

Finland

Background

What motivated the establishment of your Single Window (SW)?

At the beginning of the 1990s there could be up to seven different forms to fill in, on arrival of a ship into a Finnish port. 80-90 % of the content was the same, only the layout was incompatible. The content was rather basic, containing information on identification, expected time of arrival (ETA) or expected time of departure (ETD), cargo and dangerous goods (DG) details on a statistical level. Thus there was a lot of work done which was felt to be largely unnecessary and expensive.

The first task was to try to convince the different authorities that reform was urgently needed and to realise one common paper form. A cost savings estimate was produced showing a theoretical savings of a few €100,000¹ on a national level. The electronic notice transfer was not even contemplated initially!

What year was it established?

The process started in 1991, but the first electronic system was set up in 1993-94. It was set up on an IBM mainframe and RB2 database and dumb terminals.

What is the current status of the facility (study, pilot phase, running)?

The present PortNet system is up and running since 2000, which replaced the old mainframe based system. We are now building the new PortNet 2 (perhaps it should have been called PortNet 3), to come into production in 2007.

Establishment

How did the SW interface with already established systems (if any existed)?

The first system operated with a central database and dumb terminals, it was very rigorous and nothing could be changed without huge cost. There were no SW interfaces to replace at that time. A Windows SW interface was added later, without great success, because it was exceptionally badly designed.

Did any other SW model serve as inspiration or model?

As an inspiration we had the Imaging Riometer for Ionospheric Studies (IRIS) system, a traffic information system solely for icebreakers, which was set up in 1986 by the maritime authorities in Finland and Sweden. The technical solution, however, was far more advanced than the first version of PortNet.

What process was followed in setting it up? Was there a pilot project?

In 1992 nobody knew what we were doing; hence the solution was left to the state-owned software company VTTK to resolve. The result was a rather clumsy, inflexible and expensive system. It was, however, a useful learning experience.

The pressure to build a completely new system mounted and when it was realised, in 1998, that the system was not Y2K proof, we had a good excuse to make a fresh start. We now knew what we wanted and the design phase involved everybody who wanted to have a say. The present system is easy to learn and use, but its age has started to show.

¹ 1 US\$ = €0.82 (September 2005)

What kind of training for the staff was required in the establishment and how was it organized?

In the early days training was performed by VTTK for every company that joined the system. With the present system the Finnish Maritime Administration arranged/arranges 1-2 day training courses.

What services does the SW provide? What documents/information/process are covered?

Services

The user (normally the ship agent or terminal operator) can give the following notices and get the following information:

- Port arrival notice, containing ship id, ETA, destination port, previous port(s), detailed dangerous cargo notice, cargo notice (initially on a statistical level, going in the direction of a general cargo declaration, accepted by the Customs office), passenger list, ship provisions
- Port departure notice, similar to the above, but less complete at this time (new development ongoing)
- Issuing a single common customs reference number for the ship call, valid throughout the whole duration of the visit
- Paid fairway dues and authority decisions on exemption of fairway dues
- List of exemption for line ships that have a contract with a local ship waste handling company
- A request to the port to allow some particular DG into port and as a response the decision from that port on that matter
- International Ship and Port Facility Security Code (ISPS) notice (security notice, prescribed by the International Maritime Organization (IMO))
- Terminal notice regarding containers
- Ship database, with relevant basic information on all ships that have visited Finland before
- A restricted set of the International Maritime Dangerous Goods (IMDG) code database
- UN LOCODE database, including port areas
- Database on ID and contact data on all agents using the system
- Database on ID and contact data for ports
- To order port services, like towing, water electricity, telephone (a very little used feature)
- Six IMO FAL forms produced automatically from the information are available

How many transactions per day are handled? What percentage of total transactions?

There are two alternatives to provide information to the PortNet: Using an Internet browser and by XML file transfer. All the major players presently use file transfer, even if they sometimes correct mistakes later using the Internet browser interface. Smaller players use the Internet browser.

The number of part or complete transactions is impossible to estimate because of the diversity of information. A rough idea is given by the fact that there are about 70000 annual ship calls to Finland, the system handles more than 99% of their notices, there are some 1500 registered users and up to 1000 daily users.

How many clients does the SW have at the present time?

A rough idea is given by the fact that there are about 70,000 annual ship calls to Finland, the system handles more than 99% of their notices, there are some 1500 registered users and up to 1000 daily users.

Operational model

How does it work? What is the operational model for the SW (describe the business process model)?

PortNet is a national maritime traffic database, not a port community system (operating within one port only). The user logs on to the system using the given user name and password and may provide the information using an Internet browser (https://) or file transfer (XML or UN/EDIFACT) using dedicated data communication. The access is restricted by the user management system into user profiles. Agents only have access to their own data, port authorities have access only to data within their own port, and governmental authorities have access to all information.

The Border Guard, however, exclusively use read-only access. Hence all the data is available to everybody within the limits of his prescribed user profile. Timetable data is open to use without any restrictions. The business profile has never been depicted really, although everybody involved knows how it works.

Who are the main clients?

This is a tool for the ship agent to give all his formal notices to authorities at the same time, using a single window. It is also a tool for authorities, and all that are involved, to track what is going on in the maritime traffic. Finally this is a tool to enable anybody to update information regarding ETA and ETD timetables.

Which public and private agencies are involved in the facility?

It has already been stated that all the players in the port environment are involved in using the system. Presently the system is paid and maintained by the Maritime Administration, the Customs Office and the 21 largest ports. The Border Guard is using the system. Hence the system encompasses the maritime safety, maritime security, cargo logistics and environmental aspects of maritime traffic.

Business model

What is the business model? How is it financed (government, private sector, Private-Public partnership)?

As of 2007, with the advent of PortNet 2, the PortNet-system is financed by the Maritime Administration and the Customs Office. Due to the added emphasis on security and the ISPS code, the system is now state-owned. No user charges have been charged at any time and there are no plans to change this.

<i>What were the costs of establishment of the facility?</i>	It has been estimated that the total cost until year 2002 has been €1 million (approx. 1,220,000 US\$) , including operating cost. It was not possible to separate between investment and operating cost.
<i>What was the difference between estimated costs and real costs?</i>	As everything was built up step by step over the years, the cost estimate was always matched.
<i>What are the ongoing operational costs (annual)?</i>	Roughly €100,000 (approx. 122,000 US\$) per year. Some small investments as well as testing costs for new FTP clients were also added to the operating costs adding up to a total of €160,000 (approx. 195,000 US\$) per year.
<i>What are the user fees (if any) and annual revenue? Model of payment (fixed price per year, price per transaction, combination, other model)?</i>	No user charges are carried. First charges were rejected because the system was voluntary and charges could have discouraged use. Now it is mandatory but it is considered to be inappropriate and unfair to collect mandatory information for government use and in addition charge for it. However it has been seriously discussed, that those few traders who are still delivering their information on paper should be charged with a paper-handling fee.
<i>How will the SW be sustained over the coming years?</i>	PortNet is considered a public utility and hence paid for by the taxpayer.
Technology	
<i>What technology is used?</i>	The system is run by Microsoft/Dell servers and the database is Oracle 10 G.
<i>How are data submitted (electronically – what type of format/language, paper – what forms, combination – what kind of combination)?</i>	Manually, using an Internet browser and input forms or automatically using FTP and XML- or EDIFACT-files (CUSCAR, CUSREP, and IFTDGN).
<i>Where are data sent and lodged (government or private entity)?</i>	The system operator is the Finnish Maritime Administration (FMA), selected by the owner group. The operator must be third trusted party as in this case. Hence the data is sent to FMA.
<i>Who can submit data (importer, exporter, agent, customs broker)?</i>	Any party who is legally responsible for the cargo coming into and out of Finland and registered with PortNet may input data. Authorities may input any data they want. In particular the customs is using the system very actively.
Promotion and communication	
<i>How did you promote the facility?</i>	We are contacting directly those parties, who we consider important enough, encouraging them to join. Also we give frequent presentations both nationally and internationally to promote the PortNet philosophy.
<i>How were all stakeholders kept informed about the facility's progress?</i>	PortNet is connected to a portal, www.portnet.fi , where information on important issues is promulgated. Information on more long-term issues and trends are promulgated at an annual user conference.
<i>What kind of training was provided for users?</i>	Any potential candidate may contact our main user and ask for a training course, which is arranged free of charge. In the initial stages

larger classes were arranged, even outside the capital, according to demand.

Do you provide any helpdesk or customer service?

The main user and his assistant, who are located at the customs office, give online and telephone help. The access address and telephone numbers can be found on the PortNet portal.

Judicial aspects

Is use of the facility obligatory or voluntary?

The use is obligatory, as prescribed by a Customs decree. This Customs decree is from few years back. Until then it was voluntary, but initially some larger ports gave a 1% reduction on port fees if PortNet was used.

Do participants need to sign a contract with provider/agency in order to participate?

At present nothing else is needed but a formal application. This is going to change with the advent of PortNet 2.

Was specific legislation (or change of old legislation) necessary?

At present legislation exists only for gathering information for ISPS purposes and for producing import and export statistics. This is barely adequate and new legislation is planned.

How is the privacy of information protected?

By robust user profiling. Once a common standard, on a mandatory electronic identification card, is agreed upon in Finland, it is probably going to be applied.

Standards

What is the role of international standards (UN/EDIFACT, UNLK, UN LOCODE, UN/CEFACT Single Window Recommendation, etc) in your SW?

The UN/EDIFACT and UN LOCODE standards are applied.

Benefits

What are the benefits to clients and to participating agencies?

In the old times agents submitted separate paper documents to all the authorities either by fax or by hand. There is a documented case where the number of annual faxes was reduced from 50,000 to 365. The old regime did not encourage agents to correct mistakes by sending new faxes or manual documents. It just wasn't done. The data about the ship had to be accurate even if the agent did not have the information. So the agents invented what they did not know.

For line vessels there is the obvious benefit of copying the old notice into a new notice just modifying the changed parts. Ports may and frequently do import PortNet information into their invoicing systems for automatic invoicing.

How did it benefit trading community and the Government?

The Customs earlier stored enormous amounts of notices and even distributed copies of the notices within the Customs organisation. That is all gone now, nothing is stored on paper. The existence largely governs the way the Customs work. It is used as a daily task list. The new regime has also affected the data quality in a very positive way. Field checking and routines are certainly going to increase in the new PortNet 2. Customs also may import PortNet information into their invoicing systems for automatic invoicing. The reduction of work phases has a profound effect on both cost and accuracy.

What was the impact on Customs revenues?

Revenues are improved, as the invoice cycle is faster.

What problems did it solve?

There is no easy and simple answer to this question as there are so many benefits. The advent of PortNet has profoundly changed the modus operandi of people. Things are done now, which simply were not done previously, because it would have been too elaborate or expensive.

Lessons learned

What were the crucial success factors?

The key success factor is the co-operation between the parties that are responsible for the maritime safety, maritime security, cargo logistics and environmental issues. In particular it has to be stressed that a system that works well is just a minor enabling factor.

What were the greatest obstacles?

The greatest obstacle has been establishing the co-operation between authorities and real commitment. Initially it was very difficult. Once those obstacles were removed, problems vanished. In fact co-operation is getting better all the time. We have seen it time and time again that without this co-operation the idea does not work, no matter how good the system is technically.

There are major barriers between these authorities that have to be pulled down: some of the authorities are not used to/do not like to share information with other authorities. There are also matters of authority (who will take the lead?), how will financing be shared and what about federal borders? The authorities may also be located under different ministries. Often there seems to be no one responsible for an application covering this large an area of jurisdiction.

We have also seen that once an enlightened person is found in an organisation, high enough in command, problems tend to resolve themselves. The final initiative, however, has to come from the inside.

What are the main lessons learned?

Establish the co-operation between authorities, decide what services actually should be set up, decide on finance, and decide on who will take the technical lead. Prepare legislation, if not in place already. Listen to and follow good advice.

Future plans

What are the plans for further development of the SW?

The new version of the PortNet-system (PortNet 2) was launched on 1 July 2009. It was mainly a technical development project and does not

create any changes to the business processes described in the repository.

What are the biggest obstacles to further development of the SW?

There are none, within the scope we are working with presently.

Do you intend to make agreements concerning SW cooperation on the regional level?

It is fairly obvious for a country like Finland that the information about goods coming to Finland originates abroad; hence the information should be input at its origin. As we are not interested in enlargement of our national PortNet system, similar national PortNet-like systems have to be established in those countries and then interconnected with us. This we try to accomplish both with individual countries and within the ongoing European Union (EU) BaSIM project. Denmark is already well under way and is taking the right approach to it.

Source for further information

Website:

www.portnet.fi

Contact details:

Name: Mr. Antti Arkima, Deputy Director
Address: Finnish Maritime Administration
P.O.B. 171, 00181 Helsinki, Finland
Phone: +358 204484377
Fax: +358 204 484470
Email: antti.arkima@fma.fi