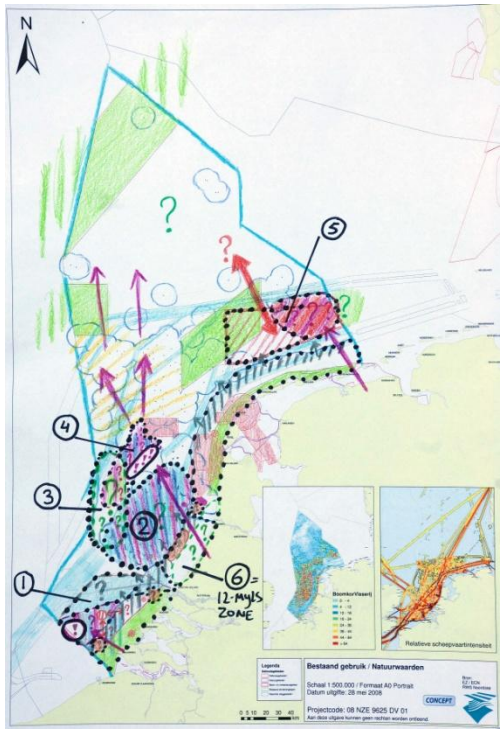


Ministry of Infrastructure and the Environment

Separating facts from fiction

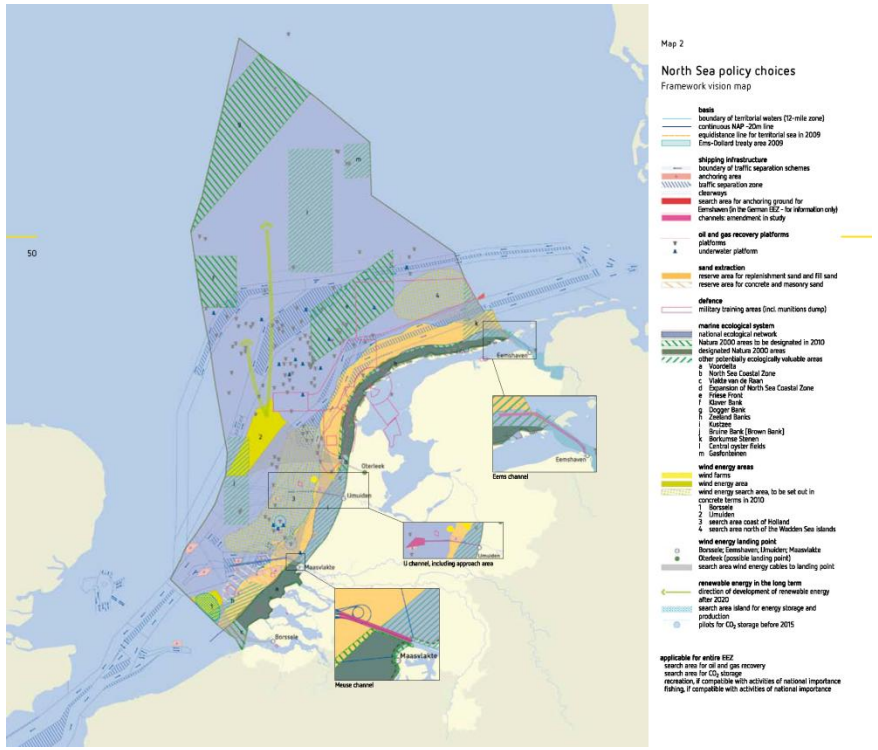
The use of data, information, knowledge and opinions in maritime spatial planning processes.

Lodewijk Abspoel

Expert Group EMODnet, Brussels 31 October 2012

MSP and knowledge management: The Dutch case

- **Brief history of MSP in The Netherlands**
  - First integrated maritime spatial plan in 2009.
  - Result of joint fact finding process, mainly driven by task to find suitable areas or wind farm development offshore.
  - Workflow products included a.o. stocktaking, Strategic Environmental Assessment, Formal Safety Assessment, Social cost-efficiency analysis.



MSP and knowledge management: The Dutch case

- **Data, information, knowledge and opinions are components of a common knowledge base for informed decision making**
  - Agreeing to the facts and figures and the cause/effect thumb rules
  - Getting the level of detail of data and info right
  - Listening to opinions: focus on interests/stakes not on positions
  - Defining a (common) research agenda
  - Reducing uncertainties
  - Getting all relevant info on the table
  - Translate data/info into management information and visualize it

- **Way forward of MSP in the North Sea: further integration and cooperation: more use of 'spatial application infrastructure' (e.g. North Sea app).**

MSP guiding principle 10: strongdata and knowledgebase

- "MSP has to be based on sound information and scientific knowledge. Planning needs to evolve with knowledge-adaptive management"

- Little is known of the sea, and of the impact of human activities, especially cumulative impacts
- Sound political decision making requires a sound evidence base, and incorporates information and opinions
- Quality assurance and joint fact finding/research are part of good stakeholder management
- Plans will be based on environmental impact analysis, cost-benefit analysis, safety assessments etc

The importance of a common language

The MSP challenge 2030 / 2040

- Think big, think long term, think human beings and manage knowledge, info and data across sea basins / borders.
- Forecasting the future usages.
- Forecasting potential conflicts between users.
- Forecasting potential conflicts with environmental objectives.
- Ecosystem based planning: challenges ahead.
- Creating synergies/seanergies.
- Working towards a “7D Digital aquarium”: experiences with the MSP challenge 2011.

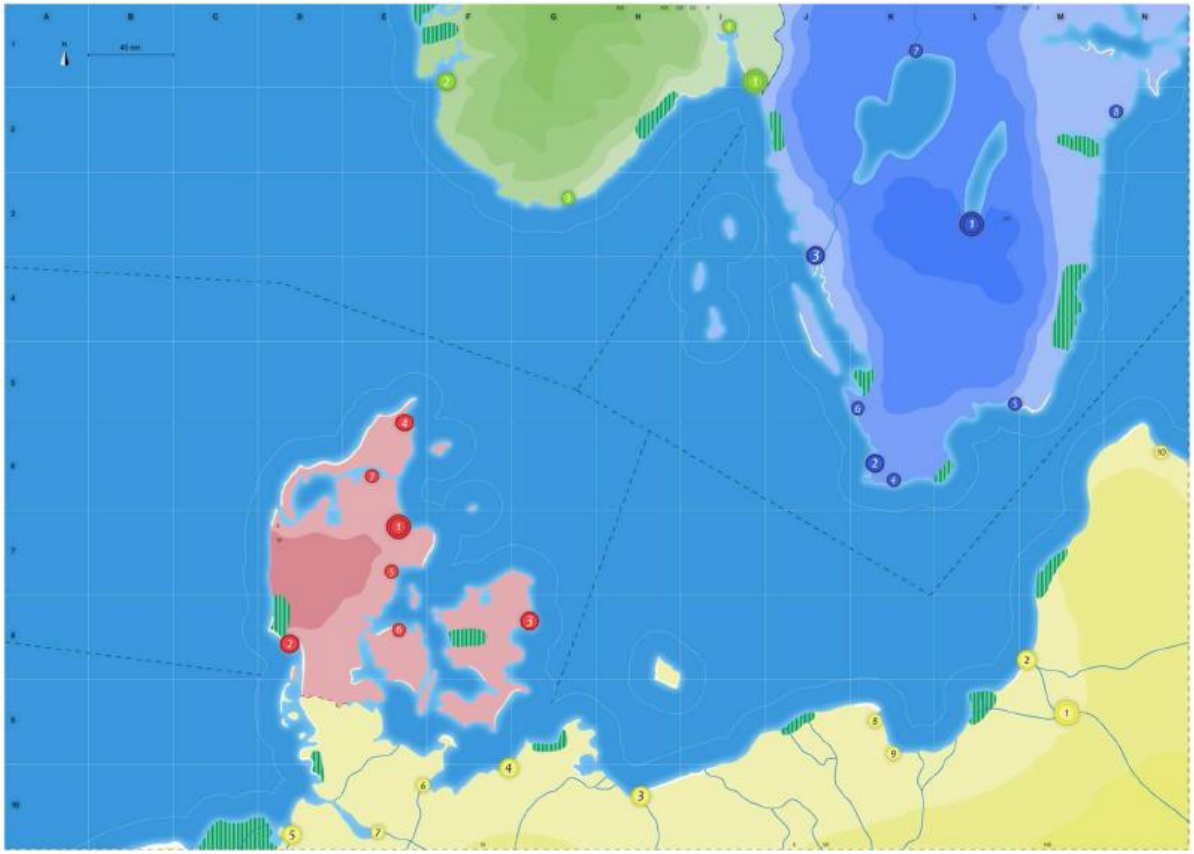
MSP Challenge 2011 (simulation game)

- *"contribute to the further development of (…) marine spatial planning (by) reinforcing and extending existing networks and sharing knowledge and experience between scientists, managers and planners (…) test how (scientific) data can be used in the development of an MSP plan (…)'*

Game:

- The objective of the simulation-game is to contribute to the international learning process on (ecobased) MSP in particular:
  - underlying complexities of MSP: ecological-technical and social political;
  - underlying regulatory principles and institutional frameworks of MSP;
  - joint development of (best) practices of MSP;
  - use of science, knowledge, data, methods and tools in MSP.

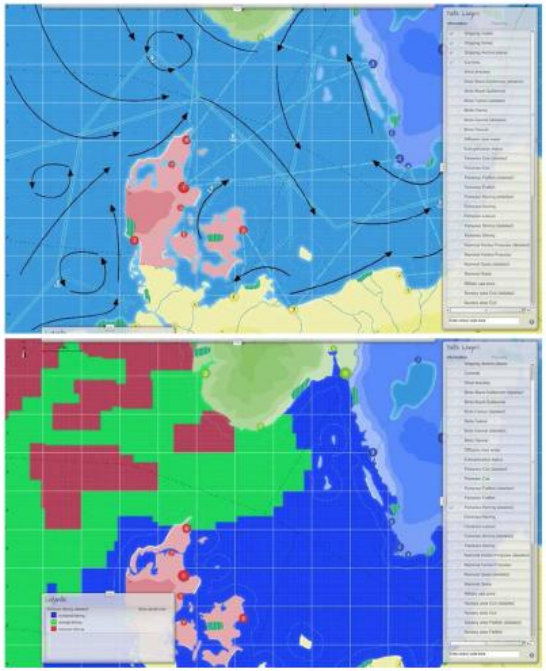
The Sea of Colours



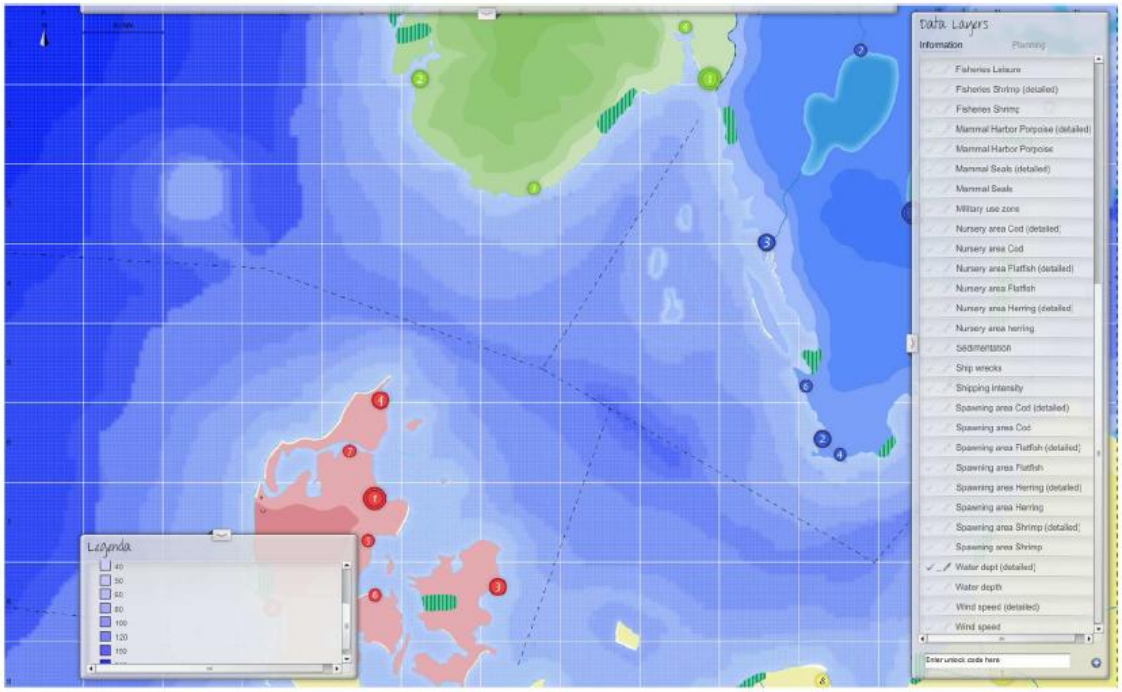
Digital Map Tool

- 48 layers of information (water depth, wind speed, fisheries, military use zones, …)
- 27 planning layers (wind farms, MPA habitat, anchor places, …)

…view information
…share information
…draw MSP plan



Digital Map Tool



TU Delft Challenge the future 13

Game day

TU Delft

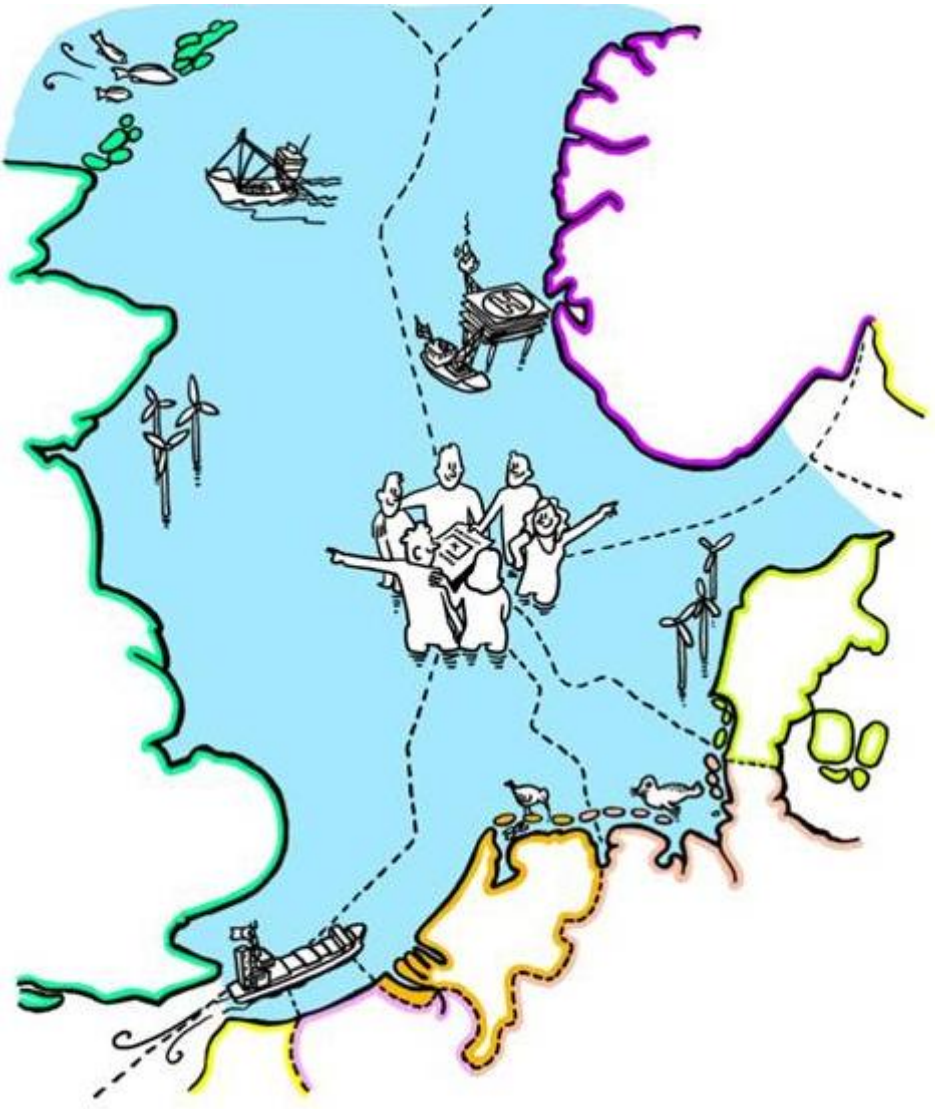
Challenge the future 16

MSP Challenge 2013 (under development)

- The game is played in 5 sea basins around 5 tables with 100 or more players in real time; in-game time continues to run. A certain time period can be chosen, e.g. from the year 2020 to the year 2050.
- During this period, the necessary plans are made and if they are approved the plans are implemented. Each implemented plan has a time span and at the end of this must be decided on decommissioning or "renovation".
- Game will be played on with multiple, but connected sea basins.
- The game takes into account the different layers of the sea (the sea floor, underwater, water surface, above water).
- When planning the game gives feedback on potential conflict situations that may occur as a result of the plan.
- It contains the information on the sea based on the information from the 'real' world (depth, fish stocks, etc.). This information is available in the game through map layers.
- In the background a cause / effect system with real world thumb rules calculates all the influences of the plans. The effects are shown by changes on the map and a dashboard showing the KPIs.

Role for EMODnet in MSP challenges ?

- Historical and in situ data versus getting a grip on the future:
  - thumb rules ecological effects human activities;
  - cumulated effects;
  - thumb rules for sea-use effects (e.g. ship movements related to off shore sites).
- Getting the most out of Emodnet in strategic or operational: who's responsible for what? (government needs versus investors needs)
- Smooth, quick and easy access to data and information.
- The role of scientist and their science – peer reviewing.
- The cross border component: sharing data and information.



Thank you for listening

Time for Q&A's.

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