



Round-table on environmental legislation and consenting procedures for ocean energy

Ocean Energy Forum
19 February 2015, Brussels

DG Environment





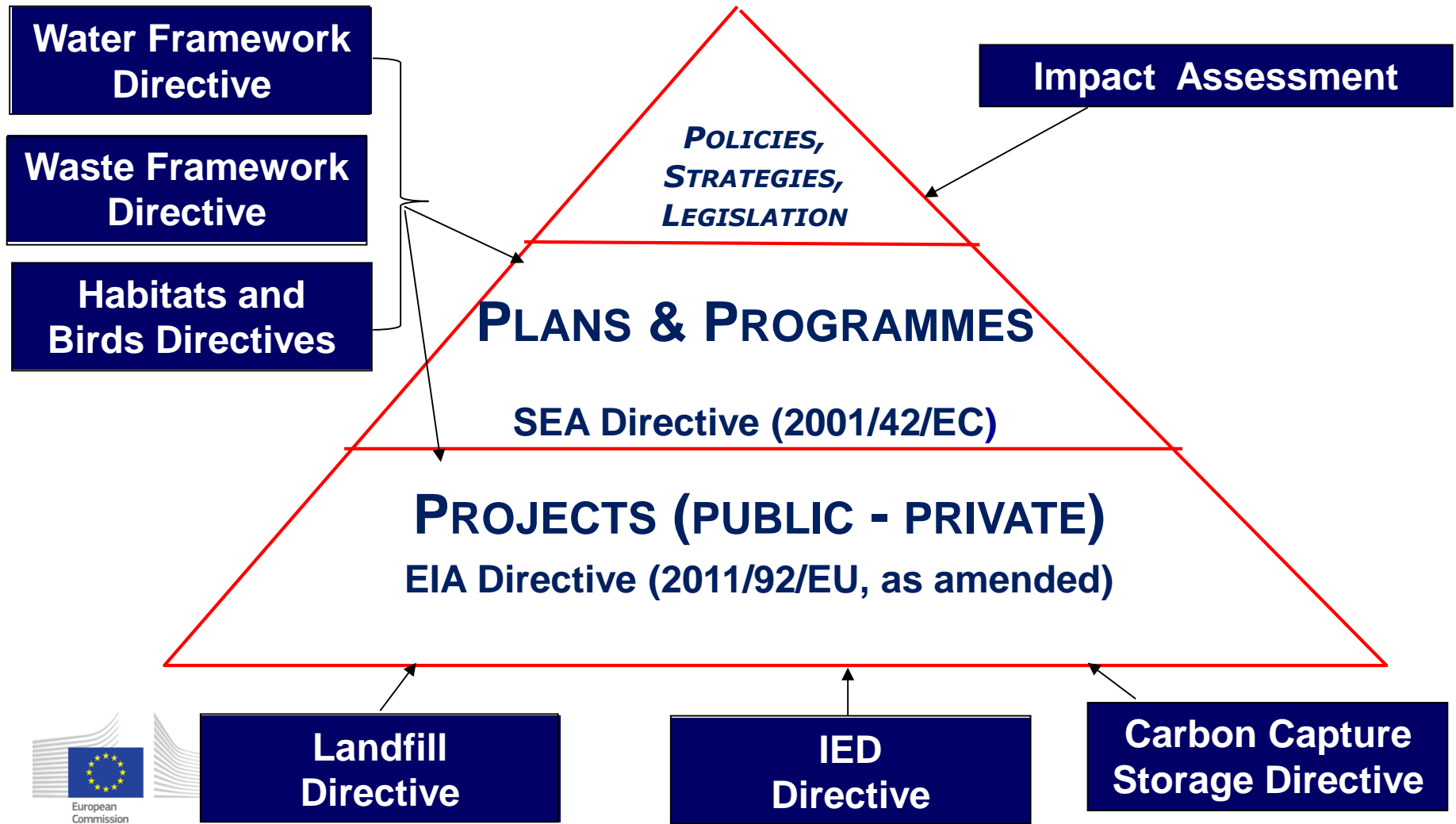
Environmental Impact Assessments: SEA and EIA

(Directive 2001/42/EC and Directive 2011/92/EU, as amended)



Milena Novakova
DG Environment, European Commission

Environmental Legislation & Assessments



Environmental Assessments EU legislation

Environmental Impact Assessment (EIA)

Directive [2011/92/EU](#) on the assessment of the effects of certain public and private projects on the environment (codified):

- Initial EIA Directive [85/337/EEC](#), as amended by Directive [97/11/EC](#), as amended by Directive [2003/35/EC](#), and Directive [2009/31/EC](#)
- Directive [2014/52/EU](#) amending 2011/92/EU with view of improving the effectiveness and efficiency of the EIA procedure.

Strategic Environmental Assessment (SEA)

Directive [2001/42/EC](#) on the assessment of the effects of certain plans and programmes on the environment

Principles

SEA

- To provide for a **high level of protection of the environment**.
- To contribute to the **integration of environmental considerations** into the preparation of plans and programmes with a view to promoting sustainable development.

EIA

- To protect the **environment and the quality of life**.
- Ensure **approximation of national laws** with regard to the assessment of the environmental effects of public and private projects.

Guiding principle for both EIA/SEA: plans, programmes and projects which are **likely to have significant effects** on the environment are subject to an assessment.

SEA: **WHICH** plans and programmes?

Plans and programmes:

- prepared and/or adopted by an **authority** at national, regional or local level **AND**
- **required** by legislative, regulatory or administrative provisions.
- P/Ps that **always** require SEA are those prepared for agriculture, forestry, fisheries, energy, transport, industry, waste/water management, town & country planning, **AND**
- which **set the framework for future development consent** of projects under **EIA Directive**, as well as which have been determined to require an assessment under Articles 6 or 7 of the Habitats Directive.

SEA: **WHICH** plans and programmes?

Non-exhaustive examples of p/p required under the EU legislation

- Action Programmes
Nitrates Directive (91/676/EEC)
- River Basin Management Plans (RBMPs)
Water Framework Directive (2000/60/EC)
- Flood Risk Management Plans (FRMPs)
Floods Directive (2007/60/EC)
- Programmes of measures
Marine Strategy Framework Directive (2008/56/EC)
- Waste management plans
Waste Framework Directive (2008/98/EC)
- Transitional National Plans (TNPs)
Industrial Emissions Directive (2010/75/EU)
- Operational Programmes (OPs) - EU co-funded
Common Provisions Regulation (Regulation 1303/2013)

EIA: **WHICH** projects?

Annex I projects



**Mandatory
EIA**

Annex II projects

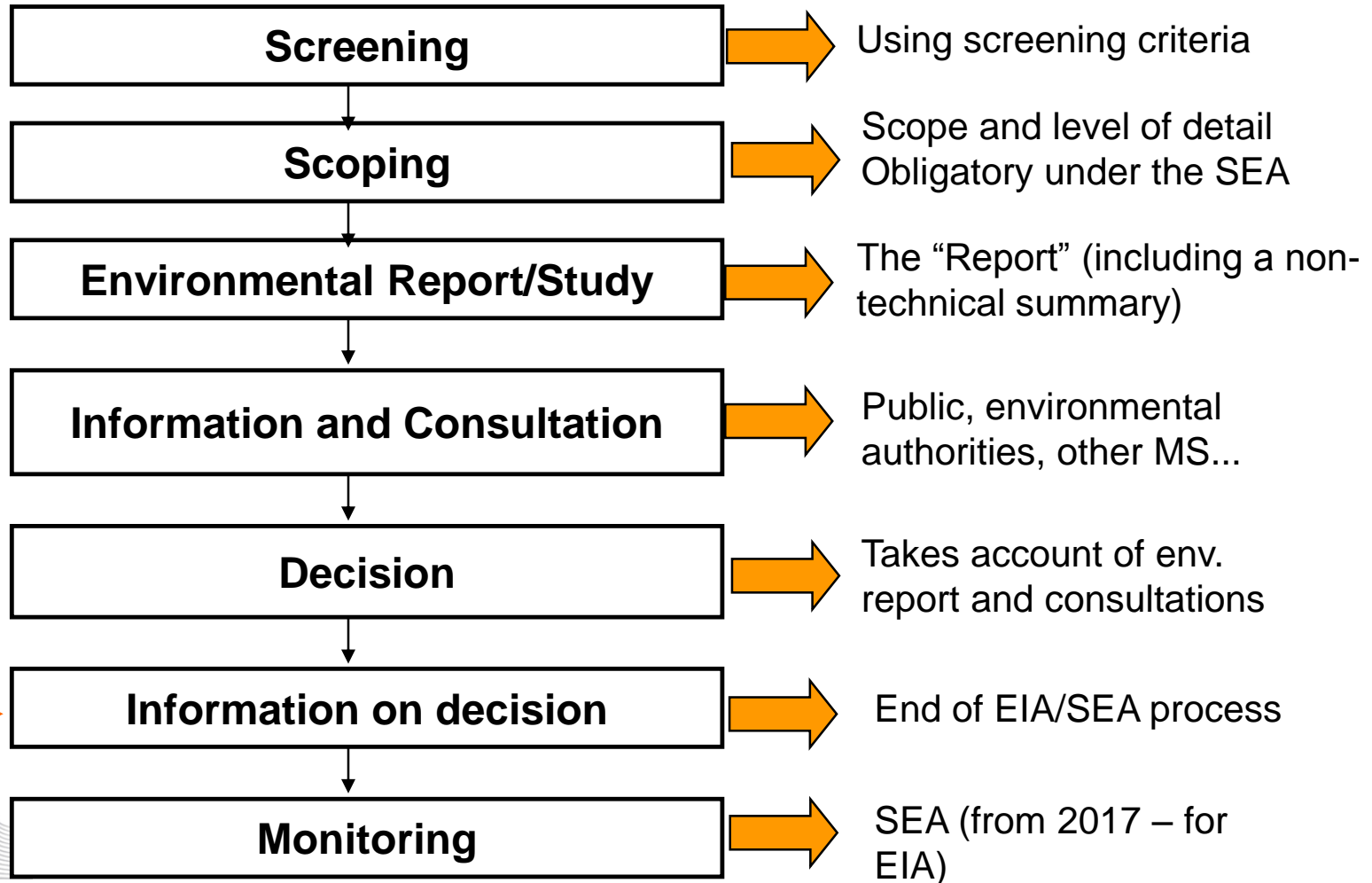


Screening

* Discretion of competent national authorities to decide based on certain criteria (case-by-case) or thresholds

The Environmental Assessment Procedures

For plans, programmes and projects screened out (shorter procedure)



Reducing administrative burden: streamlining of environmental assessments EIA Directive, as revised

Mission accomplished

Enhance the transparency of the national regulatory framework.

Avoid duplication of environmental assessments.

Reduce administrative burden: single assessment of the environmental impact or designation of an authority to coordinate different assessments.

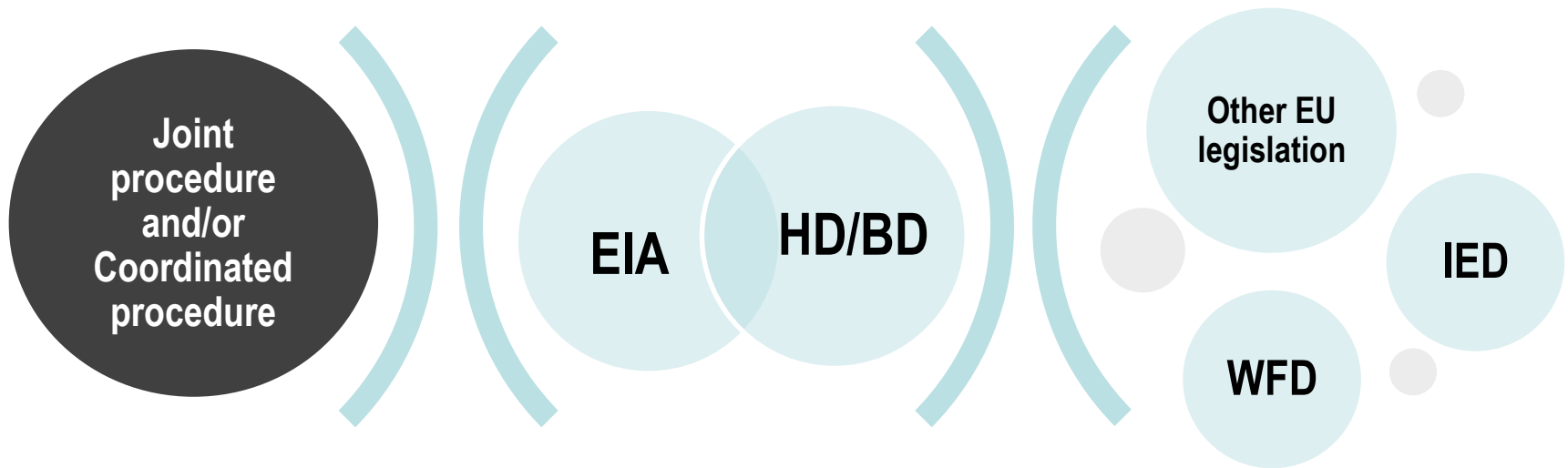
Better integrate the environmental considerations in assessment procedures.

Greater legal certainty for developers.



Streamlining the environmental assessments

Article 2(3) EIA Directive (revised)



Streamlining approach

Mandatory

Discretionary



Streamlining options

HOW

- Streamlining can be performed either as **coordinated**, or **joint procedure**, or in **combination** of the two.

Mandatory

- If a project requires an assessment **both** under the EIA and the Habitats/Bird Directives, there **shall be** a coordinated and/or joint procedure, unless such procedure is not relevant for the project in question.

Discretionary

- If a project is subject to an assessment both under the EIA and other EU legislation , e.g. WFD, IED, Waste Framework Directive, SEA Directive, Seveso Directive, Member States have the discretion to foresee such a streamlining (**may**, i.e. voluntary).

EIA/SEA Guidance

EU Commission EIA / SEA Homepage

<http://ec.europa.eu/environment/eia/home.htm>

Guidance on the implementation of the EIA and SEA Directives

Studies and reports on the implementation of the EIA/SEA



Marine Strategy Framework Directive - MSFD (2008/56/EC)

European Commission
DG Environment
Marine Environment and Water Industry Unit



Main objective & features

Achieve "Good Environmental Status"
(GES) by 2020

Healthy, clean & productive seas

Make sustainable use of the EU's seas

Links with other legislative frameworks

11 Descriptors...

Biodiversity

Non-indigenous species

Commercial fish & shellfish population

Marine food webs

Eutrophication

Sea-floor integrity

Hydrographical conditions

Contaminants (in environment)

Contaminants (in seafood)

Marine litter

Energy & underwater noise

...to determine GES

Decision on Good Environmental Status

Commission Decision (2010/477/EU)

Lays down criteria & methodological standards

Currently being revised

*To achieve
GES*

What has been done until now?

Member States:

Assessed status of their marine waters (Art.8)

Determined their "Good Environmental Status" (Art.9)

Set targets to achieve GES (Art.10)

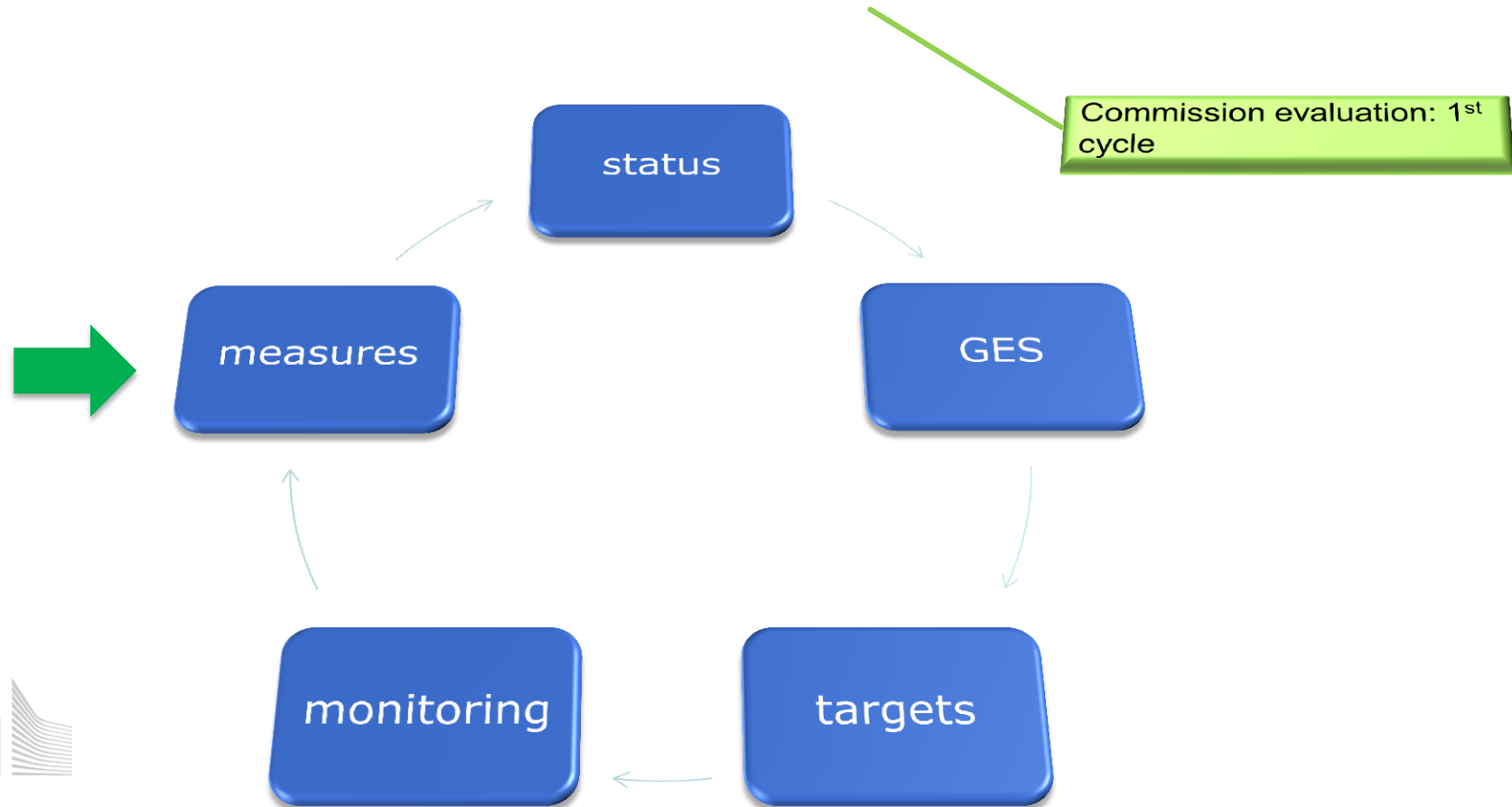
Set up monitoring programmes (Art.11)

Commission:

Supports a "Common implementation strategy" with Member States & stakeholders

Assessed Member States' Art.8,9,10
COM(2014) 97 final

MSFD implementation cycles




Permitting and licencing in MSFD

No specific requirement in Directive

Likely to be used by Member States
in their Programmes of measures

Commission launched study

Workshop in April 2016



*Map, understand,
compare & analyse
use*

Water Framework Directive requirements for new projects



WFD objectives

Binding environmental objectives

Non-deterioration

Good ecological status / potential

WFD binding objectives also for projects

Article 4(7) exemption

Permitting authorities bound to follow the conditions of Article 4(7) when considering whether to grant permits for concrete projects

National legal frameworks should allow for effective application of this exemption

**New hydromorphological
modifications**

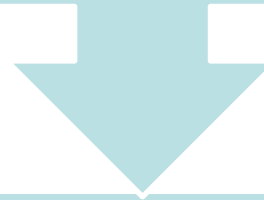
**or new sustainable human
development activities**

**Deterioration of
ecological status**

or

**non-achievement of WFD
objectives**

Assessment of the impact of the project on water body status



If Article 4(7) is deemed applicable:
all conditions should be met for the
permit to be granted

Assessment of impact of projects on status of water bodies

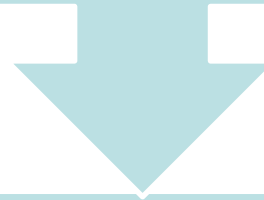
- Assessment at **quality element** level (**Annex V**)
- **Permanent** impacts
- Irrespective of **size, purpose, permitting authorities...**
- **Cumulative** impacts
- Applicable to **HMWBs**
- Impacts on **associated** water bodies

Impact on the status of water bodies

- to be assessed at quality element level
- annex V

Status class	Inv.	Flora	Fish	<u>Phys Chem</u>	<u>Hymo</u>	RBSP	...	Global
High	X	X		X	X	X	...	
Good							...	
Moderate							...	
Poor			X				...	X
Bad							...	

Assessment of the impact of the project on water body status



If Article 4(7) is deemed applicable:
all conditions should be met for the
permit to be granted

Compliance with ALL conditions of Article 4(7)

cumulatively

**ex-ante
assessment**

Are all **practicable steps** taken to mitigate the adverse impact on the status of the water body?

no

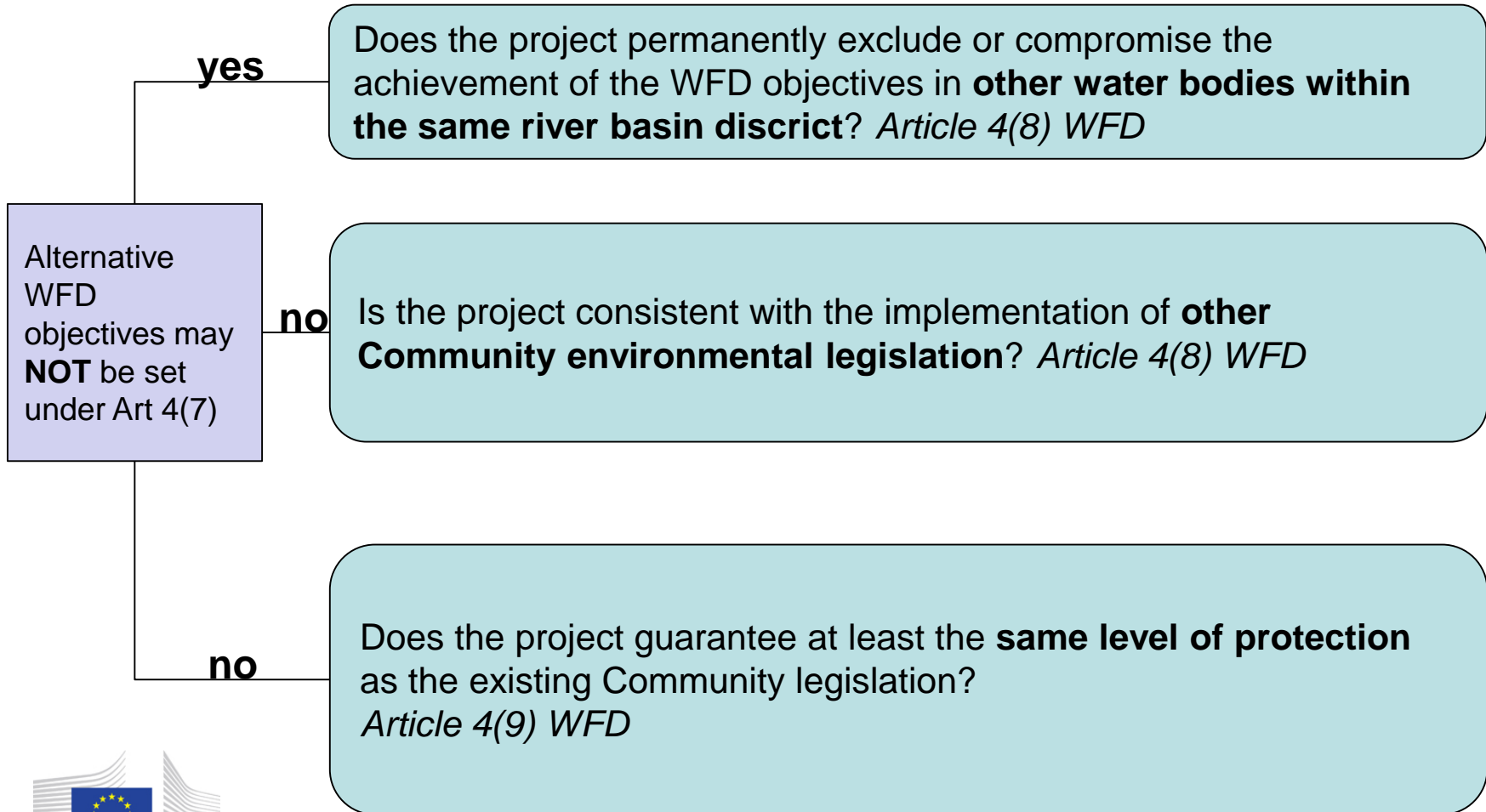
Can the beneficial objectives served by the project be achieved by **other means** which are technically feasible, do not lead to disproportionate cost and are a significantly better environmental option?

yes

Alternative WFD objectives may **NOT** be set under Art 4(7)

Are the reasons of **overriding public interest** and/or are the **benefits to the environment and to society** of achieving WFD objectives outweighed by the benefits of the project to human health, maintenance of human safety or sustainable development?

no



The reasons for those modifications are specifically set out and explained in the RBMP and objectives reviewed every six years

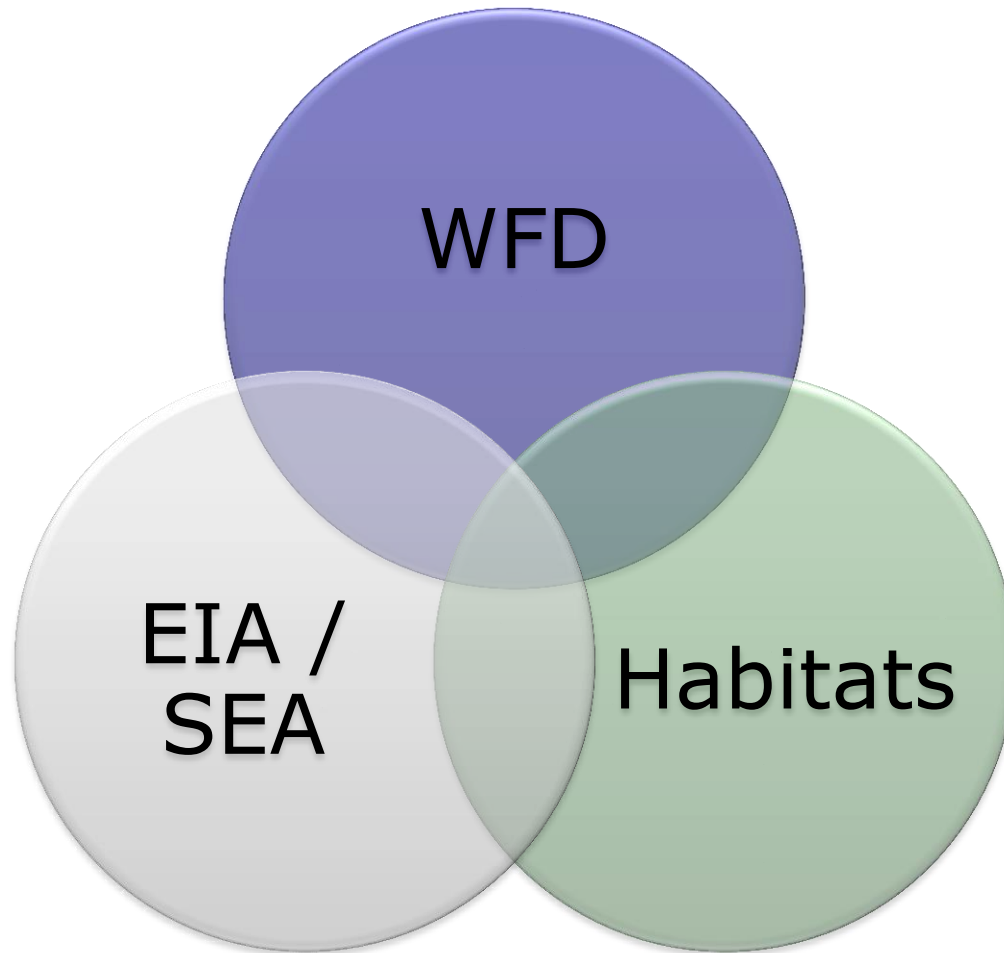
Public consultation

RBMPs should include information on:

- projects approved in the previous cycle**
- projects not subject to Article 4(7)**



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Appropriate assessment under the EU Habitats Directive and ocean energy projects

Vedran Nikolić
DG Environment
Nature unit



Round-table on environmental
legislation and consenting
procedures for ocean energy
Brussels, 19 February 2016



EU biodiversity strategy to 2020

"Our life insurance, our natural capital"

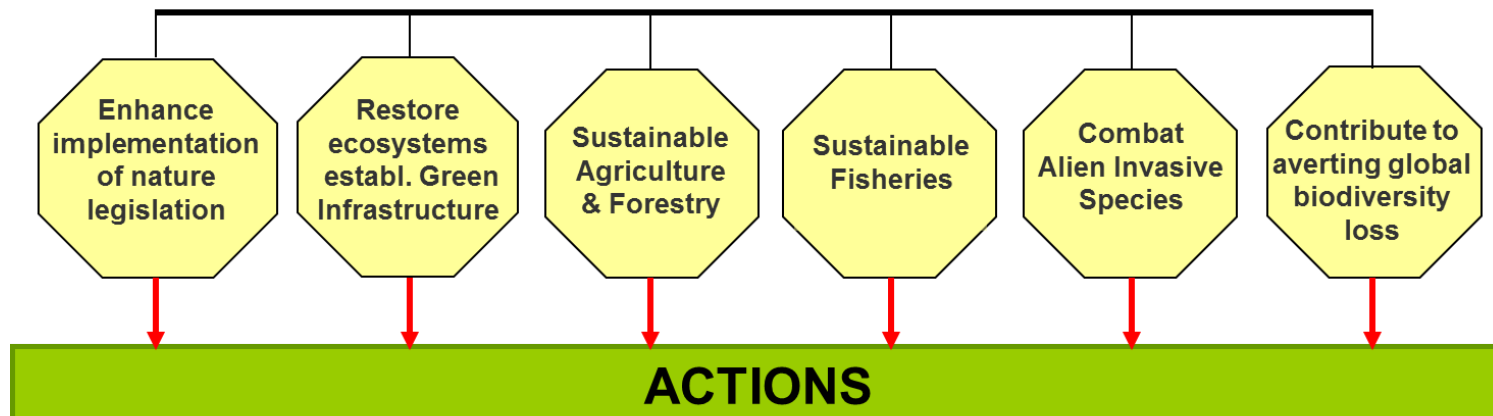
A 2050 VISION

European Union biodiversity and the ecosystem services it provides – its natural capital – are protected, valued and appropriately restored.

A 2020 HEADLINE TARGET

Halt the loss of biodiversity and ecosystem services in the EU and restore them insofar as feasible, and step up the EU's contribution to averting global biodiversity loss.

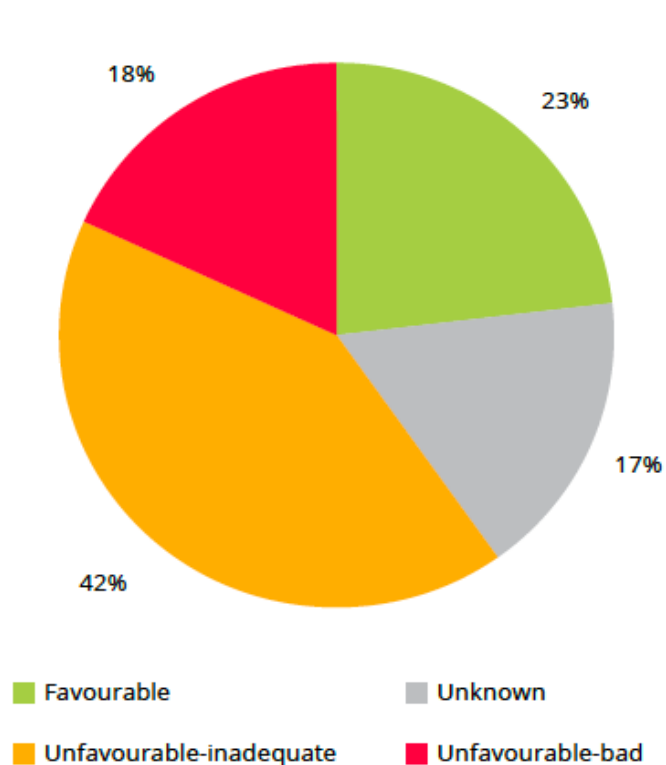
6 TARGETS



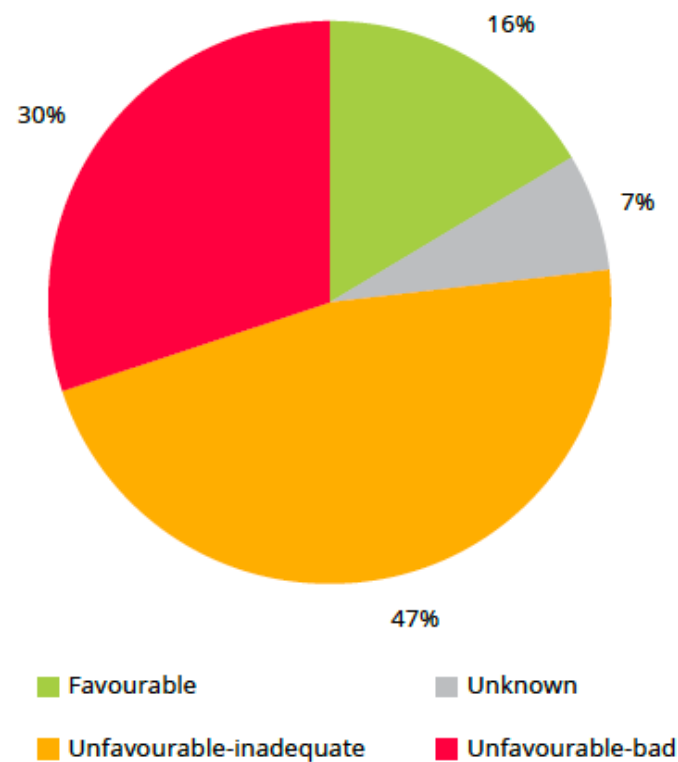
State of nature in the EU

Results from reporting under the Birds and Habitats directives 2007–2012

60% of EU **non-bird species** and **77%** of **habitat types** have **unfavourable conservation status**



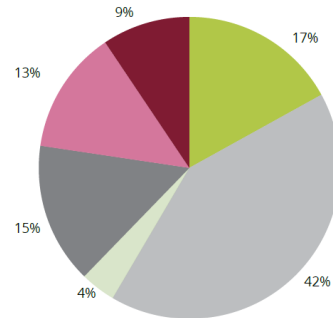
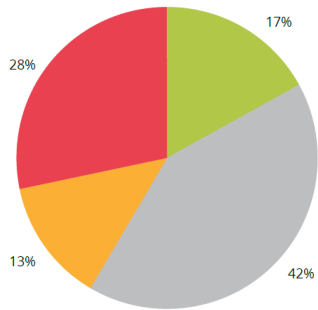
Conservation status of **non-bird species**, EU level



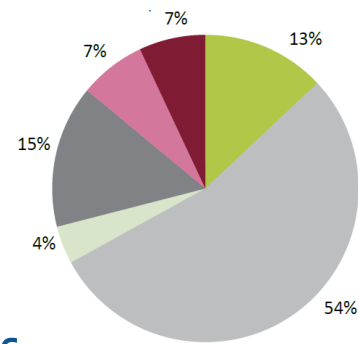
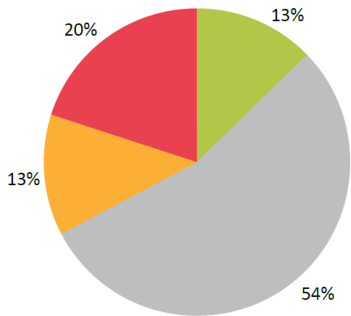
Conservation status of **habitats**, EU level

Conservation status

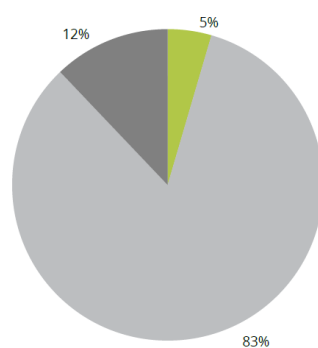
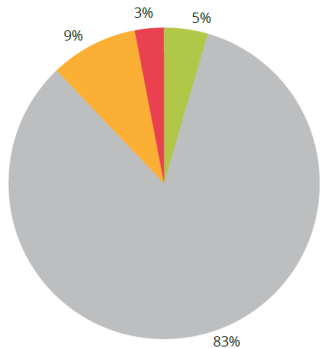
Short-term trend



Coastal

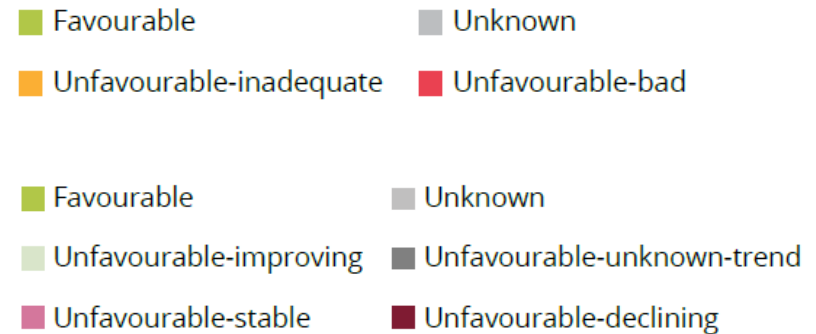


Shelf

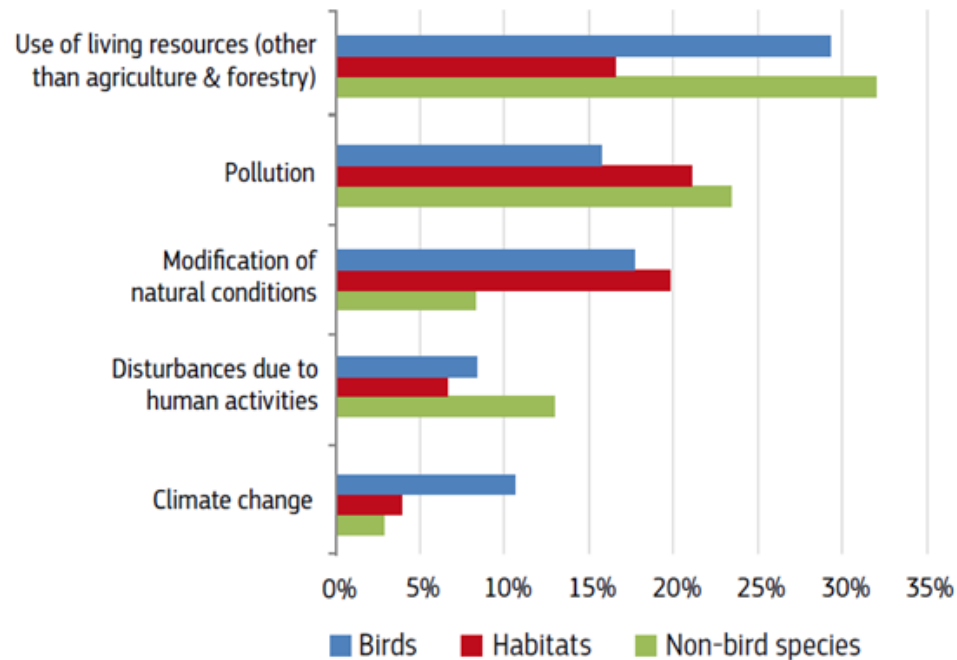


Open ocean

Conservation status and trend of (non-bird) species associated with marine ecosystems



Pressures and threats on **marine ecosystems**



Frequency of pressures and threats on marine habitat types and species

Natura 2000 – based on two EU Directives

HABITATS DIRECTIVE

National List of
proposed sites
(pSCI)

Sites of
Community
Importance (SCI)

Special Areas of
Conservation
(SAC)

BIRDS DIRECTIVE

Special
Protection
Areas (SPA)



Objective of both Directives

Within all Natura 2000 sites:

- ❖ *Avoid damaging activities that could significantly disturb the species and/or habitats for which the site has been designated;*
- ❖ *Positive measures are taken, where necessary to maintain and restore those habitats and species to a favourable conservation status in their natural range*



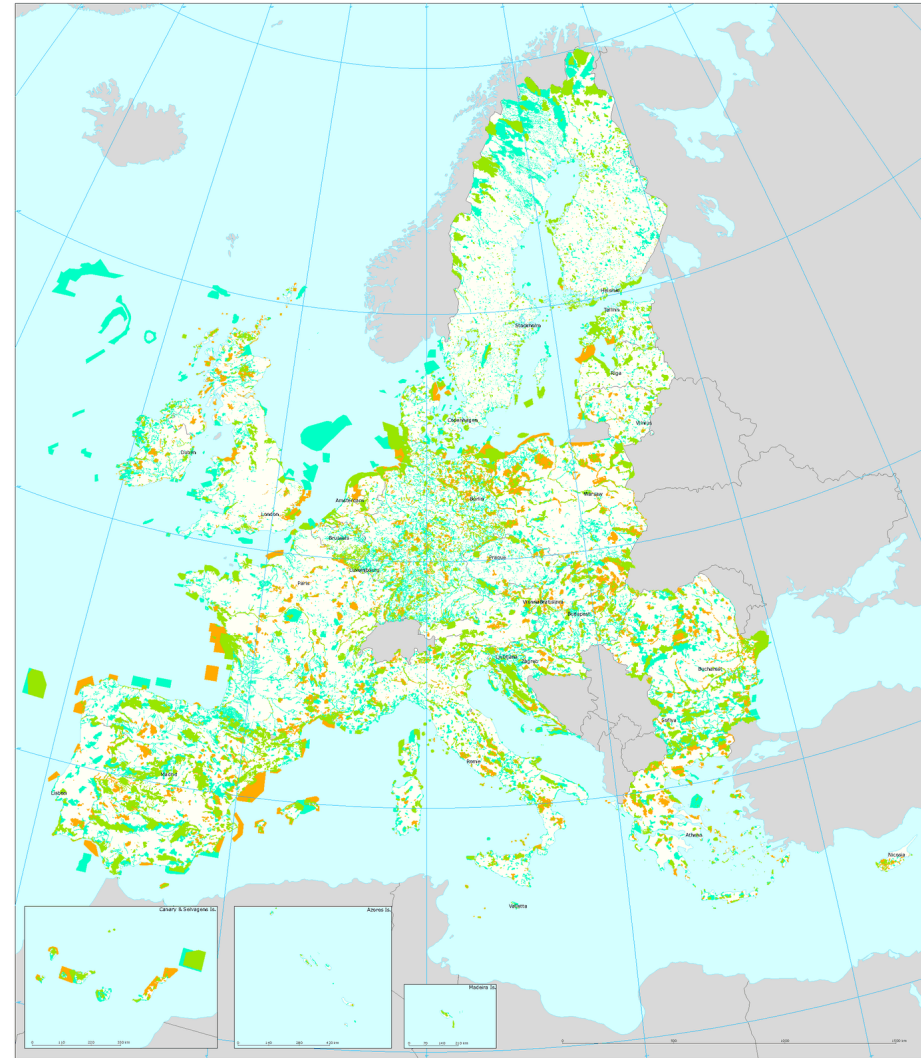
The ultimate objective is to ensure that the species and habitats reach "favourable conservation status"

Translated in legal terms in **Article 6 of the Habitats Directive (HD)**
BUT applies also to sites designated under the Birds Directive

Marine Natura 2000 Network

State of play

- More than **3000** marine sites (out of **>27000**)
- Covers **over 5% of EU seas** (>**300.000** km²)
- Network is not complete in the **offshore** area
- Differences across **regional seas**
- Cornerstone of EU nature protection policy: aims to ensure long-term survival of Europe's most valuable/threatened **species and habitats**
- Human activities can take place if they are compatible with **nature conservation objectives**
- Conservation measures in the sites help maintain and restore habitats and species to a **favourable conservation status**
- **Economic benefits** (whole network): 200-300 billion €/year, in the marine e.g. benefit to fish stocks (current coverage): 1,4-1,5 billion €/year



NATURA 2000

- Birds Directive sites (SPA)
- Habitats Directive sites pSCI, SCI, SAC
- Sites - or parts of sites - belonging to both Directives

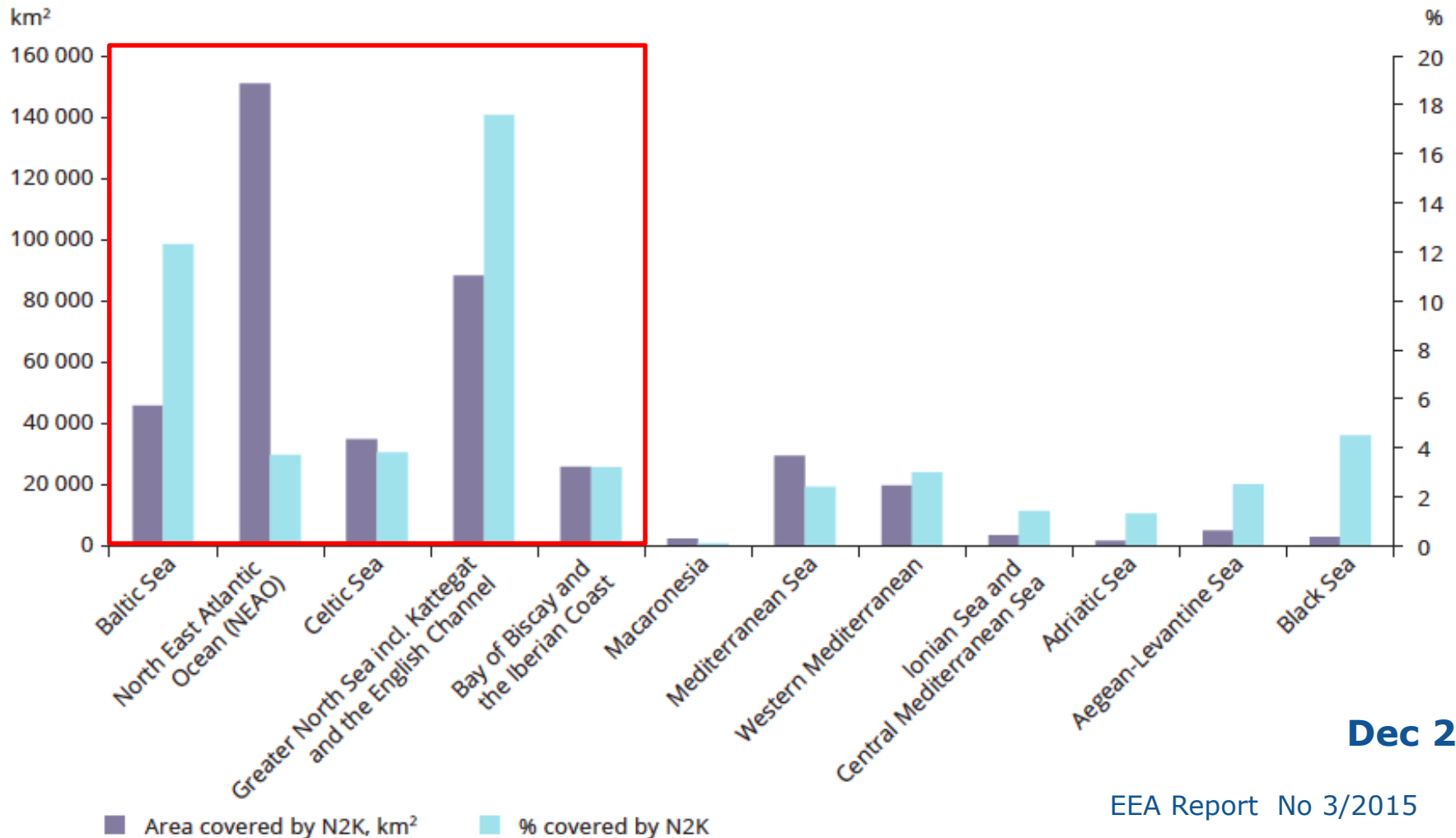
European Environment Agency



Report:
"NATURA 2000 - 04 ENK compiled from databases from the Member States.
Source: background map: © EuroGeographics/Compassion and GIS 03/04.
Source of NATURA 2000 sites for: Denmark, Iceland 2004.
Proprietary: Landmark Database Europe Area.

*Bathymetry under UNEP/IOC 854/07

Area of regional seas covered by N2000



Dec 2012

The permitting procedure

*Natura 2000 supports **sustainable development**: new activities or development affecting N2000 are not automatically excluded*

Avoid damaging activities that could significantly disturb the species and/or habitats for which the site has been designated (Article 6(2)(3)(4))

- *Step-by-step procedure under Art. 6(3)*
 - **Screening**
 - **Appropriate Assessment**
 - **Decision-making**
- *The derogation procedure under Art. 6(4)*



Step-by-step assessment of plans and projects affecting Natura 2000 sites

- Possible negative impact on Natura 2000 site? (screening)
 - No ⇒ OK
 - Yes ⇒ Appropriate Assessment (AA)
 - No impact ⇒ OK
 - Negative impact ⇒ Alternatives?
 - There are alternatives ⇒ no authorization ⇒ new AA
 - No alternative ⇒ Imp. Reasons of Overriding Public Interest?
 - No IROPI ⇒ no authorization
 - IROPI ⇒ Priority habitats/species affected?
 - No ⇒ OK with compensation measures, notification to EC
 - Yes ⇒ Commission opinion required



Appropriate Assessment (AA) – key elements

- ❖ Appropriate Assessment is a key tool of Habitats Directive in ensuring sustainable development and nature protection
- ❖ Triggered by the likelihood of significant effects ("screening")
- ❖ Assessment focusing on **conservation objectives** of the site on the basis of habitats/species for which it has been designated.
 - Consider **cumulative effects**
 - **Mitigation measures** form integral part of the process
- ❖ **Objective and verifiable information** required to enable the competent authorities to decide on the basis of the impact on the integrity of the site.
- ❖ Coordination with the **EIA/SEA process** is possible/advisable.
- ❖ Guidelines and standards very important in helping ensure quality and consistency of assessments
- ❖ A sound and objective AA can prevent/reduce conflicts and delays at the permitting and implementation stage and increase public acceptance

Commission guidance documents

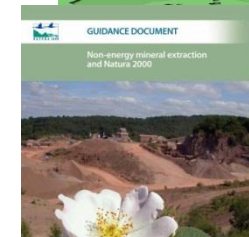
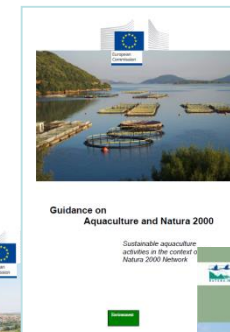
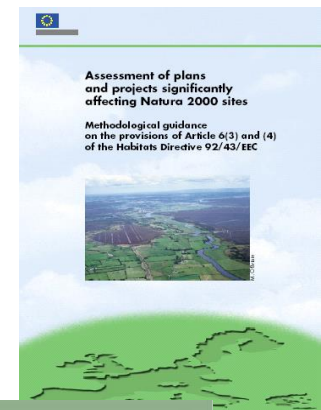
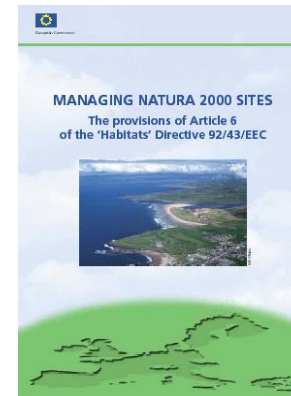
❖ 'Managing Natura 2000 sites – the provisions of Art. 6' – currently updated...

❖ ***NEW – Article 6 – Rulings of the ECJ (July 2015)**

❖ Assessment of plans and projects: methodological guide Art 6 (3) & (4)

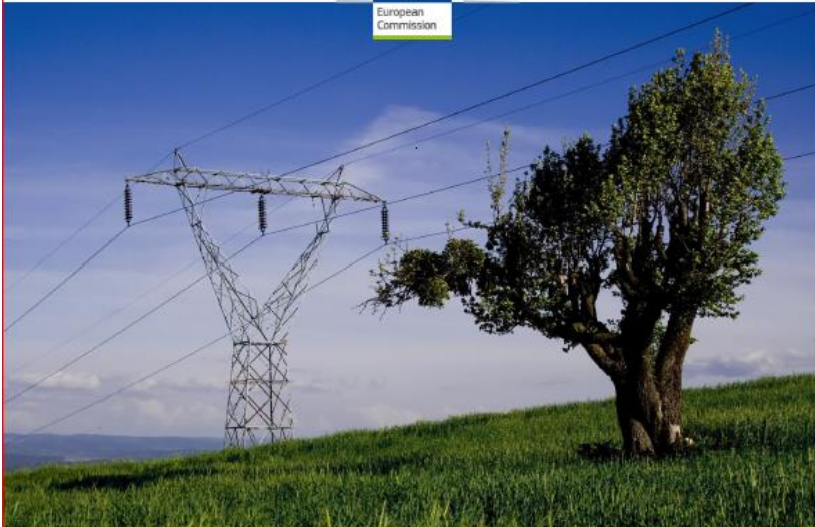
❖ Sector specific guidance:

- ❖ **Wind energy**
- ❖ **Non-energy extractive industries**
- ❖ **Ports and estuaries**
- ❖ **Aquaculture**
- ❖ **Inland Waterways**
- ❖ **Agriculture**
- ❖ **Forests**
- ❖ **Forthcoming: Energy infrastructure and hydro-power**





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Guidance on electricity,
gas and oil transmission
infrastructures and
Natura 2000

Environment

Commission guidance

on how best to ensure that developments of energy transmission infrastructure are compatible with the provisions of the Habitats and Birds Directives

- 1 Objectives
- 2 Energy infrastructure development in the EU
- 3 EU policy framework for nature & biodiversity
- 4 Potential impacts from energy infrastructures
- 5 Strategic planning
- 6 Step-by-step guidance for an AA
- 7 Annexes

Environment

Potential impacts of marine energy transmission infrastructure

- *Installation*
 - Changes to benthic habitats, communities and species
 - Damage to intertidal habitats and species
 - Disturbance and displacement of highly mobile species
- *Operation*
 - Pollution, noise, vessel traffic
 - Electromagnetic fields and effects on fish
 - Changes to benthos
- *Decommissioning*

➤ **Cumulative effects!**

	PHYSICAL LOSS/ DAMAGE	BIOLOGICAL DISTURBANCE/ DAMAGE/LOSS	HYDRO- LOGICAL CHANGE	HAZARDOUS SUBSTANCES	ELECTRO- MAGNETIC FIELDS*
Sandbanks	V	V	V	V	
Posidonia beds	V	V	V	V	
Estuaries	V	V	V	V	
Mudflats & sandflats	V	V	V	V	
Coastal lagoons	V	V	V	V	
Inlets & bays	V	V	V	V	
Reefs	V	V	V	V	
Structures made by leaking gas	V	V	V	V	
Boreal Baltic narrow inlets	V	V	V	V	
Caves*	?	?	?	V	
Cetaceans	?	V	?	V	
seals	?	V	?	V	
reptiles	?	V	?	V	
fish	?	V	V	V	V
invertebrates	V	V	?	V	
plants	V	V	V	V	
seabirds		V		V	

* as unlikely routing location
? unknown/poorly understood

+ mechanisms and impacts still poorly understood



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Installations:

- *shoreline, near-shore, offshore*
- *single or arrays*
- *Floating, anchored, pylons*
- *transmission infrastructure*



Marine current turbines

Potential mitigation measures

● *Possible options for mitigation measures at different stages of energy infrastructure projects*

- **Assessment**
- **Routeing/Placement**
- **Footprint**
- **Time frame**
- **Scheduling**
- **Design**
- **Operational issues**
- **Monitoring**
- **Framework**

	Mitigation Measures					
Environmental impacts	Route selection	Construction times	Burial technique	Burial depth	Cable type	Removal
Disturbance	x	x	x	(x)	(x)	see text
Noise	(x)	(x)	(x)			
Heat emission	(x)			x	x	
Electromagnetic fields				x	x	
Contamination	x		(x)	(x)	x	x
Cumulative effects*	x	x	x	x	x	

x: important measure; (x) less important measure; * knowledge insufficient

Streamlining permitting procedures

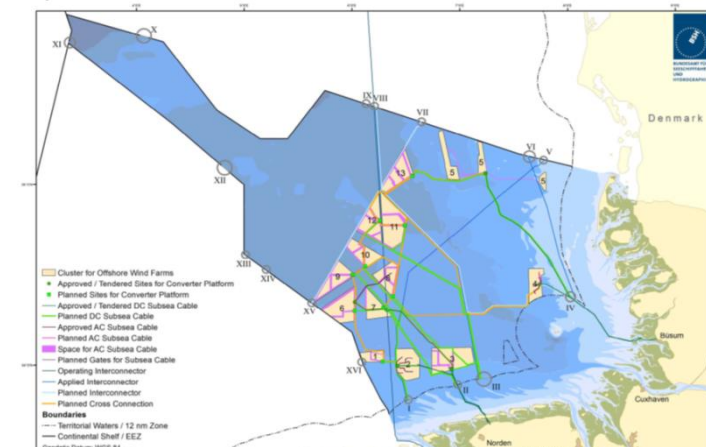
- Early planning, "road-mapping" and scoping of assessments
- Early and effective integration of environmental assessments and of other environmental requirements
- Procedures, where appropriate, can be coordinated and/or run jointly– AA can be part of EIA/SEA, but SEA and EIA cannot substitute for the AA
- Quality of the reports
- Cross-border co-operation
- Early and effective public participation



The importance of strategic planning

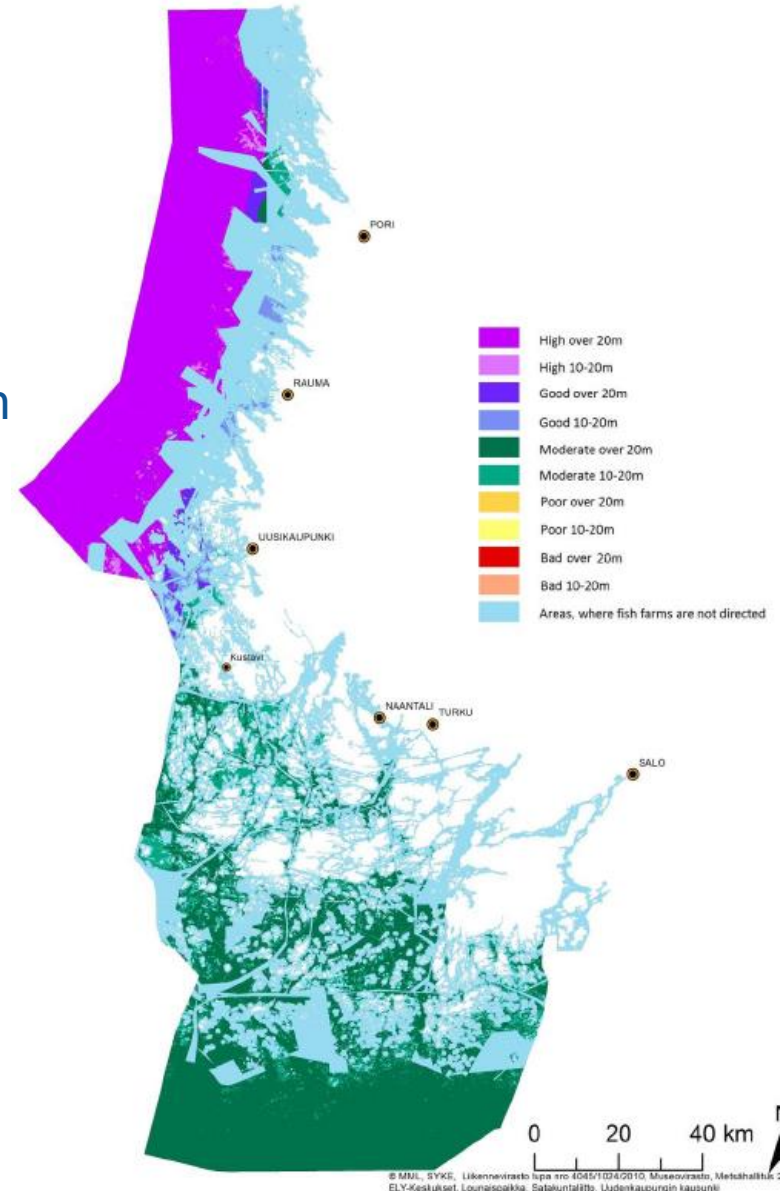
- **Strategic spatial planning** over a broad geographical area **is the most effective mean** of minimising the impacts on nature
- **Leads** to a more **integrated development framework** and **reduces** the risk of **difficulties and delays** at level of individual projects
- **Appropriate siting is critical** and **must be the first goal of any planning process**
- Benefits of **Maritime Spatial Planning**

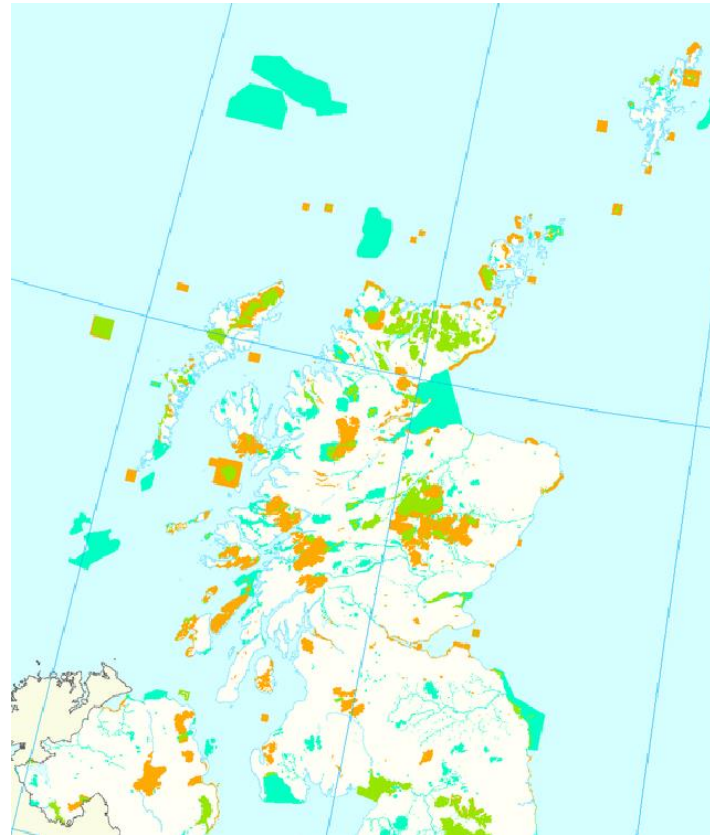
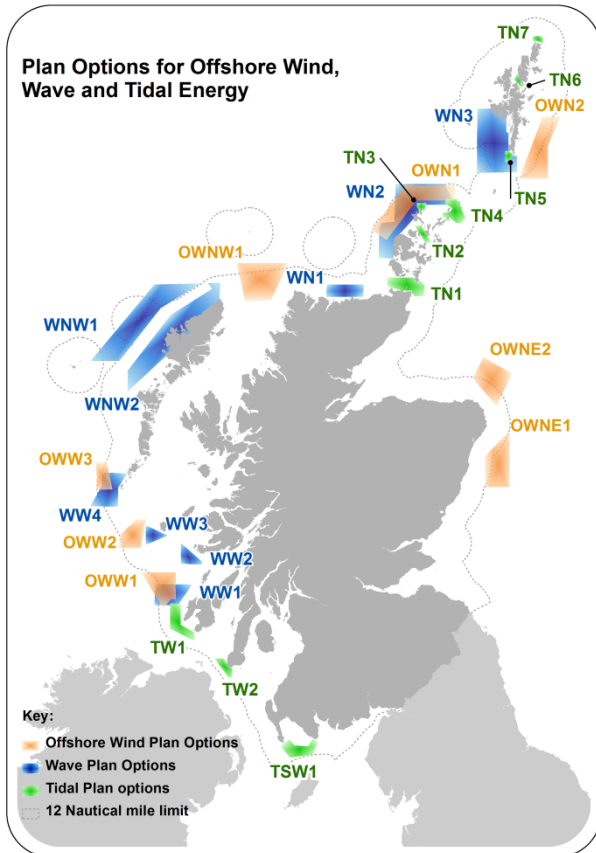
Spatial Offshore Grid Plan for the German Exclusive Economic Zone of the North Sea 2012



FINLAND: aquaculture site selection plan

- GIS spatial planning tool to identify suitable areas for aquaculture production
- Unsuitable areas for aquaculture were excluded with buffers concerning the depth of sea, summer cottages, waterways, nature protection areas etc.





- Determining suitable locations for pilot projects

Natura 2000 areas do not cover the whole marine area, just the core areas for endangered habitats and species



Original Articles

A Marine Spatial Planning Approach to Select Suitable Areas for Installing Wave Energy Converters (WECs), on the Basque Continental Shelf (Bay of Biscay)

Thank you for your attention

More information on our internet site:

http://ec.europa.eu/environment/nature/index_en.htm

