efficient processes through a single submission of data and connecting transport and logistics chains

## **2.3 Port Community System Operators**

Port Community System Operators (PCSO) are trusted third parties. Some are 100% publicly owned; some are private-public partnerships; others are privately owned.

For most of the European PCS providers, the operation of the PCS represents their core business. However, almost all PCS providers are involved in other IT and consultancy projects for the logistics industry. Every PCS has some form of steering committee made up of representatives from different internal and external groups, such as the board of directors or local user groups.

The range of PCS key stakeholders consists of private companies on the one hand (shipping agents, terminal operators, forwarders, Customs brokers, etc.) and of public or government agencies – Customs or Port Authorities, for example – on the other hand.

In terms of the client structure, shipping lines and freight forwarders play the most important role, followed by importers and exporters in general or Customs and shipping agents. The number of clients differs and ranges from about 280 to 2,000, with most of them being importers or exporters, forwarders, terminals, on-carriage operators, ship agencies or brokers.

The number of end users ranges from about 500 to more than 7,500 but this does not seem to be related to the size of the PCS or to how many PCSs are being operated.

## 2.4 PCS Services

A PCS is a modular system with functionality designed to provide all the various sectors and players within a port community environment with tools specific to them, thus delivering a tightly integrated system. Developed for port users by port users, a PCS encompasses exports, imports, transhipments, consolidations, hazardous cargo and maritime statistics reporting.

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, available 24/7/365
- 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 automation and the reduction of paperwork. In this way, PCSs contribute to sustainable transport logistics and support the ambitions to meet global carbon reduction requirements.

The functionality is aimed at eliminating unnecessary paperwork which can clog up cargo handling. Using electronic data exchange, the PCS is an effective real-time information system; fast, focused, flexible and multi-faceted, it aims to improve efficiency at all stages of the process of manifesting, through vessel discharge and loading, Customs clearance, port health formalities and delivery in and out of the terminal.

As well as the above, the PCS offers improved security, cost reduction and potentially more competitiveness for each user.

### **Maritime Statistics**

The vessel/voyage and manifest data received and stored on the PCS is used to create the GESMES (General Statistical Message) UN/EDIFACT messages required by the national collecting agent for the UK Department for Transport in order to fulfil the requirements of the EU Maritime Statistics Directive. Reports are sent on a rolling five-day basis on behalf of carriers and on a quarterly basis on behalf of ports and carriers.

### 3. Single Window

#### 3.1 What is a Single Window?

A Single Window is a complex community undertaking which facilitates trade. Various business and functional models can be used for the design of a successful Single Window system. Whether implemented at the regional, national or international level, a major factor in accomplishing a Single Window project is a strong leading body to promote its benefits. These efforts, combined with strong political support and the appropriate project-centric organisation and resources are the element required for a Single Window project to succeed.

Expanding upon the UN/CEFACT Recommendation No. 33, WCO Single Window Concept and EU TAXUD/1241/2005 – Rev. 2005, *Single Window at the Community Level* documents that define a 'Single Window' as a facility that:

- Expedites and simplifies information flows between trade and government;
- Allows the lodging of standardised information;
- Provides 'one' point of entry (for all cross-border trade transactions);
- Allows submission of information only once (if electronic, having non-redundant data fields);
- Facilitates trade (bringing gains to all parties involved);

a number of additional factors are requisite within the concept of the Single Window:

- Evident from its purpose, must be developed through private and public, trade stakeholder collaboration;
- Must be sponsored by one or more lead stakeholders (or a joint-lead entity) possessing strong organisation, the necessary vision, authority (legal), political backing, resources (financial and human) and connections to key organisations;
- A Single Window project must be managed via a clearly defined project management plan;
- As numerous Single Windows co-exist in the near future, a successful Single Window will be more about quality and offering of service and less about IT standards, with those Single Windows facilitating trade most smoothly (interoperability throughout the trade processes) emerging at the top;
- Ultimately, the benefits of a Single Window must be measurable.

The need for collaboration between all stakeholders cannot be over-emphasised. Possession of the relationships, influence, communication and negotiating skills to develop, maintain and persuade members of a nation's

Government and trade communities is critical for laying solid ground from which to build a sustainable and profitable system.

Access to the resources and skills sets required to assess accurately the system's requirements and then build the appropriate specifications must be established at the earliest phases of the project – during the feasibility study, in which more than one option should be presented to the high-level community stakeholders for approval of the project.

Stakeholders involved with spearheading the establishment of a Single Window must be willing to commit the resources needed to push through all potential obstacles encountered.

Recommendation No. 33 makes clear that a systematic approach from conception to implementation must be adopted. The stakeholder(s) that constitute the lead agency or sponsor entity must have the know-how to organise well, moving from concept to feasibility study, project approval to project planning, development to implementation, while simultaneously promoting the project to gain the support needed throughout each phase.

Although this body might not head the project management team, it must ensure that the project team designated continues with the organisational process set up from the start and it must remain informed of all milestones, deliverables, risks, etc., tied to the project.

The types and quality of services offered to Single Window users, whether direct users or indirect recipients of data and services, will influence them to select those services that bring the fastest and highest gains for the given quality and price. Clients want the fastest and greatest financial profits while also having a wide variety of options, flexibility in configuration and timely, pertinent support, with basic job-related functionality a given.

Benefits for the Single Window user and non-user stakeholders range from general to more specific:

- Improved sharing of information and data B2G, G2B, B2B and G2G (Trade and Government) (measurable);
- Easier access to a wider range of services (Trade) (measurable);
- Easier access to standard compliance requirements and explanations of regulations (Trade) (measurable);
- Faster collection, processing and analysis of trade data related to processes covered within the Single Window (such as import, export and transit-related trade) (measurable) (Trade and Government);
- Faster clearance of goods (Trade and Government) (measurable);
- More efficient or effective management of resources (measurable) (Trade and Government);
- Better capability to perform risk analysis (Government ) (measurable).

The bottom line is that use of a Single Window should result in a measurable, mid-to-long-term reduction of spending and probable increases in revenue for both Government and trade stakeholders.

The vision for a Single Window system must go beyond the standards recommended by expert international organisations or best practices examined from existing systems. A Single Window should be envisioned with regional, national and international needs in mind.

Competitiveness remains an essential element for motivation and differentiation in the services a company offers. This principle applies to Single Window systems regardless of the standardisation and harmonisation achieved between PCS, Cargo Community Systems (CCS) or other national or international Single Windows.

## **3.2 Single Window definitions**

### **3.2.1 Single Window by World Customs Organization**

A Single Window Environment is a cross-border, 'intelligent' facility that allows parties involved in trade and transport to lodge standardised information, mainly electronic, with a single entry point to fulfil all import, export and transit-related regulatory requirements.

Customs is the largest and most important cross-border regulatory agency in terms of its intrusion into trade transactions, its information gathering and the spread of its business activity. As such, Governments usually see Customs as the natural agency to be the focus of Single Window development.

This does not necessarily imply that Single Window will be owned or run by Customs but, even so, Customs will be the major stakeholder owing purely to its wide business coverage at international borders.

### **3.2.2 Single Window by European Commission DG TAXUD**

The proposed modernised Customs Code follows these definitions when defining the Single Window and the One Stop Shop concepts as follows: 'In the interests of facilitating business, while at the same time providing for the proper levels of control of goods brought into or out of the Customs territory of the Community, it is appropriate that the information provided by economic operators is shared, taking account of the relevant data protection provisions, between Customs authorities and with other agencies involved in that control, such as police, border guards, veterinary and environmental authorities, so that the economic operator needs to give the information only once ('Single Window') and that the goods are controlled by those authorities at the same time and at the same place ('one-stop-shop').'

According to the proposed Electronic Customs Decision, the Single Window will allow for the 'seamless flow of data between economic operators and Customs administrations, between Customs authorities and the Commission, and between Customs administrations and other administrations and agencies, and enabling economic operators to submit all information required for import or export clearance to Customs, even if it is required by non-Customs legislation'.

### **Customs and other Government agencies**

The manifests submitted to the PCS are used by Customs for all fiscal control purposes, and manifests submitted to the system in CUSCAR format are forwarded to the central Customs anti-smuggling system, for profiling purposes.

An extract of the manifest is also sent to the port operator's own computer system, for operational purposes. The manifest is also made available to other Government departments, such as quarantine, veterinary and agriculture, that also use the system. An example of their use of the PCS is for X-ray scanning, where the relevant law enforcement agency uses the PCS to notify scanning requirements and for releasing containers after scanning. No paper manifests are required to be produced to Customs, the port operator or other Government departments using the system. The manifest data is stored on the PCS database and amendments can be made by the carriers without the need to obtain prior approval, with notification of sensitive amendments being immediately notified to Customs.

Each item on the manifest is allocated a unique reference number by the PCS and, because this number is included in the associated Customs declaration, this allows automatic 'writing-off' to take place.

As clearance messages are received from the Customs declaration processing system, the PCS sends a message to the appropriate forwarding agent/broker and to the port, thus eliminating the paper Customs release note.

During discharge of the vessels, the port operator's own computer system sends messages to the PCS as each container (or Bill of Lading for general cargo) is landed and the PCS in turn sends messages to the carrier's in-house system and records the status on its database.

On completion of discharge, the PCS compares the data received from the port operator with that held against the original manifest and issues 'discrepancy lists' to Customs and the carriers detailing short or over-landed containers or general cargo items which may need further investigation or action.

### **3.2.3 Single Window by European Commission DG MOVE**

Directive 2002/6/EC of the European Parliament and of the Council of 18 February 2002 on reporting formalities for ships arriving in and/or departing from ports of the Member States of the Community requires Member States to accept certain standardised forms (FAL forms) in order to facilitate traffic, as defined by the International Maritime Organization (IMO) Convention on Facilitation of International Maritime Traffic (FAL Convention), adopted on 9 April 1965, as amended.

Parties involved in trade and transport should be able to lodge standardised information and documents via an electronic Single Window to fulfil reporting formalities. Individual data elements should only be submitted once.

Member States shall accept the fulfilment of reporting formalities in electronic format and their transmission via a Single Window as soon as possible and, in any case, no later than 1 June 2015.

This Single Window, linking SafeSeaNet, e-customs and other electronic systems, shall be the place where, in accordance with 2010/65 Directive, all information is reported once and made available to various competent authorities and the Member States.

#### **PCS/SW integration – Cargo manifests**

Cargo manifests have traditionally been received by the PCS primarily for port operational purposes and for Customs fiscal controls. Almost 100% of manifests are now received electronically into the PCS, predominantly using the UN/EDIFACT CUSCAR message, replacing the seven copies that were previously circulated around the port on paper! A screen input facility is available for the very few companies that do not have the capability to send data electronically.

However, the data included in the manifest received by the PCS enables it to fulfil other regulatory requirements on behalf of the ports and carriers, while enabling the carriers to submit data only once.

## **4. Port Community Systems and the National Single Window: a strategic alliance**

### **4.1 Introduction**

In order to develop the EPCSA vision of the alliance between PCS and National Single Window (NSW) development, it is necessary to have a clear view on the concept of 'National Single Window' on one side, and Port Community Systems as a strategic partner.

A good starting point to understand the concept of the National Single Window could be found at UNECE's paper 'Recommendation and Guidelines on establishing a Single Window'. Within the context of this recommendation, a Single Window is defined as:

*'a facility that allows parties involved in trade and transport to lodge standardised information and documents with a single entry point to fulfil all import, export, and transit-related regulatory requirements.'*

In practical terms, the Single Window aims to expedite and simplify information flows between trade and Government and bring meaningful gains to all parties involved in cross-border trade. It is further recommended to restrict the concept of a 'National Single Window' to the subject areas G2G – '*Data exchange among government agencies*' and B2G – '*Data exchange between the private sector and government agencies*'. Business-to-business data flows – B2B – clearly must stay out of the National Window scope, due to more complex communication flows (many-to-many as opposed to many-to-one), and in order to assure swift and efficient adaption to the major global trade challenges.

The Single Window is generally managed centrally by a lead agency, which could be a governmental organisation, private entity (such as a Chamber of Commerce) or public-private partnership. Whatever the nature of the lead agency, UNECE clearly recommends to proceed with the setting up of a Single Window facility at the national level through a collaborative effort with all relevant governmental authorities and the business community.

Europe is home to some of the most efficient Port Community Systems in the world. This development could only take place under competitive conditions. To meet future challenges in global trade, it is essential that the logistics sector in Europe can continue to be developed in a competitive environment. In particular, the B2B areas of this sector should not be placed under state control. This safeguard will ensure that new technologies enter the logistics sector as quickly as possible, and that Europe remains the market leader in global logistics know-how.

### **Dangerous & Polluting Goods (DPG)**

The international expert group PROTECT, consisting of PCS and Port Authorities, has established a harmonised worldwide recognised EDI standard for the notification of dangerous goods. This standard is based on the IFTDGN (International Freight Transport Dangerous Goods Notification) UN/EDIFACT message, covering the information on the dangerous and/or polluting goods carried by a vessel.

The DPG information is stored on the PCS for use by the port's safety department in cases of incident or emergency. DPGs that require specific authority to be brought into the cargo terminal are automatically notified to the safety department, with approval being given back to the carrier through the PCS. The DPG data, together with details on the carrying vessel/voyage, is also available for use by the national authority responsible for maritime safety and notifications and, where necessary, is sent to the appropriate party, fulfilling the requirements of the:

- Port Waste Directive
- Port State Control Directive
- Hazmat Directive
- Vessel Traffic Monitoring Directive

The aim of this system is to improve safety in ports and waterways by facilitating the implementation of control and monitoring systems that relevant authorities exercise over movement of vessels and dangerous goods in areas under their jurisdiction.

IFTDGN Message Scenario:

- Harmonised vessel reporting requirements;
- A global trustworthy and recognised EDI standard for the worldwide shipping industry;
- To report to port or national authorities on dangerous goods or waste carried, and vessel security requirements.

#### **4.2 Port Community Systems: A Port Single Window or Gateway to a National Single Window?**

A Port Community System (PCS) provides for the electronic exchange of information between all port sectors and is acknowledged as the most advanced method for the exchange of information within a single or national port community infrastructure acting as a Port Single Window.

The PCS concept is usually implemented with a commitment to facilitate the re-use of data from a single submission, and develop infrastructure and

interconnectivity as well as horizontal activities in areas of legal frameworks, standardisation and harmonisation in international trade.

While target market areas differ widely in terms of existing IT infrastructure and use of functionality, it is arguable that where little or no automated processes are in place either at frontier, port, or fiscal and regulatory level, the PCS is ideally placed to form the foundation or backbone of the National Single Window vision. It follows, therefore, that where an element of IT infrastructure is present at fiscal and regulatory levels, a PCS can be introduced either as gateway to a National Single Window or, indeed, as an integral part of a wider vision.

The PCS brings the business-to-business information exchange into the equation, as well as providing the gateway for business-to-government processes, and is therefore complementary as well as supplementary to the Single Window at both national and international level. However, there are a number of different and opposing views as to what exactly a Port Community System is; we have seen examples of systems described as both a Single Window and a Port Community System where it simply operates as a message switch with no back office functions enabling proactive information dissemination.

In our view, a Port Community System is not only a terminal operating system with a web front end, not only a message switching system, not only a reporting system or a methodology.

As a Port Single window, the full functionality of a PCS can provide all the various sectors and players within a port community environment with tools specific to them, thus providing a tightly integrated system. It can encompass exports, imports, transshipments, consolidations, hazardous cargo and maritime statistics reporting.

#### **Multimodality**

Port Community Systems provide services not only to the ports community but also to organisations with the logistics chain of all modes, sea, inland water, rail and road.

Each mode has its own challenges and many PCSOs provide specific services for inland terminals, dryports, multimodal hubs and interchanges.

These are services in the area of transport management and the pre-notification of terminal visits, both on the level of the modality and cargo. Based on the pre-notification, terminal planning can be optimised and the utilisation degree of the inland transport modes improved, as on-carriage operators have a clear view of the availability of the cargo and the respective government control and document status. This enables ports to optimise their inland logistics on the one hand and improve supply chain visibility on the other.

The functionality is aimed at eliminating unnecessary paperwork which can clog up cargo handling. Using electronic data exchange, it can provide an effective, rapid and flexible real-time information system which improves efficiency at all stages of the process of manifesting through vessel discharge and loading, Customs clearance, port health formalities and delivery in and out of the terminal.

### 4.3 Integration of PCS and National Single Window as a “ Gateway to a ‘National Single Window’

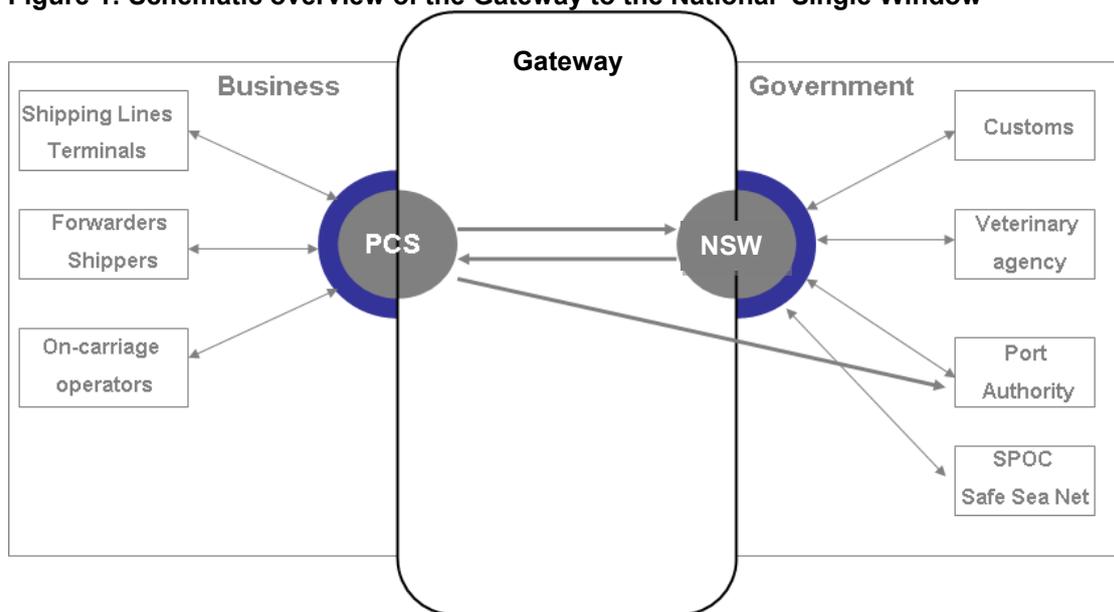
#### 4.3.1 Gateway to National Single Window to realise all stakeholder objectives

Integration between PCSs and the National Single Window can create optimal benefits for all stakeholders involved. PCS could form the ‘Gateway to a National Single Window’ where the objectives of Government, business and ports are realised. The definition of ‘gateway’ also indicates that the physical border is no longer that important. For example, the physical gate can be extended to another air, sea or inland port and Customs procedures can be performed before exiting that gate and therefore acting in a national framework

#### 4.3.2 Integration of PCS and National Single Window

The ‘Gateway to a National Single Window’ consists of both the community systems (for maritime freight and air freight) and the central government system. In order to support the objectives of a National Single Window, the Gateway to a Single Window consists of a purely public section (NSW) and a public-private section (PCS). Figure 1 below gives a schematic overview of the different systems and how they are integrated.

Figure 1: Schematic overview of the Gateway to the National Single Window



The PCS collects all vessel and manifest information for both import and export flows from the shipping lines. The information needs to be sent (or input via web-based data entry) only once for all declarations. Based on this information, all declarations can be sent towards Customs, harbourmaster and other Government agencies.

The PCS supports: vessel notification towards harbourmaster/Port Authority and Customs; cargo declaration, manifest filling/summary declaration towards Customs; ship's stores declaration; crew's effects declaration; and dangerous goods declaration towards the harbourmaster/Port Authority.

Crew lists and passenger lists can currently not be received electronically by the specific Government agencies. Waste disposal and port dues declarations can also be sent electronically towards the harbourmaster/Port Authority based on the same information. Also, declarations towards the veterinary agency can be sent. In the same way, Governments send all their reply information back via the PCS to the business community.

At the same time, the business community can re-use the information already stored in the PCS for business-to-business purposes such as discharge lists, informing shippers and forwarders of the arrival and departure of their cargo, etc. This ensures data integrity not only towards Governments, but also in the business area and vice versa.

#### **4.4 Development towards a European network of Single Windows**

In the near future, a European network of National Single Windows formed by both the PCS and the NSW could be developed, serving the needs of the business community, national and European Governments and its ports. This could result in both a network between PCSs on the one hand, and a network between NSWs on the other, connected via central European systems such as, for instance, SafeSeaNet or e-customs.

## **5. Conclusion**

The challenges faced by the implementation of the National Single Window and the differing and emerging requirements for Single Window ambitions from different organisations and agencies ensures that Port Community Systems in the role of Port Single Windows will remain key stakeholders in the electronic interchange of information, which provides the efficient and effective facilitation of trade within the European Union.

In order to achieve a seamless and cost-effective implementation of Single Windows projects, they should work in collaboration with Port Community System Operators. This will benefit the sector as a whole, increasing and maintaining its competitiveness with the rest of the world and limiting the cost to the sector of implementation.

In order to achieve closer collaboration with National Single Window projects, EPCSA will:

- Formulate European-wide advice and guidance for Port Community System Operators and ensure that standards are of the highest quality;
- Develop future technologies under competitive conditions to meet future challenges in global trade;
- Work together with local, regional, national and international organisations/agencies and the European Commission to support in the implementation of Single Window concepts and projects;
- Enable the European Union to remain the home of the most efficient Port Community Systems in the world.

## **Glossary**

CUSCAR:	Customs Cargo Report Message
CCS:	Cargo Community System
DPG:	Dangerous & Polluting Goods
EDI:	Electronic Data Interchange
EDIFACT:	UN/Electronic Data Interchange for , Commerce and Transport
GESMES:	General Statistical Message
IFTDGN:	International Freight Transport Dangerous Goods Notification
NSW:	National Single Window
Port Community System (PCS):	A neutral and open electronic platform enabling intelligent and secure exchange of information between public and private stakeholders, optimising, managing and automating port and logistics efficient processes through a single submission of data
PCSO:	Port Community Systems Operators
SafeSeaNet:	A centralised European platform for maritime data exchange
Single Window:	A complex community undertaking which facilitates trade
UNECE:	United Nations Economic Commission for Europe



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