

Water Framework Directive, hydromorphology and seaport development

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Scope of presentation

- Characteristics of seaport development
 - Hydromorphology in the WFD
 - Article 4(7)
 - Possible practical implications
 - Steps in delivering WFD-compliant hydromorphological modifications
- What can we already do to 'WFD-proof' proposals?

Seaport development

- EU depends on maritime transport
- 90% external/40% internal trade by sea
 - 2 billion tonnes of freight through EU's 1200 ports each year
- Container transport increasing globally; also growth in RoRo traffic, etc.
- EU Transport Policy: Motorways of the Sea; Short-Sea Shipping

Typical hydromorphological modifications associated with seaport development

- Dredging (berths and access channels)
 - Dredged material disposal
 - Training walls, breakwaters
- Flood embankments, quay walls
 - Land claim, impoundment

Possible impacts of modifications

- Smothering of sensitive species/habitats
- Erosion, accretion, change to sediment transport
 - Sediment removal or relocation
 - Loss of riparian/foreshore habitat or longshore connectivity
- Barrier to movement of aquatic species
 - Physico-chemical changes due to impoundment

WFD relevance to seaport development

- Designation of heavily modified or artificial water bodies
 - Good ecological status/potential targets
 - Identification of restoration or mitigation measures
 - Application of Article 4(7) of WFD
 - Relationship to Birds and Habitats Directives

Hydromorphology in the WFD

- WFD makes provision for both ongoing economic activity and new development
 - Hydromorphology second biggest pressure in Article 5 reports
- CIS hydromorphology (HyMo) guidance prepared 2006
- Policy integration paper; technical good practice document; also case studies

CIS HyMo policy paper recommendations

- Better integration between policies
 - Improved co-operation between competent authorities and stakeholders
- More integrated development strategies
 - Attention to dynamic nature of environment in achieving GES; also achieving 'Natura 2000' targets
- Possible supplementary measures to deal with sediment transport

CIS HyMo technical good practice guide

- Methodology to deal with existing and new hydromorphological modifications
- Recognises expensive to retrofit measures
 - Look for win-win solutions
- Acknowledges 'legacy' issues (ie. historic but now redundant modifications)
 - Case study examples include bank protection and maintenance dredging

WFD Article 4(7)

- Modifications affecting water status must meet the following criteria
 - implement all practicable mitigation measures
 - confirm there are no alternative, economically viable and environmentally better means to deliver project objectives
 - demonstrate overriding public interest or equivalent
 - set out reasons for development in RBMP
- Article 4(7) may already apply?

CIS Article 4(7) guidance

- Important clarification of key provisions
- Deterioration refers to changes between not within status class
- 'Generic approach' to limit assessment burden on small developments
- Many temporary effects excluded from 4(7) requirements (eg. construction, dredging)
- Retrospective route for projects not in RBMP
- Article 4(7) does not require compensation

Practical implications of WFD

- Seaports experience with Habitats/Birds Directives: increased costs and delays
- Will WFD have similar consequences?
 - How to minimise the risks?
 - Proactive approach
 - Understand WFD requirements
- Ensure proposal is WFD-compliant

Key differences and similarities

| Habitats/Birds Directives | WFD |
|--|--|
| Special/protected species and sites | All water bodies |
| Limited consideration of economic effects | Economics 'at heart of' Directive |
| Objectives take precedence if more stringent | Objectives secondary unless more stringent |

Steps in delivering WFD-proof proposal

1. Be clear about the objectives of the proposed modification
2. Check if reasons for proposed modification are set out in relevant river basin plan
3. Develop understanding of (often complex) natural and physical environment
4. Ensure proper appreciation of water body WFD characteristics and ecological targets

Steps in delivering WFD-proof proposal (2)

5. Initial assessment of effects of proposed modification on WFD objectives
6. Re-consider design so as to avoid adverse effects wherever possible
7. If Article 4(7) applies, assess all possible practicable measures to mitigate adverse impact on status
8. Incorporate mitigation into design

Steps in delivering WFD-proof proposal (3)

9. Identify possible alternative means of meeting the project objectives; consider their technical and economic viability
10. Identify reasons of overriding public interest or undertake an analysis of costs and benefits to determine whether the benefits to human health, safety or sustainable development outweigh the achievement of WFD objectives

Useful publications

- CIS WFD and Hydromorphology Policy Paper, 2006
- CIS WFD and Hydromorphology Good Practice Paper, 2006
 - CIS Article 4(7) Guidance, 2006
- PIANC Bird Habitat Management for Ports and Waterways, 2005
- PIANC Best Management Practices for Dredging and Disposal, forthcoming

So, what do we already know and what can we already do to ensure WFD compliance (1)?

- We do know that WFD objectives relate not only to chemical but also to ecological *and hydromorphological* status
- We do know that high status means at/close to pristine natural conditions and good status is slightly below high status, but provisions are made for hydromorphological change

What can we already do to ensure WFD compliance (2)?

- We do know that developments which affect status will be subject to Article 4(7); we also know the types of activity that may be exempt
- We do know that economic considerations (cost-effectiveness, disproportionate cost) are important in WFD decision making

What can we already do to ensure WFD compliance (3)?

- We don't yet have river basin plans but
- We do know that Article 4(7) guidance requires Member States to provide opportunity for 'interested parties to express their views in advance of a decision'

What can we already do to ensure WFD compliance (4)?

- We don't know actual GES/GEP targets but
- We do know that the WFD has a strict no deterioration requirement and that Member States should aim to achieve good status/potential

What can we already do to ensure WFD compliance (5)?

- We do have extensive experience with assessment and mitigation
- We do know that Article 4(7) does not require compensatory measures
- We do know that Article 4(7) may already apply

and.....

we do understand the importance
of getting it right!

Thank you
for your attention

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