



coastman

Coastman Project Meeting

WP 3 - Hamburg Case Study

Hamburg 27th March 2006



Coastman Case Study in Hamburg



-
- Background
 - The problem
 - Stakeholders involved
 - Approach used (Methodology)
 - Expected results
 - Contact information



Background

- Hamburg: 2nd largest city in Germany (1.7 M. inhab.) ‘Gateway to the World’. Europe’s 2nd largest harbour.
- Port is important for economy, tourism, trade, fishing
- Port is also a source of conflict similar to interest areas such as the ocean or the coastal zone.
- Focus of the case study: Deepening of the harbour to 14.5 m from 2008 at a cost of € 320 million (€80m local funds and €240m Federal funds). This is a controversial issue, quite complex, directly involving many different stakeholder groups.



Problem

- Like many other European ports, Hamburg is experiencing problems **linked with the utilisation of the passing river**, in this case the Elbe.
- **Not all stakeholders share the same views** and the current problems related to dredging (favoured by local authorities but disputed by the Federal government) illustrate such a trend.
- There is therefore a perceived need for an independent **evaluation of the environmental risks (and potential conflicts)** related to use of the Elbe river in Hamburg.
- It is envisaged that this study will arrive at **recommendations regarding conflict solution and sustainable utilisation of the Elbe river.**



Stakeholders involved

- **Category 1: Conflicting stakeholders**
- Hamburg Ministry of Urban Development and the Environment - Hamburg Ministry of Economics and Labour Affairs – Federal Ministry for the Environment, Nature Conservation and Nuclear Safety
- **Category 2: Interest-based stakeholders**
- Port Authority - Chamber of Commerce - Tourism operators - Ship owners - Port workers
- **Category 3 - Other stakeholders**
- Universities – NGOs - Research agencies



Deepening and Dredging of River Elbe

- New situation
- New handling of dredged material
- Looking for reasons



2005: New situation

- 2005: Dutch dredger took out 800.000m³ of dredged material from the Hamburg Harbour
- Costs for the city in 2005: 8 Mio.€
- 1,5 Mio.m³ will be dredged in Hamburg



New handling of dredged material

- **MORE MATERIAL:** The amount of DM has increased due to „Tidal-Pumping-Effekt“ (DM returns from the North Sea, 3times a year!)
Before 2004: 2-4 Mio.m³/a; since 2004: 9 Mio.m³/a
- **NEW DEPOSIT PLACE:** The dredged material will be analysed and cleaned if it is contaminated. Hamburg has the permission until 2008 to deposit the clean material in the North Sea (in 150 km distance to the city).
- **COSTS:** This process is much more expansive but it is the better place. Previous deposit site is not capable to take up the increasing amount of DM.



Looking for reasons

- 2004: Working group „Sediment Management“ established. Members: Port Authorities, Federal Waterways Engineering and Research Institute
- Method: Three dimensional computer programme analyses sediment transport
- Reasons: Tidal-Pumping-Effect, Climate Change, Sea Level Rise, Siltation in upstream areas, Dikes and further civil works



Methods

- Conflict assessment
- Phase 1: Historical analysis of the use of the Elbe
- Phase 2: Analysis of the conflict and problems posed by dredging including sediment analysis
- Phase 3: Overview of the implications of different scenarios to traffic/economic growth and possible ways to address the conflict. Method used: *conflict assessment*; process tool: *scenario methods* and *SWOT analysis*; fact tools: *strategic impact assessment* and *cost-benefit analysis*.
- Phase 4: Application of the results to the situation in the Elbe catchment area.

Status 2006:

- **Report: Problems and Challenges of the Sediment Management Measures applied to the Elbe River in Hamburg – towards a conflict resolution, February 2006**
- **SWOT, under progress**
- **ICZM Marker, envisaged**



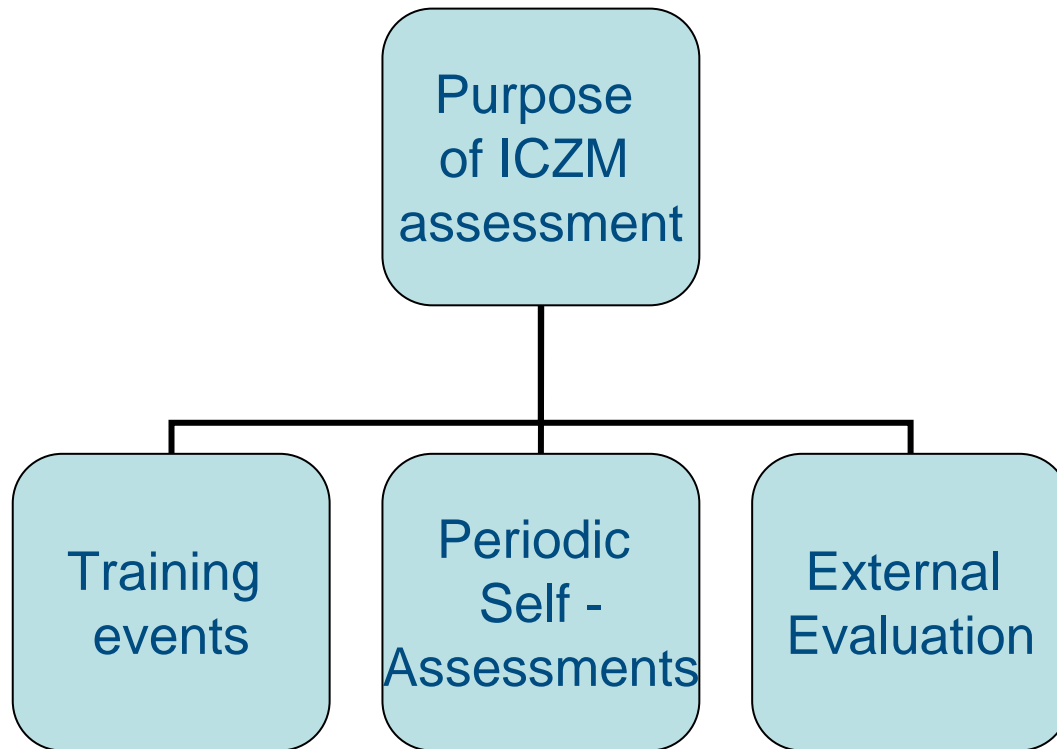
ICZM Marker

- The indicator tries to capture the degree to which ICZM is being implemented for a particular place at a particular point in time for a particular river basin.

place.	Y	Y	Y	Y	Y	Y	
on the coast are governed by general legal instruments.	Y	Y	Y	Y	Y	Y	
ie areas, are regularly and routinely monitored.	Y	Y	Y	Y	Y	Y	
y, where appropriate, for the protection of natural areas.	Y	Y	Y	Y	Y	Y	
mentation of coastal management plans.	N	N	N	N	N	Y	In part only at local level
combined to deal with planning and management issues on the	N	Y	N	Y	N	Y	Increasingly as with Wales Spatial Plan
ried out that contain recognisable elements of ICZM.	Y	Y	Y	Y	Y	Y	But not necessary called ICZM
written with the intention of repeating the exercise every 5 or 10	N	Y	N	N	N	N	At national level
ing term perspective, has been developed, with relevant issues	N	N	N	N	N	N	
awn up and adopted.	N	N	N	N	N	N	
ironment) has been produced which takes into account both the	N	N	N	N	N	N	
ocesses and human activities.	N	Y	N	Y	N	N	No but working ongoing with the national strategy
ice which includes the precautionary principle and an ecosystems	N	Y	N	Y	N	N	
s distinct and separate entities.	N	Y	N	Y	N	Y	Still progress to be made
decision-making process have been identified and involved.	N	Y	N	Y	N	Y	
responsibility for ICZM, are placed at each administrative level from	N	N	N	N	N	N	But progress being made
ion from the national to the local authority, and back again, is	N	N	N	N	N	N	But situation improving
h administrative level.	N	N	N	N	N	N	
of the relevant administrative bodies, nationally, regionally and	N	Y	N	Y	N	N	
ie and being used for specific solutions, and flexible measures, to	N	Y	N	Y	N	N	Position improving via demo projects+ Understanding of benefits of ICZM has not filtered down to local level
made available in a form understandable to lay people without	N	Y	N	Y	N	N	But improving position overall
the general public to take a participative and inclusive (as opposed	N	N	N	N	N	N	Improvements being done under planning
on across local, regional or national boundaries is occurring.	N	Y	N	Y	N	Y	SMP – coastal engineering SAC mgt
een stakeholders is in place.	N	N	N	N	N	N	But improving
used to assess whether or not the coast is moving towards a more	N	N	N	N	N	N	To be developed further
s for the implementation of ICZM.	N	N	N	N	N	N	
g sustainability goals is being made continuously.	N	Y	N	Y	N	Y	
ve trend towards greater sustainability of coastal resources, an	N	N	N	N	N	N	
oastal habitats and biodiversity.	N	N	N	N	N	N	
with problem areas given special attention.	N	N	N	N	N	N	



ICZM Marker II



...more information tomorrow!



Expected results

- **Overview** of the issues that need to be examined regarding integration of economic needs with environmental considerations
- **A better understanding** of environmental issues and ways of coping with environmental pressures
- **A new approach** towards handling dredged materials with a view to move towards the concept of a sustainable, clean port and harbour operations

These results will be made available to the City of Hamburg as well as other European ports with similar backgrounds.



Thank you!



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