



3rd INTERNATIONAL CONFERENCE

Ports, Maritime Transport & Insularity

Smooth sailing towards a sustainable future? a sincere governance challenge

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Structure of the presentation

- I. Introduction
- II. Sustainable Maritime Shipping
- III. Sustainable Port management
- IV. In search of a new organisational approach
- V. Conclusions



I. Introduction



- Transport plays a crucial role in modern societies.
- Ports are part of a transport system:
 - ports are nodes in a transport network, and
 - the locations where trade, logistics and production converge
- Not only the port and port-cities benefit from port related activities, but also regions and countries



To illustrate:

- In the EU-28, the port activities represent about 10 per cent of the employment
- For Singapore and Shanghai this is even above 20 per cent





- At the same time, transport has undesired side-effects
- There are serious concerns related to:
 - safety,
 - public health issues,
 - congestion, and
 - emissions at the local regional, national and the global level (however serious problems occur beyond boundaries)
- The maritime transport sector (including ports activities and hinterland connectivity) is increasingly associated with these negative feelings



To illustrate:

- Transport activities, excluding international shipping and international air transport, account for about 60 percent of the CO₂–emissions (databank World Bank, 2016)
- There are serious concerns:
 - half of the SO₂-emissions in Hong Kong are ship related,
 - about 85% of all truck traffic on certain highway sections in Los Angeles is port related, and
 - the port area in Antwerp encompasses one-third of the city's land mass
 - recently a relation is proven between PM-emissions and dementia



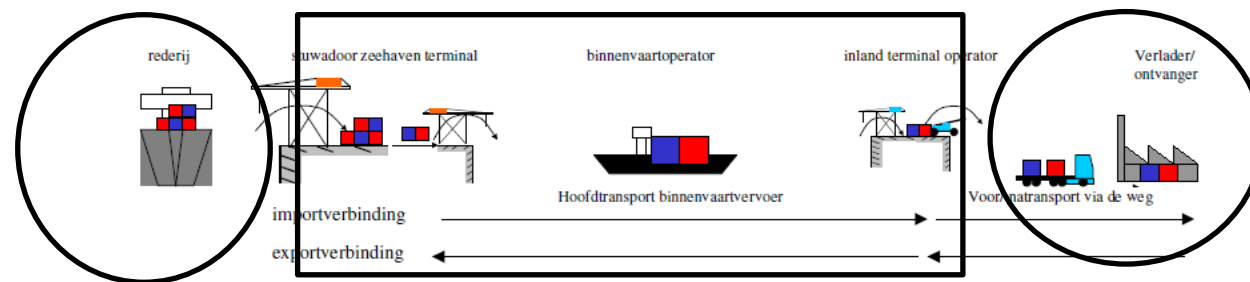


There is a dilemma. But what is the answer?

- There is a general awareness that new approaches and policy measures are needed
- The maritime sector is almost untouched and unregulated (for instance not under the jurisdiction of the Paris-agreement): the public image of maritime transport is under pressure
- There is a sincere health problems related to air quality
- Governments experience increasing pressures from the public opinion when action is lacking.
- So there is a clear governance challenge



For this presentation we make a distinction between 3 types of activities that form the logistic chain



- I- maritime shipping activities
- II- port activities
- III- connections with the hinterland (not addressed today)



II. Sustainable Maritime Shipping



The starting point

- It is acknowledged that
 - vessels are becoming the biggest source of air pollution in the EU and worldwide
 - strict regulation on the global level is missing or is lacking behind (in comparison to the land-side!)
- Terms are popping up as: the need for sustainable shipping, green shipping, green and lean shipping, etc.
- Jurisdiction, governance and policy enforcement (flag states, port control, etc.) is complex



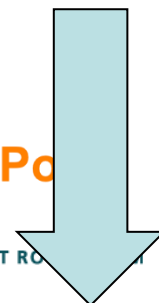
From the shipping perspective, the International Maritime Organization (IMO - a United Nations specialized agency) is responsible for shipping and deals with the prevention of pollution from ships

- The first (and until now only!) legislation for the reduction of ship emissions dates back to 1993, when the European Union with the adoption of council directive 93/12/EEC decided to set limits for the amount of sulfur in marine fuels.
- Annex VI entered into force in 2005: different standards for different parts of the world, not enforced, weakened position the regulation of IMO as guard of 'sustainability'
- Governments were disappointed about IMO-regulation and introduced ECA zones: the Baltic, North Sea and North America. The US Caribbean Sea ECA entered into effect by the 1 of January 2014: much more strict regulation



- In 2020 the global sulphur cap will be introduced: a global playing field for the reduction of SO₂-emission.
- From an environmental point of view this might not be the most exciting measure, but it is the first globally binding emission standard and might inspire for the reduction of other emissions as well.
- And the IMO member states are responsible for policy enforcement.

This is a typical top-down approach: the playing field is clear and every flag state can make its own policy





III. Sustainable Port Initiatives



- The increasing environmental awareness creates new challenges for ports as well. The impact of port activities on public health, but also climate change adaptation and mitigation are nowadays important in port policies
- All these different elements are merged into the concept the Green Ports, Smart Ports, etc. as the answer to the new challenges
- Ports are subject to a wide variety of policy initiatives, often initiated by the EU but also by local, regional and national policy makers: very detailed prescriptions

This is a typical bottom-up approach: the playing field is clear and the instruments are described in a very precise way





There is a wide variety of *instruments* involved

Policy types	Instruments	Intervention level	Examples
Regulation	Global emission cap	Global	IMO Marpol Annex VI
	Emission control areas	Cross-boundary	North America, Europe
	Technical standards	Global	IMO: EEDI, SEEMP
Information	Emissions Inventory and monitoring	Local	Los Angeles
	Port-state control co-operation	National	Antwerp
	Compliance monitoring		US
Incentives	Bunker tax / emission trading	Global	
	Fuel switch	Local	Hong Kong
	Slow steaming	Global, local	Long Beach
	Cleaner ships	Local	ESI, Sweden
	Modal shifts	Local	Alameda corridor
	Truck retirement	Local	Los Angeles
Technology upgrade	Clean bunkering	Local	Rotterdam
	Shore power	Local	Gothenburg
	Electrification equipment	Local	Busan
	Renewable energy	Local	Zeebrugge

We see that concrete actions are prescribed on different levels



How to challenge the future?

- maritime transport is becoming the biggest source of air pollution in the EU and worldwide. This is not good!
- there are many stakeholders involved: governments, the business community, port authorities, NGOs, etc.
- there is a general awareness that new approaches, policy measures and actions are needed

We can learn from Public Administration that deal with:

- multilevel governance (MLG)
- network management (NM)
- practical organizational actions



IV. In search of a new organisational approach

1

2

3

4

5



Governments play a key role

- Governments have to act at the same time on the global level (e.g. IMO), European, national and regional level and local level (e.g. Port Authorities), etc. = **Multi Level Governance**
- There are many stakeholders and interests involved. Consequently there is a need for **network management** and **policy integration** of complex daily life:
 - Differences in scale (from global to local)
 - Multiple actors (private sector, NGOs different governments)
 - Different driving forces (economic, environmental, nationalistic, etc.)
 - Different agenda's
 - Different status and jurisdiction for stakeholders involved



Based on these insight we developed: New working routines (1)

Create joint team working:

- considered more effective in terms of time, resources and expertise
- search for possible mechanism for reducing cost

Generate political support on different levels:

- policy implementation requires political support for policy approval
- securing this political support is sometimes problematic because decisions may only have long-term and/or rather intangible impacts

Create shared budgets and responsibilities

- consensus that policy integration is more effective when there is a balanced (fairly even), clear division of budgets and responsibilities





New working routines (2)

Nominate shared goals

- policy integration requires a set of shared goals, which necessitates procedures, rules and guidelines that promote policy consistency
- information, communication and professional training is important

Procedures and guidelines

- no formal procedures set out by local or national government to formulate integrated policy
- most procedures currently developed through trial-and-error

Key individuals and networks

- importance of strongly motivated officers and/or extensive professional networks
- benchmarking and staff mobility can help to extend professional networks



V. Conclusions



To conclude (1)

- Maritime transport and ports are in a unique and privileged position in the global logistics chain to capture and evolve their roles
- In shipping and port management we observe an increasing pressure, also from within the business community and from the public, to improve the environmental performance.
- There is a need for frontrunners in shipping and port management who pick up this challenge and implement the new growth paradigm

This is what sustainability is about and will determine the license to operate for all stakeholders involved.



To conclude (2)

- Of course businesses have already spent a lot of efforts on reducing fuel consumption through more efficient routing, better placement of distribution centers, and new technologies that help to become more energy efficient.
- And public authorities at various administrative levels have put in place a wide range of policy instruments to limit negative environmental impacts from ports.
- Therefore policy making should take place in co-operation with private sector, public authorities, NGOs, academic world and other ports = integrated policy making.

These are separate worlds: so ask for a (green) vision and an integrated approach.



To conclude (3)

- There is a big governance challenge when it comes to the environmental performance of shipping, port management and hinterland transportation:
 - there are serious concerns related to the performance of shipping and port activities: the reputation of the sector is worsening very rapidly
 - CSR is becoming a licence to operate, society does not expect this anymore
- A coherent policy framework is needed and the maritime sector should take a pro-active role to safeguard its position also for the longer term



To conclude (4)

- Decision makers in the maritime sector have a clear vision on the hardware and techware related to the performance of **ports** and **shipping**
- Now it is time for a better understanding for the orgware (public policy making, policy integration, network management, new practical working routines, etc.) to deliver a better performance: for **sustainable ports** and **green shipping**.



THE END

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