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# Norsaic **REPORT**

**CRITERIA AND NEEDS  
FOR INNOVATIVE  
TOOLS IN MARITIME  
SPATIAL PLANNING**



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## Work Package 2: Innovation Capacity in MSP

# CRITERIA AND NEEDS FOR INNOVATIVE TOOLS IN MARITIME SPATIAL PLANNING

## Workshop Report

A workshop on Criteria and Needs for Innovative Tools in Maritime Spatial Planning (MSP) was recently held to develop criteria and objectives for innovative MSP tools. The session focused on key topics including the multi-use of maritime space, cumulative impacts at sea, and land-sea interactions.

### **Current use of MSP Tools**

The workshop took place on September 10, 2024, bringing together nearly 20 stakeholders, most of whom had experience with MSP tools. However, their frequency of tool usage varied widely—from daily use to occasional application, such as once a year. Commonly used tools were primarily GIS-based or involved data portals like EMODnet.

Participants were invited to identify the key benefits of using MSP tools. The most frequently cited advantages included facilitating data sharing, enhancing communication and collaboration, supporting mapping efforts, and enabling spatial analysis. Additionally, participants highlighted the tools' ability to improve data accessibility and streamline data processing as significant benefits. A complete overview of the identified benefits is provided in Figure 1.



Figure 1: Overview of main benefits for using MSP tools

### Criteria and Requirements for MSP Tools

The majority of the workshop was dedicated to developing criteria and requirements for innovative MSP tools together with the participants. Attendees were asked to prioritize the most relevant criteria by ranking clusters of categorized criteria based on their importance.

For this purpose, a distinction was made between high level criteria that are overarching and sub criteria, which are more specific and actionable. This approach allowed participants to address both strategic and operational needs. The following high-level criteria were identified as most important during the stakeholder session:

- **Transparent:** The tool is clear what data and methods are used and how
- **Easy to use:** Functionality and meaning are easy to understand, the tool is intuitive
- **Comprehensive:** The tool covers all relevant metrics
- **Relevant:** The tool should produce meaningful information
- **Supports sharing:** The tool supports discussion and dissemination of the results

When delving deeper into the criteria from strategic to operational levels, the following sub-criteria have been identified as the most important:

- **Intuitive visualization and interpretation:** Intermediate results should be easily visualized and interpreted by users.
- **FAIR data principles:** Data should adhere to FAIR (Findable, Accessible, Interoperable, and Reusable) principles to ensure usability and compliance.
- **Source traceability:** All data and research sources must be traceable, providing clear documentation and provenance.
- **Transparent cause-and-effect relationships:** The tool should clearly present cause-and-effect relationships, with appropriate references to scientific or meta sources.
- **Map-based interface:** The platform should include robust map-based functionalities for intuitive spatial data interaction.
- **Up-to-date data:** The data utilized should be current, ensuring relevance and accuracy.
- **Seamless data ingestion and export:** The tool should support straightforward import and export of data layers, including the ability to create maps and export to formats like XLS, SHP, or others, for broader applicability.
- **Clear workflow guidance:** The tool should provide clear and intuitive instructions for its workflow, detailing the steps (e.g., which buttons to press and in what order).
- **Efficient data handling:** The tool must handle new and updated data efficiently, minimizing wait times and ensuring seamless operation.
- **Multi-country accessibility:** The tool should be designed to accommodate use across multiple countries, promoting scalability and adaptability.

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This exercise sparked lively and engaging discussions, leading to new ideas and perspectives. The outcomes not only offered valuable input for the project team but also provided actionable insights for the broader community of developers working on tools for marine and coastal systems.

It should be noted that generic criteria might face the challenge of being broadly applicable but are not perfectly suited to a specific case or tool. To address this, tool users should be asked during the evaluation of tools to not only score tools on each criterion but also reflect on the criterion's relevance to the specific tool. This dual evaluation will provide insights into the tools and helps to refine the criteria themselves.

### **Conclusion and Next Steps**

Overall, the findings from this workshop are expected to serve as valuable input for the MSP community, particularly for organizations and individuals involved in developing MSP tools for stakeholders. While similar exercises on needs and challenges have been conducted in the past, this workshop placed greater emphasis on specific details and operationalizing outcomes.

By focusing on actionable insights, the workshop effectively bridged the gap between the strategic needs of MSP stakeholders and the technical requirements of tool developers. This approach ensures that the input provided is both practical and sufficiently detailed to inform the creation of innovative and effective tools. For the NORSIAIC project, these inputs will also be used to further update and develop MSP tools in the coming period.