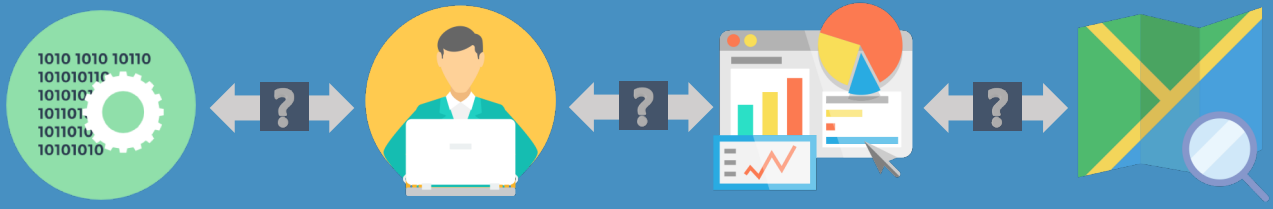
TOOLS AND APPROACHES FOR MSP INTEGRATION



Input
scientific/stakeholders

Planning tools
e.g. software /methods

Outputs/Outcomes
best available evidence

Decision support
for all types of MSP

Governance Baselines

A time trajectory that shows the development of policies, institutions and broader environmental paradigms over time.

Outcomes

Analysis of the context for MSP and the wider political, institutional and legal environment.

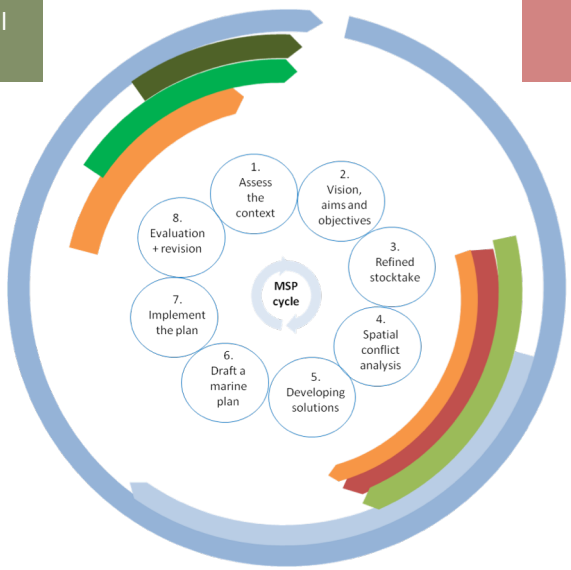
Spatial Economic Benefit Analysis

Identifies and maps the spatial distribution of beneficiaries (jobs, companies) associated with a given set of maritime uses.

Outcomes

Maps showing the geographical distribution of beneficiaries at different scales.

Application of the tools in the MSP process



Bowtie Analysis

Connects the causes of an event (e.g. sector growth leading to more offshore wind farming) to its effects (e.g. impact on MSP, environmental impact)

Outcomes

Cause-and-effect chains that give an overview of existing management measures. Analysis of management, legislative and policy gaps.

Culturally Significant Areas

An approach to identify and take account of immaterial cultural values in communities. Five criteria are used for determining cultural significance.

Outcomes

A deeper understanding of why communities value different places. Baselines of immaterial values, maps and risk assessments.

Marxan

Site selection software that helps to systematically identify possible locations for specific uses or nature conservation based on an iterative, cost optimizing model and geographic data.

Outcomes

Maps and data visualizing the spatial management options for the modelled scenarios.

Integrated Indicator System

Evaluates the impact of MSP against an initial baseline and is thus capable of evaluating MSP ex-post.

Outcomes

Monitoring and evaluation of environmental and socio-economic change before and after the introduction of MSP.

Open Standards for the Practice of Conservation

Process standards including a comprehensive, 5-step adaptive management approach, an ecosystem-based conceptual framework and a digital and practical toolbox. All is owned and supported by a community of practice and learning (Conservation Measures Partnership).

Outcomes

Systematically structured planning, based on a situation specific conceptual model, enabling evaluation and learning and process-based multidimensional integration.

BONUS BALTSPACE project has received funding from BONUS (Art 185), funded jointly by the EU and national funding institutions.

Authors: Kira Gee, Michael Gilek, Cordula Göke, Andrea Morf, Erik Ooms, Jacek Zaucha

Institutional affiliation: Helmholtz-Zentrum Geesthacht Zentrum für Material-und Küstenforschung GmbH, Germany; Södertörn University, School of Natural Sciences; The Department of Bioscience (BIOS), Aarhus University, Denmark; Swedish Institute for the Marine Environment, Sweden; S.Pro, Germany; Maritime Institute in Gdansk, Poland.

TOOLS AND APPROACHES FOR MSP INTEGRATION

Tool analysis results: Strengths and limitations

Governance Baselines

Strengths

Flexible analytical approach that can be applied to any context and scale. Can be done as a desktop exercise or with stakeholders. May support future policy integration by pointing out historical trajectories.

Limitations

Backward- rather than forward-looking. Cause-and-effect of events is difficult to establish. Requires some tacit knowledge of past events and support from the research community.

Bowtie Analysis

Strengths

Flexible, can be used in any context at any scale. Potentially participative. Can contribute to greater policy integration and help to fill in management gaps.

Limitations

Conceptually challenging. Requires an experienced facilitator. Computer software is expensive.

Spatial Economic Benefit Analysis

Strengths

Integrates economic data in MSP. Can be used to promote stakeholder, sector and knowledge integration at all scales. Shows the effects of different spatial development preferences or sector trends in the sea.

Limitations

Depends on available data

Culturally Significant Areas

Strengths

Focus on immaterial values. Integrates scientific and local/traditional knowledge and different knowledge systems. Promotes land/sea integration. Broadly participative, can include stakeholders not normally part of MSP.

Limitations

Takes time and resources. Requires strong social science skills. Some results can be difficult to map.

Marxan

Strengths

Supports knowledge integration by bringing together ecological and socio-economic data. Scenarios can help with both conflict resolution ("what if") and work towards drafting a spatial plan. Offers much potential for stakeholder integration and a platform for debate.

Limitations

Requires specialist skills and facilitation. Can seem like a black box. Depends on good input data. Results require careful interpretation.

Integrated Indicator System

Strengths

Supports knowledge integration through combining ecological and socio-economic knowledge. Uses data that is collected anyway (statistical data, MSFD descriptors) and expands it (cumulative impact assessment). Can help stakeholder integration if done in a participative context.

Limitations

Expert-led and only marginally participative. Dependent on data availability/access. Problems of attribution when measuring the effects of MSP.

Open Standards for the Practice of Conservation

Strengths

Supports all dimensions of integration if used in participatory process. A systematic way to visualise, structure and connect knowledge and procedures. Facilitates learning within and across processes. Can be matched to various scales and needs. A global community of practice provides support.

Limitations

Most suitable for ecosystem-oriented MSP (incl. ecosystem services and human wellbeing). Clear links to MSP process need to be established from start. To pay off the high initial effort, long-term commitment and institutional support are needed. Skilled facilitation and good knowledge of the approach or mentoring are essential.

More information on BONUS BALTSPACE tools on www.baltspace.eu:

- Report: Addressing MSP integration challenges: The role of tools and approaches
- Handbook: Addressing MSP integration challenges: A handbook of tools and approaches
- Video tutorials

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