

BONUS BALTSpace FINAL REPORT

TOWARDS SUSTAINABLE GOVERNANCE OF BALTIC MARINE SPACE

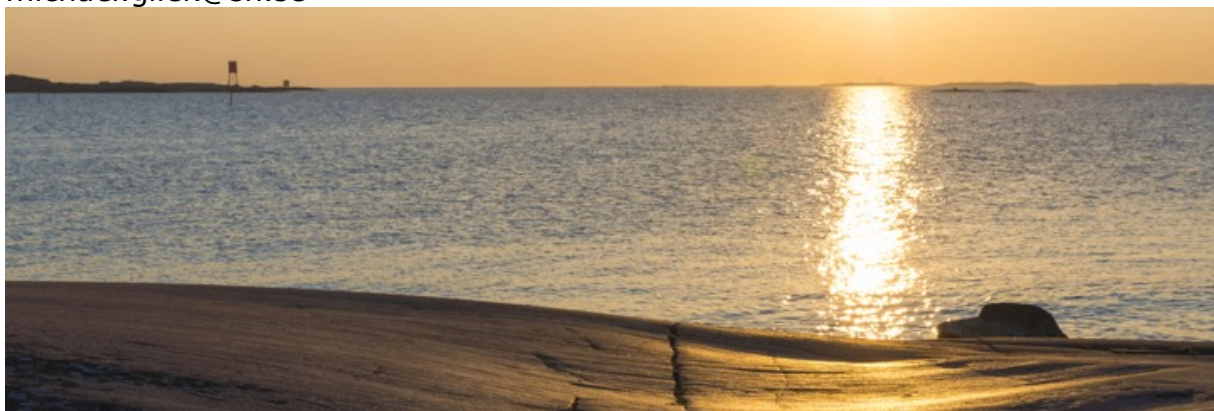
BONUS BALTSpace DELIVERABLE 5.5

Reporting period: April 1 2015 to March 31 2018

Michael Gilek^{1,2}

¹ BONUS BALTSpace Coordinator (report is submitted on behalf of the consortium)

² MG is professor in environmental science; Affiliation: Södertörn University, Sweden; telephone +46 (0)8 608 48 62; +46 (0)70 792 32 78; michael.gilek@sh.se



www.baltspace.eu



Important note: This document is an internal deliverable of the BONUS BALTSPEACE project. Please do not cite without prior permission by the authors.

Contents

1	Aims and organisation of BONUS BALTSPEACE	4
2	Scientific achievements in BONUS BALTSPEACE.....	5
2.1.	WP1: Interdisciplinary framework for analysis and evaluation of MSP in the Baltic Sea.....	5
2.2.	WP2: Analysing institutional and socio-ecological contexts of MSP and critical integration challenges in the Baltic Sea Region	8
2.3.	WP3: Developing and adopting science-based approaches and tools	11
2.4.	WP4: Extended peer review, stakeholder communication and dissemination	14
3	Summary of the produced scientific and technological foreground capable of industrial or commercial application, plan for the use and dissemination of this foreground and measures taken for its protection .	19
4	Further research needs.....	20
5	Promoting an effective science-policy interface to ensure optimal take up of research results.....	25
5.1.	Key activities and impacts at the science-policy interface (linked to performance indicators 1-4).....	26
5.2.	Illustrative examples of BONUS BALTSPEACE impact on MSP processes ...	27
6	Collaboration with relevant research programmes and the science communities in the other European sea basins and on international level.....	30
7	List of peer-reviewed publications and PhD dissertations.....	33
8	Progress in comparison with the original research plan and the schedule of deliverables.....	35
9	Wider societal implications	38

1 Aims and organisation of BONUS BALTSAPCE

The overarching aim of the BONUS BALTSAPCE project was 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 Baltic Sea governance (BONUS BALTSAPCE Description of Work).

To reach this objective the project has analysed challenges and opportunities associated with various aspects of integration in MSP (i.e. integration of policies & sectors, over scales & boundaries, stakeholders and knowledge base). 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 (Figure 1).

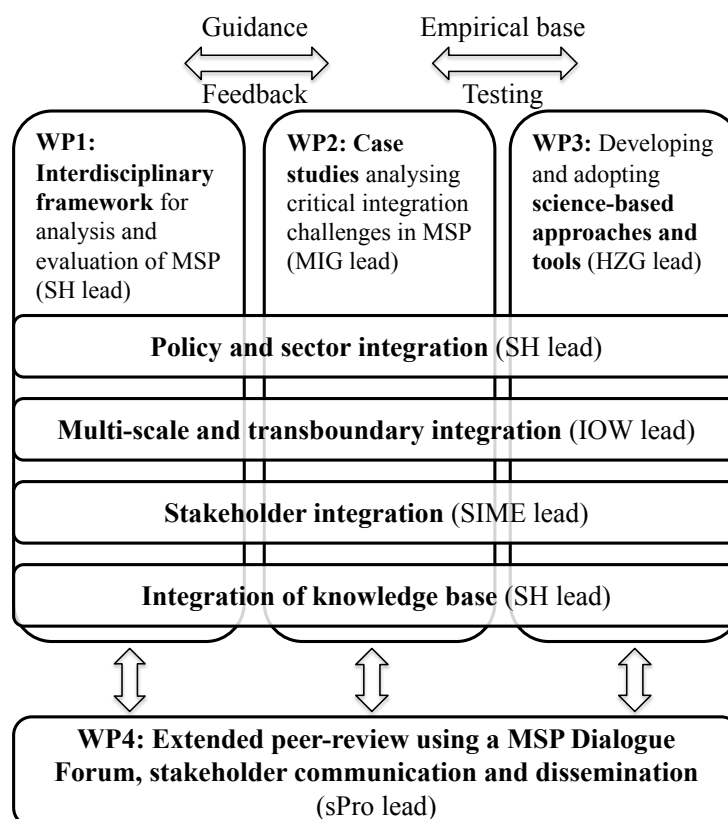


Figure 1. Overview of key research components (WPs) in BONUS BALTSAPCE as well as the studied integration aspects connected with MSP in the Baltic Sea region.

2 Scientific achievements in BONUS BALTSAPCE

2.1. WP1: Interdisciplinary framework for analysis and evaluation of MSP in the Baltic Sea

The overarching aims of WP1 have been to develop an interdisciplinary framework to guide case study design and analysis of MSP challenges and opportunities in WP2, as well as to aid in the development of MSP approaches and tools in WP3.

The key scientific contributions are presented as they were developed in chronological order in the project. In this way we are better able to show the evolution of thinking in relation to the role that integration plays in MSP.

In the initial phase of the project, this WP developed a framework to analyse what were seen as four key dimensions of integration in MSP (Deliverable 1.1). This work also highlighted the need to 'problematize' integration, rather than conceive it as a ubiquitous policy principle to strive for at all costs (which is the way it had been dealt with in most of the MSP literature) - we were also reluctant to fix integration with any definitive meaning prior to undertaking empirical work. So, this meant that we were not so concerned to measure degrees of integration (and assume that higher degrees are desirable as other work in MSP (and related fields) had tended to do, but to explore and interrogate the functions and roles of integration in MSP. This included what are the effects of adopting different approaches to integration across the multiple dimensions, including across borders, across sectors/policies (esp. Blue Growth and environmental protection), among stakeholders and between different types of knowledge (e.g., scientific and experiential) (Deliverables 1.1 and 1.2). We argued that exploring these dimensions of integration of MSP could identify, elaborate and help address the multiple integration challenges MSP practice faces. This included unpacking the notion of balance – essentially arguing that a conceptual and empirical focus on our integration dimensions could show how 'balance' was arrived at in any one MSP setting. That is, we saw balance as a normative term that when used casually worked to conceal MSP preferences such as between environmental protection and maritime development, between strategic decision-making and participation; between scientific and experiential knowledge, among others (Deliverable 1.2). The conceptual insights developed above promised to give greater clarity on its diverse roles and functions in MSP practice across different MSP settings.

The second stage of the work further built on Deliverable 1.1., by applying the developed analytical framework to preliminary empirical material from our Baltic Sea case studies to ensure that it was fit for purpose (Deliverable 1.2). This step in the work contributed several important insights. First, it highlighted how a focus on integration (as a multidimensional concept) could provide insights into how sustainability (as an overarching goal of MSP) particularly in relation to governance was being practised in different MSP settings (Table 1). Second, it highlighted the need to add temporality to the project's integration framework. This involves two key components (1) to assess whether MSP has the capacity to adapt, or is adapting over time to both changing environmental and social conditions (2) how MSP gives consideration of current imperatives in relation to desirable future states – with clear implications for the intergenerational aims of sustainable development (Deliverable 1.2). Third, it indicated that conceptually vertical integration should be separated from cross-border integration. That is that vertical integration implies 'hierarchical governance relations (more likely to apply within nation-states across government levels), whereas cross-border integration implies more 'horizontal relations' such as between countries or in regional governance for a where nation states act collectively to develop principles (such as in MSP in the BSR) (Deliverable 1.2).

Table 1. Relations between focussed integration dimensions and sustainable development discourses.

Integration Dimension	MSP Implementation Emphasis	Links to Sustainable Development Discourse
vertical	top down - bottom up	affects strategic decision-making and possibilities for more 'localised' influence
cross-border	disjointed - coherent	affects possibilities for a harmonised or coherent approach across boundaries and scales to development and environmental protection, as well as between adjoining areas/or areas of shared interest
policy/sector	ecological boundary conditions/limits - win-win	affects likelihood of effective consideration (trade-off/synergies) of multiple sustainable development goals
stakeholder	tool for legitimacy - implementation efficiency	affects possibility for participation and deliberation
knowledge	scientific knowledge - stakeholder knowledge	affects the scope and quality of the evidence-base and opportunities for a broad range of stakeholders' knowledge to be valued
temporal	static – adaptive	affects the capacity of the MSP process to adopt a reflexive approach over time in anticipation of and response to changing socio-environmental conditions

(Adapted from Deliverable 1.2 and 1.3)

WP 1 also applied this emerging thinking that linked integration with sustainability (outlined in Table 1) in MSP to address how to evaluate MSP (Deliverable 1.3). There has been a growing call among social scientists working on MSP to more critically see MSP as complex sites of governance, where there are winners and losers (rather than in win:win terms, which dominates much of the academic and practitioner literature). In response to this, we proposed an evaluation design approach based on a, 'sustainability of governance' approach in MSP. Points highlighted are the need to adopt a deliberative and reflexive approach that draws on a wide body of evidence in evaluation. A set of clustered evaluative criteria (CEC), referring to practices deemed to be desirable for sustainability of MSP governance, are proposed to guide or direct an evaluation process on MSP practice (Deliverable 1.3). This is novel work that ties together the normative ambitions of sustainability, MSP as a site of governance, the multidimensionality of integration processes and the experience of Baltic Sea cases in proposing an evaluation approach to MSP. The CEC can be applied to interrogate and evaluate different aspects of sustainable governance in MSP practice. This approach could also support problem-solving efforts aimed at improving MSP coherence by more precisely pinpointing where integration problems lie. The rather conceptual approach outlined here will be developed in a manuscript that combines the conceptual evaluation thinking outlined here with the more practical focus of the recent BALTICScope project to advance this thinking (Varjopuro et al. in progress).

To identify the wider relevance and resonance of the work described above, in Saunders et al. (Forthcoming) in addition to applying the BONUS BALTSPEACE integration framework to Baltic Sea Region cases studies, it is applied to marine planning in Great Barrier Reef, Australia and Rhode Island, USA. This work, while highlighting the ubiquity of integration concerns and therefore the relevance of the framework, also underlined how institution design of MSP settings shape the possibilities for innovative responses. The manuscript affirmed that in diverse MSP settings a conceptual and analytical focus on integration (through our framework) gives insights into the various 'balances' sought after in MSP – between environmental protection and maritime development; between strategic decision-making and participation; between scientific and experiential knowledge among others.

It became apparent as the BONUS BALTSPEACE project unfolded and we developed thinking around the relationship between integration and sustainability in MSP that social sustainability in MSP has been neglected

by both scholars and practitioners. Saunders et al. (forthcoming) address this gap in MSP thinking and practice by proposing a conceptual framework to elucidate key features of social sustainability (and how they relate to MSP). These include elaboration of conceptual arguments in relation to: deepening democratic decision-making; inclusion of socio-cultural values and knowledge; equitable distribution and social cohesion. Using these features of social sustainability, Saunders et al. (Forthcoming) develop a conceptual framework (with related questions) that could be used to conduct an analysis of social sustainability in MSP practice as well as actions to centre it on the MSP agenda.

2.2. WP2: Analysing institutional and socio-ecological contexts of MSP and critical integration challenges in the Baltic Sea Region

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. The main vehicle for this was the investigation of MSP integration in various case study areas, exposing a wide range of MSP settings, stages and integration challenges (Table 2).

Table 2. Presents a summary of the case-study settings (from Deliverable 2.4)

Baltic Sea Case-study	Status	Focus
Regional, HELCOM Baltic-wide	Working arrangements have been established and MSP has been adopted several formal HELCOM/VASAB agreements	HELCOM/VASAB WG coordinating/norm making role
Lithuania and Latvia comparison	Lithuanian has established an MSP. Still in development in Latvia	Cross-border institutional interaction on MSP/comparison on approaches to develop national MSP
Germany – a sub-national comparison	Established MSP in territorial waters (by Bundesländer) and EEZ (Federal government)	Comparison and MSP cross-border relations between the EEZ and territorial waters in Germany - describing different conceptions of sustainable development and cross-boundary compatibility
The Sound (Öresund) - Denmark and Sweden	Sweden and Denmark are at different stages of national MSP development. Sweden has municipal MSP in place	An examination of the role of Sweden and Denmark's different institutional MSP contexts and the implications on transboundary planning in the Sound.
Poland	Development of a national MSP strategy for Poland is ongoing.	A focus on the problems of engaging coastal fishers in MSP in Poland

The case studies built on an extensive document analysis and involved interviewing a wide range of MSP actors, 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 (IGOs) and other affected actors, such as fishers, wind power entrepreneurs, NGOs (non-governmental organisations), municipality representatives and lower level experts and decision makers, among others.

Obviously assembling this extensive and rich material on BSR MSP in the making is a key scientific achievement in itself that not only has generated key analytical insights to BONUS BALTSPEACE (as summarised below, but also has the potential to contribute to future research on MSP in the BSR and beyond (e.g. metadata sheets have been prepared and published on the project website and data will as far as possible be made available to the scientific community).

The analytical framework developed in the BONUS BALTSPEACE project was used to generate insights into integrated related MSP practice in the case studies referred to above in the Baltic Sea Region, which we hope will also be useful for MSP more generally. For example, the results highlighted, that while development of regional-wide agreements and principles advance thinking on MSP, if they are not transposed more actively to country-level they are likely to have limited influence (Deliverable 2.2 ; Hassler et al. 2018). This is not to argue for a 'regional one size fits all' approach, but it is an empirical observation, that in international settings, governance direction is likely to gain limited traction around achieving coherency between national states on MSP. While the HELCOM:VASAB regional governance platform is important for norm setting, currently, it is limited in terms of its tangible influence on the way that MSP is organised and administered at the country level (Deliverable 2.5). The work also highlighted that harmonising MSP countries in the Region requires more than just relying on cooperation between 'old friends' or those with what appears to be shared political histories. The findings of the project showed that national contextual factors such as institutional design differences, strategic priorities, stakeholder engagement processes and what constitutes a valid (and comprehensive) evidence base between (cross-border) countries are likely to lead to differences in how MSP is practised among across countries (Hassler et al. 2018; Hassler et al. Forthcoming). While the same applies within countries, particularly in federated states, such as Germany, there is more likelihood of higher orders of integration (or functional coherence at least) due to the stronger territorial legislative

jurisdictional powers within nation states. Although adding more complexity to the analysis, where authority is administratively distributed between governance levels for marine planning competency, such as in Sweden and Latvia (and as mentioned above, Germany), there may be increased opportunities to strike a 'balance' between local values and interests (through participatory processes) and national strategic priorities.

In summary, BONUS BALTSAPCE has generated insights in all the BSR case studies on how a range of contextual factors (operating at the national level and through relations with others) play a strong role in how MSP is transposed in national settings within the overarching framework of the institutional architecture of the EU MSP Directives and HELCOM:VASAB guidance. Such insights aid understanding on the vastly different ways that MSP has been adopted and more importantly, how these different manifestations of MSP are likely to affect sustainability ambitions across a broad range of measures. Furthermore, the results of the project showed that while the 'hard' and 'soft' conceptualisation of sustainability in MSP¹ is useful to ascertain whether environmental protection or Blue Growth is prioritised, it overlooks the third pillar of sustainability discussed further below.

An empirical focus on integrative processes, also highlighted what is ignored or largely left lacking in MSP. Key features of social sustainability are not routinely or systematically dealt with by MSP (Saunders et al. forthcoming). While the empirical work showed that some states do provide scope for broad stakeholder engagement in MSP, such as Latvia, Germany and Sweden, others such as Lithuania do not (Deliverable 2.3). Others such as Poland, exhibited problems of how to effectively include socio-cultural knowledge connected to small-scale fisheries in MSP decision-making (Deliverable 2.4). Additionally, across our case-studies, there appears to have been little or no focus on, or explicit consideration to, the distributional implications of MSP decisions.

Key empirically-based policy-relevant insights and recommendation are developed in Section 5, below.

¹ See Qiu W and Jones P. 2013. The emerging policy landscape for marine spatial planning in Europe. *Marine Policy* 39: 182–190.

2.3. WP3: Developing and adopting science-based approaches and tools

Work Package 3 was tasked with developing and assessing practitioner-oriented approaches and tools for MSP that could help facilitate multi-level, policy and sector, stakeholder and knowledge integration. The WP consisted of the following sub-tasks:

- 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

A review of academic literature revealed that “tools” in MSP are mostly understood as technical instruments that provide decision support. The use of tools largely assume a reliance on scientific data and information, as an evidence-based exercise requiring data collection and analysis as a basis for marine planning. Despite the plethora of available tools, only few are currently being used in statutory MSP processes. Integration challenges are mentioned occasionally, such as the need for tools to be able to integrate different types of scientific data, but integration as such has not yet been a specific focus of analysis in the context of tools for MSP (Deliverable 3.3).

An important outcome of this WP is therefore **a better conceptual understanding of how tools could potentially contribute to improve how integration is addressed in MSP**. Three aspects are salient here: (1) the inherent capacity of a tool to address a particular integration challenge – e.g. its capacity to integrate different forms of knowledge; (2) the application context of the tool – e.g. whether it is applied in a participative setting or not, leading to indirect integration benefits; and (3) how the tool relates to the MSP process, i.e. whether the tool leads to a product that can be fed into the MSP process (e.g., to underpin decision-making) or provides more comprehensive support to the MSP process in the sense of a structuring framework (Deliverable 3.3, Gee et al., forthcoming)

A wide range of tools/approaches that could potentially contribute to integration challenges were described in an initial report (Deliverable 3.2).

WP3 then selected seven problem- and process-specific techniques and approaches for more detailed assessment in different case study settings (see Deliverable 3.3 for more details on the application contexts and a description of the tools):

- Bowtie (BT)
- Culturally Significant Areas (CSA)
- Governance Baselines (GB)
- Integrated Indicator System for monitoring the spatial, economic and environmental effects of MSP solutions (IIS)
- Marxan (Mar)
- Open Standards for the Practice of Conservation (OS)
- Spatial Economic Benefit Analysis (SEBA)

This selection reflected both the variety of available methods and the diverse range of tasks in MSP, leading to the inclusion of product- and process-oriented tools/approaches, descriptive and analytical tools, as well as data and forecasting tools. One of the tools (SEBA) was specifically developed for MSP as part of BONUS BALTSAPCE (Weig & Schultz-Zehden forthcoming). Each tool was applied/assessed at least once in a particular country context in a format determined by the tool user.

In order to assess the capacity of the tools/approaches in the context of the BONUS BALTSAPCE integration challenges, the four broad categories of multi-level, policy and sector, stakeholder and knowledge integration were broken down into sub-categories, each of which represented a potential end points for analysis. The tools were then compared against these end points by the tool users, reflecting both past and present experiences with applying the tool (e.g. Janßen et al. forthcoming, for Marxan). Differences between the inherent capacity of the tool and its application context were noted. This provided **an overview of which integration challenges are easily covered by various tools and which are not, and where the particular strengths and weaknesses of each tool/approach lies** (Table 3, Gee et al. forthcoming).

Table 3: Applicability of BONUS BALTSPACE tools to specific integration challenges. Green = good applicability, yellow = partial applicability, red = limited or no applicability. (from Deliverable 3.3)

	BT	CSA	GB	IIS	Mar	OS	SEBA
Multi-level and transboundary integration							
<i>Integration of different geopolitical and/or geographical scales</i>							
<i>Land-sea integration</i>							
<i>Contribution to a common vision for sea space</i>							
Policy, sector and multi-level integration							
<i>Integration of EA and blue growth perspectives</i>							
<i>Integration of asymmetric sectors</i>							
<i>Increasing national/transnational policy coherence</i>							
<i>Resolving institutional compatibilities</i>							
Stakeholder integration							
<i>Involving different types of stakeholders</i>							
<i>Contributing to stakeholder mobilisation</i>							
<i>Facilitating collaborative decision-making</i>							
Knowledge integration							
<i>Generating or bringing together different types of knowledge</i>							
<i>Generating and/or harmonising spatial data</i>							
<i>Recognising and addressing specific knowledge gaps</i>							
<i>Aggregating and weighing different forms of knowledge</i>							
<i>Evaluating the consequences of planned action</i>							
<i>Creating a forum for deliberation</i>							
Contribution to overall MSP outcomes							
<i>Contribution to the efficiency of decision-making</i>							
<i>Improving the quality of MSP decisions and plans</i>							
<i>Contributing to the legitimacy of MSP decisions</i>							
<i>Contribution to capacity building</i>							
<i>Greater inclusiveness, representativeness and fairness of MSP</i>							

Some of the key lessons are outlined below:

The integration challenges that can be most readily addressed through use of the focused tools are stakeholder and knowledge integration. Conversely, policy integration is difficult to achieve as a direct result of tool use, although some tools are well suited to analysing the existing policy landscape and potential integration gaps. Multi-level (transboundary) integration depends on the scale of tool use and is potentially achievable as all tools can be up-scaled if necessary. Some tools are also well-placed to contribute to e.g. land-sea integration.

In terms of stakeholder integration, a general difference emerges between tools that inherently require stakeholder participation to achieve the desired output, and those that could also be conducted as a mere desktop exercise. Process-oriented tools generally require more active stakeholder

involvement, but so do some product-oriented tools where the main purpose of stakeholder integration is in fact knowledge integration (such as CSA or SEBA).

All of the tools assessed facilitate some form of knowledge integration if this is understood as bringing together different types of knowledge. Only complex process-oriented tools, however, can offer a forum more suited to deliberation – the results of which could either be fed into a separate MSP process or be understood as framing the entire MSP process (Morf et al. 2018).

Despite some limitations, e.g. the fact that the longer-term impacts of tool use could not be evaluated, our analysis confirms that integration effects can firstly be achieved by the tool itself – in the sense of specific outputs, such as maps or scenarios – or secondly, by the application context of the tool, such as whether it is used in a participatory, inclusive setting. In terms of supporting integration, these “soft” benefits of tool use should be considered just as important as the integrated product a tool may produce (e.g. by combining different types of knowledge). Integration effects therefore manifest themselves at the point of tool use - e.g. when a map is being generated; as an indirect benefit of tool use, or at an even later stage when the results are being fed back into the MSP process.

2.4. WP4: Extended peer review, stakeholder communication and dissemination

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, the project has used an active communication approach, which was developed and managed in WP4. In this WP a diverse number of methods, activities and tools were developed and used. These communication-related tools have been designed based with specific goals and target groups in mind. This approach fulfilled the objectives of the project’s implementation plan and communication strategy. Furthermore, there has been a substantial amount of learning by doing, meaning that an important outcome of WP4 is improved interdisciplinary and transdisciplinary capacity and capability among BONUS BALTSAPCE researchers and among stakeholders participating at, e.g., Dialogue Forums (which we believe will be valuable for future research on MSP and marine governance in the BSR and beyond). The most important activities and achievements of WP4 are identified and described in this section

(more information on these achievements are available at www.baltspace.eu and in the cited deliverables and references).

Dialogue Forums

The MSP Dialogue Forums had the goal to bring together planners, sector experts and scientists to discuss the project results as well as to provide input on project implementation (e.g. case study selection and scoping). Participants had the opportunity to comment on the analytical framework, the tools developed and tested, as well as any conclusions and lessons drawn by the project partners. Two main approaches of dialogue forums can be differentiated: feedback from 'internal' stakeholders within the sub-cases and feedback from external stakeholders (Table 4). To make sure that the results of the MSP Dialogue Forums informed the research process throughout the partnership, the events have been documented according to an agreed standard (direct debriefing, drafting of well-structured short reports, highlighted relation with integration challenges, application of the findings from fora to the research process). Specific examples where input from the dialogue forums has had significant impact on project implementation include:

- Selection and scoping of case studies: At the start of the project there was a quite long list of potential case study areas and ideas on how to focus specific issues and integration challenges in these. Input from stakeholders helped to develop Deliverable 2.1 in which a final list of case studies (including a detailed scoping of these) was developed to meet criteria of societal relevance, scientific significance, practical considerations etc.
- Identification of key integration challenges and associated key issues/questions: The project started with list of four focussed integration challenges (i.e. policy and sector, multiscale and transboundary, stakeholder and knowledge integration, Figure 1). Input from the dialogue forums helped to clarify that the analytical framework (and subsequent analyses of MSP processes and practice in the case studies) needed to consider a wider list of integration challenges (such as temporal and cross-border integration) to provide a more nuanced framework to analyse MSP in the BSR and beyond (Deliverable 1.2, Saunders et al. forthcoming), as well as to explore relations to various conceptions of the Ecosystem Approach and to what constitutes sustainability in marine and coastal areas (Gilek et al. in press).

Table 4. Selected examples of MSP Dialogue Forums arranged by BONUS BALTSPACE (2015-2018).

	Occasion	Date	Target group	Scope	Focus
1	Baltic SCOPE kick-off, Riga	29.09.15	Internal (BSR) stakeholders (planners) & researchers	Pan-Baltic	WP3 tools and approaches
2	Project-specific, Berlin	15.12.15	Internal stakeholders (planners)	'Western' cases	Integration challenges per country, Research themes, Sub-cases
3	Baltic SCOPE planners' meeting, Tallinn	11.02.16	Internal stakeholders (planners)	'Eastern' cases	Sub-case studies and related research questions
4	2nd Baltic MSP Forum, Riga	24.11.16	Planners and researchers from the BSR and beyond	All cases	General agreement towards the suggested integration barriers
5	HELCOM-VASAB MSP Working Group	25.11.16	Internal stakeholders (planners)	Pan-Baltic	guideline for the ecosystem based approach
6	Event for Polish planners, Gdansk	14.12.16	Internal stakeholders (planners)	Polish	Tools and methods for involvement of fishers
7	Meeting national and sub-national MSP authorities, Hamburg	20.03.17	Internal stakeholders (planners)	German	Feedback German case study cross-border MSP
8	International Conference on MSP, Gdansk	15.03.17	External stakeholders	Polish	E-poster discussion on fisheries
9	HELCOM-VASAB MSP Working group meeting, Warsaw	08.11.17	Internal stakeholders	Plan Baltic	Overview on expected BONUS BALTSPACE deliverables
10	Final Project Conference, Brussels (EU Parliament)	07.03.18	Internal and external stakeholders	All	All integration challenges, and transferability of findings
11	HELCOM-VASAB MSP Working group meeting,	09.05.18	Internal stakeholders	All	MSP tools and integration challenges

Improvement of the BONUS BALTSPACE tools and approaches

During the project several already existing planning approaches and tools have been further developed or their application to a specific case has been refined (see WP3 in Section 2.3). In WP4, the spatial economic benefit analysis (SEBA), bowtie approach, as well as the culturally significant areas approach (CSA) were discussed with external stakeholders, for example during an MSP Platform roundtable in July

2017. Specific stakeholder meetings have also been arranged to discuss Open Standards (OS) and Marxan. Also, a scientific review on the Bowtie and CSA approaches was undertaken at an ICES Working Group for Marine Planning and Coastal Zone Management workshop: where the potential to combine these was explored. With these inputs our analyses could be enhanced and our recommendations, and particular tools/approaches could further be improved. All of these processes of refinement mean that the tools became (more) 'fit for purpose', which increases their likelihood of being used by practitioners (e.g. marine and coastal planners) to address integration challenges in MSP (see Section 2.3 above + Deliverable 3.3 for more discussions on the utility and significance of tools in MSP).

Training tutorials on WP3 tools (internal stakeholders)

To increase the applicability of the project's outcomes by maritime spatial planners, a series of so-called training modules (YouTube tutorials) have been recorded (see www.baltspace.eu). With support of the communication office, partners developed three tutorials (Marxan, Spatial Economic-Benefit-Analysis, Culturally Significant Areas with additional tutorials are under development). The tools are being promoted in several ways, for example by the European MSP Platform² newsletter and database (see www.msp-platform.eu). Developing a tutorial was new for many researchers, meaning that this is an example illustrating how WP4 activities has led to experiential learning among project participants. To improve the outreach of the tools, a brief two-page summary was also developed.

Communication tool (internal and external stakeholders)

An interactive communication tool has been developed to raise stakeholders' awareness of the different aspects that MSP needs to consider (see Figure 2 and Deliverable 4.2). The process of developing the tool involved: considerable interaction among project researchers, input from stakeholders, and multiple feedback rounds to improve the texts and

² The European MSP Platform is an information and communication gateway designed to offer support to all EU Member States in their efforts to implement MSP. It provides an interactive information gateway for planners and stakeholders, for example by explaining current MSP projects and actual work done by planners (practices). The findings of the BONUS BALTSAPCE project have been integrated in the database and the MSP platform will activity use the infographics and the communication tool during meetings the coming years.

visualisations, e.g., a major visualisation exercise was performed during a partner meeting. The result is a combination of five animation movies explaining the key MSP integration challenges linked to four interactive areas with buttons to explore more detailed findings. The tool has been promoted in several ways, by the project partners (e.g., with a flyer), as well as through the European MSP platform (www.msp-platform.eu). It has also been demonstrated at several meetings/conference, for example at the final conference in Brussels which was held at the European Parliament with participation of several MEPs, decision makers and stakeholders. It is expected that the communication tool will have a long-term impact because of its design and clarity. It can be described as a key end product of the communication part of the project.



Figure 2. Setup of the interactive part of the BONUS BALTSAPCE communication tool (see the full tool at www.baltspace.eu)

Publication set

To disseminate the project findings in a more attractive and understandable way to different target groups, three so-called 'infographics' have been developed on policy briefs developed in the project (<https://www.baltspace.eu/published-reports>). The infographics have an appealing structure, based on several blocks. They are adapted towards a scientific audience, practitioners or potentially MSP newcomers. The info graphics always fit into one or two pages and can easily be printed out by the project partners and shared during conferences or meetings. Developing the infographics has also been an important learning-by-doing exercise, and increased the awareness of the researchers of using visualisation instead of text to disseminate findings.

3 Summary of the produced scientific and technological foreground capable of industrial or commercial application, plan for the use and dissemination of this foreground and measures taken for its protection

The BONUS BALTSPEACE Consortium Agreement (signed by all partners in March 2015) confirms that both the intellectual property rights regime and the foreground dissemination rules of the project are in line with the BONUS Grant Agreement (Annex 1 and 2), and with the principles of FP7.

To further specify procedures, actions needed and responsibilities required by the project partners to fulfil these rules and principles, the consortium developed a 'BONUS BALTSPEACE plan for open access and sharing of reports and data' (jointly agreed in January 2017). Below follows a summary of issues of relevance relating to produced foreground and its protection and dissemination.

First, concerning to the questions of **what foreground has been produced** within BONUS BALTSPEACE, and **who owns this foreground?**

The project has mainly produced qualitative social science data (e.g. documentation of interviews, focus groups, input from dialogue forums, input from stakeholders relating to tool development, and document reviews). This material is owned by the party that generated them (Consortium agreement §8.0) or in the case of joined data generation the ownership is joint (Consortium agreement §8.1)

Second, on the topic of **protection of foreground** produced within BONUS BALTSPEACE, it is clear that there are no direct possibilities (nor any plans) for direct industrial or commercial application of the foreground produced within the project. Hence, no other measures for protecting foreground are deemed necessary, beyond those relating to requirements in research ethics to, for example, secure the anonymity of informants, as well as to copyright protection of scientific publications, reports and other products produced. Both of these issues are discussed further below.

Third, concerning **dissemination of foreground** produced within BONUS BALTSPEACE, the consortium has agreed to disseminate (e.g. to the scientific community) the produced foreground with as few restrictions as possible. However, some of this data requires to conform with requirements in research ethics to secure the anonymity of informants etc. Hence, the strategy applied by the project has been:

- as a default, project partners have stored primary and aggregated/summarised (e.g. interview summaries) data in their repositories and on the password-restricted section of www.baltspace.eu together with clear information on how the information can be used/quoted in publications.
- Metadata descriptions for datasets (e.g. on case studies, tools testing, dialogue forums), including information on e.g. data type, data owner, accessibility/protection) have been developed in line with relevant guidelines and standards, and published on the open section of the project website.
- Primary and aggregated/summarised data should then, on request to the data owner and with as few restrictions as possible, be made available to the scientific community. Ethical aspects connected with the non-disclosure of sensitive information, informants' right to anonymity etc. will be considered and ensured in all decisions concerning if and in what format to share data.
- Aggregated and publishable data are also being made available through open access scientific articles and reports. Here it has been agreed in the consortium that all BALTSPEACE deliverables classified as 'Public' in the Annex 1 (BALTSPEACE DoW) will on completion and reporting to BONUS be published as Open Access in scientific journals and/or as reports on the BALTSPEACE homepage with as short delay as possible. Other scientific articles, reports and book chapters etc. building on BALTSPEACE research such as (e.g. country reports, case study reports, analytical framework development etc.) will, as far as possible, also be published as Open Access.

4 Further research needs

Obviously, in an interdisciplinary project as ambitious as BONUS BALTSPEACE that encompasses conceptual, empirical, practice-based and normative research approaches on multiple integration challenges in a large number of MSP contexts and linked to practical tools' application, a plethora of different research needs and gaps will be identified (on top of the extensive knowledge-base that is generated). Instead of attempting to provide a full account of all ideas on future research that have come to our notice in the various parts of the project, we summarise below what we see as key gaps/fields requiring further research. Linked to each identified gap we also provide some more specific ideas on research questions and/or ways to develop research to address the identified gap.

Marine and coastal sustainability (SD) and implementation of the Ecosystem Approach (EA) in MSP: *How are SD and EA variously conceived and implemented in different MSP contexts? How are trade-offs among different sustainability dimensions/aspirations in MSP processes arrived at? How can various MSP integration challenges be incorporated and addressed as part of SD and EA discourses?*

BONUS BALTSPACE research shows (in line with research from other marine areas) that a key challenge facing MSP is how to achieve a more sustainable use of marine resources and territory without transcending environmental thresholds. It is widely viewed that this is best achieved through the adoption of the principles of the so-called Ecosystem(-based) Approach (EA). An Ecosystem Approach has been suggested as a broad-scale approach to research, policy and management that is able to consider people and their relationship to coastal/marine environment.

The EA has been widely adopted and applied as the cornerstone of coastal and marine governance applications such as ICZM, design of MPAs and MSP around the world. EA is of high interest among international coastal and marine policy-makers and researchers. However, despite considerable research and policy attention, there are still a number of outstanding questions that suggest that more attention needs to be paid to how SD and EA are conceived and implemented in different MSP contexts. These include: ambiguity about how EA can and should be operationalised in practice, how to adequately include multiple sustainability dimensions and goals, how to support trade-offs between environmental, economic and social goals, how to adequately deal with uneven power relations and how to include non-scientific knowledge, among others.

Up until now, EA methodologies, data collection and applications in coastal/marine areas have been dominated by the natural sciences with a focus on biophysical assessments. A more critical qualitative social science engagement is only beginning to emerge that shifts attention to how multidimensional sustainability aspects can be more comprehensively and adequately reflected in EA.

The social pillar in MSP: *How can social sustainability be effectively included in MSP? What should social sustainability consist of and who should decide? How can MSP include different socio-cultural epistemologies and material interests? How to build support for active inclusion of social sustainability in MSP?*

A key result of BONUS BALTSPACE is that, despite the overall aim of MSP to deliver sustainable seas for the purpose of sustainable societies, little attention has been given in research or practice on what social sustainability should or could mean. Therefore, there is a need for research to redress this omission by exploring how social sustainability dimensions can be defined in the context of MSP and effectively included

through both conceptual development and by examining MSP practice in various contexts in the BSR and beyond.

Critical to understanding what social sustainability could/should mean in MSP are: what should the goals of MSP be, who should decide over access to marine resources, how should these decisions be made and who should benefit from them? Studying how different countries in the Baltic Sea Region and beyond have considered and incorporated social sustainability in their national MSP processes offers significant possibilities to empirically interrogate these questions and offer ways forward for MSP to actively promote social sustainability.

Although we have done some research on social sustainability within BONUS BALTSAPCE, we believe that more research on this topic as outlined here is needed. This will contribute to sustainability research in general and to a better conceptual understanding of the 'forgotten social pillar', in particular. We argue that such enhanced understanding of how social sustainability could be meaningfully analysed and included in MSP practice is vitally important in the BSR at this critical, still nascent, stage of MSP's development, not least for taking forward MSP in the context of the UN's SDGs.

Transboundary integration in MSP: *How to promote EU policy coherence without jeopardising domestic implementation and legitimacy?*

An important result emanating from BONUS BALTSAPCE research concerns transnational coordination of national MSP frameworks. Because of the rather vague requirements in the MSP Directive on Member States' obligations, those Member States have a great deal of flexibility (or width) when in transposing MSP to national contexts. This is important, and probably necessary. If the obligations were too prescriptive (precise and standardised) it would most likely result in large differences in implementation efficiencies among Member States. Our findings show that allowing Member States to adapt national MSP frameworks to domestic contexts has led to considerable diversity in the design of national MSP frameworks. However, this diversity creates substantial coordination challenges for Member States, because transnational coordination tends to be harder, the less similar national policy frameworks are. Although this tension between the importance of contextualisation and coordination is a rather general phenomenon in transposition of EU Directives, it becomes especially important in the MSP Directive due to the collective nature of the Baltic Sea natural resources and ecosystem services. However, research on how to reconcile, or balance, objectives related to domestic contextualisation and transnational coordination is still in its infancy. Additional research is therefore needed on how EU policy coherence can be promoted, without jeopardising domestic implementation and public legitimacy. More precisely, more research is needed on how to identify concrete issues where coordination is likely to improve governance, and

target those issues in coordination initiatives. If such improvements cannot be shown to be plausible, attempts to increase coherency may be at best a waste of resources and at worst do more harm than good.

Stakeholder representation, communication and dialogue in MSP:

How to systematically develop formal and informal stakeholder representation, engagement and dialogue given multi-level and multi-actor complexities and social sustainability imperatives to deepen democracy? How can capabilities and specific approaches/methods for stakeholder communication be developed and adapted to different MSP contexts? How can deliberative forums be enacted that are able to handle/redress uneven power relations between stakeholders?

BONUS BALTSAPCE's results indicate that communication and dialogue with and among stakeholders is one of the most pressing integration challenges linked to the efficiency and perceived legitimacy of MSP processes - as well as, ultimately, to the outcomes of the planning and the subsequent implementation of the plans. We have also observed that - how sectoral representation is constituted in national MSP arrangements may directly affect the range of stakeholders and related knowledge included and considered in MSP decision-making (e.g. in Lithuanian/Latvian case study). However, as a result of the multi-level and multi-actor complexities of formal and informal stakeholder interactions in national and transboundary MSP processes, there are substantial research gaps linked to, for example: how to systematically develop stakeholder communication and dialogue that promotes stakeholder engagement and empowerment while at the same time considering other evaluative criteria such as efficiency, transparency and equity? Of special interest would be to analyse more in depth how formal (e.g. consultation) and informal (e.g. ad hoc meetings) could be combined. Similarly, we believe that it will be important to develop further comparative research on how sectoral boundaries are defined and how this influences stakeholder integration in various MSP contexts. Understanding if and how the influence of various stakeholder groups differs (being mindful of uneven power relations), and how the stage in the MSP policy cycle influences stakeholder communication and dialogue, will also be of importance.

In WP4 of BONUS BALTSAPCE, which in part had an applied focus on how to develop and adapt communication products and events to various stakeholder groups in an efficient way, we have also identified a set of more practical topics in need of more research as exemplified below:

- Effectiveness of different communication methods (e.g. YouTube tools, dialogue fora, presentations) to promote knowledge exchange, reflexivity, learning and adaptation among MSP authorities.
- How to use communication tools to promote knowledge exchange, reflexivity and learning among wider stakeholder groups (e.g. sectoral and civil society) e.g. on the transnational component of MSP.

- How to increase understanding, support and capacity among researchers on how to communicate findings of spatial projects (MSP, land use) in a more understandable way to different target groups.

Temporal integration in MSP: *How can adaptation, reflexivity and learning be promoted in MSP processes? How can evaluation (in a practical way) be linked to the process and substantive SD goals of MSP?*

While BONUS BALTSAPCE case studies revealed considerable differences among countries concerning if and how temporal integration is being considered in ongoing MSP, temporal aspects were only more directly considered in D1.2 and D1.3. Still, in a general sense our results indicate that temporal integration is central to the aspirations of MSP in the BSR and beyond. Thus MSP can be seen to aspire to provide a basis for marine use that takes account of current uses, while being future oriented. This role is to both facilitate and give certainty to desirable future marine activities, as well to ensure that such activities do not overly impinge on achieving 'good environmental status' or on protecting key socio-cultural values. Furthermore, adaptation, reflexivity and learning are considered key concepts to enable the refinement of MSP arrangements as knowledge accumulates over time within particular contexts.

In principle, the need for adaption over time to changing socio-environmental conditions has been recognised in MSP policy circles (e.g. HELCOM-VASAB MSP Working Group 2015), however BONUS BALTSAPCE research highlights a substantial knowledge gap regarding how temporal integration, adaptation and learning is being addressed in different MSP contexts in the BSR and beyond. Apart from analysing the mechanisms of adaptation/learning linked to institutional and governance arrangements and processes in different MSP contexts, it will be important for future research to specifically explore if and how planning copes with controversies between traditional and new uses/users of sea space, since such conflicts might become more frequent in light of the Blue Growth agenda (i.e, increased competition between traditional and new sea users). We also argue that developing a MSP evaluation approach that promotes adaptation, reflexivity and learning in MSP processes will be a potentially very important future research topic. We believe that such research will need to be addressed through a collaborative and 'transdisciplinary' research approach among academic researchers, MSP authorities, stakeholders and local communities. Research on how to build greater reflexivity into MSP to enhance its adaptive capacity to cope with the coming challenges will be vitally important.

Tools and approaches in MSP: *What is the utility and impacts of MSP tools and approaches in different contexts, and how can this utility be measured and evaluated? How can tools meaningfully support MSP*

process goals (around good governance) while delivering substantive outcomes?

In the context of tools and approaches, future research needs to be undertaken on assessing the longer-term impacts of tool use, in particular evaluating the “soft” benefits of tool use in MSP. This does not need to be restricted to the BONUS BALTSAPCE tools, but could also include other tools that are being used or considered for MSP (such as decision support tools).

It would also be valuable to carry out a comparative evaluation of selected tools, applying them in different settings to establish the role of context for tool use and the outputs and outcomes that can be achieved for integration. This would require the active support of MSP authorities, as well as a significant commitment on their part to allow experimental tool use during their actual MSP processes.

Last not least, we argue that more research is needed on what integration really means for MSP and when/how various tools and approaches can be considered useful. Although the BONUS BALTSAPCE project made some good progress in this area, more research is needed on what would constitute useful endpoints for measuring the quality and depth of integration in different MSP contexts (i.e. developing an evaluation approach for tools that is sensitive to contextual differences on the meaning of integration in MSP).

5 Promoting an effective science-policy interface to ensure optimal take up of research results

As described in relation to WP4 (Section 2.4) and scientific collaboration (Section 6), promoting science-policy interactions in terms of two-way communication, feedback, review and cooperation with and from a variety of stakeholders such as practitioners, decision-makers and NGOs, as well as with the scientific community, has been a core aim of BONUS BALTSAPCE.

Project achievements corresponding to the relevant BONUS performance indicators (#1-4) have been described in detail in the annual periodic reports. Here in the final report we rather choose to, first, pinpoint what we see as key indicator entries illustrating that the project has been successful in promoting science-policy dialogue, cooperation (and ultimately project impact on MSP processes). Secondly, we present some illustrative examples of how we believe that the project has had (or will have) significant impact on MSP processes in the BSR and beyond.

5.1. Key activities and impacts at the science-policy interface (linked to performance indicators 1-4)

As we have argued here, we believe that BONUS BALTSPEACE has been very successful in terms of promoting science-policy interactions. Still, while the project can report a high number policy and governance suggestions (15 entries over the project period for indicator #2) and an even higher activity in terms of participation at committees and arrangement of stakeholder events (49 and 23 entries for indicators #3 and #4, respectively), only three examples of significant contribution to regulation/policy (indicator #1) have been registered. The main reason for this, apart from the obvious problems to directly show causality given the associated complexities and time lags in science-policy interactions, is that we have chosen to be very restrictive in reporting project achievements related to direct policy impact (indicator #1). We do however argue, that the project's results and the 'softer' learning-related outcomes of the project's collaborative and communicative setup (Section 2.4) may well have substantially higher impacts on MSP processes in the BSR and beyond in the years to come (as further argued and illustrated in Section 5.1, below).

Looking specifically at significant contributions to policy and regulation (indicator #1), the project has through project researcher Holger Janßen's (IOW) participation in the HELCOM-VASAB MSP Working Group made **significant contributions to the developed of two very important guideline documents for development of a pan-Baltic MSP approach**: "HELCOM-VASAB Guideline for the implementation of ecosystem-based approach in Maritime Spatial Planning (MSP) in the Baltic Sea area" and "HELCOM-VASAB Guidelines on transboundary consultations, public participation and co-operation". Both of these documents are, as we also have found in the WP2 case study work of the project, quite influential guidelines that are affecting how MSP processes are currently being rolled out in BSR countries. Although filtered through a rather long and multi-actor development process, we argue that BONUS BALTSPEACE arguments and approaches are discernible in the final products (albeit naturally not in all respects). Several project partners are also currently involved in the ongoing EU-EASME/DG MARE-financed authority driven project Pan-Baltic SCOPE, which will review and potentially revise these guidelines.

In terms of indicator 2 (policy and governance suggestions), we observe that project researchers have been very active at international, European, national and subnational levels. At the international level, project

researchers have, for example, made suggestions on the 'Call for action' linked to the **UN SDG 14 conference held in New York in June 2017**. These comments were focussed on insights from the project relating to integration of knowledge, stakeholders, and sectors in Ocean Governance. In the second draft of the document several of the suggestions were included. Furthermore, project partner HZG organised an **UNECE Workshop on Sustainable Development Goals and Regulatory Standards** in February 2017, in which recommendations to the UN regarding the specific role of risk management and regulatory standards in building approaches and processes to use for all 17 UN SDGs were formulated. Most project activity in terms of policy suggestions is, however, discernible at the Baltic Sea and national levels, where policy and governance impact is also likely to be highest in the years to come (as further illustrated in Section 5.2 below). For example, at the Baltic level the project has via the coordinator Michael Gilek made a set of suggestions on **the follow-up and development of the VASAB MSP Roadmap** (Gdansk, February 2016) and project researcher Kira Gee was invited to the HELCOM-VASAB MSP WG meeting in Helsinki (May 2018) where she made project-derived suggestions relating to transnational MSP cooperation and the use of tools in MSP. As part of national MSP processes project researchers have also made **several suggestions relating to planning and draft plans in, for example, Sweden and Germany**. Suggestions on the use of specific tools have also been made in several national settings, such as for the **Integrated Indicator System in Lithuania, Latvia and Poland**, as well as for **Marxan in Denmark**. In the latter case, the Danish partner (AU) has also applied the Marxan tool as part of an actual MSP process (as described more in Section 5.2, below).

5.2. Illustrative examples of BONUS BALTSAPCE impact on MSP processes

As part of the project's communication plan we have during the final stages of project implementation developed a policy brief that summarises and illustrates how the project has and may continue to influence MSP processes in the BSR and beyond (Figure 3). It is there argued that BONUS BALTSAPCE impacts on MSP processes are manifested in different ways and through various processes. Consequently, we identify five key types of contributions to real-life MSP practice (as illustrated in Figure 3).

3. Contributions to real-life practice

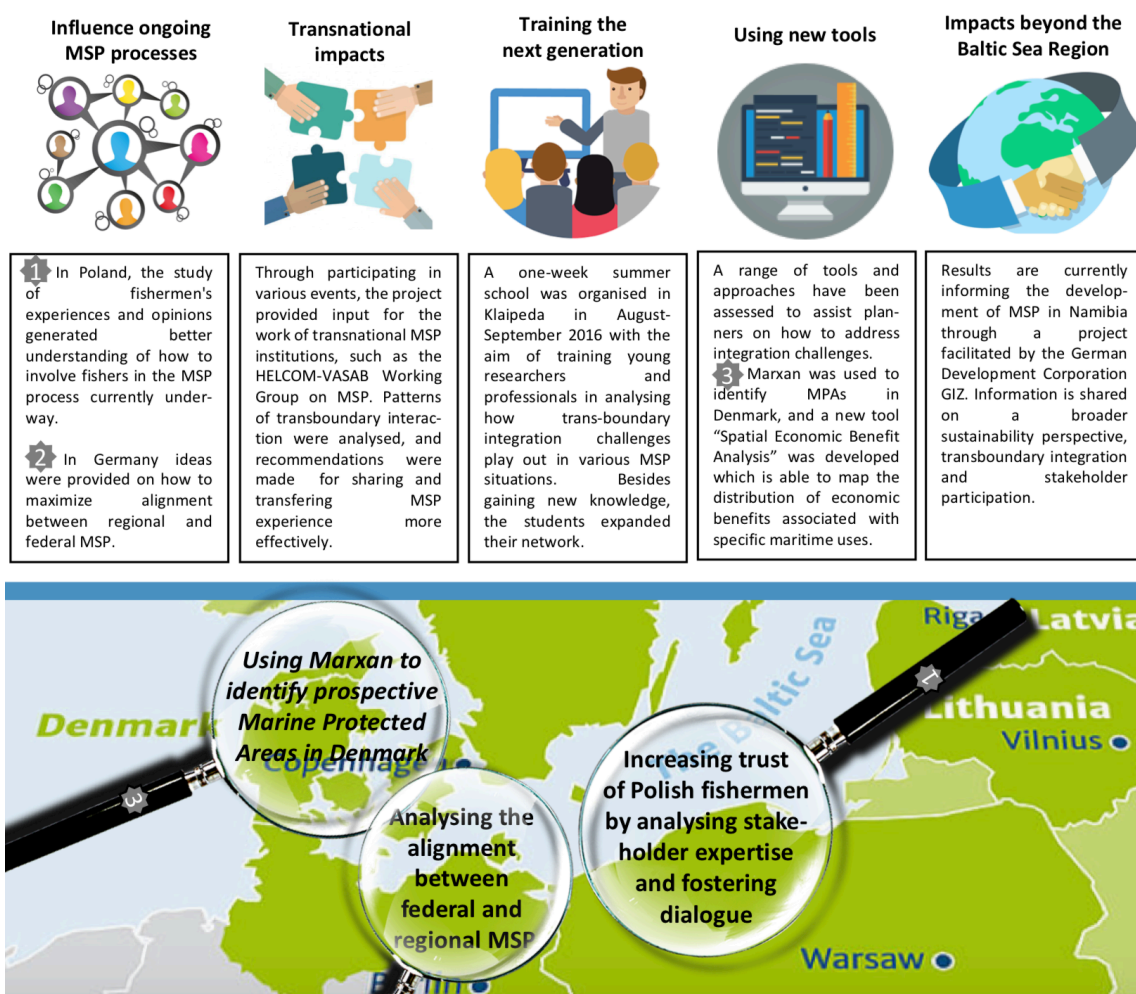


Figure 3. Key types of impacts (and illustrations of these in real-life practice) that BONUS BALTSAPCE has had (or is envisioned to have) on MSP processes. (see the full Policy brief infographic on www.baltspace.eu).

Influence on ongoing MSP processes is perhaps best illustrated by the Polish MSP process, where project findings on barriers and opportunities in stakeholder integration (in particular in relation to involvement of fishers) has led to **changed stakeholder integration related practices of the Polish Maritime Administration as part of national Polish MSP**. For example, the Maritime Administration decided to work more closely with the fishers, explaining how MSP supports their rights and can limit the pressures exerted by other sectors on the best fishing grounds. Dedicated meetings were also organised to address the fishers' concerns and an attempt was made to engage and interact with individual fishers, in order to avoid communication problems such as information distortion that may arise when an MSP dialogue is dominated by the fishers' stakeholder associations.

Impacts beyond the Baltic Sea Region include the probable long-term influence of the wide international research collaborations and networks associated with the project (as discussed in Section 6), but there is also an example where BONUS BALTSAPCE findings already now are **influencing development of MSP in Namibia** through a project financed by the German Development Cooperation (GIZ). Namibia is one of the first countries in Africa to develop an MSP and is currently finalising its present-day status report on maritime activities, trends and developments. The MSP process is under design, also with a view to transboundary cooperation on the MSP with neighbours South Africa and Angola. Stakeholder and knowledge integration is important in the entire MSP process and particularly at the early stages, which is why BONUS BALTSAPCE case study insights have proven helpful.

Relating to the use of tools in MSP, the Marxan tool was used and evaluated for spatial planning with focus on identification of potential MPAs in the Danish Baltic area around Bornholm. The work was done in association and as an ad-on to a specific project launched by the Ministry of Food and Environment. Although it is too early to evaluate the exact impact of this use of BONUS BALTSAPCE findings and know-how it is clear that there is **a potential for significant impact on future spatial planning outcomes and use of the Danish parts of the Baltic Sea.**

Finally, we argue that **training the next generation of planners, decision makers, researchers etc. is a potentially very important** route for the project to exert influence on MSP processes in the BSR and beyond. With the aim of training early-career researchers and professionals in analysing how trans-boundary integration challenges play out in various MSP situations, the project organised (with additional support from VASAB) a one-week BONUS BALTSAPCE summer school in Klaipeda in August–September 2016. The school was attended by nine early-career professionals, seven PhD students and two research assistants from nine countries (from the BSR as well as UK, Ireland, Serbia and Greece). BONUS BALTSAPCE researchers and invited MSP experts made state-of-the-art updates on the academic discourse and provided empirical insights on the transboundary MSP and integration challenges. We argue that the students gained not only new insights on transboundary MSP, but also expanded their international professionals networks on MSP research and practice. Hence, it is likely that there will be long-term influence of this training activity, not the least linked to **promoting trans-boundary coherence and integration on how MSP is perceived and addressed.**

6 Collaboration with relevant research programmes and the science communities in the other European sea basins and on international level

BONUS BALTSAPCE has aimed to embed R&D activities in ongoing scientific discussion on MSP. Rather than creating a separate scientific peer-review group, the project has made use of existing networks and meetings (e.g. ICES ASC, ICES WGMPCZM group, the MSP Research Network), to provide opportunities for input and critical review of the project's approach and results. In line with this, scientific communication and feedback has been organised and addressed in association with a specific task (i.e. task 4.2) in WP4. Achievements associated with this task has been reported in detail as part of the project's annual periodic reports (and in particular as part of our reporting of performance indicator #5 – where we have reported 16 entries over the 3-year project period). Below follows a summary of what we perceive as the most significant scientific collaborations and related activities.

First, we argue that BONUS BALTSAPCE's association with **the ICES working group on Marine Spatial Planning and Coastal Zone Management (WGMPCZM)** has been extremely valuable for receiving scientific feedback on project implementation and results. The project has presented interim results and received valuable feedback, especially relating to the development of specific tools such as Bowtie and Culturally Significant Areas (CSA). In a wider sense the interaction with WGMPCZM has allowed a possibility to discuss the project's approach and results in light of other ongoing MSP research initiatives in Europe and beyond. The BONUS BALTSAPCE connection with WGMPCZM has mainly been facilitated through project researchers Andrea Morf (member since 2013 and co-chair from 2017), Andreas Kannen (co-chair until 2017), Kira Gee and Roland Cormier (members). A dedicated ICES workshop on culturally significant areas (WKVCSA 2018) was an added opportunity for exploring and expanding the CSA tool and connecting it with the Bowtie analysis. The continued engagement of these project members in WGMPCZM will, we believe, ensure continued possibilities to disseminate and discuss project findings with the ICES community and with MSP-interested researcher in general.

Second, we have **initiated and arranged a number special sessions at international scientific conferences**. This has ensured that the project results are disseminated to and (more importantly) discussed with a wider interdisciplinary group of researchers/experts in Europe and beyond. These special sessions have been arranged in collaboration with

(and have also attracted participation by) researchers from a large number of countries in Europe, North America, Australia/ New Zealand and South-east Asia. For example, project researchers have arranged special sessions on MSP and integration challenges at the ICES Annual science conference in 2016 (and also forthcoming in 2018). We also arranged and participated in a special session on 'MSP and Sustainability' at the International Conference on Environmental, Cultural, Economic & Social Sustainability at James Cook Univ., Cairns. Moreover, several project members are active parts of the international MSP Research Network and have participated in related activities, in collaboration with the network we have arranged a session on 'Critical social science perspectives on MSP' at the Nordic Environmental Social Sciences NESS Conference 2017 in Tampere. Furthermore, we will in September 2018 coordinate and participate in a special session on 'Taking Social Sustainability to Sea' at the 57th ECSA conference in Perth, Australia.

Third, project researchers have been quite active in organising and subsequently editing **special issues in peer reviewed journals and in collaborating with other researchers on joint book volumes** published through distinguished academic publishers. We argue that such collaboration on scientific publications is a very important route for fostering a wide and in-depth scientific engagement and discussion on a specific research topic such as MSP and associated integration challenges. Most importantly the project has taken an initiative for acting as guest editors on a special issue in Ocean and Coastal Management (submission deadline for articles in May 2018 with planned publication 2018/early 2019), which combines 6 planned articles based on BONUS BALTSAPCE results, with a couple of collaborative papers among project researchers and scholars from Australia, USA, UK, Portugal etc, as well as ca 10 solicited article contributions by external key MSP scholars. We anticipate that this special issue will prove to be an important contribution to interdisciplinary research on MSP integration challenges and how these relate to marine/coastal sustainability. Furthermore, project researchers Kira Gee and Jacek Zaucha are currently editing a book volume on 'Marine spatial planning – past, present, future' for open access publication by Palgrave Macmillan. While funding for editing and publishing this book has been received from a Polish funder, the volume includes several contributions based on BONUS BALTSAPCE results (see Section 7). A chapter contribution by Gilek et al. to a joint volume on 'The Ecosystem Approach in Ocean Planning and Governance' (Brill Open) organised by

internationally renowned environmental law scholars is also worth mentioning.

Fourth, BONUS BALTSAPCE researchers have developed and submitted **research proposals** that are currently under consideration by the Swedish Research Council and the Foundation for Baltic and East European Studies to undertake further research on 'MSP and social sustainability', as well as to undertake a systematic literature review on how to better include socio-cultural values and benefits into MSP.

Finally, the project has in collaboration with various international research networks, universities and organisations **organised and participated in a number of educational activities on MSP and marine governance**. As argued also in Section 5, we believe that the training of next-generation MSP researchers is a potentially very important route for promoting research collaboration in the long term. During the course of the project, BONUS BALTSAPCE as a consortium as well as individual project researchers have organised and participated in a number of international MSP-relevant courses and educational activities as reported in detail in the periodic reports. For example, in collaboration with the MSP Research Network and with contributions from MSP experts from the UK, Finland, Germany and Sweden, the project arranged a MSP summer school in Klaipeda in 2016. Project partner HZG has also collaborated with European MSP scholars on a Master level course on 'Maritime Spatial Planning' at World Maritime University in 2016 and 2017, as well as on a course on MSP in collaboration with the AF-POGO school at the Alfred Wegener Institute (North Sea). Moreover, project partners such as SIME have over the years contributed with their expertise at several MSP expert trainings in the BSR and beyond, including a MSP summer school in Nantes in 2015. On top of this, the project partners have in general been very active in lecturing on MSP and project-related issues at bachelor and master level courses both at their home universities and as guest lecturers at other universities' courses and at stakeholder events in Europe and beyond.

7 List of peer-reviewed publications and PhD dissertations

Published peer reviewed articles and book chapters:

- Gee K, Kannen A, Adlam R, Brooks C, Chapman M, Cormier R, Fischer C, Fletcher S, Gubbins M, Shucksmith R and Shellock R. 2017. Identifying culturally significant areas for marine spatial planning. *Ocean and Coastal Management* 136, 139-147
- Gilek M, Saunders F and Stalmokaitė I. In press. The Ecosystem Approach and Sustainable Development in Baltic Sea Marine Spatial Planning - The Social Pillar, a Slow Train Coming. In Langlet D and Rayfuse R (eds), *The Ecosystem Approach in Ocean Planning and Governance*, Brill Open, Netherlands.
- Göke C, Dahl K and Mohn C. 2018. Maritime Spatial Planning supported by systematic site selection: Applying Marxan for offshore wind power in the western Baltic Sea. *PLoS ONE* 13(3):e0194362. <https://doi.org/10.1371/journal.pone.0194362>
- Hassler B, Gee K, Gilek, M., Luttmann A., Morf A, Saunders F, Stalmokaitė I, Strand H and Zaucha J. 2018. Collective Action and Agency in Baltic Sea Marine Spatial Planning: Transnational Policy Coordination in the Promotion of Regional Coherence. *Marine Policy*, 92: 138-147, OA
- Janßen H and Schwarz F. 2015. On the potential benefits of marine spatial planning for herring spawning conditions - an example from the western Baltic Sea. *Fish. Res.* 170: 106-115, doi: 10.1016/j.fishres.2015.05.023
- Janßen H, Bastardie F, Eero M, Hamo, KG, Hinrichsen H-H, Marchal P, Nielsen JR, Le Pape O, Schulze T, Simons S, Teal LR and Tidd A. 2017. Integration of fisheries into marine spatial planning: Quo vadis? *Estuar. Coast. Shelf Sci.* doi: 10.1016/j.ecss.2017.01.003
- Janßen H, Varjopuro R, Luttmann A, Morf A and Nieminen H. 2018. Imbalances in interaction for transboundary Marine Spatial Planning: Insights from the Baltic Sea Region. *Ocean and Coastal Management* 161C: 201-210, doi:10.1016/j.ocecoaman.2018.05.008
- Jay S, Klenke T, Janßen H. 2016. Consensus and Variance in the Ecosystem Approach to Marine Spatial Planning: German Perspectives and Multi-Actor Implications. *Land Use Policy* 54: 129-138.
- Saunders F, Gilek M and Tafon R. Accepted. Adding People to the Sea: Conceptualising social sustainability in MSP. Chapter in Anthology on 'Marine spatial planning – past, present, future', Palgrave Macmillan.
- Tafon R. 2017. Taking power to sea: Towards a post-structuralist discourse theoretical critique of marine spatial planning. *Environment and Planning C:1-6*, In press. DOI: 10.1177/2399654417707527
- Tafon R, Howarth D and Griggs S. In press. The Politics of Estonia's offshore wind energy programme: Discourse, power and marine spatial planning. *Environment and Planning C: Politics and Space*. DOI: 10.1177/2399654418778037

Forthcoming peer reviewed articles and book chapters:

- Ciołek D, Matczak M, Piwowarczyk J, Rakowski M, Szeffler K and Zaucha J. Submitted, The perspective of Polish fishermen on maritime spatial planning. *Submitted to Ocean and Coastal Management*.
- Gee K, Blazauskas N, Cormier R, Dahl K, Göke C, Hassler B, Kannen A, Leposa N, Morf A, Plug D, Strand H and Weig B. Forthcoming. Can tools contribute to integration in MSP? An assessment of selected tools and approaches. For submission to MSP special issue in *Ocean and Coastal Management*.
- Hassler B, Blazauskas N, Gee K, Luttmann A, Morf A, Piwowarczyk J, Saunders F, Stalmokaitė I, Strand H and Zaucha J. Forthcoming. *New generation* EU Directives and the role of transnational coordination: Marine Spatial Planning of the Baltic Sea. For submission to MSP special issue in *Ocean and Coastal Management*.
- Janßen H, Göke C and Luttmann A. Forthcoming. Decision support tools in Marine Spatial Planning: A practitioners' view from 25 countries, with special focus on Marxan. For submission to MSP special issue in *Ocean and Coastal Management*.
- Kidd S, Calado H, Gee K, Gilek M and Saunders F. Forthcoming. Exploring challenges and opportunities of integration in MSP practice and research linked to environmental, social and economic pillars of sustainability. For submission to MSP special issue in *Ocean and Coastal Management*.
- Moodie J, Giacometti A, Kull M, Gee K, Piwowarczyk J and Morf A. Forthcoming. Challenges and enablers for transboundary stakeholder integration in MSP. For submission to MSP special issue in *Ocean and Coastal Management*.
- Morf A, Gee K., Kull M. Forthcoming. Towards a ladder of MSP participation. Chapter in Anthology on 'Marine spatial planning – past, present, future', *Palgrave Macmillan*.
- Piwowarczyk J, Gee K, Gilek M, Hassler B, Luttmann A, Maack L, Matczak M, Morf A, Saunders F, Stalmokaitė I and Zaucha J. Forthcoming. Insights on integration challenges in the Baltic Sea Region Marine Spatial Planning: implications for the HELCOM-VASAB principles. For submission to MSP special issue in *Ocean and Coastal Management*.
- Saunders F, Gilek M, Day J, Hassler B, McCann J and Smythe, T. Forthcoming. Examining the role of integration in MSP: towards an analytical framework to understand challenges in diverse MSP settings. For submission to MSP special issue in *Ocean and Coastal Management*.
- Tafon R. Submitted. A Critical discussion of research on the uncooperative Polish fisher and an agenda for the advocate "social" planner in marine spatial planning. Submitted to *Journal of Environmental Policy and Planning*.
- Tafon R, Saunders F and Gilek M. In progress. Marine spatial planning beyond domination? Exploring possibilities for empowerment through the four dimensions of power. Tentatively for submission to *Journal of Environmental Policy and Planning*.
- Varjopuro R, Saunders F and Gilek M. In progress. Evaluating MSP - Sustainability and a Theory of Change. Tentatively for submission to special issue in *Maritime Studies*.

Weig B and Schultz-Zehden A. Forthcoming. Spatial Economic Benefit Analysis: Facing Integration Challenges in Maritime Spatial Planning. For submission to MSP special issue in *Ocean and Coastal Management*.

Forthcoming peer reviewed scientific reports (external peer review required prior to publication):

Morf A and Strand H. Forthcoming. Challenges and Enablers for Integration in Marine Spatial Planning Across Borders – The Multidimensional Integration Puzzle of the Sound Case. Peer reviewed version of BONUS BALTSAPCE case report, *Swedish Institute for the Marine Environment Report series, Swedish Institute for the Marine Environment, University of Gothenburg, Gothenburg, Sweden*.

Morf A, Leposa N and Strand H. Forthcoming. Applying the Open Standards for the Practice of Conservation in Coastal and Marine Spatial Planning – Scandinavian experiences and guideline for practitioners. Peer reviewed version of BONUS BALTSAPCE tools analysis report, *Swedish Institute for the Marine Environment Report series, Swedish Institute for the Marine Environment, University of Gothenburg, Gothenburg, Sweden*.

Morf A, Strand H, Gee K, Gilek M, Janssen H, Hassler B, Luttman A, Piwowarzyk J, Saunders F, Stalmokaite I and Zaucha J. Forthcoming. Peer reviewed version of BONUS BALTSAPCE Deliverable 2.3 report, *Swedish Institute for the Marine Environment Report series, Swedish Institute for the Marine Environment, University of Gothenburg, Gothenburg, Sweden*.

PhD dissertation:

Tafon R. Forthcoming 2019. Exploring discourse and power in marine spatial planning: Domination and empowerment. PhD Thesis to be defended in May 2019. *Södertörn University, Sweden*.

8 Progress in comparison with the original research plan and the schedule of deliverables

As is made apparent in sections 2-7 above, as well as in Tables 5 and 6 below, the implementation of BONUS BALTSAPCE R&D has (with some minor delays) progressed fully in line with the research plan (Table 5). Hence, except in the few cases where we have informed the BONUS Secretariat on necessary re-scheduling, all planned Milestones (as specified in the periodic reports) have been reached and all planned deliverables (Table 6) have been finalised and submitted in the EPSS.

Table 5. Gantt chart showing the timing of different tasks, milestones and Deliverables in BONUS BALTSAPCE.

Task		2015									2016											2017												2018													
Month (Starting April 2015)		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38								
WP1	T1.1 Analytical Framework				M1.1	D1.1																																									
	T1.2 Validation of framework										M1.2											D1.2																									
	T1.3 Framework for evaluation																					M1.3												D1.3	D1.4-1.5												
WP2	T2.1 Baseline case screening										M2.1				D2.1																																
	T2.2 Policy and sector integr.														M2.2			D2.2																													
	T2.3 Stakeholder Integration														M2.2			D2.3																													
	T2.4 Integr. of knowledge base														M2.2			D2.4																													
	T2.5 Synthesis across scales																	M2.3			D2.5																										
	T2.6 Synthesis for policymakers																				M2.4					D2.6			D2.7-2.8																		
WP3	T3.1 Categorise appr. and tools				M3.1	D3.1				D3.2																																					
	T3.2 The Marxan tool				M3.1	M3.2															M3.4												D3.3			D3.5-3.6											
	T3.3 Spatial cost-benefit				M3.1	M3.2															M3.4												D3.3			D3.5-3.6											
	T3.4 Cumulative impacts				M3.1	M3.2															M3.4												D3.3			D3.5-3.6											
	T3.5 Bow-tie approach				M3.1	M3.2															M3.4												D3.3			D3.5-3.6											
	T3.6 Governance baselines				M3.1	M3.2															M3.4												D3.3			D3.5-3.6											
	T3.7 Open standards for conserv.				M3.1	M3.2															M3.4												D3.3			D3.5-3.6											
	T3.8 Evaluation and guidance																				M3.4												D3.3			D3.4											
WP4	T4.1 MSP Dialogue Forum				M4.1															M4.2												M4.3				M4.5											
	T4.2 Scientific feedback																																			M4.4											
	T4.3 External communication				D4.1															D4.2																											
	T4.4 Using tools to communic.				M4.1															M4.2												M4.3															
	T4.5 Internal communication				D4.1																																										
	T4.6 Dissemination and training																							D4.2												D4.3-M4.4				D4.4							
WP5	T5.1 Communication plan				D5.1																																										
	T5.2 Scientific coord./reporting				M5.1															D5.2												D5.3												D5.4-5.5			
	T5.3 Financial coord./reporting																			D5.2												D5.3												D5.4-5.5			
	T5.4 Extended peer review																			D5.2												D5.3												D5.4-5.5			

Table 6. List of BONUS BALTSAPCE Deliverables, as well as indication of the status of each Deliverable. Colours denote the status per May 31 2018 in the BONUS EPSS system. Green = accepted by BONUS; Yellow = submitted to BONUS.

#	Deliverable name	Status
D5.1	Communication and dissemination plan (RE, due month 2)	This deliverable was finalised and agreed among project partners, submitted via EPSS and published on the internal website in month 2
D4.1	BONUS BALTSAPCE Website online (PU, due month 4)	www.baltspace.eu was launched in month 3
D1.1	Internal guidance document: Analytical and methodological framework (RE, due month 6)	This deliverable was finalised and published on the internal website in month 6
D3.1	Draft Catalogue of categorised approaches and tools (RE, due month 6)	This deliverable was finalised and published on the internal website in month 6
D3.2	Final catalogue of categorised approaches and tools (PU, due month 12)	This deliverable was finalised and published on the external website in month 13
D5.2	Periodic report 1 (RE, due month 14)	This report was submitted in month 14 and was after minor comments from the BONUS secretariat approved in the fall of 2016
D2.1	Baseline-mapping and refined case study design (RE/SP, due month 16)	This report was finalised with some sight delay in month 18.
D1.2	Analysing possibilities and challenges for MSP integration in the BSR (RE/SP, due month 18)	This report was finalised in month 18.
D2.2	Report/manuscript on policy and sector integration via MSP process (RE/SP, due month 25)	This report was finalised with some sight delay in month 26.
D2.3	Report/manuscript on stakeholder integration (RE/SP, due month 25)	This report was finalised with some sight delay in month 27.
D2.4	Report/manuscript on integration of the knowledge base in the MSP process (RE/SP, due month 25)	This report was finalised with some sight delay in month 26.

D5.3	Periodic report 2 (RE, due month 26)	This report was submitted in month 26.
D2.5	Integration across scale and boundaries via MSP process (RE/SP, due month 29)	This report was submitted on time in month 29 and also submitted to Ocean and Coastal Management (where it now is accepted)
D1.3	Evaluation and monitoring of MSP in the BSR (RE/SP, due month 30)	This report was submitted with a slight delay in month 31 and is currently being revised for submission to the journal Maritime Studies.
D2.6	Policy brief(s) on approaches to integration and possible benefits and preconditions (RE/PP, due month 30)	This report was submitted with a slight delay in month 31 and is available at baltspace.eu
D4.3	BALTSAPCE Tools - Training Module (TE, due month 30)	The tools training modules were delayed owing to delays in D3.3. The deliverable (and the training modules) was submitted in month 38
D3.3	Final report on approaches and tools) (RE, due month 32)	This report was delayed owing to challenges in tool application/testing. It was submitted in month 38.
D4.4	BALTSAPCE Findings - Publication Set (RE/PP, due month 34)	This report was submitted with a slight delay in month 36 and is available at baltspace.eu
D4.2	BALTSAPCE MSP Communication Tool Set (OT, due month 35)	This report was submitted with a slight delay in month 36 and is available at baltspace.eu
D1.4	Analysing MSP integration challenges in the BSR and beyond (RE/SP, due month 36)	This report was submitted with a slight delay in month 38 and is being revised for submission to Ocean and Coastal Management
D1.5	WP1 scientific publication relating to analytical framework and evaluation (RE/SP, due month 36)	This report was submitted with a slight delay in month 38 and has subsequently been submitted to a edited volume with Palgrave Macmillan
D2.7	WP2 scientific publication on the role of context in MSP (RE/SP, due month 36)	This report was submitted with a slight delay in month 38 and is being revised for submission to Ocean and Coastal Management
D2.8	WP2 scientific publication on limits and possibilities for addressing integration in MSP (RE/SP, due month 36)	This report was submitted with a slight delay in month 38 and is being revised for submission to Ocean and Coastal Management
D3.4	Policy brief on approaches and tools in MSP (RE/PP, due month 36)	This report was submitted with a slight delay in month 37 and is available at baltspace.eu
D3.5	WP3 scientific publication on approaches and tools in support of MSP integration (RE/SP, due month 36)	This report was submitted with a slight delay in month 38 and is being revised for submission to Ocean and Coastal Management
D3.6	WP3 scientific publication on decision support tools in MSP (RE/SP, due month 36)	This report was submitted with a slight delay in month 38 and is being revised for submission to Ocean and Coastal Management
D5.4	Periodic report 3 (RE, due month 38)	This report was finalised in month 38.
D5.5	Final report: Tentative title 'Towards sustainable governance of Baltic Marine Space' (RE, due month 38)	This report was finalised in month 38.

9 Wider societal implications

This section provides illustrations of possible wider societal benefits from the BONUS BALSPACE project.

Clearly, as discussed more in Section 5 on science-policy interactions, we argue that the most direct societal implications of the project have been to influence MSP processes and directly associated actors and stakeholders (e.g. authorities, planners, sectoral and environmental stakeholders) by providing conceptual and empirical insights on MSP integration challenges, as well as by supporting capacity building, wide knowledge exchange, dialogue and reflexivity. It is, however, also likely that most of these direct effects on MSP processes also will have **wider indirect societal implications** on e.g., how public engagement and involvement plays out in MSP (as in the Polish case) as well as on the societal outcomes of MSP in terms of e.g. distribution of costs and benefits. Still, although we believe that these indirect societal effects of the project may accumulate and become significant in the coming years, we will refrain from any more specific speculations here because of the fundamental problem of attributing causation of such complex phenomena. Instead, we will mention some key project insights with potential wider societal implications and project activities aiming at involving and engaging a wider set of actors than those directly involved in (formal) MSP processes.

First, in terms of key insights, the conceptually informed empirical findings on integration challenges and multi-dimensional sustainability provide a raft of significant insights not only for MSP practitioners and policy makers. For example, the project developed insights into how MSP practice has been performed across several BSR countries, illuminating **how countries have variously organised MSP responsibility and set about developing national plans**. This is particularly important, also for stakeholders and local communities, given that countries around the Baltic are at different stages of MSP formation and implementation (including how stakeholder issues are being addressed). In this respect the project generates a platter of **information and ideas about how evaluation and review can result in better ways to address MSP challenges and problems**, including how to make MSP a more socially-oriented endeavour, rather than a distant strategic planning process.

Moreover BONUS BALSPACE results and insights on **how to meaningfully involve various stakeholder groups, such as fishers**, in MSP have - we argue - contributed with societal benefits in several MSP contexts. In particular, this relates to the previously described case of

Polish fishers' distrust of the national MSP process and the subsequent changes that the Polish Maritime Authorities have made in their stakeholder-related practices. In a more general sense, results from German (Mecklenburg-Vorpommern) MSP also reveal insights on how there has been institutional and actor-related learning when moving from the 1st to the 2nd planning cycle in that practices to meaningfully involve a wide range of stakeholders and their different types of knowledge have been modified (and we venture to say improved). Project insights on how such learning and adaptation has come about in this and other cases may also provide valuable insights (and wider societal benefits) in other MSP contexts in the BSR and beyond.

In addition to this, the findings of the project have no doubt generated **greater awareness of the challenges involved in planning and managing seas sustainably**. For example, we have in the case studies found that 'balancing' between sustainability goals in MSP is not likely to imply the same thing across national territorial borders. Nor does 'balancing' imply that win:win solutions are automatically achievable in all contexts. Hence, the project draws attention to how the 'end goal of achieving sustainability' through MSP is variably conceived and given effect. This problematisation of balance and its relationship to sustainability also draws attention to the, often taken for granted, assumptions of e.g., win:win embedded into marine development pathways. While not always clearly or explicitly expressed, these assumptions have immense ethical and material implications for human:environment relations.

Moreover, the BONUS BALTSAPCE project not only details what is happening within large parts of the BSR on MSP, but also **what is neglected or excluded**. This, we hope, could stimulate a wider societal discussion on how MSP processes could be developed and 'improved' over time. In particular, our studies reveal that while much of the previous literature on MSP has either dealt with economic (Blue Growth) or environmental (protection) aspects of MSP, other aspects of sustainability (in particular **social and cultural aspects and values**) of importance for society have hitherto been largely overlooked. Linked to this, core aspects of **good governance**, while commonly present in formal MSP policy are often rather vaguely addressed in MSP practice.

Hence, based on the mentioned results and insights the project highlighted how MSP, if it is to contribute to sustainability in the region (and the SDGs more broadly), **needs to more actively strive for MSP practices that are coordinated, transparent, coherent,**

participative, inclusive, deliberative and accountable. While such processual aspects at least are given some consideration in MSP, **social sustainable outcomes** generally are not. Outcomes in this sense, mean the distributional implications of MSP decisions for different vocational, geographic, ethnic or other social groups or more generally in relation to how to enact governance for a more socially cohesive society. This highlights the importance of potential disadvantages for different social groups affected by MSP, which we also believe is an important input to wider societal discourses on how MSP can contribute to sustainable development in marine and coastal areas.

Finally, to mention some specific steps that we have taken to disseminate the mentioned insights beyond primary MSP circles, we have, for example: arranged public seminars at the Swedish political week at Almedalen, arranged so-called 'speakers corners' at the Swedish Sea and Water Forum, held several public seminars and open lectures in various Baltic Sea countries, as well as given numerous lectures and seminars as part of bachelor and master level courses in Europe and beyond. We are also hopeful that our developed outreach material, such as the interactive communication tool and the policy briefs (section 2.4), can continue to contribute in this respect in the coming years.