

Communiqué on the results of the research on blue growth in theselected international projects aimed at enhancement of maritime spatial planning in the Baltic Sea Region (BSR)

Wyniki badania „niebieskiego wzrostu” w wybranych projektach międzynarodowych ukierunkowanych na rozwój morskiego planowania przestrzennego w regionie Morza Bałtyckiego.

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Abstract: Blue growth is a relatively new policy of EU enhancing sustainable use of the sea resources. The relation between blue growth and maritime spatial planning (MSP) are not obvious. Both belong to a class of EU policies and both cover the sea space. Since maritime spatial planning in the Baltic Sea Region (BSR) has recently gained its momentum, the maritime spatial planners face the challenge of incorporating the concept of the blue growth into their planning processes. This paper facilitates this task by providing a comprehensive information on the international projects executed by the maritime spatial planners and the relations of those projects to the concept of the blue growth. This is important in order to capitalize on what has been achieved so far. However, it seems that has been so far no single “planning project” focusing exclusively on the blue growth and this growth has been tackled in such projects rather at ad hoc and non-systematic manner. Thus, the research on relations between MSP and blue growth seems to be still pending. Possible directions of its development are suggested in the final part of the paper.

Keywords: Management of sea resources, blue growth, marine spatial planning

Streszczenie: Niebieski wzrost to stosunkowo nowa polityka UE. Jego celem jest zrównoważone wykorzystanie zasobów morskich. Relacja pomiędzy niebieskim wzrostem i planowaniem przestrzennym obszarów morskich (MSP) nie są oczywiste. Obie kategorie należą do klasy polityki UE i dotyczą przestrzeni morskiej. Jako że planowanie przestrzenne obszarów morskich w regionie Morza Bałtyckiego (BSR) zyskało ostatnio na znaczeniu, morscy planiści przestrzenni stoją przed wyzwaniem włączenia koncepcji błękitnego wzrostu do swoich procesów planistycznych. Niniejszy artykuł ma im ułatwić to zadanie, dostarczając kompleksowych informacji na temat międzynarodowych projektów realizowanych przez morskich planistów przestrzennych i sposobów uwzględnienia w nich koncepcji błękitnego wzrostu. Chodzi o to by budować na tym co już zostało osiągnięte. Jak dotąd nie było jednak ani jednego projektu planistycznego poświęconego wyłącznie niebieskiemu wzrostowi. Koncepcja ta była raczej osadzana w tych projektach na zasadzie ad hoc i w sposób wybiórczy. Tak więc badania relacji i związków między MSP i błękitnym wzrostem wydają się oczekiwać bardziej wnikliwego podejścia. Możliwe kierunki ich rozwoju są sugerowane w końcowej części artykułu.

Słowa kluczowe: Zarządzanie zasobami morza, niebieski wzrost, morskie planowanie przestrzenne

Introduction

In the course of preparation of the project on cross-border maritime spatial planning (MSP) between Finland and Estonia, the screening was conducted on the relation between MSP and blue growth in cross-border setup. The results seem very relevant for numerous teams and consortia currently working on similar initiatives in the Baltic Sea Region (BSR). The number of MSP projects is growing nowadays at a fast rate. They build on the momentum for cross-border MSP created by the newly adopted EU Directive on MSP [1] and EU drive for wiser use of sea and oceans as a part of EU integrated maritime policy [2; 3]. Thus, we want to publish the key findings from our research to allow the new projects and initiatives to start from where the others finished. This should be treated as a contribution of the institution that conducted research (SYKE, Maritime Institute in Gdańsk, Tartu University, and University of Eastern Finland) to the community of the BSR spatial planners that was formally launched by the post graduate course on maritime spatial planning held in 2013 in Reda and Goteborg on initiative of VASAB 2010 under the flag of Baltic University Programme in co-operation with World Maritime University, Maritime Institute in Gdansk, Åbo Akademi University, Blekinge Institute of Technology, Gothenburg University, Swedish Institute for the Marine Environment.

Aims and method

The article has very practical ambitions. It aims at providing maritime planners with a list of the most important trans-boundary BSR projects with clear indications to what extent and how the question of the blue growth has been tackled in them. The article can serve as a primary source of information for maritime spatial planners, looking for solutions or best practice examples related to blue growth. In the final part, some tentative suggestions on the needs of the further research are added. Thus, the paper fills in some of the information gaps indicated by many authors [4; 5]. This paper is based on two sources of information; namely published material and informed insider view. The authors have participated in many MSP projects in the BSR. For identification of the different approaches to the blue growth a critical review of the projects' reports was conducted. All these have allowed for identification of the key messages on existing gaps and needs for further research.

Blue Growth

The Blue Growth Strategy of the EU stems from the realization that the resources in land are getting scarce and the seas still offer unused potential to support the regional development. Thus, the business potential that the seas offer need to be enhanced and diversified. There are also technical developments, namely in offshore technology and biotechnology that will enable developments in sea-based businesses. In this con-

text, the maritime spatial planning can be seen as a tool with the aim to boost the blue economy. On the other hand, since the human activities are expected to increase in the sea, their coordination through a process of spatial planning will become as necessary as it has been on land already for decades. The European Commission launched its Blue Growth Initiative in 2012 [6]. As pointed out in the literature MSP might be an important part of it [e.g. 7, p. 89]. In the current programming period (2014-2020), the European Fisheries Fund has been turned into *European Maritime and Fisheries Fund* (EMFF) in order to support blue growth.

Blue growth is a long-term strategy to support growth in the maritime sector as a whole. It has been adopted in October 2012 by European Ministers for Maritime Affairs through the Limassol Declaration on a "Marine and Maritime Agenda" for growth and jobs. The strategy aims at creating sustainable economic growth and employment in the marine sectors and maritime economy of EU countries. Novelty is considering sea areas and the maritime economy as a chance for the increase of GDP and prosperity. Thus, seas and oceans are recognised as drivers for the European economy with great potential for innovation and growth. As pointed out by the EU Commission [6], the 'blue' economy represents 5.4 million jobs and a gross added value of just under €500 billion a year. The strategy highlights several maritime sectors paying attention in particular to tourism, offshore renewable energy, aquaculture and maritime research with the blue biotechnology at the forefront.

The Commission adopted in May 2014 a "Sustainable Blue Growth Agenda for the Baltic Sea Region"[8]. It calls for a stakeholder-driven, cross-Baltic approach to innovation, sustainability, skills and qualifications. As a first step of this agenda, the European Commission launched a Maritime Stakeholders' Platform on 26-27 March 2015 in Kiel, Germany. The Platform is expected to bring together all key maritime stakeholders from business, science and research and the public sector in the BSR to discuss smart specialisation, maritime technologies and skills and employment.

Maritime Spatial Planning in the BSR

Experimenting and developing of approaches for maritime spatial planning in the BSR is well advanced [9]. In fact, BSR is among worldwide laboratories of MSP [10]. Since 2001 (the year when MSP was started in BSR – [7, p.11], numerous international projects and initiatives have been conducted with regard to MSP in this region. Key outcomes have been achieved such as MSP Handbook [11], MSP vision [12] or MSP principles [7, p.47-50]. The BSR know-how on MSP has been summarized in several books and reports [e.g. 13; 7], however, Blue Growth so far did not take a prominent role in all those efforts. A key question emerges what type of support is necessary in order to achieve better link between Blue Growth and MSP and what are the key research questions that are still open with regard to that.

MSP can enhance Blue Growth in several ways. However, it may happen that the industries and enterprises might see, at least in the beginning, MSP that is a new regulatory approach more as a burden and a threat not as an opportunity. MSP can be seen as a threat from the perspectives of sectors whose interests are best served by *status quo* of little coordination between sector policies. In the long run, MSP may help the enterprises to decrease the uncertainty whether some areas will be available for the planned business in a sustainable manner, also in the future. The aim of MSP is overall long-term welfare. Thus, MPS should be seen as a tool to enhance coordination and mutual benefits of environmental and economic aspirations. It can help also to bring together different types of sectoral stakeholders, alleviate conflicts between them and identify synergies.

Results

In our research we have reviewed the following projects: BaltSeaPlan, GAP2, AQUABEST, AQUAFIMA, PartiSeaPate, BSR EastWest Window, BaltCoast, PlanCoast, MASPNOSE, TOPCONS, TPEA, PlanBothnia, GoF MSP pilot in Russia, Barents Sea MSP. Information on those projects can be found at their websites (richness of online information) and also in the literature [13; 7]. The list of the projects consists of the projects in the Baltic Sea area and some relevant projects outside of the Baltic Sea. Summary of the review results are presented in table 1.

Discussion

Blue growth has been hardly researched in the context of MSP. In the database, Science Direct, one can find 65 scientific papers genuinely related to the blue growth as understood by EU. The others detected by the search engine (all together in June 2015 one could find 151 records related to blue growth) describe some chemical and biological processes. The majority out of those 65 papers refer to some sectoral aspects of blue growth, e.g. in the context of fisheries, aquaculture, tourism seabed mining or biotechnology. Many papers relate blue growth to ecosystem-based management and the Marine Strategy Framework Directive. Also some other horizontal aspects of the blue growth have been referred such as maritime security, application of GIS technologies, measurement of marine economy [14], marine governance (e.g. an issue of ocean sustainability target) [15] or stakeholder involvement. There are only two papers discussing both blue growth and MSP. First one discusses MSP goals (nature protection versus blue growth [16] while the second one [17] is on MSP tools and methods and tackles blue growth only marginally.

In 2014, the first call of Horizon 2020 on blue growth was called. Definitely such research will contribute to the expansion of knowledge in the field of blue growth. In fact, this H2020 call, totalling €15M, aimed at addressing the following priority areas in an integrated way:

- ◆ (i) Marine ecosystem-approach;
- ◆ (ii) Observing systems;
- ◆ (ii) Marine biotechnology;
- ◆ (iii) Aquaculture;
- ◆ (iv) Ocean literacy – engaging with society;
- ◆ (v) Seabed and benthic habitat mapping.

Thus, MSP was not covered under this call. Therefore, it seems that the provided in the previous section list of projects should be treated by BSR maritime spatial planners as the only and the primary source of knowledge how to tackle the blue growth in MSP. Saying this, one can try to point out the most promising good practices in relation to the blue growth and MP developed by those projects and matured enough worthy to be widely used in the various BSR planning processes. This choice is of subjective nature, but it might facilitate the search of maritime spatial planners for ready to be used solutions helping them incorporating the blue growth into their work. Among the most important good practices one should list:

1. BaltSeaPlan good practice on assessing the impact on sectoral and horizontal policies on the future use of the marine space. Documents on that one can find on the project home page (<http://www.baltseaplan.eu/index.php/Reports-and-Publications;809/1>) i.e. BaltSeaPlan reports no. 1-7. In addition, BaltSeaPlan provides interesting hints on integration fishery into MSP (i.e. BaltSeaPlan reports no. 23, 26) and on stakeholder involvement (i.e. BaltSeaPlan reports no. 24).
2. PartiSeaPate good practices on stakeholder involvement tackling different scales, transboundary context and the level of self-organisation of different stakeholders. Documents on that one can find on the project home page (<http://www.partiseapate.eu/results/>) i.e. handbook on multilevel consultations and the governance report. Some tools for stakeholder involvement can be also taken and/or adapted from the GAP2 project.

Conclusions

Most of the projects were pilot projects that developed principles and approaches while actual implementation of MSP was not pursued. Environmental dimensions of MSP have been addressed by the existing projects quite comprehensively. Findings of the review of the projects indicate that processes and procedures of MSP have been developed and tested already in several nationally and EU funded projects. Some of them have addressed the blue growth aspects but mainly in terms of outstanding questions to be addressed in the future. There is no systematic thinking in this field neither the BSR common denominator how to plan the sea for the blue growth has been developed in the BSR.

It seems that following issues need further development in the new MSP project tackling the Blue Growth Strategy:

Tab. 1. Review of previous and ongoing MSP projects – main findings with regard to Blue growth

PROJECTS	HOW BLUE GROWTH HAS BEEN ADDRESSED	MAIN OUTSTANDING QUESTIONS POINTED OUT BY THE PROJECT WITH REGARD TO BLUE GROWTH
BSR EastWest Window	<p>Blue Growth has been addressed in terms of balancing the interests, long term view on use of sea resources through MSP</p> <p>The project has recognized a need for a BSR vision on sea space use agreed among the countries coupled with most important goals shared.</p> <p>The Vision formulated in the project includes elements of Blue Growth: "the Baltic Sea Region as a sustainable, integrated, well-functioning and safe part of Europe with the Baltic Sea as a common asset, which we all cherish"</p> <p>Several Blue Growth aspects have been examined: Supergrid linking new power plants producing renewable energy on sea areas of all BSR countries, Intelligent sea transport corridors in the BSR allowing separation of the sea traffic and its intelligent electronic monitoring</p>	<p>Ways of agreeing at the BSR level on the important targets of use of the Baltic resources. The knowledge on the nature of those targets and ways how to come to agreement on them.</p> <p>Ways of starting joint planning of BSR grid and BSR smart sea corridors</p>
BaltCoast	<p>The project tested coordination of offshore development (related to Blue Growth)</p>	<p>Ways of assessing impact on different sea uses on, other uses on, on functioning of the sea as an ecosystem.</p> <p>Degree of coexistence (synergy) and conflicts between sea uses.</p> <p>Mutual impacts of sector activities on each other (synergies and dissynergies) e.g., energy on fishery, extraction on energy etc.</p> <p>Ways of starting and running planning activities for offshore infrastructure corridors</p> <p>Ways of combining different MSP governance levels: regional/local, national, BSR, EU in line with subsidiarity and efficiency principles</p>
PlanCoast	<p>The project has addressed Blue Growth (cross-sectoral national strategies for offshore development, well done planning should bring new input to sectoral processes, transnational concerted plans for offshore infrastructure corridors, providing certainty for investors and facilitating competitiveness, entrepreneurship and innovation)</p>	<p>Ways of measuring impact of sea development on the prosperity of coastal communities.</p> <p>Ways of ensuring iterative relation between MSP and national/regional strategic development policies.</p> <p>Ways of starting and running planning process for offshore infrastructure corridors.</p> <p>Extension of SEA towards TIA (territorial impact assessment) – possible way forward.</p>
BaltSeaPlan	<p>Blue Growth issues have been addressed in some details in the BaltSeaPlan Vision 2030 and Recommendations. However, the Blue Growth objectives and criteria have not been actually addressed/only slightly addressed in a course of BaltSeaPlan Project's Case Study implementation. The project demonstrated how to assess the impact of sectoral strategies on MSP.</p>	<p>The essence of a cross-border maritime spatial planning aimed at enhancement of blue growth</p>
GAP2	<p>Only open and effective participation of stakeholders in research and management (fisheries and marine environment) has been researched. This is relevant part of Blue Growth Strategy. The project extended knowledge on integration of the fisheries (as an important part of blue economy) management into the Maritime Spatial Planning process in the Baltic Sea Region (Participatory GIS Mutual Learning approach)</p>	<p>Economic and social parameters (jobs and value) of the planned human activities</p>
AQUABEST	<p>The project has focused on aquaculture development (Blue Growth) with a special focus on nutrient recycling, eco-efficiency and reduction of eutrophication effects of aquaculture</p>	<p>Aquaculture related jobs, value and sustainability.</p> <p>Aquaculture trans-boundary planning related environmental and socioeconomic problems.</p>

AQUAFIMA	The project has focused on prospects for an increased integration of stocking/restocking into fisheries management under the reformed CFP (Blue Growth) and strategies to utilise aquaculture for the regional economy and tourism as part of a sustainable spatial development	Environmental, economic and societal aspects of the aquaculture (jobs, value and sustainability). Transboundary planning for aquaculture
PlanBothnia	The project has tested transboundary Maritime Spatial Planning in the Bothnian Sea between Sweden and Finland in particular: collection and processing of cross-border data, development of future scenarios to follow a shared vision, visualisation of present and future situation of the sea area	Link to sectoral policies enhancing blue growth
PartiSeaPate	PartiSEApate brought transnational, national and regional Blue Growth stakeholders together in a series of workshops intended to foster holistic thinking on MSP across the Baltic Sea Region	Systematic identification of Blue Growth barriers. The relevance of different communication channels with regard to different types of Blue Growth stakeholders. Assessment of the needs of different Blue Growth stakeholders with regard to being involved in MSP (why, when and how). Relation between Blue Growth and planning cultures of different countries and values behind planning processes. Role of MSP to integrate various policies competing for the same sea ecosystem.
MASPNOSE	The project facilitated two concrete cross-border MSP case studies on the North Sea. One of them was related to fishery	Ways of using MSP to facilitate effectively integration between sectorial policies. Effective facilitation of the presentation of all the sectorial interests in MSP
TOPCONS	The project has focused on development of innovative spatial tools for the regional planning and long-term invocation of the sea areas for the sustainable consolidation of human activities and the marine nature values The Blue Growth aspect was not very important in the project, but some results could be used in consideration of sustainability of Blue Growth.	Economic analyses of the human activities in order to identify areas where these human activities could increase in the future and especially areas where sensitivity of marine nature prevents their growth.
TPEA	The project has developed commonly-agreed approach to cross-border MSP in the European Atlantic region including critical elements of the planning process in the context of legal and policy frameworks, participatory approaches and technical considerations Blue Growth does not have an important role in the project.	Data gaps for proper ecosystem approach. Complexity of regulatory and institutional framework. Ambiguity about terminology and conflicting interest across the border
GoF MSP pilot in Russia	The project prepared proposals to improve the legal framework of the Russian Federation and the introduction to the concept of "the offshore maritime (spatial) planning". The model testing of these proposals was made on the example of the Russian waters of the Baltic Sea (the Gulf of Finland and the Kaliningrad marine area).	The scope of Blue Growth in Russia
Barents Sea MSP	The project has addressed the issue of usage of MSP as a tool for integrated management of the big marine ecosystems. It has developed the methodological approaches, and an example of their application in the Russian part of the Barents Sea. The main focus was on the data collection and preparation of a number of sectoral maps. The maritime spatial plan was not produced.	Comprehensive review of the use of marine waters on the base of ecosystem approach.

Source: own elaboration

- ◆ Economic and social parameters (jobs and value) of the planned human activities.
- ◆ Measurements of impacts of maritime developments on the marine ecosystems and ecosystem services provided by them.
- ◆ The systematic dialogue between maritime spatial planners and various maritime sectors actively using sea resources.
- ◆ Barriers in relation to multi-level and transnational stakeholders' involvement and governance in particular stakeholders important for blue growth enhancement.

- ◆ Relation of MSP to maritime policies.
- ◆ Planning cultures of different countries and values behind planning processes in relation to the blue growth.
- ◆ Approaches and tools for dealing with various issues bridging MSP and blue growth, in particular:
 - assessing impacts on different sea uses on other uses or marine ecosystem,
 - measuring impacts of sea use development on the prosperity of coastal communities,
 - planning of corridors for technical infrastructure and other cross-boundary issues, forming part of blue growth.

References:

- [1] EC (2014) Directive 2014/89/EU of the European Parliament and of the Council of 23 July 2014 establishing a framework for maritime spatial planning. Official Journal of the European Union L 257/135
- [2] EC (2007) Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Region. An Integrated Maritime Policy for the European Union. Brussels, European Commission, COM(2007) 575 final
- [3] EC (2007) Accompanying document to the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. An Integrated Maritime Policy for the European Union. Brussels, European Commission, SEC(2007) 1278
- [4] Zaucha J. (2012) Offshore Spatial Information - Maritime Spatial Planning in Poland. Regional Studies 46 (4), 459-473
- [5] Matczak M., Zaucha, J. (2011) Developing a Pilot Maritime Spatial Plan for the Southern Middle Bank, Gdańsk, Instytut Morski w Gdańsku, 79p.
- [6] EC (2012) Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Blue Growth opportunities for marine and maritime sustainable growth. Brussels: European Commission 13.9.2012, COM (2012) 494 final
- [7] Zaucha J. (2014) The Key to governing the fragile Baltic Sea. Maritime Spatial Planning in the Baltic Sea Region and Way Forward. Riga, VASAB, p. 110
- [8] EC (2014) COMMISSION STAFF WORKING DOCUMENT A Sustainable Blue Growth Agenda for the Baltic Sea Region Brussels, 16.5.2014 SWD(2014) 167 final
- [9] Jay S., Flannery W., Vince J., Liu W.H., Xue J., Matczak M., Zaucha J., Janssen H., van Tatenhove J., Toonen H., Morf A., Olsen E., Vivero J., Mateos J., Calado H., Duff J. & Dean H. (2013). International progress in marine spatial planning. In: Chircop A., CoffenSmout S. & McConnel M. (Eds). Ocean Yearbook 27 (171-212). Leiden, Martinus Nijhoff Publishers
- [10] Zaucha J. (2014b) Sea basin maritime spatial planning: A case study of the Baltic Sea region and Poland. Marine Policy 50, 34-45
- [11] Schultz-Zehden A., Gee K. and Ścibior K. (2008) Handbook on Integrated Maritime Spatial Planning. Berlin, S.Pro
- [12] Gee K., Kannen, A. & Heinrichs B. (2011) BaltSeaPlan Vision 2030: Towards the Sustainable Planning of Baltic Sea Space. Hamburg, BaltSeaPlan
- [13] Schultz-Zehden A., Gee K. (2013) BaltSeaPlan Findings - Experiences and Lessons. Berlin, S.Pro
- [14] Fernández-Macho J., Murillas A., Ansuategi A., Escapa M., Gallastegui C., González P., Prellezo R., Virto J. (2015) Measuring the maritime economy: Spain in the European Atlantic Arc. Marine Policy 60, 49-61
- [15] Visbeck M., Kronfeld-Goharani U., Neumann B., Rickels W., Schmidt J., van Doorn, Nele Matz-Lück E., Ott K., Quaas M. F. (2014) Securing blue wealth: The need for a special sustainable development goal for the ocean and coasts. Marine Policy 48, 184-191
- [16] Santos C. F., Domingos T., Ferreira M. A., Orbach M., Andrade F. (2014) How sustainable is sustainable marine spatial planning? Part I—Linking the concepts. Marine Policy 49, 59-65
- [17] Muñoz M., Reul A., Plaza F., Cómez-Moreno M.-L., Vargas-Yañez M., Rodríguez V., Rodríguez J. (2015) Implication of regionalization and connectivity analysis for marine spatial planning and coastal management in the Gulf of Cadiz and Alboran Sea. Ocean & Coastal Management, in Press, Available online 8 May 2015

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