

Workshop: multi-use

UGent –Dr. M. Rabaut - Prof. Dr. F. Maes

How to reconcile different priorities?

THEME: Policy analysis

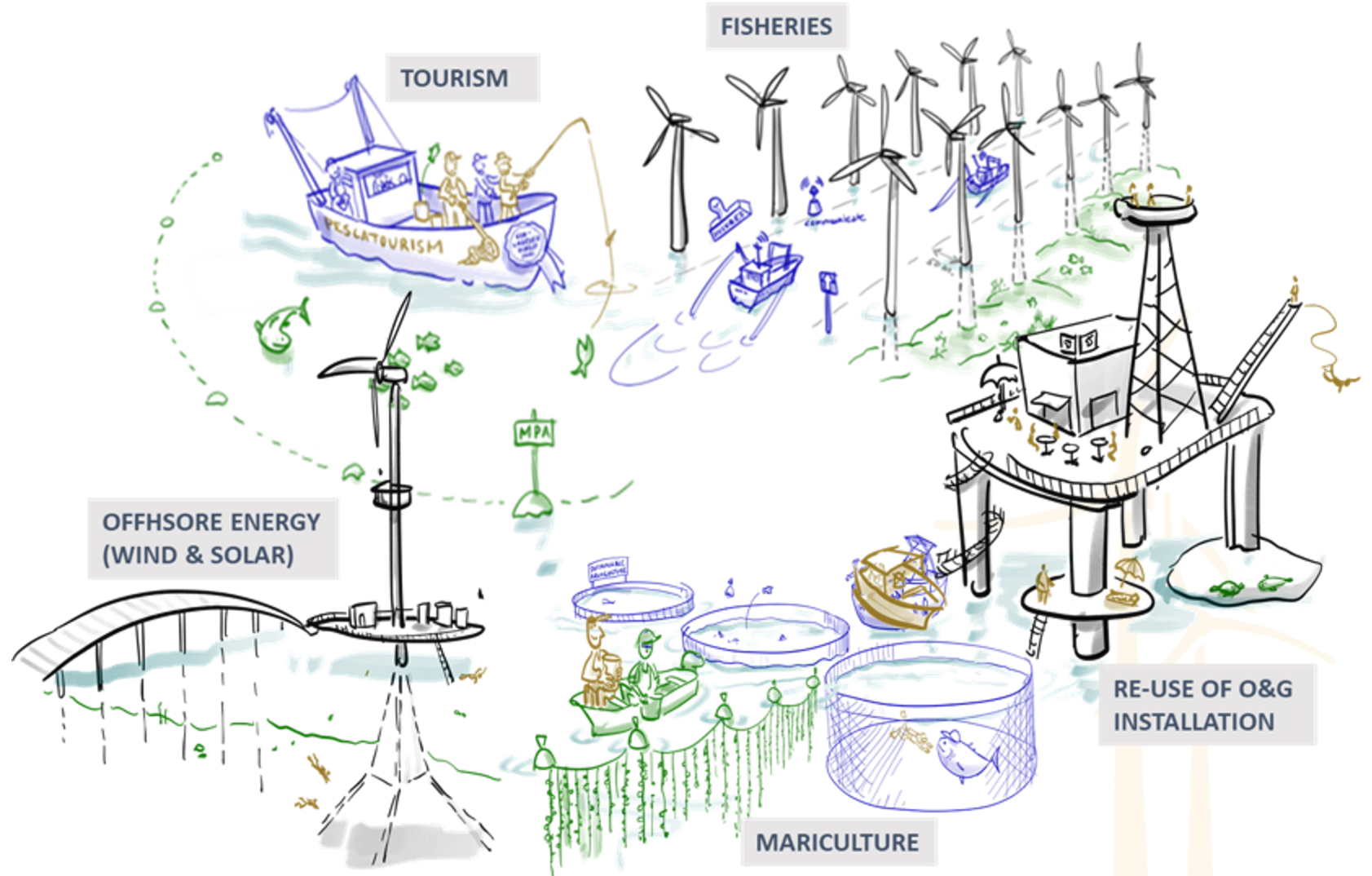
The Multi-Use Concept

Reduced Demand For Space For All Interests

Environmental Benefits

Socio-Economic Synergies

Efficiency and Cost Reductions



Key facts

KEY FACTS

DURATION
4 years
(2020 - 2023)

26
PARTNERS

5
BLUE
ECONOMY
SECTORS

5
PILOTS

3
REGIONAL
SEAS

5
ADVISORS



PILOTS

Locations



Legal and policy context of MU governance in pilots

Research questions

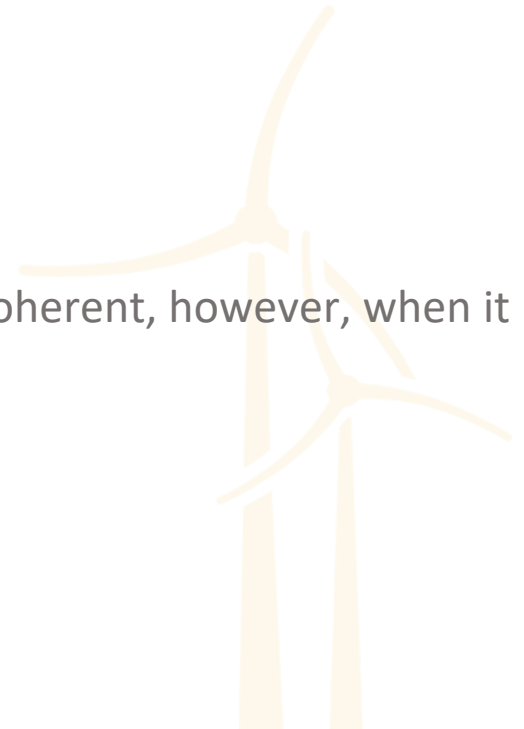
Why is the implementation of MU at sea so difficult?

Besides all technical issues, is there a working legal framework to develop MU projects?

And is there a coherent and affordable insurance system possible?

Observations

The MSP process has in most countries significantly contributed to make actions spatially coherent, however, when it comes to MU, no specific legal or regulatory framework seems to be in place.



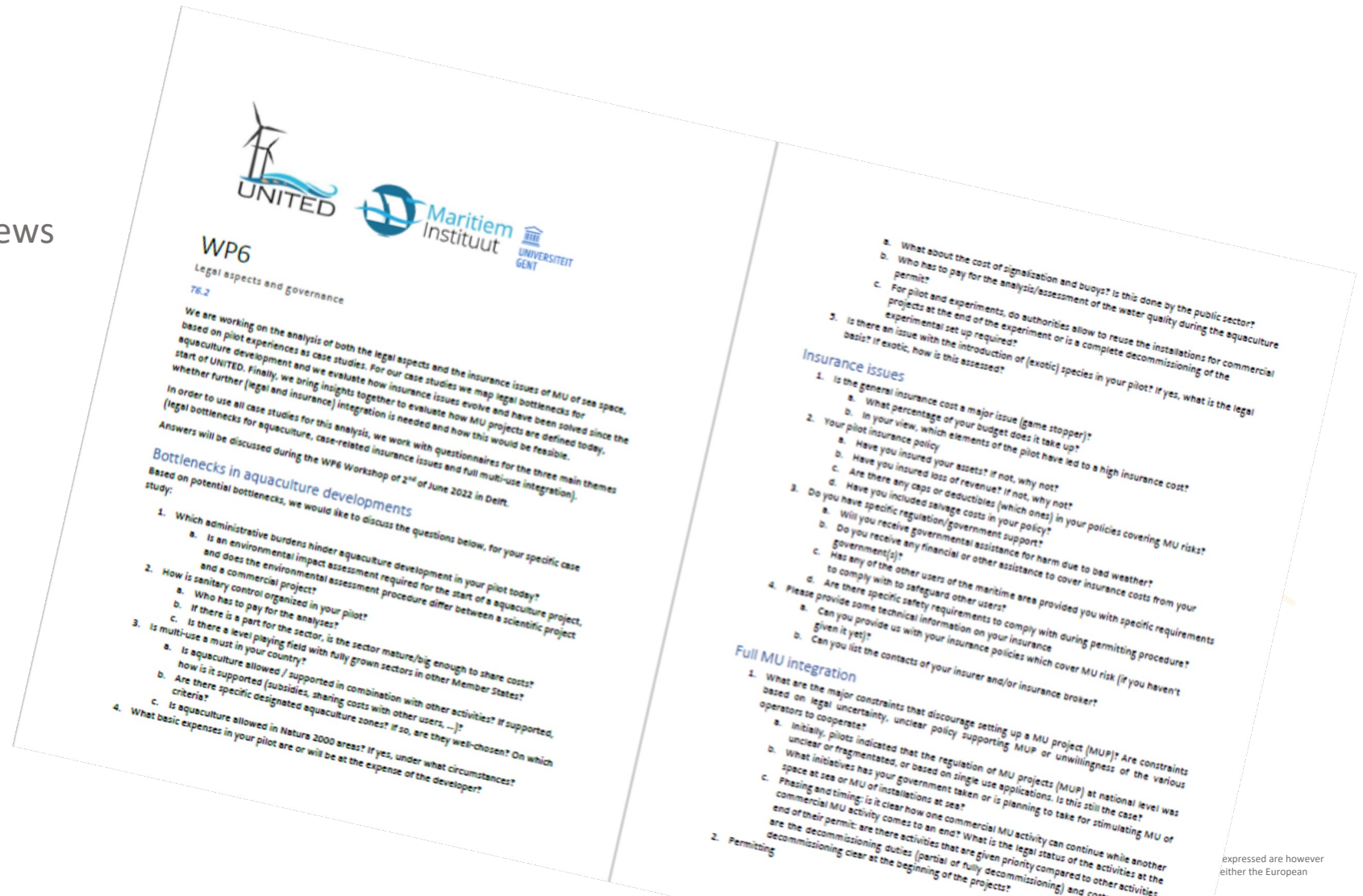
Legal and policy context of MU governance in pilots methods

Literature

Pilot analysis

Questionnaires for directed interviews with all pilots

Governance analysis

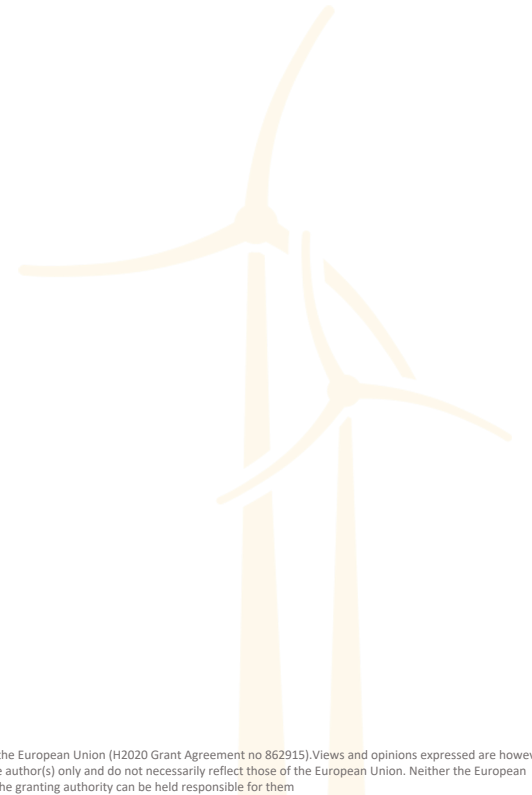


Legal and policy context of MU governance in pilots

Key challenges in MU

- (1) co-location and multi-use of installations due to scarcity of space,
- (2) better integration of policies and
- (3) constructive stakeholder and public involvement

We focus on existing frameworks and explain which burdens exist for full MU deployment

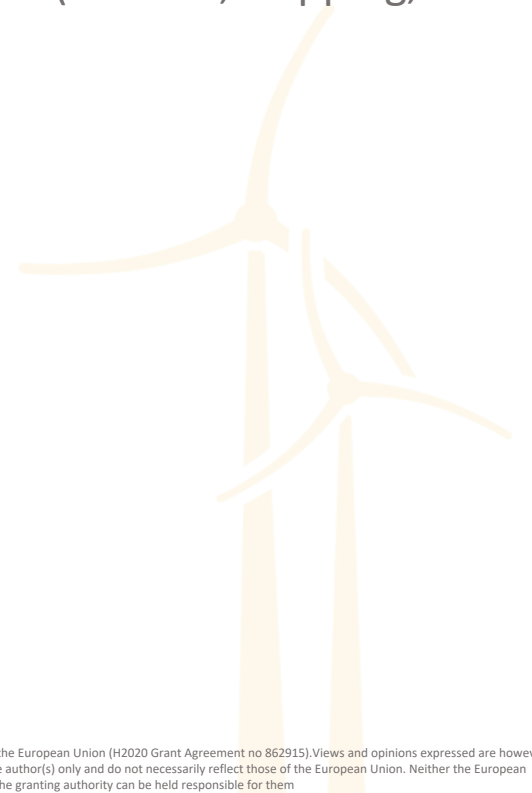


MSP and MU

Most European Union (EU) Member States (MS) have developed a Maritime Spatial Plan (MSP) according to the EU MSP Directive

So far MSP is more focused on conflict mitigation, securing compliance between Blue Growth (tourism, shipping, off-shore energy) and environmental considerations than enhancement of blue innovations.

The existing plans consider Blue Growth and Green Deal but in a rather fragmented way



Demonstration Pilots

German Pilot: Blue mussels, seaweed & offshore wind

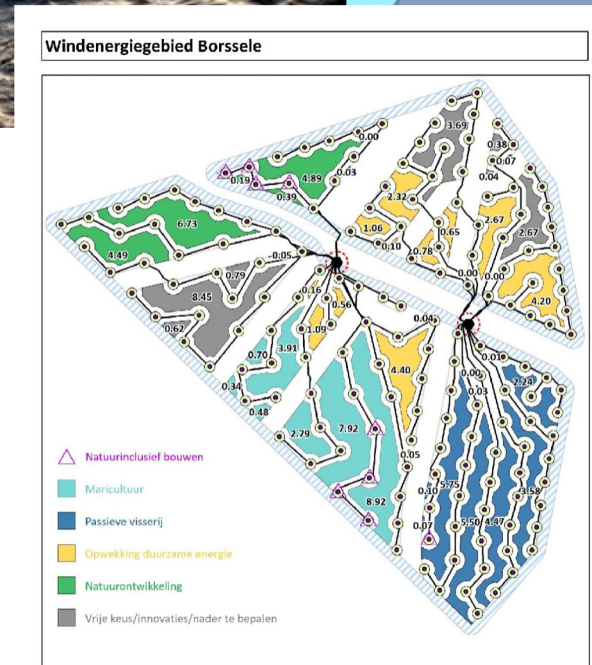
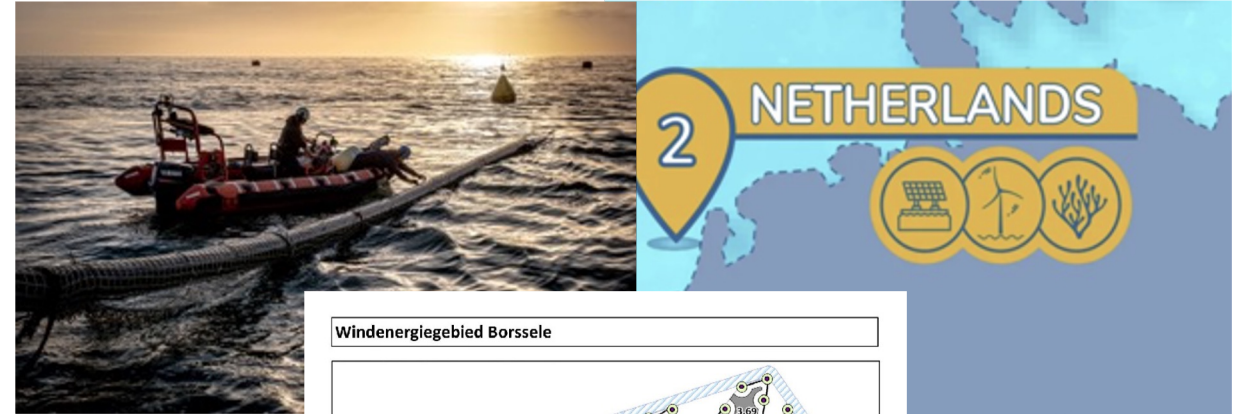
- 80 km off the North-German coast (high energy environment)
- Research platform focused on multi-use
- Aquaculture: There is no single authority responsible for the control and further development
- Decision-making: formally on political level, however, due to very strict law interpretation little room for change (except through law revisions)
- MSP with 'priority areas' for certain spatially significant functions, excluding other spatially significant functions or uses in the area
- For offshore wind installations, Germany has two overarching guiding principles for granting "Approval" to applicants: safety and impact on the marine environment.
- The development of combining renewable energy production and sustainable food production is not yet in a (pre-)commercial phase



Demonstration Pilots

Dutch Pilot: Seaweed, floating solar & offshore wind

- 12 km from the Dutch coast (moderate energy environment)
- Research site focused on upscaling innovation
- The MSP is based on an established link between the parliament, stakeholder discussions and discussions with regional and local authorities.
- The governance of innovation and the driver for upscaling the sustainable blue economy is streamlined with the installation of the so-called “Community of Practice North Sea”.
- **Opportunity maps: maps, without legal status, show a potential future use in areas where growth could take place**
- Joint initiatives: MU incentives
- Offshore wind: government helps to reduce pre-bid risks, financing and societal cost
- Aquaculture (mussel farming), innovative developments including MU applications of aquaculture and other activities, such as renewable energy production
- MU: area passports in offshore wind farm (indicative zonation for non-priority uses in the area)



Demonstration Pilots

Belgian Pilot: Offshore wind, seaweed & flat oyster aquaculture & restoration

- 50 km from Belgian coast (moderate energy environment)
- Commercial multi-use site
- Aquaculture: specific zones were designated in two wind zones, several demonstrations. In MSP2020 aquaculture is allowed in new wind zone AND in so-called CIA-zones **close to the coastline** (one is under development for commercial production: **in front of Nieuwpoort**)
- **At the end of the scientific project the aquaculture installations have to be removed and cannot be upscaled to a commercial project**
- MU in new wind zone: the new tendering mechanism will work with several selection criteria and MU will probably be included in a bulk criterion on sustainability (combining circular economy, fuel consumption and MU in the same criterion) **counting for 10% (price will probably 70% of the score, citizen participation 10%)**
- Potential introduction of exotic species is of huge concern for

further development



Demonstration Pilots

Danish Pilot: Offshore wind & tourism

- 3.5 km off the Danish coast (high energy environment)
- Commercial multi-use site
- The MSP is divided into 4 different zones: development zones; special use zones; nature conservation and environmental protection zones
- Flexibility: the MSP allows significant flexibility in many respects. The objective of the MSP is to set the spatial priorities
- based on principles of spaciousness as well as co-existence as a form of MU
- Overlapping zones (MU): in overlapping zones projects can only be permitted after consultation with the Minister who is competent for the other sector
- Fishing, shipping, tourism and recreational use can take place in each type of zone insofar not prohibited by any other sectorial legislation



Demonstration Pilots

Greek Pilot: Aquaculture & tourism

- Commercial multi-use site
- Aquaculture site visited by tourist scuba divers
- MSP: no legally binding national MSP in place - Ministry of Environment and Energy
- Spatial planning in Greece is rather sector focussed than area based
- Specific frameworks for sectors such as aquaculture, renewable energy, industry and tourism
- Aquaculture: only sector with spatially explicit plan
- The sectorial plans are by their nature focussed on one sector, which is also the reason why the concept of MU is completely lacking in these plans
- This does not mean that MU is non-existent in Greece. It can be decided on an ad hoc basis. Several initiatives of MU exist in Greece such as fishing tourism activities organised by local communities as a social-economic



Common and MU policies in pilots

- Priority is given to the **safety of shipping** above all other uses: no ORE or aquaculture installations in or close to international recognized shipping lanes (IMO)
- Expansion of offshore renewable energy, mainly wind energy to achieve national climate targets (**priority areas**)
- Offshore installations need to be **decommissioned** (partly or completely ?) at the end of their lifetime
- **MU in offshore wind farms is possible:**

Belgium (aquaculture, passive fisheries, fisheries research, monitoring, no passing through, nature conservation);

Germany (passive fisheries by fish traps and baskets, passing through by fishing vessels on their way to fishing grounds, fisheries research, monitoring) (aquaculture to be further researched);

The Netherlands (aquaculture, passive fisheries, passing through, nature conservation, fisheries research, monitoring);

In Belgium: restrictions for tourism in ORE parks in contrast to Denmark, which is supportive to tourism in ORE parks and even going further allowing visits in an offshore wind mill (cf. Danish pilot)

- So far no MU permit for a combination of two static offshore activities, such as ORE + aquaculture. Single permits is still the rule, and cumulative EIA is non-existent so far.

Governance analysis

Governance models

(1) the model of control, strict planning and regulation which allows MU only within pre-defined zones,

(2) the model of flexibility and adaptive management in which the exact location and modalities of MU are to be defined within larger zones according to a bottom-up process and depending on innovation, and

(3) the “hybrid” model which culminates the characteristics of the first two models into one at different governance levels.

<p>Model 1</p> <p>BE, D</p>	<p>FIXED structures activity</p> <p>Wind farms, aquaculture</p> <p>Predefined zones, strict procedure, top down</p>	<p>Mobile activity</p> <p>Fisheries, shipping tourism</p> <p>Strictly regulated, prohibited within zones with fixed structures</p>
<p>Model 2</p> <p>NL, GR</p>	<p>Flexibility within zones, adaptive procedure, bottom up, innovation driven</p>	<p>Flexible application of safety distances, opens options to operate within zones with fixed structures</p>
<p>Model 3</p> <p>DK</p>	<p>Predefined zones, strict procedure, top down</p>	<p>Flexible application of co-use, opens options to operate with fixed structures</p>

Thank you !



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Multi-use: Swedish example

Joacim Johannesson

THEME: Co-existence of activities

Multi-use: PANEL discussion

How to reconcile different priorities through MU?

THEME: Co-existence of activities

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What do you expect to take home from this United session?

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What type of stakeholder are you representing? (please select 1 option)

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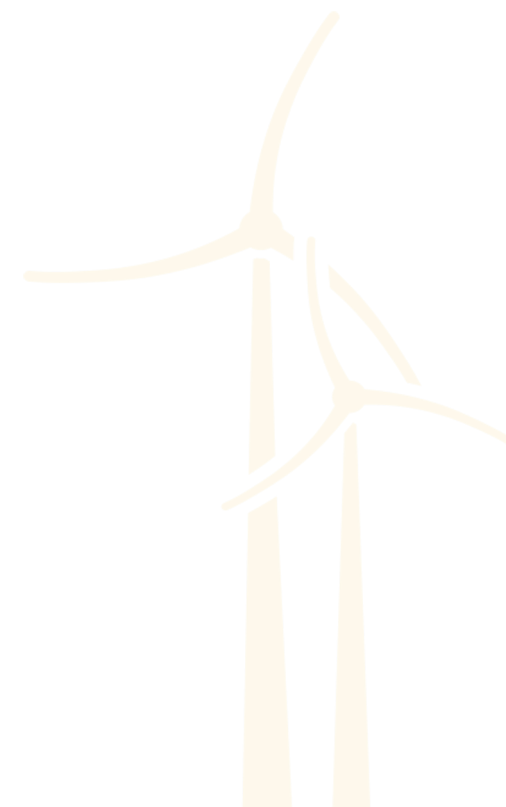


How would you rate your experience with the multi-use concept?

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Provocative Statements Discussion prompts



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**Given the very high climate ambitions we should go for full mono-use deployment of wind farms to ensure the fastest possible renewables roll out!
(1=fully disagree - 5=fully agree)**

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Multi-use should be mandated by permit conditions that strictly prohibit single-use operations (i.e. zero tolerance for mono-use)!

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We need to rely on wind developers to include Nature Inclusive Design (NID), integrate aquaculture, etc. .

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Multi-use is a powerful tool for integrating diverse national priorities.

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Multi-use is context dependent and should only be used in case of a significant lack of available space.

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