



Handbook for developing

VISIONS IN MSP



Technical Study on
Maritime Spatial Planning (MSP)
for Blue Growth

Assistance Mechanism
for the Implementation of
Maritime Spatial Planning



European
MSP Platform

Written by the European MSP Platform under
the Assistance Mechanism for the Implemen-
tation of Maritime Spatial Planning
February – 2018

Handbook for developing VISIONS IN MSP

Imprint

List of Authors:

Ivana Lukic, Angela Schultz-Zehden, Lisa Simone de Grunt, s.Pro GmbH, Germany

With Contributions from:

Clare Waldmann (s.Pro), Daniel Nigohosyan (Ecorys, Belgium), Emiliano Ramieri (Thetis, Italy), Hannah Jones (University of Liverpool, UK), Jacek Zaucha (s.Pro), Jan Maarten de Vet (Ecorys, Belgium), Javier Fernandez Lopez (Ecorys, Spain), Kira Gee (s.Pro), Lucy Greenhill (s.Pro), Martina Bocci (Thetis, Italy), Stephen Jay (University of Liverpool, UK).

Suggested Citation:

Ivana Lukic, Angela Schultz-Zehden, and Lisa Simone de Grunt. 2018. Handbook for developing Visions in MSP. Technical Study under the Assistance Mechanism for the Implementation of Maritime Spatial Planning.

DISCLAIMER

The information and views set out in this report are those of the author(s) and do not necessarily reflect the official opinion of the Commission. The Commission does not guarantee the accuracy of the data included in this study. Neither the Commission nor any person acting on the Commission's behalf may be held responsible for the use which may be made of the information contained therein.

LEGAL NOTICE

This document has been prepared for the European Commission however it reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

More information on the European Union is available on the Internet (<http://www.europa.eu>). Luxembourg: Publications Office of the European Union, 2018. The European MSP Platform is financed by the European Commission under the EMFF. The European MSP Platform is a result of the 'MSP Assistance Mechanism' implemented by EASME on behalf of DG MARE.

© European Union, 2018 Reproduction is authorised provided the source is acknowledged.

Image(s) © s.Pro, 2018 (unless otherwise specified)

**Europe Direct is a service to help
you find answers to your questions
about the European Union.**

**Freephone number (*):
00 800 67 89 10 11**

(*) The information given is free, as are most calls
(though some operators, phone boxes or hotels
may charge you).

Acknowledgments

The elaboration of this handbook would not be possible without the great support from the EU MSP Platform team members. Authors would also like to express their greatest appreciation to the EU Member States Expert Group members, for their valuable advice and insights. Finally, the handbook is mainly based on the results of comprehensive interviews with experts whom we thank very much for their time and support.

Content

1

How to read this handbook

6

Introduction

7

Purpose of visioning

8

Purpose of the handbook

9

2

Visioning processes and outputs

11

3

Relationship between visioning and MSP processes

15

4

Decision-making framework

19

5

First-level decisions: Preparatory Actions

23

Decision I: Deciding what type of process to use

24

Decision II: Ensuring adaptability

29

Decision III: Temporal Scope

31

Decision IV: Resources

32

Decision V: Facilitation team and essential skills

35

6

Second-level decisions: Building Blocks

39

Building Block I: Background Research

40

Building Block II: Methods for analysing future trends

50

Building Block III: Stakeholder identification and analysis

58

Building Block IV: Interactive methods

69

Building Block V: Ensuring commitment and take up

78

7

Summary of key findings

81

Case studies

Plano de Ordenamento do Espaço Marítimo (POEM)

10

Maritime Strategy for four municipalities in Sweden (Norra Bohuslän)

14

BaltSeaPlan Vision 2030

18

Towards an Implementation Strategy for the

Sustainable Blue Growth Agenda for the Baltic Sea Region

22

WESTMED Maritime Initiative and ASUR Vision

38

Celtic Seas Partnership future trends

84

ANNEX I - How this handbook was developed

86

ANNEX II - EU visions and other relevant literature

88

References

94

How to read this handbook

The handbook was developed as one of the three tasks of the Technical Study 'MSP as a tool to support a sustainable Blue Economy' carried out under the European MSP Platform. The purpose of the handbook is to assist planners in developing their own vision, as well as for preparing the terms of reference for those who will facilitate a vision process.

This handbook is designed to provide quick and easy access to information. Readers are encouraged to skip through the handbook and read about the methods that interest them the most. **The first three chapters set the scene for the content of the handbook.** Chapter One provides the introduction and explains why it may be useful to undertake vision making process, also including scenarios and forecast development exercises, action planning and development of roadmaps. Chapter two discusses the relationship between vision making process and MSP, and defines different formats a vision making process could result in, as well as usefulness of such processes and their outputs for MSP.

The practical part of the handbook starts from chapter four, where a decision-making framework is outlined, with two distinctive parts; 1) first level decisions, to determine the type of vision development processes, and 2) second level decisions, relating to possible building blocks of such processes. Chapter five relates to first level decisions and contain supportive checklists and examples. Chapter six relates to building blocks and describes different tools and methods that can be used in the processes.

The following icons are used throughout the handbook:



WHEN
TO USE



FURTHER
READING



HINTS
& TIPS



LINK TO OTHER
ELEMENTS

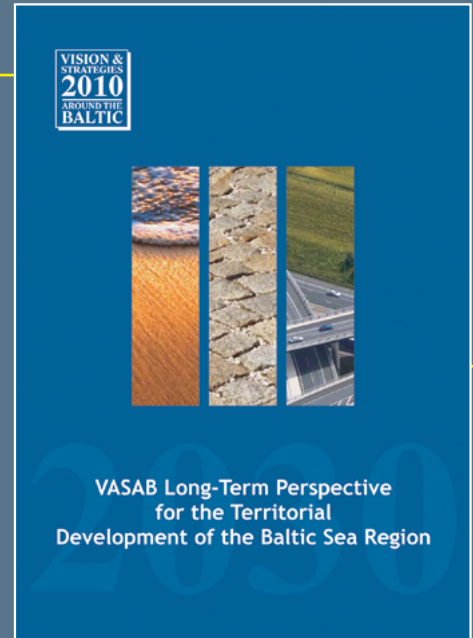
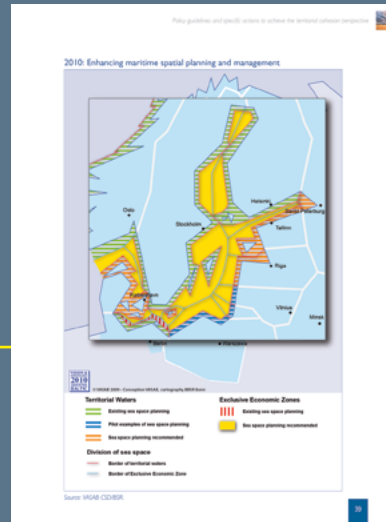


PRACTICAL
EXAMPLE



CHECK
LIST

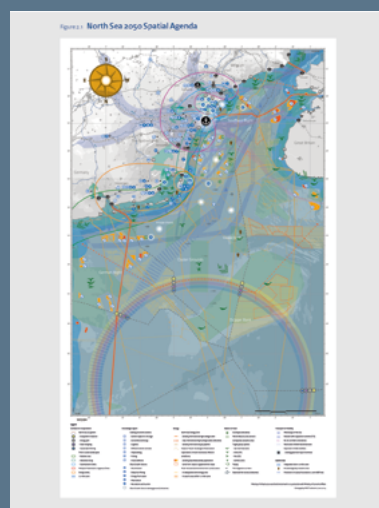
1. Introduction



[7]



[24]



7.2 Overview of actions

Subject	Measure	Owner	Year
Policy coordination	Annually updating NPS monitoring and action	Ministry of S&D	Annually
	Establishing a joint monitoring system for monitoring progress	Ministry of S&D	Annually
	Updating marine strategy (prior assessment and description of good environmental status)	Ministry of S&D	2014
	Reviewing or implementing management plans before 2015, 2015 and 2016	Ministry of S&D	2014-2020
	Implementing action for building with nature	Ministry of Economic Affairs	2014
	Implementing action for building with nature (the recovery of sandbanks and dune systems)	Ministry of Economic Affairs	2014
	Implementing action for building with nature (the recovery of sandbanks and dune systems)	Ministry of Economic Affairs	2014
	Implementing action for building with nature (the recovery of sandbanks and dune systems)	Ministry of Economic Affairs	2014
	Implementing action for building with nature (the recovery of sandbanks and dune systems)	Ministry of Economic Affairs	2014
	Implementing action for building with nature (the recovery of sandbanks and dune systems)	Ministry of Economic Affairs	2014
	Implementing action for building with nature (the recovery of sandbanks and dune systems)	Ministry of Economic Affairs	2014
	Implementing action for building with nature (the recovery of sandbanks and dune systems)	Ministry of Economic Affairs	2014
	Implementing action for building with nature (the recovery of sandbanks and dune systems)	Ministry of Economic Affairs	2014
	Implementing action for building with nature (the recovery of sandbanks and dune systems)	Ministry of Economic Affairs	2014
	Implementing action for building with nature (the recovery of sandbanks and dune systems)	Ministry of Economic Affairs	2014
Policy implementation	Implementing action for building with nature (the recovery of sandbanks and dune systems)	Ministry of Economic Affairs	2014
	Implementing action for building with nature (the recovery of sandbanks and dune systems)	Ministry of Economic Affairs	2014
	Implementing action for building with nature (the recovery of sandbanks and dune systems)	Ministry of Economic Affairs	2014
	Implementing action for building with nature (the recovery of sandbanks and dune systems)	Ministry of Economic Affairs	2014
	Implementing action for building with nature (the recovery of sandbanks and dune systems)	Ministry of Economic Affairs	2014
	Implementing action for building with nature (the recovery of sandbanks and dune systems)	Ministry of Economic Affairs	2014
	Implementing action for building with nature (the recovery of sandbanks and dune systems)	Ministry of Economic Affairs	2014
	Implementing action for building with nature (the recovery of sandbanks and dune systems)	Ministry of Economic Affairs	2014
	Implementing action for building with nature (the recovery of sandbanks and dune systems)	Ministry of Economic Affairs	2014
	Implementing action for building with nature (the recovery of sandbanks and dune systems)	Ministry of Economic Affairs	2014

[7] VASAB (2009). VASAB Long-Term Perspective for the Territorial Development of the Baltic Sea Region. Vision and Strategies Around the Baltic.

[24] The Dutch Ministry of infrastructure and the Environment (2015). Policy Document on the North Sea 2016-2021. The Hague.

Maritime Spatial Planning (MSP) is not only concerned with minimizing conflicts between ongoing activities in a given maritime space, but is designed to take a future-orientated approach to prevent such conflicts occurring in the first place. It is therefore necessary to understand potential future developments in the marine space in question; whether it is economic, technical or ecological, strategic or externally driven, short or long term. Such multi-objective 'visions' can be developed through visioning exercises, scenarios and forecast development processes, or as part of strategic planning, action planning and developing roadmaps. Often, a combination of techniques is used to set out a framework for the future, or to define relevant options. However, the presentation of visions varies greatly, from philosophical and artistic descriptions of the future to presentations of quantified analyses. Given the complexity of these processes and their often multiple outputs, there can be ambiguity regarding terms, e.g. strategy, vision, roadmap or an action plan.

There are many variations of visions processes, with regard to their purpose, methods used, presenting results, and other aspects. They also differ in their geographical scale, initiating organisations; relationship with MSP and actual decision-making processes.

Purpose of visioning

Visions are employed for different purposes, both as integral parts of MSP processes or separately. In some cases, the process itself is more important than the final document as it presents a mechanism for stakeholder engagement and facilitates dialogue on a joint future. In other instances, the final document is crucial, for example, if it documents statutory norms and principles.

The development of a vision for MSP is especially useful in:

- raising awareness of emerging issues
- enabling co-ordination between different authorities addressing sectors and issues
- engaging stakeholders and capacity building, particularly where MSP is a new process
- providing a long-term focus for MSP that may exceed political cycles
- accounting for future uses not present so far
- achieving better land-sea integration of planning

Drawing up a vision or a strategy for a given marine space (be it at national or sea-basin wide scale) can have several advantages. It can help to communicate the benefits of an MSP process, stimulate public debate and stakeholder dialogues, increase awareness of future trends, define priorities for maritime space and ensure commitment to actions needed to reach a desired future.

The development of scenarios and visions can serve as a ‘warm-up’ for an MSP process, encouraging stakeholders to start thinking outside of their sectoral interests, to consider longer time scales and to stimulate questions on “what if?”. A vision process helps to clarify the focus of MSP and may also provide the basis to derive jointly agreed SMART¹ objectives, towards which a MSP process should lead to. Sometimes the joint development of scenarios or a forecast might be used to help to raise awareness of an emerging issue (i.e. climate change).

Such processes can also provide a basis for cross-border cooperation for MSP. Developing a transnational vision is particularly useful if, for example, the development of maritime sectors in one country influences maritime development in a bordering country whereby consensus is needed. On the other hand, many sectors require cross-border coherence in planning (e.g. shipping lanes, energy corridors, underwater cables), so developing e.g. a joint vision and planning principles can help in this regard. A vision or a strategy can also be an umbrella to better link MSP and coastal zone management objectives as well as territorial development in general, across a specific portion of space.

Purpose of the handbook

The handbook is based on a study of diverse vision processes from around Europe. It draws on detailed analysis of relevant documents supplemented with interviews with those who have developed the process and those who are meant to take up or actively use the process outputs. The handbook presents the collection of methodological approaches that were taken and highlights the lessons learnt from these processes. **The purpose of the handbook is to assist planners in developing a vision for their marine space, or initiators in preparing the terms of reference for those that will be facilitating the process**

Despite the range of vision processes studied, it should be noted that there is still limited experience, specifically for MSP related vision processes. Thus, this handbook also presents methods from other relevant fields, such as general management and urban planning.

The handbook was developed taking into consideration:

- The needs of planners that use or refer to visions in their MSP implementation;
- The current questions/knowledge gaps of those who plan to develop visions in the future.

The intention of the handbook is to indicate a range of possibilities for working with visions, showcasing options and ideas, rather than being prescriptive.

Case study

Plano de Ordenamento do Espaço Marítimo (POEM)

> Purpose of the process

The vision process was developed 2008-2010 by the Instituto da Água, Portugal (Water Institute) in parallel with the MSP process that involved the GIS spatial analysis. The idea was to establish the vision as well as establish a mission for stakeholders to be more focused on their roles. Defining a mission is useful if stakeholders are involved in the implementation. This is particularly suitable in the context of small scale plans, for example the water catchment plan, or a small investment for planning certain aspect on the coast.

> Approach

The POEM process had series of workshops which included the EEZ of Portugal and the two autonomous regions. Subjects and themes were divided according to the regional interest. While Azores islands focused on science and environment, northern Portugal focused on the industrial theme (incl. shipbuilding), and Algarve region on tourism. The themes followed the main economies/ aspects driving these regions.

The Council for all the Ministries involved in maritime issues (CIAM) always followed POEM work, steering, discussing and approving proposals. The Commission, composed of all the representatives from ministries and public agencies, was attended meetings, discussed reports and validated the project results.

Stakeholders were mainly involved in collecting information but also to collect needed actions. Another aim was to expose stakeholders to other opposing views so that they could start preparing for the fact that the final product (plan) would have to be a commitment between different points of view. The stakeholder meetings involved explaining of visions, the national situation, including the national policy context, etc. meetings were not guided by particular moderation techniques but rules regarding the length of interventions, recordings of all suggestions and keeping the focus on the themes given.

The results of the workshop formed the basis for setting sector visions whereas SWOT results from the workshop were complemented with desk research by experts. On the basis of each of the sectoral SWOT analysis, a set of actions was defined, as well as the interrelations between actions and timelines. Actions were structured in plain matrices, with actions on one axis and actions or goals on the other to analyse their compatibility and interdependence. A big matrix with all the actions was developed, to combine the actions and produced:

- Interdependence matrix;
- Compatibility matrix;
- Precedence & Hierarchy matrix.

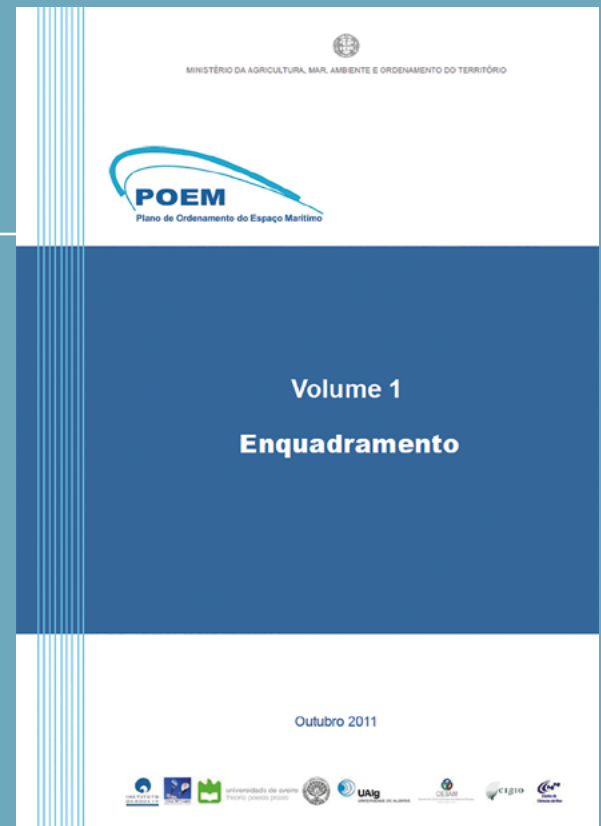
No software was used to analyse the matrices but final results can be plotted onto Gant charts. The analysis was done using the expert judgement rather than a specific method.

POEM has a monitoring program that would monitor the plan implementation and the results of actions. However, it was difficult to establish a monitoring program to evaluate whether some action had been completed since the government's mandate was over before the plan could be adopted. The plan was used in the current MSP as a baseline geographic location description.

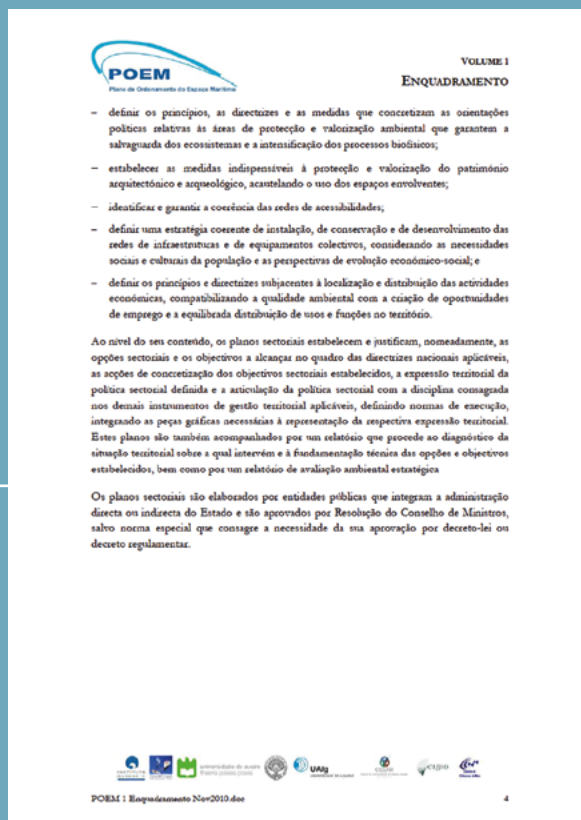
> Lessons learned

- Stakeholder workshops covered all the relevant stakeholder categories. However, it would have been beneficial and perhaps ensured that the plan was implemented if stakeholders, responsible for implementing the plan, were involved in one more round of workshops. This additional round of workshops would ensure discussing actions with those who should implement them. This would also give them the feeling that they have indeed been listened to.
- It is important to have the methodology in place to cope with questions such as how to weight stakeholder inputs; are all stakeholders equally important; are all inputs acceptable?

2. Visioning processes and outputs



[92]



[92] Ministerio da Agricultura, Mar, Ambiente e Ordenamento do Território. 2011. Plano de Ordenamento do Espaço

A visioning process usually starts with some type of investigation of future trends, using methods designed to analyse possible and/or desirable future conditions. The specific drivers of, and situations in which a vision is initiated, determine the purpose or ambition of the process. In other words, to gather stakeholders for the first time as part of the 'MSP warm up', to raise awareness of an emerging issue, or to stimulate local development.

This subsequently defines the geographical scope of the process (i.e. local, national, sea basin/macro regional or EU wide), the thematic scope of the process (i.e. is it one sector oriented or is it integrating number of aspects), and the relationship with MSP and actual decision-making processes (i.e. from autonomous studies to integrated parts of MSP process).

All these variables then influence the selection of an appropriate format(s) the process will result with, such as a vision and/or a strategy, as well as the choice of tools and methods to be used for developing these. The outputs from vision processes vary greatly, from philosophical and artistic descriptions of the future (broad visions) to presentations of quantified analyses (sectoral scenarios and roadmaps). A process often results with a combination of interlinked formats. For example, a document can be called a strategy, but it may also include a vision and/or scenarios. As part of the same process, an action plan could also be developed as an extension of the strategy to better support its implementation.

Some frequently used definitions of possible output formats from visioning processes are presented in Table 1. However, **the understanding and definitions of these formats vary widely among process facilitators and outputs users, and common agreement is scarce**. While literature that defines forecasts and scenarios is in abundance, literature that defines visions, strategies, roadmaps and action plans is limited, or the definitions provided are not applicable in the specific context of MSP. Hence, the following definitions have mainly been adapted on the basis of interviews.

Scenarios [1][2]	Consistent and coherent descriptions of alternative hypothetical futures intended to explore how current and alternative development paths might affect the future, and consider assumptions about the drivers of change and the impact they have.
Forecast [3]	An estimate of a variable of interest at some specified future date by analysis of trends in the past and present status.
Vision	Preferred evolution of maritime developments in the course of a given timeframe, which has been agreed on in general lines, either only among those developing the vision, or together with stakeholders. In some cases, a vision is seen as the preferred agreed scenario, which implies that scenarios must have been developed and discussed prior to the actual adoption of the vision.
Strategy	A strategy outlines various actions, usually in broad terms, necessary to reach the vision. Preferably, it can also define the specific objectives together with the set of actions and responsible bodies for reaching each of the objectives. The timelines and indicators for tracking progress of the objectives are sometimes also defined.
Roadmap	A roadmap defines the steps needed to attain the vision and/or objectives; it is usually underlined by milestones and concrete timelines.
Action plan	Usually defined as complementary to a strategy and a roadmap, an action plan proposes clear actions and responsible actors for the implementation of the roadmap or strategy.

Table 1 Definitions of possible formats of outputs from visioning processes



FURTHER READING

> **Forward thinking platform:** A Glossary of Terms commonly used in Futures Studies [4]

Case study

Maritime Strategy for four municipalities in Sweden (Norra Bohuslän)

> Purpose of the process

The maritime strategy development process was meant to define the preferred future for four municipalities, their goal and which actions to promote desired development. The rationale for developing a strategy was based on the fact that municipalities needed a maritime focus in their existing business strategies. Also, there was a need for a more detailed approach to planning for development, including more visibility to small businesses and attracting new ones. This process was meant to enable different combinations of companies and researchers to jointly identify project opportunities and execute them together.

> Approach:

The maritime strategy was developed for a sub-region, with the same goal as for the MSP plan. Actions that would enhance economic development have been specified for all municipalities, taking into consideration cultural and environmental aspects as well. One broader strategy concerning political aspects was developed, and one that includes all the background data in four different focus areas: shipping & boating, sea food, energy, tourism and recreation. Each of the focus areas also include sub-areas, goals and actions that the municipality should act upon.

Focus groups for the sub-areas were formed and stakeholder needs were collected through interviews with around 60 companies of different sizes. Competence days were also organised to bring together politicians, civil servants and researchers. It was also pertinent to take into consideration, compare, and possibly align with other relevant EU, national, local/regional strategies and funding programmes. As part of the communication strategy, easily readable dissemination material was produced, as well as a small infographic film on Facebook and the website showing what the strategy entails. Other social media is also extensively used and engagement was continuously tracked.

The process was funded by the county municipal board with support from the Västra Götaland Region, as well as the EU Interreg programme. Business developers (civil servants), environmental specialists and planners as well as sectoral boards (i.e. tourism board) have been involved to develop the strategy.

The strategy is not spatial but works in parallel with the MSP; with same goals, and includes the same group of people. Both MSP and the political strategy are seen as two parallel tools applied, where strategy indicates where do we go with business, and the MSP, where do we do what at the sea. The Strategy and MSP facilitation teams meet several times per year to discuss the direction and actions taken. A fairly simple approach was used with excel with different colours, representing focus areas to discuss next actions and relevant project links. Goals including 70 actions were clustered into groups and associated to regional projects. Projects groupings were marine activities, environmental profiles, marine aquaculture, etc. Nevertheless, that is an ongoing, continuous work. Revision is meant to take place with every political mandate, likewise the MSP, every 4 years.

> Lessons learned

- Time watching is very important, especially when engaging stakeholders, or aligning the times of vertical political decisions making.
- It is essential to clearly specify what input is needed at the different stages and what are the timelines and responsibilities.
- Revision in the form of yearly evaluation is a good tool for keeping everyone engaged committed to agreed goals.

3. Relationship between Visioning and MSP processes



[9]

[9] Strömstad, Tanum, Sotenäs och Lysekils kommuner. 2016. MARITIM NÄRINGSLIVSSTRATEGI för Strömstad, Tanum, Sotenäs och Lysekils kommuner. Maritime Industry Strategy for the municipalities of Strömstad, Tanum, Sotenäs and Lysekil.

Relationship between Visioning and MSP processes

A maritime vision can be developed as part of MSP processes, but can also be initiated separately. MSP is spatially oriented, often also containing other non-spatial elements such as planning policies, whereas visions, strategies, action plans and roadmaps are not necessarily spatial. While MSP is a medium-term process (revised and adapted normally every 6 years), visions usually have a long-term perspective (beyond 10 years).

MSP extensively uses data-based, analytical, quantitative and spatial techniques. Vision development also provides scope for using more creative, imaginative techniques. Consequently, visions are also less detailed, since their purpose is to define what we would like maritime space to look like in a given timeframe. While development of a maritime spatial plan is a requirement under the EU and national regulation, the development of a maritime vision or a strategy is not an obligation under the EU law and is usually developed on a voluntary basis. Hence, not all outputs of these processes have statutory standing. Nevertheless, a shared vision can supplement an MSP with a long-term perspective by considering the evolution of key maritime sectors beyond the 6-year MSP framework. Spatially mapped visions are usually more useful in an actual MSP process than non-spatial examples, usually because they concentrate on the spatial implications of possible changes or show the spatial consequences of future sea use trends.

The development of a vision or strategy can **define relevant concepts as part of the MSP preparatory phase** (e.g. maritime space and the use of maritime space), **prepare stakeholder input to MSP, help prioritise the uses** in maritime spatial plans and **set out general planning principles**. Maritime strategies can also **provide a legal framework and basis for evaluating MSP**. For example, the Portuguese National Ocean Strategy is a legally binding document that needs to be taken into account as it forms part of their legal framework and will be used to evaluate their MSP processes.

The visions and strategies developed as part of the **EU funded projects** proved to be particularly useful in providing **an inspiration for the formulation of initial spatial planning principles** (e.g. developments on sea must not be problematic for terrestrial developments), **guidelines and values in the national MSPs**. The BaltSeaPlan Vision 2030 [5], for example, helped countries around Baltic Sea to define relevant concepts at the initial stages of their MSP.

Macro-regional and sea basin strategies and action plans are useful since they set out a vision and related objectives shared by all countries in the macro region/sea basin. This facilitates **more coherent MSP across national borders** based on commonly agreed elements for planning. These long-term processes also serve as a **cross-border cooperation instrument**. For example, the EUSAIR [6] is a relevant cooperation instrument between Adriatic-Ionian countries, and is therefore beneficial for the cross-border cooperation aspect of MSP.

> Local maritime strategies and action plans processes

Usefulness:

- Allows for addressing land sea interactions;
- Allows for concrete problems to be solved in detail;
- Ensures strong links with territorial development – this mainly refers to maritime strategies attracting developments and specifying the policies and actions for development;
- Results of local processes are felt fairly quickly as defined actions are usually legally enforced;
- Extensive engagement increases the sense of ownership and commitment as all involved have the feeling they are in the driver's seat.

Shortcomings:

- History of local planning and possibly lack of connection with other higher-level processes including national MSP;
- Lack of vertical cooperation;
- Possibility of closed local networks.

17

> National maritime strategies, visions and roadmaps

Usefulness:

- Facilitates inter-sectoral coordination as they set out a broader vision for the entire maritime economy;
- Serves as a point of departure for preparing policies in the maritime economy and for developing programmes e.g. for port development.

Shortcomings:

- The risk is that without wider commitment to implementation and/or active use of outputs, these last only as long as the mandate of the government that developed it.

> (Sub) Sea basin wide visions and strategies

Usefulness

- Allows for addressing the Large Marine Ecosystem and Areas Beyond National Jurisdiction;
- Improves coherence and data exchange across countries;
- Identifies transnational common priorities, planning principles and agreed actions;
- Reviews whether the national policies/strategies are compatible with each other and where synergies could be enhanced (i.e. energy corridors);
- Identifies topics that need cross border cooperation (or problems that can be solved only by joint transnational effort).

Shortcomings:

- In some cases, there are limited links to statutory MSP process, or limited uptake from such formal processes.

Case study

BaltSeaPlan Vision 2030

> Purpose of the process

The BaltSeaPlan Vision 2030 was developed as part of the BaltSeaPlan project (2010- 2013) lead by the German Federal Maritime and Hydrographic Agency (BSH). It is a regional sea basin wide scale vision for MSP processes, providing an integrated perspective of sea uses and the Baltic Sea ecosystem. The vision aimed to provide more coherence and certainty to all users of Baltic Sea space. Grounded in existing trends and policy objectives, it tried to anticipate future developments and changes and to place them in a spatial context. The vision is transnational, but linked to national MSP as part of a holistic approach to MSP across scales. As part of the vision, objectives and spatial implications were highlighted for the very first time for 4 transnational topics: 1) healthy marine environment; 2) coherent pan-Baltic energy policy; 3) safe, clean and efficient maritime transport; 4) sustainable fisheries and aquaculture.

> Approach:

The BaltSeaPlan Vision 2030 was developed jointly by organisations from seven Baltic countries, making it a reflection of a broad range of different backgrounds and perspectives. Lead authors of the document include researchers and spatial planners. The vision development was not a participatory process but instead developed by the BaltSeaPlan partners in a collaborative process. General steps of the process included: 1) development of initial joint vision statement 2) analysis of existing strategies 3) development of new project ideas for unsolved issues regarding governance and management 4) involvement of all BSR partners and smaller working group

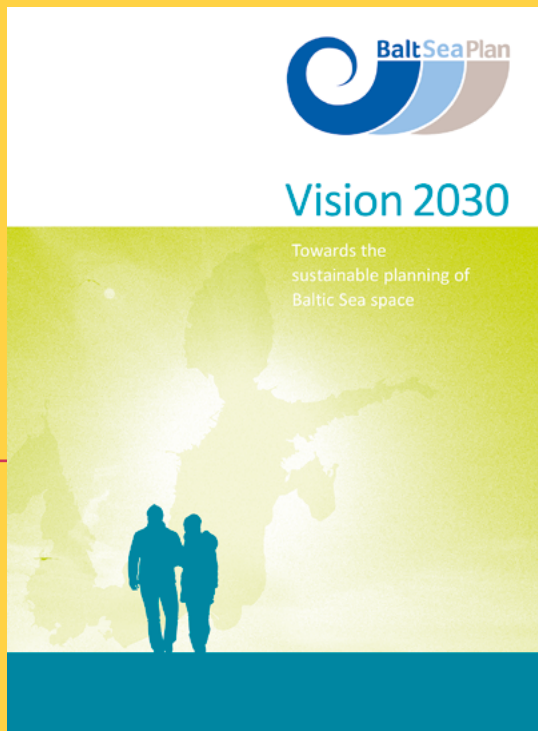
through series of meetings 5) drafting and revision of vision text and graphics. A pre-study was developed on future spatial needs of key transboundary sectors. The pre-study also explored links to sectoral strategies and policies, existing MSP principles (HELCOM/VASAB) and national MSPs. The scenarios were developed as part of the process and discussed at workshops. There were various feedback loops on the final text of the vision. Take up of the vision was ensured through partners involved in MSP processes. This was the first vision of its kind and is still quoted, although it is less well-known today and not well-known outside the region.

The vision influenced some MSP processes and outcomes in the Baltic; esp. as it developed joint sea-basin wide principles for spatial allocation decisions such as spatial efficiency, spatial connectivity, spatial subsidiarity; which have been used ever since by MS Planners. It also had substantial intangible benefits for those involved by creating a strong sense of common identity between the MSP community throughout the Baltic Sea Region.

> Lessons learned

The BaltSeaPlan Vision 2030 was the first of its kind. Given the advancement of MSP in Baltic countries during the last years, revision or rather further development of the vision would be beneficial. This is partly ensured by the ongoing project 'BalticLINes' – but still needs a more strategic endorsement by all MSP authorities. This would allow to include more specificities and focus on issues and opportunities in the Baltic that need collaborative approach.

4. Decision making framework



[5]

There has been a "mentality change" in the Baltic Sea region towards a less consumerist and more responsible attitude.

The Baltic Sea region has developed a smart (maritime) economy.

A "Baltic spirit" has developed.

Some areas of activity might be regulated jointly – those where the EU has more competence and ambition and where strong drivers exist.

1.1 The Baltic Sea region – a dynamic picture

The Baltic Sea is a unique environment governed by special hydrographic and climatic conditions. Connected to the North Sea by only a narrow stretch of water, it is a self-contained sea that is brackish on average, fairly shallow, and covered by ice in some areas in winter. These environmental conditions give rise to unique flora and fauna, and many habitats and species are protected as a result. But those same special qualities also make the Baltic Sea vulnerable, in particular to overuse and pollution. At one point, the Baltic came to be regarded as one of the most polluted seas in the world. Recognising the particular sensitivity of the Baltic, HELCOM has worked for the last three decades to eliminate pollution and other threats. This has culminated in the Baltic Sea Action Plan of 2007 which aims to restore the good ecological status of the Baltic marine environment by 2021.

Apart from its significance as a natural environment, the Baltic Sea is also a dynamic economic and cultural space. It lends identity to an entire region and has given rise to long-standing traditions. As a transport space the Baltic offers connections to other nations within the region and beyond, and more recently it has also become an energy space, through offshore wind farming, or oil and gas extraction, or LNG ports and associated facilities. Oil and new maritime-dependent industries are an important source of jobs; moreover, they represent the cornerstones of a competitive maritime economy which has become a key policy focus for the EU and Baltic Sea states. This is reflected by the EU Baltic Sea Region Strategy which presents an integrated framework to address the challenges and opportunities of the Baltic Sea Region.

As the world is becoming ever more connected, global trends will increasingly influence the Baltic Sea region. Climate change is one example, leading to temperature change, salinity change or acidification in the Baltic Sea ecosystem. Other trends are the liberalisation of markets and trade, the growing political role of regions, increased competition for natural resources, or the need for renewable forms of energy. Despite the opportunities these may bring, we cannot be sure what impacts these will really have on

the natural environment or the socio-economic development of the region. Already today, new economic demands are putting growing pressure on tight marine resources. Changing views of the benefits we can derive from the Baltic Sea are likely to increase this pressure further.

As a result of these trends, the Baltic is changing as a planning space. Sea space is already much in demand, and the more users compete for it, the scarcer and the more valuable this space becomes. Since sea space cannot be multiplied, it is vital that we plan for its use in a systematic and co-ordinated way. Wise planning needs to anticipate future needs and also deal with existing objectives for space. It needs to make sure the future mix of uses is compatible with ecological objectives, for instance biodiversity, the protection of key habitats and water quality. It needs to consider what use is best suited where, in the sense of both economic viability and environmental sustainability in the long term. VASAB was the first to lay the foundation for MSP in the Baltic Sea when it published its "VASAB 2010+ Spatial Development Action Programme" in 2001.

Natural phenomena such as demographic change, globalization and climate change will remain hard to predict and prevent.

6 BaltSeaPlan | Vision 2030 | 01 introduction

[5] Gee, K., Kannen, A., Heinrichs, B. (2011). Towards the Sustainable Planning of the Baltic Sea Space. Vision 2030. BaltSeaPlan.

To develop a maritime vision, planners need to understand many underlying factors and make a number of interrelated decisions. Planners are usually limited by certain pre-conditions ('givens') that are beyond the planner's control, such as geographical scope of the process or the statutory nature of the process. On the other hand, 'first-level' and 'second-level' decisions are within planners' purview, with first-level decisions, such as temporal scope or available skills and resources, possibly directly affect second-level decisions (here: 'Building blocks'). Building blocks refer to main steps and elements of the process such as background research, stakeholder identification, analysis, and engagement and future trends analysis. However, all visions are different and this handbook uses one possible framework as its structure. Planners can use this framework to determine their own first- and second-level decisions relevant to their process.

Decision making framework

Decision I

Deciding what type of process to use

Decision II

Ensuring adaptability

Decision IV

Resources

Decision III

Temporal scope

Decision V

Facilitation team and essential skills

Preparatory Actions

Building Blocks

Building Block I

Background research

What questions and sources can be used for a **desk research** phase?

What methods can be used for involving **stakeholders as a source** of information?

What techniques can be used for **structuring and analysing** information?

What is the **benefit** of involving stakeholders in this phase?

Building Block II

Methods for analysing the future

When to use **forecast and scenarios**?

How to **develop** a scenario?

When is it useful to develop **different types of scenarios**?

How to use **'wild cards'** to account for extreme changes?

What methods can be used for **presenting scenarios**?

Building Block III

Stakeholder identification and analysis

How to **identify** stakeholders?

How to **analyse** stakeholders?

How to develop a stakeholder **engagement strategy**?

What are typical stakeholder **engagement challenges**?

Building Block IV

Interactive methods

How to generate information in an **interactive** way?

How to **jointly** organise information?

How to **ensure** a feeling of ownership and **commitment**?

Building Block V

Ensuring commitment and take up

What are the **success factors**?

How to best **communicate** process and **disseminate** outputs?

Summary of key findings

Case Studies

Case study

Towards an Implementation Strategy for the Sustainable Blue Growth Agenda for the Baltic Sea Region

> Purpose of the process

22

The implementation strategy was developed to refresh the Sustainable Blue Growth Agenda for the Baltic Sea Region (adopted by the European Commission in 2014) and support its implementation by all stakeholders. A consultancy (s.Pro-sustainable projects) was the lead facilitator for the process that lasted eight months. The aim was to have a grounded projection for each of four blue growth sectors- opportunity areas and four sectoral visions for 2030, linked closely to proposed strategic actions. The implementation strategy helps to prioritise and ensure synergies between specific portfolio of actions or (co-) investments in order to achieve a jointly agreed objective; the vision for 2030. The aim was also to contribute to the strategic transnational cooperation for the maritime economy in the BSR and to raise mutual understanding, creating ownership and buy-in as well as stimulating the systematic interplay between the various actors throughout the region to kick-start the implementation of the Baltic Blue Growth Agenda.

> Approach:

The choice of experts for this work was based on the following knowledge and skills categories. 1) Knowledge: country expertise / sector expertise 2) Skills: analytical, survey and mapping, organisational and strategic, facilitation (including logistics), and 3) outreach (networking) skills. The desk research was the initial step and provided an overview of existing actors, projects and initiatives to identify the most important development trends and action gaps in each of the chosen opportunity areas. As the second step, surveys open to all stakeholders were carried out to verify and complement the desk research. Followed by interviews held with selected stakeholders for further insights in priorities and possible actors. Next was the development of four sectoral (opportunity areas)

scoping papers to capture the results of three previous steps, and to identify the most important development fields with the biggest potential for sustainable growth (SWOT analyses).

The fifth step included four interactive discussion workshops to discuss and agree on the entrepreneurial opportunities, industry challenges and explore the necessary transformative steps and structures to finalise the strategic transformation maps for each of the chosen opportunity areas, which provides elements such as actors, coordinators and objectives for each action field. The workshops, accompanied by a "graphic recorder" provided a "live protocol" with key discussions and results, were an important vehicle to test, as well as to stimulate the commitment and ownership that stakeholders are willing to take. The Visual Facilitation Methods increased cooperation and interaction among participants contributed to a coherent and engaging documentation. The final, sixth step, considered the development of the well designed, easy-to-read Implementation Strategy document itself containing description of state of play, including main drivers/challenges, vision 2030, strategic action fields including 'bricks to build on' and 'demonstration projects', concluding remarks showing commonalities and, finally, recommendations for the way forward.

> Lessons learned

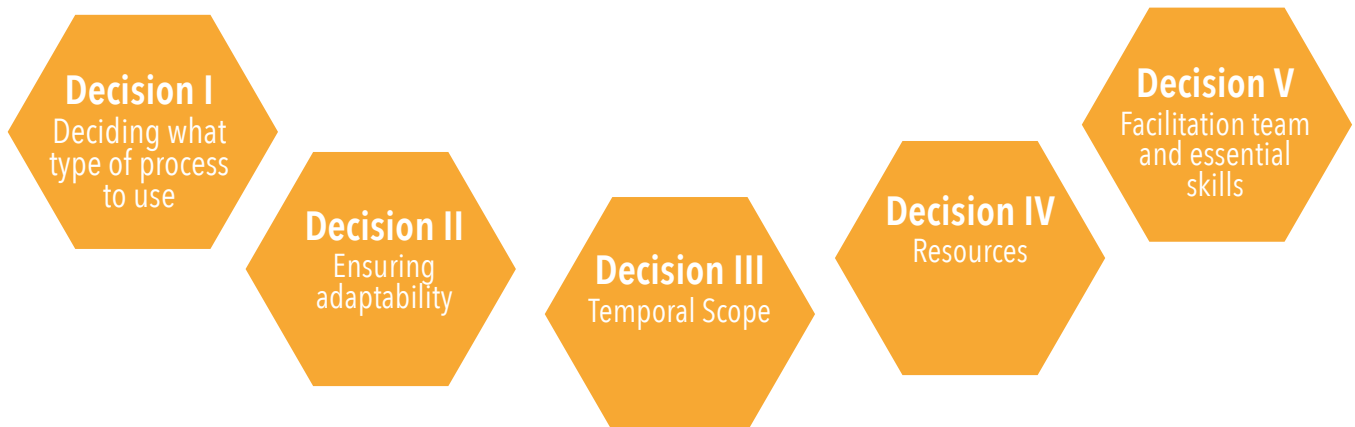
- By developing a bottom-up strategy, stakeholders take ownership for their actions and the strategy. Enterprises and business representatives are the multipliers and their job is to be aware of trends in their sector. Industry representatives were easier to engage as their role is to represent and speak for the industry, whilst individual enterprises were the hardest to engage.
- The companies that already have participated in other workshops/conferences were the most pro-active. An incentive for them is that they can present their businesses and potentially get new clients.



5. First-level decisions: Preparatory Actions

First-level decisions are usually made by planners at the preparatory stages of a vision development process. The following chapters explain each of the five first-level decisions, and present lessons learned from the 40 examined processes

24



Decision I: Structuring the process

SUMMARY

- How to decide on the scope of the process and establish a link with other relevant processes or high-level policies?
- What methodological approaches can be taken and what outputs can be produced?

> Scope

When beginning a process, initiators will ask themselves questions such as ‘What issues and policy objectives do we wish to address with this process?’ The answer will determine the overall scope of the process. This can either be focused on one aspect, e.g. to answer the question ‘How is shipping likely to develop over the next 20 years?’ or integrating all aspects in a more holistic approach, e.g. ‘What is the shared ideal picture of the planning area in 30 years’ time?’.

The vision is usually built upon objectives and priorities that are set out in relevant policy documents. During the initial stages of the process, it is also important to ensure it links to other visions and strategies from the same or relevant thematic fields.

Findings from existing processes (e.g. Maritime vision 2050 for the entire sea) can be taken into account when developing another process with a different scope and time horizon (e.g. scenarios for 2030, which cover only a specific portion of the sea).



The Baltic Sea basin wide **VASAB Long Term Perspective [7]** (VASAB LTP) made a link with the EUSBSR [8] Horizontal Action "Spatial Planning", which is of key importance in ensuring coherence between EUSBSR actions and maintaining an integrated approach.



The **Maritime Strategy for four municipalities in Sweden - Norra Bohuslän [9]**, have a strong land sea interaction and territorial development component, as well as links with other relevant processes.



The Belgium government is in the process of developing an integrated long-term **vision for their part of the North Sea for 2050**, meant to be included in the new Belgian maritime spatial plan. This long-term vision can also function later as a framework or input for other processes, such as the development of different scenarios on separate sectors (e.g. human resources, maritime innovation, use of space).



As part of the **BalticScope project**, the long-term vision on sea use was developed, as the strategic part of the **Latvian MSP [10]**. The vision was built upon objectives and priorities that are set in relevant policy documents. It was essential to facilitate the exchange of ideas, view-points and proposals of different sectors, local municipalities and civil society to be incorporated in the vision and priorities of the MSP.

> Approach to vision development process

With the purpose of the process and its outputs in mind, it is important to choose the right methodological approach and the format for the outputs. Questions asked at this stage include 'Do we want a process that lets us explore different options, and agree on a particular target or framework?' 'Do we have a vision or target already agreed upon and we now need to understand how to attain it'. There are two main elements to this decision. Firstly, whether the process needs to be exploratory, normative or predictive. Secondly, whether it will make use of, or result in, a vision, scenario, forecast, strategy, action plan and/or roadmap, or a combination of these.

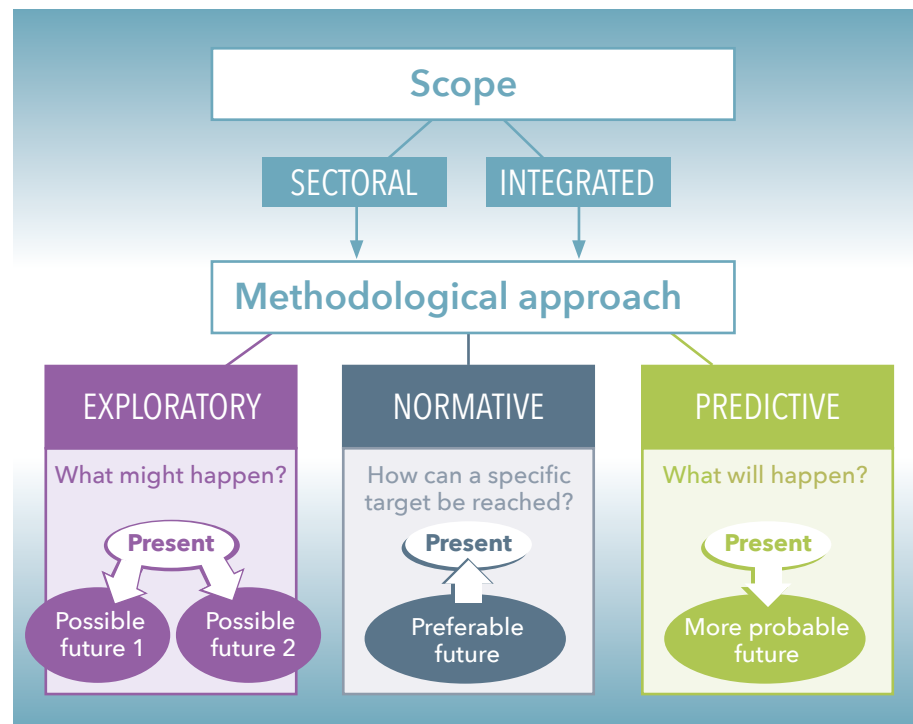


Figure 3 Visual presentation of the content scope and structure of the process

A vision-making process can make use of scenario analysis and/or exploit evidence from forecasts, while strategies are generally based on previously agreed visions and can generate roadmaps and/or actions plans. While forecasts are usually developed as part of the preparatory stages, a wished scenario can be generated within the stakeholder co-visioning process, not necessarily only from the preliminary analysis. There is often a certain degree of visioning often associated with a strategy, and a strategy as such might not be meant to be implemented but rather taken up by relevant actors and actively used.

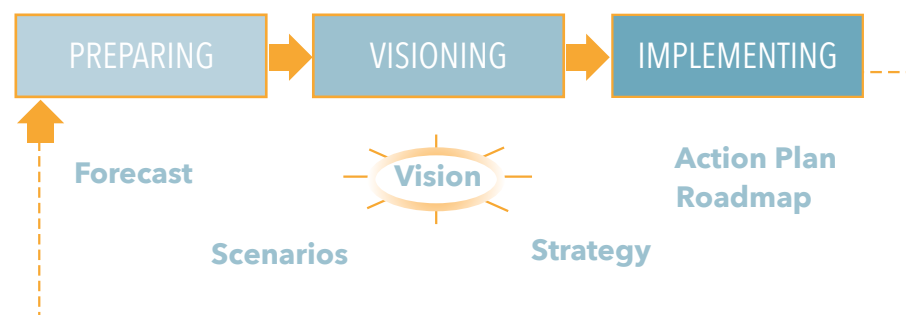


Figure 4. General interrelation of process phases and resulting outputs

Exploratory approach

The exploratory approach usually starts from the present state and looks towards one or several possible futures. Often, this is a bottom-up approach where the vision and desired outcomes are being defined through a participatory process. The process focuses on exploring, collectively among stakeholders, desirable future scenarios and the preferred development trajectory. For example, initial scenarios could be developed through desk research and subsequently discussed and refined with stakeholders during a workshop. Depending on the geographical scale and content scope of the process, stakeholder engagement may be resource intensive and require specialist skills e.g. professional facilitation.



FURTHER READING

- > GAUFRE Project [11]
- > BaltSeaPlan Vision 2030 [5]



For an efficient exploratory process facilitators and stakeholders should prepare thoroughly by reading material distributed prior to the workshop.



The **GAUFRE** project [11] has developed a strategic vision on the desired spatial development of a particular area, represented by structural maps. Apart from being a good communication tool, the benefit of using structural maps is that they contain less detail and are flexible and easy to change to respond to policy or other changes in the given environment. The difference between structural and GIS maps is shown in Figure 5.

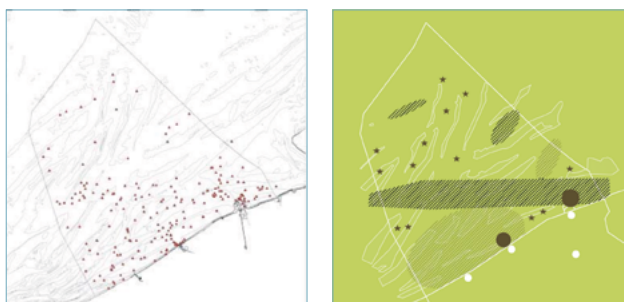


Figure 5. Detailed vs Structural maps in GAUFRE project [11]



Visions are not necessarily spatial and even if spatial, may not be depicted on a traditional map. Structural maps are not geographically accurate down to the last detail and are often used in visions for easier presentation.

FURTHER READING

- > VASAB LTP[7]
- > National Spatial Development Concept 2030 (Poland) [12]

Normative approach

A normative approach usually sets out a clear direction for achieving a desired outcome. Generally speaking, this approach explores what has to be done to make this desired future unfold and connect to the present. Backcasting² scenarios can be used to explore different paths that could be taken to reach the set objectives. Stand-alone, normative approach is often used in top-down processes where a preferred vision has already been agreed on by relevant authorities and the aim is to develop a political strategy, action plan and/or a roadmap. This approach is often used on a wider geographical scale, e.g. at the national, macro-regional, or EU-wide scale.

FURTHER READING for backcasting

- > The Roads from Rio+20 [13]
- > Exploring social structures and agency in backcasting studies for sustainable development, Technological Forecasting and Social Change [14]
- > Participative backcasting: A tool for involving stakeholders in local sustainability planning [15]
- > BaltSeaPlan Vision 2030 [5]

Predictive Approach

A predictive approach usually uses a forecast³ to assess what is the most probable situation in the future by using what is known already about the present and the past. This type of process is usually driven by a sectoral or topic related issue. This approach might imply quantitative estimations from the analysis of trends or the numerical modelling and employment of extensive analytical or scientific skills. Forecasts developed for a smaller geographical area usually use geo-referenced spatial information as one component of the analysis. However, depending on the size of the geographical area in question, and the availability of spatially referenced information, different levels of detail and precision may be employed in spatial analysis and mapping-visualisation processes. Depending on the internal expertise and budget available, it is not uncommon for the initiating body to decide to outsource part of the process.



If decisions resulting from visioning process are expected to be enforced by law, spatially referenced data used for the analysis and visual presentation should always be as precise as possible, as well as validated and trusted by everyone

FURTHER READING

- > C-SCOPE - Study Case Heist [16]



To be useful in an actual MSP process, scenarios or forecasts should concentrate on the spatial implications of possible future sea use trends and other possible changes in the environment.



In the **C-SCOPE** [16] project in the coastal zone of the Knokke-Heist, Belgium, impacts that the growing sandbank could have on local maritime businesses and the environment was the major driver for developing predictive scenarios with a forecast element.

² To find out more about backcasting scenarios visit [page 28](#)

³ To find out more about when to use a forecast visit [page 50](#)



Different approaches can be taken over the course of process development.

The EU wide study on **Blue Growth Scenarios and Drivers for Sustainable Growth from the Ocean, Seas and Coasts** used a normative approach and backcasting scenarios after the exploratory phase. In the first phase, the general background scenarios were developed, taking the exploratory approach, while concurrent development of micro futures was based on the normative approach given that preferred futures were already decided on in the earlier phase. The aim of micro futures was to see how certain sector determinants change if alterations are imposed to other variables.



FURTHER READING

> **Blue Growth Scenarios and Drivers for Sustainable Growth from the Ocean, Seas and Coasts [17]**

29

Decision II: Ensuring adaptability

SUMMARY

- Why is it important to design an adaptable process?
- What are the questions that planners might use during the adaptation phase?
- What are the SMART objectives?

It is important to have a clear understanding of the purpose of a vision development process, and think of the best ways to monitor changes that could redefine this purpose and resulting outputs. It is relevant to not only have an effective understanding of the variables and their relationships, but also to ask whether these will continue to be important in the future. Perhaps after some time other factors or entirely new contexts need to be explored.

Developing a vision should not be a one-time exercise, but rather a continuous process that is responsive to the internal (within the development team) and external changes (all other changes that could affect the purpose of the process development). New information collected intentionally or opportunistically throughout the process can point out these changes. The purpose of the process and resulting outputs should then be updated to better reflect this new knowledge.

Monitoring can be done in different ways, either by using the checklists, a system of indicators, or any other method that fits the given context. For example, indicators for some changes in the environment could be monitored to ensure these are taken into consideration in the revision⁴.

⁴ Information collected during the interactive session at the Member States Expert Group in Maritime Spatial Planning

When developing an action plan or a roadmap, the SMART objectives and specific actions should be defined. Points in time should be specified for evaluating if actions have been taken and if objectives have been reached. Defining objectives that follow the SMART criteria allows for easier identification of relevant indicators to evaluate progress towards achievement.

Specific – objectives should not be too broad, but rather concrete. For example, ‘protect the marine environment’ would be a very broad objective. A specific objective could be, e.g. ‘protect the specific species in a specific place’;

Measurable – objectives should be defined in a way that allows their quantification. For example, ‘decrease number of shipping accidents’;

Achievable – the objectives should be attainable within the relevant time, resources, and contexts;

Relevant – maritime spatial planning should influence the defined objectives, which should be relevant to the identified needs;

Time-bound – the achievement of objectives should be set in a specific timeframe.

Possible questions planners may ask at this stage are:

- ✓ Have actions taken place or have objectives been attained?
- ✓ Are actions and objectives still relevant?
- ✓ Should timelines be updated?
- ✓ Should the list of responsible actors be updated?
- ✓ Is our target audience still the same?

FURTHER READING

- > Handbook on MSP Indicators Development
- > Marine Spatial Planning Quality Management System [18]
- > Quality Indicators: Past and Present [19]
- > Programme Frameworks: Objectives and Indicators [20]
- > Equal Access Participatory Monitoring and Evaluation Toolkit – Setting Objectives and Indicators [21]



The **VASAB Long Term Perspective** [7] has the character of a living document, so new actions and initiatives may result from the evolution of trends and challenges. Based on the established monitoring principles, the Perspective was meant to be periodically reviewed and the implementation progress is to be reported to the ministers responsible for spatial planning in the Baltic Sea Region countries, as well as relevant stakeholders.

Decision III: Temporal Scope

SUMMARY

- What temporal horizons are used for different visioning processes?
- What to take into consideration when deciding on the temporal horizon?

There is no hard and fast rule as to what type of vision process outputs should be linked to what temporal horizon. Processes also vary in terms of the frequency of updates. While MSP is a medium-term process (revised and adapted normally every 6 years), a general vision is usually developed for a longer time span (e.g. 20 years). Some of the broader type visions that are not linked to a specific implementation plan, do not even specify the temporal horizon they cover. Strategies and action plans with specific actions and evaluation systems normally have a shorter time span, e.g. every five years. On the other hand, broad background scenarios can be quite long term (e.g. aligning with the vision or a long-term strategy), containing more specific and shorter micro futures⁵ scenarios.

Preferably, the interim time horizon should also be defined for more specific objectives and actions for implementing the strategy and reaching the desired vision.



Consider the **planning horizons of sectors**, e.g. duration of offshore wind permitting and project lifespan; and temporal **horizons of high-level policy objectives, political mandates and other planning cycles**, e.g. coastal zone and land planning processes.



Processes that used interim horizons include:

BlueMed	3 years / 5-10 years / 10 years
Our Ocean Wealth	1 year / 2-8 years / 8+ years
BalticLINes	13 years / 33 years
NorthSEE	13 years / 33 years
VASAB LTP	5 years / 10-15 years / 20 years

Table 2 Examples of interim temporal horizons

⁵ To find out more about micro scenarios visit [page 56](#)



The **ENTSO-E 2030 Visions of TYNDP** [22] are developed as exploratory scenarios regarding generation, demand and pan-EU adequacy of possible futures in the context of deploying grid infrastructure. For these type of scenarios, the time horizon is usually 10 -15 years. As part of the same process, national and regional resolution scenarios were developed that focused on extreme events, such as cold spells, dry years, bad wind / solar years, covering a time horizon of 5 - 10 years (maximum). These scenarios, or rather forecasts, are usually predictive and designed to inform and assess the possible risks. In this sense, they are fundamentally different from visions, which should be understood as more 'exploratory' scenarios without focus on extreme events.



The **VASAB Long Term Perspective** [7] operates with three different time scales starting from the endorsement date of the document. Actions denoted as short time are recommended to be completed within five years (until 2015). The medium time horizon implies completion of the actions within ten to fifteen years (until 2020-2025). Finally, the long-time horizon indicates that the actions will be implemented on a constant basis throughout the whole period (until 2030).



North Sea Policy Document 2016 - 2021 [24] summarizes the Netherlands long term vision (2050) and incorporates a maritime spatial plan. It also aims to look at the broader picture and consider other relevant trends in the region. The document is being officially revised every six years, but given that this is an adaptive process it is also continuously being revised for certain aspects within shorter periods, as soon as new relevant evidence is available. This enables the vision process to adapt to changes in the environment and new technology (i.e. technology readiness and commercialization of floating wind generators).



FURTHER READING

- > **ENTSO-E. 2016. TYNDP 2016 Scenario Development Report** [23]
- > **VASAB Long Term Perspective for the Territorial Development of the Baltic Sea Region** [7]
- > **North Sea Policy Document 2016-2021** [24]

Decision IV: Resources

SUMMARY

- What questions can help determine the amount of resources?
- What steps might take the most resources?
- How much time was spent on different processes across the EU?

The amount of financial resources that are invested in a process depends on the geographical scope and depth of the analysis, needed expertise, stakeholder engagement, communication and dissemination. Usually, stakeholder engagement is a fundamental part of the development of a process and constitutes a large financial cost.



The following questions might help determine the financial resources needed for the process:

- ✓ What is the geographical scope of the process?
- ✓ Does analysis of future trends involve development of multiple scenarios and / or analysis of spatial data sets?
- ✓ Can the process rely on internal expertise (is there a need for hiring an external expert or for outsourcing some of the work)?
- ✓ Who should be engaged in a process and by what means (e.g. a questionnaire versus active involvement)?
- ✓ What is the extent of the communication and dissemination strategy (does it require a targeted approach)?
- ✓ What data and information is already available?
- ✓ Is there already a maritime spatial plan in place?



For stakeholder-heavy processes in a wide geographical scale it is useful to plan extra budget for travelling and for contingency actions, especially if stakeholder views are expected to be conflicting.



Keep track of budgeting so that these lessons learned can be used in the future rounds of budget planning – e.g. for the process revision and update.



Hiring experienced stakeholder engagement leaders can contribute to an efficient process. However, engaging local ‘champion’ to work pro bono has been beneficial in some cases, as this person is not perceived as a spokesperson of any specific agency, and as such is trusted by a wider community.



The budget required for stakeholder engagement will be informed by key considerations such as:

- ✓ Whether there are established processes for stakeholder engagement in place;
- ✓ The number and location of stakeholders to be involved;
- ✓ The method of engagement (e.g. face-face, virtually, written consultation, etc.);
- ✓ Whether external support and skills are needed (e.g. facilitators and strategic communicators);
- ✓ Whether a contingency budget is needed for unplanned events or extra work.

Alongside decisions relating to the financial resources, it is also vital that facilitators make good estimates of how much time is needed for each step of the vision-making process. Efficiencies may be gained by relating the timeline for the process to the timeline of a national MSP process or the high-level policy objectives. For members of the team, but also for wider stakeholders, investing in a vision process is time-consuming and accurate time-allocation is necessary.



The experience with the **SHAPE** process [25] has shown that although a wider stakeholder engagement would have been beneficial, it is not always possible due to resource constraints; both in terms of budget, as well as the allocation of time for the process as a whole, and time allocated to the separate steps in the process.



The experience from the **Celtic Seas Partnership future trends** process [1] shows that informing the stakeholders involved of the level and timeline of engagement foreseen and the dissemination of results is of key importance, also defined as **expectation management**, as this is very dependent on the allocated budget, time and other resources. This process example has shown that it is often beneficial to allocate more time for dissemination after the conclusion of the development process, as this is a step in the process that is sometimes overlooked. Also, presenting the engagement timeline to stakeholders allows them to plan in advance which steps is relevant for them to be involved in.



FURTHER READING

- > SHAPE project [25]
- > Celtic Seas Partnership Future Trends [1]

The vision-making processes investigated in Europe have taken between one and a half and three years from beginning to end. Nevertheless, it has been noted that the 'will' or 'need' to develop a forward-looking document must be well in place beforehand. It is often difficult to determine the specific budget for a vision process within wider projects. However, it is important to set a time and budgetary limit for the process or a part of it, and give it a sense of urgency and dedication.

Vision processes ⁶	Time spent (months)
VASAB LTP	36
BaltSeaPlan Vision 2030	18
EU Strategy for the Baltic Sea Region	24
Implementation Strategy for the Baltic Sea	8
Long-term vision for Knokke-Heist West	24
GAUFRE	24
Transboundary Planning in the European Atlantic	18
West Med Strategy	6
BlueMed	24

⁶ Some of the listed processes also included other aspects apart from developing a vision such as for example developing a pilot MSP. In some cases, it was difficult to distinguish the time devoted solely to the vision development, therefore some of the times listed refer to the whole length of the project.

Table 3 Examples of the time needed for the FLP development

Decision V: Facilitation team and essential skills

SUMMARY

- What skills and expertise are usually required when planning to develop a vision?
- What questions might determine the necessary skills for a vision development process?

For visioning processes, the skills identified are generally aligned with those required for the MSP, although with greater emphasis on graphical and visualization skills and social skills, including moderation and strategic communication. A varied set of skills is an advantage and the Table 4 presents a suggested list of useful skills.

Necessary skills for the facilitation team
Management skills Comprehensive approach - system thinking Overall management, time keeping and coordination skills
Social skills Stakeholder analysis including up-to-date knowledge of policy actors and their mandates, development and implementation of stakeholder engagement strategy Networking, media and strategic communication skills* Facilitation skills, diplomacy, active listening and conflict moderation skills Interdisciplinarity and capacity to cooperate among different regions and with the private sector
Technical expertise - sectoral Knowledge of innovation and investment trends; strategies, financial programming - EU funds Business development skills Technical expertise of maritime sectors/fields/topics
Technical expertise - analytical skills Data collection, database management and analysis; scientific forecasting, modelling, feasibility study, risk assessment, spatial analysis - GIS
Policy and legislation skills (Integrated Maritime) Policy and legislation expertise and analysis
Communication and visualisation skills Knowledge of visualization and communication tools Graphic design*

Table 4 List of essential skills for the vision development process



The following questions might help determine the set of essential skills for the process:

- ✓ Is there a history of diverging opinions between the process initiator and target stakeholders?
- ✓ Do important agreements need to be made?
- ✓ Are vision or scenarios developed as part of the MSP process?
- ✓ Is there a plan for a comprehensive communication and dissemination campaign?

In some cases, it is beneficial to have a **neutral external and independent analyst** of sectors or of cumulative impact analysis, as an input to stakeholder workshops. If there is a history of diverging opinions between the process initiator and target stakeholders (i.e. environmental NGO and the maritime business community), the facilitator might opt to hire a **professional communicator** in order to neutralize the process.

If a vision or scenarios are developed as part of the MSP process in order to set the scene and provide a path for the MSP itself, then the development process needs a **specialist with good knowledge of the given policy context and/or good policy analysis skills**. Linking with other relevant visions and high-level policy commitments is important to avoid inconsistencies.




Sometimes policies in fields that a first glance do not seem related could be a relevant link, i.e. a food strategy linking with a fishery strategy.


Process outputs along with possible actions, responsible actors and timelines will usually need to be agreed on among various stakeholders, sometimes internationally. Hence, quality **facilitation and moderation of workshops and meetings** is emphasised as sometimes lacking, but highly important. In general, a good facilitator will design workshops that combine learning and information sharing with interactive tools for group work⁷.


⁷ For more information about interactive methods visit Building Block IV on [page 69](#)

Effective communication of the process and dissemination of the results is also an important skill needed to ensure involvements of relevant actors in the process, and active use and take up of process outputs. Media can be involved including a short movie, TV, newspaper articles as well as social media content. A vision process can be an opportunity to connect with those who are usually underrepresented as well as for education and outreach. Therefore, the knowledge of appropriate tools and media can ensure effective communication⁸. Having **local opinion leaders** as part of the facilitation team might also be relevant. This includes identification and engagement of those who could promote the process, demonstrate commitment and encourage related civic actions⁹. This could imply connecting with e.g. women's networks, journalists' networks and other relevant networks and associations. So far, this practice has been predominantly used in local contexts, but it could be also useful for processes initiated on a wider geographical scale. Identifying local leaders¹⁰ would also allow for better adaptation to the local context, and contribute to the feeling of ownership¹¹.

⁸ For more information about communication and dissemination methods visit [page 79](#) 

⁹ Usually defined as defined as citizens working together to make a change

¹⁰ For more information about local leaders visit The Whales We Want example on [page 79](#) 

¹¹ For more information about the Snow Ball effect and the Stakeholder Network Analysis, both applicable in this context, see [pages 59 and 60](#) 

Case study

WESTMED Maritime Initiative and ASUR Vision

> Purpose of the process

The vision is to build an ASUR sea-basin, which stands for four principles guiding this process: 1) attractive and authentic, 2) smart, sustainable and social, 3) unified, 4) resilient and open to renaissance. The 'ASUR' Vision is linked to Maritime Initiative for the Western Mediterranean [32] and the development of a 'framework for Action' for its implementation. The initial vision for the potential strategy was to build on the Blue Growth Concept and to bring sustainable economic development to the sea-basin through an integrated approach. This vision had to be shared with all Western Mediterranean countries in accordance with existing overlapping cooperation agreements (e.g. Barcelona Convention, UfM, 5+5, UMA). The vision contains three goals and some given targets that will be monitored on an on-going basis.

The process was initiated by the European Commission, to assess the possibility for working towards building an integrated maritime initiative and action plan for the Western Mediterranean Sea basin. The initiative aims to better coordinate activities and to more efficiently use existing governance and cooperation frameworks to facilitate implementation of the existing legislative framework at international level and at EU level. It will also be instrumental to implement other strategies and policy initiatives and to better use existing funding instruments and leverage private investment as well as the investment plan for Europe.

A Task Force will be formed with careful selection and representation under the umbrella of the Union for the Mediterranean (UfM) and the European Commission to jointly chair this new body, and an assistance mechanism with focal points in the sub-sea basin to be created in early 2018. Implementation is based on full UfM and European Union support (Commission's Communication approved 19 April 2017, endorsed by the Member States Council on Blue Growth on 26 June).

> Approach:

The facilitation of the process is led by the consultancy Ecorys (Spain). Using a bottom-up approach, extensive consultations with stakeholders were conducted to identify clear needs specific to the region- assessed against existing frameworks relating to the sustainable development of the blue economy to highlight possible gaps based on a gaps analysis that takes into consideration the initial ASUR Vision and the outcomes of the working groups that took place in four occasions (formed by the EU, the 5+5 Dialogue, the UfM and a selected list of stakeholders).

Over 200 institutions were involved in the process: public sector (including national and sub national level), private sector, academia, sectoral organisations, and clusters. Stakeholder engagement was based on four focus group workshops, a stakeholder conference and online tools for consultation (dedicated website westmed-initiative.eu and twitter account). Questions for the workshops were formulated and a non-paper document was circulated beforehand to enable easy aggregation of the results in the discussions. Four different public reports were developed, one leaflet, one stakeholder conference wrap-up document, and videos of the conference, all available on the dedicated project's website.

> Lessons learned

- For involving stakeholders from the partners' countries (south), a formal institutional contact through the respective government always had to be used given the different culture of stakeholder involvement for policymaking in those countries.
- Elaborating a Vision or a Strategy that involves territories outside the EU might pose some challenges, and certainly there are grounds for improvement in this respect. It is difficult to say how to overcome this barrier to involve the stakeholders from those countries to a full extent, but probably, more physical presence there would be a plus.

6. Second-level decisions: Building blocks



[31]



[31] European Commission. (2017). Towards an initiative for the sustainable development of the blue economy in the western Mediterranean. Goals and Priorities.

Following the first-level decisions, planners engaged in a vision development process will need to make second-level decisions, which are defined here as building blocks. The five building blocks are presented in following chapters, each with multiple tools and methods, offering vision developers the flexibility to add, remove or refine tools and methods based on the specific needs, pre-conditions and first-level decisions of their vision process. Each process will contain a different combination of building blocks, depending on the specific needs and questions such as 'Do we need to involve stakeholders and if so, who?' and 'Do we need to analyse future trends and if so, how will we do this?'.



Table 5 Example of a typology with 5 building blocks

Building Block I: Background Research

SUMMARY

- What sources are often used and what questions are researched in literature?
- What are the means and methods for collecting information from stakeholders and how are these being used?
- What techniques for structuring and analysis information can be used and how?

> Desk research

Desk research is usually carried out at the beginning of the process to generate an information baseline and ensure links with existing strategic high-level policy visions and objectives.



Questions that may be asked at desk research phase include:

- ✓ What is the current situation with respect to sea use in key sectors (including environmental protection)?
- ✓ What trends are apparent in maritime sectors and marine environment?
- ✓ What policies exist that might influence the development of maritime space?
- ✓ Are there any policy targets for sectors that might influence the development of maritime sectors?
- ✓ Are there any “burning issues” or conflicts between sectors?

Analysing the existing frameworks, such as general policy priorities, may highlight preferred future development trajectories for the planning area. In order to ensure policy coherence, it is important that the process links to other relevant frameworks. Where there is no national policy framework, supra-national policy frameworks can be used as a basis. This includes the EU policy frameworks, or even global frameworks such as the Sustainable Development Agenda [26]. Identifying existing (policy or spatial) priorities helps make the vision a useful (complementary) tool in achieving more general objectives for an area. In local contexts, for example, links with territorial development and land sea interaction are relevant to be considered.

Trends in key sectors can be researched to give added information on potential impacts on the space in question. Some of these trends may be actively encouraged by the existing policy and strategic framework, others result from more general drivers at the international or national level.

Some processes have first developed **baseline studies and issues papers** (i.e. Irish Sea Issues and Opportunities) to have a good overview of existing conditions and issues. This presents an inventory step where the rationale for building a vision is developed. Sources of information commonly used include industry reports, or even data baselines such as tax registers or demographic data for more in-depth analysis of certain aspects. Baseline information can also be used to prepare a subsequent stakeholder process and used in communication, i.e. here are the issues we need to think about in order to develop the strategy or plan, what are your views on those issues? The baseline is then used to start off the vision process. In other cases, the collection of information is first done through interviews and workshops and then supplemented by additional desk research.




The following three vision processes – **BaltSeaPlan Vision 2030, Implementation strategy for the Baltic Blue Growth Agenda**, as well as the **Irish Seas Issues and Opportunities** - developed short briefing papers based on extensive desk research, which were distributed to workshop participants prior to the workshop. In all three cases the briefing papers contributed to common understanding of relevant concepts and helped to focus discussions of the workshops to already identified issues.

> Stakeholders as a source of information

Stakeholders are valuable sources of information and can contribute to the scoping and scenario development phase as well as the verification of the results. They can also connect the process leaders to other relevant stakeholders. There are many methods for obtaining information from stakeholders, including interviews and focus groups or the use of social media. The two main decisions are to be made when planning the stakeholder engagement to collect information. First is the choice of moderator for the workshop and / or the interviewer who needs to have a combination of technical, as well as communication skills. Second is the composition of the working group: the choice of stakeholders and meeting place, the periodicity of the workshops and / or interviews, and the method of invitation are all important factors for success.

Interviews with sector representatives and / or other relevant stakeholders could take place to collect a range of relevant information. Interviews are useful when direct information is being sought rather than a discussion. An example would be to ask sector representatives to rate the speed of developments, or to explain trends.

Apart from individual interviews, **focus groups or workshops** are typical social science methods used in vision development processes. Although they can also be used to obtain information, they are often designed to elicit preferences; a preferred state of the environment or preferred future spatial choices. Focus groups can also provide information on stakeholder perceptions of changes and main issues to be dealt with by policy-makers. Focus groups can also be used for participatory mapping, e.g. to map expected future trends in maritime sectors. Focus groups are usually led by a moderator; several focus groups can be organised as part of a larger workshop.¹²

¹² More on the interactive techniques for moderating focus groups can be found in chapter Interactive Methods, page 72 



The Netherlands North Sea Scenario development process used participatory mapping (Figure 6). A total of 19 GIS base maps were produced and used during the workshop to capture the input from a moderated group of experts.



Surveys allow to reach out to a large number of stakeholders. However, it should be noted that response rates may get very low unless the survey is very carefully designed and followed up on. Surveys can only be designed around a limited amount of (often closed) questions and are therefore mainly useful to validate existing findings,

rather than to collect new information. Some of the user-friendly software to create online surveys and analyse responses are:

- AddPoll
- Google Forms
- Survey Monkey

Live Q&A and poll software such as **sli.do** [27] could also be used during events to collect viewpoints from a larger audience.

Webinars are a useful communication tool that can enhance wider public engagement and transparency of the process. While in the US Regional Planning Bodies [28] largely rely on this type of communication (e.g. to present draft documents), webinars are not commonly used in the EU. Webinars can be helpful for processes covering large geographical areas, or when there is a need to engage stakeholders from remote places i.e. islands or mountainous areas. There is a range of webinar hosting software differing in price and payment schemes (free vs monthly vs yearly subscriptions), number of participants, and other features such as live polls or webinar recording.

Finally, **twitter or other social networks** should not be underestimated as a means to create or gather opinions and information. One tool for analysing the data from the social media is Blurr [28], a social media insights platform. The Wales We Want (The WWW) [81] used **Blurr** for collecting and understanding posts in real-time, and picking out what's most relevant, interesting, engaging and fun to make the content that can be used. **Twitter Polls** are now also used to create short polls and the results can be seen instantly.



The BaltSeaPlan project hired a team of three external experts to facilitate the process to develop a vision for how the Baltic Sea could look like in 2030 if maritime spatial planning had been carried out by all countries by that time. Rather than taking an entirely 'visionary' approach, the common spatial vision wanted to extrapolate from current reality, taking into account the existing priorities and policies that already set the stage for the development of the wider Baltic Sea Region (BSR).

As a preparatory step to developing the **BaltSeaPlan Vision 2030**, the expert team analysed the international and national policy context that had influence on the Baltic Sea space. The guiding framework was provided by EU policy on the one hand - which is more or less prescriptive - and international strategy documents on the other, which have been agreed as part of international institutions, such as HELCOM or VASAB. In addition, actual trends were analysed to indicate where developments were headed to and which uses of the marine environment were likely to be significant in the mid-term. This wider context also helped the common spatial vision to tie in with other strategic visions, ensuring that they are complementary.

The documents were mainly screened for the following type of information:

- significant driving forces that are considered to have an impact on the Baltic Sea space;
- any specific spatial trends and pressures on the Baltic Sea space;
- specific spatial conflicts or synergies in the Baltic Sea;
- spatial targets;
- non-spatial targets.

Work was mainly desktop research, analysing international documents and national reports. Results from focus groups, moderated as a World Café held at a BaltSeaPlan partner meeting, were also included.

> Techniques for structuring and analysing information

In order to structure and analyse the information collected through desk research, interview, and/or workshop, and to prepare them for possible use in a vision development process, some of the techniques described in following chapters can be used.

SWOT

The SWOT technique is used to analyse the internal strengths and weaknesses as well as external opportunities and threats. This technique is usually used to structure qualitative information. The classic SWOT diagram is a two by two matrix. The four quadrants in the SWOT matrix are: strengths, weaknesses, opportunities, and threats. SWOT is seen to have limits when it comes to developing a sea-basin wide vision. This is due to diversity of countries and thus difficulties to generalise strengths and weaknesses as well as opportunities and threats, as these might differ widely across countries.



FURTHER READING

> **Baltic Scope project - Development of a Maritime Spatial Plan: The Latvian Recipe [10]**



The four scenarios for **the Latvian MSP** [10] were built to support the formulation of strategic goals, priorities and objectives. The strategic assessment of scenarios by SWOT analysis was carried out during three coastal regional stakeholder workshops. Using the world café setting, the participants provided input for the SWOT analysis of each scenario. Four mixed groups with different representation of sectors were setup to promote varied discussions.



During the four interactive workshops for **the Implementation Strategy for the Baltic Blue Growth Agenda** [80], the facilitators provided a flipchart on which the layout of a SWOT analysis was drawn. During semi-structured roundtable discussions participants jointly decided which elements should be classified as Strengths, Weaknesses, Opportunities or Threats. In a final step, participants then decided on the related priority actions necessary to make use of opportunities and strengths as well as overcoming weaknesses.

ses and minimizing threats. The participants were invited to comment on the draft briefing papers before and during the workshops, and were also invited to comment on a second draft that was developed after the workshops, incorporating the input received. During the workshops, emphasis was placed on interactive discussion and documentation using active listening, post-its on flipcharts and a rich picture developed during the visual facilitation session.

PEST(LE) and STEEP

PEST(LE) refers to Political, Economic, Social, Technological, (Legal and Environmental) factors. PEST(LE) is a manual technique commonly used to organise information collected through desk research, interviews and workshops, and to prepare them for use in the scenarios or forecasts. STEEP is another technique similar to PEST(LE), referring to Social, Technological, Environmental, Economic and Policy factors.



WHEN TO USE SWOT, PEST(LE) and STEEP:

- for the written transcripts with small amount of data;
- at initial stages of the process to familiarise yourself with the data;
- to analyse scenarios.



SWOT, PEST(LE), STEEP are fairly easy to use, but are time consuming.



For the **Implementation Strategy for the Baltic Blue Growth Agenda** [80], a stakeholder-heavy process was organized, starting with an online survey and semi-structured interviews with 60 selected stakeholders, concluding with four interactive workshops. During the desk research phase, the process facilitators used the STEEP methodology to structure the information received from the desktop research as well as the information gathered from the survey and the semi-structured interviews. On the basis of this analysis, the facilitators developed a draft briefing paper for each of the defined topics¹³, that was sent to the participants before the workshops. In these briefing papers, the STEEP analyses were shown as well as 'opportunity areas' for the Blue Growth sectors in the Baltic Sea Region.

Q-Method

Q Method is an analytical method used to investigate patterns of opinion among groups of people. It helps understand what stakeholders perceive as important actions towards future development. The method allows for the generation of statistically significant results and its participant-driven nature minimizes research bias. The Q-method¹⁴ [85] can be used during surveys, interviews and workshops.



FURTHER READING

> Using the Q method to Reveal Social Perspective in environmental Research. [91]

¹³ The analysis focused on four topics: blue bioeconomy, environmental monitoring, tourism and shipping.

¹⁴ For more information about the Living Q used at workshops, visit [page 70](#)



The **POLIS Litoral Ria Formosa project** [29] used the Q-method for its action plan development in order to understand what stakeholders perceive as important actions towards future development of the Ria Formosa Coastal Zone in South Portugal.

DPSIR - Drivers, Pressures, State, Impact, Responses

The DPSIR framework is a causal framework and structural aid for describing the interactions between society and the environment, often used in a scenarios development process. In the framework, driving forces (such as industry developments) lead to pressures (e.g. pollution), changes in the state of the environment, impacts (e.g. on human health) and ultimately policy or management responses. For example, the DPSIR framework is used by the European Environment Agency in its reporting activities (Figure 7) [30]. This framework is an extension of the pressure-state-response model developed by OECD and is often used in research projects. It can also be usefully linked to concepts such as ecosystem services and their change in line with certain developments.

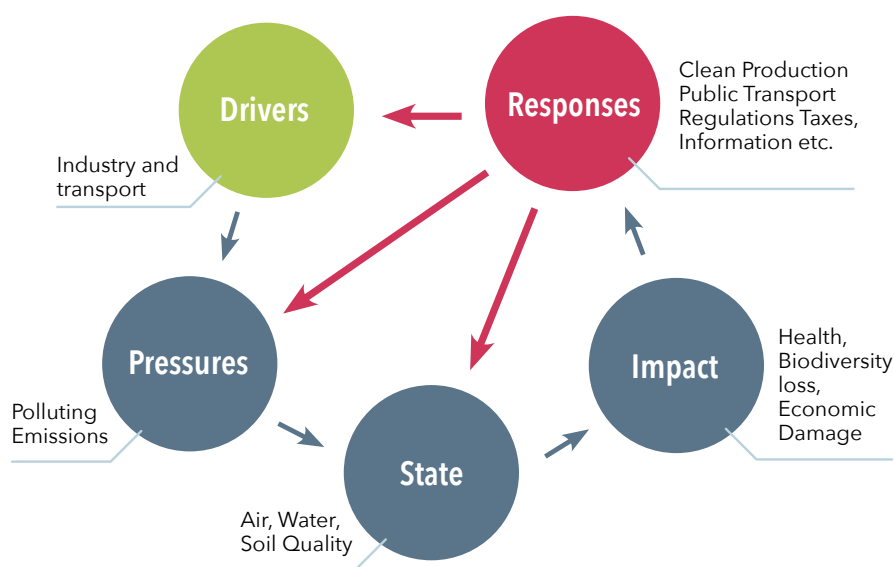


Figure 7 DPSIR template [30]



DPSIR was successfully used as a framework for assessing the added value of specific initiatives for the Western Mediterranean sub-sea basin [32]. It helped to analyse the response capacity of the region, define the ability of actors (businesses, research organisations, authorities and the civil society at large) and the ecosystem to fully address the range of posed challenges.

Life Cycle Approach

In order to focus on what is important today, but particularly also on what can be expected tomorrow, it can be useful to apply a Life Cycle Approach. This holds true especially when considering impacts of maritime economic activities. In one of the Blue Growth studies [33], these have been classified according to their development stage as follows:

- (Pre-) development stage: In the pre-development stage, inventions have been made, but most promising outputs are still to be defined. Much Research and Design is required. In the development stage, the possible outputs are clear, but commercial viability still needs to be proven;
- Growth: characterized by (strong) economic growth and/or employment growth. Smaller sized companies can enter the market, while prices of technologies gradually go down;
- Maturity: economic activity remains stable at a big size. Market positions of main players are clear and competition is fierce;
- Decline: economic activities are declining, no major innovations are being made, and it is clear which players are dominating the market.

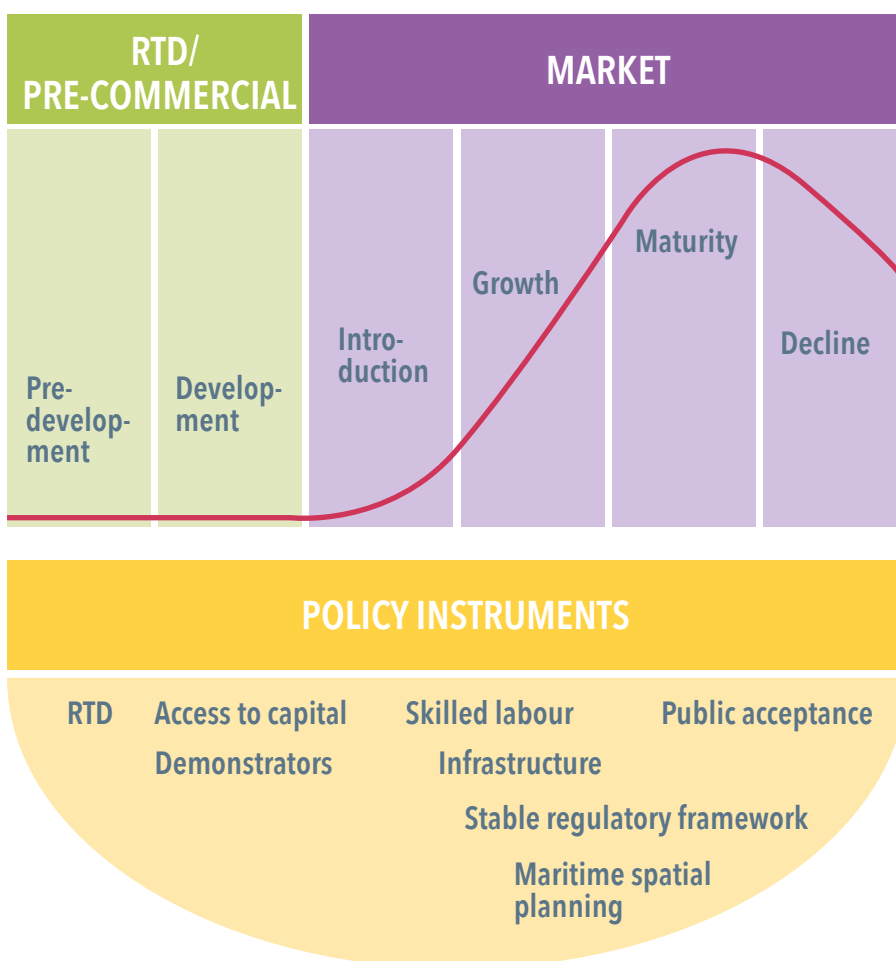


Figure 8 A simplified presentation of the life cycle approach [33]



**FURTHER
READING**

> Looking Towards 2030:
Preparing the Baltic sea
Region for the Future [34]

Evidently, when it comes to future-oriented such as visioning, as well as MSP, particular focus is to be placed on growing as well as developing or emerging maritime activities. For example, the expansion of offshore wind energy generation (growing sector) is having considerable spatial consequences – which leads to deviations which are much more pronounced from today's state, than for mature activities (e.g. fisheries). By the same token, emerging activities, such as wave or tidal energy generation, may not have spatial impacts to be considered in the short-term planning, and therefore could rather be taken into consideration in the vision should this technology break through. However, trends in sectors development, such as declining oil and gas energy production, should also be taken into account (e.g. decommissioning of oil & gas platforms)

Apart from defining the vision, some processes also include the development of more specific objectives and/or actions as part of the strategy, action plan or a roadmap. The maritime trends identified through different sources such as workshops, interviews or desk research, can have varying relevance for individual objectives that are being developed as part of the process. Figure 9 provides an example of how rough indications of the effects of trends could be defined for each of the objectives. Trends that have a negative impact on reaching the objectives more difficult are marked with minus sign (-). Trends pointing to easy gains are marked with the plus sign (+), referring to trends that may support the objectives.

Objectives and the trends matrix

TRENDS	OBJECTIVES			
	Objectiv 1	Objectiv 2	Objectiv 3	Objectiv n
T1	-			+
T2	+		+	-
T3	-	-		+
Tn		+	-	+

Figure 9 An example overview of objectives and trends affecting them (adapted simplified example from Looking Towards 2030)

Software-aided techniques

WHEN TO USE:

- For fairly quick analysis of large amounts of information;
- When including voice and video transcripts as well as written sources.

Some of the popular software for analysis of mainly qualitative data are NVivo, Atlas.ti and Transana. The general characteristics of each of the software are shown in Table 6.

49

data analysis software

NVivo	Atlas.ti	Transana
<p>Text analysis software</p> <p>Supports qualitative and mixed methods research. It is designed to help to organize, analyse and find insights in unstructured, or qualitative data such as interviews, open-ended survey responses, articles, social media and web content.</p>	<p>Text, visual, audio and video analysis software</p> <p>Serves as a workbench for the qualitative analysis of large bodies of textual, graphical, audio and video data. This tool can be used to clarify meanings and relationships between different communication outlets.</p>	<p>Text, visual, audio and video analysis software</p> <p>Also a workbench for different kinds of communication outlets. More specifically, the software is a tool for analysing video and audio data and to work with complex media data to discover the meaning behind messages.</p>

Table 6 Main characteristics of the popular qualitative data analysis software



Extra time is needed to familiarise oneself with the function of the software.



Atlas.ti was used for qualitative data coding during development of the **Study on Lessons for Ocean Energy Development [35]**. A total of 57 stakeholders were consulted through semi-structured interviews on the critical barriers in ocean energy technology development. By processing the transcripts of these interviews, important differences in perception emerged between several categories of stakeholders (business sector including developers, academic stakeholders and government representatives).



NVivo was used by the **Celtic Seas Partnership future trends [1]** development process where interview transcripts and notes taken during the workshop were entered into NVivo and coded to country, question number, sector, ideal scenario or tool category and combined where appropriate into categories. This resulted in 585 nodes themed into 10 dominant categories spanning all countries and all sectors to form an overview of an ideal scenario.

Building Block II Methods for analysing future trends

SUMMARY

- When to develop a forecast and scenarios?
- How to develop scenarios?
- When is it useful to develop different types of scenarios as part of the same process?
- How to use 'wild cards' to account for extreme changes?
- What methods can be used for presenting scenarios?

The analysis of future trends is often conducted using scenarios or forecasts. This section clarifies the main difference between the forecasts and the scenarios, and explains in which situations is it useful to employ these. Given that scenarios development is more common in the vision development process, the section goes on to explain the scenario development process and relevant tools and methods used in this regard.

> Difference between a forecast and scenarios development

A forecast is usually developed to estimate what the status would be, if the trends will continue without taking any action. Forecasts are useful in order to understand what actions are needed to reach the preferred vision¹⁵ and are often used in vision processes that focus on a specific topic or are driven by a certain issue. Forecasts analyse historical and present data to make an estimate of a variable of interest (e.g. intensity of tourism activities) at some specified future date. In comparison to scenarios where additional work is needed to choose a preferred scenario, a forecast is directly usable in decision-making processes. Developing a forecast usually requires strong quantitative and technical skills and is often outsourced to an external expert.

Scenarios are typically used in exploratory approaches to visioning, while forecasts are usually employed in processes driven by a certain issue in order to predict how the future may unfold and what actions might need to be agreed upon. Scenarios can take different forms including a story or "narrative", with maps, graphics, drawings, pictures, etc. Modelling and/or simulations can also accompany scenarios. Scenarios developed in a participative way can help to promote engagement and ownership of the process by stakeholders. If an aim is to build scenarios as a part of the exploratory process, there is no limit to the imagination of participants. Whereas if an aim is to build scenarios as part of the normative process, the participants are limited in their options by the fact that the desired future is already defined and **backcasting scenarios**¹⁶ are used to find the best way to attain that vision.

¹⁵ Information collected during the interactive session at the Member States Expert Group in Maritime Spatial Planning

¹⁶ For more information on backcasting scenarios visit the exploratory approach on page 27

Scenarios also make it possible to evaluate decision-making processes, actions to be taken, and visions or strategies developed as part of the normative process. Usually, a number of alternative scenarios can be developed in parallel (e.g. 3 to 4) which are then compared with one another in order to illustrate different future developments and to let the consequences of various developments and/or decision-making processes play out against a virtual backdrop. In this way, scenarios serve to test the reliability, robustness, and effectiveness of policies [36].



WHEN TO USE

- to predict how the future may unfold and what actions might need to be agreed upon.
- to evaluate visions or strategies developed as part of the normative process.



A large number of scenario development processes analysed reveal that a scenario or forecast development requires significant skills in analytical, graphic and communication techniques. The capacity within an organization to undertake the development of scenarios and the expertise it has are important limiting factors that need to be acknowledged from the outset.

> Scenario development process

Although there are many different kinds of scenario development techniques, the scenario process always unfolds in a broadly similar manner (Figure 10).

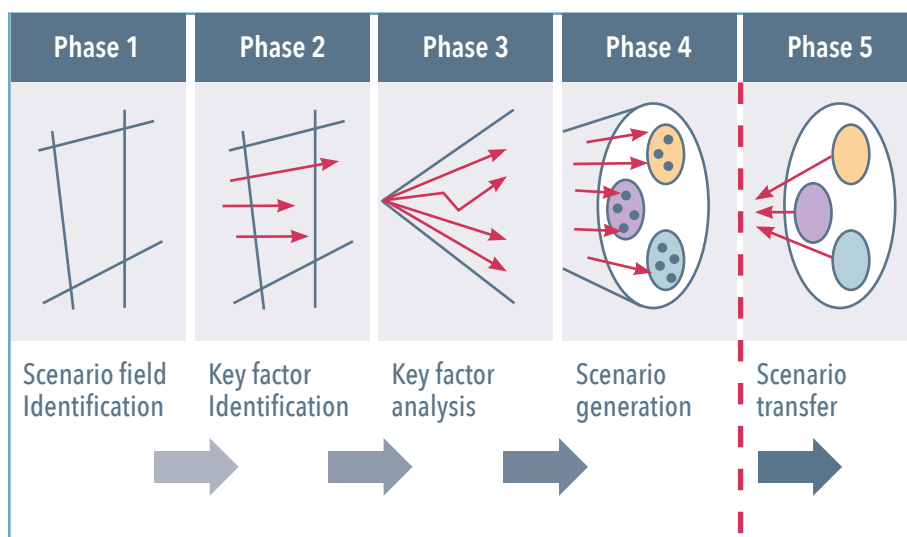


Figure 10 Visual presentation of scenario development phases [31]



FURTHER READING

> VALMER scenario toolbox [86]

- The first phase of the scenario process deals with the identification of the scenario field by establishing the precise questions to be addressed and the scope of the study.
- The second phase identifies the key factors that will have a strong influence on how the future will unfold.
- The third phase usually examines what range of outcomes these key factors could produce.
- The fourth phase involves condensing the list of central factors or bundling together key factor values in order to generate a relatively small number of meaningfully distinguishable scenarios.
- The fifth and final phase of the scenario process can be labelled “scenario transfer” and involves applying the finished scenarios for purposes such as strategy assessment [32].

The choice of scenario techniques depends on the overall aims of the process, the target audience (e.g. policy makers, industry, or public in general), geographical scale considered and the time and resources available within the responsible organisation. Several techniques can be combined and/or coupled with modelling and simulation using, for example, **InVEST** [37] or **ExtendSim** [38] software.

One of the first steps in a scenario making process is to identify drivers of change and establish key variables. These drivers and variables can be environmental changes, uses and human activities, governance and management contexts, etc. Changes in the system may represent a risk or an opportunity; they can also be influential or be influenced and show high or low flexibility. These variables can be evaluated via a coordinate system according to their degree of unpredictability and their degree of impact [36].

- **High uncertainty/ high impact: Pivotal Uncertainties**
These are likely to have a direct impact, but their outcome is uncertain. These are pivotal in the sense that the way they turn out may have strong directional consequences. These are the areas that will determine the shape of different scenarios.
- **High uncertainty/ low impact: Potential Jokers**
These are pretty uncertain as to their outcome and less relevant. However, it could be dangerous to treat them as mere ‘noise’.
- **Low uncertainty/ high impact: Significant Trends**
These have a more direct impact on the relevant question and it should be possible to anticipate their effect.
- **Low uncertainty/ low impact: Context Shapers**
These are relatively certain and, therefore, will surely shape the future context.

Example of a simplified template for evaluation of variables is provided in Figure 11.

The key uncertainties provide a logical framework for developing scenarios. Each quadrant in Figure 11 represents a different combination of uncertainties and different future outcomes. The challenge is to develop scenarios that describe in more detail the characteristics of each future outcome and show how it could come about. Characteristics for each scenario were developed and formed the basis for the scenarios.

Variables and hypotheses can be identified together with stakeholders and experts during workshops, interviews and/or surveys. At the start of the process, it is advisable to define at the start of the process a maximum number of critical uncertainties (e.g. 5 to 10 maximum). To identify these critical uncertainties, it is useful to ask the following questions: "What determines the evolution of the system? On what can we act?" [39]

53

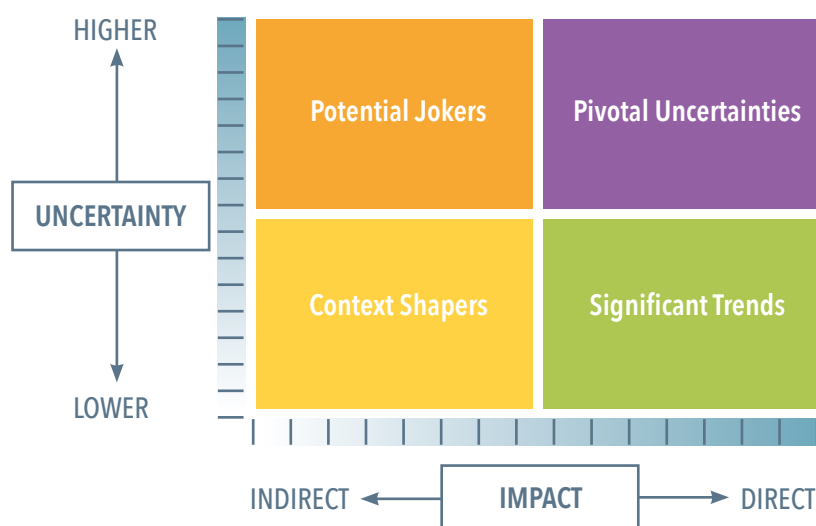


Figure 11 Evaluation of variables according to their degree of unpredictability and their degree of impact [40]



The BaltSeaPlan Vision 2030 [5] process has analysed the horizontal and sectoral policies and funding programmes, as well as trends in key maritime sectors on a national, sea basin and EU level to identify the impact of policies and trends on the development of sea space. Impacts were categorised according to strength and immediacy (Figure 12)

IMPACT	DIRECT	MEDIUM	INDIRECT
STRONG			
WEAK			

Figure 12 Simplified template for the analysis of strength and directivity [5]

Variables (e.g. ecosystem or economic change as a result of particular drivers) can then be associated with different evolutionary hypotheses, in general between 2 to 4 hypotheses per variable. For example, the development of offshore wind farming may be strong or weak, and lead to large areas of sea space required or less space depending e.g. on the renewable energy policy environment.



The **GAUFRE (Towards a Spatial Structure Plan for Sustainable Management of the Sea) project [11]** team has used a software to develop a ‘What if’ model to potentially be used by decision makers. Modelling allows integrated and interdisciplinary assessments of changes over time in a multitude of causal relationships. They allow for the exploration of different scenarios and policy options. MSP expands beyond the boundaries of a single department and requires collaboration between several departments and agencies on both federal and local levels. **Stella Architect [41]**, a software for modelling and interactive simulations was used for the GAUFRE project. It offers the ability to create holistic system diagrams that can be simulated over time. The systematic view allows the examination of the system and its behaviour to determine where changes are beneficial and to avoid decisions that have a negative impact. Additionally, modelling allows the realization of interactions that are not so obvious at first sight and allows for clear visual communication of results. Insights should be structured in an engaging way to engage with the target audience.

Overview of GAUFRE scenario development steps:

- Analyse policy objectives and their spatial claims;
- Identify key values (well-being, ecology and landscape, economy);
- Develop six scenarios (Figure 13) based on these values;
- Agree on a vision balancing all the scenarios.

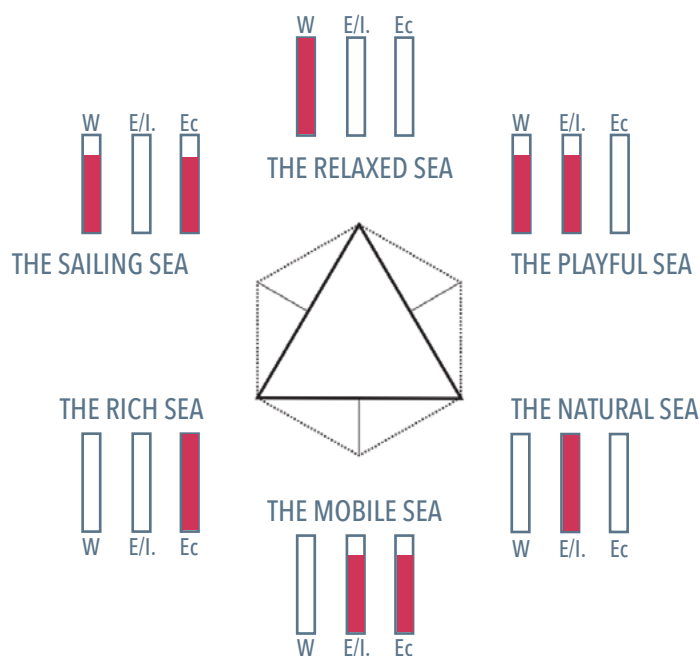


Figure 13 Example of six GAUFRE project scenarios [11]

> Background scenarios and micro futures

As part of the same process, two different types of scenarios can be developed inspired by the different issues or different scales. Building two types of scenarios helps to better address important differences per sector or region in what is relevant and uncertain.



WHEN TO USE:

- In processes encompassing large geographical region and/or wide content scope.



The 'Blue Growth' [42] project developed two types of scenarios, based on a DPSIR method: 'general background scenarios' and 'micro-futures', which were subsequently combined. The general steps of the process included:

I Development of general background scenarios; from a top-down approach, four more or less realistic futures were painted for a timeframe of 10 – 15 years. They were shaped by external drives (exogenous conditions) and were considered therefore to be a given – they could not be altered by policy makers or individual actors alone.

II Development of micro-future scenarios; from a bottom-up approach, depicting likely futures specific to maritime economic activity under investigation for a timeframe of 10 – 15 years, deemed desirable and ambitious, but at the same time realistic. Desirable in terms of Europe 2020 policy goals: smart, sustainable and inclusive. Ambitious and realistic in terms of aiming to achieve above-average estimates, but always rooted in the best available information from literature and interviews. In total, the report includes 11 micro-futures, each structured in a similar format. They have been ordered by their development phase (mature, growing and pre-development). In each of the descriptions they provide:

- Definition of the activity, its value chain, main characteristics and the competitive position of the EU;
- Potential development: assessment of how the economic activity could develop in terms of focus, size, and impact. Included are the external drivers and the response capacity of the actors;
- Uncertainties: if the potential development were to come true, what would be required from the relevant drivers in the outside world? Would they develop in all four background scenarios or is the micro-future specific to one outlook?
- Synergies and tensions: what are the potential environmental consequences? What other maritime economic activities are expected to benefit?
- Framework conditions that need to be fulfilled in order to reach the future potential of this maritime economic activity.

III Combination of the two approaches – with the aim to review whether the conditions for utilising the future potential is likely to be met. When doing so, it is important to reiterate that the background scenarios cannot be influenced by individual (policy) actors, and that they are acknowledged as a possible future.

> Wild cards / Black Swan

Trends and other developments come with a wide range of uncertainties. Wild cards, also called black swans, could be used to stimulate thinking about possible – though unlikely – events, which may change the development paths. Some of them may actually be not so ‘wild’ and perhaps could be viewed as emerging trends, so called ‘seeds’.



WHEN TO USE:

When it is important to consider unlikely events that can have an extreme impact to the space in question or overall development path (e.g. volcano eruption, tsunami or earthquake, extreme changes in supra-national policy or global economy)



In the report *Looking towards 2030: Preparing the Baltic Sea Region for the future* [34], the wild cards were divided in the four categories: 1) political, 2) societal, 3) environmental, and 4) technological. The examples of the wild cards used in this report, include, ‘Globalisation stalls or even moves backwards’, ‘Privatisation of EU Commission Services’, and ‘Breakthrough in nuclear fusion technology changes energy landscape and stops global warming’. These wild cards were largely taken from existing studies. Apart from the general description, the following was provided for each of the wild cards:

- early indications;
- likelihood;
- impact;
- duration;
- geography.

> Presentation of scenarios

Depending on their purpose, scenarios may have different formats, from a narrative text to a creative visual presentation; but they are often a combination of the two. The thread of the story is of key importance, as is the tone of narration, which can be positive and uplifting, worrisome, what-if, action-oriented, etc. Some processes opted for fully narrative scenarios while most of them have used narrative as just one of the component of their scenario. On the other hand, visual scenarios can be used to present information in an engaging and easily understandable way, as a means to generate stakeholders’ interest and input. Graphic design that is attractive to the reader will increase the level of engagement. Visual scenarios can be developed in many different ways and combinations are widespread.



FURTHER READING

- > [Scenario Planning for Urban Planners \[87\]](#)
- > [Opening Access to Scenario Planning Tools \[88\]](#)
- > [Integrative Scenario Development. \[89\]](#)
- > [The Scenario Planning method in Urban Planners \[90\]](#)

For decision makers to understand multiple futures to frame decision-making	For wider stakeholder community to understand the impact of future trends and importance of planning	For stakeholders to consider different options when deciding on the preferred vision
Depicted through a brief narrative with eye-catching and easy-to-read graphics and diagrams that are to the point and based on data as accurate as possible;	Videos capturing future activities such as unmanned shipping or multi-use platforms to stimulate forward thinking. Online-based interactive timelines, but also stories, letters, pictures, etc.	Options depicted through role play, post-cards, pictures, and drawings produced during workshops.

Table 7 Matching scenario purposes and presentation methods

Building Block III: Stakeholder engagement

SUMMARY

- How to identify relevant of stakeholders?
 - How to analyse stakeholders?
 - How to develop a stakeholder engagement strategy?
 - What are some common stakeholder engagement challenges and how to overcome them?
-

Producing a robust process (be it only a vision development process or also associated SMART goals and associated actions) and the necessary coalition of support are typically connected. This is due to the fact that people are likely to feel more ownership of, and commitment to the ideas they helped to develop. In addition to stakeholders' interests being represented, involvement also provides stakeholders with an opportunity to start thinking about the economic, social and cultural value of their sectors as well as other sectors, and to consider in more depth the impacts and synergies with other sectoral interests.

Careful stakeholder identification and analyses can help inform decisions about who to involve in the vision development process, in what ways, when, and for what reasons. Stakeholder identification and analysis techniques are fairly well developed and used in the strategic management field [43], but many of these have not yet been applied in the maritime vision development context.

> Methods for identification of stakeholders

In general, a part of the stakeholder identification phase could include the creation of stakeholder lists, which could also be checked with the stakeholders and kept as inclusive as possible. Stakeholder mapping that does not follow a more targeted approach includes the collection of all agencies, NGOs and official institutions that are assumed to have some interest in the process. A quality check and traceability of the stakeholder list is important in order to track who was invited and who actually participated in the process, and to avoid possible complains at the later stages.

Snowball

The Snowball is the most commonly used approach in the analysed processes. This approach implies that the first stakeholders engaged in the process will be asked for suggestions on other potentially relevant stakeholders. Stakeholders that were already involved in relevant past processes could constitute the initial list, as they tend to be more interested to be involved again. This way, a list of stakeholders is made rather spontaneously and new stakeholders are added on a continuous basis. This method can also be used as a verification for lists made through other, more structured approaches. The approach is quite useful for identifying stakeholders in a local context, as there is usually a history of well-established networks.



Prevent biased engagement - some stakeholders important to the process might be missed because those in the existing network might be favoured or there might be a history of negative relationship.

Marriage approach

Stakeholder identification could include marriage of vertical and horizontal integration. Horizontal integration is meant to ensure identification of relevant actors across industrial sectors, including sector authorities, sector representatives (i.e. associations and clusters), as well as commercial enterprises themselves. The environment is usually also considered a sector, and apart from public authorities, the environment would also be represented by the environmental NGOs. On the other hand, the vertical integration concerns the identification of different levels of governance, be it local, regional, national, macro-regional, sea basin scale or EU-wide.

Quadruple helix approach

The Triple helix approach refers to the identification of stakeholders in three distinctive spheres: academia, industry, and government, each with the ability to contribute according to its institutional function in society. For a more top-down approach, a Quadruple helix approach is now also used to include society-at-large as a fourth sphere. Both were originally developed and implemented as territorial innovation approaches attempting to exploit the potential of socio-economic systems.

Involvement of hybrid organisations is also relevant, but categorizing them by using clearly defined spheres might be challenging. Hybrid organisations are defined as 'multi-sphere' or 'multiple-nature' entities and synthesize features of University, Industry and Government. Organisations more aligned with academia are, for example, interdisciplinary research centres, or technology transfer offices in universities. Those aligned with industry are firms' research labs, industry-university research consortia, business support institutions including science parks, and business/technology incubators. Those aligned with government are publicly funded research or innovation centres.



Stakeholder identification should first focus on institutions, organisations and informal groups, not individuals. Later on, other methods and criteria are needed to identify relevant people in identified institutions. The Snowball Effect can be helpful in this regard.



FURTHER READING

> [Using the Quadruple Helix Approach to Accelerate the Transfer of Research and Innovation Results to Regional Growth \[44\]](#)

> Methods for stakeholder analysis

Force field analysis

The Force field analysis¹⁷ (Figure 14) is used to assess various forces for and against proposed change. The analysis is conducted by listing, on one side those who oppose, and on the other side those who support proposed changes. Once this is clear, it is easier to determine what engagement strategies need to be employed so that the impact of opposing forces is reduced and driving forces are strengthened. Therefore, the Force field is a particularly useful technique for developing an action plan to attain the vision and/or objectives.

? WHEN TO USE:

- To determine if a proposed vision can get support – identifies opponents and allies;
- To suggest actions to reduce the strength of the obstacles;
- To identify obstacles to implementation of actions.

📖 FURTHER READING

- > MUSES project Analytical Framework [45]
- > Resolving Social Conflicts and Field Theory in Social Science. 1997. K. Lewin. American Psychological Association, Washington DC [46]
- > NHS Improving Quality [47]

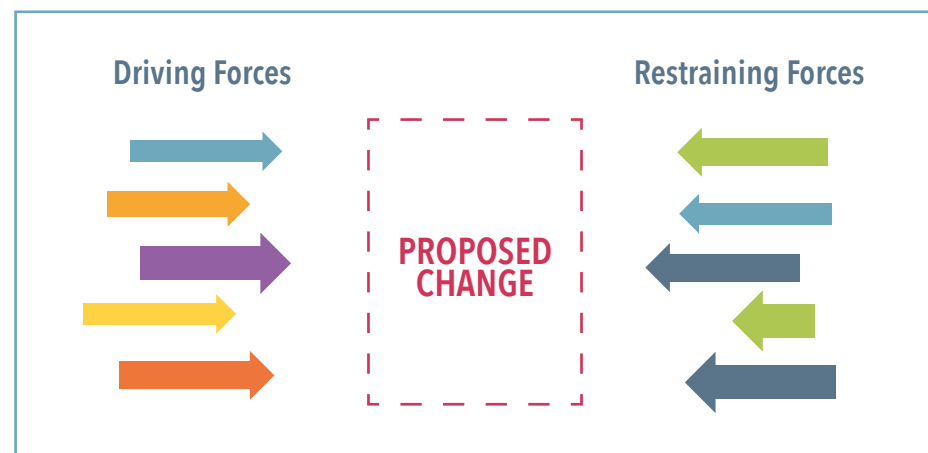


Figure 14 Simplified template for a Force Field Analysis



Build in reminders to check the analysis again. This ensures that you take time out to reflect on the forces, what you've already done, how it has worked, what you should carry on doing, and what you should discontinue

Stakeholder Network Analysis

Stakeholder Network Analysis (SNA) allows for estimation of stakeholder power on the basis of the strength and extent of their network, and their position in it. SNA aims to identify the key stakeholders who hold the network together, i.e. those that are trusted and that can enhance communication for the active use of the vision and/or implementation of a strategy, roadmap, and action plan.

¹⁷ Force Field Analysis is a management technique for diagnosing situations, developed by Kurt Lewin, a pioneer in the field of social sciences.

Central actors are usually identified by analysing the demography of the network:

- degree of centrality [48] - the number of ties a stakeholder has, visualised with the size of the node (shape);
- distance among actors - how actors are embedded within the network, visualised with the distance from other stakeholders in the network.



Actively engaging stakeholders in the central position of the network can be highly effective as they can promote engagement [49] using the relationships they already have.



The SNA was used in the MUSES project to prepare Stakeholder Profiles Report and the Action Plan with the aim to stimulate the practical adoption of the sustainable ocean multi-use concept. The central idea was to understand which stakeholders have the power to influence a wide range of institutional stakeholders, and could best support the implementation of the action plan. Position and network strength analysis was conducted using multi-relational data matrix, analysed using UCINET [52] software. The NetDraw [53] software was then used to visualize the network structure of identified stakeholders (Figure 15).



FURTHER READING

- > [Social Network Analysis in use for Strategic Transboundary MSP: Case of the Adriatic Sea \[50\]](#)
- > [MUSES Stakeholder Profiles \[51\]](#)

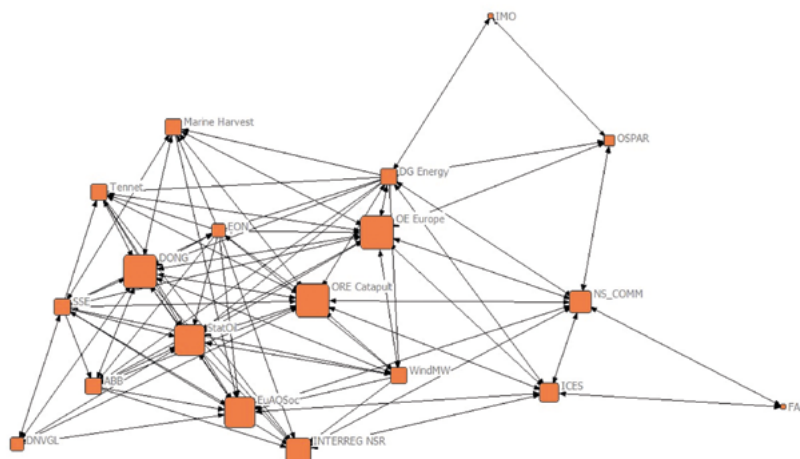


Figure 15 an example of the SNA visualisation from the Multi Use in European Seas (MUSES) project [51]

Stakeholder matrix

A Stakeholder Matrix analysis helps to determine which stakeholders are essential to the process or who is the most affected by the process has the strongest impact and should be engaged even if this entails a significant effort. A number of variations can be used depending on the purpose of the analysis, and what information about stakeholder can help in preparation, implementation or uptake.



Mapping of opinion leaders, general public or non-organised groups with this method is complicated, so other more relevant methods (e.g. Stakeholder Network Analysis) are more suitable.



Stakeholder characterisation using the matrix (legitimate, powerful, interested, etc.) can be narrowed or expanded depending on the aim of stakeholder involvement.

Four possible models for structuring stakeholder analysis matrix:

I A widely-used model is the analysis of **Power and Interest** (Mendelow's matrix) [54]. In this model, power is placed along one axis and defined as the level of authority a stakeholder has in the project. The 'level of interest' is assigned to other axis and defined as likelihood that a stakeholder will take some sort of action to exercise his or her power.

II Power and Influence model uses the same methodology, but replaces Interest with Influence along one of the axes. The influence is usually defined as the level of involvement the person has, or rather claim, in terms of ownership, rights, or interests. Influence can also be defined as the impact the project has on the stakeholder. Preferably, those who are affected the most and have the greatest power are the ones who should be prioritized for engagement.

III Another model combines **Power and Influence** in the same column and analyses **Interest** separately (Figure 16) [55]. Starting from any of these models, any other intra-group prioritization criteria can be added, if it seems to be appropriate. The analysis by using one of these matrices usually divides the stakeholders into four groups. The specific type of treatment is then defined for each of these groups.

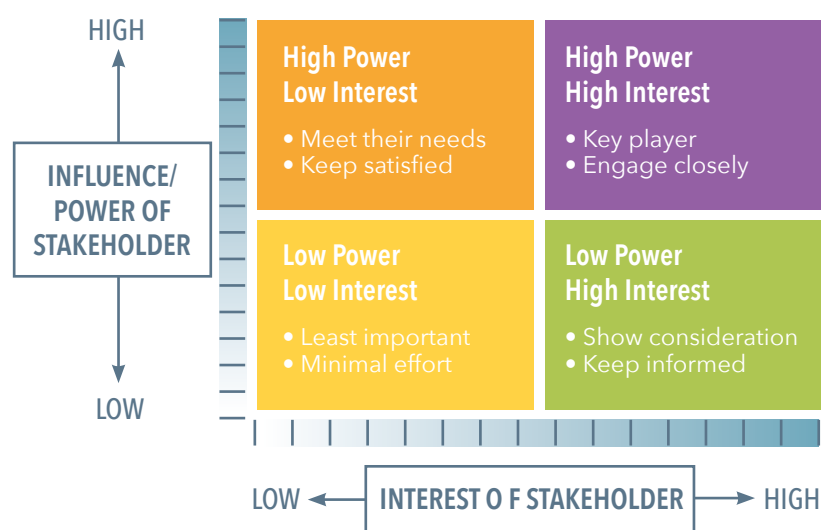


Figure 16 Influence/Power and Interest of stakeholders [56]

IV Power, Legitimacy and Urgency model [57] is often used in business management (Figure 17) and differentiates between legitimacy and power. These two are distinct attributes that can be combined to create authority (defined as the legitimate use of power [58]) but can exist independently as well. Adding the stakeholder attribute of urgency helps move the model from static to dynamic. Urgency exists only when two conditions are met: (1) when a relationship or claim is of time-sensitive nature and (2) when that relationship or claim is important or critical to the stakeholder.

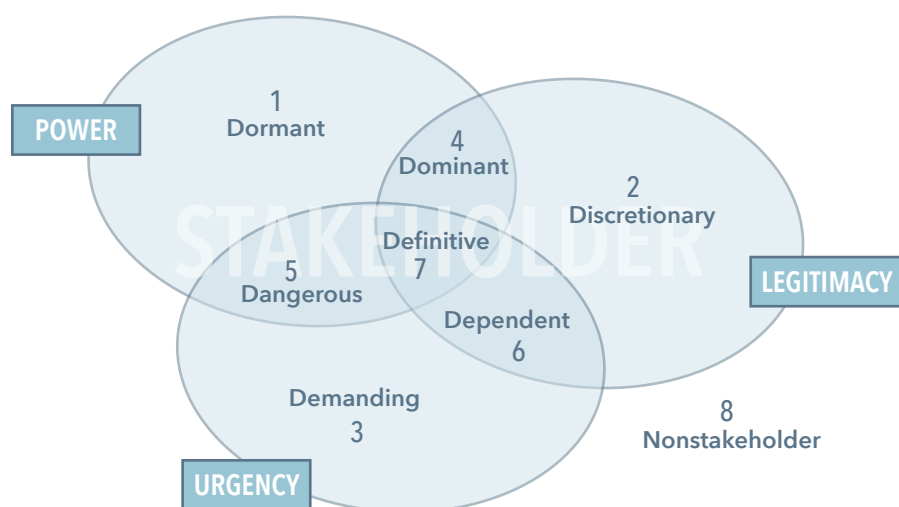


Figure 17 Stakeholder analysis model that combines the power, legitimacy and urgency [57]



Stakeholder Identification and Analysis should be performed by a responsible authority and preferably an expert group to justify judgements and bridge the knowledge gaps about the power and expertise of stakeholders.

Stakeholder engagement strategy

> Stakeholder engagement strategy

Having analysed the stakeholders, a stakeholder engagement plan with specific type of treatment is defined for each of stakeholder groups, and addressed through a communication plan [59]. In communication with stakeholders, pointing out the concrete benefits of involvement could be very useful to attract them to the process. In the invitation letter, some concrete short-term benefits should be listed in bullet points, such as sharing reports from other sectors, joining a new stakeholder forum, sufficient time for networking, etc.

The combination of appropriate methods¹⁸ for stakeholder engagement and making up the stakeholder engagement strategy depends on the purpose of the process, as well as type and number of stakeholders identified as relevant to the process. Some

¹⁸ To find out more about engagement methods visit [page 69](#)

Interactive methods

of the key questions also include: how to balance stakeholder inputs? How to ensure that not only those with a loud voice are heard? Stakeholders are usually engaged for the following purposes:

- Collect and validate information¹⁹;
- Point out to, or serve as a link with other relevant stakeholders²⁰;
- Consent and endorse the proposed outputs such as joint principles, preferred scenario, vision, objectives, and/or actions. In some cases, stakeholders are also already involved in defining purpose of the process;
- Disseminate information about the process and its output and mobilize for the joint action (e.g. through civic actions and conversations)²¹.

¹⁹ To find out more about stakeholders as a source of information visit [page 42](#)

²⁰ To find out more about stakeholder identification - Snowball effect visit [page 58](#)

²¹ To find out more about ensuring commitment, take up and dissemination practices visit [page 78 and 79](#)



In the **Baltic LINes project [60]**, stakeholders have been analysed using the matrix based on the four characteristics (Figure 18).

STAKEHOLDER	MAIN CHARACTERISTICS				
	Power	Relevance from a transnational perspective	Willingness to participate	Claim for territory	Interest in transnational issues
	- high - medium - low	- high - medium - low		- yes - no	- high - medium - low
	EXPERTISE			VALUE	
Stakeholder 1					
Stakeholder n					

Figure 18 Stakeholder analysis table

The rating per characteristic is translated into scores, i.e. 3 for high, 2 for medium, 1 for low. The indicator “expertise” is the sum of power as well as relevance. Its maximum value is six. The indicator “value” is the sum of claim for space (1 for yes, 0 for no) and interest in transnational issues. Its maximum value is four. The stakeholders are plotted in circles in the matrix (see figure 19) according to their expertise and their willingness to participate. The latter ranking is directly taken from the stakeholder analysis table. The value of each stakeholder is expressed by different sizes of circles Figure 19. The basis of their legitimacy (legal, economic, political, scientific) is expressed through a colour code. The location of the plotted stakeholders in the matrices quadrants indicates how they should be involved.

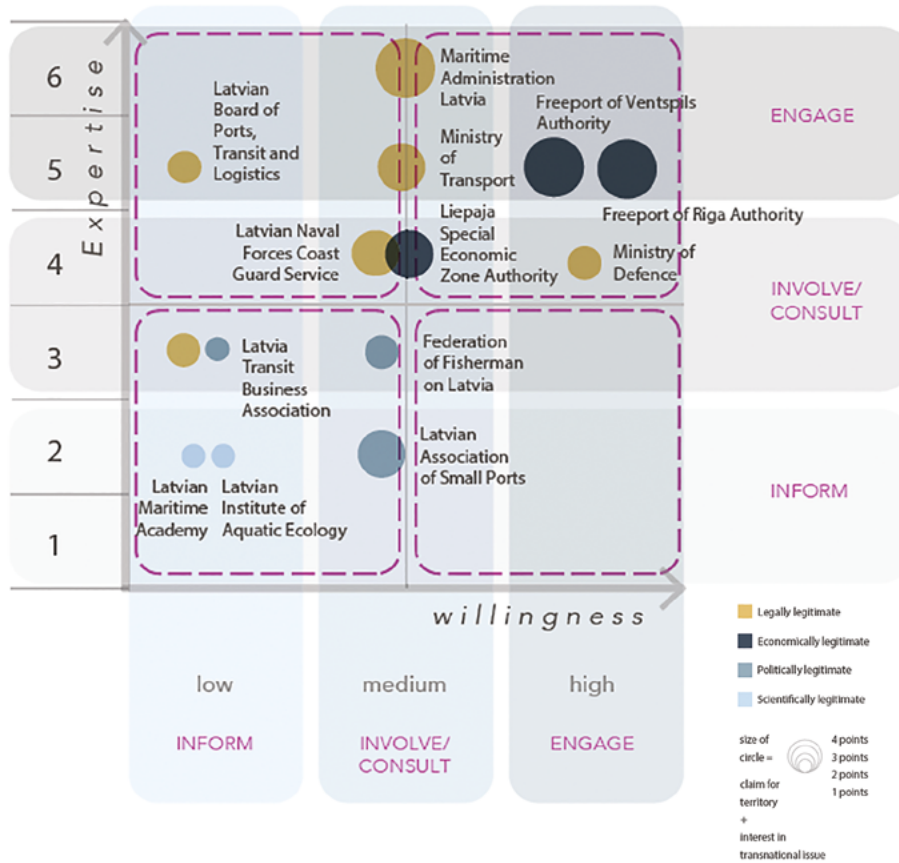


Figure 19 Stakeholder mapping matrix [60]



Visually mapping stakeholders allows to better understand their characteristics, and determine level of involvement needed for each stakeholder group.



As part of **The Wales We Want (The WWW) communication process** [81] a video "I want a Wales where..." was produced and presented on the online platform which was good tool to inspire people during the workshop. The facilitation team also worked with different networks, for example, the Women's Institute, that would hold a workshop for the purpose of the process. Postcards were used in a way that people could fill them in, stating their preference and also ask any questions they might have in relation to the process. The WWW team also tracked the responses received as a result of these conversations from individuals and groups in response to the line "I want a Wales where..." which came in multiple forms from the postcards, online responses etc. There were 6474 recorded responses, which were later categorised by theme (Figure 20).



Figure 20 The WWW [81] recorded responses categorised by theme

118 known conversations that happened across Wales from 6 February 2014 to 28 May 2015 are on record. These are a mix of facilitated and self-initiated conversations. These took variety of forms, from presentations in the early stage on what the conversation was about, to workshops, awareness raising at staff and board meetings, The WWW staff speaking at conferences, public engagement and interventions as exhibitions and shows, stand-up comedy and workshops, video interviews and surveys.



Postcards and drawings are particularly useful at a community level or with informal groups. Drawing and playing videos is useful for communicating with children.



The **VASAB Long-term Perspective (LTP) for Territorial Development of the Baltic Sea Region 2030 [7]** was initiated by a regional body (VASAB – Visions and Strategies around the Baltic Sea Region) and employed a predictive forward-looking approach to define important transnational challenges and trends up to 2030. Ahead of the workshops and roundtables, background documents were sent to participants, and were then discussed during the event along with prepared statements and identified challenges. The aim was to ensure a sense of ownership among the workshop participants and to create a ‘living’ document. The main contribution from stakeholders included verification and validation, and their input was especially valuable during the scoping phase with the suggestions of trends and challenges. Stakeholders engaged came from broad backgrounds, including local and regional governments and businesses.



For the **development of the Maritime Strategy for Västra Götaland in Sweden [61]**, several workshops were organised with stakeholders to ensure that they felt ownership throughout the process. To keep them engaged, communication with the stakeholders used a targeted approach, ensuring that they only received information that was of specific relevance to them. Throughout the process, stakeholders were asked about their interests and needs, also related to some specific issues such as funding and legislation. During the workshops, participants were invited to give inspirational talks in an informal setting.



The **Transboundary Planning for the European Atlantic [62]** employed an inclusive stakeholder engagement process with methods such as workshops, information sessions and a final workshop. When certain stakeholders could not be reached, personal contacts and snowball effects were used. A web viewer was also developed to visualize the process and to actively engage all relevant stakeholders. Given the extend of the stakeholder engagement and geographical scope of the process, planning wisely for the travelling budget for the stakeholder engagement was essential in the context of this process. Involving many stakeholders was important, as well as to engage them efficiently and interactively. Visuals were extensively used and documents were written with a type of stakeholders in mind. It was important to take into account different cultures and to prepare stakeholders that are new to the process. Inviting stakeholders well ahead of the meeting was also essential.



Development of the **National Spatial Development Concept (NSDC) 2030 [12]**, included one year of face-to-face meetings with several stakeholders, including governments and businesses. For each meeting, a draft document was prepared which formed the basis for discussions. The main goal was to verify information and to change the draft document with input from the stakeholders.

The following table list some of the major stakeholder engagement challenges identified in vision development processes.

ENGAGEMENT CHALLENGES	GOOD PRACTICES
Challenges in involving the maritime business community.	Time is very relevant in the business context. Involving the business community early on and being explicit on anticipated timetables is important. To secure interest, it is also important to clarify how participation and process outputs will benefit them.
Certain individuals are difficult to handle and do not trust the process.	Ensure that all relevant stakeholder groups are engaged early on, and through informed and fair processes. The moderator needs to establish fair ground rules and encourage constructive arguments.
Need for a neutral/unbiased stakeholder engagement process lead and workshop moderator	The characteristics of the stakeholder target groups should be taken into consideration when choosing the lead for the engagement process. For example, if the target stakeholder group is the maritime business community, an agency with a more business oriented or even neutral background could be considered as a better option to present the engagement process than an environmental NGO. An important factor is also the neutral and in some cases, autonomous chairperson of the stakeholder process. To adapt the process to the local context, a person chosen should be someone who knows the area in question well.
Low motivation and interest among stakeholders	Involve local 'opinion leaders' or local 'champions'; who could represent and advocate the process in their networks. Also, involving a known public figure to represent the process often improves engagement. Using means and methods of engagement adapted to stakeholder needs, e.g. webinars for large geographic areas or for those unable attend, interactive workshops with terminology and visuals that everyone present can easily understand, informative materials for research community, substantial time for networking, etc.
Difficult to get the stakeholders to break out of their 'sectoral shell', and to get them to think beyond 5 years.	Prepare a compilation of principles that could surpass the sectoral approach. For example, in Belgium Vision Process 2050, one of the principles was 'no more private ownership at sea', which made for some very lively discussions and this helped to get the stakeholders talking. An unmanned shipping movie was played at the GOUFRE stakeholder workshop to inspire people to think far ahead. Pictures of possible future or even possible extreme unrealistic future scenarios could also initiate a lively discussion.

Table 8 Summary of the stakeholder engagement challenges and selection of advises

Building Block IV: Interactive methods

SUMMARY

- How to generate information in a structured and interactive way?
- How to jointly organise information?
- How to ensure a feeling of ownership and commitment?



Having thematic workshops can cause stakeholder fatigue. Stakeholders to whom all topics are relevant might find it difficult to attend each of the workshops. Integration of information collected through thematic workshops can also be challenging.



An experienced workshop facilitator would need to have the following skills:

- ✓ The ability to intervene in a way that adds creativity to a discussion rather than leading the discussion and taking away creativity from the group;
- ✓ The ability to understand the group process and dynamics – successfully address these inequalities in the group dynamic;
- ✓ Identify who is dominating in the group and how stop them;
- ✓ Identify who looks bored and how to draw them in to the process.



FURTHER READING

> [Multi-Stakeholder Partnership Guide \[63\]](#)
[Handbook on Creative Facilitation Techniques. Permaculture Facilitator's Resource Book for Training and Assessment \[64\]](#)

USED IN WHAT CONTEXT	METHOD	
Generation of information	<ul style="list-style-type: none"> • Method • World Cafe • Visual facilitation • Brainstorming 	<ul style="list-style-type: none"> • Living Q method • In-person or phone interviews • Microsite
Organisation of input	<ul style="list-style-type: none"> • MSP Challenge game • SWOT /PEST/STEEP/ • Living Q 	<ul style="list-style-type: none"> • DELPHI • ARDI • Mind mapping
Ensuring feeling of ownership and commitment	<ul style="list-style-type: none"> • Contract game • Signed letter 	

Table 9 Overview of interactive methods described under this chapter and their purpose

> Living Q-method used for workshops

The Living Q method is an interactive exercise to investigate the perspectives of participants who represent different stances on an issue, by ranking and sorting a series of statements. It serves as a tool to understand stakeholders' perspectives and values, and to foster discussions in a living, communicative and playful environment. For example, the Q-method has been used during several workshops, including the NorthSEE (Edinburg, 2016), the European Maritime Days (Pool, 2017) and the North Sea Commission Marine Resources Group (2017). The tool can be adapted so that different kinds of questions can be asked, based on the background knowledge of the participants. The tool is easy to implement and allows participants to gain quick understanding about the key aspects.



To facilitate the best discussions, thorough preparatory work usually needs to be done (e.g. statistical analysis), and the setup needs to be developed in advance.



Following steps were used for employing Living Q-method at the NorthSEE workshop:

- Choose a table. You will be given 5 coloured, numbered tokens on post-it notes and a questionnaire.
- Please fill in the questionnaire and look at the 5 statements on MSP. Think about how strongly you disagree or agree with them and indicate your initial ranking for each on the sheet.
- Allocate ONE of your five tokens to each statement, from strongly disagree (-2) to neutral (0) to strongly agree (+2) NOTE: Only one statement per category is possible.
- Each statement will be considered in turn. The different rankings are set out around your table. Place your token on the sheet of paper with the ranking you think is appropriate for the statement and stand by it. The facilitator will guide you through the process.
- Explain and discuss your decision. If you want, you can write your views on the coloured post-its and stick them on the sheet of paper with the relevant number for the statement under consideration.
- Change your mind – if you want!
- Repeat from step 4 until all statements are considered or until we run out of time



Figure 21 Q-method visualised by MoreThanMinutes.co.uk at the SimCelt final conference workshop

> MSP Challenge

MSP Challenge 2050 is a multi-player, computer-based simulation game about Integrated Maritime Spatial Planning. The game is based on spatially referenced data being fed into a simulation model, including a temporal analysis, and results in multidimensional visualizations. It gives insight into the diverse challenges of sustainable planning of human activities in the marine and coastal ecosystem. This is an innovative format to quickly introduce the essence of MSP to outsiders, in particular politicians, decisions-makers and stakeholders from various sectors using the sea space. It aims to cultivate a spirit of collaboration and show what can and cannot be achieved through MSP.

Players design a marine spatial plan according to functional, sectoral and integrated interests within a particular jurisdictional area. Gaming provides a safe environment to explore the consequences of alternative planning options for the space in question (e.g. policy intervention or co-location of activities) with no real-world consequences. It provides better understanding of cause and effect relationships through trial and error. Added benefits include the development of shared language, relationships, and trust among players. The game is also found to contribute to empowerment, ownership and commitment to the actual MSP process.

The MSP Challenge 2050 comes in two formats; as a board game and as a computer supported simulation-game. The MSP Challenge board game is particularly useful in places where the MSP is a new concept as it introduces participants to the MSP concept, while the computer game is more suited for stakeholders with previous experience with MSP.



FURTHER READING

- > Software demonstration webpage [65]
- > MSP Challenge software website [66]



**FURTHER
READING**

> theworldcafe.com

> World Café

This method is appropriate for smaller groups where there is a need to engage people into dynamic conversation and foster conditions for the emergence of collective intelligence. Main steps include dividing people among different tables and fostering informal 'café atmosphere' discussions.



WHEN TO USE:

- generate input, such as information on future trends and their spatial implications;
- conduct an in-depth exploration of key challenges and opportunities;
- share knowledge and stimulate innovative thinking;
- engage people who are meeting for the first time;
- learn about each other perspectives;
- deepen relationships and mutual ownership of outcomes in an existing group;
- identify synergies, and solving smaller conflicts among stakeholders.



The World Café method was successfully used during **BaltSeaPlan Vision 2030** partner meetings to discuss the proposed vision and collect additional input on future trends and policy perspectives. The method is also often used during the **Member States Expert Group in Maritime Spatial Planning**, as it allows participants to exchange lessons learned and opinions on topics of shared importance in a more informal environment.



Not useful when there is a need to convey only one-way information or drive towards an already determined outcome.



It is helpful to have:

- fewer than 10 participants per table;
- several predefined discussion questions;
- neutral moderator at each table to stimulate, but not influence the discussion;
- note taker to record the possible input.



**FURTHER
READING**

> The Change Handbook: The Definitive Resource on Today's Best Methods for Engaging Whole Systems [67]

> DELPHI - an expert based forecasting

DELPHI is a structured communication method to develop a systematic, interactive forecasting that relies on a panel of experts. It is also used for longer-term assessments where extrapolations are irrelevant. It is designed to avoid domination by particular individuals. The experts answer questionnaires in two or more rounds. After each round, a facilitator provides an anonymised summary of the experts' forecasts from the previous round as well as the reasons they provided for their judgments. It is sometimes criticized for stressing consensus over divergence.



The DELPHI method was used for development of **scenarios for Latvian MSP [68]** and structuring discussion with stakeholders. Scenario-building was based on identifying possible development directions (axes) according to the determining factors (driving forces) that affect the marine resources and spatial use, and the situation in maritime sectors. Each of the four scenarios included the following components: i) a narrative story which describes the policy, economic, technological, social and demographic as well as environmental and climate driving forces; ii) semi-quantitative assessment of trends based on selected indicators; iii) spatial solutions.



FURTHER READING

> **The FOR-LEARN
Online Foresight Guide
[69]**

> ARDI - Actors, Resources, Dynamics, and Interactions

ARDI [70] is part of a companion modelling approach that makes it possible to engage a broad spectrum of stakeholders in the design and development of plans commonly used in land and water management fields. It is based on participatory workshops that set out to collaboratively imagine a future open, dynamic management system, capable of adaptation and anticipation, by gathering the various stakeholders in a partnership to examine conservation of the natural resources and promoting sustainable development. Its originality lies in the co-construction of a “conceptual model” of the functioning of the system, according to an overarching, negotiated development question. Ultimately, ARDI creates a graphical representation of how the stakeholders perceive how the system functions, including actors, resources, dynamics and interactions. It focuses on co-construction of the meaning and the sharing of information, and helps to create a shared representation of the whole system.

> Micro Site - interactive online platform

A micro-site implies the development of an interactive online platform where the forward-looking process is presented. It can also provide discussion pages structured by different topics or by geographical area. This method is also suitable for engaging and capturing input from the larger society. A micro-site could also contribute to broader commitment to the strategy / vision implementation or uptake / active usage. Interactive online platforms are often used to generate a conversation about possible futures. Platforms often contain easy-to-share elements such as interactive scenario maps or infographics. Some platforms also capture the conversation within the microsite (conversation feed), so that the user can see what others are saying.



The **Celtic Seas Partnership future trends [1]** used an interactive online platform to present their scenarios, as illustrated in Figure 22. This website allows users to manually manipulate the targets, thereby creating different scenarios, encouraging the user to reflect on the process.

- interactive maps (created from existing material) with layers that can be displayed or hidden by the user;
- graphics or charts that can be manipulated by the user;
- case studies to bring each scenario to life.



Figure 22 Example of the Celtic Seas Partnership Future Trends online platform micro-site [71]



The **MEDTRENDS** project illustrated and mapped the main scenarios of marine economic performance in the Med-EU countries for the next 20 years. This project also uses an interactive online platform (Figure 23) to show an in-depth analysis of the current situation and future trends in four main marine economic sectors, their drivers and environmental impacts.

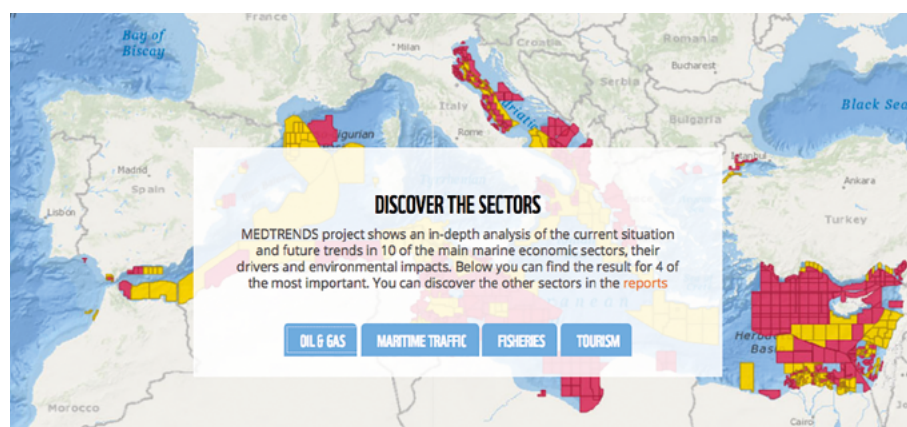


Figure 23 Example of the MEDTRENDS project interactive online platform [72]

> Mind maps

Mind-mapping is a technique that concerns the development of diagrams to visually organize information. A mind map is hierarchical and shows relationships between different aspects. It is often used to structure and analyse the results of brainstorming sessions with stakeholders. Mind maps can be drawn manually or by using computer aided software. A number of online software are available, such as iMind-Map [73], FreePlane (free) [74], Coggle (free basic version) [75].

75

Steps to Making a Mind Map

1. **Start in the CENTRE of a blank page turned sideways.** Why? Because starting in the centre gives your Brain freedom to spread out in all directions and to express itself more freely and naturally.
2. **Use an IMAGE or PICTURE for your central idea.** Why? Because an image is worth a thousand words and helps you use your Imagination. A central image is more interesting, keeps you focused, helps you concentrate, and gives your Brain more of a buzz!
3. **Use COLOURS throughout.** Why? Because colours are as exciting to your Brain as are images. Colour adds extra vibrancy and life to your Mind Map, adds tremendous energy to your Creative Thinking, and is fun!
4. **CONNECT your MAIN BRANCHES to the central image and connect your second- and third-level branches to the first and second levels, etc.** Why? Because your Brain works by association. It likes to link two (or three, or four) things together. If you connect the branches, you will understand and remember a lot more easily.
5. **Make your branches CURVED rather than straight-lined.** Why? Because having nothing but straight lines is boring to your Brain.
6. **Use ONE KEY WORD PER LINE.** Why? Because single key words give your Mind Map more power and flexibility.
7. **Use IMAGES throughout.** Why? Because each image, like the central image, is also worth a thousand words. So, if you have only 10 images in your Mind Map, it's already the equal of 10,000 words of notes.

Figure 24 Seven steps to making a mind map [76]



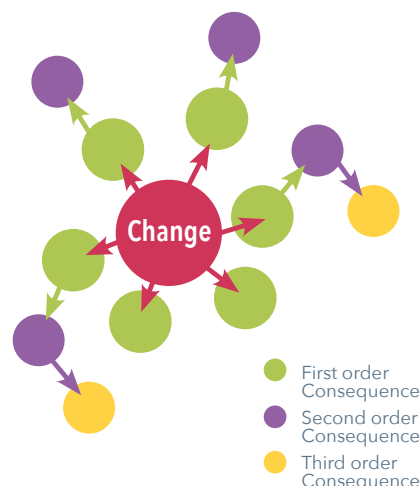
The **Celtic Seas Partnership Future Trends** [1] project made use of Coggle software (Figure 25). This was an intermediary step, where all the information from the workshops, were categorised, themed and then visualised using the software to organize the information for the scenario development.

> Futures Wheel

The Futures Wheel is one form of mind mapping that allows for a more structured brainstorming and questioning about the future. The trend or desired change is written in the middle of a poster and then small spokes are drawn from the cent-

²² For more information about Visual Facilitation visit [page 60](#)

re. Primary impacts or consequences are written at the end of each spoke. Next, the secondary impacts of each primary impact form a second ring of the wheel. This ripple effect continues until a useful picture of the implications of the proposed change is clear. For better visual results, this method can be led by a professional visual facilitator²². The futures wheel can also be done in a combination with interactive backcasting.



> Interactive Backcasting

Interactive backcasting is an exercise in which stakeholders choose one or several future images as the starting point for their analysis and subsequently, in working backwards to the present situation, interactively explore which interventions are needed to realise this future. In this exploration, the stakeholders identify milestones to be passed, opportunities to be taken and obstacles to be overcome 'along the way'. The method not only shapes the diversity between the future and the present but also between the many views and perceptions of the stakeholders involved. It provides a meeting – and at times a confrontation – between, for example, scientific and stakeholder knowledge.

> Sketch Match

A Sketch Match is an interactive planning method, involving a series of interactive design sessions lasting up to three days. The Sketch Match session consists in forming work groups that analyse qualities, problems and potentials. Participants analyse and work out the spatial problems in a specific sea area, with the aim to meet a range of different objectives. The result of a Sketch Match is a spatial design, in the form of a map, visual story, model, 3-D GIS [78] visualizations, or whatever form suits the project best.



The Sketch Match was developed by Dutch Government Service for Land and Water management (Dienst Landelijk Gebied, DLG) for the project "Room for the River in Cat's Bend, Romania" [79]. The project aimed to develop a number of spatial draft plans for integrated flood management in the Galați-Tulcea region in Romania. The SketchMatch method was applied in Eforie and Sfântu Gheorghe study cases to identify and visualize potential development paths and facilitate the decision-making process for managers, policy makers and local stakeholders. The aim of the SketchMatch was to lay the basis for so-called 'spatial development sketches' for integrated MSP in the Black Sea region.

FURTHER READING

> PARTICIPATORY METHODS TOOLKIT - A practitioner's manual [77]

> Visual facilitation

Workshops could be accompanied by a 'graphic recorder', who provides a 'live protocol' with key information, discussion topics and results of the workshop. The visual facilitation not only increases cooperation and interaction among participants, but the graphics created during the workshop also contribute to a coherent and engaging documentation which can be used further as part of the implementation of the process.



When hiring visual facilitators make sure they have some knowledge about the topic and provide them with substantial reading material in advance.



WHEN TO USE:

- increase cooperation and interaction among participants;
- contribute to a coherent and engaging documentation;
- provide results to be used further as part of the document graphic design and dissemination process.



The **Implementation Strategy for the Baltic Blue Growth Agenda** (Figure 26) made use of visual facilitation [80]. The graphic designer specially versed in maritime topics helped moderate the discussion and in the same time drawing on the large white poster paper. Questions usually used to facilitate the drawing relate to the links between elements including challenges, actions, actors, etc. Visuals produced under the Implementation Strategy for the Baltic Blue Growth Agenda were later also used also in parts for each of the report chapters. This was highly engaging exercise during the workshop where stakeholders were really moved to contribute. Everyone was able to see right away that their input is taken on board and made a piece of the overall picture. This ensured that stakeholders feel they are in the driver's seat and increased overall engagement with the process, and the feeling of ownership.



Figure 27 Example of the visual record for the maritime and coastal tourism team under the Implementation Strategy for the Baltic Blue Growth Agenda [80]

Building Block V: Ensuring commitment and take up

SUMMARY

- What are the success factors?
 - How to best communicate process and disseminate outputs?
-

> Success factors

There are a number of factors influencing the success of the implementation phase. Among others, the benefits that a vision process can yield depends on a country's ability to ensure uptake of the results (e.g. integration of a vision with other strategic documents and processes such as development strategies and the maritime spatial planning), or direct implementation (e.g. of a strategy or action plan) through legally binding implementation mechanisms (i.e. legally enforced actions). Processes will therefore be diverse in character in terms of implementation mechanisms depending on specific political and regulatory context. It is crucial to have an agreement at the beginning of the process on the extent to which a vision is binding, and to ensure **political commitment** and links with policy agendas in other relevant fields (e.g. Food Agenda).

Preferably the whole process and the adoption should be done within one political mandate to ensure that is not affected by the changes in the government. Sustained, **strong overarching leadership**, preferably with a legal basis is crucial. Even if the process does not end with a fully agreed output, it can still identify gaps in the law, and parts could be taken up in decision making process, if there is a strong political support throughout the process. Lessons learned from the Portuguese POEM (Plano de Ordenamento do Espaço Marítimo) project are relevant in this regard, as POEM was never adopted due to a change of government (end of the political mandate).

In countries where no Integrated Maritime Policy is in place, all other political actors on a local and national levels should be involved to **jointly develop and agree on a vision**. Good examples on how this engagement has been organized can also be found outside the EU. Such examples are the Plan for the Gulf Hauraki Marine Park, New Zealand and the Rhode Island Ocean Special Area Management Plan, United States.

The need for **transparency** in vision making processes is also crucial – information on how the process is ongoing and what the next steps are should be available to everyone. This also allows stakeholders to plan their engagement on time.

The **shared enthusiasm** and the joint feeling that the driver is relevant (i.e. importance of the problem covered by vision) are also key factors for success and ability to implement. Resistance to the process, e.g. lobbying against it by certain groups,

is an indicator that implementation may be difficult and that further work might be required, e.g. involving the dissatisfied group or explaining the long-term benefits of the vision. A vision may not please everyone, but acceptance is likely to be greater if everyone is involved from the start and there is broad-scale “buy-in” to the process. If the vision is not supported by the larger group of society than when a political mandate changes, the vision as such, or related actions, might be disregarded.

> Dissemination and communication methods

79

Existing vision processes show that for the vision to be effective, it is crucial to have engaged end-users at very beginning and ensure sufficient time to communicate the process and disseminate outputs. The most success in reaching the wider audience was yield in processes where there was a good balance between the written reports and visually strong online presentation (i.e. interactive website).

Nevertheless, in some processes was helpful to have a dedicated person associated with a vision process, ideally with high-level political support. For example, for **The Wales We Want** vision development process [81], a well-known person - a Welsh actor and political activist, acted as an ambassador to promote work and good coverage on TV and radio. In processes that cover a wide geographical scale, having **local opinion leaders, or dedicated stakeholder engagement teams**, ensured better adaptation to the local context, and contributed to the wider feeling of ownership.

Use of different **social media channels** such as Twitter, Facebook and Instagram for communication during the process and the dissemination of the process outputs allows one to tap into a larger network.

Reaching out to industry actors was the most common challenge in past vision processes. Apart from having conferences, it was also important to approach maritime business community where they are i.e. talk to them during their own conferences/ events. Moreover, to address this challenge, a ‘**vision roadshow**’ as a series of conferences with business pitches were organized during the development of **Maritime Strategy for Västra Götaland** [61].



The **Wales We Want** vision development process [81] provided much learning along the way and the open and organic approach was seen as a strength. It was a challenge in capturing and interpreting the responses as they were so varied and unusual and having a robust system in place was essential. Overall, the website had weekly to monthly updates, there was a mailing list and interim reports were produced.

Throughout the campaign there was tracking of the number of Future Champions²³ who were signing up to hold a conversation in their community or organisation. Conversations were anything from a local self-interest group, darts team, community group or business. Future Champions were key to the success in promoting the cam-

²³ Term adopted during The WWW process, addressing those registered stakeholders involved in active communication of The WWW.

paigned as widely as possible and ensuring that the conversations meant something at a local level.

Through the Future Champions the facilitation team was able to track:

- the number of conversations taking place;
- the number of people participating in each conversation;
- where the conversations were held;
- what was the topic of the conversation.

These conversations were quite varied and included presentations in the early stage on what the conversation was about, to workshops, awareness raising at staff and board meetings, The WWW staff speaking at conferences, public engagement and interventions as exhibitions and shows, stand-up comedy and workshops, video interviews and surveys.

Process facilitation team kept a register of all stakeholders defined as:

- Futures Champions - registered;
- Active - unregistered champions;
- Hot leads - people registered as interested in taking part;
- Web signups - people who had submitted an online response.

There was over 200 Futures Champions either registered online or unregistered, at varying degrees of 'activeness'. Process facilitation team also tracked the responses received as a result of these conversations from individuals and groups in response to the line "I want a Wales where...". The responses came in multiple forms from the postcards, online responses, etc. There were 6474 recorded responses. This was an organic and responsive campaign and flexibility was key to enabling the conversation to evolve as new information came to light. This particularly applied to the engagement materials that evolved, moving from a starter pack to an inspiration pack filled with ideas on how to hold a conversation based on real examples from our champions. Throughout the people were at the heart of the campaign and featured heavily through the branding and the Wales We Want film [81]. It was really important to show these were responses from real people throughout the campaign.

7. Summary of key findings

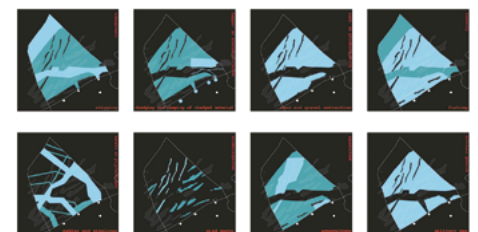


[81]

Continue the Conversation on the Wales We Want www.thewaleswewant.co.uk



[11]



152

[81] Sustain Wales. (nn).The Wales We Want Report. A Report on Behalf of Future Generations.

[11] The Gauffer Report (2005). A Flood of Space: Towards a Spatial Structure for Sustainable Management of the Sea. Belgian Science Policy.

Summary of key findings

There are many different types of vision making processes and ways of organising them. It is important to have the overall purpose of the process and resulting outputs in mind when deciding on the right approach. Vision making process can make use of scenario analysis and/or exploit evidence from forecasts, while strategies are generally based on previously agreed visions and can generate roadmaps and/or actions plans. Added criteria are the geographical scale at which the process is to take place, time and resources available, and the desired inclusiveness of the approach (i.e. the level of stakeholder involvement).

Also, it is important to think about the relationship between the vision-making process and MSP: Is it going to be a stand-alone process (that maybe feeds into an MSP process eventually) or part of an ongoing MSP process? Scenarios and visions, especially spatial scenarios and spatial visions, should preferably be the integral products within the MSP process, which allow for collective thinking about "where we want to be" before we can propose "how do we get there". However, it is important to emphasize that scenarios or visions are not plans. They are simply developed and communicated to get participants in the planning process to think long term and to stimulate questions about "what if".

> Ensure commitment and active use of a vision

If the process is to result in an action plan or a roadmap is meant to be implemented, it is important to ensure a legal mandate where possible. However, many visions are exploratory and really exist to bring together stakeholders and raise the awareness about the given topic. If the process is politically driven, or has political support from the outset, stakeholders usually engage as if they know that the process will end up with actual legally enforced changes. This is due to the fact that stakeholders want to be involved in shaping these changes according to their needs, as they know that if they are not involved, they might lose out when decisions are enforced. In cases where the exploratory vision is being developed dissemination tools have an important role, as well as engagement strategy that involves everyone that the uptake, or active use of the vision depends on. It is also essential to ensure that the process is sufficiently resourced to enable effective and thorough stakeholder engagement.

> It is relevant to always consider both the process and the output

The product will only be good (and widely accepted) if the process is inclusive and promotes ownership. Sometimes the process and the indirect outcomes can be more important than the product – e.g. promoting dialogue between stakeholders, getting people to meet.

> Ensure identification and engagement of all relevant stakeholders and monitor engagement

It is crucial not only to ensure optimal stakeholder engagement but also to monitor/ do a quality check on who was actually engaged and whether the desired level of engagement in terms of representativeness was reached. Answering questions such as: who did we plan to engage? Who we did engage? Who was difficult to engage? Was it worth it? How to balance engaging efforts - for those that have high power and influence and for those that can be strongly affected and whose livelihoods depend the most on these actions? Children and young generations also fall into the last category. In general, there is a need for better engagement of business sectors and their availability for changing "business as usual" model for a new working approach, aligning with principles defined in the strategy/vision/action plan goals, objectives and identified actions.²⁴

83

> Establish a comprehensive adaptive planning strategy

It is important to keep the purpose and aim of the process in mind throughout the process. If needed, the purpose of the project can be shifted as new findings are revealed. The right tools and methods to achieve the process aims should be chosen (and if necessary adapted). Having a system in place for tracking progress towards the vision and/or objectives as well as for identifying the need for adaptation is also essential. Preferably, a vision process should be a closed loop and a continuous improvement process that can track its progress by making use of indicators. It is also essential to ensure that the process is sufficiently resourced to enable effective and thorough stakeholder engagement as well as process monitoring and adaptations.

> Consider the wide range of tools and techniques available to develop an engaging and informative process

General management, social sciences and urban planning techniques may be relevant to the various steps of the development process, and could ensure a more efficient and robust process. A very small number of examined vision processes made use of structured approaches using tools and methods with history of broad application in other policy fields.

> Show evidence of concrete benefits, in particular for MSP

Transparent and clear communication of benefits derived from the process and its outputs can improve stakeholder engagement and commitment, as well as foster the continuation of the process.

²⁴ Point made at the MSP4BG Conference

Case study

Celtic Seas Partnership future trends

> Purpose of the process

The Celtic Seas Partnership (CSP) carried out a study exploring future growth scenarios in the Celtic Seas and the resulting impacts on environmental, social and economic conditions with the purpose to explore the need for integrated marine management for the future environmental integrity of the Celtic Seas and the socio-economic well-being that it supports. The purpose of employing more than one scenario is to demonstrate the extent of potential interactions and impacts under alternative possible futures in order to stimulate debate around the nature of future activities and the trade-offs and solutions that may emerge. Future scenarios were developed and applied to selected marine sectors to demonstrate the different possible changes in the scale and nature of human activities over the next twenty years (2017–2036), and to provide the opportunity for discussion of possible future trade-offs and synergies.

> Approach

Stakeholder engagement was central to the project approach, with feedback on the baseline and draft scenarios being a key element. A baseline of the environmental conditions and marine sector activities was established and this baseline information was reviewed by industry experts in one-to-one interviews to verify its accuracy. Three different future scenarios were developed combining information from the workshops and the review of marine activities. One scenario was 'Business as Usual' and two reflected stakeholders' ideal future. These two were based on the National Ecosystem Assessment scenarios 'Nature at Work' and 'Local Stewardship'.

Future scenarios were developed for ten selected marine sectors, and for nature conservation (implementation of marine protected areas and management measures within them) to demonstrate the different possible changes in the scale and nature of human activities over the next twenty years. Interviews were carried out with stake-

holders to discuss the scenarios and their consequences. The social, economic and environmental impacts (positive and negative) were assessed for each sector under each scenario, through quantitative (where possible) and qualitative approaches. Maps and written descriptions of the future scenarios were made and presented to stakeholders to check whether the projections were plausible and if they reflected a reasonable expectation of the developments under each scenario. Comments were taken into account and the results were used to look at the interaction between sectors, potential impacts on the environment and hotspots where a number of activities were predicted to overlap in the same space. As part of the conclusion, the study pointed out aspects that are important for marine management in the Celtic Seas: 1) Integrated approach taking into account economic, social and environmental concerns; 2) Transboundary approach; 3) Spatial planning; 4) A robust evidence base; 5) Stakeholder engagement.

> Lessons learned

Expectation management to include allocation of more time and extra budget for stakeholder engagement as well as the dissemination of key results are very important to allow for an effective and efficient conclusion of the whole development process. As this is often overlooked.

The use of visualization tools is important as it allows for easy understanding, and better informs stakeholders of important information that guides goals, visions, among others.

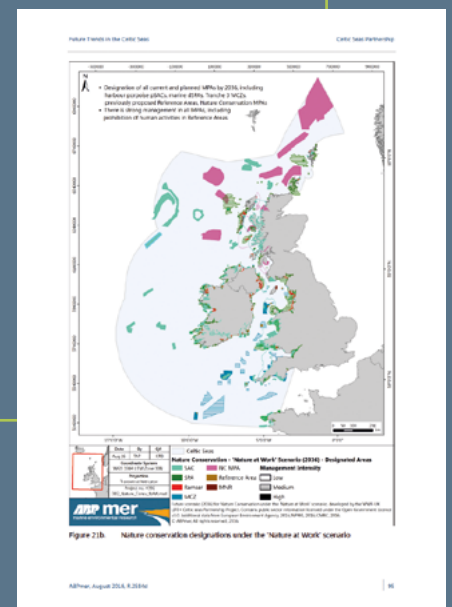
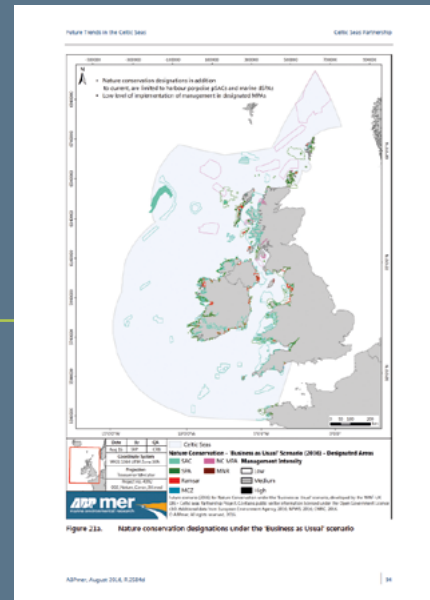


Figure 21b. Nature conservation designations under the 'Nature at Work' scenario

ABPmer & ICF International, (2016). Future Trends in the Celtic Seas, Scenarios Report, ABPmer Report No. R.2584d. A report produced by ABPmer & ICF International for Celtic Seas Partnership

Annex I – How this handbook was developed

The handbook was developed as one of the three tasks of the Technical Study 'MSP as a tool to support a sustainable Blue Economy' carried out under the European MSP Platform. The first stage of the research for the handbook included a desk review of existing visions documents and current approaches to developing them. The review included documentation from over 30 visions, as well as over 20 handbook-style documents and peer-reviewed articles. The aim of this review was to capture the "state of the art" and scope of vision making process. A wide range of initiatives and projects from Europe and beyond were studied, including statutory MSP processes, MSP projects, and non-MSP visions such as those that might be used in sectoral planning, terrestrial planning or macro-regional strategies. Different spatial scales have also been covered, as well as an understanding of which approaches have been used in which contexts, and for what purposes.

Moreover, the analysis included ongoing and planned processes, such as the current Belgium Vision 2050 process and scenario development by the Dutch MSP authorities; maritime strategies (e.g. West Med Strategy); the Implementation Strategy for the Baltic Blue Growth Agenda; and visions within ongoing MSP projects (such as Baltic LINes and NorthSEE). In the case of planned processes, the aim was to gain a better understanding of the ambitions and thus to focus the handbook on the needs of ongoing processes, so as to provide an immediate service for Member States' MSP initiatives and projects.

The desk research was supplemented by semi-structured interviews with:

- Facilitators - including national / regional authorities, research institutes, consultancies and other organizations that have led the practical work of the development of visions.
- Users - including those who extensively refer to visions in their MSP processes, and who might have been involved in the process as a stakeholder.

Based on the wealth of information revealed by the desk research, a sample of practices was selected, ensuring a representation of different approaches and contexts. Interviews were based on two sets of questions. The first set of questions was intended for facilitators, and focused on the development of the visions, the place of the vision-making process in the MSP process, the role of stakeholder consultation in formulating visions, the impacts and benefits the such processes and their outputs may have had and the lessons learned from the process. The second set of interview questions (Annex III) was intended for vision users, and focused on the awareness of existing vision processes, the perceived quality of their communication and impact, relevance of the vision process for MSP, how the visions were taken up, and, if applicable, the experience of / with stakeholders in the vision development process. The interviews also addressed the current understanding of different visions, including strategies, action plans and roadmaps on the part of MSP authorities as well as related MSP projects, and also used open questions with regards to the purpose or process of drawing up a vision. The MSP authorities were also asked whether they would be interested in developing a vision (what format and for what purpose), what information and / or other resources they might need, what obstacles they might foresee, and whether they were aware of existing visions.

All information was collected in a structured way and analysed by looking at the similarities and differences across interview responses by using the simple word search function. Special attention was given to collection of good practices and lessons learned in relation to using a certain tool or method, that could serve in future endeavours. The advice or conclusion was formed only if backed by multiple responses, or supported by the literature. If responses relating to lessons learned were opposing, then the characteristics of the process were compared to understand how different characteristics affect the applicability of the element.

Annex II – EU visions and other relevant literature

88

INITIATIVE	SEA BASIN	SHORT DESCRIPTION
European Union Strategy for the BSR and the Action Plan for the European Union Strategy for the BSR	Baltic	The strategy seeks to provide both a co-ordinated, inclusive framework in response to the key challenges facing the Baltic Sea Region and concrete solutions to these challenges. Action Plan was developed to provide "an integrated framework that allows the European Union and Member States to identify needs and match them to the available resources by coordinating of appropriate policies, thus enabling the Baltic Sea region to achieve a sustainable environment and optimal economic and social development."
A Sustainable Blue Growth Agenda and The Implementation Strategy for the Baltic Blue Growth Agenda	Baltic	The development of the Implementation Plan for the Baltic Blue Growth Agenda is a eight month long stakeholder-dialogue process (2016-2017) with the ambition to set out key actions necessary to deliver on the 2030 visions for four key blue growth sectors. The process follows a structured and facilitated 6-step approach incl. desk research, survey, interviews, scoping paper and workshops.
Baltic Sea Action Plan and Baltic Sea Broad Scale MSP Principles	Baltic	Principles were meant to provide valuable guidance for achieving better coherence in the development of Maritime Spatial Planning systems in the Baltic Sea Region. The common vision of the healthy Baltic Sea has been defined together with all participating stakeholders – from governments, through industry and NGOs, right down to individual citizens, including older and younger generations, and organisations in both the private and the public sectors.
VASAB Long Term Perspective for Territorial Development of the BSR 2030	Baltic	The LTP identifies the most important assets, development trends and challenges affecting the long-term development of the Baltic Sea Region. It predicts the state of the Region in 15- 20 years as a result of joint efforts of countries and organisations; and presents the most important instruments and actions to guide the development of the Region towards territorial cohesion.
Celtic Sea Partnership – Future trends	Atlantic	The Celtic Seas Partnership (2013-2016) aimed to draw people together from across the Celtic Seas to set up collaborative and innovative approaches to managing their marine environment. The process entailed various outputs / formats – many of which provide practices for vision development.
Comprehensive management plan for Wadden Sea (ARTWEI)	North Sea	The Trilateral Wadden Sea Plan is an agreement of how the countries envisage the coordination and integration of management of the Wadden Sea Area and of the projects and actions that must be carried out to achieve the commonly agreed targets. A joint vision was formulated that guides the implementation of plan.
BaltSeaPlan Vision 2030	Baltic	The BaltSeaPlan Vision shows how MSP processes would impact upon the planning of the Baltic Sea by 2030 especially in relation to shipping, fishery, offshore energy and environmental planning. It developed the principles, which should be applied by Baltic Sea states in any MSP process in the future; i.e. pan-Baltic thinking, spatial efficiency, spatial connectivity. The principles and transnational topics identified in the vision have been leading principles for MSP processes throughout the BSR.

INITIATIVE	SEA BASIN	SHORT DESCRIPTION
Study on perspectives of main grid network interconnection between countries and potential wind parks (POWER)	Baltic	A review on development of electricity distribution systems in Poland, Lithuania and Kaliningrad district (Russia) and OWE development related problems. The study provides visionalised decisions for interconnection of main grid networks and potential wind power parks of target countries including relevant insight to legislative, economical and environment aspects.
Conditions for Deployment of Wind Power in the Baltic Sea Region (BASREC)	Baltic	The study provides for an outline strategy for the integrated economic promotion of wind power in the BSR through regional cooperation based on evaluation of potential production sites, grid integration possibility and appropriate supporting regulatory frameworks.
Vision of Particularly Sensitive Area 2020 (Baltic Master)	Baltic	The vision raises awareness about the PSSA framework and aims to increase international cooperation on maritime safety in general and on PSSA in particular. It intends to improve and extend common monitoring, navigational and vessels equipment solutions for the whole Baltic Sea area.
Methodological handbook on MSP in the Adriatic Sea (SHAPE)	Eastern Med	Chapter 4 of the Handbook lays out a preliminary common vision for the future of the Adriatic Sea taking into account environmental, economic, social, government as well as climate change and innovation issues.
Final Recommendations & Conclusions (ADRIPLAN)	Eastern Med	The final report developed a vision on how to proceed with MSP at a trans-boundary scale within the Adriatic Ionian Region making a distinction between areas for coexistence of multiple maritime uses in sensitive environment; intensively used areas as well as areas which are important for the delivery of ecosystem goods and services.
EU maritime strategy and action plan for the Western Mediterranean - WEST-MED building an ASUR sea basin	West Med	Building a Western Med Strategy to integrate aspects related to Maritime Spatial Planning. Intense stakeholder consultation has been carried out.
Bluemed initiative: vision and strategic agenda	Eastern and Western Med	The BLUEMED initiative aims to advance a shared vision for a more healthy, productive, resilient, as well as a better known and valued Mediterranean Sea. It fosters integration of knowledge and efforts to develop the Blue Growth in the Mediterranean and promotes joint actions on relevant research and innovation priorities. It developed a Vision Document and a related Strategic Research and Innovation Agenda (SRIA) issued in September 2015. The SRIA goal "Effective Maritime Spatial Planning in the Mediterranean" includes 5 actions dealing with MSP.

INITIATIVE	SEA BASIN	SHORT DESCRIPTION
TPEA - Trans-boundary Planning in the European Atlantic	Atlantic	Project aimed to investigate the delivery of a commonly-agreed approach to cross-border maritime spatial planning (MSP) in the European Atlantic region. The work of the TPEA partnership focused on three key aspects of MSP: stakeholder engagement; governance and legal frameworks, and data management. Two pilot sites (east coast Irish Sea: Republic of Ireland-Northern Ireland and the Gulf of Cadiz: Spain-Portugal) were used to trial the approaches and methodologies implemented by the TPEA partnership.
The Atlantic Strategy and the Action Plan	Atlantic	The purpose of this process was to present an EU strategy and an action plan for the Atlantic region in order to address common challenges faced by the countries of the region.
EU Strategy for the Adriatic and Ionian Region (EUSAIR)	Adriatic and Ionian Seas	EUSAIR jointly developed by the EC, together with the Adriatic-Ionian Region countries and stakeholders, in order to address common challenges. The general objective of the Strategy is to promote sustainable economic and social prosperity in the Region through growth and jobs creation, and by improving its attractiveness, competitiveness and connectivity, while preserving the environment and ensuring healthy and balanced marine and coastal ecosystems. For the implementation of the Strategy, an Action Plan was defined, structured around four cross-related pillars of strategic relevance: 1) Blue Growth, 2) Connecting the Region (transport and energy networks), 3) Environmental quality, 4) Sustainable tourism.
Bologna Charter and Joint Action Plan on Med Coasts Adaptation to Climate Change	Eastern and Western Med	The "Joint Action Plan on Med Coasts Adaptation to Climate Change" (JAP) can be defined as the operative tool of the Bologna Charter 2012. This aims at strengthening the role of the coastal administrations in the context of European policies and initiatives at the Mediterranean scale referring to: coastal protection, integrated management of the coastal and marine systems (including MSP and Blue Growth) and adaptation to climate change. Referring to the Bologna Charter goals and a shared vision, the JAP identifies a number of joint actions (studies, researches, projects, communication actions, dissemination actions, clustering, etc.) clustered in 4 strategic themes
Baltic LINES	Baltic Sea	Baltic LINES seeks to increase the transnational coherence of shipping routes and energy corridors in Maritime Spatial Plans in the BSR. This will prevent cross-border mismatches and secure transnational connectivity as well as an efficient use of Baltic Sea space. Baltic LINES will improve access to relevant MSP data needed for the development of strategic plans for shipping lines and energy infrastructures in the Baltic Sea by piloting the first ever BSR MSP data infrastructure.
NorthSEE Strategy: Harnessing Our Ocean	North Sea	NorthSEE aims at achieving greater coherence in MSP across the NSR for three transnational topics: environmental aspects, shipping routes and energy infrastructure. Future scenarios are jointly developed by planners and stakeholders in the framework of the "MSP Challenge 2050" simulation. This improved informational basis allows planners to identify current and future synergies and mismatches of national planning solutions and approaches as well as to come to planning solutions for selected sites with incompatibilities.

INITIATIVE	SEA BASIN	SHORT DESCRIPTION
Wealth (Ireland CP Integrated Marine Plan for Ireland)	Ireland	The practice sets out a roadmap for the Government's vision, high-level goals and integrated actions across policy, governance and business to enable our marine potential to be realised. Implementation of this Plan will see Ireland evolve an integrated system of policy and programme planning for marine affairs.
Irish Seas Issues and Opportunities (Irish Sea Maritime Forum)	Ireland	The Irish Sea Issues and Opportunities report was intended inform the direction of future Irish Sea Maritime Forum activities and forthcoming maritime planning in the region. A stakeholder workshop provided the basis of a draft paper, focussing on Fishing; Marine Energy; Ports and Shipping; Tourism and Recreation; and the Environment. The draft paper was circulated for further consultation before a final report was produced in May 2013.
Irish 2040 National Ocean Framework: Issues and Choices	Ireland	The purpose of this paper is to set out the main issues and possible choices for the development of Ireland as a place, beyond 100 years of statehood over the next twenty years or more, to 2040. This is the first major step towards the preparation of a national spatial plan for the country, taking into account a range of social, economic and environmental factors, with the term 'spatial', meaning 'space' or 'place'. One of the principal purposes of preparing the NPF will be to co-ordinate all of these specific departmental or 'sectoral' areas into an overall strategy.
Developing a framework for integrating terrestrial and marine planning (C-Scope)	UK and Belgium / North Sea	Development of marine spatial plans for Dorset (England) and Heist (Belgium) and a long-term vision for Heist. The long-term vision development is particularly interesting in this regard. This was an issue driven process and the forecast has also been developed.
A flood of space – Towards a spatial structure plan for sustainable management of the North Sea (GAUFRE)	Belgium / North Sea	The GAUFRE report was the first attempt to deal with the high level of use in the Belgian part of the North Sea in a structural manner allowing the reader to easily move between scientific information and the use of that information, to creatively consider ways in which spatial structure planning might be achieved
Belgium Vision Process 2050	Belgium	The current marine spatial plan was adopted in 2014 and is set to be revised in 2020, so by then a new plan is needed, with a view to 2026. There is a correlation between this revision process with the development of a Vision for the North Sea 2050. The North Sea Vision looks to 2050 from 2018 and three working groups were established on nature, blue economy and innovation, and multi-use. Transversal themes are sustainability, research and development, governance structures, safety, land-sea interactions and cross-border issues.

INITIATIVE	SEA BASIN	SHORT DESCRIPTION
Scenario study for the North Sea North Sea 2050	Netherlands/ North Sea	The scenario study for the North Sea is being developed in a broader context and is expected to provide input not only for the MSP but other high-level policy and strategic documents. The methodology for scenario development is well developed as part of this process.
Spatial Agenda (Netherlands - MSP)	Netherlands / North Sea	The report of joint research into the long-term potential of sea and coastal areas, translated into a vision, series of ambitions, opportunities, points of action and maps. The visions and points for action are guiding the 'maritime spatial plan' for 2016-2021.
National Policy Strategy for Infrastructure and Spatial Planning and National Spatial Strategy	Netherlands / North Sea	The strategy for the terrestrial and marine areas of the Netherlands is a mixture between a vision and a strategy. It contains a comprehensive vision and, at the same time, a so-called strategy for the achievement of developments and ambitions until the year 2040. The central government goals are focusing on enhancing the countries' competitiveness, improving space for accessibility and safeguarding the quality of the living environment. Additionally, maps have been created on step-by-step approaches to achieve the ambitions until 2040.
POEM - Planning and Ordering of Maritime Space	Portugal/ Atlantic	Process for setting up the vision, action plan and the MSP in Portugal.
The overarching strategy of spatial development of Poland (National Spatial Development Concept 2030)	Poland / Baltic Sea	The document presents a vision of spatial development in Poland for the coming 20 years, defines goals and objectives of the national spatial development policy to facilitate its implementation as well as providing for the rules and mechanisms for coordination and implementation of public development policies featuring a significant territorial impact.
Maritime Strategy for Västra Götaland region	Sweden/ Baltic Sea	The maritime sector is dependent on a living, healthy marine environment. To develop the maritime sector further, a strategy is needed that brings together all players around a set of objectives and a vision of the direction that development will take. The region Västra Götaland has taken upon itself the task of drawing up a maritime strategy together with all the stakeholders concerned in the region.
The Swedish Maritime Strategy - for people, jobs and the environment	Sweden	The Swedish Ministry of Enterprise and Innovation initiated the vision document, which was drafted with three other Ministries. It sets out a broad, idealistic future, or at least the criteria to which it should adhere. It is a policy document for socially, environmentally and economically sustainable development in the Swedish maritime sectors. It should also aim to promote Sweden abroad. A competitive, innovative and sustainable maritime sector can contribute to increased employment, reduced environmental impact and an attractive living environment. The plan is to consult with stakeholders in order to achieve the vision.

INITIATIVE	SEA BASIN	SHORT DESCRIPTION
Maritime Strategy for four Swedish municipalities – Strömstad, Tanum, Sotenäs, Lysekil	Sweden	Maritime strategy was developed for the sub-region, for four municipalities with the goal same as for the MSP plan. The Strategy was also meant to show the direction (where we all want to go) in terms of development and hence, provide more focus for everyone. The process was mainly funded by the county municipal board. The strategy is not spatial but is in parallel with the MSP. Both are tools that help to define where do municipalities go with business and where do they do what at the sea.
The Wales we want by 2050 A Welsh society's commitment to a better quality of life for future generations	UK	The Well-being of Future Generations (Wales) Act is about improving the social, economic, environmental and cultural well-being of Wales. It will make the public bodies listed in the Act to think more about the long-term, work better with people and communities and each other, look to prevent problems and take a more joined-up approach. To make sure everyone is working towards the same vision, the Act puts in place seven well-being goals.
SPRS – Spatial Development Strategy of Slovenia	Slovenia	The Spatial Development Strategy of Slovenia that is now being revised provides a broader policy framework that is also relevant for the MSP implementation process in Slovenia. The strategy is being developed as a participatory process, with well-developed methodology.

References

- [1] ABPme R, ICF International. (2016) Future Trends in the Celtic Seas, Scenarios Report, ABPmer Report No. R.2584d. A report produced by ABPmer & ICF International for Celtic Seas Partnership. August 2016.
- [2] Alcamo, J. (2001). Scenarios as tools for international environmental assessments. Expert corner's report, Prospects and Scenarios No. 5. EEA, Copenhagen.
- [3] Armstrong J Scott, ed. (2001). Principles of Forecasting: A Handbook for Researchers and Practitioners. Norwell, Massachusetts: Kluwer Academic Publishers. ISBN 0-7923-7930-6.
- [4] The Forward-Thinking Platform (2014) A Glossary of Terms commonly used in Future Studies. Rome.
- [5] Gee, K., Kannen, A., Heinrichs, B. (2011). Towards the Sustainable Planning of the Baltic Sea Space. Vision 2030. BaltSeaPlan.
- [6] European Commission (2014). European Strategy for the Adriatic-Ionian Region. Retrieved from <http://www.adriatic-ionician.eu/about>. Accessed on 12 December, 2017.
- [7] VASAB (2009). VASAB Long-Term Perspective for the Territorial Development of the Baltic Sea Region. Vision and Strategies Around the Baltic.
- [8] European Commission (2009). European Union Strategy for the Baltic Sea Region. Retrieved from <https://www.balticsea-region-strategy.eu/news-room/documents-materials>. Accessed on 10 December, 2017
- [9] Strömstad, Tanum, Sotenäs och Lysekils kommuner. 2016. MARITIM NÄRINGSLIVSSTRATEGI för Strömstad, Tanum, Sotenäs och Lysekils kommuner. Maritime Industry Strategy for the municipalities of Strömstad, Tanum, Sotenäs and Lysekil. Retrieved from: http://www.tillvaxtbohuslan.se/bla-op/wp-content/uploads/sites/4/2014/04/2016-09-09_Antagandehandling-och-underlag-Maritim-Näringslivsstrategi_hela.pdf Accessed on 12/12/2017
- [10] Kriatina Veidemane, Anda Ruskule, Sandra APrukta (2017). Development of a Maritime Spatial Plan: The Latvian Recipe. Baltic SCOPE.
- [11] The Gaufer Report (2005). A Flood of Space: Towards a Spatial Structure for Sustainable Management of the Sea. Belgian Science Policy.
- [12] Polish Ministry of Regional development (2012). National Spatial Development Concept 2030. Summary Paper. Warsaw.
- [13] Environmental Assessment Agency (2012). Pathways to Achieve Global Sustainability Goals by 2050. Roads from Rio+20 Report.
- [14] Josefin Wangel (2011). Exploring Social Structures and Agency in Backcasting Studies for Sustainable Development. Journal of Technological Forecasting and Social Change. Volume 78, Pp 872-882.
- [15] Annika Carlsson-Kanyama, Karl Henrik Dreborg, H.C. Moll, Dario Padovan. (2008) Participative Backcasting: A Tool for Involving Stakeholders in Local Sustainability Planning. Futures 40, Pp. 34-46.
- [16] C-Scope. Heist Case Study. Retrieved from <http://www.cscope.eu/en/project-activities/marine-management-plan/belgian-marine-management-area/>. Accessed on 12 December, 2017.
- [17] European Commission (2012). Blue Growth Study - Scenarios and drivers for Sustainable Growth from the Oceans, Seas and Coasts. Retrieved from <https://webgate.ec.europa.eu/maritimeforum/en/node/2946>. Accessed on 12 December, 2017.
- [18] Roland Cormier, Andreas Kannen, Michael Elliot, Paulette Hall. (2015). Maritime Spatial Planning Quality Management System. ICES Cooperative Research Report, Number 327.
- [19] University of British Columbia. Retrieved from http://polqm.med.ubc.ca/powerpoint/PLCO_Indicators_0606.pdf . Accessed on 12 December, 2017.
- [20] Save the Children. Monitoring, evaluation, Accountability and Learning (MEAL). 3 Programme Frameworks, Objectives and Indicators. The Open University.
- [21] June Lennie, Jo Tacchi, Bikash Koirala, Michael Wilmore and Andrew Skuse (2011). Equal

- Access Participatory Toolkit. Helping Communication for Development Organisations to Demonstrate Impact, Listen and Learn, and Improve their Practices.
- [22] ENTSO-E (2014). 2030 Visions of TYNDP. Retrieved from [https://www.entsoe.eu/news-events/events/Documents/140219_announcement_leaflet__2030_vision%20\(2\).pdf](https://www.entsoe.eu/news-events/events/Documents/140219_announcement_leaflet__2030_vision%20(2).pdf). Accessed on 10 December, 2017
 - [23] ENTSO-E. (2015). TYNDP 2016 Scenario Development Report- For Public Consultation. Brussels.
 - [24] The Dutch Ministry of infrastructure and the Environment (2015). Policy Document on the North Sea 2016-2021. The Hague.
 - [25] The Shape Project. <http://www.shape-ipaproject.eu/Statica.asp?p=project>. Accessed on the 20th of January, 2018.
 - [26] United Nations (2015). Transforming our World: The 2030 Agenda for Sustainable Development. UN Resolution A/RES/70/1. General Assembly.
 - [27] Sli.do Audio Interaction Tool. Available on <https://www.sli.do>. Accessed on 12 December, 2017.
 - [28] US Department of the Interior. Regional Coordination. Available at: <https://www.doi.gov/pmb/ocean/regional-partnerships>. Accessed on 12 December, 2017.
 - [29] POLIS LITORAL RIA FORMOSA. Available at: <http://www.polislitoralriaformosa.pt/polis.php>. Accessed on 12 December, 2017.
 - [30] Peter, K. (2004). The DPSIR Framework. National Environmental Research Institute, Denmark Department of Policy Analysis European Topic Centre on Water, European Environment Agency. UNEP Headquarters. Nairobi.
 - [31] European Commission. (2017). Towards an initiative for the sustainable development of the blue economy in the western Mediterranean. Goals and Priorities.
 - [32] WestMed Maritime Initiative. (2017). More about the Initiative available at: <http://www.westmed-initiative.eu>.
 - [33] Ecorys/Deltares/Océanec Développement. (2012). Blue Growth Study. Third Interim Report. "Blue Growth: Scenarios and drivers for Sustainable Growth from the Oceans, Seas and Coasts".
 - [34] Böhme, K. Zillmer, S. Hans, S., Antikainen, J., Pykkonen, S. (2016). Looking towards 2030: Preparing the Baltic Sea Region for the future. Full Report. EUSBSR.
 - [35] Fraunhofer and Ecorys (2011). Study on Lessons for Ocean Energy Development. Retrieved from <https://publications.europa.eu/en/publication-detail/-/publication/03c9b48d-66af-11e7-b2f2-01aa75ed71a1/language-en>. Accessed on 20 December, 2017.
 - [36] Kosow, H., Gaßner, R. (2008). Methods of Future and Scenario Analysis. Overview, Assessment, and Selection Criteria. German Development Institute. DIE Research Project "Development Policy: Questions for the Future".
 - [37] n.n. (n.d). InVEST - Integrated Valuation of Ecosystem Services and Tradeoffs. Retrieved from <https://www.naturalcapitalproject.org/invest/>
 - [38] EN ExtendSim. (2017). Tools for simulation. Retrieved from <https://www.extendsim.com>. Accessed on 20 December, 2017.
 - [39] Marine Ecosystem Services. (2017). Retrieved from <https://www.marine-ecosystem-services.eu/en/section-4/4-2-building-scenarios-why-and-how>.
 - [40] Branagh, S., Ratcliffe, J. (2002). Dublin City Foresight. Retrieved from <https://arrow.dit.ie/cgi/viewcontent.cgi?referer=https://www.google.de/&httpsredir=1&article=1009&context=futuresacrep>
 - [41] Isee Systems. Retrieved from <https://www.iseesystems.com/landing-b.aspx>. Accessed on 12 December, 2017.
 - [42] Wolters, H. A., Gille J., de Vet J. M., Molemaker, R. J. (2013). Scenarios for selected maritime economic functions. Eur J Futures Res (2013) 1:11. DOI 10.1007/s40309-013-0011-8.

- [43] Eden, C., Ackermann, F., Bryson, J., Richardson, George P., Andersen, D.F. and Finn, C.B. (2009) Integrating modes of policy analysis and strategic management practice: requisite elements and dilemmas. *Journal of the Operational Research Society*, 60 (1). pp. 2-13. ISSN 0160-5682.
- [44] Cavallini, S., Soldi, R., Friedl, J., and Volpe, M. (2016). Using the Quadruple Helix Approach to Accelerate the Transfer of Research and Innovation Results to Regional Growth. Retrieved from <https://cor.europa.eu/en/documentation/studies/Documents/quadruple-helix.pdf>. Accessed on 12 December, 2017.
- [45] Zaucha J., Bocci M., Depellegrin D., Lukic I., Buck B., Schupp M., Caña Varona M., Buchanan B., Kovacheva A., Karachle P.K., et al. (2016) Analytical Framework (AF) - Analysing Multi-Use (MU) in the European Sea Basins. Edinburgh: MUSES project.
- [46] Lewin, K., (1997). *Resolving Social Conflicts and Field Theory in Social Science*. American Psychological Association, Washington DC
- [47] NHS (2014). *Quality and Service Improvement Tools. Force Field Analysis*. NHS Improving Quality.
- [48] Prell, C. (2012). *Social Network Analysis. History, theory and Methodology*.
- [49] Markantonatou, V., Meidinger, M., Sano, M., Olkonomou, E., Di Carlo, G., Palma, M., Ponti, M., Cerrano, C. (2013). *Stakeholder Technology*.
- [50] Lazic, M., and Markantonatou, V. (2016). Social network analysis and possibilities for transboundary MSP. Case of Adriatic Sea at the 2nd Baltic Maritime Spatial Planning Forum. Retrieved from <https://www.slideshare.net/BalticSCOPE/social-network-analysis-and-possibilities-for-transboundary-msp-case-of-adriatic-sea-at-the-2nd-baltic-maritime-spatial-planning-forum>. Accessed on 12 December, 2017.
- [51] MUSES. Stakeholder Profiles. Retrieved from <https://muses-project.eu/project-outputs/>. Accessed on 12 December, 2017.
- [52] Borgatti S.P., Everett M.G., Freeman L.C. (2002). *Ucinet 6 for Windows: Software for Social Network Analysis*. [Report].
- [53] Borgatti SP. (2002). *Netdraw Network Visualization/ Analytic Technologies*, Harvard, MA [Book].
- [54] Mendelow, A. (1991). 'Stakeholder Mapping'. *Proceedings of the 2nd International Conference on Information Systems*, Cambridge, MA.
- [55] Eden C., Ackermann F. (1998). *Making Strategy: The Journey of Strategic Management*. Sage: London.
- [56] Project Governance Sounds Important – But What Does It Actually Look Like? Retrieved from: <http://www.projectizing.com>. Accessed on 12 December, 2017.
- [57] Ronald K. M., Bradley R. A, Donna J. W. (2009). Toward a Theory of Stakeholder Identification and Salience: Defining the Principle of Who and What Really Counts. *The Academy of Management Review*, Vol. 22, No. 4 (Oct., 1997), 853-886.
- [58] Weber, M. (1947). *The theory of social and economic organization*. New York: Free Press.
- [59] Ackermann F., Eden C. (n.d.). *Strategic Management of Stakeholders: Theory and Practice*. Long Range Planning.
- [60] VASAB. Vision and Strategies for the Baltic Sea Region. More about the project available at: <http://www.vasab.org/index.php/balticlines-eu>. Accessed on 12 December, 2017
- [61] Region Västergötland (2008). *Maritime Strategy for Västergötland in Sweden*. Retrieved from <http://msp-platform.eu/practices/maritime-strategy-vastra-gotaland>. Accessed on 12 December, 2017.
- [62] TPEA (2014). *Transboundary Planning in the European Atlantic: Pilot Areas Report*. University of Liverpool, Liverpool, UK.
- [63] Brouwer, H., Woodhill, J., Hemmati, M., Verhoosel, K., Van Vugt, S. (2015). *How to Design and Facilitate Multi-Stakeholder Partnerships. The MSP Guide*. Wageningen UR.

- [64] Schneider, P. and Brown, J. (2006). Permaculture Facilitators Resource Book: Training & Assessment. Tools for creative workshops & project follow up. Yayasan IDEP with Green-Hand. IDEP Foundation. Bali.
- [65] Open Channels. <https://www.openchannels.org/videos/marine-spatial-planning-challenge-2050-software-demo>. Accessed on the 20th of January 2018.
- [66] MSP Challenge 2050. Retrieved from <http://www.mspchallenge.info/>. Accessed on 12 December, 2017.
- [67] The Change Handbook: The Definitive Resource on Today's Best Methods for Engaging Whole Systems. The Change Handbook. Available on SlideShare: <https://www.slideshare.net/michaelpupil16/the-change-handbook>
- [68] Veidemane, K., Ruskule, A., Sprukta, S. (2017). Development of a Maritime Spatial Plan: The Latvian Recipe. BalticSCOPE project. Available at: http://www.balticscope.eu/content/uploads/2015/07/LV-recipe_EN_web.pdf. Accessed on 10 December 2018.
- [69] European Commission Joint Research Centre (JRC). Available at http://forlearn.jrc.ec.europa.eu/guide/0_home/index.htm. Accessed on 12 December, 2017.
- [70] Etienne, M., D. R. Du Toit, and S. Pollard. (2011). ARDI: a co-construction method for participatory modelling in natural resources management. Ecology and Society 16(1): 44. [online] URL: <http://www.ecologyandsociety.org/vol16/iss1/art44/>. Accessed on 12 December, 2017.
- [71] Celtic Seas Partnership. Available at: <http://futuretrends.celticseaspartnership.eu>. Accessed on 12 December, 2017.
- [72] The Mediterranean Sea. Trends, Threats and Recommendations. Available at: <http://www.medtrends.org>. Accessed on 12 December, 2017
- [73] iMindMap App. Retrieved from <https://imindmap.com/software/>. Accessed on 12 December, 2017.
- [74] FreePlane App. Retrieved from <https://sourceforge.net/projects/freeplane/?source=recommended>. Accessed on 12 December, 2017.
- [75] Coogler. Retrieved from. <https://coggle.it/>. Accessed on 12 December, 2017.
- [76] Tony Buzan. Mind Mapping. Retrieved from <http://www.tonybuzan.com/about/mind-mapping/>. Accessed on 12 December, 2017.
- [77] Slocum, N. (2003). Participatory Methods Toolkit: A Practitioner's Manual.
- [78] Esri 3-d gis. Available at: <http://www.esri.com/products/arcgis-capabilities/3d-gis>. Accessed on 12 December, 2017.
- [79] Nichersu, I., Marin, E., Sela, F., Trifanov, C., Mierla, M. (2010). Room for the River in Cat's Band: Application of the SketchMatch in Romania. 30th IAD Conference, June 2010, Dresden, Germany.
- [80] Beyer, C. and Schultz-Zehden, A. (2017). Towards an Implementation Strategy for the Sustainable Blue Growth Agenda for the BSR.
- [81] Sustain Wales. (nn).The Wales We Want Report. A Report on Behalf of Future Generations. YouTube Documentary. Retrieved from <https://www.youtube.com/watch?v=rDUiJFJ2ibE>. Accessed on 12 December, 2017.
- [82] IABR (2016). 2050 - An Energetic Odyssey. The North Sea and Energy Transition. Retrieved from <https://www.iabr.nl/en/projectatelier/Atelier2050>. Accessed on 12 December, 2017.
- [83] Geldof C., Janssens N., Goossens C., Goris E., Pelger D., Labarque P. (2011). The future commons 2070. Map C01 Harwich to Hoek van Holland and Dover Strait.
- [84] VLIZ (2012). LITTORAL 2012: Coasts of tomorrow. Retrieved from <http://www.vliz.be/events/littoral2012/index.php?p=rationale>. Accessed on 12 December, 2017.
- [85] EnesGuimaraes, M.H.M., nn. (n.d) The use of Q-methodology to obtain stakeholder discourses on the future development of Ria Formosa coastal zone, south of Portugal.

- [86] VALMER Project. (2015). A summary of the lessons learnt from VALMER scenario development process.
- [87] Chakraborty, A., McMillan, A. (2015). Scenario Planning for Urban Planners: Toward a Practitioner's Guide. *Journal of the American Planning Association*, 81:1, 18-29, DOI: 10.1080/01944363.2015.1038576.
- [88] Holway, J., Gabbe, C.J., Hebbert, F., Lally, J., Matthews, R., Quay, R. (2012). Opening Access to Scenario Planning Tools.
- [89] Priess, J.A., Hauck, J. (2014). Integrative Scenario Development. *Ecology and Society* 19(1): 12. Retrieved from <http://dx.doi.org/10.5751/ES-06168-190112>.
- [90] Stojanovic, M., Mitkovic, T. and Mitkovic, M. (n.d). The scenario method in urban planning. *Architecture and Civil Engineering* Vol. 12, No1, 2014, pp. 81 - 95 DOI: 10.2298/FUA-CE1401081S.
- [91] Webler, T., Danielson, S., Tuler, S. (2009). Using Q method to reveal social perspectives in environmental research. Greenfield MA: Social and Environmental Research Institute.
- [92] Ministerio da Agricultura, Mar, Ambiente e Ordenamento do Territorio. 2011. Plano de Ordenamento do Espaço

