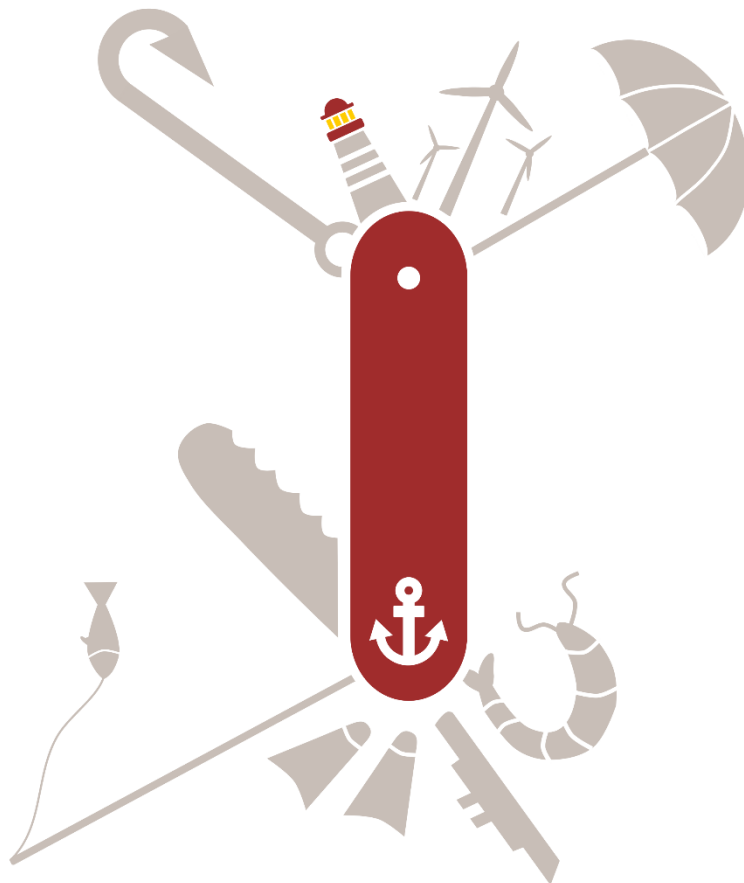


**Sea and maritime basin
Strategy document
Strategic phase**

Development Guide
Volume 2 - Methodology



May 2017

Contents

Introduction	1
1. Initial assessment and issues.....	3
1.1. Initial assessment	3
1.2. Thematic issues	9
1.3. Summary and deliverables.....	14
2. The vision for 2030	15
2.1. Cross-cutting the issues: from a "silo-based" analysis to a cross-sectoral analysis	16
2.2. Towards an initial mapping of territories.....	17
2.3. The relative importance of the topics for the sea basin	18
2.4. Vision for the sea or maritime basin in 2030	19
2.5. Summary and deliverables.....	23
3. Strategic objectives.....	24
3.1. Building strategic objectives.....	24
3.2. Vocation map	28
3.3. Summary and deliverables.....	30
4. List of abbreviations and acronyms	31
5. Bibliographical references	33

Introduction

The sea basin strategy document is in four parts, produced in two phases that follow each other in time:

The first phase is the period for strategic choices and includes:

- 1 **The initial assessment** in the perimeter of the sea basin. It includes an inventory of the situation and identifies the main issues and emerging needs of the sea basin.
- 2 **Definition of priority strategic objectives** and related indicators, which include:
 - socio-economic objectives,
 - the environmental objectives,
 - the definition of, and justification for the conditions for co-existence of activities and uses in space and in time,
 - the resulting cartographic representation(s), showing areas that are coherent in terms of general issues and objectives in maritime areas.

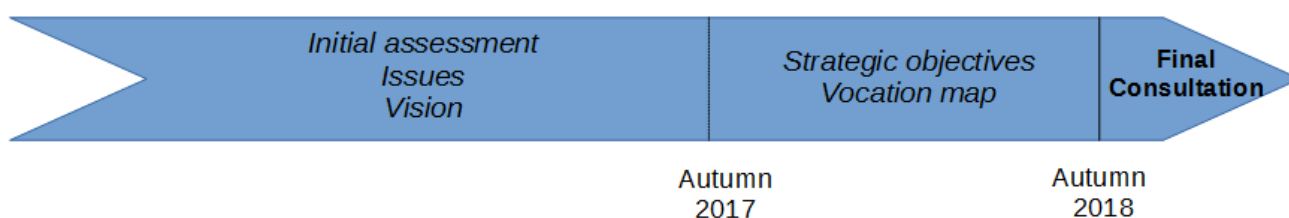
For the first round of strategy document preparation, this first phase will be completed by late 2018.

The second phase is the period of the action plan and contains:

- 3 The procedures for evaluating implementation of the strategy document.
- 4 The action plan for the strategy document.

For the first round of strategy document preparation, this second phase will be completed by late 2021.

This guide provides a methodological framework for the preparation of the first two parts of the sea basin strategy document corresponding to the **first phase**¹.



¹ Refer to the French version of this guide for more details about the following timeline



The guide breaks down the approach in the following way:

- **An assessment of the current situation and an inventory of the issues**

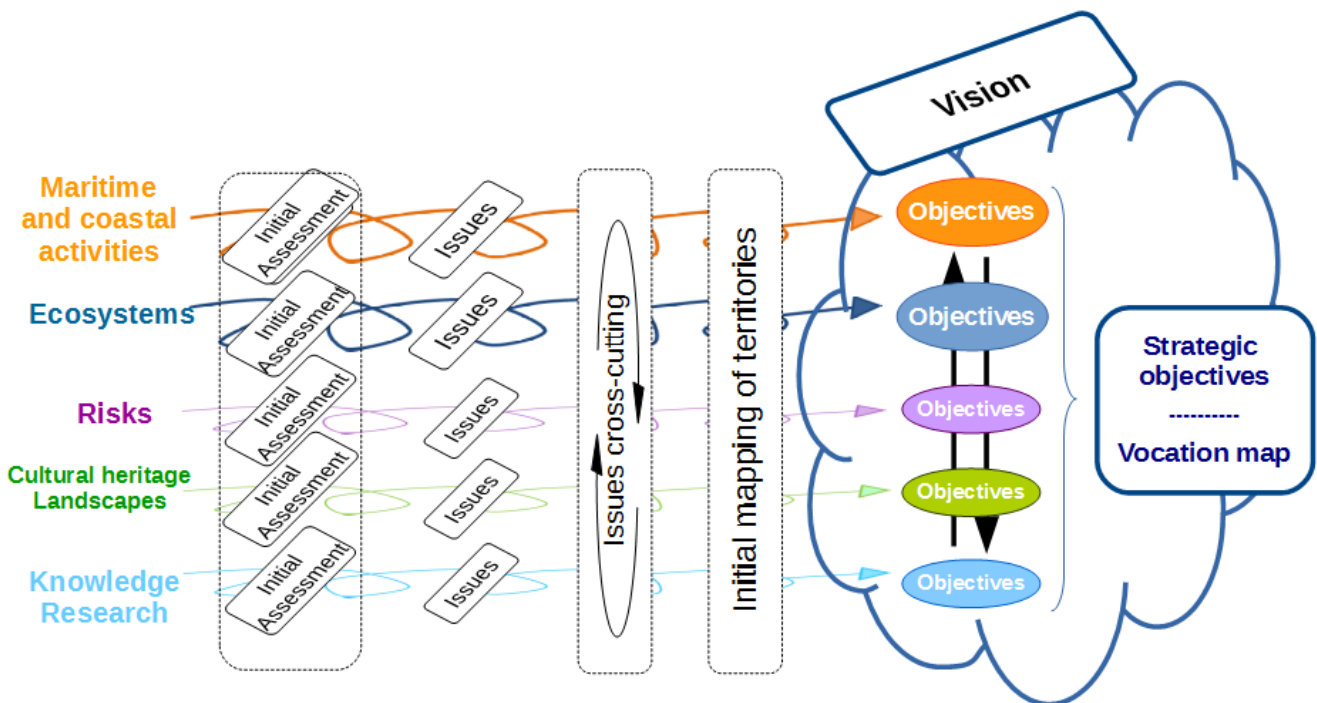
This diagnosis explains the different topics that characterize the area and how they interact with one another: activities and uses, marine and coastal ecosystems, risk prevention, cultural and landscape heritage, knowledge and research. It is based on the best available data. It includes an inventory of the main issues for each topic within the sea basin.

- **Drawing up a medium- and long-term vision for the sea basin**

This is based on cross-cutting the issues, identifying the existing maritime territories and assessing the relative importance of the issues for the sea basin, in agreement with the SNML. This vision describes an organization of space, priority topics and their related issues and the future that it is desired to have for maritime and coastal areas by 2030.

- **Determining strategic objectives and drawing up a vocation map**

This includes the environmental, social and economic objectives, together with the resulting spatial planning.



1. Initial assessment and issues

1.1. Initial assessment

The initial assessment of the sea basin, according to the different topics addressed in the strategy document:

- maritime and coastal activities;
- marine and coastal ecosystems;
- sites, landscapes and cultural heritage²;
- risks;
- research, knowledge, innovation and training.

To this thematic inventory are added cross-sectoral aspects:

- local planning or integrated management initiatives;
- interactions between activities and between activities and the marine environment.

This stage brings together all available and relevant knowledge and data relating to the above-mentioned categories and how they interact. Without being exhaustive, it must provide shared understanding of the sea basin. This information provides the knowledge base required for the following steps in drawing up the strategy document: issues, vision and strategic objectives.



Box 1 The cartographic approach

The spatial approach occupies an important place in the sea basin strategy document. This is why the information and data collected for each of the topics in the strategy document are mapped as much as possible.

This mapping effort is particularly concerned with the known distribution of ecosystem components (species, habitats and ecological functions), the distribution at sea of the various activities under consideration and the related socio economic indicators, the distribution of sites and landscapes and noteworthy cultural heritage, the distribution of risk areas for goods and people, and risk factors.

The identification of data sources and the organization of public operators (Cerema, AFB, Soes, SHOM, Ifremer, IGN, etc.) for acquiring and disseminating them is the subject of a file detailed in volume 3 of the guide, "Toolbox .

The inventory is therefore structured around several topics.

² This topic also includes the natural public maritime domain and free access to the shore



Introductory presentation of the sea basin

This section describes the main characteristics of the sea basin: physical (geology, bathymetry, meteorology, etc.), administrative (regulatory delineation, administrative description) together with economic, demographic and residential dynamics and their consequences for the occupation of space and pressure on land use.

Maritime and coastal activities

This section describes the different sectors of activity of the sea basin according to a standard plan:

- general description of the activity: definition of practices, national overview, public policies and ad hoc regulation.
- Initial assessment at sea basin level: socio-economic indicators, current trends and presentation of public policies: specific local policies and implementation of national, international and community policies;
- description of activities at thematic or spatial and temporal levels adapted to their interactions with other activities, the environment and the land-sea link. This level of description may lead to more detailed consideration of certain practices, and certain descriptive parameters. Description at levels below that of the sea basin will in some cases be necessary.

The activities to be taken into account in the inventory are presented below:

Exploitation of living resources	Professional fishing Aquaculture, marine biotechnology Sales and processing of seafood
Exploitation of non-living resources	Extraction of marine materials Electricity production Offshore oil and gas activities
Maritime transport	Marine transport and ports
Maritime works	Maritime public works Submarine cables Shipbuilding
State action at sea	State action at sea
Defence	Defence
Leisure	Bathing and beach activities Recreational fishing Boating and water sports
Coastal and maritime tourism	Coastal tourism
Protection, knowledge / research and innovation	Environmental protection Scientific monitoring networks and systems related to the marine environment
Maritime financial services	Maritime financial services
Land-based activities	Agriculture Industries Artificialization of coastal territories



Note: For marine aggregates, the method is to be found in the guide for drawing up DOGGMs (guidance documents for the sustainable management of marine aggregates, a document incorporated in the strategy document) contained in Volume 3 of this guide; the "inventory" and "sensitivity scales" sections of the DOGGMs must be discussed here. The "management measures" and "marine aggregate production capacity" sections will be addressed with the definition of strategic objectives, the "guidelines and general measures" will be incorporated into the action plan of the strategy document.

If need be, these broad categories of activities can be described in a more detailed way: special practices that may be of particular interest for the sea basin or specific interactions with other activities or with the environment.



Box 2 Example of a more detailed description of an activity

For example, professional fishing can be described as a whole, but also at the level of certain occupations which are of great interest to the sea basin or which generate specific pressure on the environment. In addition, certain less well documented practices must be taken into account if they are of particular social or cultural interest, such as red tailed goby larva fishing in Réunion.

Marine and coastal ecosystems

First, this section briefly describes the main features of the marine and coastal ecosystems of the sea basin.

It then presents the assessment of the ecological status of marine waters, respecting, in mainland France, the 11 descriptors common to all the Member States of the European Union and defined in the DCSMM (see table below). These descriptors describe the main pressures on marine ecosystems and the status of these ecosystems under pressure. These assessments are carried out under the scientific responsibility of the DCSMM on the basis of environmental monitoring data. As far as possible, the gap between the current status of each descriptor and good ecological status is estimated. In addition, the activities that generate the different pressures and their contributions to the status of ecosystems are identified (several activities can generate the same pressure and several pressures can impact the same ecosystem component).

1. Biodiversity	7. Hydrographic conditions
2. Non-native species	8. Contaminants
3. Commercial species	9. Health issues
4. Food web	10. Marine waste
5. Eutrophication	11. Noise
6. Integrity of seabed	

List of 11 DCSMM descriptors (for mainland France)



Finally, the expected cost of achieving or maintaining good ecological status is described. The assessment of this cost is based on the inventory of the various public policies and private initiatives, the evaluation of their costs and the assessment of the environmental, social and economic impacts, i.e. residual impacts, which remain even when these have been implemented. This inventory is structured by domains as follows:

- marine waste;
- micro-pollutants;
- microbial pathogens;
- oil spills and illicit discharges;
- impact of invasive non-native species;
- degradation of fishing resources;
- degradation of shellfish resources;
- introduction of energy into the environment and changes in the hydrological regime;
- loss of biodiversity and of the integrity of the seabed;
- eutrophication.

Sites, landscapes and cultural heritage

The purpose of this section is to draw up an inventory of the existing situation and of public policies relating to:

- free access to shore (including coastal footpaths);
- sites and landscapes (coastal and underwater);
- management of the natural maritime public domain, the coastal and maritime cultural heritage, including the underwater archaeological heritage.

In particular, the fact sheets present the actions and strategies of the decentralized State departments (DDTM, DREAL, DRASSM, etc.), public institutions such as the coastal and lakeside protection agency and local authorities participating in knowledge, protection, preservation and enhancement of the sea basin heritage.

Risks

This part identifies the risks for the safety of people and goods, and specifies how they are managed at the level of the sea basin.

The inventory is broken down into four main categories of risk:

- technological risks (industrial hazards, transport of dangerous goods, pipelines, oil spills);
- natural coastal hazards (marine submersion, coastal erosion, climate change and rising sea levels);
- health risks (quality of bathing water, quality of shellfish waters, etc.);
- maritime safety (including safeguarding of persons and property at sea and safety).



Research, knowledge, innovation and training.

This section of the inventory presents the structure of the knowledge, research, innovation and training sector at the level of the sea basin. This part identifies all those involved in the sea basin: public or private bodies, with a national scope or set up by local authorities. An inventory of current and future knowledge, research and training initiatives and projects is also carried out. This topic is structured as follows:

- collection, storage, making available and enhancing information relating to the sea and the coast (data and people/entities involved);
- people/entities involved, resources, topics and research projects linked to the sea and the coast in the area;
- innovation policies (including regional innovation strategies) and people/entities involved;
- maritime vocational training and the needs of the marine sectors;
- Awareness-raising and communication actions in favour of the sea and the coast.

Local planning or integrated management initiatives for the sea and coast

Strategic planning at the level of sea basins is based on a global and cross-sectoral vision. It is therefore necessary to take into account strategic planning on other levels or in other frameworks and to favour information acquired through experience of integrated management of coastal areas, particularly those dealing with the land-sea link.

This part of the inventory presents the strategy documents existing or in preparation at regional level. In particular the regional scheme for economic development, innovation and internationalization (*Schéma régional de développement économique, d'innovation et d'internationalisation* - SRDEII) and the regional scheme for planning, sustainable development and territorial equality (*Schéma régional d'aménagement, de développement durable et d'égalité des territoires* - SRADDET), which are likely to take account of maritime areas and the specific features of the coastline of and will necessarily interact with the provisions of the strategy document.

The inventory also includes planning on a more local scale, mainly coastal SCoTs and any maritime components, natural marine parks and national parks, as well as any other entity with meaning in terms of an urban planning strategy and governance (e.g. the Blue Coast Marine Park, the Bouches de Bonifacio International Park, etc.).

The way in which the strategy document coordinates with other public policies, in particular Plans, Programmes and Schemes, is presented in point 10 of volume 1.

Interactions between activities and with the marine environment

Understanding and spatial representation of the interactions (synergies or conflicts) between activities, and between activities and the environment (pressures/impacts) are essential for integrated management of activities and uses that respects the good ecological status (to be attained or maintained).

The diagnosis of these interactions must be considered in two areas:

- interactions between activities:

Initially, levels of compatibility between activities (from conflict to synergy) are estimated. Next, based on the spatialization of activities and levels of compatibility, interactions between activities are mapped and qualified in terms of intensity. Local focus on multi-purpose complex areas may be required;



- interactions between activities and the environment:

By crossing-referencing activity maps and maps of ecosystem components, the main areas of pressure and impact on ecosystems are localized, mapped and qualified in terms of intensity.

The detailed methodologies for estimating the different interactions are given in the fact sheets in volume 3 of the guide ("toolbox").



1.2. Thematic issues

1.2.1 General framework

In addition to a detailed inventory, defining the sea basin strategy project requires an evaluation of what is "at stake" for each of the subjects covered in the strategy document. The objective is to identify the most important current and emerging aspects with regard to the purposes for the different topics of the strategy document: activities and uses, marine and coastal ecosystems, risk prevention, cultural and landscape heritage, knowledge and research.

The issues are qualified according to the different purposes for each of the topics:

- maritime and coastal activities: the smooth running of activities and uses from the standpoint of the people/entities concerned;
- marine and coastal ecosystems: attaining good ecological status;
- sites, landscapes and cultural heritage conservation of sites and landscapes considered as social, cultural or landscape assets for coastal communities, protection of the public and natural characteristics that define the natural maritime public domain and free access to shore;
- risks: the safety of people and merchandise
- research, knowledge, innovation and training: the key elements for the momentum and excellence of the sector.



Box 3 Distinguishing issues and objectives

Issues are defined as the important aspects for each topic tackled and do not address the notions of purpose, trend or action. These are discussed when defining strategic objectives.

Examples

"The capacity of commercial ports" is an issue because it is decisive and bounding at sea basin level for the maritime transport sector. "Increase the capacity of commercial ports" is a strategic objective.

"The natural habitat of maerl beds" is an issue because of their rarity, vulnerability and functional importance in the ecosystem. Maintaining or decreasing abrasion acting on maerl beds at a level consistent with good ecological status is a strategic (environmental) objective.

The issues are determined independently at the level of each topic or sub-topic. In this way, the issues specific to each sector of activity, to each ecological compartment (marine and coastal ecosystem topic) or to the management of each category of risks are inventoried separately from each other.



The issues defined at this stage of the process do not vary with regard to possible interactions with other issues. For example, an area that is an issue in one sector of activity will be no less so if it is also an issue for another sector of activity.

This inventory exercise may lead to a large number of issues being defined. It may be necessary to prioritize between issues specific to a topic or a sub-topic in order to refocus thinking on the most important aspects thereby rationalizing the strategic planning approach.

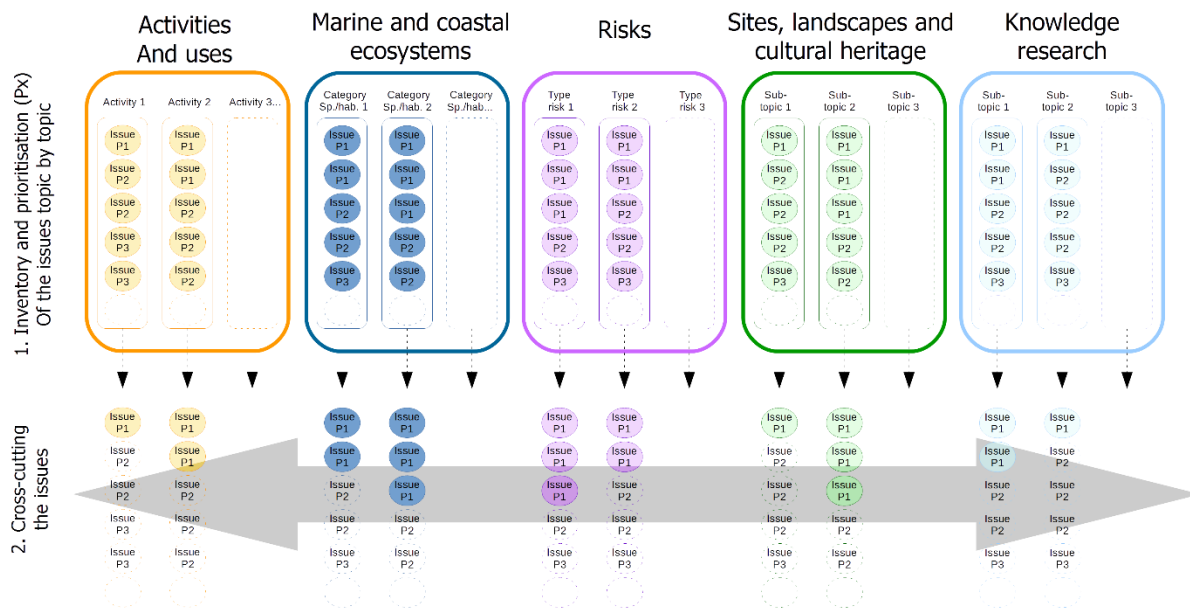


Figure:
 1/ Identification of the issues for each topic or sub-topic of the strategy document (no cross-cutting between topics) carried out during the inventory. Prioritization within each topic or sub-topic.
 2 / Cross-cutting the issues (see next chapter on the vision for 2030) between the different topics examined. It is possible to focus on issues identified as priorities if the number of issues is very great.

Mapping the issues, for those that have been located, is essential for the cross-cutting that will be done in the next step. Location of the issues depends on the degree of fineness permitted by the available data. In the absence of available data, it can be carried out on the basis of the empirical knowledge of those involved or sea basin experts.

Various methodological approaches can be used to bring out the issues and to share them with those involved with the sea basin. Some approaches may be relatively empirical, such as investigative work or the organization of debates with the people involved. Others are based on analysis of existing strategy documents (summary of the *Assises de la mer et littoral*, strategy documents at regional and supra-regional levels, pre-existing sectoral documents). Global topic-level approaches exist, such as SWOT analysis. Finally, the prospective approach makes it possible to identify the emerging needs of the sea basin.



1.2.2 Identification of issues pertaining to each topic

Activities and uses

Issues about activities and uses are determined for each sector of activity described in the inventory. If necessary, analysis of the issues can be carried out on a lower analysis scale, at the level of practices or subcategories of a given sector. For example, it might be relevant to analyse the issues of traditional small-scale fishing and those of industrial fishing separately.

Issues are aspects considered essential for activities to run smoothly. They may be categorized as follows:

- **structural economic fundamentals:** these concern the material or organizational components of the sectors of activity; they include infrastructure and their characteristics, sectors for increasing and adding value to the various products³, market access mechanisms, skills and know-how of the people involved in the sea basin, the ecological and energy transition, the legal and tax context, etc.;
- **Resource use or access and occupation of the maritime and/or coastal area** is a second category of issues: for each activity/use, needs must be identified in terms of access, occupation, use and potentiality; particular attention will be paid to the temporal dimension of these needs, permanent or temporary according to a cycle (annual, seasonal, daily, etc.);
- **the link with the marine environment:** this category of issues corresponds to what is important for an activity in relation to the marine environment, whether it depends on the quality of the environment or whether it has an impact on the environment that requires it to take “prevent-reduce-compensate” measures; this also concerns the public's sensitivity to environmental concerns and the consequences in terms of reputation or acceptability that follow on from this;
- **research and development:** knowledge and innovation may be decisive for an activity, whether in order to be able to adapt to meet the needs of the market or its competitiveness; research and development functions specific to companies or existing in their environment may in this way be issues for them;
- **the social and cultural context:** whether an activity is carried out properly is dependent on aspects relating to its social and cultural components; these aspects are of several kinds: quality of life at work, trade union and professional representation, cultural identity, etc.;
- **exposure to risks:** the aspects correspond to the factors making it possible to reduce the level of risk for the activity under consideration as well as to the levers which are used to overcome weakening of the sector when the risk occurs;

For activities and uses, it is the people concerned who determine what is at stake for each sector of activity according to the specific characteristics of the sea basin.

³ For example, promotion/enhancement of the offer may correspond to quality initiative issues (eco-labelling, traceability, etc.), a collective approach (promotion and enhancement of regional products), high added-value products (products that have undergone greater transformation).



Marine and coastal ecosystems

Ecological issues are aspects of the marine ecosystems of the sea basin (species, habitats) or of the way they function (functional zones), for which the status has to be re-established or maintained with regard to the purpose of achieving good ecological status. They are determined from information from each DCSMM status descriptor (D1: Biodiversity, including habitats and species; D3: Species harvested; D4: Food webs).



Box 4 Examples of ecological issues

- a particular ecosystem: the highly productive upwelling zone at the level of the eastern Mediterranean slope, which is decisive in how the marine subregion functions;
- a particular aspect of an ecosystem: The zoo planktonic compartment of the Gironde plume, which is sensitive to nutrient inputs, is crucial for the functioning of coastal and offshore ecosystems;
- a species or group of species: the Guyana sotalia, given its very small range and sensitivity to several kinds of pressure.

Prioritization of ecological issues is carried out according to the following criteria:

- **representativeness** gives information about the proportion of a species, habitat or a functionality in the sector in relation to a broader scale. This criterion may be expressed as a percentage of the range or size of a species or as a percentage of the total area occupied by a habitat, for example;
- **sensitivity and vulnerability** provide information as to the propensity of the aspect considered to be affected, destroyed or degraded and its ability to recover. It may depend on the biology of the species or habitat or a restricted range that limits its ability to adapt in the event of a change in its environment. Since sensitivity is often difficult to assess, **large-scale vulnerability** can be used as a substitute. This can be assessed by the state of conservation or historical trends of the aspect on the scale of its range;
- **functional importance** informs as to the importance of the issue under consideration for the functioning of the sea basin ecosystems. Here the focus is on species and habitats that structure ecosystems ("keystone"), areas that are critical to the life cycle of species, areas of important primary production, etc.

Sites, landscapes and cultural heritage

Cultural or landscape issues are important aspects of the maritime heritage for coastal populations in social and cultural terms. These correspond to local cultural life, traditional activities, the enhancement of heritage and historic sites, etc. They may be categorized as follows: management of the natural maritime public domain, free access to shore, sites, landscapes and the tangible and intangible maritime cultural heritage.

The related identification criteria are those of identity, social cohesion, social well-being, attractiveness and awareness of the issues at stake.



For example, in Occitania, ancestral practices for the protection and maintenance of ponds and lagoons are a cultural issue because they help to maintain these ponds and lagoons, which are a strong marker of the region's identity.

Risks

Risk management issues relate to any aspect (prevention plan, regulation, infrastructure, etc.) that promote:

- knowledge of hazards;
- monitoring, forecasting, alertness and warnings;
- citizen education and preventive information;
- control over urbanisation and building;
- reducing vulnerability;
- protection;
- emergency preparedness.

Cross-cutting the probability of a hazard with vulnerability, which expresses the predictable level of effect of the phenomenon on the issues, should make it possible to identify the highest levels of risk for the sea basin. Identification criteria can be considered as the most important criteria for reducing the highest levels of risk.

For example, knowledge of the vulnerability of the coastal area to climate change is an issue for highly exposed areas because it can be used to better characterize this risk and to define the perimeters on which prevention or crisis management should apply.

Knowledge and research

Aspects that may be issues for knowledge and research concern the structuring of the knowledge, research and teaching sectors, alongside actions implemented in terms of training, communication and awareness of questions relating to the sea and the coast.

Identification criteria are those which most favour the development of the maritime economy, companies' adaptation to economic developments, the appropriation of maritime and coastal ambition by local people and the general public, the level of education, etc.

For example, the issues of structuring knowledge and research are linked to the existence of competence and innovation centres (sea hubs), to the extent of partnerships, to the networking of institutions or researchers and to international networks in which the research and higher education centres take part.



1.3. Summary and deliverables

This first phase of the process gives a photograph of the initial assessment of the sea basin, shared with those concerned and covering each of the topics of the strategy document.

Several deliverables are expected:

- a detailed inventory of the topics of the strategy document, including trends observed; this inventory will be organized according to the plan set out in 1.1; special attention must be paid to the cartographic approach;
- an inventory of the issues relating to each of the topics or sub-topics of the strategy document, formulated using a common thesaurus for sea basins;
- mapping of issues with a spatial component.

The next phase of the process will involve cross-cutting the issues and defining the future desired for the sea basin, according to its specific features and the structuring objectives of the SNML.



2. The vision for 2030

The French national strategy for the sea and coast aims at several long-term structural objectives:

- ecological transition for the sea and the coast;
- development of a sustainable blue economy;
- good ecological status of marine environments and preservation of an attractive coastline;
- the influence of France.

To this end, it proposes four strategic areas:

- Making use of knowledge and innovation;
- Developing sustainable and resilient maritime and coastal areas;
- Supporting and adding value to initiatives, and removing obstacles;
- Promote a French vision within the European Union and in international negotiations, and supporting and defending national issues.

The sea basin strategy documents give these objectives, taking into account the specific features of the sea basin and local realities, in order to highlight the vision for 2030 for the sea basin shared between the State and local stakeholders.

The vision for 2030 is built from three standpoints:

- transition from a "silo-based" analysis to a transverse analysis cross-cutting the thematic issues (see section 2.1);
- identification of existing maritime and coastal areas within the sea basin (see section 2.2);
- relative weighting of the various items of the inventory on the scale of the sea basin (see section 2.3).

The vision defines the desired future for the sea basin and its thematic or territorial components, together with the contribution made to the national strategy. The vision carries the position of the State and incorporates the determination of those involved to move towards a common future. The time horizon is set at 2030 as a guide.



2.1. Cross-cutting the issues: from a "silo-based" analysis to a cross-sectoral analysis

Cross-cutting issues is a cross-sectoral analysis which aims to highlight the potential difficulties or synergies caused by superimposing issue, on the scale of the sea basin or on more local geographical areas. It follows on from the stage of identifying and spatializing the issues in chapter 1, according to an individualized approach by topic or sub-topic of the strategy document.

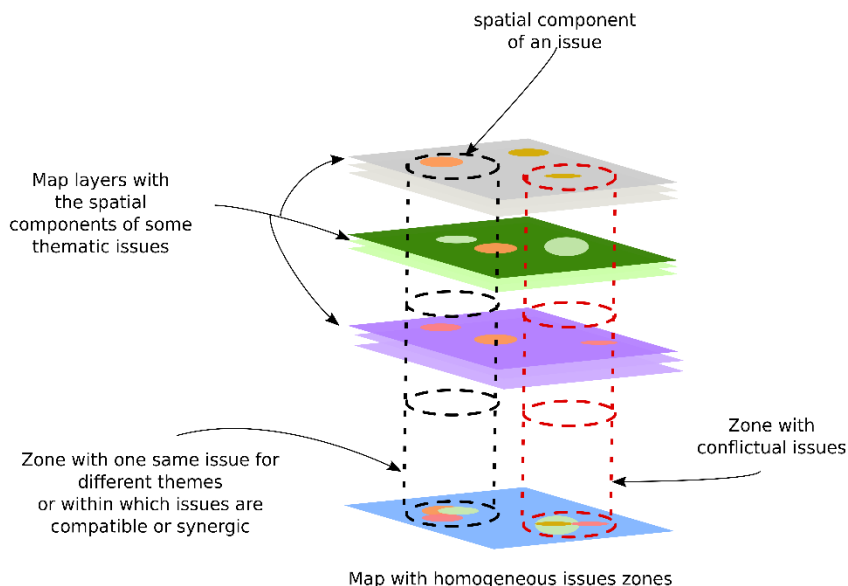
Cross-sectoral analysis of the issues must be conducted using two approaches:

- A general approach that analyses the convergence or the divergence between the issues: these may be shared by different topics or, on the contrary, they may be antagonistic, in particular because of positive or negative interactions between activities or between activities and the environment. Redundancy of a given issue for several topics gives it a priority. For example, the health quality of coastal waters is at one and the same time an ecological issue, an issue for aquaculture, inshore fishing and tourism, and a health safety issue. Antagonistic issues must also be identified, as they will require strategic choices to be made;
- a spatial and, if appropriate, temporal (seasonal) approach that analyses superimposed issues and maps areas of conflict or synergy.

The mapping resulting from cross-cutting issues makes it possible to identify zones that are consistent from the point of view of questioning in terms of issues:

- areas without any issue;
- areas that have a single issue or in which issues that are compatible with one another are concentrated;
- areas with conflicting issues;
- areas with multiple issues requiring more detailed analysis.

The diagram below illustrates the process of cartographic cross-cutting.



2.2. Towards an initial mapping of territories

Within sea basins, territories must be taken into consideration when drawing up the strategic project. A territory has one or more of the following characteristics:

- structuring by its own environmental characteristics (e.g. an estuary, a bay, an ocean front zone, the continental slope zone, etc.);
- the homogeneity of the issues involved, relating to the activities or topics of the environment, risks, sites and landscapes or cultural heritage (see sub-chapter 2.1 on cross-cutting issues);
- preferential use by one or more activities or by a group of people engaging in an activity (e.g. a fishing territory, a surfing location, etc.);
- identification with a sector by part of the population of the sea basin for social and cultural reasons (sense of belonging).



Box 5 The notion of territory in geography

The notion of territory is a central one in geography applying to both sea and land. It acts as a filter for analysing the relationship between man and his environment.

There are many definitions of the term territory, and they coincide with the notion of an area appropriated by a social group. Appropriation may be motivated by a material dimension, referring to the notion of space containing a resource that is exploited or support for activities, or an ideal dimension to be compared with the systems of representation that guide societies in the way they come to terms with their environment.

The notion of territory refers in particular to the feeling of belonging (I'm from there) and to appropriation.

The boundaries of territories are most often schematic, because they refer to variables that are partly fuzzy. The scale of description of territories is variable: the size of the territories may vary, in particular, between those identified in a denser and more complex coastal zone and those on the open sea, which are much more extensive and homogeneous.

At this stage it is a matter of ascertaining the territories that exist or are experienced, in order to contribute to the analysis of the existing situation. They can be debated again when the strategic objectives and the vocation map are defined.



2.3. The relative importance of the topics for the sea basin

The third angle of cross-sectoral analysis of the inventory consists of identifying the most important topics for the sea basin. In the inventory of issues the objective was to identify what was important for each topic or sub-topic; here it is a question of revealing what is important for the sea basin from among them by taking into account the territories that are attached to them.

Different criteria can be used to assess the relative importance of a topic or issue. In the majority of cases, these criteria can be assessed on the basis of the knowledge gathered during the inventory. For each of these, the importance is assessed in terms of weight (for example, the relative percentage of an activity as part of the sea basin economy, or the number of people faced with a particular risk) or in terms of interdependence for other topics or issues (for example, the quality of water, which is a deciding factor in shellfish farming and seaside tourism, or professional fishing in relation to the downstream sector dependent on it).

The main criteria for measuring the importance of topics and issues for sea basins are:

- **Economic importance**
The economic importance of a topic or issue can be defined as its contribution to the maritime and coastal economy of the sea basin or territory, from a quantitative or qualitative standpoint. Detailed data such as value added, contribution to employment or the number of dependent companies can be used to assess the economic importance of a topic.
- **Environmental importance**
This concerns anything to do with achieving or maintaining good ecological status at sea basin level.
- **Social importance, cohesion, diversity**
A topic may have social significance for a sea basin or a territory if it contributes to social cohesion for human populations. This cohesion may be expressed through market, political or community links.
- **Cultural importance**
There are many definition of cultural significance, and these may include notions of knowledge, arts, beliefs or morals. Cultural importance can be characterized on the basis of bibliographic analyses but would require sociological survey work.
- **Responsibility for the sea basin at national or international level**
The importance of a topic or an issue for the sea basin may also arise from the importance it has from a national, European or international point of view, responsibility for which being related to what will be done in the sea basin. For example, the European commitment to good environmental status makes every sea basin responsible. International commitments such as conventions for the protection of rare or threatened species may depend mainly on the sea basin because of their range. National issues also impose responsibility at the level of the sea basin, such as places of national memory to be preserved, or the potential of the sea basin (for example the potential for renewable marine energy for energy transition). The French national strategy for the sea and coast is the framework within which responsibility for the sea basin is assessed at national level.



2.4. Vision for the sea or maritime basin in 2030

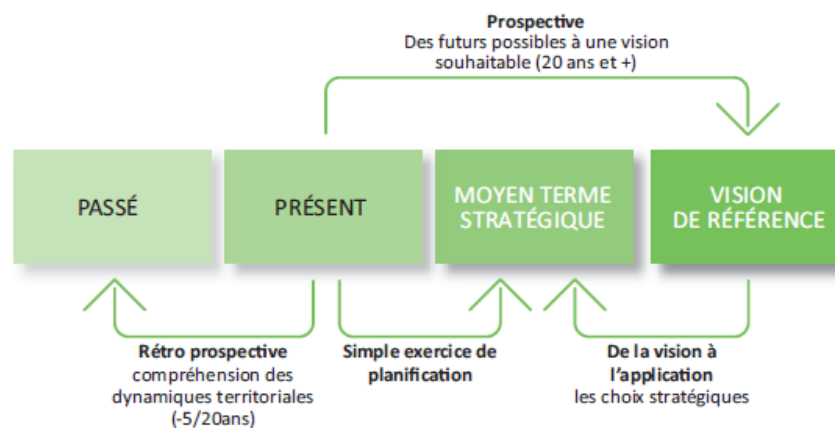
To conclude from the three previous angles of analysis, the vision explores the possible futures and defines what is wanted for the sea basin:

- the future of important topics and their issues;
- the future of territories;
- contributions to the national strategy for the sea and the coast.

The vision will then direct the definition of strategic objectives, which will be chosen to guide the factors that influence the priority topics and issues.

The choice of regional prospective methods

Prospective methods are a set of methodological tools that allow one to step back from the present in order to imagine the future, or to ask questions about the paths that lead from the present to the future. As a whole, the strategy document initiative has similarities with this approach (see the two figures below). This is because it concerns the fate of a territory and people, and its first part leads to strategic objectives that will guide the future. It builds on the present and the past (the existent situation) to build a benchmark vision that will guide future strategic choices.



General approach to prospective methods. Source: Teddif (2013)



Like regional prospective methods, the process of the strategy document is also motivated by needs⁴:

- for freedom in relation to the present in order to open up to the field of possibilities;
- for strategy: what sort of sea basin is wanted?
- for readability;
- for anticipation (for example promoting multi-use in a context of increasing pressure on maritime and coastal areas);
- for prioritization, in particular for defining strategic objectives;
- for significance, for example to give meaning to an action, or to carry out a shared project;
- for sharing the state's vision with the people involved.

This is why the use of regional prospective methods is considered to build the vision in the strategy document.

The choice of scenario method

Many prospective methods exist. Quantitative models (such as those of the IPCC), scenarios and narratives, and methods of consultation or participation are among the most commonly used methods (Coreau, A. et Conversy, 2014).

However, in drawing up the strategy document, the strong link to the future in order to prepare the action and the strategy, and the size of the available knowledge base guide the choice of the method towards that of scenarios (Coreau A. et Conversy P., 2014).

This is because the scenario approach is based in most cases "on a systemic approach by cross-cutting appropriate socio-economic, institutional and environmental variables to arrive at contrasting paths and visions [of the subject under consideration] in different territorial contexts. [...] [It] also incorporates the notions of crisis and rupture, essential parameters in a process that aims to provide a panorama of possible futures in order to better prepare for the future. Finally, it brings together points of view and the ideas and brings out collective thinking by uniting very heterogeneous players" (CGDD, 2013).

More specifically, the scenario method involves the following steps (CGDD, 2009):

- diagnosis: knowledge and understanding of the territory, of what it is sought to achieve there, of the people involved and the image they have of their territory;
- identification of key variables, producing assumptions about change and about scenarios;
- construction of common visions of the future;
- strategic choices to be considered.

⁴ The criteria are taken from Teddif (2013)



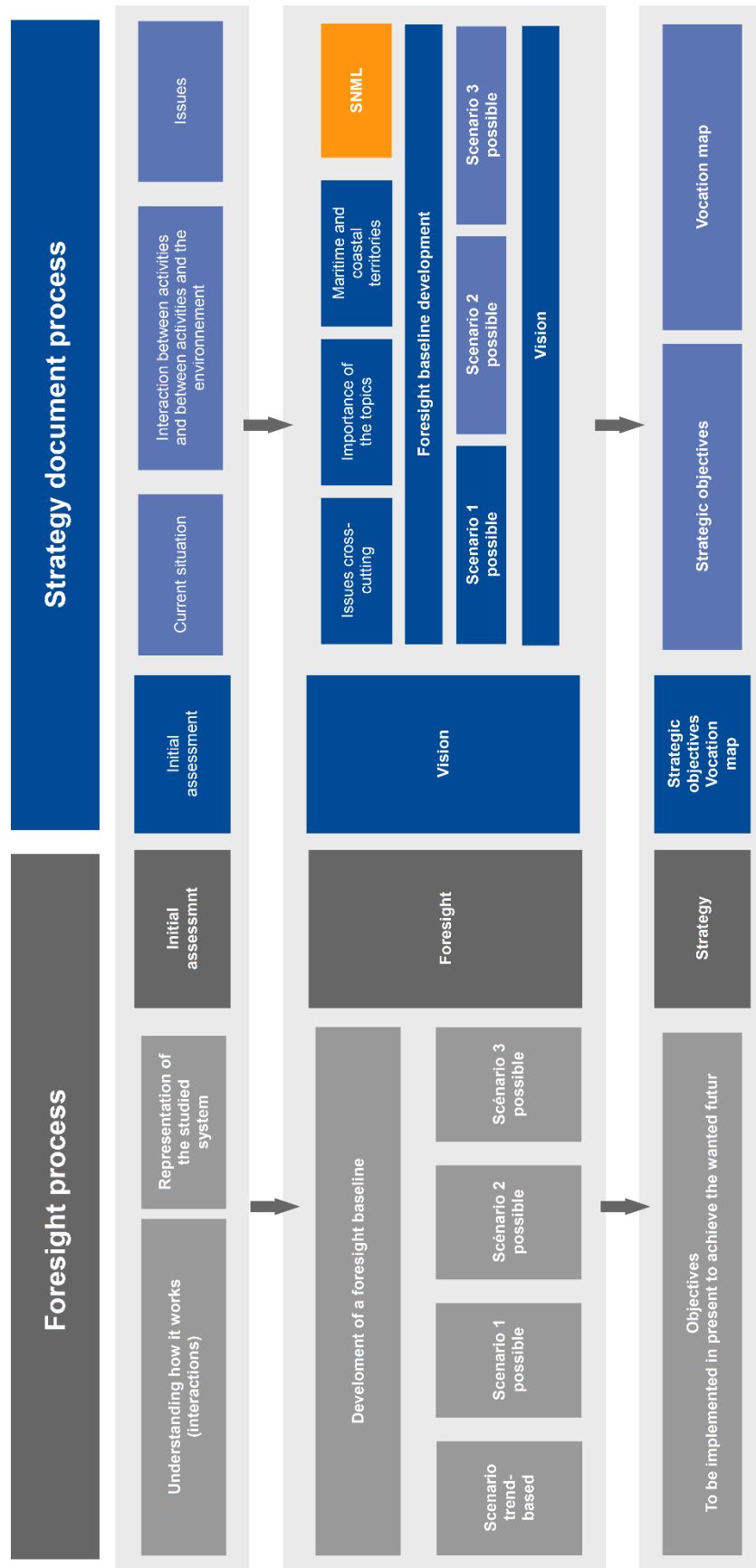
The process of constructing the strategy document is well suited to this. The figure below highlights the similarities between the strategy document process and that of a prospective exercise using the scenario method.

Methodological elements

The method of conducting the prospective exercise based on the scenario approach is left to the discretion of the sea basins. The choice of the method depends on the means available or the degree of detail that one wishes to obtain. In addition, there are many ways to conduct a prospective exercise using this method, depending on: the number of key variables, the people to be mobilized, the number of scenarios decided upon, how accurate they are, the resources allocated, etc.

In order to avoid imperatives, short-term conjunctures and conflicts, it is proposed, to set the time horizon for thinking to 2030. It should be noted that thinking must take into account the foreseeable changes in environmental parameters and those resulting from synergies or antagonism between issues.





The strategy document from a prospective standpoint. Source: Teddif (2013) and Dirm NAMO (2016) modified



2.5. Summary and deliverables

This second phase of the process leads to a vision, a description of the organization and priorities decided upon for the sea basin by 2030, in view of its specific features and national objectives drawn up by the SNML.

Several deliverables are expected for this phase:

- An analysis, localized if possible, of the convergences, divergences or conflicts between the thematic issues identified independently during the first phase: this sheds light on the problems facing the sea basin and thereby gives an initial view of the strategic choices on which the strategy document will take decisions;
- an analysis of the relative importance of the different topics and issues of the strategy document for the sea basin or territory, in particular with regard to the weight (economic, environmental, social, cultural, etc.) of each topic on a local scale (sea basin or territory) and at national or even international level;
- a mapping of the territories of the sea basin;
- a summary of the vision, shared between the State and the people or entities involved, describing the future decided upon for the sea basin and its territories, in particular with regard to their contribution to the national objectives drawn up by the SNML;

The next step in the process is to set detailed goals to help move towards the vision.



3. Strategic objectives

Determining strategic objectives will make it possible to progress towards the shared vision defined in the preceding stage. These are set primarily for the topics and issues considered as being most important for the sea basin, so as to encourage the expected changes. Drawing up a vocation map makes it possible to address strategic objectives in terms of organization in the area, and between the territories concerned.

3.1. Building strategic objectives

Type of strategic objectives

Two types of strategic objectives may be defined in relation to an issue:

- objectives defining a medium- to long-term state for the issue under consideration;
- objectives aiming to impact the factors influencing the issue, whether they are restrictive (negative factors) or favourable (positive factors).



Box 6 Some examples of strategic objectives

Examples of objectives related to an ecological issue

- Ecological issue: a species of small coastal marine mammals (because the majority of the European population is distributed over the sea basin in question);
- Strategic objective dealing with the desired state: "Maintain the sea basin population at a given level";
- Strategic objectives dealing with influencing factors: "Reduce accidental catches of the species by x% (mainly caused by gillnetting in a given area)" and "Keep noise disturbance to a level x in rest areas (mainly caused by underwater work sites and large vessel traffic)".

Examples of objectives related to an issue for an activity

- Economic issue for the shellfish farming sector: production area;
- Strategic objective dealing with the state: **Maintain at, or increase** the production area for shellfish farming to a threshold of x km² ;
- Strategic objective dealing with influencing factors: **Prioritize** occupation of the DPM by shellfish farming in relation to other activities in a given sector" and **Promote** the maintenance of shellfish farms in a given sector".

While status objectives provide information as to the targets to be reached, including nationally defined objectives for good environmental status, they provide little or no information on how to achieve the desired status. On the other hand, they may be relatively consensual. They are important but not sufficient, as in



the context of the strategy document it is a question of implementing a strategy to achieve the desired status.

The definition of strategic objectives relating to the factors influencing the issues should therefore be preferred. This more operational approach favours taking into account the interactions in the sea basin, influencing factors being both intrinsic and external to the topic under consideration.



Box 7 Environmental objectives: some initial answers to the DCSMM

Within the strategic objectives, environmental objectives are those that address the priority ecological issues defined for the purpose of achieving good ecological status. Defining them makes it possible to comply with the DCSMM.

Factors influencing ecological issues

The factors influencing ecological issues are pressures having a significant effect on these issues. There are many sources of these pressures, mainly anthropogenic ones (activities) but also natural ones. It is therefore necessary to specify the links between pressures and their sources in detail.

Useful information is gathered in the chapter on the existing situation concerning the "pressures generated by uses" and during the diagnosis on the interactions between activities and environment. This information is used to identify the activities generating pressure that have a significant effect on the ecological issues, and to estimate the level of this pressure.

Factors influencing the issues of the "activities and uses" topic

These may be factors having a positive or negative impact on the different types of issues for the sectors of activity (n.b. the different types of issues for the sectors of activity are: structural economic fundamentals, resource use or access and occupation of the maritime and/or coastal area, good ecological status of the environment, research and development, social and cultural context, exposure to risks).

Use of trend projections

Trend projections may have been made to establish the prospective vision for the sea basin, which must be specified and completed, notably on the probable status of the issues in relation to trends and current public policies ("business as usual" scenario). They are used to assess how urgent it is to take action on certain issues.

In particular, these projections will be carried out on priority ecological issues, in the light of trends in the sectors of activity and therefore of the pressures induced. These projections make it possible to estimate the probable status of ecological issues, excluding changes to environmental public policies.



Form of the strategic objectives

The definition of strategic objectives must include the notion of action or a shift in the trend. So action verbs must be used in stating the issue: "limit", "maintain", "preserve", "promote", "restore", etc.

Strategic objectives should, as far as possible, correspond to the principles of the SMART approach:

- **Specific:** strategic objectives must be specific about the issue or the influence factor targeted;
- **Measurable:** It must be possible to follow the path remaining to be followed towards the strategic objectives, in particular by defining monitoring indicators;
- **Attainable and Relevant:** The potentialities and levers of action of the sea basin must be taken into consideration in defining the strategic objectives;
- **Timely:** The strategic objectives must be attainable within a given time frame.

Spatializing strategic objectives and scale of definition

Just like the issues they deal with, strategic objectives can be defined at the scale of a sea basin or a more local area, with its own particular problems.

In addition, certain strategic objectives may be expressed at the sea basin level, but they should be given priority in some more local areas. For example, reduction of accidental catches of small coastal cetaceans must be observed over the entire sea basin, but more especially in zones where they are concentrated or areas with isolated populations.

Analysis of the cross-effects relating to the definition of strategic objectives

The purpose of the strategy document is to propose a global project for the sea basin according to the specific features and issues of the sea basin, taking into account the interactions between all its components.

A strategic objective dealing with a given issue may have an impact on other issues, particularly when the objective in question is an influence factor generated by a topic different from that of the issue under consideration (external influencing factor).

It is therefore necessary to anticipate the overall effects of the definition of each strategic objective. For example, in defining a strategic objective for an activity, effects on the marine environment (in relation to the strategic environmental assessment), and also on other activities or other topics must be assessed. Similarly, the economic and social consequences of the definition of environmental objectives must be estimated.

The balance between the expected effect on the issue concerned and the effects on other components of the sea basin should be considered in the decision-making process.



Proposal for an analysis table

To support the decision-making process relating to the strategic objectives, summary fact sheets may be produced for each priority issue. These fact sheets combine information for diagnosis and understanding available for each issue. Not all of the items detailed here are necessarily available for all issues. In addition, some fact sheets may concern groups of issues, relating to one or more topics, whose characteristics are similar.

Topic:	Title of issue
Activities, ecosystems, sites and landscapes, risks, research and knowledge	
Description of issue:	
Component of the ecosystem or sector concerned	
Summary description	
Variables and descriptive data	
Justification of issue level (criteria)	
Spatialization (if possible)	
Influencing factors:	
List of known influencing factors (+ Variables and descriptive data)	
Importance of the effect on the issue	
Current spatialization (if possible)	
Trend (if known)	
Analysis of interactions with other issues	
Spatialized and non spatialized approach.	
Probable state of the issue at the end of the strategy document cycle:	
Description of the most likely status or failing that, the trend.	
This approach to predicting the status or trends in the status of the issue is a minimum requirement for ecological issues in the context of implementing the DCSMM	
Assessment of the discrepancy between the current or short term state of the issue and the desired state	
Mainly qualitative assessment established by expert analysis	
Strategic objectives	
On the status	

Proposal for an analysis table



3.2. Vocation map

Some of the strategic objectives defined above can be distributed geographically over the sea basin or even associated with certain identified territories. Drawing up the vocation map allows us to gain perspective on how the strategic objectives are distributed between the territories and helps to define strategic priorities (vocations) for identified sectors.



Box 8

Directive 2014/89/EU establishing a framework for maritime spatial planning states in article 8 that Member States shall set up maritime spatial plans which identify the spatial and temporal distribution of relevant existing and future activities and uses in their marine waters”.

The production of plans is a requirement of the directive to which the strategy document responds by developing a vocational map proposing to deal with the distribution of uses by adapting strategic objectives to the context of the territory, thereby avoiding an approach which would involve assigning or reserving spaces for each activity.

Vocation: A privileged use for a thing, a country or a group, because of its nature or its characteristics. Larousse dictionary.

Spatial unit for defining vocations

In the same way as the definition of strategic objectives, the vocation map must make it possible to strive towards the situation described by the vision. The spatial expression of the vision is based on the map delimiting the territories identified in the existing situation of the sea basin, adjusting certain limits with regard to the desired changes in certain territories if necessary. The definition of zones and their vocations will be based on this prospective mapping of changes in territories. Since territories are geographical sectors with natural and/or human characteristics and specific questions, each of them is a relevant unit for defining a vocation there.

Outside the territories identified in the preceding stages, the delimitation of an area must meet one or more of the following criteria:

- environmental coherence;
- grouping of issues and similar questions;
- the appropriation by users of one or more activities or designation by the authorities of a preferred use.



Characterization of vocations

The scope, level of detail and the prescriptive nature of vocations are not fixed at national level. Each sea basin must decide on these points according to its specific features. However, the number of different vocations on the same sea basin must remain limited in order to ensure that the exercise remains concise.

In addition, the level of detail of the vocations is not necessarily homogeneous within a sea basin. Certain territories may be very precisely oriented towards a given organization and adjoin neighbouring territories for which the prospects for development or organization are simply structured by a few principles.

For example, vocations may define:

- priorities in terms of the use of maritime space and its resources;
- requirements that certain components of ecosystems or cultural or landscape heritage should be without impact;
- the conditions in which certain activities are carried out: special conditions, restrictions, prohibitions;
- rules for co-existence between certain activities;
- The need, where appropriate, to refer to a more local planning exercise (SMVM, Marine Nature Park management plan, etc.).

To provide support for sea basins in characterizing their vocations, a thesaurus listing various items that can make up a vocation will be drawn up and annexed to this guide. This non-prescriptive thesaurus on the specific terms used to characterize vocations will be both a common resource for sea basins and a tool for cross-sectoral analysis at national level, making it possible to define correspondences between vocations established in different sea basins.



3.3. Summary and deliverables

At the end of this third and final phase of the first part of the strategy document preparation process, the strategic choices for the sea basin are drawn up and translated into two types of deliverable:

- A list of strategic objectives relating to the issues of the topics considered to be the most significant at the sea basin or local area level. These strategic objectives must meet the principles of the SMART approach and, if possible, be spatialized. The overall coherence of objectives must be ensured by analysing the cross-effects of each objective.
- A vocation map identifying the preferred use for certain territories of the sea basin in a more or less detailed way according to local situations.



4. List of abbreviations and acronyms

AFB	Agence française pour la biodiversité (<i>French biodiversity agency</i>)
Cerema	Centre d'études et d'expertise sur les risques, l'environnement, la mobilité et l'aménagement (<i>Centre for Studies on Risks, the Environment, Mobility and Urban Planning</i>)
CGDD	Commissariat général au Développement durable (<i>General commissariat for sustainable development</i>)
DCSMM	Directive-cadre « stratégie pour le milieu marin » (<i>Marine environment strategy framework directive</i>)
DDTM	Direction départementale des territoires et de la mer (<i>Departmental directorate of territories and the sea</i>)
DIRM	Direction interrégionale de la mer au niveau des façades (<i>Interregional directorate of the sea for sea basins</i>)
DOGGM	Document d'orientation pour une gestion durable des granulats marins (<i>Guidance document for sustainable management of marine aggregates</i>)
DRASSM	Département des recherches archéologiques subaquatiques et sous-marines (<i>Department of underwater archaeological research</i>)
DREAL	Direction régionale de l'environnement, de l'aménagement et du logement (<i>Regional directorate for the environment, land use planning and housing</i>)
DSBM	Document stratégique de bassin maritime (<i>Maritime basin strategy document</i>)
DSF	Document stratégique de façade (<i>sea basin strategy document</i>)
Ifremer	Institut français de recherche pour l'exploitation de la mer (<i>French research Institute for exploitation of the sea</i>)
IPCC	Intergovernmental Panel on Climate Change
ScoT	Schéma de cohérence territoriale (<i>Regional integrated development plan</i>)
SHOM	Service hydrographique et océanographique de la Marine (<i>French navy hydrographic and oceanographic department</i>)
SMART	Spécifique-mesurable-atteignable-réaliste-temporel (<i>Specific, Measurable, Attainable, Realistic and Time</i>)
SMVM	Schéma de mise en valeur de la mer (<i>Scheme for developing the sea</i>)
SNML	Stratégie nationale mer et littoral (<i>National strategy for the sea and the coast</i>)
SoES	Service de l'observation et des statistiques du MEEM (<i>Observation and statistics service of the french Ministry in charge of the Environment</i>)
SRADDET	Schéma régional d'aménagement, de développement durable et d'égalité des territoires (<i>Regional scheme for planning, sustainable development and territorial equality</i>)

SRDEII

Schéma régional de développement économique, d'innovation et d'internationalisation (Regional scheme for economic development, innovation and internationalization)

Teddif

Territoires, environnement et développement durable en Île-de-France
(Territories, environment and sustainable development in the Île-de-France region)

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**Ministère de l'Environnement,
de l'Énergie et de la Mer**

Secrétariat général
Tour Pascal A
92055 La Défense cedex
Tél. 01 40 81 21 22



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