Dredging and sediment management; the significance for the European Port Sector and the Mediterranean Ports



Marc Eisma

"Sediments and Biodiversity: bridging the gap between science and policy",

Venice, 6-9 April 2011



Content

- \checkmark Few words on ESPO
- ✓ Significance of dredging
- ✓ Port Sector response
- ✓ Way forward





Few words on ESPO

- Founded in 1993
- Represents European sea port authorities in all varieties
- + 800 ports handling 3,5 bln tonnes of cargo and 350 mln passengers annually
- Recognized counterpart of EU institutions
- Platform with EFIP (European Federation of Inland Ports)
- Integrating EcoPorts since January 2011 (<u>www.ecoports.com</u>)





ESPO and the environment

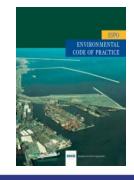
Both a priority and a challenge

2 main fields of action :

- 1. Follow-up legislative developments and influence on EU policies
- 2. Encourage ports to be proactive in protecting the environment:
 - recommendations on environmental management
 - exchange of good practices
 - raise awareness and disseminate information
 - www.ecoports.com







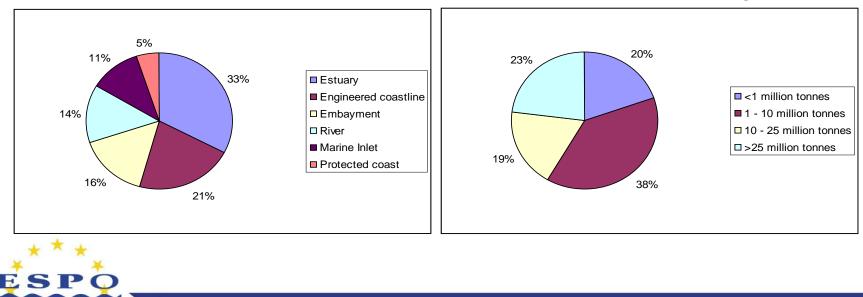
Significance of Dredging in Europe

Source: ESPO / EcoPorts Port Environmental Review 2009

✓ Synergy ESPO / Ecoports
✓ Similar exercises 1996, 2004
✓ Launched February 2009



✓122 ports from 20 European Maritime states; 37 categories



Significance of Dredging in Europe

	1996	2004	2009
1	Port development (water)	Garbage / Port waste	Noise
2	Water quality	Dredging: operations	Air quality
3	Dredging disposal	Dredging disposal	Garbage / Port waste
4	Dredging: operations	Dust	Dredging: operations
5	Dust	Noise	Dredging: disposal
6	Port development (land)	Air quality	Relationship with local community
7	Contaminated land	Hazardous cargo	Energy consumption
8	Habitat loss / degradation	Bunkering	Dust
9	Traffic volume	Port development (land)	Port development (water)
10	Industrial effluent	Ship discharge (bilge)	Port development (land)

Source: ESPO / Ecoports Environmental Review 2009

Significance of dredging / port size

	< 1 million tonnes	1 - 10 million tonnes	10 - 25 million tonnes	> 25 million tonnes
	(24 ports)	(47 ports)	(23 ports)	(28 ports)
1	Garbage/Port waste	Dredging: operations	Air quality	Air quality
2	Noise	Air quality	Port development (water)	Noise
3	Dredging: disposal	Energy consumption	Noise	Garbage/Port waste
4	Dredging: operations	Noise	Dust	Dredging: operations
5	Energy Consumption	Dust	Relationship with local community	Port development (land)
6	Dust	Dredging: disposal	Garbage/Port waste	Relationship with local community
7	Relationship with local community	Garbage/Port waste	Energy consumption	Dredging: disposal
8	Bunkering	Relationship with local community	Port development (land)	Conservation areas
9	Ship waste	Ship waste	Ship waste	Port development (water)
10	Cargo spillage (handling)	Port development (land)	Dredging: disposal	Climate change





Significance of dredging in Med ports

2009	Europe (122 ports)	Mediterranean ports (18 ports)
1	Noise	Air quality
2	Air quality	Garbage / Port waste
3	Garbage / Port waste	Dust
4	Dredging: operations	Noise
5	Dredging: disposal	Hazardous cargo (handling/storage)
6	Relationship with local community	Energy consumption
7	Energy consumption	Water quality
8	Dust	Relationship with local community
9	Port development (water)	Sediment contamination (marine)
10	Port development (land)	Dredging: disposal



Source: ESPO / Ecoports Environmental Review 2009

Conclusions on the significance of dredging

- Dredging and disposal of dredged material are constantly identified as top priority environmental concerns by European seaports since 1996
- ✓ Dredging and disposal of dredged material are identified as priority concerns independently of the port's size
- ✓ In the Mediterranean dredging seems to have a lower priority ranking but still figures within the top environmental priorities



Port sector response

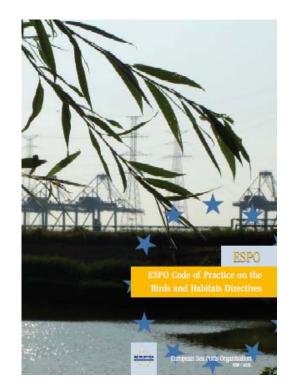
- ✓ ESPO Code of Practice on the Birds and Habitats Directives (2007)
- ✓ EC Guidance Document; the implementation of the Birds and Habitats Directives in Estuaries and Coastal zones (2011)
- Navigation groups: Water Framework Directive (WFD) and Marine Strategy Framework Directive (MSFD)





ESPO Code of Practice on the Birds and Habitats Directives

- Despite long experience with Birds and Habitats Directives, implementation still causes problems for port development
- Based on existing good practices and projects (New!Delta, Paralia Nature, GEODE, SedNet)
- Recommendations for managing port related activities and the different phases of port related projects/plans, possibly having an adverse effect on designated areas
- Outstanding issues which cause unnecessary administrative and financial burdens without significant environmental added-value





ESPO B&H Code of Practice recommendations on dredging:

- 1. Work with environmental agencies to determine the status of dredging works and to find appropriate regulatory solutions.
- 2. Actively participate in the management plan process.
- 3. Disseminate information about sustainable dredging techniques to show this could be part of a Natura 2000 management plan.
- 4. Carrying out an appropriate assessment could lead to the inclusion of maintenance dredging works in a management plan.
- 5. Adverse effects of dredging can be mitigated.
- 6. Try to facilitate stakeholder engagement.

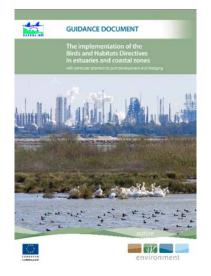






EC Environmental Guidelines

- ...on the implementation of B&H directives in estuaries and coastal zones, with particular attention to port development and dredging
- Process started 2007 based on a request of the ports and maritime services sector
- Estuary Expert Group (DG ENV, DG MOVE, ports, stakeholders)
- Published March 2011 Commission Working Document, Guidelines, Technical annex
- Successful process / basis for future work





Guidelines – Key recommendations

- The design of plans or projects should always be based on mutually beneficial strategies according to the 'working with nature' concept.
- Damage prevention or avoidance measures should always be preferred to compensation measures.
- Pre-assessments to evaluate the potential for impact of a plan or project on Natura 2000 sites should always be foreseen.
- Thorough and timely stakeholder consultation is always recommended.



Guidelines – Key recommendations

- Maintenance dredging of ports and navigational access should be dealt with in the context of integrated management plans for the entire waterway or the affected Natura 2000 site.
- Capital dredging operations should be designed as a part of sustainable dredging and sediment management schemes.
- Mitigation or compensatory measures should include a pre-defined and validated scheme to monitor the actual impacts and a framework to adapt to the actual impacts.



WFD Navigation Task Group

Position Paper on Sediment EQS*

- NTG does not believe there is a specific requirement for generic European-wide sediment EQS or a role for the Commission to propose such standards
- Important differences exist between the characteristics and behaviour of water and sediment
- High levels of natural diversity/variability between river basins plus difficulties collecting representative and relevant sediment samples make it impossible to set meaningful sediment EQS for Europe-wide application
- * Environmental Quality Standard



WFD Navigation Task Group

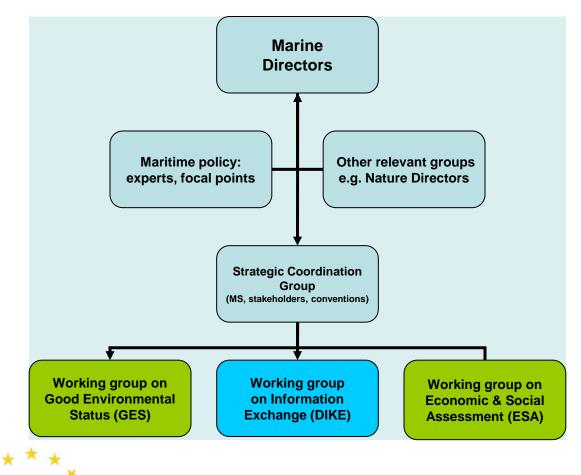
Position Paper on Sediment EQS, conclusions:

- Severe doubts about legal basis for setting Europeanwide sediment EQS
- Such standards are neither scientifically justified nor workable in practice
- NTG recognised that development of sediment EQS at a local (catchment or river basin) level could be supported
- NTG will monitor progress on this issue in the review process of the Priority Substances Directive (WFD)



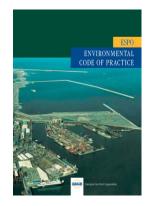
MSFD Navigation Group

Involvement in Common Implementation Strategy



Way forward

- Review of the ESPO Environmental Code of Practice
- ESPO inventory of best practices + dissemination
- SedNet provides a good link to science & policy
- Pro-active involvement in the implementation process of relevant (new) EU Directives





Thank you for your attention



Contact ESPO:

Antonis.Michail@espo.be

www.espo.be / www.ecoports.com