



European Port Performance Dashboard

Port authorities and port community stakeholders take pride in the important contribution seaports deliver to European trade and welfare. But is anyone outside the industry aware of this? ESPO seeks to contribute to public policy in the EU to achieve a safe, efficient and environmentally sustainable European port sector, operating as a key element for the competitiveness of European companies. In this context, ESPO increasingly needs to demonstrate the performance of the sector in terms of delivering the expectations of an ever-widening range of stakeholders who seek evidence of achievements.

ESPO has taken a first step in establishing a culture of performance measurement in European ports with the two year PPRISM project (Port Performance Indicators: Selection and Measurement), co-funded by the European Commission that has delivered a shortlist of indicators that form the basis of the first European Port Performance Dashboard.

ESPO acknowledges with grateful thanks the expert advice of its members related to data input and evaluation, and to its PPRISM academic partners for dedicated research support. The European Commission is thanked for its encouraging cooperation and financial support.

How can port authorities contribute?

Port authorities can contribute directly by participating in the next round of data collection. A user friendly interface is being developed to facilitate data reporting.

Effective and influential representation of the sector at all levels requires credible measures of performance based on a wide sample of member ports. ESPO encourages its members to develop and support the culture of monitoring and reporting of the proposed performance Indicators.

Benefits of participation to the port authority:

- » Gain recognition as having contributed to the dashboard (data provided is kept strictly confidential and the dashboard is only populated with aggregated results at European level)
- » Assist ESPO in contributing to EU policy and retain initiative with stakeholders
- » Performance data for the dashboard are of direct use for the port's own management programmes and self-assessment

The dashboard is a support tool to assist ESPO members and help the sector.

Contact & Support

Requests for further information or clarifications about the Dashboard can be obtained from ESPO (pprism@espo.be). PPRISM results are available at <http://pprism.espo.be/>.



EU port authorities converge towards the 'facilitator' type

Over the last years, port governance issues have become increasingly relevant. The changing economic and political environment has led to changes in port governance structures. There is still an ongoing debate regarding appropriate port governance models. Thus, it is relevant to identify and monitor particular aspects of the governance models in place and their impact on performance.

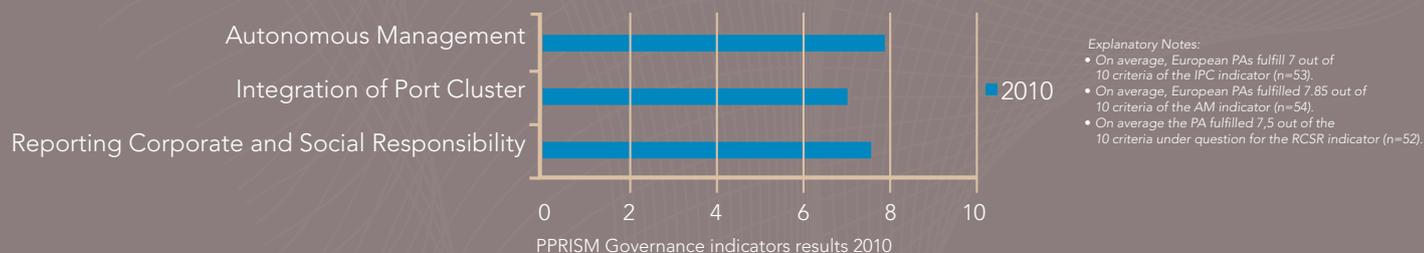
“With the current economic and institutional environment being characterised by high levels of uncertainty and complexity, Greek ports have to reconfigure their (outdated) governance models and practices so as to enhance further development and increase their competitiveness.”

George Kastellanos, Executive Director of Hellenic Ports Association

Since the 1970s, ESPO and its predecessor the Community Port Working Group have been producing a series of “Fact-Finding” reports which aim to provide insight in the way in which European ports are governed. Throughout the years these reports have become leading reference tools both for port practitioners and policy makers at all levels. In 2011, ESPO published a new version of its ‘Fact-Finding Report’ on port governance based on an extensive survey among ESPO members.

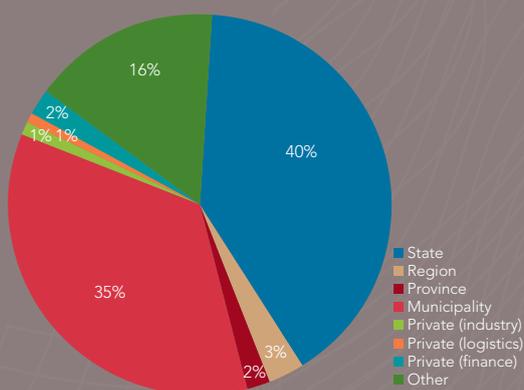
The governance section of the PPRISM project draws on this latest report and attempts to develop and measure a number of port governance indicators. These can be interpreted on a stand-alone basis. In addition, analysis of the relation between the port governance indicators and other port performance indicators may provide meaningful insights. The governance indicators reported in the dashboard touch upon basic functions of port authorities through an evaluation of a number of relative criteria on a binary (True, False) basis.

- » Autonomous Management provides information on whether port authorities maintain features that enable it to develop vital initiatives.
- » The indicator Integration of Port Cluster expresses the extent to which port authorities aim towards the integration of various stakeholders composing a port cluster.
- » Reporting Corporate and Social Responsibility touches upon port authority's activities that enhance corporate responsibility.

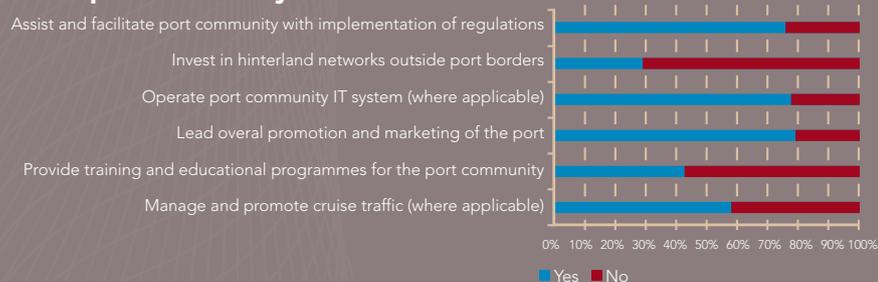


Snapshot of the EU Port System

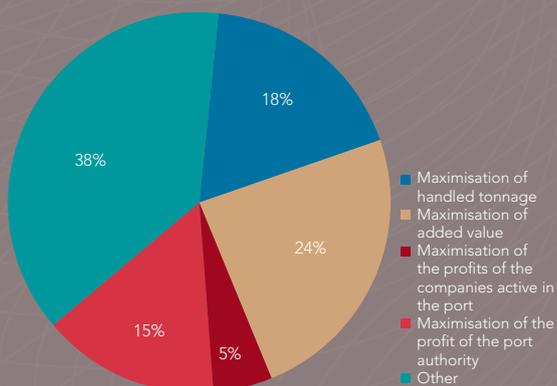
Ownership of port authorities



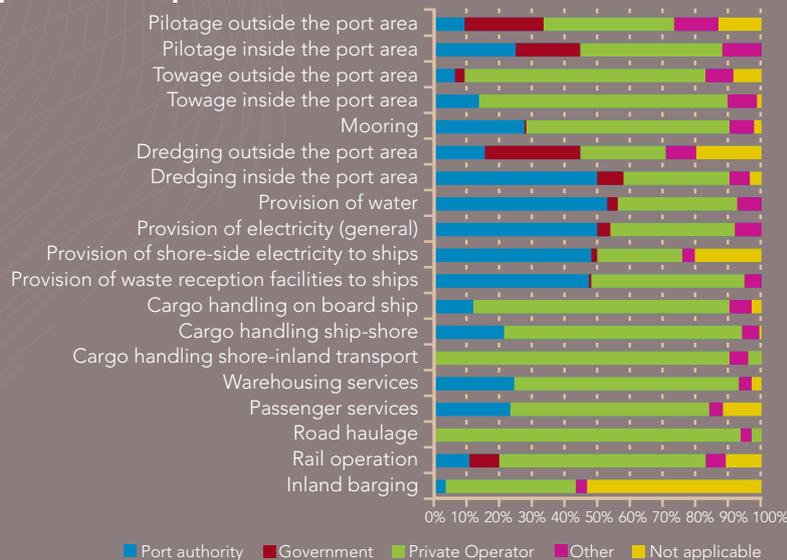
Involvement of PA in actions and initiatives that benefit the entire port community



Economic objectives of port authorities



Direct provision of operational services



EU ports connect

Maritime Connectivity - Containers

Connectivity can be defined as the quality of a connection for moving freight between two or more points. The primary goal is to develop an indicator of maritime connectivity for container traffic based on four components (frequency of services, transit time, and the average ship size and level of competition between shipping lines to approximate costs) which monitors how the quality of connections between two ports changes over time. Secondly, an aggregated indicator at EU level will express how the maritime connectivity of the EU port system for containers evolves over time.

Number of directly connected port-pairs between European port regions and ports in the rest of the world.

Number directly connected port pairs	Black Sea	East Med	Iberian Atlantic	North Cont. Europe	South Europe	Scandinavia	UK/ Eire	Total Europe
Africa	14	22	77	63	146	5	21	348
Central & South America	6	5	103	207	157	89	62	629
Far East	126	51	26	193	320	37	95	848
Middle East	3	2	7	18	39	9	11	89
North America	30	22	42	92	75	32	47	340
Total	179	102	255	573	737	172	236	2254

Source: PPRISM calculations based on Linescape data on container shipping services Q3 2011.

Disclaimer: the database is not fully complete, so monitoring the trends over time is more accurate than the absolute numbers.

The table above shows how European ports are connected to ports in the rest of the world, by counting directly connected port-pairs. (Example: take the port-pair Felixstowe to New York. If there has been at least one direct service between both in the three month period, Felixstowe – New York qualifies as a directly connected port pair). The higher the number of directly connected port pairs between Europe and the rest of the world, the better Europe's maritime connectivity for container traffic.

Intermodal Connectivity - Containers

Index intermodal connectivity (2010=100)



This indicator expresses the extent to which intermodal connectivity of the EU ports for container traffic improves over time. This indicator is based on data from the port authorities on the number of at least weekly barge and train services to unique inland destinations. The connectivity improves both because ports develop more intermodal services and because ports that previously were not intermodally connected to hinterlands have become connected.

Quality of Customs Procedures

Custom procedures impact supply chains and port operations. This indicator is calculated with data from the Global Competitiveness Report. The scores of the EU 27 countries is translated to an index, starting in 2007. The index is unweighted: the weight of all countries is equal, regardless the size of the country or the number of ports in a country.

EU 27 unweighted index quality of customs procedures (2007=100)



“In line with the EU ambitions for a core freight network as key part of the TEN-T programme, an indicator on intermodal connectivity is important for the EU port system and for the port of Rotterdam.”

Aernoud Willeumier, Port of Rotterdam Authority, Member of the ESPO Intermodal and Logistics Committee

Socio-economic performance: direct employment down by 6% during 2009

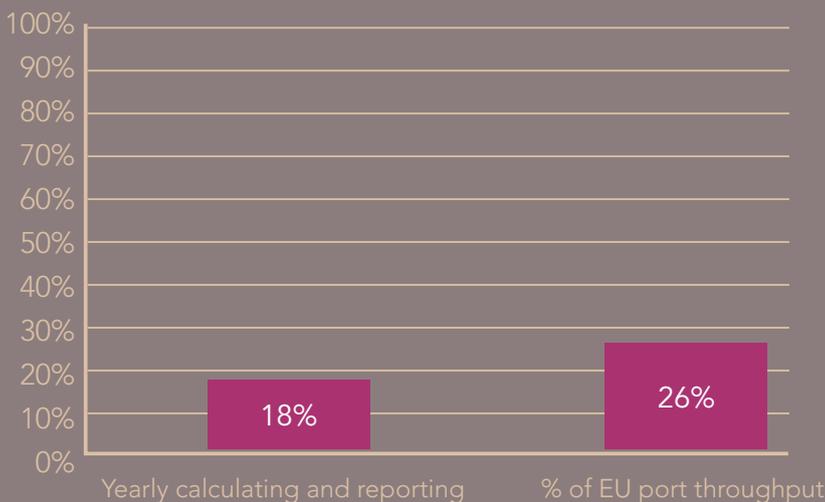
The socio-economic performance category focused on the measurement of direct employment and direct gross added value, as main indicators to express the seaport sector's contribution to the European economy. The PPRISM pilot survey showed that harmonisation of calculation methods and data availability challenges need to be addressed in the future. The survey results show that only a limited number of ports measure socio-economic impacts on an annual basis. For direct employment it concerns 18% of the survey sample, representing 26% of European seaport throughput. The results for direct employment, based on an extrapolation, show that the port sector represents a direct employment of about 1,5 million FTEs over the period 2007-2009. The results on the level of the sample show that the port sector suffered from job losses (-6% in 2009) due to the economic and financial crisis that started in the 3rd quarter of 2008 in the EU. The analysis also shows that ports are leading indicators for the EU economy as already over the year 2008, direct employment in ports showed a minor decrease.

“Every person in the port community has great awareness of the importance of ports for the economy as generators of gross added value, employment and in Belgium, these parameters are calculated in an objective manner. Year after year, this allows us to reveal the social and economic significance of ports to the external world, and this on a consistent basis.”

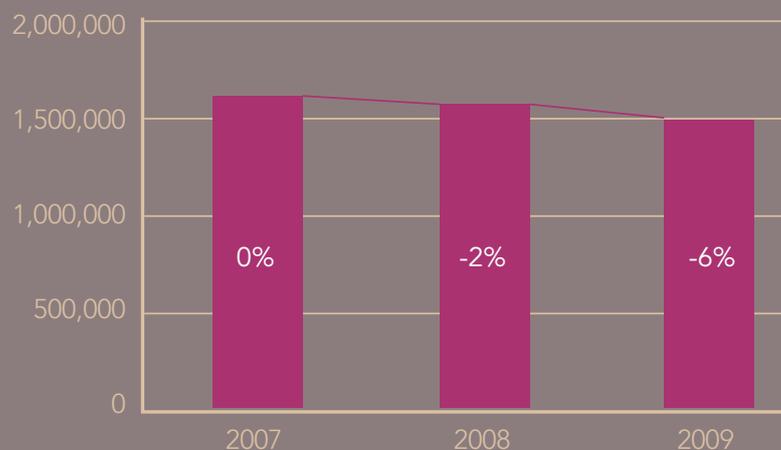
Dr Francis Rome, Chairman, Flemish Port Commission

Direct Employment

Sample characteristics (pilot survey 2011, N=57)



In Full-time equivalent (FTE) - EU



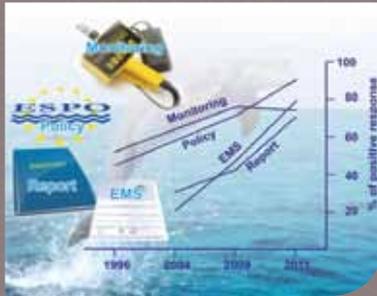
“An economic activity representing 8,5% of Belgian GDP and 3% of Belgian employment, can not and may not be ignored. For this reason, the Belgian National Bank follows this sector with the greatest attention, and this since more than 10 years”

George Van Gastel, Head of Service, Micro-economic Analysis Unit, National Bank of Belgium

15 years of progress in port environmental management

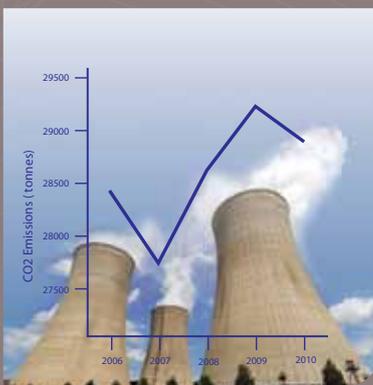
“It is so important that ports can generate the information and data to demonstrate their environmental achievements. Using these to regularly report on progress based on selected indicators is a real advance and a very welcome development for a sector which is so fundamental to the EU economy.”

David Whitehead OBE, Director, British Ports Association



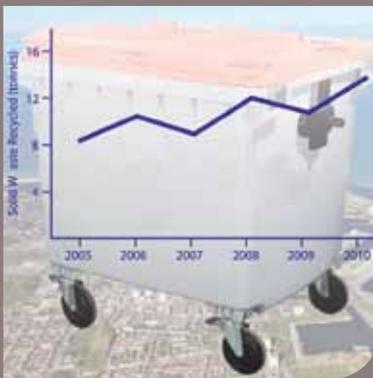
Environmental Management

The European port sector has demonstrated positive progress in delivering compliance with environmental legislation, cost- and risk-reduction, environmental improvement, and sustainable development. The graph provides evidence of 15 years of positive progress of port authorities putting key components in place to deliver effective environmental management. Since 2003, 80 ports have completed at least once the Self – Diagnosis Method (SDM) – the user-friendly checklist for developing and implementing an Environmental Management System (EMS). In addition, 37 port authorities have achieved certification using the Port Environmental Review System (PERS) – the only port sector-specific Environmental Management Standard.



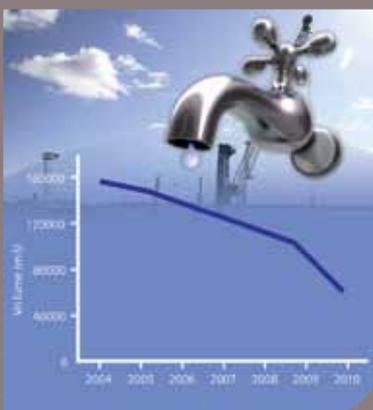
Carbon Footprint

Carbon Footprint is a common denominator and an inclusive indicator of air quality that summarises issues of energy use and environmental quality. Different tools and scoping are used throughout the sector but systematic reporting of trends of performance based on consistent calculation methods by each participating port yields exemplar reporting data. The sector has an established record of monitoring and reporting amongst many ports. The schematic diagram is based on actual performance of selected pilot ports.



Waste Management

Environmental performance indicators of waste management are widely adopted, and indicator values are readily available. The range of methodologies used within the sector reflects the diversity of operations and local conditions. The results demonstrate an example of the sector's performance in terms of solid waste recycled (tonnes) based on selected pilot port feedback.



Water Consumption

Water consumption is increasing in significance in terms of cost-reduction and resource consumption. More than 56% of respondent ports provided data. Tracking of water consumption encourages the culture of monitoring and reporting of environmental performance indicators because it is relatively straightforward to monitor via bills or meters.

“Dover Harbour Board recognises the value of monitoring and reporting its environmental performance as an effective approach to management and stakeholder relations. The Dashboard will assist port authorities and the sector to showcase their improvements in environmental performance.”

Vicki Case, Environmental Manager, Dover Harbour Board

The culture of monitoring and reporting is of interest to a wide range of stakeholders. Positive trends and examples of best practice are helpful in port development and in achieving best practice. Become an Ecoports port (www.ecoports.com) and contribute to the dashboard.

European maritime traffic again at pre-2009 levels

The changing nature of the competitive environment and market structures in seaports creates a need for performance measurement that depicts market trends. The performance indicators on market trends and structure have a high practical relevance as a large percentage of them is already used by the industry, in particular by port authorities. However, in practice there are differences in collection methods and the definition of data.

PPRISM provided the opportunity to fine-tune the reporting format and the specification of the indicators on Market Trends and Structure. In addition, it revealed that for a successful implementation, the development of specific instructions and guidelines is needed in order to achieve harmonisation of tools, methodologies and techniques.

Maritime Traffic (M.T.)



“The ESPO Rapid Exchange System has proven very useful to the sector in providing quarterly traffic data for the principal European ports but more importantly, it is an example of collaborative exchange of data between European ports. We expect that the European Port Observatory will consolidate these efforts and become the official source of data for the whole European port sector.”

Miltiadis Arvanitidis, Thessaloniki Port Authority and Chairman of the Economic Analysis and Statistics Committee of ESPO

Call Size (C.S.)

