Guide for cross-border spatial data analysis in Maritime Spatial Planning

Tua Nylén, 5.6.2019
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European Union
European Regional Development Fund

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PLAN4BLUE
MARITIME SPATIAL PLANNING FOR SUSTAINABLE BLUE ECONOMIES

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Plan4Blue publishes a new guide for spatial data analysis in Maritime Spatial Planning

- Aim: Improve the efficiency and transparency of spatial data analysis in MSP
- Targeted at actors in national and cross-border MSP:
  - Regional planners – aiming at helping them understand and evaluate maps and other outputs of spatial data analysis
  - GIS specialists – aiming to assist them in understanding Maritime Spatial Planning and designing spatial data analysis workflows in a goal-oriented way
- Based on: Plan4Blue experiences and literature

Nylén T, Tolvanen H, Erkkilä-Välimäki A & Roose M (2019). Guide for cross-border spatial data analysis in Maritime Spatial Planning. Publications of the Department of Geography and Geology of University of Turku 12. University of Turku, Turku.

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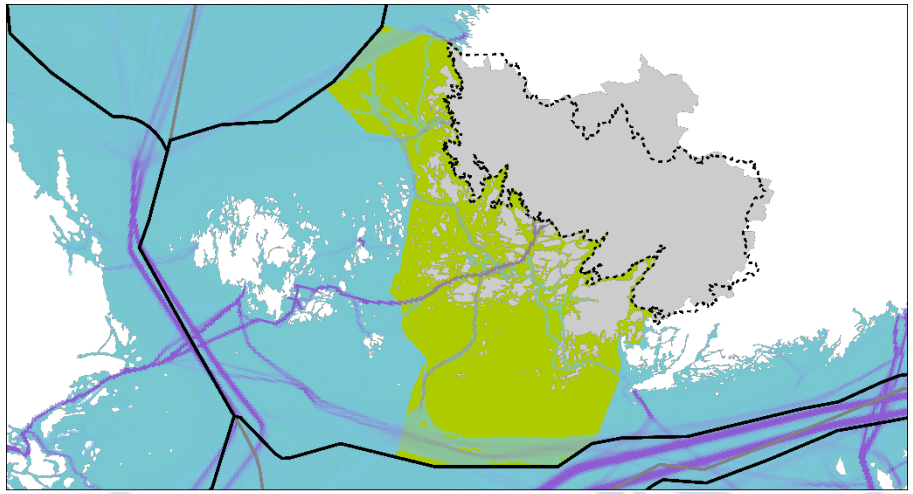
Cross-boundary issues in spatial information influence MSP processes at all scales

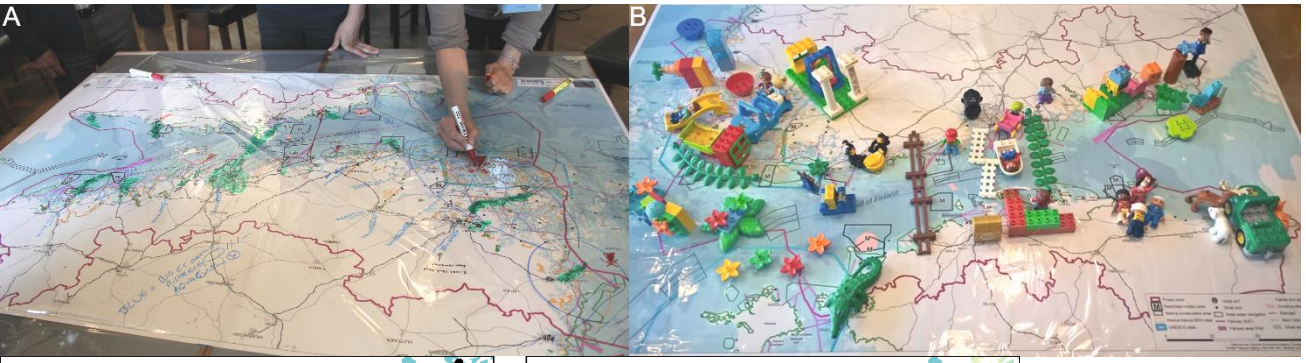
- Countries, counties and sectors must consider their neighbours
- Economic activities are often dependent on international and multisector interactions
- Habitats, species and environmental issues do not respect administrative borders and may be influenced by human activities on the other side of the border

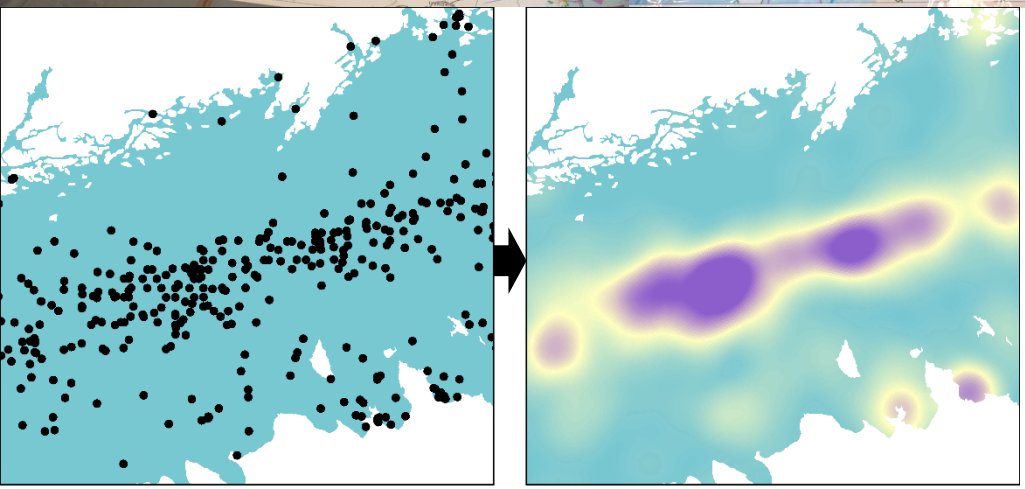


Additional challenges at sea compared to land use planning

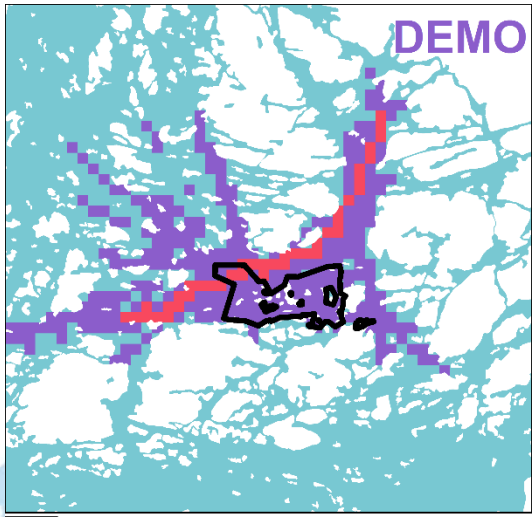
- Ownership and jurisdiction differ
- No static boundaries at sea
- Vertical dimension must be considered
- Multifunctionality and seasonal uses possible
- Less data available and specific data types are difficult to obtain
- Lack of official records of the influence areas of economic activities or the recreational use of sea space
- Land-sea interaction is vital for the environmental status and economic development of the sea, but difficult to transform into explicit spatial information

Main steps of the MSP spatial data analysis process





I. Set stage for spatial data analysis in MSP
II. Collect and manage spatial data
III. Analyse spatial data – examine interactions
IV. Visualise MSP on maps

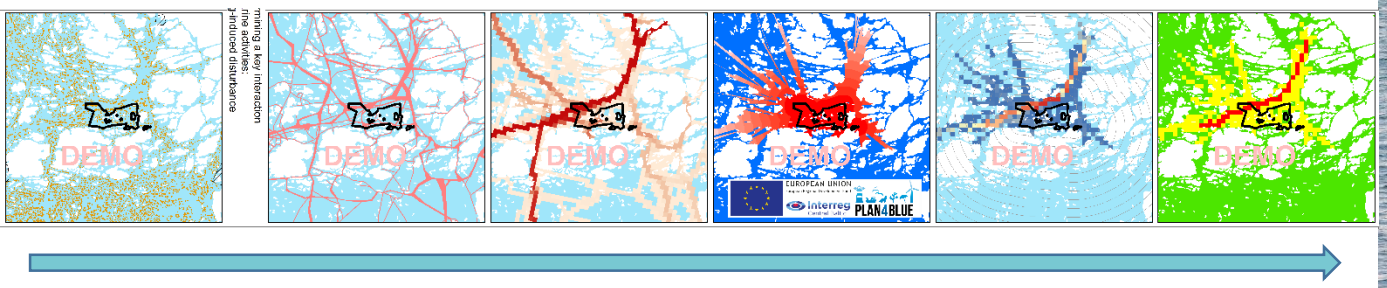


Principles to improve the efficiency and transparency of spatial data analysis in MSP

1. Goal-oriented process
2. Coordination and collaboration
3. Critical data selection
4. Documentation
5. Sharing across borders

1. Guiding spatial data analysis in a goal-oriented (instead of data-oriented) way

- To serve common goals
  - ➢ Relevance of the results
  - ➢ Efficiency
  - ➢ Identification of data gaps



2. Collaborating with all MSP actors throughout the process

- To reach goal-oriented spatial data analysis
- Practical tool suggestion: process-specific guidance document for MSP spatial analysis
  - Data evaluation criteria (plan area, scale, timeframe…), data inventory, analysis goals, harmonization guidelines…

3. Using the best available spatial data and excluding inadequate data from the analyses

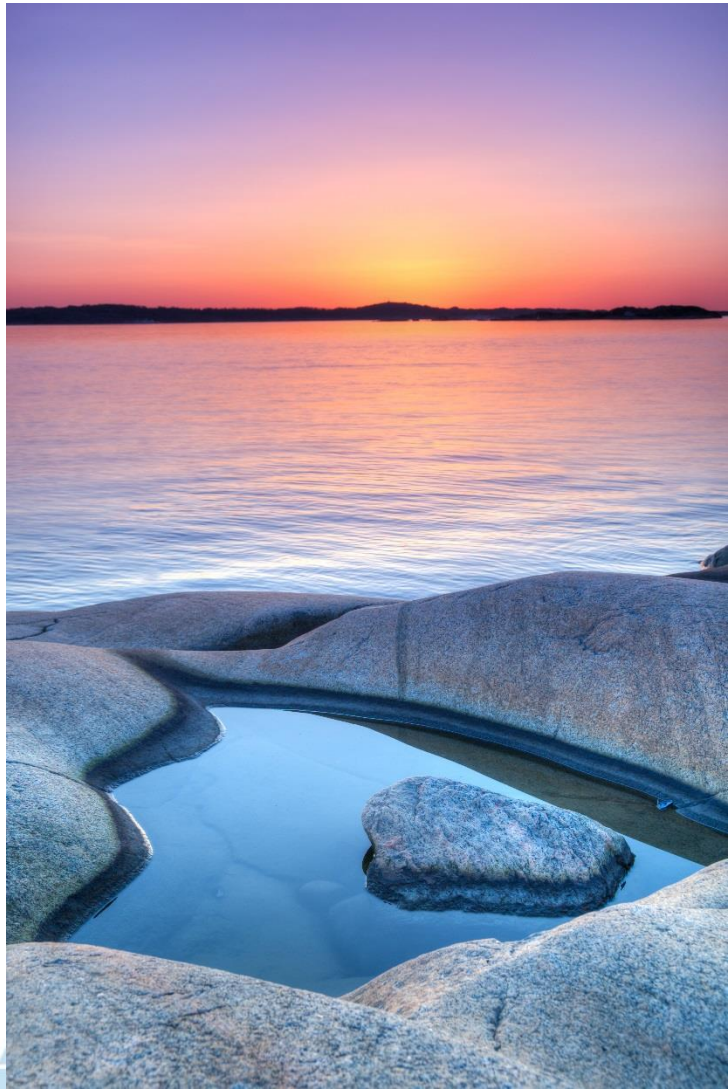
- Is bad data better than no data?
- How to account for:
  - Seasonal cycles
  - Vertical dimension
  - Scaling issues
  - Up-to-date information

4. Documenting the utilised spatial data and analysis methods and their limitations at every step of the MSP process

- Metadata
- Citations
- Methodological documentation
- Disclaimers
- Practical tool suggestion: metadata catalogue

5. Sharing and utilising high quality spatial data across administrative and sectoral borders

- Open access – open data standards
- Attributes and metadata in English
- Cross-border communication



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Thank you!

MORE INFORMATION

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