

Multiple-use of offshore wind farms

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Happy coexistence



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Maritime Spatial Planning

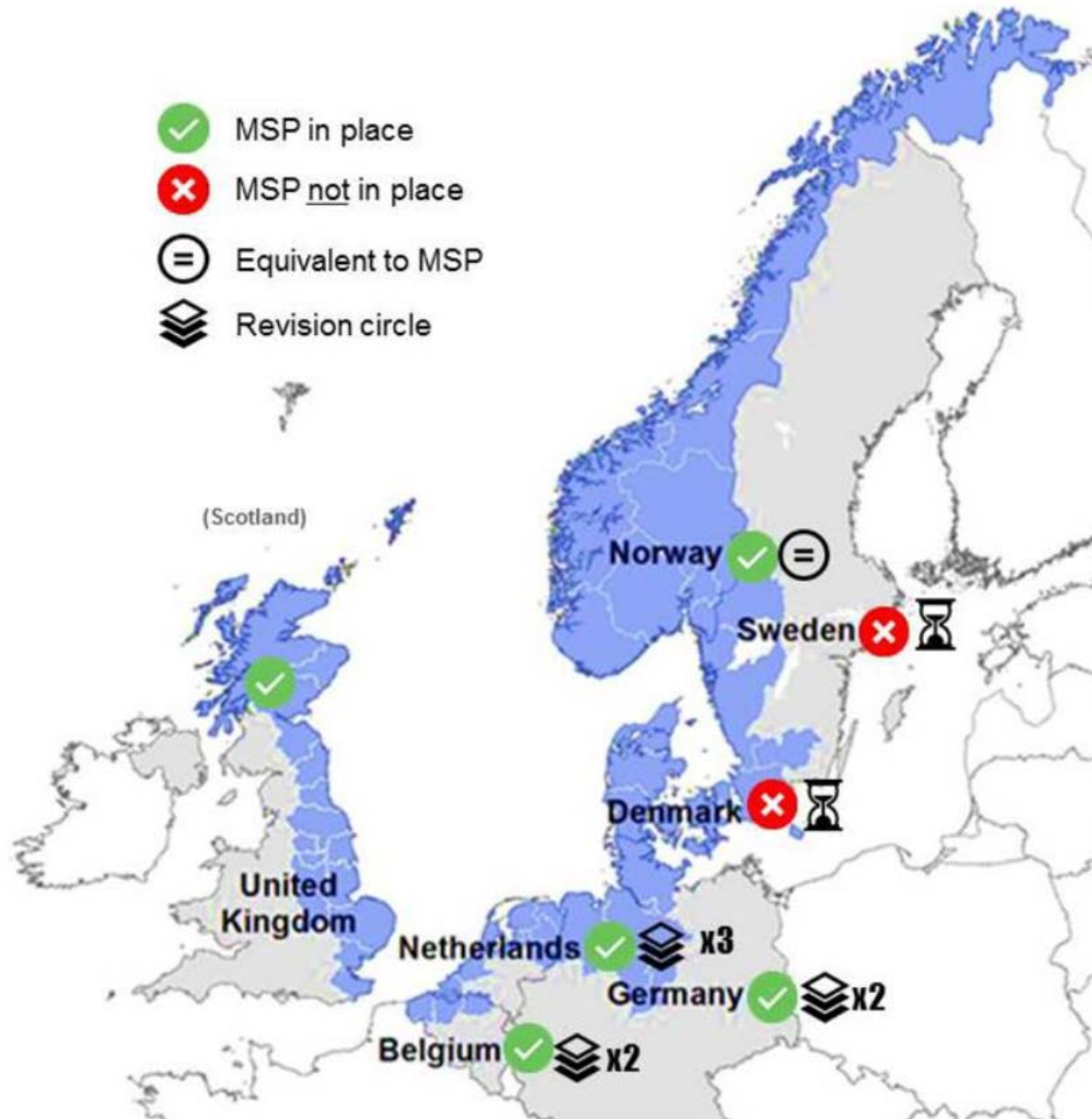
Directive 2014/89/EU

With the implementation of the Directive 2014/89/EU, Member States are asked to adopt a legally binding Maritime Spatial planning.

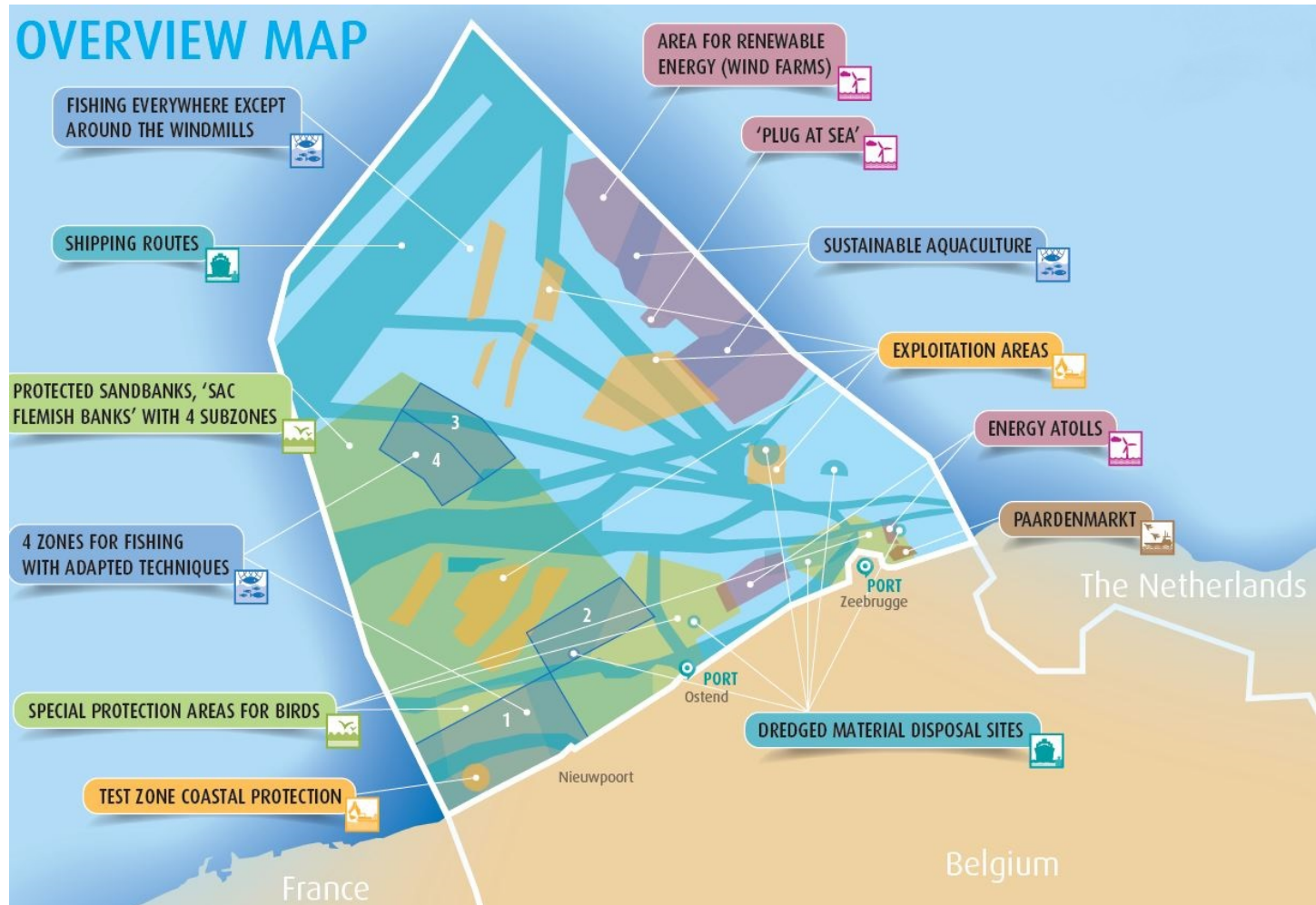
MSP is a tool which EU Member States use to **organise and optimise their sea space, in line with their national objectives.**

MSP Status in the North Sea

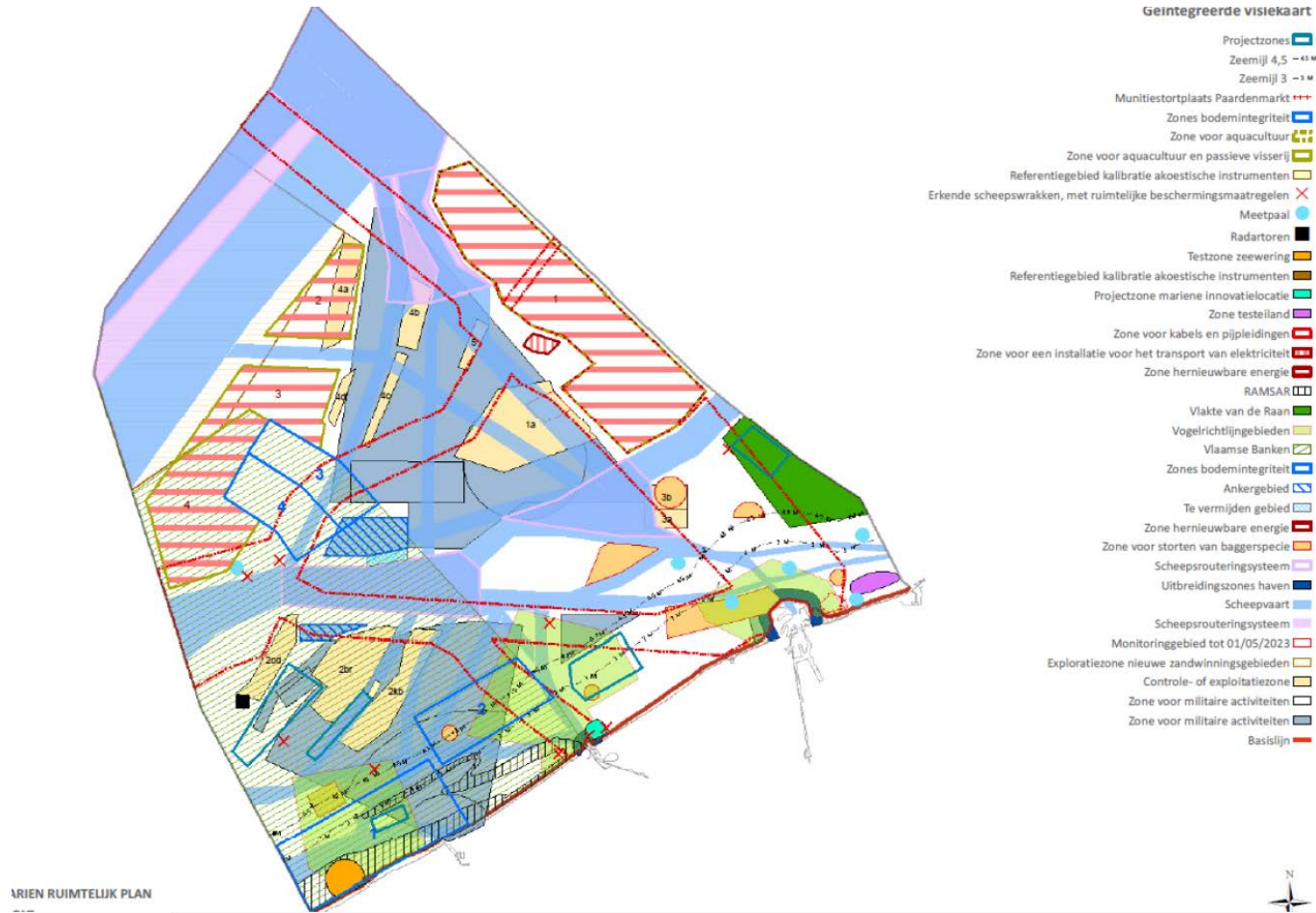
- ✓ MSP in place
- ✗ MSP not in place
- ⊖ Equivalent to MSP
- ⏳ Revision circle



Belgian MSP - today



Belgian MSP – 2020/2026



Belgian MSP - tomorrow

N2000 area - Vlaamsen Banke

Species: Grey Seal; Harbor Seal; Harbor Porpoise.

Habitat: Permanently with sandbanks slightly covered with seawater & reef

Current and planned windfarms concessions

225km²

23km from the coast

2.2GW installed by 2020

New windfarms concessions

221km²

35km from the coast

Additional 1.8GW by 2030



Aquaculture

Governments should:

- *Promote **research and pilot test** in order to consolidate technical knowledge. This will allow to **decrease the risk of liability** in case of damage or accidents;*
- *Create a dedicated regulatory framework and government support will simplify **the permitting procedures** and allow to **reduce costs** – e.g. creation of Insurance Funds.*
- *Promote **sustainable aquaculture** and **nature inclusive approach** and developed to maximise the positive environmental effects.*

Nature conservation and protection

Governments should:

- *Plan wind farms as an effective **restoration option** for benthic habitats and species;*
- ***Promote positive environmental effects**, such as the artificial reef effect;*
- *Promote collaboration with windfarms operators in **environmental monitoring** actions, **research and innovation**, **data sharing** and implementation of latest technology available.*

Combination of energy sources

Governments should:

- *Support the commercialisation of wave technology through **pilot test and a dedicated framework** – e.g. exemptions from balancing responsibility;*
- *Support research and innovation actions to **increase knowledge on synergies** between the energy systems and cumulative environmental effects;*
- *Should promote the established **Belgian Supply Chain** which is key to create local value.*

Passive fishing and navigation

Governments should:

- *Collaborate with the project developers, such as **data and information sharing** and stakeholders engagement and involvement;*
- *Promote **compensation measures** such as alternative employment and Fisheries Funds.*
- *Develop a **new navigation risk assessment** in line with the new rules for marine users;*
- *Ensure that navigation will happen safely, clearly stating requirements and conditions for marine users to navigate in certain areas;*
- *Maximise the learning from **other countries' experiences**, including navigation risk assessment, health, safety and emergency responses measures.*
- *Ensure coherence with international and neighbouring risk assessment approaches and navigation rules.*

Open concerns – multiple uses and transit

- **Who** is to cover the costs of adapting the offshore facilities to the new situation, and how does this relate to the contract between operator and the government;
- Commercial **aspects of damages to the wind farm infrastructure and increased operational expenses**, which were **not part of earlier business plans**. Currently, there is no **proposal for compensation** in case these hazards occur. Due to opening of the wind farm exclusion zone;
- **Loss of work time** of operational & maintenance (O&M) teams and risks to OWF personnel due to responding to third party safety infringements;

Navigation Risk Assessment

- **Identification of hazards.** A list of all relevant accident scenarios with potential causes and outcomes,
- **Assessment of risks.** Evaluation of frequency and impact of hazard, to arrive at risk level;
- **Risk control options.** Devising regulatory regulations to control and reduce the identified risks;
- **Cost benefit analysis;**
- **Regulatory framework;**

Open concerns – gaps in knowledge

- Lack of easily accessible, quantitative data and analysis on accidents in operational wind farms. Difficult to re-evaluate the risk in new conditions;
- Lack of available equipment, training (including realistic exercises) and coordination between Coastguard and wind farm operators;
- The found data indicates that accidents in offshore wind farm areas concern mostly the maintenance and operational crews, not third-party users;
- A lack of knowledge about the damage mechanism to cables (buried and uncovered) caused by modern trawling methods.

Findings – transit and co-use

- The following conclusion can be derived for the transit and recreational use of the Dutch wind farms:
- Opening the wind farms, combined with the proposed set of regulations **will not lead to an overall increase in risks;**
- Based on the review and assessment, **the proposed risk control measures** are expected to be effective and, if properly implemented, the proposed regulations will effectively reduce the risks of the identified hazards.
- SAR-operations in wind farms can be performed safely
 - *Mitigation measures -> active monitoring and rule enforcement*

THANK YOU

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