Selection and Measurement of Port Performance Indicators

Limassol, May 5th, 2011
Why?

- Performance Measurement is common in other industries:
  - ASQ
  - BE LOGIC
  - UIC
- For ports only limited information is available:
  - Tonnes of cargo handled
  - Number of passengers
- Measuring the performance of the port industry is relevant for interaction with policymakers and other stakeholders. It also can assist port development initiatives and contribute to the competitiveness of EU ports.
Objectives

‘PPRISM aims to identify a key list of sustainable, relevant and feasible indicators to monitor the overall performance of the EU port system and assess its impact on the society, environment and the economy of the EU’

- **Sustainable**: quantification is possible in time series in the long term
- **Relevant**: measurement of the performance on EU level (not on a port level)
- **Feasible**: precisely defined and collected in a coherent manner for different seaports
Stakeholder relevance

- **For (EU) policy makers**: relevant information on the performance of the EU port system.

- **For stakeholders of the port industry**: indicators that respond to stakeholder concerns (e.g. Environmental performance, safety, employment).

- **For the port industry**: contribution to quality of port policies and societal acceptance of port activities.

- **For port authorities**: Next to the above mentioned effects, an opportunity to benchmark against EU average (taking into account port specificity, cf. typology indicator)
The PPRISM partners

External Stakeholders

ESPO’s Technical Committees

Port Performance Indicators Selection and Measurement

UNIVERSITY OF THE AEGEAN

ESPO

ITMMA

Technische Universiteit Eindhoven
University of Technology

TU/e

Vrije Universiteit Brussel

CARDIFF UNIVERITY

PRIFYSGOL CAERDYDD

European Commission

ESPO

European Sea Ports Organisation vzw/asbl
Inventory and selection process

159 Indicators → Academic partners

39 Indicators → Academic partners and ESPO

45 Indicators → Port authorities, through ESPO committees (1st phase)

42 Indicators → Port authorities, through ESPO committees (2nd phase)

10-14 Indicators → Multi-stakeholder response panel assessment

Min Number of Indicators → FINAL SELECTION
Assessment methodology

To be implemented within observatory; PPRISM identifies conditions for implementation and provides (paths to) solutions and/or ideas to solve the feasibility bottlenecks

To be implemented within PPRISM

To be implemented within observatory if acceptance increases (e.g. periodical surveys within ESPO)

No real interest to implement in the near future. If acceptance increases, observatory should look into feasibility
Top-10 Indicators (1\textsuperscript{st} Assessment)

- Environmental Management System
- Maritime Traffic
- Market Share
- Reporting Corporate Responsibility
- Autonomous Management
- Vessel Traffic
- Direct Employment
- Strategic Environmental Aspects
- Concentration Ratio
- Availability of Port Community System
Top-10 Indicators (3rd Assessment)

1. Degree of Containerization - 3.86
2. Ex. of an Environmental Management Programme - 3.87
3. Modal Split - 3.89
4. Levels of Safety - 3.92
5. Vessel Traffic - 3.93
6. Direct Gross Value Added - 3.95
7. Existence of an Environmental Policy - 3.96
8. Direct Employment - 3.96
9. Ex. of an Environmental Monitoring Programme - 3.97
10. Maritime Traffic - 3.97

Acceptance & Feasibility
How can stakeholders contribute?

- Further evaluation of the indicators, (mostly on-line at [http://www.surveymonkey.com/s/pp prism](http://www.surveymonkey.com/s/pp prism)) with input from various stakeholders (**closing date: 13 May 2011**)
  - Port authorities
  - Port users (shippers, terminal operators, shipping lines, logistics service providers, transport firms, etc.)
  - Institutional stakeholders (government, NGOs, etc.)

- **Next steps:**
  - A pilot, to test data availability and the calculation method
  - Recommendations to European Commission on how to establish a working European port performance dashboard
Conclusive remark

- **Short term:**
  - Create a culture of performance measurement
  - Getting the indicators right (learning process with stakeholders)
  - Design the organizational structure behind the dashboard

- **Medium to long term:**
  - Analyse and understand port system performance indicators linkages with policy, socio-economic and technological development
  - Support tool for decision-making and evaluation in the EU port industry