



# **WORKSHOP**

## **Small & Island Ports Management**

### **Roadmap to sustainability**



- **Presentation**
- **Discussion**
- **Templates for RoadMap**



**Professor Vasileios Tselentis**  
**Piraeus University**

**Dr Chris Wooldridge**  
**Cardiff University**  
**&**  
**Science Coordinator, EcoPorts**



# **Workshop Objectives**

## **SMART Roadmap**

**(Specific Measurable Achievable Realistic Timebound)**

**Assist Small and Island Ports to:  
bridge the gap between policy - and practice**

- 1) Retain local influence**
- 2) Enhance collaboration**
- 3) Implement effective EMS**
- 4) Demonstrate improvement**
- 5) Assist Sustainable Development**
- 6) Deal with priority Aspects\***



# **The Special Case of Small and Island Ports**

- i. To what extent are they adequately represented?**
- ii. Who are the ambassadors for these ports?**
- iii. How can knowledge and experience be shared?**
- iv. How to implement an effective EMS?**
- v. Methods to establish 'green credentials'?**



# Developing the Roadmap: pathways and destinations

- Future roles and options
- Management of cruise and passenger vessels
- Environmental protection – and tourism
- Scope as Energy Hubs
- Financing options for Networked collaboration, R&D, Education and training



## Fundamental requirement

Who wants to know?	What is in it for me?
<ul style="list-style-type: none"><li>• <b>Regulators and courts</b></li></ul>	<ul style="list-style-type: none"><li>• <b>Compliance</b></li></ul>
<ul style="list-style-type: none"><li>• <b>Marine Governance</b></li></ul>	<ul style="list-style-type: none"><li>• <b>Cost and risk reduction</b></li></ul>
<ul style="list-style-type: none"><li>• <b>Investors/Stakeholders</b></li></ul>	<ul style="list-style-type: none"><li>• <b>Sustainability</b></li></ul>
<ul style="list-style-type: none"><li>• <b>Insurers and banks</b></li></ul>	<ul style="list-style-type: none"><li>• <b>Market opportunity</b></li></ul>
<ul style="list-style-type: none"><li>• <b>Auditors</b></li></ul>	<ul style="list-style-type: none"><li>• <b>Positive image</b></li></ul>
<ul style="list-style-type: none"><li>• <b>Communities/Society</b></li></ul>	<ul style="list-style-type: none"><li>• <b>'License to operate'</b></li></ul>

→ **QUALITY OF THE ENVIRONMENT** ←



- **ISO 14001**
- **EU Eco-Management and Audit Scheme**
- **PERS**

## **POLICY OBJECTIVES\***

### **NON COMPLIANCE**

**risks of litigation, financial penalty and bad publicity**

### **COMPLIANCE**

**respond to legislation as required to minimum level of effort, resources and commitment**

### **COMPLIANCE PLUS**

**pro-active, planning ahead for future environmental legislation in parallel with commercial opportunity**

### **COMMERCIAL EXCELLENCE**

**integrated management to achieve total quality on all environmental and commercial issues**





**“The wind of change is blowing.....  
whether we like it or not.”**

- **Dynamic nature of the market**
- **Incidents and accidents**
- **Legislation**
- **Climate change**
- **Global economics**
- **World politics**
- **Technology**
- **Stakeholder pressures**
- **Business model**
- **Local Community expectations**



# Priority issues change with time

1996	2004	2009	2013	2016
Port Development (water)	Garbage / Port waste	Noise	Air quality	Air quality
Water quality	Dredging: operations	Air quality	Garbage/ Port waste	Energy Consumption
Dredging disposal	Dredging disposal	Garbage / Port waste	Energy Consumption	Noise
Dredging: operations	Dust	Dredging: operations	Noise	Relationship with local community
Dust	Noise	Dredging: disposal	Ship waste	Garbage/ Port waste
Port Development (land)	Air quality	Relationship with local community	Relationship with local community	Ship waste
Contaminated land	Hazardous cargo	Energy consumption	Dredging: operations	Port development (land related)
Habitat loss / degradation	Bunkering	Dust	Dust	Water quality
Traffic volume	Port Development (land)	Port Development (water)	Port development (land)	Dust
Industrial effluent	Ship discharge (bilge)	Port Development (land)	Water quality	Dredging: operations



STRATEGIC ANALYSIS  
QUESTIONNAIRE FOR  
THE (ENVIRONMENTAL)  
PORT MANAGER



SDM

SELF DIAGNOSIS METHOD

- **Confidential**
- **Data-base**
- **Benchmark**
- **Priority Issues**

- 1) **Environmental policy\***
- 2) **Organization and personnel**
- 3) **Awareness and training**
- 4) **Communication**
- 5) **Operational management**
- 6) **Emergency planning**
- 7) **Monitoring**
- 8) **Review and audit**



# PORT ENVIRONMENTAL REVIEW SYSTEM



- **Environmental policy statement\***
- **Register of environmental aspects\***
- **Register of legal requirements\***
- **Documented responsibilities**
- **Conformity review**
- **Environment report**

- Voluntary
- Compliance
- Cost and risk reduction
- Sustainable development
- Evidence

Welcome to the EcoPorts network

This page provides visibility and credit to ports that are currently part of the Network through the interactive map and the list below. The "EcoPort" status is obtained by any port within the broad ESPO membership upon completion of a Self Diagnosis Method (SDM) checklist. The port is awarded in that way for providing data on the performance of its environmental management programme and for contributing in such way to the up-to-date maintenance of the ESPO European Benchmark of performance. Additional credit is provided to ports that are certified with PERS, the only port-sector specific environmental management standard, and ISO 14001.



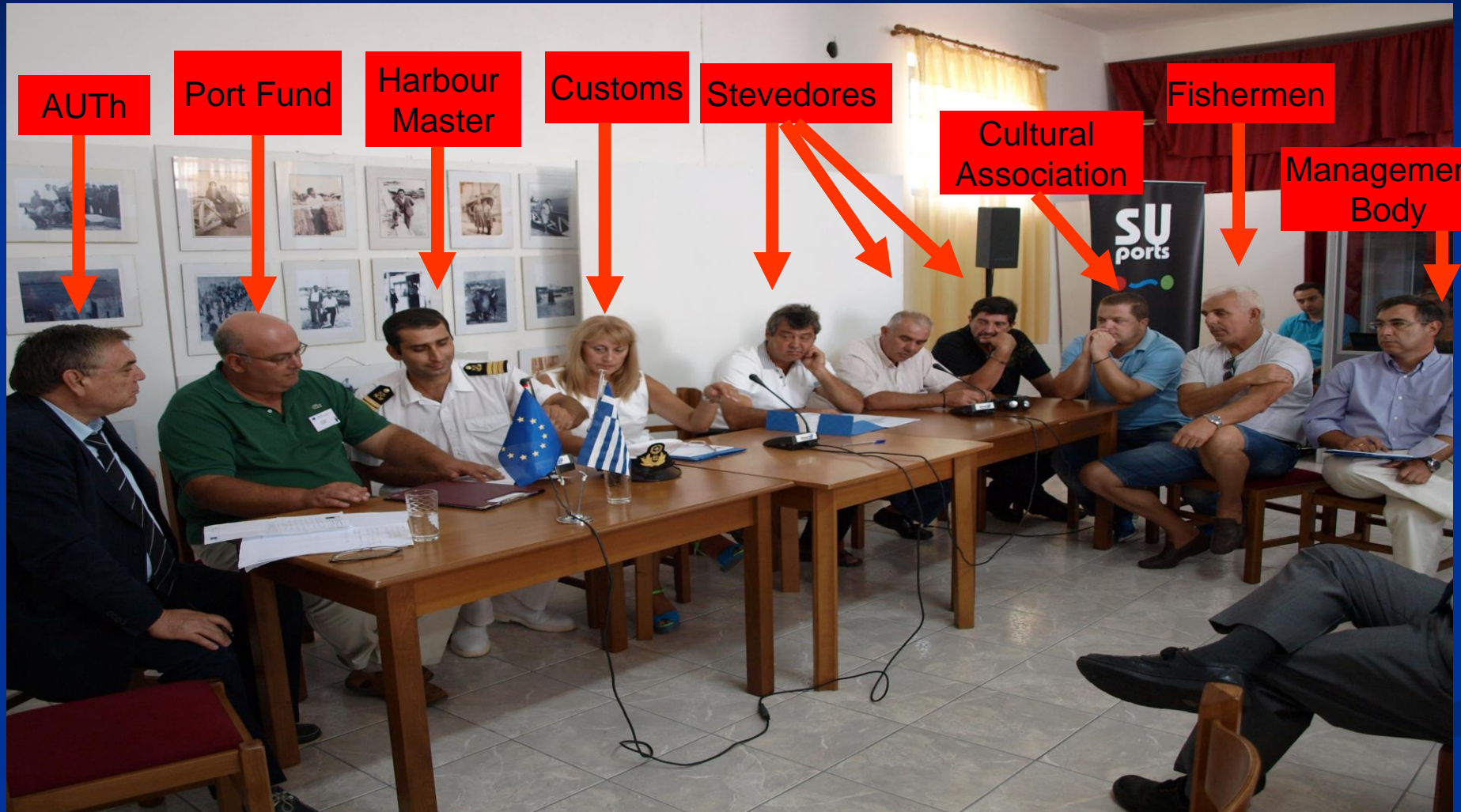
## ECOPORTS NETWORK



- Generic
- Port Sector – specific
- Global

## 2. Port of Lagos

Stakeholder roundtable 7/09/2012

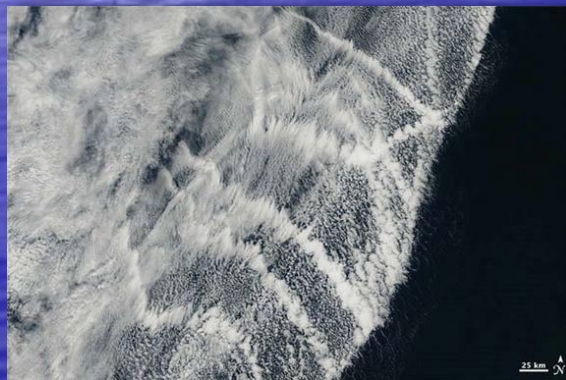


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- **PRIORITIES?**
- **COLLABORATION?**

## Monitoring: Factors and variables



- **Air quality\***
- **Wind direction**
- **Wind speed**
- **Meteorology**
- **Sampling frequency**
- **Site locations**
- **Temperature profile**
- **Topography**
- **Hydrography**
- **Sources\***
- **Technology**
- **Methodology**
- **Seasonality**
- **Aspects**
- **Boundaries**
- **Hinterland**
- **Chain**
- **Ship type – design, equipment, management & operations**
- **Number of vessels**
- **Frequency**
- **Periodicity**
- **Scheme criteria**
- **Commercial profile**
- **Market and competition**
- **Bunkering/Fuel type**
- **Waste management**
- **OPS**
- **Transparency**
- **Data comparability**
- **Liabilities and responsibilities**
- **Cost and maintenance**
- **Interpretation and validation**
- **Dynamics and climate change**

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# Roadmap components

- **Priority issues**
- **Scope for collaboration**
- **Existing networks/organisations**
- **Framework for cooperation**
- **Demonstration projects**
- **Delivery route for training and exchange of experience**



**Σας ευχαριστώ για  
τη συνεργασία σας**

**THANK YOU FOR YOUR  
COLLABORATION**