





BONUS BALTSPACE PROJECT (April 1, 2015 – March 31, 2018)

The final publishable summary report

Date: May 31, 2018

1 BONUS BALTSPACE overall goals and expected final results

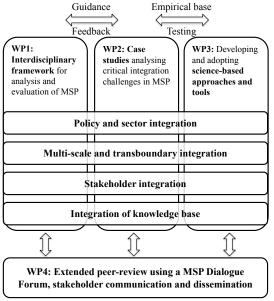
The **overarching aim** of the BONUS BALTSPACE project is to:

Provide science-based approaches and tools to clarify and improve the capacity of Maritime Spatial Planning (MSP) as a policy integrator, and thereby enhance the capabilities of society to respond to current and future challenges of sustainable Baltic Sea governance.

Specifically, BONUS BALTSPACE aims to:

- Develop an analytical framework for analysing integration in MSP to diagnose shortcomings and inefficiencies.
- Identify concrete obstacles to improved efficiency and effectiveness based on detailed studies of strategically selected case studies and through continuous input into the research process from external experts, practitioners and stakeholders.
- Develop and evaluate MSP approaches and tools, which target improved integration of MSP processes.

2 Work carried out in the project



To reach the project objectives, analyses of challenges and opportunities associated with various aspects of integration in MSP (i.e. integration of policies & sectors, over scales & boundaries, stakeholders and knowledge base) have been undertaken.

Research activities have been organised in a set of Work Packages (WPs), where WPs 1-4 addressed specific research and communication/dissemination related objectives and associated so-called 'integration themes' that served to further focus, synthesis and complement work on the studied MSP integration topics in and between the WPs (Fig 1).

Figure 1. Organisation of work in BONUS BALTSPACE.

2.1 WP1: Interdisciplinary analytical framework

WP1 has developed an interdisciplinary framework to guide the analysis of MSP challenges and opportunities in Baltic Sea MSP and to aid the development of MSP approaches and tools.

This was done in three steps (Fig 2). First, a comprehensive literature review was performed to examine the varied roles of integration in MSP. Based on this survey a set of key integration challenges were identified (Table 1). Second, results of pilot case studies helped refine the analytical framework even further. In this step, we added a focus on temporality as a key dimension of integration that is important for understanding the role and function of MSP (Table 1). This work also confirmed that we should further consolidate our existing perspective on how integration practices relates to the MSP end goal of contributing to sustainable seas. Third, based on the case study results and additional literature review on MSP evaluation, we developed a proposal for a MSP evaluation approach based on a 'sustainability of governance' approach. This stage also assessed the relevance of the analytical approach to other parts of the world (e.g. Australia, USA).







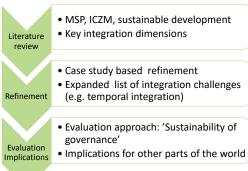


Table 1. MSP integration challenges identified.

Table 11 Was integration chancinges rac			
MSP integration challenge			
cross-border			
horizontal- policy/sector (balancing			
economic growth vs environment)			
stakeholder			
knowledge			
*temporal			

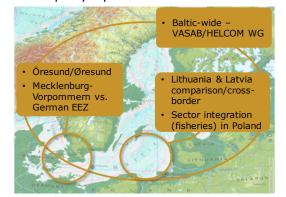
^{*}Added to the analytical framework

Figure 2. Methodological steps in WP1.

WP2: MSP case studies and analyses of integration challenges

This WP analysed socio-ecological and institutional contexts in which integration challenges are embedded and play out in MSP practice. While this work centred on identifying limits and obstacles to integration, it also examined factors which enable and enhance integration in MSP in different parts of the Baltic Sea Region (BSR). The main vehicle for this was the investigation of MSP integration in various case study areas, examining a wide range of MSP settings, stages and integration challenges (Fig 3).

The case studies built on an extensive document analysis and involved interviewing a wide range of MSP actors (Table 2), including those involved in and responsible for MSP in each country/case study setting as well as relevant national authorities, sector representatives, scientists, intergovernmental organisations and other affected actors, such as fishers, wind power entrepreneurs, non-governmental organisations, municipality representatives and lower level experts and decision makers, among others.



Authorities ICOs Costore

Table 2. Case study interviews (Saunders et al. 2017)

	Case	/Politicians	1005	/users	NGOS	Science
	Baltic-wide	17*,**	6	-	1**	1**
	Latvia/	22	-	-	5	-
	Lithuania					
	The Sound	20	-	5	1	-
	Germany	6	2	5	2	-
	Poland	5	-	12	3	2
*Interviews partly undertaken by Baltic SCOPE shared					d with BA	I TCDACE:

by Baltic SCOPE, shared with BALTSPACE;

Figure 3. MSP case studies in BONUS BALTSPACE

WP3: Science-based approaches and tools

WP3 developed and assessed practitioner-oriented approaches and tools for MSP that could help facilitate multi-level, policy and sector, stakeholder and knowledge integration. The specific tasks were:

- Understanding the role of tools in MSP and their current application in practice.
- Describing a set of potentially useful tools for addressing MSP integration challenges.
- Assessing the capacity of selected tools in addressing integration challenges.
- Providing practical recommendations and suggestions for future research.



- 1. BowTie
- 2. Culturally Significant Areas
- 3. Governance Baselines
- 4. Integrated Indicator System for monitoring the spatial, economic and environmental effects of MSP solutions
- 5. Marxan
- 6. Open Standards for the Practice of Conservation
- 7. Spatial Economic Benefit Analysis (SEBA)

^{**}Interviews/Questionnaires/Personal communication







2.4 WP4: MSP Dialogue forums, stakeholder communication and dissemination



Figure 4. Key examples of WP 4 activities (bottom).

Table 3. Key examples of MSP Dialogue Forums (out of a total of 11)

Occasion	Target group	Scope	Focus
Baltic SCOPE	Internal (BSR)	Pan-	WP3 tools and
kick-off, Riga	stakeholders (planners) & researchers	Baltic	approaches
2nd Baltic MSP Forum, Riga	Planners and researchers from the BSR and beyond	All cases	General agreement towards the suggested integration barriers
Meeting national	Internal	German	Feedback German
and sub-national	stakeholders		case study cross-
MSP authorities, Hamburg	(planners)		border MSP
Final Project	Internal and	All	All integration
Conference,	external		challenges, and
Brussels (EU	stakeholders		transferability of
Parliament)			findings
HELCOM-VASAB	Internal	All	MSP tools and
MSP Working	stakeholders		integration challenges
group meeting,			

In WP4 a diverse set of methods, activities and tools for dialogue, communication and dissemination were developed and used (Fig 4). Most importantly, we have arranged eleven **MSP Dialogue Forums** to discuss MSP integration challenges and project insights with planners, decision-makers, sectoral experts and scientist from various Baltic Sea countries (Table 3). Other important WP4 activities included developing of an **Interactive Communication Tool** to raise stakeholders' awareness, development of **policy briefs** and other popularised outreach material and the production of **training tutorials** on MSP tools and approaches.

The overarching objective of these activities has been to increase the long-term impact of the project, improve the validation of research findings, as well as to increase input and support from practitioners.

3 Main results achieved during the project (with focus on WPs 1-3)

3.1 WP1: Interdisciplinary analytical framework

This part of the project developed an approach to examine integration in MSP that is both conceptually informed and empirically attuned to the specificities of the BSR. This approach meant that the analytical findings emanating from the project were particularly salient to MSP policy and practice in the BSR. More specifically the project:

- Identified analytical and empirical linkages between integration and different aspects of sustainability as a process and outcome. Table 4 shows the thinking underpinning this approach.
- Deepened insights on what 'sustainability of governance' means and how it can be applied in MSP across a range of functions and activities.
- Developed an evaluation approach to improve key MSP processes through linkage with the MSP aim of contributing to the attainment of sustainable seas.
- Elaborated a conceptual framework to examine social sustainability in MSP, which could also be used to shape and refine MSP practice.

Table 4. Relations between integration and sustainable development.

Integration	MSP Implementation	Links to Sustainable Development
Dimension	Emphasis	Discourse
cross-border	disjointed - coherent	affects possibilities for a harmonised approach across boundaries and scales
policy/sector	ecological limits - win-win	affects likelihood trade-off or synergies between sustainable development goals
stakeholder	legitimacy - efficiency	affects possibility for participation and deliberation
knowledge	scientific knowledge - stakeholder knowledge	affects quality of the evidence-base and legitimacy
temporal	static – adaptive	affects the capacity of the MSP process
		adapt to changing socio-environmental conditions







3.2 WP2: MSP case studies and analyses of integration challenges

WP 2 generated extensive and rich empirical material on MSP and integration challenges in the BSR and the importance of (country) contextual factors on MSP (Fig 5). This also resulted in the development of a set of general and specific policy recommendations (Fig 6).



01

Horizontal & vertical integration

Integration across administrative and geographical borders is pivotal to enhance functional coherence in the planning of marine areas, particularly at the macroregional, Baltic Sea wide level. A key challenge is to promote effectiveness and synergies between parallel planning efforts in MSP at different administrative levels and in different countries and regions. This is important, since MSP is grounded in many regulations, norms, and practices at each of the planning levels: European, macro-regional (Baltic Sea region) and national (at times including regional and local levels). Moreover, various interrelated MSP objectives, roles and functions are pursued at different jurisdictional levels in MSP processes.

O2 Policy and sector integration

One major challenge of is to increase coherence between relevant global policies, EU Directives, macro-regional commitments, national regulations and strategies, and national implementation. This is especially complex in MSP, as planning is typically embedded in different regulatory and ideological contexts. Also, bringing together and matching their goals, targets and ambitions and expectations towards the marine environment and its resources is important to foster sustainable development of marine areas and to avoid a domination of well organised lobbies.



03

Stakeholder integration

The ambition with regard to is an early and broad participation of stakeholders. This remains a challenge, since – despite a growing agreement on the need for such social inclusiveness – most stakeholder involvement in Baltic Sea MSP processes have so far been temporary/project-driven and/or restricted to authorities and key sector representatives. The stakeholder integrationreasons for broader stakeholder involvement can be both practical (e.g. improved MSP processes and outcomes) and value and rights based (e.g. linked to democratic rights to participate).

04 Knowledge integration

One of the key challenges related to in MSP centres on how to mix expert and scientific knowledge with other types of stakeholder knowledge to improve the MSP knowledge base. Fair and open communication between scientists/experts and other stakeholders can foster mutual learning across groups over time. However, different deficits and limitations of knowledge, scientific uncertainty and scientific disagreement among different disciplinary perspectives are also important challenges to address.

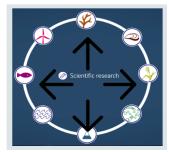


Figure 5. Summary of key WP 2 insights from MSP case studies in the Baltic Sea Region (from BONUS BALTSPACE policy brief 'Challenges and possibilities for MSP integration in the BSR' – www.baltspace.eu)







Solutions: Multi-dimensional integration



MSP can enable the development of mutual understanding, compromises and collaboration, as well as the identification of fundamentally different interests, values and unavoidable trade-off.



To be truly adaptive, MSP authorities must take account of different time horizons of national and international processes



The aims of integration should be clearly defined, and criteria measuring progress should be developed.



Integration requires institutional capacity building. A more bottom-up approach involving stakeholders and a wider knowledge base is required.

Recommendations / solutions for specific challenges

Hor. & Vertical

The HELCOM-VASAB WG on MSP needs to find an agreement on which incompatibilities (e.g. differences in values, goals, priorities, ambitions, administrative routines etc.) between countries are most urgent to address to ensure coherence of the planning efforts at a Baltic-Sea level.

The HELCOM-VASAB WG on MSP should try to enhance interaction among national sectoral and regional/local level administrations

National MSP authorities could promote the establishment of bilateral or regional groups to discuss planning issues and share experiences in specific interest areas.

Policy & sector

Systematically search to exploit policy and cross-sectoral synergies while transposing international obligations.

Closer interaction between environmental protection and resource use (Blue growth) sectors to promote long-term sustainability

Regional groups of specialists can be set up to refine coordination of policies on specific MSP components to address potential trade-offs and seek synergies between policies and sectors.

Stakeholder

Engagement of stakeholders at relatively early stages of the MSP process should be enhanced

Stakeholder involvement in MSP may need to become more continuous than the formal process and clearer in its aims. Authorities should also explore nonstatutory forums and methods

Improve the capacity and resources of stakeholders to participate effectively and meaningfully. Also authorities designing and moderating MSP processes need to have the capacity, time and resources

Knowledge

Strategic Environmental Assessments as foreseen by the EU SEA Directive or sustainability appraisals may offer potential to integrate ecological and social knowledge.

MSP should use social science to develop approaches to better support stakeholder engagement, as well as open and democratic forms of MSP decision-making.

Develop robust evaluative criteria to judge the sufficiency and quality of the evidence base, including consideration of uncertainties and the limits of science.

Figure 6. Key policy and stakeholder-related recommendations on MSP integration challenges (from BONUS BALTSPACE policy brief 'Challenges and possibilities for MSP integration in the BSR' – www.baltspace.eu)

3.3 WP3: Science-based approaches and tools

Key insights of WP3 research are summarised in Figure 7 and relate to:

- a better conceptual understanding of **how tools could potentially contribute to improve how integration is addressed** in MSP.
- an overview of which integration challenges are easily covered by various tools and which are not and the particular strengths and weaknesses of each tool/approach.







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.

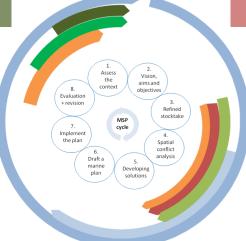
Bowtie Analysis

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.

Application of the tools in the MSP process



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.

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.

Figure 7. Key findings on the application of the tools and approaches in the MSP process (from BONUS BAL RONLIS BONUS) e role of tools in promoting integration', www.baltspace.eu).

The continuity plan of the project

We plan the following actions that will secure a continued access, dissemination and development of findings:

- Website: WWW.baltspace.eu will continue to provide access to project reports and outreach material.
- **Data availability:** Metadata descriptions for project datasets have been developed. While ethical issues and non-disclosure will be considered, data will be made available with as few restrictions as possible.
- Open Access (OA) scientific publishing. A total of twenty four (24) OA publications in international peer reviewed journals and book volumes are foreseen as a result of the project.
- **Scientific conferences**: Partners have organised sessions at upcoming international conferences (e.g. ICES ASC 2018 and the ECSA 57).
- Academic networking: Partners will continue to actively interact with key MSP research networks (e.g. ICES WGMPCZM and the MSP Research Network). Joint publication with international experts is planned.
- MSP projects and national planning: Partners will continue to contribute to authority-led projects (e.g. Pan Baltic Scope) and to national MSP processes.
- New research projects: Partners are actively developing project proposals based on project findings to national and EU funders.