



# SMOOTH PORTS

**ADSP MTS**

**NORTHERN TYRRHENIAN SEA PORT AUTHORITY  
SYSTEM**

**BEST PRACTICE- TPCS- Tuscan Port Community  
System**

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### **(3) Good practice general information**

The Tuscan Port Community System (TPCS) is the free Port Community platform of the ports managed by ADSP MTS, capable of processing data related to cargo flows. The TPCS is widely acknowledged as one of the best PCS in Italy, and now it has more than 500 users that daily process information to freight transit in the port paperless, reducing both costs and environmental impact of documentation management. The TPCS is the PCS for the port of Livorno and Piombino, albeit mostly used in the former seaport.

#### **Good practice detailed information**

- **Short summary of the practice**

The Tuscan Port Community System (TPCS) is the free platform for port operators to process and manage information on freight transit (both import and export) in the port of Livorno.

- **Short description of the local situation**

The Port System of the Northern Tyrrhenian Sea is one important gateway in Central Italy, ranking first in many traffic categories, notably new cars, Ro-Ro shipments, forestall products. As a consequence of the wide variety of cargo handled in its ports, it is essential to effectively manage freight flows, through seamless and paperless exchange of data. It is also fundamental to monitor port operations and to detect any hazard for



the environment and for the port security and safety. For this reason, the Port System has invested in recent years in ICT tools to help port community managing freight related information and to control in real time port activities. The two best practices put forward by ADSP MTS highlight this policy to fully digitalize the freight flows management and the environmental impact of port operations.

- **Detailed information on the practice**

The TPCS stems from the need of real time, paperless and smooth communication among port operators in dealing with freight operations. At the very beginning, information among terminals, customs agencies, shipping agencies, freight forwarders and hauliers was made through hardcopy documentation, along with phone call. Nowadays, through logging-in the platform, users can check the status of cargo, the gate-in, gate out, thus speeding up port operations and reliability of data.

More than 500 users operate daily in the PCS, which is provided for free by the Port Authority. More than 1.5 million euros have been invested in implementing this platform since 2008. A round-the-clock helpdesk service assist port users in daily routine management, solving problems when needed. What can be considered as good practice of TPCS is not only its IT functioning, but the governance that steers the PCS development. The Port Authority has set up a technical Committee for sharing with port stakeholders (Control Authorities, Port Terminals, hauliers, freight Forwarders representatives, shipping agencies) the development pattern, the upgrades and services which are mostly needed by port community. In so doing, the making of the TPCS is not a top-down, but it is rather a bottom-up process. These meetings, that are held on a regular basis, have both targeted more strategic decisions (i.e., shaping of new functionalities, testing), as well as more operational issues.

- **How does the good practice contribute to a reduction of CO2 emissions by road transport in the port**

The Port Community System TPCS has helped in digitalising and making procedures smoother in the port of Livorno. Before the TPCS was adopted, some 500 port users had to print customs and port declarations and bring them physically to the Border points in port areas. Nowadays, export and import flows, as well as documentation



related to freight, besides Customs declaration, (i.e phytosanitary, vet declarations) are digitally managed. Albeit not directly assessed, the TPCS has subsequently contribute to lower CO<sub>2</sub> and other harmful gases emissions made in the port and at port gates.

- **Resources needed**

Most of financial sources come from Port Authority's own budget, which of course financed partially by port users. Some services were actually implemented through EU funds (TEN-T and CEF funds). The PCS management engages two staff units on a permanent basis.

- **Timescale**

Since 2008, the TPCS has been continuously implemented.

- **Evidence of success (results achieved)**

The TPCS is one of the few PCS in Italy that encompasses a wide array of operations, both for containerized as well as not-containerized cargo.

Port Community can benefit from IT freely.

In 2016, the Port of Livorno has been subsequently awarded a prize (SMAU), for its innovation activities.

- **Challenges encountered**

A PCS, per se, cannot be a stand alone exercise. An effort for coordination with national IT systems is needed, without losing the specific services and standards provided to the port community. Upgrading the TPCS in accordance with national and European standards is therefore a top priority.

- **Potential for learning or transfer**



A PCS has to be tailored and customized for the needs of each port. Nonetheless, the management of innovation process, the PCS general structure and needs, along with experimentations and trials, are something common to most ports. The governance of innovation, with the shared bottom-up process, is also something valuable as lessons for other regions when developing or upgrading this important service. At the same time, even if the EU port governance's models differ greatly across Member States, there is a basic common ground of international legislation come into force (i.e. VGM functionality), which calls for joint solutions for all seaports. In this respect, the TPCS can be an useful lesson, especially for middle-sized or small ports, with a wide variety of traffic flows, which are eager to provide the local port community with a comprehensive ICT tool to support logistic process. The way the Port Authority has established a long-standing co-operation with other public institutions, private associations of undertakings and port users could be also a benchmark for setting up a shared tool.

- **Recommendations for implementation in other ports**

It is essential for other ports to ensure that a PCS is built up on shared objectives and standard services, that are accessible to all users in an indiscriminate way. It could be quite a long process, that can take up to several years, commitment of financial and human resources as well. Solutions should be thoroughly assessed and tested before their actual implementation.

- **Further information**

<https://tpcs.tpcs.eu/>

- **Keywords related to your practice**

Ports, Cooperation, ICT, Digitalisation