COMMISSION STAFF WORKING DOCUMENT

Integrating biodiversity and nature protection into port development
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1. THE PORTS POLICY CONTEXT

In its Communication on a European Ports Policy, the Commission provides its assessment of the role of ports in the transport chain, of the current use of port capacity and of the way forward for a proper use of the existing infrastructure and its development. It sets out an action plan for the achievement of the objectives falling within the competence of the Commission. One item of the action plan is the adoption of Guidelines on the application of the EU environment legislation to port developments, as port industry stakeholders claimed legal uncertainty regarding the interpretation of the Birds and Habitats Directives (the "Nature Directives").

The present Commission Staff Working Document acknowledges the positive attitude by the port sector for reconciling port development with nature protection and sets an important signal demonstrating the port sector's active commitment to sustainable operations.

In parallel to this Commission Staff Working Document the Commission has published guidelines on the implementation of the Birds and Habitats Directives in estuaries and coastal zones, with particular attention to port development and dredging (hereafter referred to as "the Guidelines"). The Guidelines were developed by the Commission in close co-operation with major stakeholder organisations with the view to explaining the provisions of the Nature Directives in a ports and estuaries context and to facilitating their implementation.

Ports have demonstrated over time that it is possible to plan integrated projects that reconcile port development with nature protection and to enhance the sustainability of transport: they participate in R&D activities aiming at a better integration of nature conservation concerns.

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1 COM (2007) 616 of 18.10.2007, in the following "Ports Policy Communication".
6 The Paralia Nature project was set up as a partnership network between port authorities, academic institutes, ministries and NGOs http://www.imieu.eu/index.php?option=com_content&task=view&id=47&Itemid=52
The TIDE project studies the estuaries of the Elbe, Weser, Scheldt and Humber, which have characteristics in common and are Natura 2000 sites. http://www.tide-project.eu/
and they have developed own guidance documents\textsuperscript{7}, environmental management schemes\textsuperscript{8} and tools for identifying and reducing port-related environmental impacts\textsuperscript{9}.

The Guidelines outline implications of port development and dredging activities for biodiversity and Natura 2000. They identify recommendations for better striking the balance between environmental protection and port development.

Stronger integration of biodiversity and Natura 2000 requirements into port activities and planning will result in positive benefits for society at large. Such integration involves building new partnerships between all stakeholders while ensuring their active participation and commitment.

2. THE BIODIVERSITY CONTEXT

The United Nations declared 2010 as the International Year of Biodiversity.\textsuperscript{10} The European Union has long been committed to halting the loss of biodiversity. In 1979 and 1992 respectively the EU adopted the Birds and Habitats Directives which since then have been representing the legal framework for nature conservation in the EU. The Habitats Directive established the Natura 2000 network of protected areas, which today covers 17\% of the EU territory and represents the cornerstone of the EU nature and biodiversity conservation policy. The EU's most ambitious policy commitment is the EU Biodiversity Action Plan\textsuperscript{11} and its most recent policy initiative is the Communication "Options for an EU vision and target for biodiversity beyond 2010", which outlines a vision until the horizon 2050.\textsuperscript{12} This constitutes a baseline for the upcoming EU biodiversity strategy after 2010.

The present Commission Staff Working Document highlights the responsibility of the port sector for biodiversity issues, its contribution to the post-2010 Biodiversity strategy and its commitment to Natura 2000. The Commission Staff Working Document should set an important signal also for other economic sectors, demonstrating that the port sector is actively committed to biodiversity conservation.

The Commission Staff Working Document should also put the Guidelines in their political context while recognising their status as a document representing the official views of the Commission.

\textsuperscript{7} The ESPO Environmental Code of Practice (2003), and the ESPO Code of Practice on the Birds and Habitats Directives (2007) are well established and authoritative guidance documents for the port sector. \url{http://www.espo.be/Publications/Codes_of_Practice.aspx}

\textsuperscript{8} The Self Diagnosis Methodology, the Port Environmental Review System (PERS).

\textsuperscript{9} The Ecoports Project (2002-05), now Ecoports Foundation, aims at harmonising the environmental management approach of port authorities, exchanging experiences and implementing best practices. \url{www.ecoports.com/}

\textsuperscript{10} \url{http://www.cbd.int/2010/welcome/}


3. MAIN ACTORS

The Guidelines are addressed to stakeholders involved in port development and related planning procedures: port authorities, dredging companies, private investors, Member States' administrations, and environmental NGOs.

3.1. Port authorities

Port authorities focus inter alia on port development (incl. capital dredging, infrastructure building, land reclamation) and infrastructure maintenance. They need to plan capacity well ahead in time.

All transport modes have environmental impacts. Port infrastructure projects can have a wide range of impacts, notably on Natura 2000, even if not all port developments concern Natura 2000 sites. Potential impacts of ports on biodiversity cover a wide range – from degradation, fragmentation or loss of ecosystems and their services due to the land intake of port infrastructure, over contamination till the intrusion of invasive species, for which ports are one of the main entry points. Direct spatial impacts include loss of habitats due, e.g., to infrastructure developments and dredging activities. Indirect impacts comprise disturbances due to maritime transport operations. To avoid potential impacts, it is essential that both strategic and detailed project planning fully integrate Natura 2000 considerations to avoid conflicts, costs and delays.

Ports need to be transparent with society about their projects and the environmental impacts thereof and communicate their efforts to avoid, mitigate or compensate negative impacts.

3.2. Dredging companies

Ports located in estuaries, on rivers or river deltas need to keep the access from open sea to port facilities and vice versa clear. An absence of dredging would prevent the port from functioning, with all the negative economic consequences this would entail. As a matter of principle, port access maintenance by means of dredging is therefore deemed as a service of general economic interest. It is, however, not exempt from the protection regime of the Habitats Directive and in particular its Article 6(3).

Dredging is an excavation activity usually carried out underwater with the purpose of collecting bottom sediments and disposing of them at a different location. The main activities are capital dredging and maintenance dredging.

Capital dredging includes the creation of new civil engineering works by means of dredging, such as harbour basins, canals, etc., and the deepening of existing waterways and approach channels. Maintenance dredging is necessary to keep existing watercourses, harbour basins, etc., at the required nautical and/or hydrological depth by removing siltation. The environmental effects of maintenance dredging are generally less important than those of capital dredging. Environmental issues increase in importance when the material to be dredged is polluted. Dredged material can contain contaminants. Sometimes their source is related to operations in ports, but often it lies in upstream industrial or agricultural activities.

13 Under Article 86(2) of the Treaty.
3.3. **Private investors**

Private investors in ports are mainly terminal operators. They are tributary to the rise in cargo volumes transported by sea as well as to the increasing size of vessels. To accommodate these demands terminals have to adapt by growing. Like port authorities they need to plan capacity well ahead in time. This entails environmental consequences as described in the sections on port authorities and dredging companies.

3.4. **Member States' administrations**

Infrastructure is the basis for the economic activities carried out in a sea port and is one of the ways in which a State can affect economic development, land-use planning and transport policies. Member States have particular responsibility, through improved integrated spatial planning\(^{15}\), to reconcile land use and development needs with the conservation of biodiversity and the maintenance of ecosystem services\(^{16}\).

It is the Member States' responsibility to ensure the implementation of the Nature Directives on their territories to assess and and approve plans and projects regarding port development under Article 6.4 of the Habitats Directive. The Guidelines can help accelerating the planning procedures.

3.5. **Environmental Groups (NGOs)**

The work performed by environmental NGOs, often in partnership with public bodies, to maintain or restore the conservation status of protected habitats is widely acknowledged. The involvement of public authorities and NGOs by port developers through a participatory process right from the planning phase of a project is fundamental for successful planning and authorisation procedures. Transparency by all actors facilitates public acceptance and appropriation of projects. Therefore, co-operation between NGOs, port industry and Member States' administrations should be enhanced with a view to promoting new partnerships and win-win situations for all actors involved.

4. **RECONCILING ENVIRONMENTAL REQUIREMENTS WITH PORT DEVELOPMENT**

In line with the rationale of the Guidelines, this chapter only deals with the Nature Directives. Ports, are often situated in or near estuaries which are generally ideal locations as they provide the necessary shelter for ships as well as access further inland along major rivers. Estuaries and coastal zones are also among the most dynamic, complex and productive ecosystems in the world. They are of prime importance for wildlife and of major value in terms of their rich natural resources (e.g. as nursery grounds for commercially important fish). In addition, they also offer a wide variety of economically important ecosystem services such as shoreline stabilization, nutrient regulation, carbon sequestration, detoxification of polluted

\(^{15}\) Integrated spatial planning is crucial for developing Green Infrastructure, one of the main elements of the post-2010 biodiversity strategy. Green Infrastructure, inter alia, aims at mitigating negative effects of infrastructure developments on biodiversity. [http://ec.europa.eu/environment/nature/ecosystems/index_en.htm](http://ec.europa.eu/environment/nature/ecosystems/index_en.htm)

\(^{16}\) These services include the production of food, and medicines, the regulation of water, air and climate and the maintenance of soil fertility. See COM(2006) 216, paragraph 2. Their importance is described in the study on 'The Economics of Ecosystems and Biodiversity' (TEEB). [http://ec.europa.eu/environment/nature/biodiversity/economics/index_en.htm](http://ec.europa.eu/environment/nature/biodiversity/economics/index_en.htm)
waters and supply of energy resources. Estuaries are a habitat type of Community interest and in many cases designated Natura 2000 sites. The overall conservation status of estuaries has been evaluated as being particularly poor\textsuperscript{17}.

The Commission has identified the reconciliation of port development and environmental protection as a key policy area also with the objective of speeding up planning procedures for new port projects. Related to this, it identified a series of recommendations as set out in the Guidelines, which lie within the framework of previous guidance offered by the Commission\textsuperscript{18}.

The Guidelines go beyond the interpretation of the provisions under articles 6(3) and 6(4) of the Habitats Directive, in the sense that they focus more on integrated development approaches with strong emphasis on reconciling port development and nature conservation interests. Sea ports are amongst the first industries which received sector-specific Guidelines on the implementation of the nature Directives.\textsuperscript{19} The Commission thus recognises the importance of sea ports and their need to integrate environmental concerns in their planning.

The Guidelines will help port planners to better integrate environmental concerns. They are an important tool to integrate Natura 2000 considerations, to avoid or resolve possible conflicts and to avoid unnecessary costs and delays. In this way they can help accelerating planning and permitting procedures.

The following summarises the main aspects of the Guidelines that the port sector should take into consideration when dealing with environmental matters of plans or projects.

4.1. **Better understanding of the context**

Several key parameters determine the biological functioning within estuaries and coastal zones. The presence or absence of species depends on the system’s behaviour. It is influenced by physical parameters, such as turbidity and salinity. Significant changes in the physical elements of estuaries and coastal zones, such as port and waterway development projects, can possibly affect the conservation status of protected species and habitat types.

Conservation objectives are established by the competent authorities for all Natura 2000 sites. They are based on the assessment of the local conservation status of habitats and species of Community interest, the relative importance of the site for the coherence of Natura 2000 and for the maintenance or restoration, at a favorable conservation status of such habitats and species. They also reflect the threats of degradation to which the site is exposed.

For Special Areas of Conservation (SACs) designated under the Habitats Directive, the protection regime under that Directive foresees three kinds of conservation measures: Positive conservation measures, according to article 6(1); preventive measures, according to article 6(2) aimed to avoid the deterioration of natural habitats and the disturbance of species and specific measures for assessing and authorising new plans and projects, according to article 6(3) and (4).

\textsuperscript{17} Report from the Commission to the Council and the European Parliament - Composite Report on the Conservation Status of Habitat Types and Species as required under Article 17 of the Habitats Directive, p. 16.

\textsuperscript{18} See: \url{http://ec.europa.eu/environment/nature/natura2000/management/guidance_en.htm}

\textsuperscript{19} Wind energy developments, non-energy mineral extraction, inland waterway transport (under development).
The conservation measures for a specific site have to consider all these obligations. The special conservation measures under Article 4 of the Birds Directive require equivalent measures to Article 6(1) of the Habitats Directive for Special Protection Areas (SPAs). The provisions under Article 6(2), 6(3) and 6(4) of the Habitats Directive also apply to SPAs under the Birds Directive.

The responsibility for setting conservation objectives and developing conservation measures for Natura 2000 sites lies with the Member States.

4.2. Better planning of the projects

The services of the European Commission recommend the development of Management plans for Natura 2000 sites. They provide a tool for reconciling routine activities, such as maintenance dredging, with environmental protection and for engaging stakeholders in the management of Natura 2000 sites.

If maintenance activities are directly connected with or necessary for the management of the site and as such integrated into a Natura 2000 management plan, they will be designed in such a way that they do not have adverse effects on the integrity of the site. As a consequence, such activities can be authorized without appropriate assessment according to Article 6(3) of the Habitats Directive.

The integration of strategic port plans and Natura 2000 management plans offers opportunities for reducing the administrative burden, delays and legal uncertainties.

Integrated spatial planning, including maritime spatial planning,\(^\text{20}\) offers opportunities for anticipating difficulties and adverse environmental impacts and for avoiding potential conflicts and delays in project development. Such plans should be submitted to strategic environmental assessments, and also to appropriate assessments in the framework of Article 6(3) of the Habitat Directive – to evaluate the potential impacts of plans and projects on Natura 2000 sites and identify possible amendments to such plans and projects, so that adverse effects on Natura 2000 sites can be avoided.

Developers of new plans and projects should pre-assess the effects of the development and consult the competent nature conservation authorities on whether their plan or project is likely to have significant negative effects on the integrity of a Natura 2000 site in the light of its conservation objectives. Early consultation with competent authorities and NGOs in the plan-making process is fundamental for a successful planning process.

4.3. Better approaches for new developments

There are many similarities between the procedures for Strategic Environmental Assessment (SEA) and Environmental Impact Assessment (EIA), and the Appropriate Assessments (AA) carried out for plans or projects affecting Natura 2000 sites under the Habitats Directive. However, a SEA or an EIA cannot replace, or be a substitute for, an AA as neither procedure overrides the other.

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In the field of waterways and ports, the EU TEN-T status or other national priorities should help projects to qualify as being of overriding public interest. Nevertheless, if a plan or a project that has significant negative effects on a Natura 2000 site is to be authorised on the basis of imperative reasons of overriding public interest (IROPI) under Article 6.4 of the Habitats Directive, then the Habitats Directive requires a justification of such reasons as well as the absence of alternative solutions with less or no adverse effects.

Working with nature is an important shift in thinking in the approach to port development projects. It promotes a proactive, integrated approach which focuses on achieving the project objectives in an ecosystem context rather than assessing the consequences of a predefined project design and on identifying mutually beneficial solutions rather than simply minimising ecological harm. This general approach is strongly recommended as it is in coherence with the principle that environmental damage should as a priority be avoided or rectified at the source.

Losses should be quantified with respect to key habitats and species. Appropriate compensation measures under Article 6.4 of Habitats Directive must be designed on the basis of best scientific knowledge and be feasible and operational in protecting the overall coherence of the Natura 2000 network. The estimated timescale should be well specified.

The compensatory measures must ensure the continuity of the ecological processes essential for maintaining the overall coherence of the Natura 2000 network and should be effective at the time the negative effects occur on the site concerned. All necessary provisions, technical, legal or financial, to implement the compensatory measures should be completed before the plan or the project starts.

4.4. Better management of dredging

The environmental impact of maintenance dredging can be of minor importance and limited to the effects of the dredging operation itself and of the relevant disposal, but the impact increases when the material to be dredged is polluted.

In the case of ports situated in or near estuaries, it occurs that the navigational access runs through designated Natura 2000 sites and potential conflicts may come up. Nevertheless, maintenance dredging can be designed in a way that it does not adversely affect the integrity of Natura 2000 site or its conservation objectives. It can even have positive effects on the conservation status of estuaries if appropriate dredging/deposit strategies are applied. However, dredging activities are not automatically exempt from an assessment under Article 6(3) of the Habitats Directive.

Good practice in this field include the identification of all possible solutions for mitigating adverse effects and, as a last resort, the examination of possible compensatory measures to be taken in case that not all significant adverse effects can be avoided through mitigation. The achievement of environmental objectives should be closely monitored and broad stakeholder participation should be assured all along the process.

4.5. Better adaptation to uncertainties

An adaptive approach for the implementation of a plan or project or a compensation scheme may be necessary in the event that, due to uncertainty associated with different factors, it is impossible to define all the effects of the plan or project or of a compensation scheme in sufficient details. In such a situation, a rigorous monitoring scheme and a pre-defined
validated package of appropriated corrective measures must be foreseen. Such measures must allow adjusting mitigation and/or compensatory measures to the impacts and make sure that any initially unforeseen adverse effects are being neutralized.

5. **OTHER LEGAL ENVIRONMENTAL INSTRUMENTS OF INTEREST TO THE PORT SECTOR**

The Guidelines do not address all areas of environment legislation. They focus on the Nature Directives, as explained above. However, further general and water related environmental legislation is applicable to ports.

5.1. **Integrated Coastal Zone Management**

Integrated spatial planning offers opportunities for anticipating difficulties and adverse environmental impacts and avoiding potential conflicts and delays in port project development. Integrated Coastal Zone Management (ICZM) paves the way for ports for such strategic planning. The EU promotes ICZM on the basis of a European Parliament and Council Recommendation (2002/413/EC)\(^{21}\). It invites Member States to support ICZM through the development of strategies, based on a series of common principles, including a cross-sector, participatory and knowledge-based approach.

5.2. **The Water Framework Directive**

The Water Framework Directive\(^{22}\) (WFD) establishes an integrated framework for the sustainable management of surface waters and groundwater with the aim of reaching good ecological status in all waters by 2015. For heavily modified water bodies, e.g. for navigation purposes or for the construction of port basins, the objective is to reach good ecological potential. Good status (including good ecological potential for heavily modified water bodies) will be achieved by implementing a programme of measures as part of the river basin management plans.

Under certain strict conditions, the WFD allows for new modifications to cause a deterioration of water status, such as port extensions or interventions for improving waterway infrastructure. These conditions include a justification that no better environmental options exist and that all mitigation measures are taken.


The Marine Strategy Framework Directive\(^{23}\) (MSFD) requires Member States to achieve good environmental status in marine waters by 2020. The MSFD takes an integrated approach based on marine ecosystems and establishes a long term framework for their protection and restoration. Marine strategies must apply an ecosystem-based approach to the management of human activities. The MSFD only applies in coastal waters insofar as particular aspects of the environmental status of the marine environment are not already addressed through the WFD (e.g. litter, noise). The MSFD however does not apply to transitional waters such as estuaries and the ports located there.

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\(^{23}\) 2008/56/EC.
5.4. **The Environmental Assessment Directives**

Environmental assessment ensures that the environmental implications of decisions are taken into account before decisions are made. This is typical for ports. Environmental assessment is undertaken for public plans or programmes on the basis of Directive 2001/42/EC\(^{24}\) (known as 'Strategic Environmental Assessment' – SEA Directive) and for individual projects, on the basis of Directive 85/337/EEC, as amended\(^{25}\) (known as 'Environmental Impact Assessment' – EIA Directive). The common principle of both Directives is to ensure that plans, programmes and projects likely to have significant effects on the environment are subject to an environmental assessment, prior to their approval or authorisation. Consultation with the public is a key feature of environmental assessment procedures.

For the purpose of the SEA Directive, "plans and programmes", including any modifications to them, must be prepared or adopted by an authority (at national, regional or local level) and be required by legislative, regulatory or administrative provisions.

An SEA is mandatory for plans or programmes which:

- are prepared for, inter alia, transport or land use and which set the framework for future development consent of projects listed in the EIA Directive, or,

- have been determined to require an assessment under the Habitats Directive.

An EIA is mandatory for all projects listed in Annex I of the Directive, as they are considered as having significant effects on the environment (e.g. ports for inland-waterway traffic which permit the passage of vessels of over 1.350 tonnes and trading ports, piers for loading and unloading connected to land and outside ports which can take vessels of over 1.350 tonnes). For projects listed in Annex II of the Directive, the national authorities have to decide whether an EIA is needed. This is done by the "screening procedure". The projects listed in Annex II are in general those not included in Annex I (e.g. construction of harbours and port installations).

5.5. **The Environmental Liability Directive**

The Environmental Liability Directive (ELD)\(^{26}\) establishes a framework based on the "polluter pays" principle, according to which the polluter pays when environmental damage occurs. This is applicable to ports. The Directive's main objective is to prevent and remedy "environmental damage" which is defined as damage to protected species and habitats, damage to water and damage to soil. The liable party is in principle the "operator", i.e. the one (natural or legal person) who operate or controls the occupational activities. Operators have to take the necessary preventive action in case of immediate threat of environmental damage.

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They are equally under the obligation to remedy the environmental damage once it has occurred.

6. **CONCLUSION**

The present Commission Staff Working Document and the Guidelines illustrate how nature protection concerns can be integrated into ports policy while reconciling the need for port development and nature conservation.

The holistic approach sought after by the Guidelines implies building partnerships between all stakeholders in order to help reaching the goals of all actors involved.

The Guidelines will contribute to increasing legal security for all stakeholders by improving the general understanding of the Nature Directives in a port and estuaries context and by explaining how their provisions can be implemented in a correct and practical way. The Commission considers the port sector as belonging to the pioneer sectors in this sense.

The practical set of recommendations will also help to implement the Nature Directives and to speed up the integrated management of Natura 2000. The application of the Guidelines will lead to more efficient planning and they will support "fast-track procedures" for port expansion, according to the Communication on strategic goals and recommendations for the EU's maritime transport policy until 2018.27

The development of the Guidelines has not only generated a practical guidance tool but also a new open and continuous dialogue between all parties involved in reconciling port development and biodiversity protection. The Commission will continue encouraging the continuation of this dialogue also in the future.

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