



Spatial planning for mariculture - Submariner experience

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MAKING THE SCENE – MSP PERSPECTIVE



Making the Scene

Definition of Maritime Spatial Planning

The process of analyzing and allocating parts of three-dimensional marine spaces (ecosystems) to specific uses, to achieve ecological, economic, and social objectives that are usually specified through a political process.

(by Intergovernmental Oceanographic Commission , UNESCO)



Making the Scene

Long term goal for the BSR

Drawing up and application of trans boundary, ecosystem-based Maritime Spatial Plans throughout the region in 2020

(Action Plan for EU Strategy for the Baltic Sea Region)



Making the Scene

VASAB-HELCOM Principles

1. Sustainable management.
2. Ecosystem approach.
3. Long term perspective and objectives.
4. Precautionary principle.
5. Participation and Transparency.
6. High quality data and information basis.
7. Transnational coordination and consultation.
8. Coherent terrestrial and maritime spatial planning.
9. Planning adapted to characteristics and special conditions at different areas.
10. Continuous planning.



Making the Scene

BSR Vision 2030

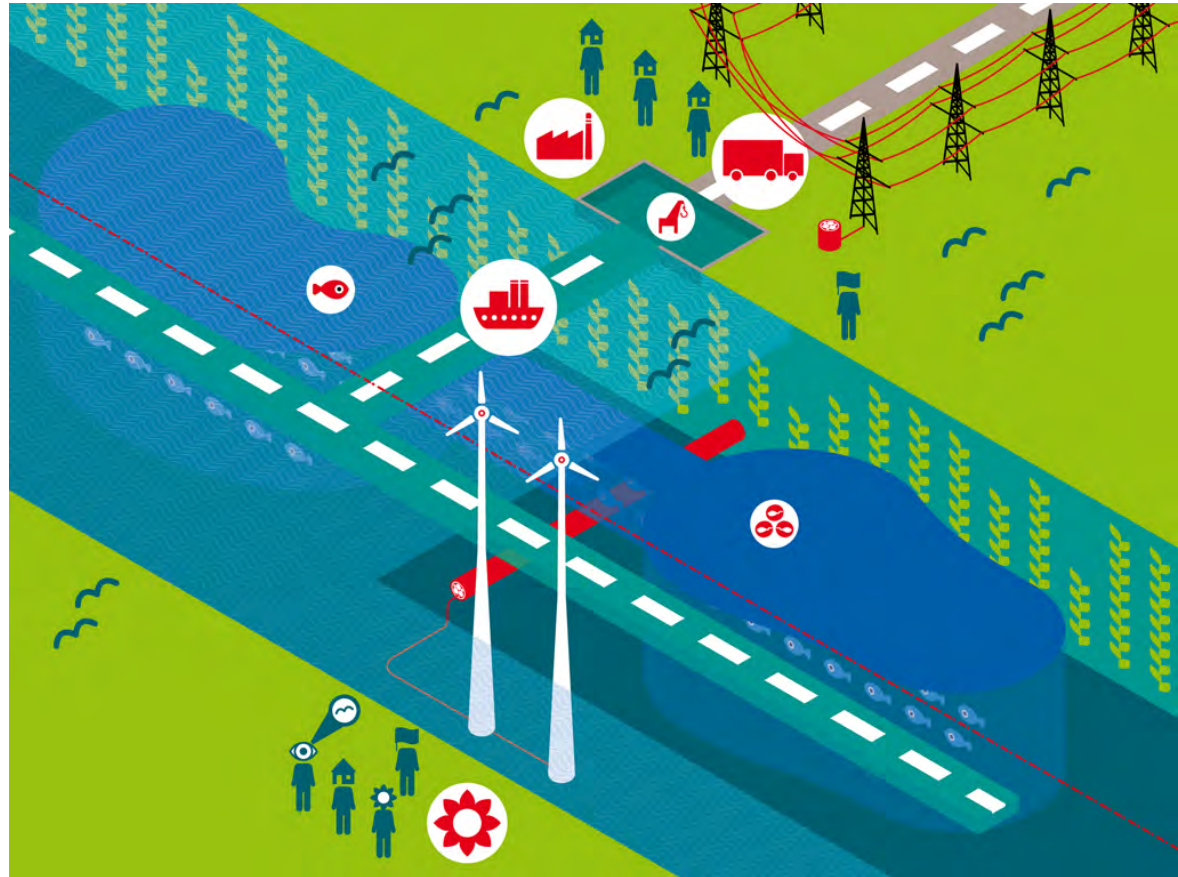
Towards sustainable planning of the Baltic Sea Space

- Prepared by BaltSeaPlan 2010-2012
- Supported by VASAB i.e. Ministers for spatial planning in the BSR
- Directing joint BSR co-operation in the field of MSP

Making the Scene

Guiding principles of the Vision

- Sustainability
- Pan-Baltic Thinking
- Spatial Efficiency
- Spatial Connectivity



Think Baltic, act regionally



Making the Scene

Key transnational topics of the Vision 2030 :

- - > A healthy marine environment
 - > A coherent pan-Baltic energy policy
 - > Safe, clean & efficient maritime transport
 - > Sustainable fisheries and aquaculture



Making the Scene

EU Draft Directive on ICM and MSP

Proposal for a Directive of the European Parliament and of the Council establishing a framework for maritime spatial planning and integrated coastal management

Article 7

When establishing maritime spatial plans Member States shall take into consideration, at least, the following activities:

- (a) installations for the extraction of energy and the production of renewable energy;
- (b) oil and gas extraction sites and infrastructures;
- (c) maritime transport routes;
- (d) submarine cable and pipeline routes;
- (e) fishing areas;
- (f) sea farming sites;
- (g) nature conservation sites.



- MARICULTURE - SUBMARINER FINDINGS

What can be cultivated at the sea or with use of sea resources:

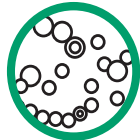
- Mussels



- Reed



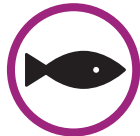
- Microalge



- Macroalge



- Fish



Surprisingly a lot

Basically the maricultures can play different functions, e.g. :

- Producing energy;
- Providing food for human beings and animals;
- Contributing to nature protection;

Some of them can play multiple functions .

In many cases one function is not sufficient to make maricultures economically viable .





MARICULTURES and MSP

MARICULTURES and MSP

There are different types of maricultures with regard to sea space demand:

- cultivated on land thus requiring only minor attention from MSP e.g. microalgae or fish RASes (*Recirculating Aquaculture Systems*);



- requiring allocation of sea space where the given mariculture has a priority e.g. reed, macroalgae farms;



- requiring rearrangement of the sea space (combination with other uses) e.g. mussels, IMTA (fish) with wind mills.





MARICULTURES and MSP

For the second type of mariculture MSP has following obligations:

- Understand their economic, ecological and social importance (political agreement) – to know how much space should be reserve for them;
- Identify the most suitable places (locations) from them on the basis of the agreed by scientists criteria – to know which space to reserve for them;
- Understand the potential conflicts, synergies and impacts (examine the results of the relevant research) – to know what other uses can be allowed in the space reserved for mariculture;
- Stay in contact with relevant stakeholders – to have a feedback loop.

MARICULTURES and MSP

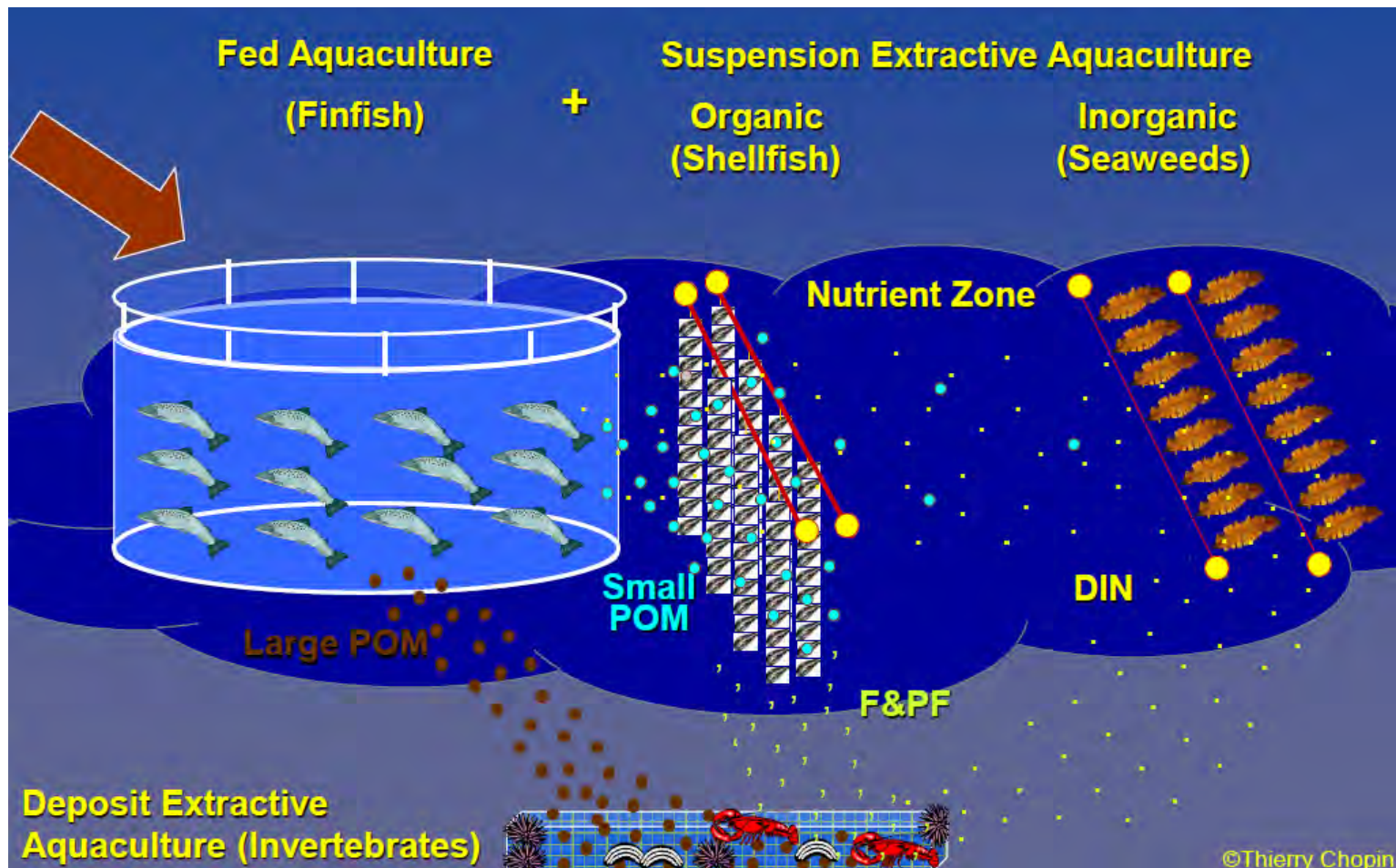
For the third type of mariculture a key notion is coexistence and proper spatial arrangement. Paralelly MSP has to create additional incentives for ensuring coexistence and proper spatial arrangement.

E.G. **rules, guidelines, principles for co-existence, spatial proximity** etc.



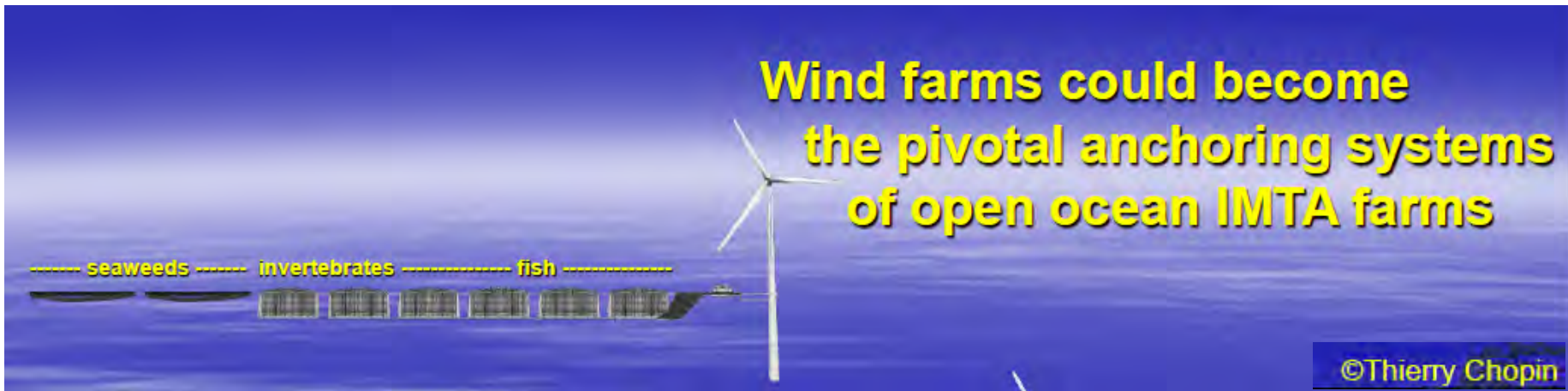
MARICULTURES and MSP

Integrated Multi-Trophic Aquaculture (IMTA)



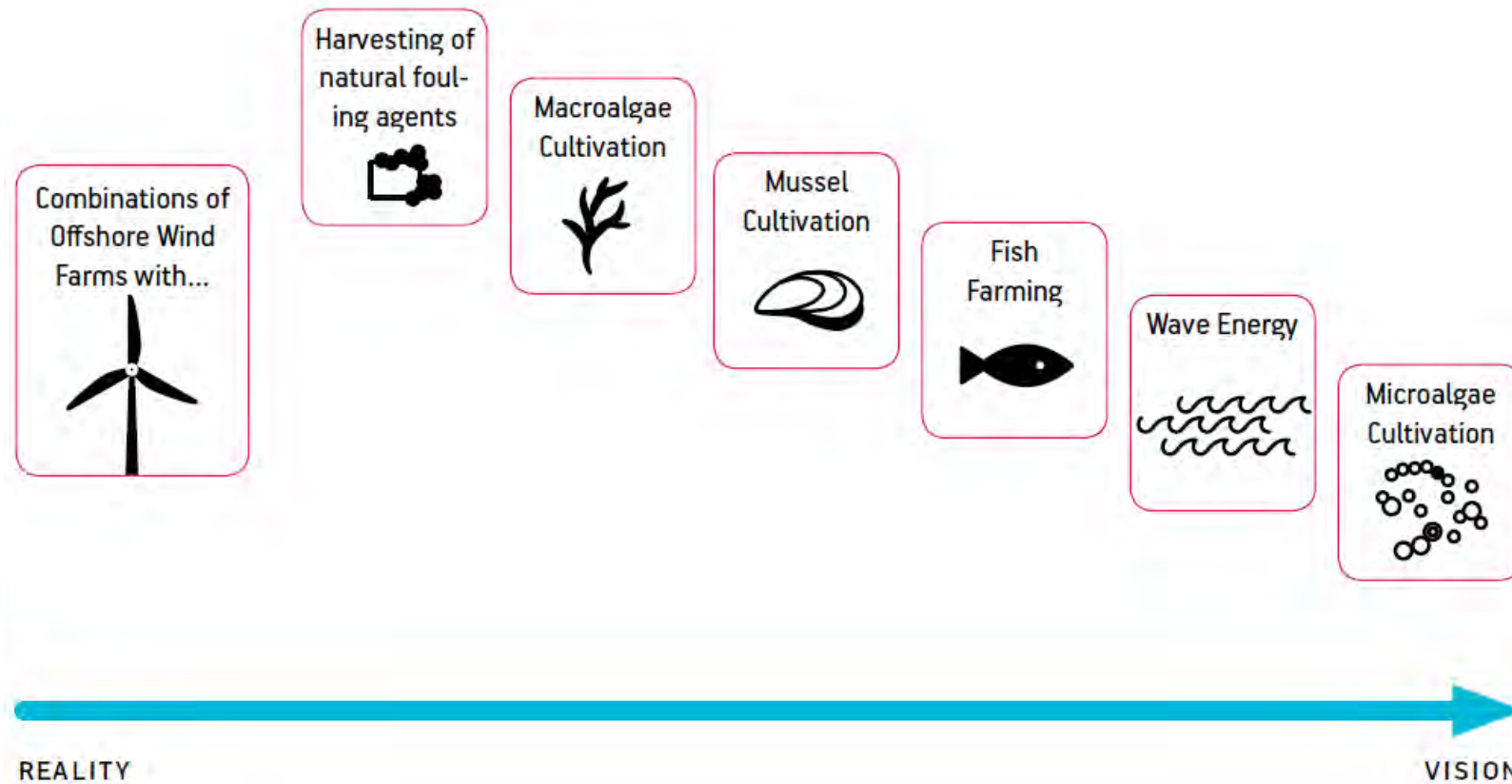
MARICULTURES and MSP

Integrated Multi-Trophic Aquaculture (IMTA)



MARICULTURES and MSP

POSSIBLE COMBINATIONS WITH OFFSHORE WIND PARKS





MARICULTURES and MSP

Don't expect too much....



MSP is not a panacea for all problems related to mariculture development:

- MSP can secure space for mariculture if this is a wish (policy decision) of coastal societies;
- MSP can decrease the spatial conflicts related to mariculture development;
- MSP can even improve environmental performance of some type of mariculture;

But it can not substitute other policy measures, even financial incentives or legal requirements (e.g. for wind mill farms developers to allow for co-existence with mariculture).



Conclusions

Still we should move anyway from sea hunting to conscious sea cultivation. (*Cieslak*)

MSP can help in doing it wisely as a part of the broader system of the management of the sea resources.

Thank you for your attention!

