

Italian Maritime Spatial Plans

"Tyrrhenian - Western Mediterranean" maritime area

Summary

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Ministry of Sustainable Infrastructure and Mobility DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

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1 The Maritime Spatial Plan of the "Tyrrhenian-Western Mediterranean" Maritime Area

This document contains an extended summary of the Maritime Space Plan for the Maritime Area "Tyrrhenian-Western Mediterranean" prepared in accordance with Legislative Decree 201/2016, the National Guidelines (DPCM 01/12/2017) and the operational methodology that the Technical Committee has subsequently developed and adopted.

For further details please refer to the full version of the Plan and the SEA Environmental Report.

The Plan has been drafted in a coherent and coordinated way with the Plans for the "Adriatic" and "Ionian-Central Mediterranean" Maritime Areas.

The Plan was prepared by the Technical Committee referred to in art. 7 of Legislative Decree no. 201 of 17 October 2016 - on "implementation of Directive 2014/89/EU establishing a framework for maritime spatial planning" established at the Competent Authority (MIMS - Department of Transport and Navigation - Directorate General for the supervision of port authorities, port infrastructures and maritime and inland waterway transport), which includes representatives of Central Administrations (five Ministries with responsibilities for issues related to sea and coastal uses) and Regional Administrations (15 coastal Regions) designated by their respective administrations and appointed by D.M. 13 November 2017, n.529 as amended.

The Competent Authority and the Technical Committee availed themselves of the technical-scientific and operational assistance of the Scientific Pole formed by CNR-ISMAR, CORILA and IUAV University of Venice for the drafting of the Plans.

2 Directive 2014/89/EU and its transposition into national law

Directive 2014/89/EU has been transposed in Italy through Legislative Decree No. 201/2016. The decree:

- establishes that the Ministry of Infrastructure and Transport (now the Ministry of Infrastructure and Sustainable Mobility) is the Competent Authority (art. 8), to which specific activities are assigned (art. 8, 9, 10, 11);
- establishes the Inter-Ministerial Coordination Table (TIC) at the Presidency of the Council of Ministers Department for European Policies (DPE), which includes all the central Administrations involved in marine-maritime issues (art. 6);
- establishes the Technical Committee at the Ministry of Infrastructures and Transport (now the Ministry of Infrastructures and Sustainable Mobility), as the Competent Authority, which includes five central Administrations and the Maritime Regions (art. 7);



- provides that the management plans of the maritime space are drawn up by the Technical Committee mentioned in article 7 and, before approval, are transmitted to the Interministerial Coordination Table mentioned in article 6, which certifies the correspondence with the planning process defined in the guidelines mentioned in article 6, paragraph 2. The maritime space management plans are approved by decree of the Minister of Infrastructures and Transport (now Ministry of Infrastructures and Sustainable Mobility), subject to the opinion of the Permanent Conference for the relations between the State, the Regions and the autonomous Provinces of Trento and Bolzano;
- provides that the existing plans and programs that take into consideration the marine waters and the economic and social activities carried out therein, as well as those concerning land activities relevant to the consideration of land-sea interactions, developed and implemented under the European and national provisions in force at the date of entry into force of the decree, are included and harmonized with the provisions of the management plans of the maritime space.

Ministerial Decree of 13/11/2017, No. 529, as amended by Ministerial Decree of 11 March 2019, No. 89 and Ministerial Decree of 27 June 2019, No. 263, regulates the organization and functioning of the Technical Committee.

In line with the provisions of art. 6, paragraph 2, of Decree no. 201/2016, with the Decree of the President of the Council of Ministers of 1 December 2017, the "guidelines containing the addresses and criteria for the preparation of maritime space management plans" were approved.

The Guidelines have identified three maritime reference areas, for the drafting of three inter-coordinated Plans, referable to the three sub-regions of the Marine Strategy (art. 4 of Directive 2008/56/EU):

- the Western Mediterranean Sea;
- the Adriatic Sea;
- the Ionian Sea and the central Mediterranean Sea.

This solution makes it possible to pool the work already carried out under the Marine Strategy with regard to the identification of indicators and the acquisition of environmental data.

The Plans will have a duration of 10 years, with the possibility of a mid-term review, or if deemed necessary following the monitoring of the implementation of the Plan or events that require revision (see par.2.1.2).

3 Characteristics of the Plan and its legal effectiveness

The Plan provides strategic level indications and guidelines for each Maritime Area and their sub-areas, to be used as a reference for other planning actions (sector or local level) and for the granting of concessions or authorisations. Depending on the characteristics of the sub-areas and planning needs, the Plan provides more or less detailed indications, both in terms of spatial resolution and in terms of defining measures and recommendations.

The reference time horizon of the Plan is 2032, the year in which, at the latest, an initial update of the Plan will be due, taking into account, where possible and necessary, a longer time horizon (year 2050).



3.1 Legal effectiveness of the Plan

The Maritime Spatial Management Plan has been configured by the domestic law transposing the Directive as a plan that is superordinate to all other plans and programs capable of affecting the same scope of application - not only those relating to marine waters, but also those concerning land-based activities that may affect marine waters - thus meeting the objectives for national maritime spatial planning set by Directive 89/2014/EU: to have an intersectoral Plan capable of coordinating different policies through a single management act, which acquires the character of an "integrated plan" and of a "comprehensive plan", suitable for identifying the different uses of the maritime space.

In fact, it has been established that plans and programs existing on the basis of pre-existing provisions, which take into consideration marine waters and the economic and social activities carried out therein, and those concerning land-based activities relevant for the consideration of land-sea interactions, are included and harmonized with the provisions of the Maritime Space Management Plans (art. 5, paragraph 3 of Legislative Decree no. 201/2016). Furthermore, it has been foreseen that, once the Maritime Spatial Management Plan has been drawn up, it will be the reference for the individual sector plans, drawing the framework in which the sector plans will go on to define their sectoral objectives and actions (ch. 14 of the supplementary and interpretative guidelines, containing the addresses and criteria for the preparation of the Maritime Spatial Management Plans, adopted by decree of the President of the Council of Ministers on 1 December 2017). The implementation of the European Directive has not changed the framework of legislative and administrative competences, imposing a form of planning and *governance that* replaces the pre-existing one, but has added a superordinate level of planning, which is necessary to ensure a clear, coherent, and capable framework to pursue the objectives of the different policies, also with a view to cross-border cooperation.

The superordinate character of the Plan and its prevalence with respect to other planning and programming acts, does not imply that the latter will cease to exist, but that they must be "incorporated" in the new Plan during its first application and, if necessary, modified to guarantee harmonisation with its forecasts; following approval of the Plan, they must be consistent with the objectives, addresses, recommendations and forecasts contained therein. Therefore, the Plan will not be derogated from plans or programs or administrative measures, thus being able to guarantee clarity and legal certainty of the use of the maritime space for economic operators, through the coordination of different administrative acts concerning activities taking place at sea or which may have an impact on the maritime space.

The Plan has, therefore, the nature of a "first-level instrument, i.e. superordinate to the further and previgent acts of planning of the management of the "marine territory", whose content must necessarily flow into it" (Council of State, section IV, 2 March 2020, no. 1486), and falls into the type of "super-plans" (together with the Basin Plan, as per art. 65 of legislative decree no. 152/2006, and the Landscape Plan, as per art. 145 of legislative decree no. 42/2004).

As regards, specifically, the relationship between the Maritime Spatial Management Plan and plans and programs concerning land-based activities, the scope of application of the Maritime Spatial Management Plan is different, but the Maritime Spatial Management Plan must take this into account and may affect it in relation to those aspects which may have an effect on the marine space, i.e. in the presence of land-sea interactions.



In particular, the national legislator clarifies that the scope of application of the Maritime Spatial Management Plan is different from that of the urban plan (to which the port master plan, approved after the entry into force of law no. 84/1994, can be assimilated): in these terms should be interpreted the provisions contained both in d.lgs. n. 201/2016 as well as in the relevant supplementary guidelines, which have the care to clarify that the planning of the maritime space does not apply to urban (and rural: the terminology used textually takes up the content of the Directive, which leaves the "urban and rural planning" of the Member State unaffected).

Moreover, taking verbatim what is provided by the Directive, the Legislative Decree no. 201/2016 establishes that "it does not apply to coastal waters or parts of them that are part of urban and rural planning regulated by existing legal provisions, provided that this is indicated in the management plans of the maritime space", with the aim "to ensure consistency between the respective provisions" (art. 2). At present, however, in the Italian legal system, neither the national town planning framework law (law no. 1150/1942) nor the regional laws governing the government of the territory consider the territorial sea as a possible object of municipal town planning. Therefore, as things stand, the possibility that the Plan excludes from its scope of application coastal waters cannot be applied to municipal urban plans, except for areas where there are works at sea strictly connected to the coast authorised by land-based planning acts, such as, for example, marinas with works at sea (not constituting "mooring points" pursuant to art. 31 of Legislative Decree no. 79/2011). They are, however, excluded from the Plan the waters that fall within the port areas administered by the Port System Authority, planned by port master plans that specify for the port areas and back-port the structure outlined in the strategic planning document system, which have been defined by art. 5, co. 2-ter of l. n. 84/1994, as replaced by art. 4, co. 1-septies, lett. b), of Decree-Law n. 121/2021, converted from I. n. 156/2021, as "territorial plans of statewide relevance", and configured as "the only instrument of planning and government of the territory within its perimeter of competence"; in the same way, the waters falling within the port areas of regional and interregional economic importance (falling within category II, class III) planned by port regulatory plans approved after the entry into force of law no. 84/1994, which have urban relevance, as also recognized by the administrative jurisprudence, are excluded from the Plan.

On the other hand, art. 5, co. 3 of Legislative Decree no. 201/2016 establishes that the Maritime Space Management Plan includes and harmonizes the forecasts contained in plans and programs concerning land-based activities relevant to land-sea interactions, and therefore also those contained in territorial and urban plans, landscape plans, basin plans, integrated coastal zone management plans, strategic system planning documents and port master plans.

For these provisions, inclusion and harmonisation cannot be equivalent to that for plans whose scope is marine waters. For plans and programs whose scope of application is land, inclusion and harmonization by the new Maritime Spatial Management Plan concern only those aspects relevant to land-sea interactions, and the superordinate relationship of the Maritime Spatial Management Plan over land-based plans and programs implies that the Maritime Spatial Management Plan has the capacity to indicate objectives that will then have to be translated into planning or programming forecasts related to land-based space.

Therefore, the harmonisation (and the superordinate character of the Plan), with respect to plans and programs that may affect the marine space, is configured differently depending on the type of plan or program concerned. On the one hand, with respect to existing plans and programs concerning marine waters and the economic and social activities carried out there, the Maritime Spatial Management Plan can



harmonise their forecasts by introducing the necessary modifications to improve the use of the maritime areas. On the other hand, with reference to existing plans and programs concerning land-based activities relevant to land-sea interactions, in accordance with the objectives set out in Directive 2014/89/EU the approach followed by the Italian legislator consists in having provided for a superordination relationship between plans that do not have the same scope of application, so that the Maritime Spatial Management Plan provides objectives for the planning of land-based activities relevant to land-sea interactions. Land-based plans and programs cannot conflict with and must be coordinated with the provisions contained in the Maritime Spatial Management Plan, which in turn must take into account land-based activities relevant to land-sea interactions.

Such considerations are also valid for port development plans, whose scope of application is different from that of the Maritime Spatial Management Plan, and which, if approved after the entry into force of Law no. 84/1994, have urban relevance: they are, in fact, land planning tools on which the Maritime Spatial Management Plan may intervene but only for the profiles relevant to land-sea interactions, just as, within these limits, the Plan may intervene on territorial and urban plans and other plans and programs concerning land activities.

In terms of content, the Maritime Spatial Management Plan under domestic law consists of a planning act whose content is binding on the public authorities and which regulates the interests of the users and concessionaires of maritime space and their conduct.

In particular, with regard to the relationships between the Maritime Spatial Management Plan and the concessions for the occupation or exclusive use of the maritime domain, of territorial sea areas and of the continental shelf, the Management Plan is a binding act with respect to their granting, with the consequent illegitimacy of those in contrast with the provisions of the Plan.

The Plan incorporates and systematizes the possible uses provided by the existing planning, in terms of exclusive uses or prohibitions of use, temporary or otherwise, such as, for example, with regard to fishing or fishing with the use of certain fishing gear (in the so-called "*Fisheries Restricted Areas*", in reserves and areas for the recovery and protection of fish stocks, in areas to be allocated to small-scale coastal fishing with sustainable tools), or with regard to maritime traffic of large vessels. In addition, the Plan directs the discretion of the administrations responsible for issuing concessions, providing for one or more uses with priority over others. Finally, the Plan can regulate the behaviour of concessionaires and users, with provisions which, in this case, are binding not only for the administrations when issuing any extension measures, but also for individual concessionaires or users of the maritime space.

3.2 Adjustment and verification of compliance of administrative acts with the MSP and revision and updating of the MSP following the adoption of administrative acts

The adjustment procedure (within the limits in which the forecasts of the maritime spatial management plans do not fully implement the pre-existing acts, in order to improve the use of marine areas) and the verification of conformity of plans or programs with the maritime spatial management plans, may be regulated by the bodies having the relevant regulatory powers. In particular, in order to adjust and verify the conformity of the territorial and urban planning tools, the Regions shall issue specific provisions.



With reference to plans and programs concerning marine waters, the adjustment procedure is configured as a due activity, without margins of discretion. Where, on the contrary, the adjustment has to do with land plans and programs, the administration responsible for the Plan or program will have to pursue the objectives fixed by the Plan for the management of the maritime space, evaluating, at its own discretion, how to concretely translate them within the land Plan or program, following the ordinary procedure for its own revision and without prejudice to the possible participatory phase of the public concerned.

Faced with specific administrative acts or new plans and programs or amendments to plans and programs that may affect maritime spatial management plans, the question of updating them arises.

The "ordinary" update of the Maritime Spatial Management Plan, according to art. 5, co. 5, of Legislative Decree no. 201/2016, must take place at least within ten years from the first approval, as imposed by the European Directive, and the Guidelines identify modalities and further timelines.

Chapter 24 of the Guidelines regulates the Plan monitoring system, providing that: "for each Plan a monitoring and control system must be foreseen, as well as measurement of the results, to be implemented through specific procedures and indicators foreseen in the Plan drafting phase. The monitoring of the Maritime Spatial Management Plans is carried out by the competent Authority, supported by the Technical Committee, which annually informs the TIC of the state of implementation of the same. The decision to start a review of the management plans can be taken directly by the TC as well as by the TIC both downstream of the reports produced as a result of monitoring and following an update of the Guidelines that entail significant variations for the implementation of the management plans or in consideration of significant social, economic, environmental and cultural aspects that call into question the objectives of the plans and/or the Guidelines".

This means that, in addition to the monitoring, if the regulatory framework, i.e. the discipline contained in the guidelines, or the factual framework, i.e. social, economic, environmental and cultural aspects, should change, the possibility of revising the Plan is recognised, based on criteria of "consistency" and "significance/relevance" of the new forecasts. In the latter case (change in the factual framework), however, the revision is initiated only if such aspects are "inconsistent" and, even within a framework of "consistency", are "significant/relevant" with respect to the current Plans, to the point of calling into question the objectives of the Plans or Guidelines.

Therefore, the adoption of a planning or programming act or a specific act, the effects of which are spread over the maritime space and are significant to the point of calling into question the objectives of the plan or the Guidelines, may entail the initiation of the procedure for the revision of the Plan. The Figure 1 schematically presents the process that may or may not lead to the need to revise the Plans, according to the ordinary mode provided by the Guidelines in force.

Therefore, on the basis of the assessments made by the Technical Committee, two different situations can be presented: the first is characterised by full consistency with the Plan and by the scarce relevance of the consequences introduced with respect to the structure already outlined therein, while the second is characterised by the considerable relevance of such consequences.

The first situation may occur when an act is adopted that is fully consistent with the discipline and with the objectives of the Plan, and that is in fact the implementation of the provisions contained therein. For example, this situation can occur with the establishment of a marine reserve or a regional nature park in a unit dedicated to the priority use of nature, or with the determination of an area allocated for aquaculture, "AZA", in a unit dedicated to the priority use of aquaculture.



In this case it will not be necessary to start the procedure for the revision of the Plan. The competent administration will only have to notify the Technical Committee of the adoption of the act, for acknowledgement and in order to update the descriptive contents.

The second situation is characterised by the considerable relevance of the consequences of acts affecting the maritime space on the layout outlined in the Plan, albeit in a context of overall consistency with the Plan.

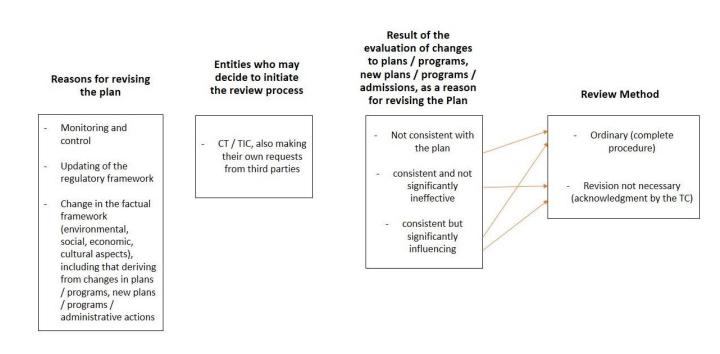


Figure 1 Overview of the Plans review process

This would include, for example, the establishment of a marine reserve or regional nature park or the determination of an area allocated for aquaculture, "AZA," in planning units that allow such uses but do not provide for them as a priority. In such a case, the representative of the affected government would be required to notify the Technical Committee of the adoption of the act, and the Technical Committee for evaluations for the purpose of formal acknowledgement and updating of the descriptive contents or possible updating of the plan. The procedure shall be implemented as quickly as possible.

There is also a further hypothesis that concerns acts that are clearly or potentially inconsistent with the discipline and objectives of the Plan, when, for example, it is planned to establish an area allocated for aquaculture in a planning unit where such use is not allowed or where this provision is in conflict with the requirements of other limited or priority uses. In this case, the competent administration will have to, before adopting the act, initiate a discussion with the TC and, in case of confirmed inconsistency, propose the start of the procedure for the revision of the Plan, at the end of which it will be possible to adopt it.



3.3 Structure and methodology for drawing up the Plans

The Technical Committee has adopted an operating methodology for the drafting of the Plans that incorporates the indications of the National Guidelines and defines in greater detail the structure and specific contents of the Plans.

The Plans are implemented in 6 Phases, which correspond to the same number of Sections of the Plans themselves:

- Phase 1 Initial status and current and expected trends
- Phase 2 Analysis of interaction between uses and impacts on environmental components
- Phase 3 Vision and strategic objectives
- Phase 4 Strategic level planning
- Phase 5 Methodology and indicators for monitoring and adapting the Plan
- Phase 6 Activities to consolidate, implement and update the Plan

These steps and contents are derived, in addition to the National Guidelines, from International Guidelines (e.g. Ehler and Douvere, 2009, UNEP/MAP, 2018; UNESCO/IOC & EC, 2021), from the plans developed in other European countries, from the results of pilot projects on MSP conducted in recent years and currently underway at regional and Mediterranean scales (e.g. SHAPE, ADRIPLAN, RITMARE, SUPREME, SIMWESTMED, MSP-MED), from the scientific literature in the field.

The objective of Phase 1 is to provide a concise but comprehensive description of the area's environmental, landscape and land use system and major trends directly aimed at supporting the analysis and planning process.

Phase 2 deals with the analysis of the mutual interactions between sea uses and between sea uses and marine ecosystems, in order to make the activities compatible and ecologically sustainable in the medium-long term. The term "interactions between uses" includes the concepts of conflict, coexistence and synergy. The overall objective of planning and management actions is to increase or ensure co-existence between different uses, reducing potential mutual conflicts and increasing potential synergistic elements where possible.

Phase 3 concerns the fundamental step of defining a vision and strategic objectives to guide planning, on a national and Maritime Area scale. This definition considers and uses, in addition to what is provided by Phases 1 and 2, the set of policies, strategies, plans and national and international standards in place and under development (e.g. Agenda 2030, EU Green Deal, SBE Strategy).

Phase 4 develops strategic level planning on the Maritime Areas and its portions (Sub-Areas and Planning Units, as we will see later on), starting from the definition of specific visions and objectives, up to the indication of vocations and measures, recommendations, addresses at local scale. Specific *research by design* approaches contribute to the definition of measures of a spatial nature on a local scale.

Phase 5 defines the characteristics of the Monitoring Program (PdM) which, in line with the provisions of the National Guidelines, has the objective of keeping track in space and time of the efficiency of the implementation of the Plans and of informing them of improvement measures in the event that these are deemed necessary, through adaptations and mid-term or end-of-term reviews of the Plans. For it to be adequately informative, the PdM must have adequate spatial and temporal connotations so as to be able to produce timely information that reflects the real trajectory to which the measures of the Plans tend and therefore the efficiency of the Plans themselves in function of the attainment of the prepared objectives.



Phase 6 identifies and specifies a number of key issues for the consolidation, implementation of the Plans and updating of the Plans.

The Plan development process is accompanied by the Strategic Environmental Assessment (SEA) process, as required by current legislation and National Guidelines.

Moreover, the interaction process with stakeholders develops progressively and at different spatial scales throughout the process, feeding and nourished by the formal consultation steps provided for by the SEA process and by art.9, c.4 of Legislative Decree 201/2016 and also including the transnational consultation processes provided for by the Directive (Art.11 and 12).

3.4 Area of interest of the Plan and its spatial articulation

The drafting of the Italian Maritime Spatial Plans is implemented in three parallel and coordinated processes in the three Maritime Areas identified by the Guidelines (Adriatic, Ionian-Central Mediterranean, Tyrrhenian-Western Mediterranean).

In each area, the Plan covers all waters and/or seabed beyond the coastline over which Italy has jurisdiction, with the exception of areas with "urban and rural planning governed by existing legislation".

The delimitation of the three Maritime Areas covered by the Plan has therefore considered the following criteria:

- jurisdictional boundaries where defined, also following specific agreements with neighbouring countries, made available by the Istituto Idrografico della Marina IIM (e.g. 12mn limits, continental shelf limits);
- delimitations between marine sub-regions of the Marine Strategy Directive;
- boundaries of marine areas open to hydrocarbon exploration and production as identified by the MISE;
- virtual equidistance lines.

The delimitations reported in the following do not prejudice in any way the outcome of future negotiations with neighbouring countries to settle existing disputes and the drafting of future agreements on maritime areas and rights of use, also according to the provisions of Law no. 91 Istituzione di una zona economica esclusiva oltre il limite esterno del mare territoriale (GU Serie Generale n.148 del 23-06-2021).

Tyrrhenian-Western Mediterranean" maritime area

The "Tyrrhenian-Western Mediterranean" area (Figure 2) has an extension of about 247,207 km² and is delimited to the South by the delimitation line between the marine sub-regions "Ionian Sea - Central Mediterranean" and "Western Mediterranean" of the Marine Strategy Directive, as also indicated in D.Lgs. 201/2016, to the West by the limit of the continental shelf agreed with the neighbouring country (Spain 1974), by the definition of the Ecological Protection Zone (EPZ D.P.R. 27/10/2011 n. 209) and by the delimitations of the waters with the neighbouring country (Strait of Bonifacio - France 1986, Ventimiglia-Menton 1892). To the South-West the limits of the continental shelf agreed with the neighbouring country (Tunisia 1971) have been considered, while the limits to the South-West of Sardinia correspond to the virtual equidistance line.



The maritime area has three distinct areas of Ecological Protection Zone (EPZ D.P.R. 27/10/2011 n. 209) of which one in the north that extends beyond the territorial waters of Liguria and Tuscany in the north. A second EPZ delimited to the north by the Tuscan territorial waters, the limit of the Sicilian territorial waters, and to the west by the limit of the territorial waters of the east coast of the Region of Sardinia. Finally, the last EPZ extends eastwards along the limit of the territorial waters of the west coast of Sardinia, to the north and west it follows the boundaries of the continental shelf, while to the south it is delimited by a straight line running from the top of the continental shelf of Algeria to the boundary of the Sardinian territorial waters south of Sant'Antioco.

Inland waters defined and regulated by the 1982 Montego Bay Convention are also present along the Tyrrhenian coast and around the Sardinian and Sicilian coasts.

Within it, the area is divided into 11 sub-areas, which will be further explained in Phase 4, 7 of which are within territorial waters.





Figure 2 Delimitation and internal zoning of the "Tyrrhenian-Western Mediterranean" Area.



3.5 Development of strategic level planning

On the whole, the methodology used for the development of the planning allows to express operationally the general objective given, that is to produce a strategic planning, or direction, and does so through a clear, consistent and flexible process, which allows to take into account the different complexity of the areas, the level of definition and the diversity of the strategic and specific objectives of the Plan, the overall framework of available information, the system of *governance* in place, the instances of stakeholders involved collected during the consultation process.

3.5.1 Multi-scalar approach and spatial scale of planning

The planning is implemented through a multi-scalar approach, with the aim of achieving the minimum level of strategic planning stated, but at the same time providing, wherever necessary and wherever possible, elements and forecasts of greater detail, from the point of view of the location and spatial scale of the plan indications and indications and forecasts for individual sectors.

The salient aspects of this multi-scalar approach are as follows:

- the possibility of scaling up objectives, choices and plan measures on the basis of the actual environmental characteristics and the system of uses of the areas, increasing the resolution where actually possible and necessary, on the basis of the existing cognitive framework, the objectives of the plan, the will of the administrations and stakeholders;
- the possibility of implementing a co-planning process between the central level (in particular the Ministries that sit on the Technical Committee) and the regional level (from the work of the Technical Committee, of which the maritime Regions are members, to more in-depth interactions with regional intra-departmental / intra-service working groups) and the local level, interacting at the local scale with communities and stakeholders, both to build awareness and to discuss plan choices in a structured way.

From an operational point of view, each Maritime Planning Area has been subdivided into Sub Areas and subsequently into Planning Units, as already introduced in the previous paragraph and as better reported in the diagram below. Figure 3.

The division into sub-areas has operational relevance for the definition, management, implementation and future updating of the Plan. On the other hand, it has no relevance from a legal and competence point of view, which remain defined by the current regulatory framework, or by specific measures that the Plan may identify and adopt.

With these objectives in mind, the criteria and elements considered in defining the sub-areas, through an optimal combination of them and expert judgment, are as follows:

- national and international legal and administrative limits;
- regional administrative limits;
- boundaries of the geographical sub-areas of fishing (FAO-GFCM GSAs);
- boundaries of marine areas open to hydrocarbon exploration and production as identified by the MISE;
- zoning already in place and used for planning and management activities;



- morphological and oceanographic characteristics of the vast area and specific sub-areas;
- existing peculiar or prevailing sea uses of the vast area and specific sub-areas.

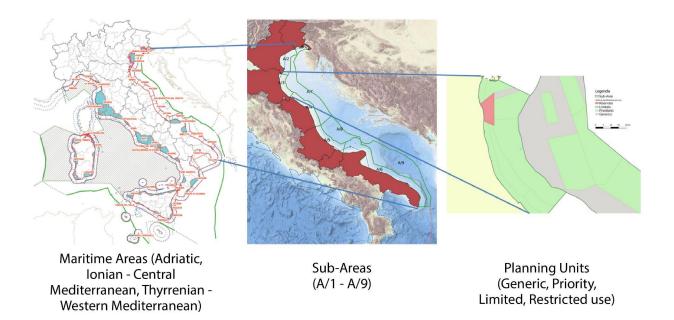


Figure 3 Spatial schematization within the Plans: from Maritime Areas to Sub Areas to Planning Units.

It should be stressed that the legal and geographical aspects are only two of the criteria used in the definition of the sub-areas, without neglecting in any way the need to use an ecological and functional vision to define the different issues on an appropriate spatial scale. In this sense, in the development of the planning the limits of the sub-areas have been considered as permeable limits, from the point of view of uses, from the environmental/ecosystem point of view and from the point of view of the governance system, in order to guarantee the maximum coherence with respect to the planning of the vast area and the neighbouring sub-areas.

In each sub-area a medium-long term vision is defined, consistent with the vision defined at national and maritime area level, and specific planning objectives are defined consistent with the strategic objectives at national and international level (Figure 4).

Subsequently, in each sub-area, "Planning Units" (PUs) are identified, i.e. areas to which specific vocations of use are assigned, with the aim of regulating and directing their functioning and evolution, and for which measures, recommendations and guidelines for carrying out activities are subsequently defined (Figure 4) (see par. 3.5.5).

The Figure 5 shows in a synthetic way the functional relationships between vision, plan objectives, vocations, measures and directions. These aspects will be explored individually and in their main relationships in the following paragraphs.

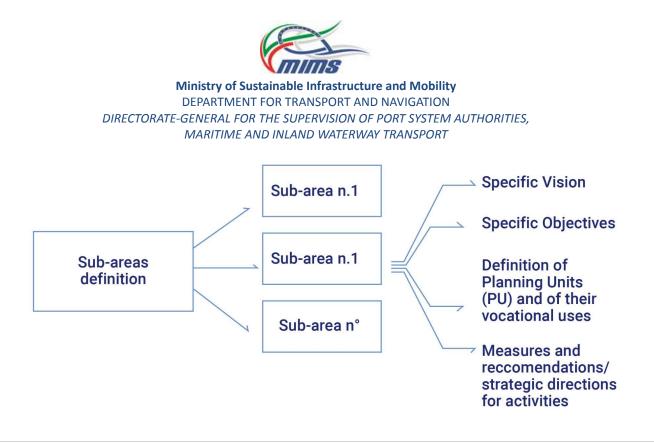
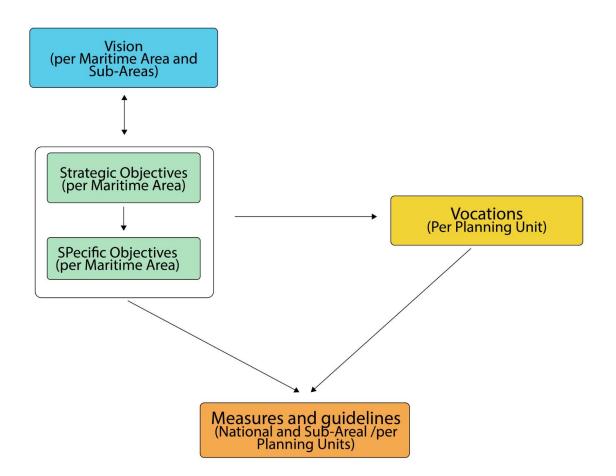


Figure 4 Outline of Plan content developed in each of the identified sub-areas.





Ministry of Sustainable Infrastructure and Mobility DEPARTMENT FOR TRANSPORT AND NAVIGATION DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES, MARITIME AND INLAND WATERWAY TRANSPORT Figure 5 - Functional relationships between the main constituent components of the Plan.

3.5.2 The four-dimensional dimension of planning

If the previous paragraph focused on the description of how the plan has addressed the challenge of spatial scales at which to develop planning, and the analysis preparatory to it, it is clear that the plan has used throughout its development a properly four-dimensional approach. All this within the limits of the information and analysis instruments available today and always keeping in mind the objective of a predominantly strategic planning. In addition to the horizontal dimension, there is the vertical dimension (water column and seabed) typical of marine environments and the temporal dimension.

These aspects have been taken into account in all phases of the plan process, from the construction of the cognitive framework, to the analysis of the interactions between uses and between uses and the environment, to the definition of plan objectives, to strategic level planning, to the definition of a plan monitoring program. The plan forecasts therefore appear to be expressed only in two dimensions, but in reality they take into account in their reference to the various uses and in the portfolio of measures that accompany the plan the vertical dimension (e.g. plan forecasts that concern above all the seabed or only the water column or its portions) and the temporal dimension.

Concerning specifically the temporal dimension, it is evident that MSP, like all planning activities, is a future-oriented activity whose purpose is to help imagine and create a desirable future and to enable short-term decision-making oriented towards long-term objectives. For this reason, recent and expected trends related to the system of sea and coastal uses and related to marine ecosystems and resources must be analyzed and understood. From this starting point, the system of plan objectives and their transposition into vocations and measures builds the desired future trajectory for the different areas and uses insisting on these areas. An understanding of recent trends in marine habitats can also be useful in directing, in addition to conservation actions or actions not to worsen environmental quality, improvement actions to achieve the established environmental objectives (e.g. GES MSFD) and environmental restoration actions, also in view of the new European legislation on the subject and the preparation of the national environmental restoration plan.

3.5.3 Vision and objectives of the Plan

As mentioned above, the MSP process is concerned not only with minimising conflicts between existing activities, but also with anticipating and avoiding the emergence of conflicts in the future, in order to promote the harmonious development of maritime activities in the planning areas. It is necessary, therefore, to understand and direct the future development of the uses of the sea and the coast towards what is defined as "Vision". We can define "Vision" (Lukic et al., 2018), as "the preferred evolution of developments of maritime activities over a given time horizon, which has been generally agreed between those developing the vision or with various stakeholders. In some cases, a vision is considered the best agreed evolutionary scenario, implying that different scenarios must have been developed and discussed before the actual adoption of the vision."



The Vision is at the same time the synthesis of a series of plan objectives and the declaratory reference to define in a more precise way the plan objectives that with their achievement should implement the Vision itself (Figure 5).

In the Plan, with reference to the multi-scalar approach described in the paragraph 3.5.1paragraph, the cycle of defining the vision and objectives is repeated twice: once at the level of the Maritime Area (Vision and Strategic Objectives) and a second time at the level of each Sub-area (Vision and Specific Objectives), obviously maintaining consistency between the superordinate level of the Maritime Area and the subordinate level of the more local scale represented by the Sub-area.

Vision and Strategic Objectives of the Maritime Area are defined in Phase 3 of the MSP process (Chap. 5 of the Plan) and take into account reference documents (Plans, standards, strategies, etc.) of international, European and national level, related both to environmental, landscape and cultural heritage aspects, and to socio-economic aspects related to the needs of the different sectors.

The Strategic Objectives are related to three transversal principles (Sustainable Development, Protection and conservation of species, habitats and ecosystems, Landscape and cultural heritage) and to eight sectors (Safety of navigation, maritime and surveillance, Maritime transport and ports, Energy, Coastal defense, Fisheries, Aquaculture, Coastal and maritime tourism, Research and innovation).

The synthesis of the reference documents and their projection in Vision and Strategic Objectives was carried out by the Technical Committee, in which the five main Ministries with competence on the sea and the 15 Maritime Regions are represented.

The methodology of the Plan does not provide for an explicit and uniformly applicable priority ranking of the various Strategic Objectives, rather attributing a generic prevalence and ubiquity to the Objectives that decline the three transversal principles and leaving the modulation of the other sector Objectives to the characteristics of the various areas.

Subsequently, a Vision and Specific Objectives are defined for each Sub-area, which are the result of the analysis of the existing situation and planning, as well as of the current trends and the evolutions expected and/or to be promoted.

In this case, for the Coastal Sub-areas up to the external limit of the territorial waters, the proposal of Vision and Specific Objectives has been carried out by the Regions, on the basis of a high resolution analysis of the local situation and often in dialogue with the neighboring Regions, and by the Regions submitted to the Technical Committee for the necessary evaluations of coherence with Vision and Strategic Objectives and harmonization at Maritime Area scale.

The Strategic Objectives, and secondarily the specific objectives, are the basis for the definition of a monitoring system for the Plans (see Step 5), through the definition of a system of measurable environmental, socio-economic and *governance* indicators linked to them.

3.5.4 Allocation of vocations and general criteria for prioritization

A fundamental step in the process of constructing the Plan is the definition of the Planning Units (PUs) and their attribution to specific vocations of use, passing through a preliminary step of typological definition of the PUs, as will be better specified below.



The definition of the PUs (location, extent and perimeter) in each Sub-area is done by expert judgment, taking into account a number of criteria listed below:

- Current status of environmental uses and components;
- Trends in place, both of the physical and environmental system and the system of uses;
- Developments in the system of uses to be promoted, based on the vision and goals stated in the Plan;
- Needs to preserve and improve environmental conditions, as also defined in the Plan objectives;
- Competence framework and governance system;
- Existing regulations and plans, with particular reference to regulations on the environment, landscape and cultural heritage.

The criterion of consistency with existing standards and plans should be considered a prevailing criterion at this stage.

Each PU is assigned a typological attribute, according to the coding described below and graphically represented in Figure 6.

- G = Generic Use
 - o Areas in which all uses tend to be permitted, with specific and reciprocal regulatory mechanisms defined or to be defined within national and international standards or sector plans, so as to guarantee safety, reduce and control environmental impacts and encourage co-existence between uses.
- P = Priority Use
 - o Areas for which the Plan provides indications of priority use and development, including indicating other uses to be secured or permitted through adjustments to each other and with the identified priority use.
- L = Limited Use
 - o Areas for which a predominant use is indicated, with other uses which may be present, with or without specific limitations, if and to the extent compatible with the predominant use.
- R = Reserved Use
 - o Areas reserved for a specific use. Other uses are permitted only for the needs of the reserved use or unless waived and granted by the entity responsible for or managing the reserved use.

Finally, the Priority, Restricted and Reserved PUs are assigned specific indications that address priority use sectors and/or themes with cross-cutting significance, either individually or jointly.

This attribution of vocation does not in itself introduce at this stage new prohibitions on the exercise of the various uses with respect to what already exists. It is also evident that the development of the uses indicated as priorities through the granting of licenses or concessions, the establishment of new protected areas or areas with specific limitations on use, or simply their preservation may in the future lead to specific and concrete consequences on the other uses.



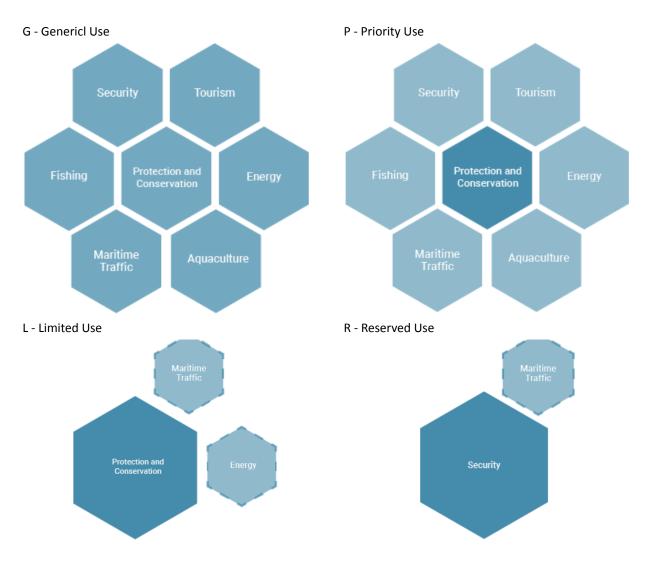


Figure 6 Graphical representation of the four typologies attributable to the Planning Units.

The Table 1 reposts the list of uses/sectors and themes with cross-cutting value used for vocation attributions to UPs. The table also provides a list of sub-uses used in the descriptive tables for the PUs in the 7 of the extended version of the Plan.

The diversity between the actual "uses" or "sectors" and the transversal themes of "Protection and conservation of species, habitats and ecosystems" and "Landscape and cultural heritage" should be noted and recognised. Similarly to what has been done in most European and non-European Maritime Spatial Plans, the Technical Committee has also chosen to use these two themes, by analogy with the sectors/uses, to attribute specific vocations to the PUs, thus recognising and highlighting their relevance. This does not mean that the environmental and landscape-cultural aspects do not maintain a transversal value, which concerns as such the whole Plan area.



	Uses / Sectors and Transversal Themes with "Strategic		
	Objectives".	Code	Possible sub-uses
	Sustainable development	-	-
	Environmental protection and natural resources	n	-
Transversal principles	Landscape and cultural heritage		Coastal landscape
F - F			Underwater cultural heritage
			beach tourism
	Coastal and maritime tourism	t	experiential tourism (e.g. ecotourism, fishing tourism, diving, etc.) nautical tourism
	Aquaculture	а	
	Fishing	р	commercial fishing artisanal fishing recreational
Uses and sectors			fishing Goods transport
	Maritime transport and ports		Passenger transport
	Energy	е	Renewable energies
			Cables and conduits
	Exploration and extraction of minerals and hydrocarbons		Extraction of hydrocarbons
	Maritime safety, navigation and surveillance	s	-
	Scientific research and innovation	re	-
	Coastal defence	dc	-
	Other Uses / Sectors to be considered for UPs		
	Telecommunications	tlc	-
	Dredged sediment sea-diving	isd	-
	Withdrawal of relict sands	sa	-

Table 1 List of Cross-cutting Themes, Uses / sectors and sub-uses.



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Infrastructure (industrial uses related to port activities)	i	-
Defense	d	-

For this reason, indications regarding the relevant environmental, landscape and cultural heritage aspects of each Planning Unit that support the definition of the compatibility of uses, not only with other uses or with the prevailing use, but also with the environmental, landscape and cultural aspects relevant to the specific unit are made explicit in the PU description tables. These indications are considered and expressed on the basis of available knowledge derived from studies or other ongoing processes, with particular reference to those related to MSFD, fisheries management, current landscape plans and the Water Framework Directive. Important references will also be derived from the indication of habitats and species of Community importance (Habitats and Birds Directives), or endangered species according to IUCN, or indications derived from ecologically or biologically significant marine areas according to the Convention on Biological Diversity. The attribution to the PUs of the specific indications regarding the sectors of use and/or priority themes with transversal value, singly or jointly, has been carried out, in strict coherence with the general objectives of the Maritime Spatial Planning Directive, with the aim of favouring the development of the sectors in a balanced and non-conflicting manner, respecting and indeed contributing to the objectives of sustainability, respect for the environment, landscape and cultural heritage. This principle is declined in a punctual way in the Strategic Objectives, including the Strategic Objectives on the three transversal principles, and specified at a local level, on the basis of specific characteristics of the areas, in the Specific Objectives for each Sub-area.

A further and relevant aspect considered in the attribution of the specific vocations, and in the consequent description of the PUs and definition of the measures to implement and develop the identified vocations, is that of co-existence between uses, to be fostered wherever possible with the necessary arrangements, until the full achievement of the multi-use objective, which means not only co-existence between uses in the same areas but also development of synergies (areas and equipment/infrastructure) between uses (Schupp et al., 2019; Van den Burg et al., 2020). The element of coexistence and often synergy between uses is a defining feature of PUs that have been given multiple priorities.

3.5.5 Methodology for defining Plan measures

The last step in the strategic planning process (Figure 4 e Figure 5), is the definition of a portfolio of plan measures, guidelines for carrying out activities and possible recommendations to be implemented in the short and/or medium and long term.

The measures and actions identified by the Plans, as required by the guidelines containing the addresses and criteria for the preparation of maritime space management plans, D.P.C.M. 1 December 2017, par. 20, are aimed at achieving the strategic objectives defined at national scale and the specific objectives declined in the different sub-areas. The measures/actions and objectives to the achievement of which they are addressed will be associated with indicators in order to be able to follow up on the monitoring in the implementation phase and to be able to proceed in the event of any misalignment between the objectives set and what is produced. The measures and actions of the Plans are not reproductive of the existing discipline contained in sectoral regulations and in existing plans and programs (e.g., the Program of Measures adopted under Art. 13 of the Marine Strategy), which remains in force, but complement it



(guidelines containing the addresses and criteria for the preparation of maritime spatial management plans, D.P.C.M. 1 December 2017, par. 14).

In line with the European directive for maritime spatial planning, which requires that maritime spatial management plans identify the spatial and temporal distribution of activities and uses of marine waters and organize human activities in marine areas, considering the interactions of uses and promoting their coexistence (dir. 2014/89/EU, art. 3, 5, 8), and in line with the provisions of its transposition into national law (d.lgs. n. 201/2016, art. 3, 4, 5; guidelines containing the addresses and criteria for the preparation of maritime space management plans, D.P.C.M. 1 December 2017, paras. 1, 3, 8, 11, 20), the measures and actions are forecasts of the Plans that may have the following contents:

- a. recommendations and guidelines addressed to administrative authorities;
- b. guidelines for plans and programs concerning marine waters;
- c. guidelines (objectives) for plans and programs with earth space as their field of application;
- d. actions to be carried out by administrative authorities, including in partnership with private entities;
- e. the spatial and temporal distribution of the different uses;
- f. the regulation of the manner in which uses may be conducted;
- g. the provision of incentives.

As for scale, maritime spatial management plans identify:

-measures and actions on a national scale, for the three maritime areas covered by the Plan: transversal and coordination measures;

-measures and actions at sub-area scale: measures aimed at the sustainable development of the sectors, the promotion of coexistence between uses of the sea and the enhancement of synergies between them. For coastal sub-areas, measures/actions related to land-sea interactions are also identified. Wherever possible, measures are spatialised within the sub-areas in relation to the vocations identified in the different PUs;

-any specific measures for individual PUs.

The choice of the content, type, scale and level of detail of each measure and action will depend, again in the light of the strategic and specific objectives, on the needs that emerge on a case-by-case basis following the unitary assessment of the various sectors and the conflicts or synergies that emerge.

In particular, the actions should also be economically feasible. For this reason, the corresponding financial coverage will have to be identified for each action, which could also coincide with the funding sources already established for the sectoral regulations and envisaged to achieve the objectives of the maritime spatial management plan (for example, those envisaged for the Marine Strategy).

3.6 Integration between Maritime Spatial Management Plan and landscape planning

The integration of landscape planning elements and the protection and enhancement of cultural heritage and landscape assets takes on a major role in maritime spatial planning, within a broader Sustainable Blue Economy framework (SBE, EC, 2021).

It clearly emerges the need for a comparison and convergence of the two planning tools that have as their object territorial areas of different nature, although spatially contiguous. Their discipline, contained in Legislative Decree no. 201/2016 and Legislative Decree no. 42/2004, provides for procedures with different



purposes, while sharing a planning approach that insists on physically interconnected spatial systems. It is therefore appropriate to coordinate maritime and landscape planning procedures, which are now in an updating or first drafting phase. Both instruments present different degrees of complexity that hinder, at different levels, the effective achievement of the objectives set by the reference standards. However, it is precisely in this complexity that the opportunity to finalize and maximize the potential of MSP and PPR can be recognized, both in programmatic terms and in terms of defining the degrees of protection.

The proposed methodology suggests a model of coordination and integration between planning tools which have as convergence of competence the coastal areas. For landscape planning, this methodology could also be considered in the definition of coordination measures between landscape planning and other plans, to which article 145, par. 2, of the Legislative Decree n. 42/2004 refers.

For maritime spatial management plans, this form of integration and coordination is necessary by virtue of the provision in Article 5, co. 3, of Legislative Decree no. 201/2016, which requires that existing plans that consider marine waters and those concerning land-based activities that are relevant for the consideration of land-sea interactions, are included and harmonized with the provisions of maritime spatial management plans, and by virtue of the provisions of Directive 2014/89/EU and the supplementary guidelines to Legislative Decree no. 201/2016, which require consistency between maritime and land-based spatial planning. In this perspective, the proposed methodology will allow maritime spatial planning to consider, also assessing them in the land-sea intervisibility relationship, the landscape values and qualities of the coastal strips identified by landscape planning and the related protection and enhancement measures. From this point of view, the proposed methodology consists, in particular, in extrapolating from the landscape plans the main guidelines (addresses, directives and prescriptions contained in the technical implementation regulations of the landscape plans in force or in the process of being drawn up; addresses and quality objectives for coastal landscape areas; addresses and objectives for coastal landscape units) for the management and safeguarding of coastal areas, with particular reference to the areas protected by law consisting of the 300 m. strip from the shoreline (art. 142, co. 1, lett. a, of the Cultural Heritage and Landscape Code), and the coastal landscape constraints "clothes".

Since the regional landscape planning currently presents different forms in each region, it has been chosen to generalize the coordination methodology in order to produce a versatile and permeable instrument to the different regional needs, considering some *best practices* that already today can be considered as important references, i.e. the landscape plans of Tuscany, Apulia, Friuli-Venezia Giulia, Sardinia. At the same time, in the regions where the updating of the territorial plans with landscape value is in progress, even more explicit operational indications can be given for the interaction between the landscape level, the regulatory level and the maritime spatial planning dimension.

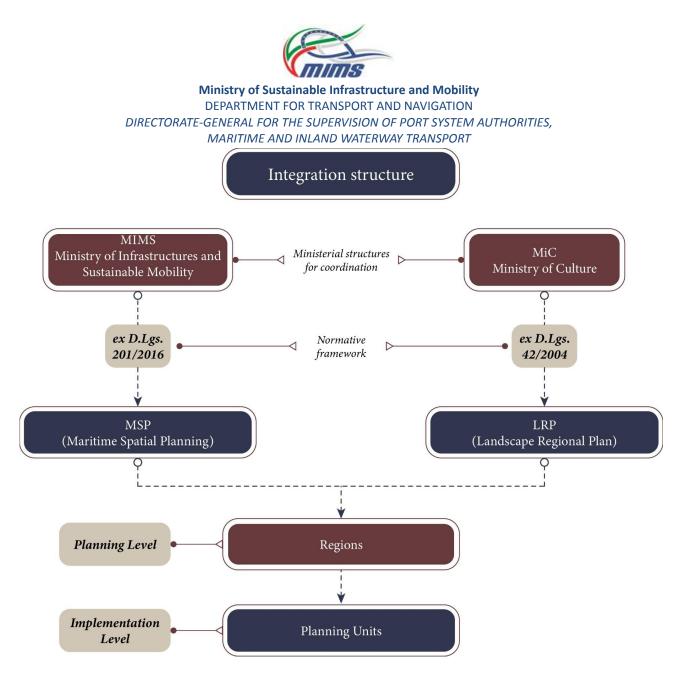


Figure 7 Interministerial Integration Structure

The implicit assumption is that planning should not stop near the coastline, but should be able to interpret and structurally include a territory which, due to its intrinsic nature, presents characteristics of land-sea interaction. In extreme synthesis, the opportunity recognized is that it is possible not only to achieve a more effective protection of the landscape (and of the cultural heritage), but also to maximize the opportunities for the enhancement of the territory. Coordination between PPR and MSP articulates specific shared competences and supports the convergence of objectives and standards where necessary.

Both planning processes are based on a normal concerted process, incorporating indications at inter-ministerial level and integrating the articulated frame of visions of the territories, involving different types of *decision makers* and *stakeholders*. The Figure 8 reports the operational *workflow* with the integration of the different levels that presuppose both processes. The model is presented with a generic character, in particular with regard to the PPR, which sometimes can take on the character of an autonomous instrument - such as the PPTR of the Apulia Region - or can become co-planning instruments - such as the PIT of the Tuscany Region and the QTRP of the Calabria Region. The Regions define or contribute to the definition of specific objectives of a protective and programmatic nature in both planning



instruments. In the case of the PPR, this definition falls within the Strategic Framework and presupposes a consultation with the MIC, with local *stakeholders* and *decision makers*. As far as the MSP is concerned, the different regions are called upon to define a set of objectives and sub-objectives, based, also in this case, on a participatory process. However, for an effective convergence of the two instruments it is necessary that the specific objectives and then the Planning Units (phase 4) can dialogue with the strategic framework of the regional RDPs, feeding both the cognitive framework and the uses contained in the actions.

At the operational level (Figure 9, Figure 10), the approach used to make landscape and cultural issues converge within the regional maritime process presents specific peculiarities, from Region to Region, oriented however towards common aims: firstly, the definition of Planning Units with the priority use "landscape protection", secondly, the assessment of the impact of marine activities on the coastal landscape in order to regulate them so that they do not compromise or, on the contrary, contribute to increase the landscape values protected by the PPR. In identifying criteria for the attribution of landscape value to marine areas, the MSP could propose the recognition of some sea areas as "additional contexts" to be subject to protection, according to the logic of the PPR. On the one hand, therefore, the landscape and the cultural heritage of the coastal and marine space is already highlighted and integrated in the regional *vision*, on the other hand it is reflected in the declination of the specific objectives and Planning Units. In any case, the explicit and operational dimension is that of specific objectives and Planning Units. Along the coastal buffer, priority vocations are clearly attributed to the protection of the landscape and cultural heritage. However, it should be pointed out that these areas are conditioned and, most of the time, shared with a "tourist use", but it is precisely through a dual priority that a synergy between the two respective uses can be guaranteed.



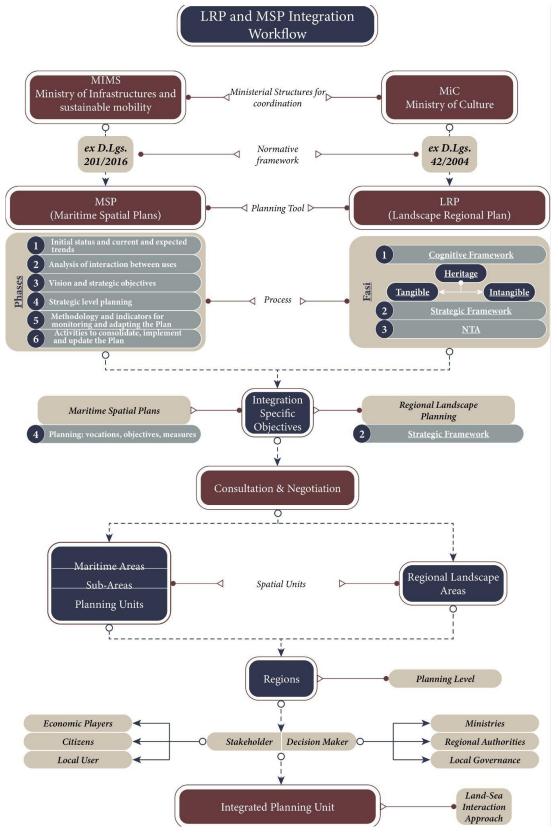
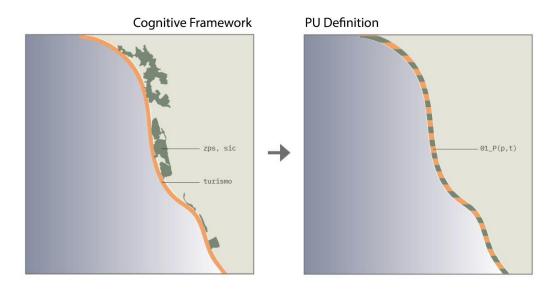


Figure 8 Workflow for the integration between LRP and MSP





PU	Use Typology	Motivation of typology attribution	Other Uses	Specific considerati ons on other uses	Relevant elemets concerning the environment, the landscape and the cultural heritage
01	Priority Use (P) -Landscape and Cultural Heritage -Tourism	Area with high touristic, landscape and natural value. Presence of Areas of environmental value (terrestrial and/or maritime)			The guidelines for the management and the conservation of coastal areas present in the RLP are limited to coastal areas where Special Protected Zones are present and for which ther conservation measures with modifications and integrations are in place

Figure 9 Sample Allocation Process for Planning Units



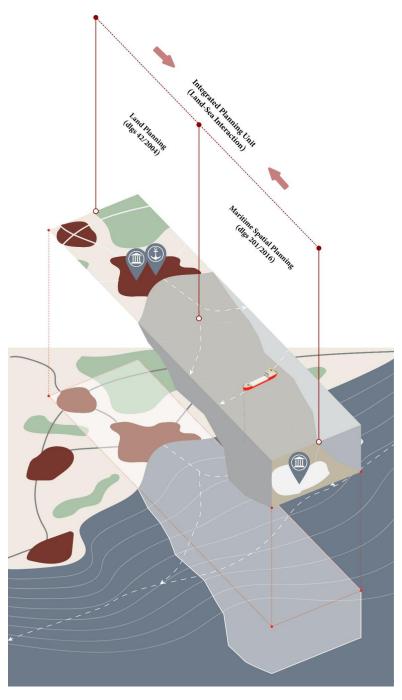


Figure 10 Concept of the coastal territorial unit

3.7 The Ecosystem-Based Approach in the Plan

The Convention on Biological Diversity (CBD) (COP 5/ Decision V/6) established in May 2000 the following definition of the ecosystem approach: "The ecosystem approach is a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an



equitable manner. Therefore, the application of the ecosystem approach will help to achieve a balance of the three objectives of the Convention: conservation, sustainable use and the fair and equitable sharing of the benefits arising from the use of genetic resources. An ecosystem approach is based on the application of appropriate scientific methodologies focusing on the levels of biological organization, including the structure, processes, functions and essential interactions between organisms and their environment. It recognizes that humans, with their cultural diversity, are an integral part of many ecosystems." The need for management approaches based on an ecosystem perspective, which fully incorporate ecosystem considerations, into marine planning has become increasingly urgent (Douvere and Ehler 2008, Ansong et al. 2017).

The *Ecosystem-Based Approach* (EBA) considers humans as an integral part of the natural ecosystem and, if applied, can show the exchange and interactions between the goods and services provided by natural ecosystems and different management objectives (Levin et al., 2009). Although the MSP Directive does not directly provide a definition of EBA, the requirement to implement EBA is set out in Preambles (3), (14), (22) and directly in Article 5 on MSP objectives.

The key principles for the application of the EBA in MSP can be summarised as follows:

- Have a long-term vision;
- Integrate ecological, social, economic, and institutional perspectives and recognize their interdependencies;
- Make the protection and restoration of marine ecosystems a priority;
- Consider anthropogenic pressures and cumulative impacts;
- Consider connections and connectivity between and across ecosystems;
- Take a perspective that considers ecosystem services;
- Promote adaptive management;
- Plan at the appropriate scales;
- Take a precautionary approach;
- Use the best knowledge available;
- Involve stakeholders.

On the basis of these premises, and what is expressly requested in this regard by the National Guidelines, the Maritime Spatial Plan has adopted the ecosystem approach in its development phases.

Phase 1 - Initial status and current and expected trends

In Phase 1 the Plan presents the main environmental components (e.g., priority species and habitats of the Habitats Directive, environmental components identified by descriptor 1 of the Marine Strategy 2008/56/EC) that provide ecosystem services and whose conservation supports good environmental status. The current state and trends of anthropogenic uses that may interact with the environmental components are also analysed, as well as the uses that benefit from the goods and services provided by the ecosystems. Finally, the tools (*area based management tools*) whose objective is the conservation of the marine environment are reported, including, for example, Marine Protected Areas, Natura 2000 Areas, reserves.



Phase 2 - Analysis of interaction between uses and impacts on environmental components

Phase 2 reconstructs the analysis of interactions between uses and the environment, highlighting, for each marine sub-region (i) areas with environmental protection value (e.g. Marine Protected Areas, Sites of Community Interest), and also environmental components such as habitats and priority species from the Habitats and Birds Directives, and the state of the environment according to the MSFD Descriptors, (ii) interactions with anthropogenic uses that may produce pressures and potential negative impacts on the same areas and components, and (iii) potential benefits that arise from the areas with environmental protection value and environmental components. In addition, the results of the monitoring of the state of the environment according to the Marine Strategy Descriptors as of 2018 (MATTM and ISPRA, 2018) and the monitoring of the Habitats and Birds Directives, as well as the studies conducted by MITE, MIPAAF, ISPRA, ACCOBAMS, and from the Reports produced by the Natural Capital Committee are taken into account in Phase 2 in order to analyze the potential causes and related measures necessary to reduce and control the potential negative effects resulting from the pressures generated by anthropogenic uses in the phase of definition of the planning units (Phase 4).

Phase 3 - Vision and strategic objectives

The Plan vision takes into account environmental sustainability aspects, considering the national strategy on sustainable development. In addition, the conservation and protection of species, habitats and ecosystems is integrated into the Plan vision. The strategic objectives of the Plan take into account the sustainability objectives of the National Sustainable Development Strategy (OS_SS|02), and also the objectives for the protection and conservation of species, habitats and ecosystems (OS_N|01-05), as further detailed in Stage 3. The sustainability aspects of development have also been taken into account in the definition of the strategic objectives of the macro-sectors, so that the sustainability objectives also intersect with the strategic objectives related, for example, to maritime safety (OS_S), fisheries and aquaculture (OS_P, A), maritime transport (OS_TM), energy (OS_E), tourism (OS_T), and research and innovation (OS_RI).

Phase 4 - Strategic level planning

In the planning phase, the strategic objectives for sustainability and for the protection and preservation of species, habitats and ecosystems were declined for the individual planning units for the territorial waters and for the off-shore areas. Below, the specific objectives of the Plan consider and decline the vision and the strategic objectives for sustainability and for the protection of species, habitats and ecosystems for each planning unit, considering its peculiarities and environmental characteristics, vocation, the presence of anthropic uses and expected development trends. In defining the vocations and types of each planning unit, the presence of areas with environmental protection value, and environmental characteristics (including the presence of priority habitats and species for conservation) were taken into consideration, so as to consider the potential positive or negative interactions between anthropic uses and environmental components, also on the basis of what emerged in phase 2 regarding use-environment interactions. Planning units can be defined as having a "limited" use for environmental protection" in case they are exclusively dedicated to environmental protection, through, for example, the establishment of new marine protected areas, or the presence of marine protected areas or other instruments for environmental protection. In addition, the



planning units can also foresee as a "priority" use for environmental protection, when environmental characteristics are outlined such as to hypothesize the future destination of the area or portions of it for the exploitation of synergies between environmental protection and other compatible uses. In any case, regardless of the typology associated with the Planning Units, in the articulation of the suitability of each Plan Unit, the environmental characteristics, priority habitats and species, ecosystems, and all the environmental issues and values that must be taken into account when implementing the Plan also in the operational phase, in order to contain potential negative effects on them, in order to achieve good environmental status in all the Planning Units.

Phase 5 - Methodology and indicators for monitoring and adapting the Plan

The monitoring program (PdM) that emerges from Phase 5 reflects on the strategic and specific objectives of the Plans by incorporating themes of sustainability and environmental protection and conservation. In this regard, among the categories of monitoring indicators considered there are environmental and pressure indicators that make it possible to monitor over time the state of the environment, its responses to possible anthropogenic pressures affecting it, and the level at which these pressures are generated by the various sectors regardless of their state of development. They are therefore transversal and priority indicators for all the themes/sectors involved in the Plans. The PdM, proposing synergy with existing national scale monitoring programs, considers those prepared under the Marine Strategy Framework Directive resulting in the acquisition of a number of suitable indicators considered suitable to inform the PdM and MSP. The adaptive approach proposed in the RBMP supports the *ecosystem-based* approach because it allows constant monitoring and a flow of updated information on an annual scale to support the implementation of the Plans and their revision should some Plan measures prove to be unsustainable from an environmental perspective.

Phase 6 - Activities to consolidate, implement and update the Plan

As this Plan process is in its first cycle, Phase 6 will define the elements of knowledge with respect to the protection of species, habitats and ecosystems that will need to be deepened, also in relation to the in-depth disciplinary investigations necessary to fill the uncertainties or lack of data information or knowledge that will be highlighted for specific issues (e.g., the impacts of anthropogenic uses in the deep environment) or for specific areas within the three regions.

The two transversal principles of "best available knowledge" and "stakeholder involvement" have also been adopted, the second of which finds its main expression in the public consultations foreseen by the SEA process and by art.9 of Legislative Decree 201/2016.

3.8 Climate change in the Plan

In this first planning cycle, climate change has been considered as a transversal theme, both in terms of mitigation and adaptation aspects, and as a theme that influences some specific uses: i) energy transition and the production of energy from renewable sources from the sea; ii) the relationship between coastal defence and climate change; iii) links with the maritime transport sector; iv) relations with the system of existing protected areas and areas with a "nature" vocation.



Knowledge of the effects of climate change on land-use sectors, environmental descriptors and land-sea interactions and priority conservation species or habitats was considered, at least for a first level of analysis. Where necessary, possible gaps and uncertainties were highlighted specifically on knowledge related to, for example, the combined effects of climate change and other local anthropogenic effects on the marine environment.

The theme of the bi-univocal relationship between climate change and Maritime Spatial Plans will certainly need to be explored in greater depth in the second planning cycle, also thanks to the monitoring and knowledge updating activities foreseen by Phases 5 and 6 of the Plan itself.

4 Phase 1 - Initial status and current and expected trends

The "Tyrrhenian-Western Mediterranean" maritime area was identified by the Interministerial Table in synergy with the reference maritime areas referred to in the Marine Strategy (art. 4 of Directive 2008/56/EU). The Regions belonging to the Western Mediterranean reference maritime area are: Liguria, Tuscany, Lazio, Campania, Basilicata, Calabria, Sicily and Sardinia. The portion of the Mediterranean considered includes the Geographic Sub Area of the Ligurian Sea and Northern Tyrrhenian Sea, Central-Southern Tyrrhenian Sea and Sardinian Seas (West Sardinia and East Sardinia). The area extends from the coast of Liguria, through the entire Tyrrhenian Sea to the coasts of Sicily and Sardinia.

The entire area covers 247,207 km² and includes the Ligurian Sea, Tyrrhenian Sea and the Sardinian Sea. The seabed and the coastline of the subregion differ considerably depending on the area. The continental shelf in the Ligurian Sea is much reduced towards the west, while it becomes more extensive as you move eastward. A fundamental characteristic of the seabed in this area is the presence of numerous and important canyons where depths can reach below the 2000 m bathymetric level in the south-west. Along the Tuscan coast the continental shelf is wide and has a slight slope between the Gulf of La Spezia and the Island of Elba, extending for about 40 km with a depth of 150 m. Further south, the platform is cut by a canyon that descends towards the north-west. Along the Lazio coasts the platform, with its 290 km of longitudinal development, is more limited in the central sector (with an extension of 20 km), and is more extensive (30-40 km) in the northern and southern sectors. The slope is slightly above 0.5°, while the margin, where the continental slope begins, is at a depth varying between 120 m and 150 m. Along the coasts, the waters are between 10 and 20 m deep, presenting a conformation of fine sands created by the contributions of the Tiber River and then mixed with muddy bottoms in the deepest part of the platform.

Going further south we have the area of the central-southern Tyrrhenian Sea, a sea that has one of the most complex structures among those surrounding the Italian peninsula, for morphological, geophysical characteristics and dynamics of water masses. The coasts are generally very indented and the island system is the richest of the Italian seas. Moreover, the coastal area is characterised by a system of gulfs with peculiar environmental and productive characteristics. The depths of the Tyrrhenian Sea are similar to those of the oceans, with abyssal plains that reach maximum depths of 2,900 to 3,600 m, in which imposing volcanic edifices of basaltic nature and mountain chains stand out, which are currently active and influence the circulation of water masses with their hydrothermal springs. In the middle of the Tyrrhenian Sea, facing the Gulf of Naples, there is the largest underwater volcano in Europe, Mount Marsili. Its height from the seabed is almost 3000 m and it is a volcano which is still active and on the flanks of which numerous



satellite volcanic apparatuses are still developing. It is part of a much more extensive submarine mountain chain 65 km long. The Tyrrhenian platform is more developed in the north along the Lazio and Campania coasts where the alluvial plains of the Garigliano and Volturno rivers are also present. Much thinner, instead, along the southern edges of Campania, Basilicata and the northern coast of Sicily.

The maritime area has numerous groups of islands that characterize the coastal morphology. The Tyrrhenian Sea, in fact, hosts the Tuscan Archipelago (consisting of the islands of Gorgona, Capraia, Elba, Pianosa, Montecristo, Giglio, Giannutri), the Ponziane or Pontine Islands (consisting of the islands of Ponza, Zannone, Palmarola, Gavi, Ventotene), the islands of the Gulf of Naples (consisting of the islands of Ischia, Procida, Capri). Further south we find the Aeolian Islands or Lipari (consisting of the islands of Lipari, Stromboli, Panarea, Salina, Filicudi, Alicudi, Vulcano), the island of Ustica, the Egadi Islands (consisting of the islands of the islands of the sea is the Strait of Messina where the waters of the Tyrrhenian Sea and the Ionian Sea mix. The underwater profile of the Strait is between 80 and 120 m deep at its narrowest point (3.2 km wide). On the Tyrrhenian side the seabed slopes down slowly, while on the Ionian side the slope is very steep, reaching depths of about 500 m in a few kilometres.

Moving westwards in the Sardinian seas there are two main basins: the Algero-Provençal basin, west of Sardinia, and the Tyrrhenian basin, east of the island, connected by the Sardinian Channel. The peculiarity of the Sardinian Seas is that they can be identified in four macro-zones with very different geomorphological characteristics: the western, northern, eastern and southern coasts. The western coast, has a continental shelf, between 150 and 200 meters deep, very large and with sandy bottoms, creating a condition, together with the great transparency of the water, favorable to the development of the vegetation. The continental slope is instead slightly inclined. The northern coast, along the Gulf of Asinara and the Strait of Bonifacio, has an averagely extended platform but with a reduced and steep escarpment. Along the east coast of Sardinia, which faces the Tyrrhenian Sea, the seabed is very shallow and steep with depths of 1000 m along the coast. This condition is particularly favourable to fishing activities. The platform, in fact, is very narrow and irregular, with the presence of underwater valleys, rises and canyons. The southern coast is characterised by the presence of the Gulf of Cagliari. The platform is much wider (11km) in the western portion (40km of coastline) than in the eastern portion, where its extension is very limited and steep; in fact, depths close to 500m are about 3km from the coast.

Starting from the North, in the Ligurian Sea, the variety of habitats is mainly distributed on the reduced extension of the continental shelf, and then reduced by the steepness of the seabed. The whole northern area presents a great biodiversity, it is enough to remember that of the 162 benthic biocoenosis (habitats) listed in the Barcelona Convention only 14 are not present. The ecosystem of the waters off the western Ligurian Sea is part of the Sanctuary for marine mammals of the Mediterranean Sea with the presence of large cetaceans and odontoceti mysticeti, large perciforms (tuna, swordfish) and pelagic sharks. It represents an element of great naturalistic value created thanks to the oceanographic characteristics of this sea.

With regard to anthropogenic impact, the area is highly anthropized, with large urban centres, industrial settlements and major ports. Maritime traffic creates considerable disturbance to the ecosystem and fishing



activities, especially along the main routes. Traffic is also linked to oil pollution and the possibility of disasters, not to mention pollutants from waterways.

Fishing presents a fleet equal to 13% of the load at national level with a prevalence of artisanal fishing boats. However, trawling contributes with the highest level of landings and turnover, but in a non-homogeneous way due to the different morphology of the sea bottom. In addition to traditional fishing, in this area of the Mediterranean, especially along Liguria and Tuscany, there are boats for the fishing of small pelagics with encircling nets and hydraulic dredges for the fishing of clams, mainly in the Lazio compartments.

Aquaculture is practiced at sea in this area, especially with fish breeding systems in cages, able to contribute significantly to the national production. The mollusc farming is however practiced, with important realities in Campania, Lazio, Liguria and in the Gulf of Olbia (Sardinia).

The central Tyrrhenian Sea instead presents a high variety of habitats with particular attention to *Posidonia oceanica* and *Cymodocea nodosa*, which constitute reproduction areas for different species of fish. The posidonia prairies present in these waters constitute repopulation areas for various coastal species. As evidence of the variety of environments and species that characterize the central-southern Tyrrhenian Sea, the presence of cetaceans in the area of the Campania Archipelago, just near the canyon of Cuma, where seven different species have been regularly surveyed, and where the marine protected area "Regno di Nettuno" (Neptune's Kingdom) has been established also for the presence of macrofauna.

Thanks to the *upwelling* phenomena present in the Strait of Messina, which attract many commercial pelagic species, fishing in this area of the Mediterranean contributes about 12% of national production with the use of different fishing methods given the morphological variety of the seabed. The presence of an overall limited continental shelf has favoured artisanal fishing systems which occupy 84% of the boats. Trawling, however, plays a fundamental role in canyons and abyssal plains. Other fisheries are used to catch swordfish using harpoons.

The waters of the seas of Sardinia are characterized by the presence of Posidonia oceanica in the waters up to 40 meters deep. This characteristic allows the development of many fish species. Among the most common the amberjack, the leccia, the saraghi, the corvinas, orate scorfani and tracine. In the northern part included in the Cetacean Sanctuary there are many species, among which the most representative are the fin whale and the common dolphin. In addition, despite the large influx of tourists, there are many turtles *Caretta caretta* that reproduce in the sandy beaches. In these depths is easy to observe the red coral at a depth between 5 and 20 meters, while pushing further you can find the black coral. Noteworthy is the protected area of Asinara where the seabed is still uncontaminated.

These waters are used a lot by the fishing sector and, given the prevalence of seabed depths greater than 100 m, activity in superficial and intermediate waters is preferred. The most important sector is that of the small fishing for social, occupational and economic number. This type of fishing extends in a capillary way along the Sardinian coasts and has a considerable impact on the annual turnover of the entire comparo for its considerable economic value. This system also makes it possible to adapt the catching of fish to the season with the use of different tools according to the abundance of the species in that period. At the same time, however, trawling represents a very high quota both in terms of catches and economic factor. It is



sometimes difficult, given the size of the trawlers, to fish close to the coast given the geo-morphological characteristics. On the other hand, it is also necessary to consider that the presence of numerous protected areas, such as marine parks and areas subject to military easements, limits the areas available for fishing activity, pushing trawlers to move even at a considerable distance from the base port. The bulk of the fleet can be found near Cagliari, where approximately 60% of the vessels are registered.

The entire maritime area of the Western Mediterranean in general is characterised by the presence of sites of important environmental value and for the protection of cultural heritage (Natura 2000 network areas, Protected Marine Areas, UNESCO sites).

From all points of view, the study area is influenced and linked to the social, economic, geographical and environmental characteristics and dynamics of the underlying coastal zone, and vice versa. For many of the activities present, significant growth is expected in the coming years, with potential increase in conflicts with other uses and pressures on the environment, with potential aggravation for the complex consequences of climate change.

Any analysis related to the analysed area requires to consider its boundaries in a flexible and permeable way. The interregional and international context in which the area is located, in fact, substantially influences the management needs for the exploitation of marine resources (e.g. fish stocks of commercial value) and the sharing of maritime space (e.g. for trade routes). Similarly, anthropogenic pressures exerted outside the study area can, potentially, influence environmental activities and components within it.

More information on the environmental, landscape and land use system of the area and on the main current and expected trends, directly aimed at supporting the analysis and planning process, is available in Section 1 of the Plan and in the SEA Environmental Report.

The information is presented according to a conceptual scheme directly extracted from the Marine Strategy Framework Directive (Directive 2017/845/EU, MSFD) and in particular from Annex III, Table 2b, while the section on maritime and coastal activities is in turn divided into the following sections:

- Physical rehabilitation of rivers, coasts or seabed and extraction of marine sands;
- Extraction of non-biological resources and related infrastructure: fossil fuels;
- Fishing;
- Power generation and related infrastructure;
- Aquaculture;
- Transportation;
- Cultural heritage: cultural and landscape heritage;
- Tourism and recreation;
- Security and defense;
- Education and Research.

For each theme the description of the state of reference for the various components makes use of a collection of cartographic tables (Essential Maps). The cartographic data that have been used to support the various plan drafting phases are based on the best knowledge available at the time and have been collected at a national level through the contribution of the Ministries involved in the MSP process. They can be



consulted through the "Maritime Spatial Planning" area of the "SID II portale del mare"¹ -grouped into sections corresponding to the 15 essential maps- either through a special interactive visualization interface or through standard interoperable services. Each information layer is also accompanied by a metadata sheet describing in detail its characteristics and accessibility.

5 Phase 2 - Analysis of interaction between uses and impacts on environmental components

5.1 Analysis of interaction between uses in marine space

5.1.1 Analysis methodology

The analysis of the interactions between uses of marine space was carried out through conceptual and critical analysis of available information on the topic. In particular, a matrix approach was adopted, according to what is in use in several plans and publications (Latvian Ministry, 2019; Israel Institute of Technology, 2015; Belgian Government, 2020; Barbanti et al., 2015; Schultz-Zehden et al., 2008; Government of Ireland, 2019) that firstly assesses the "theoretical" compatibility between possible pairs of different uses and secondly identifies the presence of conflicts or synergies that are actually experienced or can be expected as a result of the development of the different economic sectors, in each of the three maritime areas covered by the Plan.

The compatibility matrix adopted by this Plan was developed from what was already available in the literature. Starting from the matrices developed in particular in the study of Ehler and Douvere (2009) and in the Adriplan project (Barbanti et al., 2015), some modifications have been introduced that take into account knowledge subsequently developed and that introduce a declination of uses consistent with what has been identified by the Guidelines for the drafting of MSP plans (DPCM 1/12/2017). Moreover, for some uses further distinctions in sub-uses have been introduced, in order to characterize more specifically interactions involving complex sectors within which some heterogeneities may be present.

Starting from the theoretical compatibility matrix, three matrices ("interaction matrices") have been constructed to provide information on the conflicts and synergies that are actually present in each maritime area, according to the state of current knowledge. The three matrices were constructed mainly taking into account the information available in the literature (projects and scientific publications). Further cognitive elements for the purpose of identifying the interactions between uses, especially for those areas where the information available in the literature is most lacking, were derived from the knowledge gathered during Phase 1 and in particular from the analysis of the essential maps, which give the spatial distribution of the various uses of the sea, and from their overlapping. Simplified assessments of the evolution of interactions expected over the next decade were made based on an examination of the development trends of each sector (Phase 1), identifying for each interaction an increasing, stable or decreasing trend. Finally, the compatibility matrix and the three interaction matrices were integrated and revised in the light of the specific knowledge of the various experts involved in the process of formulating the Plan, in order to return

¹ https://www.sid.mit.gov.it



the most complete and consolidated information possible, capturing not only the information documented by studies on the subject but also that derived from empirical knowledge on the dynamics of interaction processes.

To complete the above analysis and in order to consider the interactions between all the main uses present in a given area, for each maritime area the Plan provides some summary iconographic maps that represent the main interactions between maritime uses in terms of location (marine areas where interaction mainly occurs on the basis of the information collected) and type of interaction (synergy or conflict). The maps were developed taking into account the interaction between all the uses present, thus not limiting the assessment to pairwise uses, with the aim of supporting strategic level planning.

5.1.2 Analysis of interactions between uses

The analysis of the conflicts that emerged from the bibliographic analysis of all sources consulted, completed with the analysis of the essential uses maps (Phase 1 of the Plan) and with the information derived from the consultation of sector and maritime area experts, are reported in the matrix of Figure 11. The matrix makes it possible to highlight the interactions between pairs of uses present in the "Tyrrhenian-Western Mediterranean" maritime area. The documented and expected presence of interactions (conflicts or synergies) is indicated by the presence of numbers that refer to an analytical reading of the information available, reported in detail in Annex 1 of Chapter 4 (Phase 2) of the extended version of the Plan, which analyses the main interactions between uses and between uses and the environment. On the basis of the sector trends (Step 1) it is also represented by symbols ($\uparrow \leftrightarrow \downarrow$) whether for each interaction an increase in intensity, a decrease or a substantial stability of the same can be expected. For some combinations of uses, the presence of actual conflict or synergy could not be identified. In this case, the cells are empty but retain the expected compatibility information from the theoretical matrix (colour). This may mean that the interaction is in fact absent (as the two uses do not overlap in space or time so they do not interact) or that there is no adequate information qualifying and describing the interaction.



	Transport	Tourism	Production of Energy-	Routes for submarine cables and pipelines	Aquaculture-mollusc far ming	Aquaculture-pisciculture	Fishing-Trawl	Stationary fishing gear	Small-scale coastal fishing	Temporary military use	Permanent military use	Extraction of raw materials	Nature and species conservation sites and protected areas	Underwater cultural heritage	Energy production from renewable sources	Scientific research
Transport	† 2, 4															
Tourism	↑5	†17. 26														
Energy Production - Hydrocarbons	1 36											2				
Routes for submarine cables and pipelines																
Aquaculture-mollusc farming	1 35	<u>↑6, 33</u>														
Aquaculture-pisciculture	1€35	个7, 33														
Fishing-Trawl	↑3, 3 0			⇔34	† 8											
Stationary fishing gear	↑3, 30				18											
Small-scale coastal fishing	↑3, 30	15, 21, 25			18		⇔24		↔16							
Temporary military use	438				↓28	↓28	↓28	↓28	↓28							
Permanent military use																
Extraction of raw materials	↔39						↓40	↓ 40	↓40							
Nature and species conservation sites and protected areas	↑1, 3 1	↑20, 22, 23, 32			1737	↑37	↑12, 18		↑11, 19	† 27	↑27					
Underwater cultural heritage																
Energy production from renewable sources	↑29															
Scientific research																

Figure 11 Matrix of interactions for the Tyrrhenian and Western Mediterranean maritime area. Red = conflict experienced in the maritime area; Yellow = conflict reported as possible/potential or simultaneous presence of possible synergies and conflicts or substantial coexistence between uses in the maritime area; Green = synergy experienced in the maritime area. Brighter colours indicate types of interaction different from what is expected according to the analysis of the theoretical matrix. The numbers reported refer to the detailed information reported in Annex 1 (see Annex 1_Tirreno_Western Mediterranean.xls)

A graphic synthesis of what has been obtained from the analysis of the overall cognitive framework and what has been summarized in Figure 11 is represented in Figure 12 (a, b, c, d) which provides a simplified representation of the main interactions between multiple maritime uses (thus considering the co-presence of more than two uses in the same area) in terms of location (marine areas where interaction mainly occurs on the basis of the information collected) and type of interaction (synergy or conflict).

This is a simplification of all the possible interactions between uses. Moreover, since this is a graphic elaboration and not a real mapping of the uses (reported instead in Phase 1), the shapes represented indicate general macro-areas (e.g. North Adriatic area, port areas, gas platform development area, etc.) but do not delimit precise geographical boundaries in a geo-referable way. As far as the nature conservation sites are concerned, the graphical representation highlights only the cases of possible synergy with the other uses of the sea, referring, for what concerns the negative interactions, to what is summarized in the section 5.2.



On the basis of the available information, it emerges how the Tuscan archipelago is characterised by a high overlapping of uses, being an area in which there is space for fishing (which extends further away from the coast than the rest of the maritime area), maritime transport (of different types) and environmental protection, with the presence of the marine protected area of the Tuscan archipelago. Other areas with significant interaction are those of the Strait of Bonifacio and the Pelagos Sanctuary, which are mainly characterised by the interaction between maritime transport and the various forms of environmental protection present along the coasts. As in the case of the other maritime areas, other areas of potential interest for conflicts are the port areas, where multiple traffic routes converge and which, in the case of the Tyrrhenian coast, are often located in areas of high environmental value that require forms of protection. On the other hand, the presence of several protected marine areas and the diffusion of small-scale fishing are elements that favour the development of synergies with sustainable tourism in extended coastal stretches of the maritime area.





Figure 12 (a) Graphic representation of synthesis on a map of the main interactions between uses in the maritime area of the Tyrrhenian Sea and Western Mediterranean (Table 1). The boundaries of the represented forms do not correspond to precise geographical references but graphically identify generic macro-areas of analysis



TABLE OF INTERACTIONS 1







MARITIME TRANSPORT

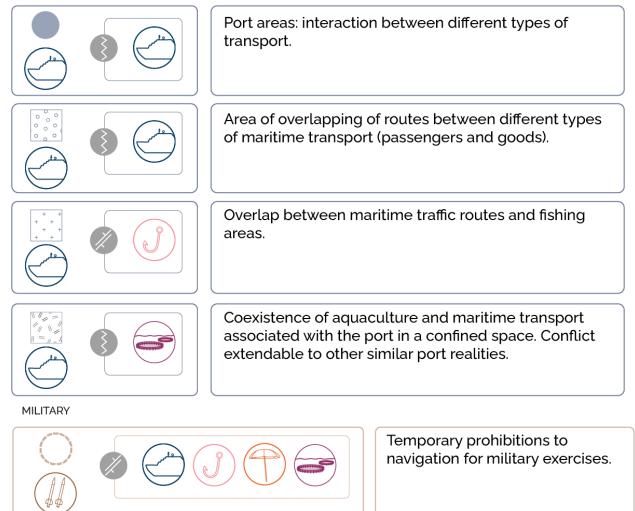


Figure 12 (b) Meaning of the interactions reported in the map of Table 1 for the maritime area of the Tyrrhenian Sea and Western Mediterranean. "<u>Conflict</u>" means conflict experienced or expected in the maritime area; "<u>Potential</u> <u>conflict/synergy</u>" means conflict reported as possible/potential or simultaneous presence of possible synergies and conflicts or substantial coexistence between uses in the maritime area; "<u>Synergy</u>" means synergy experienced or expected in the maritime area





Figure 12 (c) Graphic representation of synthesis on a map of the main interactions between uses in the maritime area of the Tyrrhenian Sea and Western Mediterranean (Table 2). The boundaries of the represented forms do not correspond to precise geographical references but graphically identify generic macro-areas of analysis



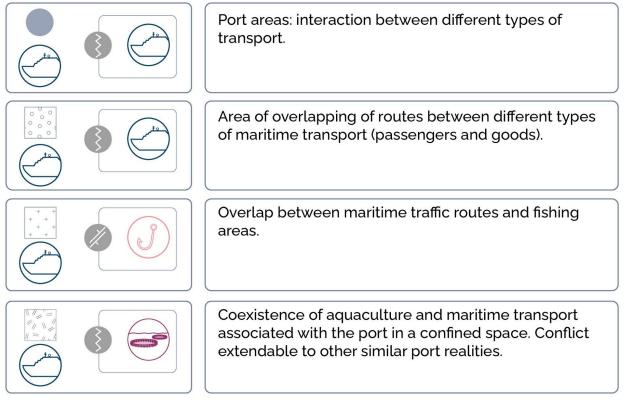
TABLE OF INTERACTIONS 2





Synergy

MARITIME TRANSPORT



MILITARY



Temporary prohibitions to navigation for military exercises.



TABLE OF INTERACTIONS 2







TOURISM



Forms of ecotourism between tourism and small-scale fishing, tourism and nature conservation sites, tourism and aquaculture.

SAND EXTRACTION



Interactions between extraction from sea sand quarries and transport (during collection) and fishing (during and after collection).

Figure 12 (d) Meaning of the interactions reported in the map of Table 2 for the maritime area of the Tyrrhenian Sea and Western Mediterranean. "<u>Conflict</u>" means conflict experienced or expected in the maritime area; "<u>Potential</u> <u>conflict/synergy</u>" means conflict reported as possible/potential or simultaneous presence of possible synergies and conflicts or substantial coexistence between uses in the maritime area; "<u>Synergy</u>" means synergy experienced or expected in the maritime area



5.2 Analysis of interaction between uses and environment

5.2.1 Analysis methodology

The analysis of the interactions between uses and environmental components aims to operationalise the principles of the ecosystem approach within marine plans. In particular, the analysis aims to analyse the potential negative effects on environmental components and more generally on the marine environment deriving from human uses. The analysis also aims to highlight the benefits of maintaining the marine environment in good condition in order to support the achievement of good environmental status under the Marine Strategy.

The analysis of interactions between uses and the environment was divided into two parts.

The first part of the analysis aims to identify potential pressures and benefits arising from areas of environmental protection value already established or defined through national or international processes as defined by environmental and marine protection policies. In Part 1, the areas with environmental protection value that have already been officially established or recognised by the competent national bodies (e.g., Marine Protected Areas), or by international bodies (e.g., Pelagos, Ecologically and Biologically Significant Areas) for the three maritime areas were highlighted. For these areas, the potential negative effects arising from human uses and also the benefits arising from the areas themselves for communities and economic activities were highlighted. This part was elaborated with reference to the national institutional information sources of MITE, ISPRA, MIPAAF, and products related to the institutional activities and implementation of the Habitats, Birds, and MSFD Directives, and to the international institutional sources implementing international and regional environmental protection policies (e.g., ACCOBAMS, GFCM, UNEP, Barcelona Convention, CBD). Each identified area is assigned an identification code (T. Tyrrhenian and Western Mediterranean, I. Ionian and Central Mediterranean, A. Adriatic) and an identification number. The areas were then identified on a specific map (Figure 13). The location of the areas is indicative of the presence of environmental components with naturalistic value, but has no normative, legal or binding value.

The analysis is carried out for each area by identifying and describing the following aspects:

<u>Conservation priorities and environmental values:</u> areas with environmental protection value are identified, linked to the presence of priority species or habitats according to the different legislative sources, or environmental values of importance for the series of goods and ecosystem services that these areas can offer;

<u>Potential positive or negative interactions resulting from anthropogenic uses</u>: In the same areas where specific environmental values are defined, present or potential uses and related anthropogenic pressures that may impact on environmental components are identified. The qualitative and where possible spatially explicit analysis is done through the use of different tools and information sources, as below:

 analysis of environmental issues and potential sources of pressures deriving from studies and reports produced by the Ministry of Environment and ISPRA and other national and international Institutions within the framework of regional, European and national policies for the conservation and protection of the sea, e.g. MSFD, Habitats Directive, Birds Directive, implementation of the EU Biodiversity Strategy and Natural Capital, protection of fishery resources and implementation of GFCM fishing policies;



- through analysis of scientific literature and other literature (e.g. reports from studies supporting plans and projects and from European projects) specific to the individual areas.

<u>Benefits:</u> In this part, an attempt will be made to identify in the various identified areas and settings a range of existing and potential environmental benefits arising from the environmental components/processes and ecological structures mentioned in Part 1 that could be lost in the event of adverse impacts from anthropogenic uses (Part 2). Reference is made to the benefits that structures and functions mentioned in Step 1 can provide to multiple beneficiaries in qualitative terms, and where possible, in quantitative terms, based on sources and best available knowledge.

The second part of the analysis aims to highlight the elements or issues of attention that have been taken into account as a knowledge base on the relationships between uses and the environment in the phase of defining the planning units and their vocations for controlling pressures from anthropogenic uses. The planning activity developed in Phase 4 is informed by these elements of attention, in accordance with the principles of the ecosystem approach set out in the Directive and Guidelines and beyond the system of protected areas currently in place. The analysis in Part 2 follows the structure of the Marine Strategy descriptors, and reports on the elements of potential pressure with adverse effects and drivers of pressures from anthropogenic uses on environmental components represented through the MSFD descriptors. Part 2 also reports other analysis and information on topics relevant to assessing use-environment interactions (e.g. cumulative impacts, ecosystem services, deep sea environments, climate change).

The scale of analysis used takes into account the purpose of Phase 2 of the Plan construction process. That is, it is a matter of producing the necessary knowledge on the interactions between uses and the environment in order to support the process of defining the vocation areas of the sub-areas and related planning units at the strategic level, without therefore going into detail on the values of habitats or ecosystems at the local scale. The analysis takes place at the scale of sub-areas and planning units as a whole, in order to define the macro-questions that need to be taken into account for the various sub-areas during Phase 4 of the plan process.

The areas of environmental protection value already officially established or recognized by the competent national bodies (e.g., Marine Protected Areas), or by international bodies (e.g., Pelagos, Ecologically and Biologically Significant Areas) for the three maritime areas are represented in Figure 13. In the extended Phase 2 analysis, for each of these areas, the potential negative effects of human uses were highlighted, as well as the benefits that result from the areas to communities and economic activities.



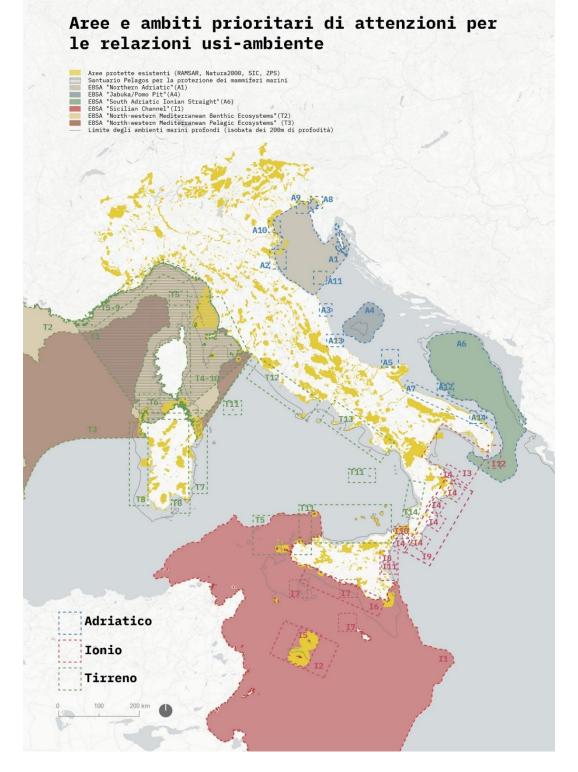


Figure 13 Priority areas and areas of attention for the use-environment relations. The areas are identified through alphanumeric codes, A= Adriatic Sea Area, I= Ionian and Central Mediterranean Sea Area, T= Tyrrhenian and Western Mediterranean Sea Area; EBSA = Ecologically or Biologically Significant Marine Areas.



6 Phase 3 - Vision and strategic objectives

6.1 Introduction

The definition of strategic objectives and a Vision that expresses them in an integrated and forward-looking manner is one of the fundamental steps in the process of constructing the Maritime Spatial Plans (MSP) of the three Maritime Areas. The Vision represents at the same time the synthesis of the strategic objectives of the Plan and a reference statement to define in a more precise way the objectives themselves that with their achievement allow the Vision to be implemented.

The objectives identified in this chapter are high level objectives, referring to the national and supranational dimension, and are common to the three maritime areas covered by the Plans. The identification of specific objectives for the individual sub-areas is reported in the respective paragraphs of Section 7.3. These specific objectives have been developed in coherence with the strategic objectives identified in this chapter and are preparatory to the definition of the Planning Units in each sub-area and the related vocations and measures of the Plan.

The identification of the vision and the strategic objectives for the three maritime areas was carried out *first* of all on the basis of the existing strategies, plans and regulations at an international, European and national level, concerning both environmental, landscape and cultural heritage aspects and socio-economic aspects linked to the needs of the various sectors. In this sense, the objectives indicated by the Marine Strategy to achieve GES ("Good Environmental Status") are central. In fact, the Guidelines for the management of the Maritime Space (DPCM 1 December 2017) indicate the ecosystem approach as a fundamental tool for the proper development of Maritime Spatial Planning. The ecosystem approach plays in this sense a bridging role between MSP and the implementation of Marine Strategies. Moreover, the paradigm of sustainable development, declined in the "Agenda 2030 on Sustainable Development" of the United Nations (2015) and in the 17 Sustainable Development Goals - SDGs to be achieved by 2030, is considered superordinate and transversal to all the objectives of the Plan, in line with the principles and objectives of the National Strategy for Sustainable Development.

For the systematic collection of planning objectives by macro-theme or macro-sector deriving from the instruments in force at a transnational (EU and non-EU) and national level, Annex 4 of the National Guidelines on Maritime Spatial Planning was used as the main reference. Consequently, the collection is structured in the following 12 themes/sectors:

- Sustainable development
- Environmental protection and natural resources
- Landscape and cultural heritage
- Maritime safety, navigation and surveillance
- Fishing
- Aquaculture



- Maritime transport and ports
- Exploration and extraction of minerals and hydrocarbons
- Energy
- Coastal defence, flood protection, seabed morphology restoration
- Coastal and maritime tourism
- Scientific research and innovation

For the identification of the strategic objectives, the 12 themes/sectors indicated above have been reduced to 11, presenting in an integrated way the objectives related to the Energy themes.

The themes of "Sustainable Development", "Environmental Protection and Natural Resources" and "Landscape and Cultural Heritage" are transversal and superordinate principles to all the objectives of the Plan. The themes "Environmental protection and natural resources" and "Landscape and cultural heritage" are also considered as specific uses of the sea and in this sense used in Phase 4 of planning.

The methodology of the Plan gives prevalence and ubiquity to the objectives that decline the three transversal principles but does not provide for an explicit ranking of priorities of the various strategic objectives, leaving the modulation of the sector objectives to the characteristics of the various areas.

The strategic objectives constitute, individually and as a whole:

- A <u>summary of</u> what is contained in the many existing strategies, plans and reference standards;
- A <u>focus</u> on what is required and desired for the MSP Plans, trying to identify and indicate what each theme/sector primarily pours into the Plans (sector objectives of particular relevance to the Plans, because of their spatial declination or their general relevance) and what it asks of the Plans (sector objectives to the achievement of which the Plans are expected to make a relevant contribution).
- An indication of <u>greater or lesser importance than is indicated</u> more broadly in the guidance documents considered, where not a real priority.

These strategic objectives, as well as the specific objectives at the sub-area scale, also directed the definition of the set of indicators of an environmental, socio-economic and governance nature, which led to the definition of the monitoring system of the Plans as part of Phase 5 of the Plan process.

6.2 Strategic objectives by theme/sector

The synthesis of the reference documents and their projection in Vision and Strategic Objectives was carried out by the Technical Committee, in which the five main Ministries with competence on the sea and the 15 Maritime Regions are represented.



The 42 strategic objectives identified are summarised in Table 2 and constitute a unitary and integrated *corpus* that contributes to forming a Vision for the development of the three maritime areas and, specifically, of the "Tyrrhenian-Western Mediterranean" maritime area.

Sustainable Development and the objectives into which it is declined, represents the paradigm of the development strategy of the maritime areas identified in the Plan. With reference to this paradigm, the objectives of the individual sectors are identified, considering the transversal nature of environmental protection and cultural heritage. The objectives identified are as a whole referable to a series of *transversal principles* that constitute the elements of reference for the Vision. These principles are identified in purple in the graphic of Figure 14 which also includes the various themes/sectors/uses considered. The Vision that derives from principles and objectives is described in the paragraph 6.3.

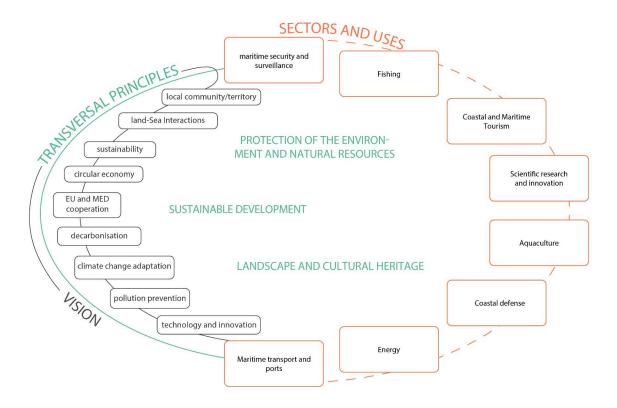


Figure 14 Principles that underpin the desired development of the maritime sectors and generate the Vision for the Plan.



Table 2 Strategic objectives of the Plan.

	THEMES/SECTO RS/USES	Code	OBJECTIVES
Transversal	Sustainable	OS_SS 01	Developing a sustainable marine economy, multiplying growth opportunities for marine and maritime sectors
principles	development	OS_SS 02	Contribute to the National Strategy for Sustainable Development
		OS_SS 03	Contributing to the European Green Deal
		OS_SS 04	Fully grasp the economic and environmental sustainability opportunities arising from the circular economy
	Environmental	OS_N 01	Apply a consistent Ecosystem Based Approach (EBA) at all stages of drafting Maritime Spatial Plans
	protection and	OS_N 02	Supporting the extension of EU marine protection to 30% by 2030
	natural resources	OS_N 03	Transpose and promote the implementation of the main space measures foreseen in the MSFD Program of Measures
		OS_N 04	Integration of land-sea interaction aspects and integrated management of the coastal strip, with particular reference to environmental aspects
		OS_N 05	Take into account in the medium - long term the process and objectives of marine ecosystem restoration as outlined in the proposed European Law on Environmental Restoration
	Landscape and cultural	OS_PPC 01	Support the landscape value of the coastal strip
		OS_PPC 02	Encourage the recovery and redevelopment of buildings and areas subject to protection
	heritage	OS_PPC 03	Promote and support the conservation of underwater archaeological heritage
		OS_PPC 04	Promoting regional and international cooperation in the field
		OS_PPC 05	Promoting and creating awareness on intangible cultural heritage
		OS_PPC 06	Combating unauthorised building in coastal areas
Sectors/Use	Maritime	OS_S 01	Preventing pollution from ships and contributing to the implementation of the measures of the Marpol Convention
s	safety,	OS_S 02	Help promote maritime safety, the implementation of UNCLOS standards and the EU Maritime Safety Strategy
	navigation and surveillance		
	Fishing	OS_P 01	Sustainable development of the fisheries sector
		OS_P 02	Implementation of European and National Multiannual Management Plans in Geographical Sub-Areas (GSA)
		OS_P 03	Promotion, development and spatial management of small-scale coastal fishing using sustainable techniques



	HEMES/SECTO S/USES	Code	OBJECTIVES			
		OS_P 04	Promote the creation of areas for the recovery and protection of fish stocks and protection of Essential Fish Habitats (EFH)			
		OS_P 05	To encourage cooperation among States in order to achieve concerted measures for the sustainable management of the activities of their national fisheries sectors.			
	OS_P 06		Monitoring and combating illegal fishing			
A	quaculture	OS_A 01	Promoting the sustainable growth of the aquaculture sector			
		OS_A 02	Promoting quality aquaculture and supporting the process of establishing AZAs (Allocated Zones for Aquaculture)			
M	/laritime	OS_TM 01	Promoting the sustainable development of maritime transport and reducing its negative impacts			
	ransport and orts	OS_TM 02	Promoting the use of alternative fuels, reducing discharges into the sea, improving port facilities for the collection of waste and cargo residues and/or encouraging the use of such facilities, improving the management of dredged sediments			
		OS_TM 03	Promoting European and regional cooperation on maritime transport and multimodality			
	·	OS_TM 04	Contribute to increasing the competitiveness of Italian ports, the sharing of "best practices" and the implementation of the National Strategic Plan for Ports and Logistics (PSNPL)			
		OS_TM 05	Promote the integration and dialogue between existing planning systems in particular regarding the integration of port strategic planning, land planning and sea plans			
Er	nergy	OS_E 01	To contribute to the energy transition towards renewable and low-emission sources through the development of offshore renewable energy production			
		OS_E 02	Pursue the environmental, social and economic sustainability of offshore hydrocarbon prospection, exploration and production activities			
		OS_E 03	Promote the conversion of platforms and infrastructure associated with depleted fields and synergies between compatible maritime activities			
		OS_E 04	Promoting European and regional energy cooperation			
		OS_E 05	Promoting the planning of suitable areas for CO capture and geological storage 2			
Co	oastal defence	OS_DC 01	Promote the development, harmonization and implementation of strategies and measures to protect the coastline and combat erosion foreseen in the Flood Risk Management Plans drawn up at the scale of the Hydrographic District in compliance with the provisions of the Floods Directive (2007/60/EC) and in the Coastal Plans / Integrated Coastal Zone Management Plans prepared by many regions			



THEMES/SEC RS/USES	то	Code	OBJECTIVES
		OS_DC 02	Ensure the best coherence between the uses and vocations of sea use foreseen in the MSP Plans and coastal uses, with reference to their safeguard in a scenario of necessary adaptation to ongoing climate change
		OS_DC 03	Consider and adequately address the issue of the use and protection of underwater sand for beach nourishment, to be considered as a strategic resource for coastal defence and adaptation plans
Coastal a	and	OS_T 01	Promoting sustainable forms of coastal and maritime tourism
maritime		OS_T 02	Promoting coherent planning actions on land and sea, also for tourism purposes
tourism		OS_T 03	To contribute to the diversification of tourist products and services and to counter the seasonality of demand for inland, coastal and maritime tourism
Scientific research	and	OS_RI 01	Target marine research activities on the knowledge needs of the Plan to strengthen and support the planning process and its sustainable growth objectives
innovation		OS_RI 02	To encourage the development of technologies and innovative solutions to be used to improve the effectiveness of the Plan and to promote their dissemination in the various sectors of the marine economy and in the various marine areas
		OS_RI 03	Support the maintenance and consolidation of the observation network and specific needs for experimentation and research, also in order to evaluate the effects and effectiveness of the Plan and support its updating



6.3 Vision

The vision reported below represents a synthesis of the key concepts expressed by the strategic objectives referred to the transversal principles and sectors. This synthesis has been built through the comparison between the stakeholders represented in the Technical Committee, i.e. the five Ministries with competence on the sea and the 15 maritime Regions.

The sea and its resources represent a fundamental and indispensable opportunity for growth and development for the entire country. The development strategy of maritime activities in the (Tyrrhenian Sea and Western Mediterranean / Ionian Sea and Central Mediterranean / Adriatic) is hinged on the Sustainable Development Goals (SDGs), identified by the National Strategy for Sustainable Development and the 2030 Agenda. The development strategy of maritime activities has as its objective the growth and balanced development of maritime sectors, both mature and emerging, in the medium to long term, in ways that ensure the achievement and maintenance of the good ecological status of the sea, enhancing the vocation of the territories and the welfare of coastal communities and the entire national community. In this perspective, the contribution to the energy decarbonisation of the country, to the fight and adaptation to climate change and to the European Green Deal and its blue declination in the EU Strategy on Sustainable Blue Economy is a priority. Maritime activities are reorganized in relation to the principles of circular economy, fully exploiting the economic potential that derives from these practices, in a framework of transnational cooperation within the Mediterranean.

The freedom of the sea and the safety of maritime lines of communication represent an existential interest for Italy, which actively contributes to stability and the fight against illegal activities in the Mediterranean.

In the fight against marine pollution, all maritime sectors - transport, offshore activities, fisheries, aquaculture and tourism in particular - are directly involved in the reduction of polluting emissions into the air and water, and in the dispersal of waste at sea and the introduction of alien species. Biodiversity, landscape and cultural heritage, both coastal and submerged, are common assets to be protected and preserved in their own right, but also as an indispensable resource for the tourism sector.

The development of renewable energies at sea is supported and accelerated, in line with European and national objectives of decarbonisation and energy transition. Fisheries and aquaculture are developed in a sustainable and efficient way, pursuing a sustainable use of fishery resources, with the objective of protecting and restoring stocks and promoting the development of small-scale fisheries, also in synergy with other sectors (e.g. tourism, food and wine, local distribution chains, processing industry), in order to increase the product value chain. The opportunities offered by marine biotechnology sectors are being fully exploited. Coastal and maritime tourism is being developed in a sustainable way, compatible with the needs of the territories and communities in which it is practised, making it a model of excellence in the Mediterranean and beyond.

Marine and maritime activities are planned and managed in an integrated and coordinated way with those on land, guaranteeing ecological continuity and compatibility of uses between land and sea, also with



reference to the urgency dictated by the need to adapt to climate change, resolving or minimizing the criticalities generated by land-sea interactions and exploiting the synergies.

For all maritime sectors, dialogue, cooperation and coordination with other European and Mediterranean countries are essential, first and foremost on safety issues, but also in relation to the integration of energy, transport, telecommunications, industry and trade networks, for the purposes of managing fishery resources and protecting species and ecosystems, as well as for the purposes of knowledge of the sea, scientific research and the transfer of the results of technological innovation.



7 Phase 4 - Strategic planning a

7.1 Definition of sub-areas

The definition of the sub-areas of the subject maritime area was identified using the following criteria:

- jurisdictional boundaries, where defined (12mn limits, existing agreements about the continental shelf)
- regional administrative limits
- perimeters of the geographical sub-areas of fishing (FAO-GFCM GSAs)
- Ecological Protection Zones

The regional administrative boundaries were considered in order to identify, wherever possible, portions of the maritime space of the territorial waters falling under the jurisdiction of a single region. With the exception of the sub-area adjacent to the coasts of the Campania Region and the Basilicata Region which was considered as a single sub-area.

The need to maintain the integrity of the Geographical Sub-Areas of Fisheries (GSAs) has been considered in order not to interfere, but rather to reinforce the measures taken at the level of the sector, complementing them with those relating to other uses of the sea.

The offshore sub-areas have instead been identified according to the boundaries of the Ecological Protection Zones (EPZ D.P.R. 27/10/2011 n. 209) and with the agreements in place about the continental shelf.

In the Figure 15 Definizione delle sub-aree dell'area marittima Tirreno – Mediterraneo occidentale is represented the zoning that identifies 7 sub-areas in territorial waters (MO/1-MO/7) and 4 sub-areas in continental shelf areas (MO/8 - MO/11), as specified below.

- MO/1 Territorial waters Liguria
- MO/2 Territorial waters Tuscany
- MO/3 Territorial waters Lazio
- MO/4 Territorial waters of Campania and Basilicata
- MO/5 Territorial waters Calabria
- MO/6 Territorial waters Sicily
- MO/7 Territorial waters Sardinia
- MO/8 EPZ Ligurian Sea
- MO/9 Northern Tyrrhenian EPZ
- MO/10 Continental Shelf and Southern and Eastern Tyrrhenian EPZ
- MO/11 Continental Shelf and Tyrrhenian-Western and Western Sardinia EPZs





Figure 15 Definition of the sub-areas of the Tyrrhenian-Western Mediterranean maritime area



7.2 Overall planning framework

7.2.1 Integrated vision of maritime area

The strategy for the development of maritime activities in the Tyrrhenian Sea and Western Mediterranean hinges on the Sustainable Development Goals (SDGs), identified by the National Strategy for Sustainable Development and the 2030 Agenda. The plan recognizes that the maritime economy (the so-called Blue Economy) has the potential for a strategic economic and social development of the area and therefore considers it necessary to support in a synergistic and harmonious way the consolidation of all sectors involved in the sustainable economy of the sea, from the traditional ones, such as tourism (seaside, recreational and cruise tourism), transport, logistics, fishing, aquaculture, to the emerging ones, such as energy from renewable sources and blue biotechnology. Maritime activities are reorganized in relation to the principles of the circular economy, fully exploiting the economic potential arising from these practices, in a framework of transnational cooperation within the Mediterranean. The area is characterized by a large number of marine protected areas, parks and Natura 2000 sites, and the protection of the great diversity of the natural, landscape and cultural heritage of the coastal and marine space in the area is the cornerstone for sustainable development. These elements are of absolute importance for the development of tourism, which is mainly based on the natural, landscape and cultural heritage. This priority, which is strategic for the maritime area, must be pursued in a sustainable manner, limiting the impact of infrastructure and related activities, and allowing regions to base a significant part of their economic and employment development on the sea. The plan recognizes the importance of the sustainable development of the ichthyic supply chains in the area, interested by important and historical marineries, pursuing the sustainability of fishing in accordance with what is foreseen by the plans of the sector, recognizing the economic and socio-cultural importance of artisanal fishing, and favouring the sustainable development of aquaculture activities in suitable areas and with ecologically sustainable processes. The area includes port hubs of absolute importance in the Mediterranean context and is widely crossed by national and international routes, for both commercial and passenger transport, which ensure territorial continuity with the major and minor islands and support tourism. A rational and efficient transport organization, based on energy efficient ports, able to share space with other sectors, and to give due consideration to the interaction between maritime transport and the protection of habitats and species seems to be of absolute priority.

The above integrated vision, described in more detail below (par. 7.2.2) for the different transversal themes and sectors of use and for the different sub-areas is expressed and spatially represented in the Figure 16, which shows the set of defined Planning Units and the relative typologies and vocations. The Figure 17 offers an integrated representation of the characterizing elements of the Plan in the area: main uses, sub-areas and planning units, vocations, described on the basis of typology, sector, number and coexistence.



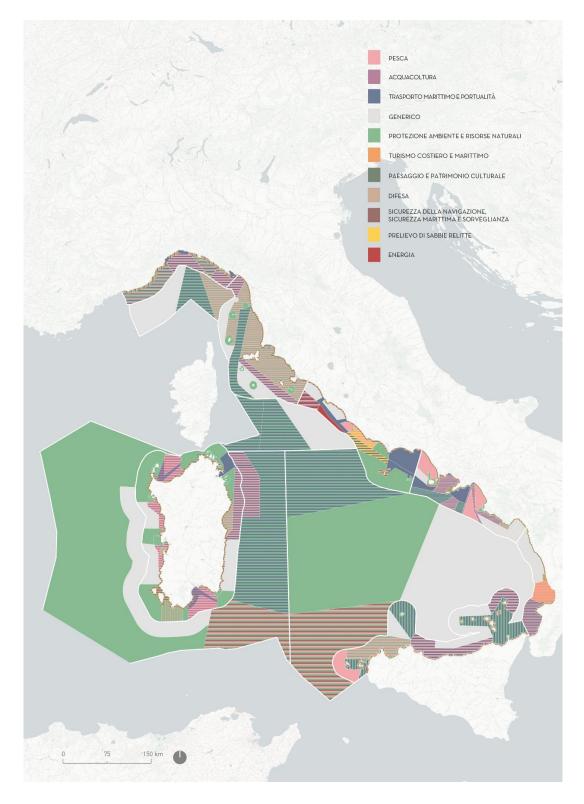


Figure 16 Tyrrhenian-Western Mediterranean Maritime Area Planning Unit.



7.2.2 Objectives and main sector choices of the plan for the maritime area

Sustainable development

The development strategy of maritime activities in the Tyrrhenian Sea and Western Mediterranean is hinged on the Sustainable Development Goals (SDGs), identified by the National Strategy for Sustainable Development and the 2030 Agenda. The plan recognizes the Blue Economy's potential for strategic economic and social development and therefore considers it necessary to support in a synergistic and harmonious way the consolidation of all sectors involved in the sustainable economy of the sea, from the traditional ones, such as tourism (seaside, recreational and cruise tourism), transport, logistics, fishing and aquaculture, to the emerging ones, such as energy from renewable sources and blue biotechnology. The objectives identified for the maritime area aim to encourage the use of environmentally friendly materials within the maritime space, and to promote the circular economy linked to waste from the sea and from ports. Particular relevance is given to the encouragement of paths to optimize the collection and disposal of *marine litter*, through the implementation of methodologies for the collection.

Environmental protection and natural resources

The plan choices for the Tyrrhenian and Western Mediterranean maritime area incorporate the primary importance of biodiversity conservation and natural capital, promoting the usability and sustainable management of protected areas. The specific objectives define as a priority the achievement and maintenance of environmental objectives arising from the Marine Strategy Framework Directive (2008/56/EC) and the Water Framework Directive (2000/60/EC). The marine protected areas established and in the process of being established are enhanced, defining in many cases specific PUs for limited use "Environment and Natural Resources Protection", and coinciding with the perimeter of the marine protected area itself. In the portions affected by the presence of Marine Protected Areas, other uses are allowed within the limits and under the conditions foreseen in the regulatory and planning acts of the manager. The system of sites belonging to the Natura 2000 network in existence and in the process of being established, according to the Habitats Directive (1992/43/CE) is punctually enhanced, defining in some areas the most important sites in the sea for posidonia and reefs (habitats 1120 and 1170). The presence of Natura 2000 sites insisting on the coastline and with portions at sea has been largely enhanced through the definition of a priority "landscape and cultural heritage". This attention has been extended to some sites located in offshore PUs and characterized by the presence of habitat 1170. Deep-sea habitats are taken into account, with particular reference to bathymetrics above 1000m, also in consideration of the limitations imposed on fishing activity, which prohibited the use of trawl nets and towed dredges in accordance with recommendation GFCM/29/2005/1. In accordance with the objective of integration of ecological corridors at European level, the plan choices have paid particular attention to the connection between neighbouring areas. The area of high value for the protection of the environment and natural resources of the Strait of Messina, where there are Natura 2000 sites on land and at sea of great relevance for the conservation of avifauna located on the border between the sub-areas MO/5 and MO/6 and with the Ionian and Central Mediterranean Maritime area, has been considered in a coordinated way, focusing on the protection of the environment and natural resources as a priority theme alongside transport. At the same level, special



attention has been paid to the conservation values of the Tuscan, Ponziane, Aeolian and Egadi archipelagos, identifying a priority "Environmental protection and natural resources" around and close to them. Important elements of habitat and species protection are enhanced, such as the ecological protection zones of the north-western Mediterranean, the Ligurian Sea and the Tyrrhenian Sea (EPZ), the Pelagos Sanctuary for Marine Mammals, established according to the Pelagos Agreement (1999), the North-western Mediterranean Pelagic and Benthic Ecosystems EBSA, established by the Convention on Biological Diversity to protect the great diversity of benthic habitats, large pelagic species, marine mammals and *Caretta caretta*.

Landscape and cultural heritage

The integration of the elements of landscape planning and protection and enhancement of cultural heritage within Tyrrhenian maritime spatial planning is of primary importance for all the coastal sub-areas of which the area is composed. For this reason, a long process of meetings has been undertaken with the proactive involvement of the SABAPs for each coastal region. The important contribution given has allowed to reconstruct the national cognitive framework of landscape assets, cultural assets along the coast and submerged assets and to enhance it together with the Regions during the definition of the planning choices for the respective sub-areas.

The two reference planning tools defined by Legislative Decree 201/2016 and Legislative Decree 42/2004 and the strategic objectives identified in Operational Phase 3 of the MSP have been transposed and explicitly integrated in the different Regional realities through an executive process that has allowed the convergence of landscape and cultural prescriptions within the maritime planning process.

On the one hand the landscape and cultural heritage of the coastal and marine space is a prerequisite highlighted in the regional vision, on the other hand it is reflected in the declination of the specific objectives and in the Planning Units. With reference to the specific objectives, the Tyrrhenian Regions contribute to enhancing and guaranteeing the aesthetic perceptive structure of the landscape, promoting relationships of reciprocity and complementarity between inland, coastal and submarine landscapes capable of developing land-sea interaction. They also favour interventions of valorisation and protection and the recovery of assets with a high historical-architectural value, encouraging a network of assets belonging to the coastal maritime heritage. Even if refunctionalised for tourism and/or cultural purposes, the objective is that the interventions contribute to the conservation of their value as historical testimony and promote the environmental culture of the sea and navigation.

The important landscape and cultural heritage vocation of the coastal PUs of all the Tyrrhenian regions is highlighted, with particular reference to the strip within one nautical mile from the coastline. In order to implement its effectiveness, the coastal buffer undergoes interruptions in conjunction with port entrances or where there is the presence of marine protected areas with their own management plan and related measures.



However, it should be pointed out that these areas are conditioned and shared with a "maritime and coastal tourism use", but it is precisely through a dual priority that a synergy between the two respective uses can be guaranteed.

Maritime safety, navigation and surveillance

In the Tyrrhenian and Western Mediterranean area, the theme of safety takes on two main forms, as a direct consequence of the strategic objectives of the plan on the subject. Safety concerns the issues of control and limitation of accidental and deliberate release of hydrocarbons and other hazardous substances into the sea, within the framework of international and European policies (Marpol 73/78 Convention and Directive 2005/35/EC). This aspect represents an important element in the PUs insisting on the Straits of Bonifacio and Messina, where recommended pilotage is envisaged and IMO traffic separation schemes are in place. In particular, the plan aims to contribute to navigational safety and environmental protection by promoting the introduction of mandatory pilotage in the Bocche di Bonifacio sea area. With regard to safety, the plan focuses on compliance with the international conventions for the safety of human life at sea (SOLAS) and search and rescue at sea (SAR). These areas represent important elements in the Southern Tyrrhenian UPs, with particular reference to offshore sub-areas.

Fishing

In line with the objective of favouring a sustainable development of the ichthyic supply chain, and in order to guarantee growth and employment in the sector, the plan acknowledges in the Tyrrhenian and Western Mediterranean maritime area the choices of the multi-annual fishery management plans, as main planning tools to guarantee the overall sustainability of the activity. The subdivision into sub-geographical areas (GSA 9, 10 and 11) proposed by FAO-GFCM and adopted in the multiannual fishery management plans has been one of the references for the subdivision of the portion of offshore waters into maritime sub-areas. At the territorial waters level, fishing activity is well represented in all sub-areas, in line with the information reported by the essential map 5 presented in phase 1 of the plan.

The plan recognizes the importance of small-scale fishing and artisanal fishing throughout the Tyrrhenian and Western Mediterranean maritime area, and widely detects its presence in the coastal UPs, with reference to the main marinas involved, in relation to the "other systems" management plans of the GSA9, 10 and 11 involved, highlighting priorities and specificities at the level of the individual regions. To this end, the plan makes use of the information provided by the regional offices, when available, as a complement to the essential map n°5 of phase 1. The importance of the development and sustainable spatial management of small-scale fisheries has been addressed through the definition of measures at national level, also with reference to the relationships between these activities and the objectives for the protection of the seas (Natura 2000 network, National and Regional Parks, etc.). The aspects of multifunctionality and integration with other sectors (tourism, food and wine, processing, quality supply chains) and the enhancement of the product are mentioned, with important positive indirect effects such as the promotion of species. The plan takes into due consideration the areas aimed at the reconstitution and protection of ichthyic stocks, as foreseen by the multi-annual plans of fishery management, with particular reference to the national and



regional ZTB. With reference to this issue, the areas characterized by bathymetry higher than 1000m, where the use of trawl nets and towed dredges is prohibited in accordance with the recommendation GFCM/29/2005/1, are reported. Finally, with the aim of improving the sustainability of the supply chain, the objectives of the plan indicate the importance of encouraging the fishing fleet to comply with the regulations on emission limitations imposed by the IMO.

<u>Aquaculture</u>

The choices of the plan highlight the importance of the aquaculture sector in the Tyrrhenian Sea and Western Mediterranean, with particular reference to fish farming, an activity that currently characterises production in the Tyrrhenian area, but looking with interest at the prospects of market diversification, multi-trophic farming and ecologically sustainable processes. The important realities traditionally characterizing shellfish farming, such as those present in the Gulfs of La Spezia and Olbia, are not neglected, emerging as distinctive elements among the other uses. The sector emerges in a diffused way as a secondary use in the coastal UPs, assuming in some circumscribed areas currently characterized by a greater and rooted presence of plants a priority value. This choice is not only limited to the coastal portions of the maritime space, but also characterizes PUs in which a potential for the development of this activity has been identified, on the basis of regional studies and in-depth studies - see the example of the Sardinia Region. Through the national and regional measures dedicated to the aquaculture sector, the plan acknowledges the importance of the AZ definition processes and aims at facilitating their future integration, once the regional selection processes will be completed. In general, the individuation of the most suitable areas for aquaculture (AZA), in order to defuse possible conflicts with other uses of the sea and to guarantee the protection of the marine environment, seems to represent the main priority to guarantee a sustainable growth of the sector, which follows an ecosystem approach and which is in line with the principles of the Blue Growth, the Green Deal and the Circular Economy. The theme of technological innovation in aquaculture emerges in different sub-areas of the Tyrrhenian Sea and Western Mediterranean, including both the possible use in association with other activities, including aquaculture in offshore plants in co-use with plants for the production of renewables, and near the coast, in potential synergy, especially with regard to mussel farming, with forms of ichthyic tourism. Finally, the plan underlines the need to further develop the theme of the connection with the ports and the development of infrastructures on land, supporting the sector.

Maritime transport and ports

Maritime transport is allowed in the entire Tyrrhenian and Western Mediterranean area, with the exception of areas subject to special restrictions deriving from military use. The plan identifies specific priorities for this sector in the PUs that include the corridors afferent to the main Tyrrhenian ports. These PUs include the maritime transport and port sector as a priority, extending attention to the area in front of the ports and up to the edge of the coastline. On the whole, the plan considers the ports belonging to the following jurisdictions of the Port System Authority: the Western Ligurian Sea, the Eastern Ligurian Sea, the Northern Tyrrhenian Sea, the Central Tyrrhenian Sea, the Sardinian Sea, the Western Sicilian Sea, the Strait, Gioia Tauro. Particular attention is dedicated to the prospects for improving the energy efficiency of ports, a



theme that is linked to the "energy" sector, for their classification as "green ports". It emerges the opportunity to increase the attractiveness of ports for cruise and commercial use, for bunkering activities, logistics, storage facilities and LNG refuelling, with increasing attention to the promotion of consistent actions for the reduction of pollution in port areas. The theme of maritime continuity between the larger islands (Sicily and Sardinia) and the continent is considered of primary importance, and is pursued through the definition of priority use in the main traffic corridors connecting with the main ports of reference (Genoa, Livorno, Civitavecchia, Cagliari and Olbia). The plan also gives great importance to the theme of territorial continuity with the minor islands, with specific reference to the Tuscan archipelago and the Island of Elba, the archipelago of La Maddalena, the Island of Carloforte, the Island of Asinara, the Ponziane Islands, the Aeolian and Egadi Islands. This theme is also pursued through the strengthening of connections necessary for the development of the territory. The continuity of the traffic corridors at sub-area level and with the Ionian and Central Mediterranean maritime area is considered as an element of attention in the plan choices, looking carefully at the off-shore areas. It should be noted that the definition of priority areas for maritime transport does not exclusively include passenger transport, giving ample space to the theme of freight and oil transport. The co-existence of transport with other maritime uses emerges clearly from a definition of PUs with dual priorities transport-fishing, transport-aquaculture and transport-environmental and resource protection. These choices are intended to emphasise the need to promote a rational and efficient organisation of transport, capable of sharing space with the above-mentioned sectors which traditionally exist or are seen as opportunities for development, and to give due consideration to the interaction between maritime transport and the protection of habitats and species.

Energy

In accordance with the strategic objectives of the plan, the choices made in the Tyrrhenian and Western Mediterranean maritime area contribute to promoting, from a cooperative standpoint, the development of trans-European energy infrastructures, with reference to the Sa.Co.I. (*Sardinia-Corsica-Italy*) Electricity Interconnection. With regard to the prospection, exploration and production of hydrocarbons at sea, the plan refers to the provisions of PITESAI (Plan for the Sustainable Energy Transition of Eligible Areas).

In the Tyrrhenian and Western Mediterranean area, the issue primarily concerns the offshore sub-areas 10_4, west of Sicily, and 11_3, south-east of Sardinia, where, in accordance with PITESAI provisions, there is a suitable area where hydrocarbon prospection, exploration and production activities can be carried out. In line with PNIEC, the contribution to decarbonisation is present in several priority PUs for maritime transport and ports, in which the use of marine renewable energies is promoted, such as wave energy to promote the electrification of ports, for their classification as "Green Ports". The plan also looks at opportunities for the development of wind energy on floating plants, referring to this possibility in different UPs, both in territorial waters and off-shore, and identifying the need to increase knowledge with respect to potential suitable areas, not visible from the mainland, not subject to environmental protection, and outside the usual fishing areas.

Coastal defence



The theme of coastal defence acquires two main declinations in the Tyrrhenian and Western Mediterranean area, as a direct consequence of the strategic objectives of the plan on the subject: the first to respond to the problem of coastal flooding, the fight against erosion and the impacts of climate change, the second, instead, to adequately address the issue of the use and preservation of underwater sand for beach nourishment.

Coastal Regions promote actions for the defence of coastal stretches subject to intense and persistent coastal erosion phenomena that jeopardise the stability and functionality of infrastructures, tourist activities and natural areas. In particular, the interest is expressed in the adoption of Integrated Coastal Zone Management (ICZM Protocol, Barcelona Convention, adopted in Madrid on January 21, 2008 and entered into force on March 24, 2011.) as a tool to achieve sustainable development of coastal areas through a rational planning of activities, so as to prevent and / or reduce the effects of natural hazards, which may be caused by natural or human activities. Reconciling economic, social and cultural development with respect for the environment and landscapes and preserving coastal zones for the benefit of present and future generations.

Based on the regional information available, represented by the sediment accumulation areas and borrow sites located offshore, Planning Units have been identified with a priority vocation "Withdrawal of relict sands". It should be noted that this activity is assigned a dual priority that allows synergistic co-existence with fishing activities or environmental protection and natural resources.

Coastal and maritime tourism

The maritime and coastal tourism sector represents a resource and an opportunity for economic development in terms of creation, employment and preservation of cultural specificities, protection and enhancement of the environment that strongly characterizes the entire maritime area of the Western Mediterranean.

In accordance with the strategic objectives of the MSP, coastal regions promote tourism development as a priority role that finds its main prerequisite in the natural, landscape and cultural heritage pursued in a sustainable way, limiting the impact of infrastructure and related activities.

The specific objectives are declined according to three types of tourism: seaside tourism, nautical products and tourism infrastructures. There is a strong interest in safeguarding the tourist use of the coasts through the improvement and/or maintenance of the quality of bathing waters; the implementation of the network of tourist ports with the creation of new settlements and the modernisation of existing ones; the improvement of services available to tourists, whether bathers, boaters or cruise passengers, through the integration of the tourist offer with the cultural attractions present along the coasts and, above all, in the inland areas.

The tourism sector is reflected at the maritime spatial level through a priority vocation of the coastal PUs of all the Tyrrhenian regions, in particular assigned to the strip within one nautical mile from the coastline. In these areas is also highlighted the importance of developing synergies with other uses characterizing through a dual priority that allows coexistence with the protection of the landscape and cultural heritage.



Scientific research and innovation

Research and innovation are essential ingredients for the sustainable development of the Blue Economy in the Tyrrhenian and Western Mediterranean maritime area. The specific objectives for the sector recognise the importance of promoting scientific production on issues related to the sea economy and the protection and preservation of the marine environment, encouraging applied research. The aim is to encourage the sharing of knowledge and a multidisciplinary approach, with the aim of creating a real "District of the Sea", able to connect research operators and companies and encourage the birth of high-tech start-ups. For this purpose, it is important to start a continuous training system that guarantees the updating of operators in the Blue Economy sectors and favours the reconversion of those coming from sectors that are no longer in use. In addition, actions of Procurement of innovation should be supported in order to strengthen and qualify in these public administrations the use, through research and development contracts, of innovative technologies at the service of the enhancement of the maritime heritage in its environmental and economic aspects. Research and activities in the field of blue biotechnology applied to the pharmaceutical and other industries will be encouraged. Attention is paid to developing interregional and transnational cooperation, also through the participation in community programs and projects connected to the sectors and themes of Maritime Spatial Planning.

7.2.3 Coexistence and synergy between uses

The maritime area of the Tyrrhenian Sea and Western Mediterranean is characterized by a large number of marine protected areas, in which forms of synergy with low environmental impact activities can develop (eco-tourism, small-scale fisheries) but at the same time potential conflicts with other sectors (maritime transport, trawling) can also occur. Conflicts between maritime transport and nature conservation generally occur in coastal areas and in the vicinity of ports and straits (Bonifacio, Messina) where marine protected areas may overlap or be located adjacent to areas of heavy traffic. The maritime area includes the area where the international agreement of the Pelagos Sanctuary for the protection of marine mammals is in force, where maritime transport is considered one of the main pressures on environmental components. In this context, forms of synergy can be developed through appropriately regulated forms of nature tourism, such as marine mammal observation at sea, which can contribute to cetacean research and conservation. The whole coast of the maritime area is interested by possible synergies between artisanal fishing and tourism, due to the diffusion of both types of use and their overlapping. Small-scale fishing is generally well accepted by tourists who appreciate its traditional and cultural aspects. Similar forms of synergy with tourism involve the aquaculture sector, which if practiced extensively can offer combinations with sustainable tourism offers, with an eye to the prospects of market diversification, also based on forms of multi-trophic breeding. The Plan carefully considers the land component of maritime activities, through the full exploitation of the land-sea interaction analysis, especially in the perspective of the further intensification of maritime transport in the area, of the requalification and diversification of activities in ports, of the development of new maritime sectors (renewable energy, marine, aquaculture, blue biotechnologies).



Still with reference to marine renewable energy, the Plan intends to promote the development of multi-functional platforms that provide for multiple uses (multi-use), with energy production (e.g. from waves or wind) coupled with other activities (e.g. production of different forms of energy: solar/waves/wind/currents, aquaculture, marine biotechnologies or other). In addition, the exploitation of wave energy represents an option of great interest to be promoted in the ports of the area, in synergy with the maritime transport sector, at the service of the infrastructures and port services themselves, in order to promote their energy autonomy.

The Plan carefully considers the land component of maritime activities, through the full exploitation of the analysis of land-sea interaction, especially in the perspective of the further intensification of maritime transport in the area, in the redevelopment and diversification of activities in ports, the development of new maritime sectors (renewable energy, marine, aquaculture, blue biotechnologies).

7.2.4 Elements of attention related to single and multiple impacts on biodiversity and marine-coastal habitats

This section summarises the key elements of concern relating to single and multiple impacts on biodiversity and marine-coastal habitats to be considered in developing the vocations and setting the Plan measures described below. This summary is based on the results of the Phase 2 Plan's analysis of interactions between uses and the environment. In particular, the overall analysis relating to the maritime area of the Tyrrhenian - Western Mediterranean presented in Figure 13 is taken up here, considering the pressures identified for each "area" previously defined, then translating them into elements of attention for planning and indicating the relevant sub-areas. The scale and level of analysis considered are consistent with the purpose of this Plan, and therefore aimed at supporting the process of defining the vocations of the sub-areas and related planning units at the strategic level, as well as the definition of the measures of the plan itself. In addition to the contents reported in the table, it is considered appropriate to emphasize that the extension of current knowledge on the distribution of habitats and species indicated in the proposal for EU Regulation on Environmental Restoration (COM(2022)304 final) is of transversal importance for all the areas of reference, and therefore for the sub-areas involved.



Scope of reference and	Main anthropogenic uses and related pressures	Attention items to be considered in the plan in response to pressures	Sub-areas interest	of
T1 The Pelagos Marine Mammal Sanctuary	The following anthropic uses produce criticalities with respect to the protection of marine mammals and their habitat: maritime transport; fishing; tourist activities. The sanctuary area falls within important trade routes and connections with the major islands (Corsica, Sardinia), which mainly refer to the ports of Genoa, Savona, Livorno, Piombino, Olbia, Porto Torres, as well as traffic from the ports along the French coast. The main pressures generated include: atmospheric emissions and discharge of pollutants and hazardous substances into the water; dispersion and accumulation of underwater waste; continuous and/or impulsive underwater noise emissions; collisions with marine megafauna.	Identification of areas with the highest incidence of collisions with marine megafauna. Identification and adoption of behavioral and technological practices to reduce the impacts of underwater noise on biota Harmonise the way solid waste is collected from ships and delivered in ports Increase and knowledge of the areas of highest incidence of transport-related air emissions and water pollution Promote the identification of new areas for the spatial management of maritime traffic (PSSA, ATBA, TTS) and the improvement of the management of existing areas.	MO/1, MO/ MO/7, MO/ MO/9	
T2 - North-western Mediterranean Benthic Ecosystems EBSA	The following anthropogenic uses, existing and/or future development, may generate pressures with respect to the reference area: trawling, maritime traffic, tourism and recreational activities, removal of relict sand from the sea and submergence of dredged sediments, aquaculture, production of energy from renewable sources. The following potential pressures on benthic habitats are reported: Illegal harvesting and removal of marine fauna; seabed damage and removal; increased turbidity; underwater litter dispersal and accumulation; overfishing and bycatch; continuous and/or pulsed underwater noise emissions; introduction of invasive non-indigenous species.	Identification and adoption of behavioral and technological practices to reduce the impacts of underwater noise on biota Appropriate actions aimed at training fishermen on sustainability aspects of professional fishing Strengthen multi-level governance systems that identify and promote concerted measures for sustainable fisheries monitoring and management. Prioritize the extraction of relict sands in areas that do not interfere with protected areas or nature priorities established by the MSP	MO/1, MO/ MO/3, MO/ MO/8, MO/ MO/10, MO/11)/7,



Scope of reference and	Main anthropogenic uses and related pressures	Attention items to be considered in the plan in response to pressures	Sub-areas of interest
		Systematizing knowledge on Essential Fish Habitats of major fish species	
T3 - North-western Mediterranean Pelagic Ecosystems EBSA	The following existing and/or future anthropogenic uses may generate pressures with respect to the reference area: trawling, marine traffic, tourism and recreational activities, aquaculture and renewable energy production. The following potential pressures on pelagic habitats are identified: atmospheric emissions and inputs of pollutants and hazardous substances to water; overfishing and bycatch; continuous and/or pulsed underwater noise emissions; collisions with marine megafauna; underwater litter dispersal and accumulation; introduction of invasive non-indigenous species; nutrient and pathogen inputs.	Identification of areas with the highest incidence of collisions with marine megafauna. Identification and adoption of behavioral and technological practices to reduce the impacts of underwater noise on biota Increase and knowledge of the areas of highest incidence of transport-related air emissions and water pollution Promote the identification of new areas for the spatial management of maritime traffic (PSSA, ATBA, TTS) and the improvement of the management of existing areas. Appropriate actions aimed at training fishermen on sustainability aspects of professional fishing Strengthen multi-level governance systems that identify and promote concerted measures for sustainable	MO/1, MO/2, MO/3, MO/7, MO/8, MO/9, MO/10, MO/11
		fisheries monitoring and management.	
T4 - Important areas for seabirds, habitat 1170 and bottlenose dolphins between northern Sardinia and Tuscany	With respect to bottlenose dolphins, underwater noise from shipping, boating, and other anthropogenic activities exerts significant pressure. Both for seabirds and bottlenose dolphins potential criticalities may derive from fishing bycatch. The area falls within the PSSA "Particularly Sensitive Sea Area" of the Strait of Bonifacio which	Identification and adoption of behavioral and technological practices to reduce the impacts of underwater noise on biota Promote the identification of new areas for the spatial management of maritime traffic (PSSA, ATBA, TTS) and the improvement of the management of existing areas.	MO/2, MO/7, MO/9, MO/11
	highlights the need to strengthen the coordinated management of maritime traffic.	Appropriate actions aimed at training fishermen on the sustainability aspects of professional fishing	



Scope of reference and	Main anthropogenic uses and related pressures	Attention items to be considered in the plan in response to pressures	Sub-areas of interest
T5 - Offshore areas characterised by the presence of habitat 1170	The following existing and/or future anthropogenic uses may generate pressures with respect to the reference area: professional fishing, aquaculture, renewable energy production. In offshore areas deeper than 1000m, the use of trawl nets and towed dredges is prohibited in accordance with Recommendation GFCM/29/2005/1. The following potential pressures on benthic habitats are reported: seabed damage and removal; underwater litter dispersal and accumulation; overfishing and bycatch; and continuous and/or pulsed underwater noise emissions.	Identification and adoption of behavioral and technological practices to reduce the impacts of underwater noise on biota Appropriate actions aimed at training fishermen on the sustainability aspects of professional fishing Strengthen multi-level governance systems that identify and promote concerted measures for sustainable fisheries monitoring and management.	MO/1, MO/8, MO/6, MO/10
T6 - North Sardinia	The Maddalena Archipelago is located near the Strait of Bonifacio, an area identified as a PSSA "Particularly Sensitive Sea Area". The Asinara MPA is located near the line of traffic leading to Porto Torres. The portion of sea in front of the inlet of Olbia is affected by high traffic connecting with different routes (Genoa, Livorno, Civitavecchia). The Gulf of Asinara is intensively fished, both with gillnets and trawls. The following potential pressures on habitats are reported: atmospheric emissions and inputs of pollutants and hazardous substances to water; illegal harvesting and removal of marine fauna; seabed damage and removal; underwater litter dispersal and accumulation; overfishing and bycatch; continuous and/or impulsive underwater noise emissions; collisions with marine megafauna; introduction of invasive non-indigenous species; nutrient and pathogen inputs.	Identification of areas with the highest incidence of collisions with marine megafauna. Identification and adoption of behavioral and technological practices to reduce the impacts of underwater noise on biota Promote the identification of new areas for the spatial management of maritime traffic (PSSA, ATBA, TTS) and the improvement of the management of existing areas. Appropriate actions aimed at training fishermen on the sustainability aspects of professional fishing Promote coexistence between aquaculture activities and Natura 2000 sites. Promoting coexistence between small-scale fisheries and protected coastal and marine areas Systematizing knowledge on Essential Fish Habitats of major fish species	MO/7, MO/9, MO/11



Scope of reference and	Main anthropogenic uses and related pressures	Attention items to be considered in the plan in response to pressures	Sub-areas interest	of
T7 - East Coast of Sardinia and Gulf of Cagliari	The Gulf of Cagliari is affected by a high level of traffic, both to and from the port of Cagliari (freight-passenger traffic) and oil and gas traffic (Port of Sarroch). There is a high level of traffic in the area off Capo Carbonara. The Gulf of Orosei has a high level of traffic along the coast, linked to tourist activities. The following potential pressures on habitats are reported: atmospheric emissions and inputs of pollutants and hazardous substances to water; underwater litter dispersal and accumulation; overfishing and bycatch; continuous and/or impulsive underwater noise emissions; collisions with marine megafauna; introduction of invasive non-indigenous species; nutrient and pathogen inputs.	Promote the identification and adoption of behavioral and technological practices to reduce the impacts of underwater noise on biota Identification of areas with the highest incidence of collisions with marine megafauna. Appropriate actions aimed at training fishermen on sustainability aspects of professional fishing Systematizing knowledge on Essential Fish Habitats of major fish species Increase and knowledge of the areas of greatest incidence of transport-related air emissions and water pollution Promote coexistence between aquaculture activities and Natura 2000 sites.	MO/7, MO/11	
		Promoting coexistence between small-scale fisheries and protected coastal and marine areas		
T8 - West Coast of SardiniaFishing is practised along the entire western coast, with greater intensity in the portion south of the Gulf of Oristano. The portion of sea between the islands of Carloforte, Sant'Antioco and Portoscuso is affected by heavy traffic to the smaller islands.I I I I The following potential pressures on habitats are reported: atmospheric emissions and inputs of pollutants and hazardous substances to water; dispersal and accumulation of underwater litter; overfishing and bycatch; illegal harvesting and removal of marine fauna; seabed damage		Identification and adoption of behavioral and technological practices to reduce the impacts of underwater noise on biota Identification of areas with the highest incidence of collisions with marine megafauna. Appropriate actions aimed at training fishermen on sustainability aspects of professional fishing Systematizing knowledge on Essential Fish Habitats of major fish species Promote coexistence between aquaculture activities and Natura 2000 sites.	MO/7, MO/11	



Scope of reference and	Main anthropogenic uses and related pressures	Attention items to be considered in the plan in response to pressures	Sub-areas interest	of
	and removal; continuous and/or impulsive underwater noise emissions; collisions with marine megafauna; introduction of invasive non-indigenous species; nutrient and pathogen inputs.	Promoting coexistence between small-scale fisheries and protected coastal and marine areas		
T9 - The strip of sea off the coast of Liguria	The area is subject to multiple uses. Among the most relevant and widespread are, near the coast: professional fishing (with gillnets), recreational fishing, illegal collection and removal of marine fauna, recreational activities and sports practiced in the area. The area is subject to intense maritime traffic, mainly from the ports of Livorno, Piombino and Olbia. The following potential pressures on habitats are reported: atmospheric emissions and inputs of pollutants and hazardous substances to water; underwater litter dispersal and accumulation; overfishing and bycatch; continuous and/or impulsive underwater noise emissions; collisions with marine megafauna; introduction of invasive non-indigenous species; nutrient and pathogen inputs.	Identification of areas with the highest incidence of collisions with marine megafauna. Identification and adoption of behavioral and technological practices to reduce the impacts of underwater noise on biota Harmonise the way solid waste is collected from ships and delivered in ports Appropriate actions aimed at training fishermen on sustainability aspects of professional fishing Promoting coexistence between small-scale fisheries and protected coastal and marine areas Promoting coexistence between aquaculture activities and Natura 2000 sites Systematizing knowledge on Essential Fish Habitats of major fish species	MO/1, MO/8	
T10 - Coasts and Tuscan Archipelago	The northern coasts of Tuscany (south-eastern Ligurian Sea) are influenced by freshwater inputs from the Magra, Serchio and Arno rivers, which enrich the coastal area with nutrients. The platform is very wide and is characterized by mobile bottoms suitable for trawling. In the northern part of the Tuscan Archipelago fishing activity is not very important, with the exception of the flotilla based in the port of Livorno. The area hosts maritime traffic of great		MO/2	



Scope of reference and	Main anthropogenic uses and related pressures	Attention items to be considered in the plan in response to pressures	Sub-areas of interest
	importance, being a crossroads for national and international transport which mainly follows the N-S routes but is also fundamental for connections to and from the larger Italian islands. Some portions of the area are involved in sand mining. These areas are subject to multiple uses and pressures. Among the most relevant and widespread are, near the coast: Maritime transport, Professional fishing (with gillnets), Recreational fishing, Recreational and sports activities practiced in the area, aquaculture, maritime traffic, Military uses.		
	The following potential pressures on habitats are reported: atmospheric emissions and inputs of pollutants and hazardous substances to water; illegal harvesting and removal of marine fauna; seabed damage and removal; underwater litter dispersal and accumulation; overfishing and bycatch; continuous and/or impulsive underwater noise emissions; collisions with marine megafauna; introduction of invasive non-indigenous species; nutrient and pathogen inputs.		
T11 - Tyrrhenian coast of Sicily	The area is subject to intense maritime traffic mainly from the ports of Palermo and Messina. Fishing is practiced along the whole coastal strip, with the greatest effort concentrated in the area facing the Strait of Messina, near Milazzo, in the area in front of Palermo and in the seabed west of the Egadi Islands. These areas are subject to multiple uses and pressures. Among the most relevant and widespread are, near the coast: Maritime transport,	Promote the identification of new areas for the spatial management of maritime traffic (PSSA, ATBA, TTS) and the improvement of the management of existing areas. Increase and knowledge of the areas of greatest incidence of transport-related air emissions and water pollution	MO/6, MO/10



Scope of reference and	Main anthropogenic uses and related pressures	Attention items to be considered in the plan in response to pressures	Sub-areas of interest
	professional fishing (with gillnets), recreational fishing, recreational activities and sports practiced in the area, aquaculture, maritime traffic, military uses. The following potential pressures on habitats are reported: atmospheric emissions and inputs of pollutants and hazardous substances to water; illegal harvesting and removal of marine fauna; seabed damage and removal; underwater litter dispersal and accumulation; overfishing and bycatch; continuous and/or impulsive underwater noise emissions; collisions with marine megafauna; introduction of invasive non-indigenous species; nutrient and pathogen inputs.	Identification and adoption of behavioral and technological practices to reduce the impacts of underwater noise on biota Appropriate actions aimed at training fishermen on sustainability aspects of professional fishing Promoting coexistence between small-scale fisheries and protected coastal and marine areas Promoting coexistence between aquaculture activities and Natura 2000 sites Systematizing knowledge on Essential Fish Habitats of major fish species	
T12 - The strip of sea off the coast of Latium	The area is subject to intense maritime traffic, which radiates from the port of Civitavecchia both north-west and south-west. Fishing is practiced throughout the area, with greater intensity in the area between Civitavecchia and Fiumicino. There are several sandy deposits in the southern part of the area (Latina, Gaeta). The following potential pressures on habitats are reported: atmospheric emissions and inputs of pollutants and hazardous substances to water; illegal harvesting and removal of marine fauna; seabed damage and removal; underwater litter dispersal and accumulation; overfishing and bycatch; continuous and/or impulsive underwater noise emissions; collisions with marine megafauna; introduction	Identification and adoption of behavioral and technological practices to reduce the impacts of underwater noise on biota Prioritize the extraction of relict sands in areas that do not interfere with protected areas or nature priorities established by the MSP Increase and knowledge of the areas of greatest incidence of transport-related air emissions and water pollution Appropriate actions aimed at training fishermen on the sustainability aspects of professional fishing Promoting coexistence between small-scale fisheries and protected coastal and marine areas Promoting coexistence between aquaculture activities and Natura 2000 sites	MO/3, MO/9, MO/10



Scope of reference and	Main anthropogenic uses and related pressures	Attention items to be considered in the plan in response to pressures	Sub-areas of interest
	of invasive non-indigenous species; nutrient and pathogen inputs.	Systematizing knowledge on Essential Fish Habitats of major fish species	



7.2.5 Elements of land-sea interaction

With regard to the factors that determine land-sea interactions, planning choices regarding ports are of great importance in the maritime area, which includes port hubs such as the ports of Genoa, La Spezia, Livorno, Civitavecchia, Naples, Gioia Tauro and Cagliari, playing a fundamental role in transport logistics (goods and passengers) in the Mediterranean. The ports of the maritime area are often associated with important industrial areas (Genoa, La Spezia, Livorno-Piombino, Civitavecchia-Fiumicino) with a mainly oil and steel vocation. The plan indicates the need to take into consideration infrastructures, related to industrial uses associated with port activities, also favouring the reconversion of activities in crisis insisting in or near the commercial ports in activity. In relation to these aspects, mention must be made of the presence in the maritime area of important Sites of National Interest (SIN) and Sites of Regional Interest (SIR), inheritances of industrial and productive poles, such as Pitelli in the La Spezia area, Cengio and Saliceto, Stoppani-Cogoleto, Massa and Carrara, Piombino, Livorno, Orbetello ex-Sitoco area, Naples Bagnoli-Coroglio, East Naples, Milazzo, Sulcis Iglesiente-Guspinese, Porto Torres. In Campania there are four SIR sites: Litorale Vesuviano, Bacino idrografico del fiume Sarno, Litorale Domizio Flegreo and Agro Aversano, Pianura.

Since the middle of the last century, the development of industrial and port areas and the urbanization, also for touristic use, have determined a huge anthropization of the coasts in the whole maritime area, with the loss of the land-sea interface areas (wetlands, estuaries, coastal lakes) and of the important ecological functions associated to them. In this context, it is worth mentioning that the entire maritime area is characterized by the presence of sites of important environmental value and for the protection of cultural heritage (Natura 2000 network areas, Marine Protected Areas, UNESCO sites). In many cases the very existence of such sites is determined by land-sea interactions, as in the case of wetlands. On the contrary, it is very often the environmental and cultural richness of these areas that generates land-sea interactions linked, for example, to tourism-related traffic (ferries, cruise ships, recreational traffic). The plan pays attention to overcoming some of these criticalities by raising the urban quality of the coastal areas through redevelopment of waterfronts and waterfront areas. At the same time, it promotes flood protection and the restoration of sandy-gravel shorelines, proposing to exercise an integrated action in the medium to long term in which the direct effects of coastal erosion and climate change (rising average sea level, extreme weather events, etc.) and the indirect effects that generally reduce the resilience of beaches and coastline must be considered.

To this end, the Plan identifies a series of measures on a national scale that make specific reference to the use of Coastal Defence and envisage, for example, tackling Integrated Coastal Zone Management in a coordinated manner, integrating existing Coastal Zone Strategies and Plans, and improving the management of underwater sands for the mitigation of erosion and flooding risks. The Plan also identifies several other specific actions at the sub-area level.

The elements of land-sea interaction highlighted at the scale of the maritime area have been considered for the definition of the elements of the Plan, in particular with regard to the determination of the suitability



and mode of use of the Planning Units closest to the coast or to the hot-spots of land-sea interaction, as well as for the measures of the Plan at national and sub-area level. With reference to the measures, in fact, paragraph 6.4 highlights the relevance for the management of land-sea interactions, for example in relation to the removal of relict sands for coastal defence, the construction of onshore connections of offshore plants or the improvement of environmental and energy sustainability of ports (land-sea interaction hot-spots).

7.2.6 Relevant elements for transnational cooperation

- Theme 1 In line with the ACCOBAMS Agreement (Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and contiguous Atlantic area), the Convention for the Protection of the Mediterranean Sea against the risks of Pollution (Barcelona Convention) and with the strategic objectives of UN Agenda 2030, EU Green Deal, EU Biodiversity Strategy 2030, a priority in the area to which MSP is called to give an important contribution in a transnational context is the operational *enforcement of* the Pelagos Cetacean Sanctuary.
- Theme 2 In line with the Convention for the Protection of the Mediterranean Sea against Pollution (Barcelona Convention), the Convention for the Conservation of European Wildlife and Natural Habitats (Bern Convention), Agenda 21, the Convention on Biological Diversity, the SPA/BD Protocol, and the Charter of Syracuse on Biodiversity, there is the important issue of improving the knowledge of the deep environments (below the 200 m isobath) of the area to direct appropriate conservation actions for the habitats and species present.
- Theme 3 In line with the International Convention for the Safety of Life at Sea (SOLAS) and the Guidelines for Vessel Traffic Service, the ongoing and expected future expansion of maritime transport in the Western Mediterranean Sea requires appropriate spatial, behavioural and infrastructural measures to ensure safe transport and reduce its environmental impacts (e.g. continuous or accidental inputs of pollutants and waste and underwater noise). This theme also includes specific actions on traffic control systems and safety of navigation.
- Theme 4 In line with the Convention for the Protection of the Mediterranean Sea against Pollution Hazards (Barcelona Convention) and Agenda 21, the development of human activities along the coasts, from tourism to coastal cities to industrial activities raises the issue of controlling and reducing single and cumulative pressures on the marine environment (e.g. pollutant and waste inputs, seabed alterations and coastal dynamics).
- Theme 5 In line with the Convention for the Protection of the Mediterranean Sea against Pollution (Barcelona Convention) and its Protocols, the Code of Conduct for Responsible Fisheries (FAO) fishing in the area, carried out with a wide range of gears, is still an important social and economic activity and raises the issue of its sustainability in the medium and long term. MSPs implemented in a transnational context can support the implementation of the Common Fisheries Policy and the multi-annual management plans of the various Tyrrhenian sub-geographical areas (GSA9-10-11), while ensuring a reduction in the environmental impacts of fishing.
- Theme 6 Unesco Convention on the Protection of the Underwater Cultural Heritage, adopted in Paris on November 2, 2001, ratified and entered into force in Italy through the L.157 of 23/10/2009,



which integrates and expands the provisions of protection inherent in the underwater cultural heritage already present in the UNESCO Convention on the Law of the Sea. The Convention on the Protection of Underwater Cultural Heritage recognizes the importance of underwater cultural heritage as an integral part of the cultural heritage of mankind and as a particularly important element of the history of peoples, nations and their mutual relations in terms of common heritage; it establishes not only a common standard for the protection of heritage, providing measures against the possibility that it is plundered or destroyed, but also for its knowledge and enhancement, also encouraging research activities. The same Paris Convention also encourages international cooperation and mutual assistance between States in the protection and management of underwater cultural heritage.



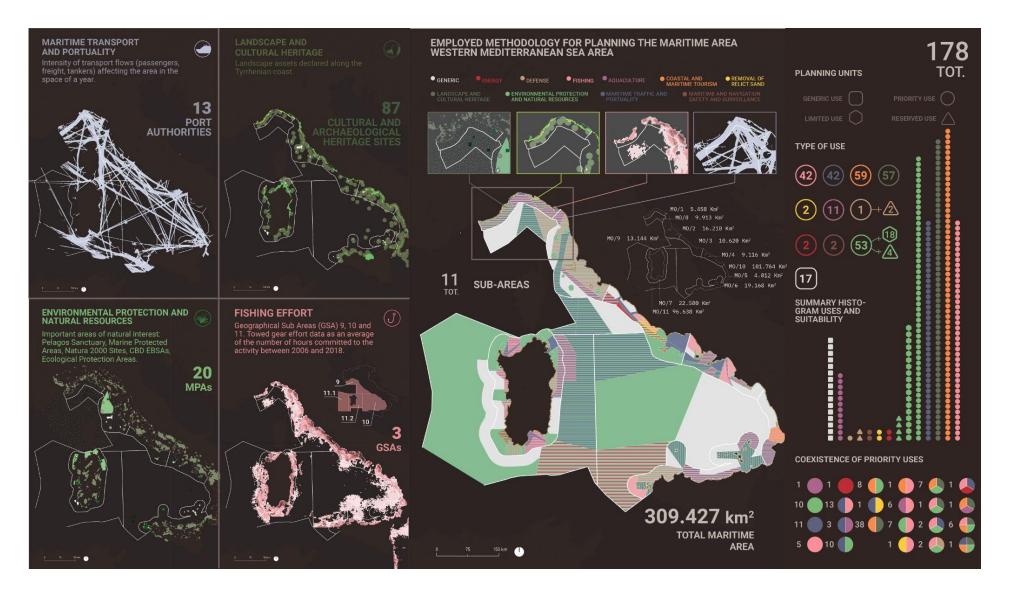




Figure 17 Summary infographic between uses and planning units for the Tyrrhenian-Western Mediterranean maritime area.



7.3 Summary of planning for each Sub-area

7.3.1 Sub-area MO/1 - Territorial waters Liguria

The main uses of the sea and the coast present in the MO/1 sub-area are represented in the Figure 18. The figure in question shows a synthetic and simplified representation of the maritime activities existing in the area, aimed at providing an overall framework and understanding the planning choices made in the area. In the maritime area in question, the main uses of the sea are: coastal tourism, maritime transport, protection of the environment and natural resources, protection of the landscape and cultural heritage, defence-related activities and fishing. The sources of the spatial data used are reported in Figure 18 and represent information available at the national level through the contribution of the Ministries involved in the MSP process.

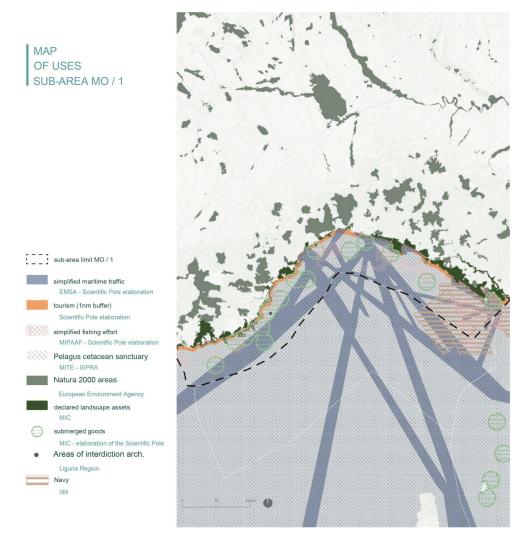


Figure 18 summary map of the main uses in the MO/1 sub-area



Vision and specific objectives

The vision and specific objectives have been developed by the Liguria Region and are currently being approved by the Regional Council.

Reference sector	Code	Specific Objective
Sustainable development	(MO/1)OSP_SS 01	Promoting the use of environmentally friendly materials in the maritime space
	(MO/1)OSP_SS 02	Encourage the use of forms of green economy and blue economy
	(MO/1)OSP_SS 03	Promote the dissemination of information related to Maritime
		Spatial Planning as a common good of the population
	(MO/1)OSP_SS 04	Encourage the creation of quality spaces
	(MO/1)OSP_SS 05	Encourage the dissemination and exploitation of information and achievements
	(MO/1)OSP_SS 06	Optimising interconnections between the maritime space and neighbouring coastal territories
Maritime safety,	(MO/1)OSP_S 01	Safety for civil and productive uses of the sea:
navigation and		promoting cross-border cooperation
surveillance	(MO/1)OSP_S 02	Safety for civil and productive uses of the sea:
		Stimulate the use of new technologies and new production
		processes and make possible new uses of the resource "sea" in line
		with the Italian Strategy for the Bioeconomy (BIT).
Maritime transport	(MO/1)OSP_TM 01	Improving maritime safety and protection of the marine
and ports		environment from pollution by shipping traffic
	(MO/1)OSP_TM 02	Rationalising communication channels by using sea routes
	(MO/1)OSP_TM 03	Rationalise sea/shore communication channels
	(MO/1)OSP_TM 04	Promoting intermodality, co-modality and logistics
Energy	(MO/1)OSP_E 01	Encourage the implementation of projects dedicated to the creation and use of renewable energy
	(MO/1)OSP_E 02	Promoting the use of renewable energy technologies
	(MO/1)OSP_E 03	Encouraging the use of renewable energy
	(MO/1)OSP_E 04	Implementing the objectives of the Regional Environmental Energy Plan
Coastal defence	(MO/1)OSP_DC 01	Promoting Integrated Coastal Zone Management
	(MO/1)OSP_DC 02	Promoting the planning of consolidation interventions in fragile coastal areas
	(MO/1)OSP_DC 03	Provide for the specific location of sediment sampling areas
	(MO/1)OSP_DC 04	Pursue the achievement of good water quality status of marine and
		coastal water bodies
	(MO/1)OSP_DC 05	Adapt the treatment system of industrial and civil waste water
		discharges to the relevant provisions in force
	(MO/1)OSP_DC 06	Complete the process of upgrading sewage treatment systems to
		comply with sector legislation.
	(MO/1)OSP_DC 07	Promote waste management actions at sea and on beaches
Fishing	(MO/1)OSP_P 01	Promoting activities to enhance the value of fisheries

Table 3 Specific objectives for the sub-area of territorial waters of Liguria



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Reference sector Code Specific Objective (MO/1)OSP_P|02 Promoting the sustainable consumption of local fish and lesser-known fish species for a better balance of resources (MO/1)OSP_P|03 To guarantee the safeguard of the sea fishing sector by fully implementing the regional directives and favouring the concentration of the sector's operators, within the framework of the multifunctional ports of the Ligurian landing places, in special sections organised with an adequate offer of services (MO/1)OSP_P|04 To promote the development and sustainability of fishing through multifunctionality (fishing tourism, ichthyic tourism), integration with other sectors (processing, food education, didactics, quality supply chains) and the valorisation of the product, also with reference to the maritime culture and the sustainable management of fishery resources Aquaculture (MO/1)OSP A|01 Frame the location of aquaculture sites, or individual facilities, subject to the development and approval of an Aquaculture Marine Area Allocation Plan (AZA), by separate act, albeit synergistic with Maritime Spatial Planning Coastal and (MO/1)OSP_T|01 Safeguarding sustainable tourism maritime tourism Consolidate the system of marine protected areas and their (MO/1)OSP_T|02 conservation measures in coherence with the other uses of the sea present Enhancing new forms of tourism based on the synergy of different (MO/1)OSP_T|03 tour operators (sea, land, hinterland), the integration between tourism policies and mobility and between sea sport activities and tourism promotion Scientific research (MO/1)OSP_RI|01 Encouraging research, study and implementation for alternative and innovation types of coastal defence works Encourage the monitoring of the effects of climate change to (MO/1)OSP RI|02 promote strategies for their containment and resilience (MO/1)OSP_RI|03 Promoting collaboration between institutions, research institutes and universities Participation in European projects (MO/1)OSP_RI|04 Foster research activities in line with, among others, the National Research Plan (NRP) 2015-2020, the BLUEMED Implementation Plan, the new Horizon Europe Program Plan and the UN Decade of Ocean Science for Sustainable Development (2021-2030) (MO/1)OSP N|01 Environmental Preservation and enhancement of Marine Protected Areas (MPAs) protection and and Marine Conservation Areas (MPAs) natural resources (MO/1)OSP_N|02 Preservation, enhancement and updating of Special Areas of Conservation established under the Habitats Directive (MO/1)OSP_N|03 Promoting ways of observing marine habitats and species of Community interest Promoting the creation of installations capable of increasing (MO/1)OSP N|04 biodiversity (MO/1)OSP_PPC|01 Enhancing the different coastal landscapes by promoting their Landscape and cultural heritage synergies



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Reference sector	Code	Specific Objective
	(MO/1)OSP_PPC 02	To promote the permeability of the views between the urban front and the maritime space and between this and the territories facing the sea
	(MO/1)OSP_PPC 03	Encourage the safeguarding of artefacts that are significant from a landscape point of view, also in line with possible risk conditions
	(MO/1)OSP_PPC 04	Encouraging mechanisms for relocating incongruous buildings
	(MO/1)OSP_PPC 05	Promoting the identification, conservation and enhancement of underwater archaeological heritage

Planning units and vocations of use

The Planning Units identified for the MO/1 Sub-area are represented in Figure 19 e Figure 20.

The Planning Units have been drawn up by the Liguria Region and are currently being approved by the Regional Council.



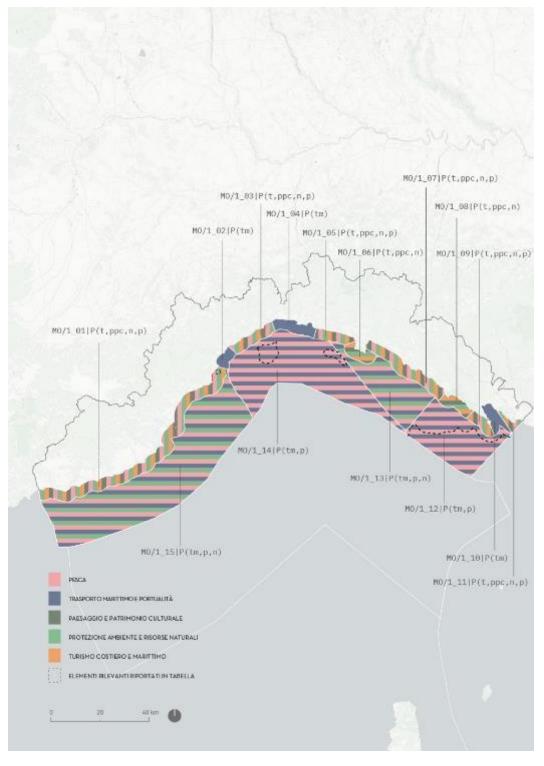


Figure 19 Identification of planning units in sub-area MO/1



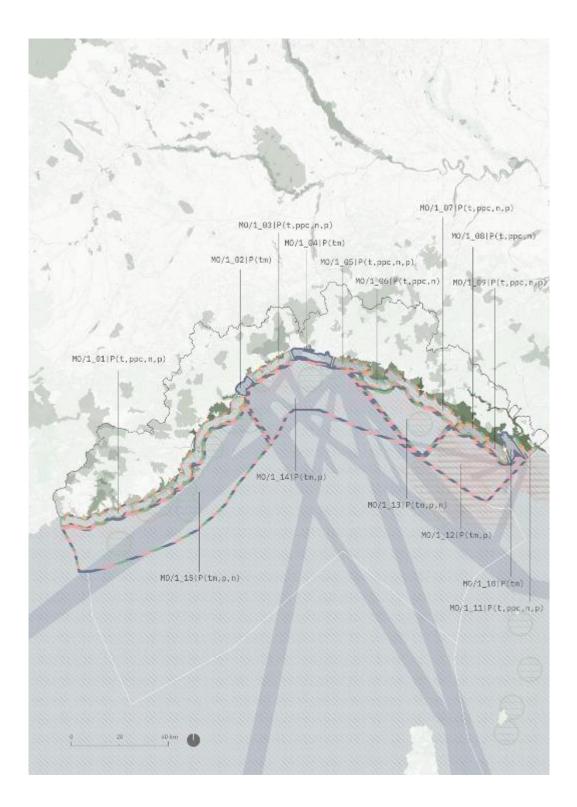




Figure 20 Overlap between the Main Uses Map and the Planning Units of Sub-area MO/1



7.3.2 Sub-area MO/2 - Territorial waters Tuscany

The main uses of the sea and the coast present in the MO/2 sub-area are represented in the Figure 21. The figure in question shows a synthetic and simplified representation of the maritime activities existing in the area, aimed at providing an overall framework and understanding the planning choices made in the area. In the maritime area in question, the main uses of the sea are: coastal tourism, sand deposits and activities related to coastal defence, maritime transport, protection of the environment and natural resources, protection of the landscape and cultural heritage, activities related to defence, aquaculture and fishing. The sources of the spatial data used are given in Figure 21 and represent information available at the national level through the contribution of the Ministries involved in the MSP process.

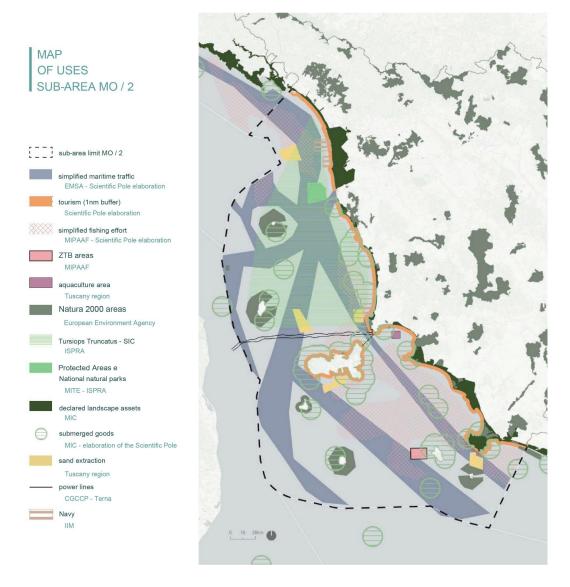


Figure 21 summary map of the main uses in the MO/2 sub-area



Vision and specific objectives

The specific objectives and the vision have been elaborated by the Region of Tuscany and have been presented through the Decision of the Council n.67 of August 3, 2020 "Addresses and strategic objectives for the drafting of the Maritime Spatial Management Plans provided for by Legislative Decree 190 of October 13, 2010.

Table 4 Specific objectives for the Tuscany sub-area of territorial waters

Reference sector	Code	Specific Objective
Sustainable development	(MO/2)OSP_SS 01	Guarantee and qualify the territorial continuity between the mainland and the Tuscan archipelago and the Island of Elba also through the strengthening of connections necessary for the development of the territory
	(MO/2)OSP_SS 02	To prevent and optimize the collection and disposal of marine litter, through the implementation of collection methodologies identified in the project of the Tuscany Region Arcipelago Pulito
	(MO/2)OSP_SS 03	Ensuring the preservation of the coastline, also ensuring the protection of the visibility of the coastline both from inland and from the sea and limiting the possibility of providing for new settlement loads on the coastal front outside the consolidated margins of urban settlements
	(MO/2)OSP_SS 04	Ensure urban quality in coastal settlements to be pursued through the redevelopment of public spaces and port waterfronts
	(MO/2)OSP_SS 05	To develop Tuscany's maritime policies through forms of interregional cooperation in the cooperation area of the Upper Tyrrhenian Sea and the participation in European calls for tenders aimed at the development of priority maritime policies on tourism, entrepreneurial development and ports, sea policies with particular reference to environmental policies and, in general, the integrated planning introduced by the European Directive on Maritime Spatial Planning
Maritime transport and ports	(MO/2)OSP_TM 01	Developing minor ports in ways that are compatible with the protection of the landscape and the marine ecosystem, as well as responding to the real needs of employment and development of the territory
Fishing	(MO/2)OSP_P 01	To favour the modernization of plants and infrastructures of the ichthyic sector through the incentive of sustainable interventions from the social-economic-environmental point of view and the integrated development of the territory
Coastal defence	(MO/2)OSP_DC 01	Combating coastal erosion and maintaining the dynamic equilibrium of the shoreline also conservation of marine eco-systems
	(MO/2)OSP_DC 02	Develop a "strategic regional program of coastal sediment management" that, starting from a basic cognitive framework where the sediment accumulation areas and the borrowing sites located offshore are represented, analyzes the various possible scenarios in



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Reference sector	Code	Specific Objective
		relation to the criticalities detected along the coast and the cost/benefit ratio of the choices
Environmental protection and natural resources	(MO/2)OSP_N 01	Conserve terrestrial and marine biodiversity and promote the usability and sustainable management of protected areas
nutururresources	(MO/2)OSP_N 02	To protect the quality of the marine environment (Directive 2008/56/EC and Directive 2000/60/EC), to improve the quality of bathing waters and to increase the effectiveness of marine control and environmental risk prevention actions, including by improving the capacity to observe and monitor the sea
	(MO/2)OSP_N 03	Implement the nature protection areas also on the basis of the monitoring plans indicated above, carried out by ARPAT on the habitats and species concerned by marine monitoring in accordance with the Habitats Directive (1992/43/EC) and for this reason included in the Addendum foreseen by the Marine Strategy from 2018
Landscape and cultural heritage	(MO/2)OSP_PPC 01	Ensure the pursuit of the objectives of protection of the significant landscape value of the coast through appropriate management policies of bathing facilities and accessibility to the sea
	(MO/2)OSP_PPC 02	(The following specific objective has not yet been the subject of a Council Decision) To favour the identification, conservation and valorisation of the underwater archaeological heritage
Coastal and maritime tourism	(MO/2)OSP_T 01	To develop the tourism system integrated with the development of the territory, through a strategic management of its landscape, environmental and cultural resources able to guarantee an environmental, economic and social sustainability
	(MO/2)OSP_T 02	Combining in particular the development of protected areas with compatible tourism use
Energy	(MO/2)OSP_E 01	Monitor and support ongoing experiments on sustainable energy production projects at sea (wind energy, wave and photovoltaic integrated power generation system).

Planning units and vocations of use

The Planning Units identified for the MO/2 Sub-area are represented in Figure 22 e Figure 23.

The Planning Units have been elaborated by the Region of Tuscany and have been presented through the Decision of the Regional Council n.792 of August 2, 2021.



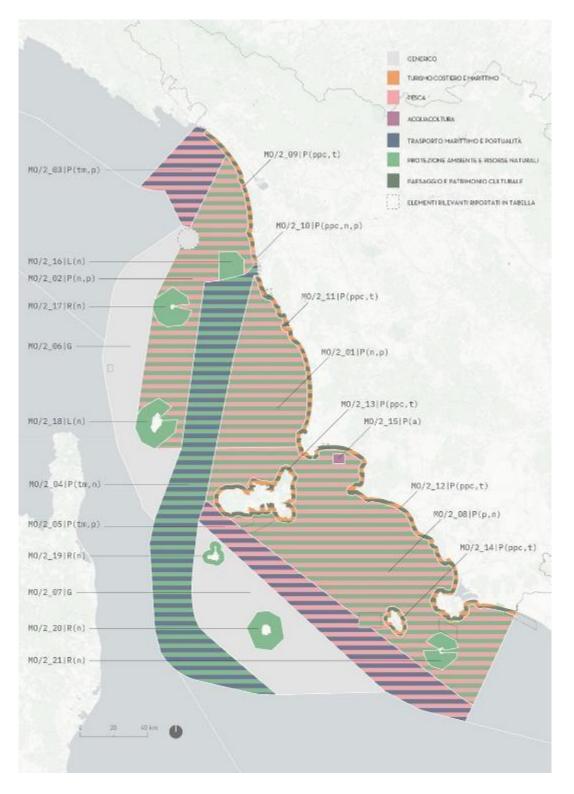


Figure 22 Identification of planning units in sub-area MO/2



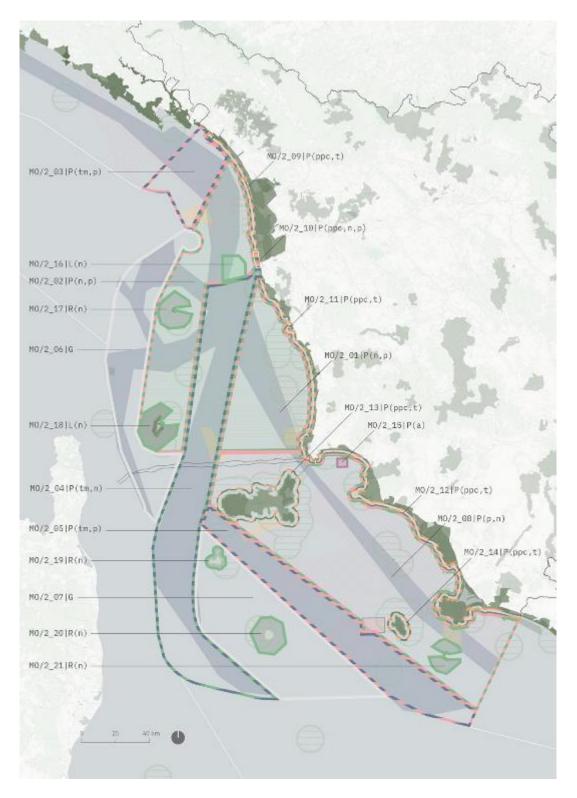


Figure 23 Overlap between the Principal Uses Map and the MO/2 Sub-area Planning Units.



7.3.3 Sub-area MO/3 - Territorial waters Lazio

The main uses of the sea and the coast present in the MO/3 sub-area are represented in the Figure 24. This figure shows a synthetic and simplified representation of the maritime activities existing in the area, aimed at providing an overall framework and understanding the planning choices made in the area. In the maritime area in question, the main uses of the sea are: coastal tourism, sand deposits, maritime transport, protection of the environment and natural resources, protection of the landscape and cultural heritage, defence-related activities, aquaculture and fishing. The sources of the spatial data used are given in Figure 24 and represent information available at the national level through the contribution of the Ministries involved in the MSP process.

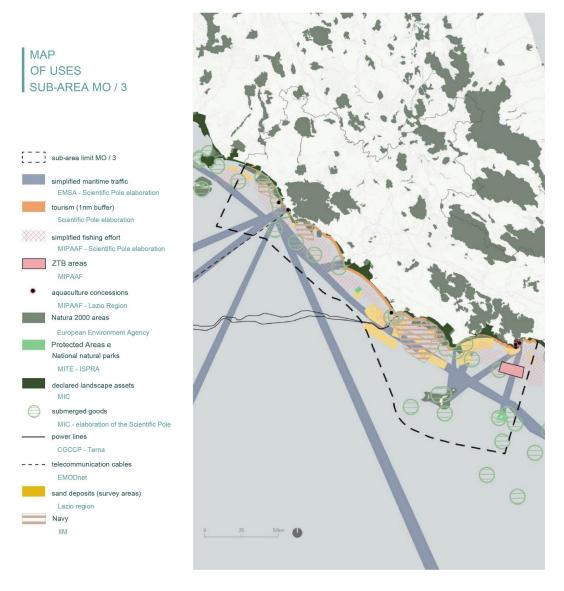


Figure 24 summary map of the main uses in the MO/3 sub-area



Vision and specific objectives

The specific objectives and vision were developed by the Lazio Region and were presented through the Deliberation of the Council n.710 of 26 October 2021 as subject "Maritime Space Management Plans. Acknowledgement of the vision and specific objectives and identification of the Planning Units."

The Lazio Region intends to consolidate a "maritime" identity appropriate to its coastal development, which is able to usefully connect coastal and inland areas, effectively connect the territory concerned and create the institutional, entrepreneurial and service synergies useful to the characterization of Lazio as a region that can base a significant part of its economic and employment development on the sea.

It recognizes the Blue Economy's potential for strategic economic and social development and therefore considers it necessary to support in a synergistic and harmonious way the consolidation of all sectors involved in the sustainable economy of the sea, from the traditional ones, such as tourism (seaside, recreational and cruise tourism), transport, logistics, fishing and aquaculture, to the emerging ones, such as energy from renewable sources and blue biotechnology. In particular, the intention is to give new functional impetus to the Lazio port system and in particular to the port of Civitavecchia, for which it is a priority to improve the infrastructure, relaunch commercial activities, shipbuilding, agrifood, logistics and the use of new fuels with low environmental impact.

In order to protect the environmental ecosystem, it promotes specific measures for the conservation of biodiversity, and in order to pursue sustainability it ensures beneficial effects such as climate change mitigation and adaptation, thus also favouring coastal tourism development.

It promotes the offer of specialised services in the sectors related to the Blue Economy, an adequate training offer also in coordination with the network of training centres and research bodies, assistance to the creation and development of business activities also for the support of employment levels, furthermore it promotes the efficient administrative connection among all the subjects involved, both at local and supra-regional level.

It identifies the Cabina di Regia dell'Economia del Mare as the place for the coordination of the actions in the field of Blue economy, in order to better govern the complexity and the intersectorial character of the decisions to be taken by the Region.

Reference sector	Code	Specific Objective
Sustainable development	(MO/3)OSP_SS 01	To promote the rational and sustainable management of coastal areas through a correct balance between the protection of environmental and social aspects and the development of economic activities, in particular tourist and recreational activities.
	(MO/3)OSP_SS 02	Ensure the visibility of the coastline ensuring the use of free beaches in a share of not less than 50% of the total
	(MO/3)OSP_SS 03	Raising the level of protection of water quality, also by strengthening control and monitoring actions
	(MO/3)OSP_SS 04	Developing interregional and transnational cooperation, including through participation in Community programs and projects related to MSP sectors and themes

Table 5 Specific objectives for the Lazio sub-area of territorial waters



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Reference sector Code **Specific Objective** (MO/3)OSP_N|01 To conserve terrestrial and marine biodiversity, also through the Environmental identification of new sites, implementing management policies that protection and allow the fruition and the tourist enhancement of the marine natural resources protected areas (MO/3)OSP_N|02 Activate policies to combat "Marine Litter", encouraging the adoption of "plastic free" management models Landscape and (MO/3)OSP_PPC|01 (The following specific objective has not yet been the subject of a Deliberation of the Council) To favour the identification, cultural heritage conservation and valorisation of the underwater archaeological heritage Coastal defence (MO/3)OSP_DC|01 Promoting actions to protect stretches of the Latium coastline subject to intense and persistent coastal erosion phenomena that jeopardize the stability and functionality of infrastructures, tourist activities and natural areas. Use of material coming from natural and artificial submarine deposits for the reconstruction of the coasts (MO/3)OSP_DC|02 Carry out an integrated medium to long term action in which the direct effects of coastal erosion and climate change (rise in mean sea level, extremes of weather and sea events, etc.) and the indirect effects that generally reduce the resilience of beaches must be considered. Coastal and (MO/3)OSP T|01 To develop an integrated tourism system capable of combining maritime tourism development and protection of the territory. To guarantee a tourist movement based also on innovative products and characterized by a strong environmental sensibility (MO/3)OSP_T|02 Promoting cruise tourism, encouraging alternative proposals, for excursions in the area and for traditional visits to the Capital (MO/3)OSP_T|03 Promoting and encouraging the requalification of the offer of seaside tourism and establishing the criteria for the use of state-owned areas for tourist and recreational purposes (MO/3)OSP_T|04 Raising the urban quality of coastal areas, through redevelopment of waterfronts and waterfront areas (MO/3)OSP_T|05 Environmental and tourist enhancement of the Ponziano archipelago also through the full guarantee of territorial continuity with the mainland (MO/3)OSP_A|01 Aquaculture To promote innovation in the ichthyic chain in a logic of safeguard of the marine environment and at the same time of consumer protection, also identifying new sites for aquaculture in coherence with the AZA management guidelines. (MO/3)OSP_A|02 Improve technical skills in aquaculture and develop methodologies and indicators for improved environmental monitoring. (MO/3)OSP_TM|01 Maritime transport Strengthen the Latium port system, in a logic of environmental and and ports social sustainability, in order to increase the level of competitiveness through the strengthening of the infrastructure, the implementation of the FTZ, the implementation of intermodality ship-rail-road and the full connection with the European corridors, with the inclusion of the port of Civitavecchia in the European transport network TEN-T.



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Reference sector	Code	Specific Objective
	(MO/3)OSP_TM 02	To make Lazio the main cruise port of call in the Mediterranean, increasing the productivity of the tourism sector and its allied industries.
	(MO/3)OSP_TM 03	To recover market shares of container traffic destined for Lazio that choose to arrive in other Italian ports or to the more competitive ports of Northern Europe and to represent the gateway for new traffic from the Maghreb countries and North Africa in general, through Short Sea Shipping services and Motorways of the Sea lines
	(MO/3)OSP_TM 04	Implement and enhance the value of minor ports, in a logic of sustainability that can ensure the coexistence of the environment and landscape and at the same time economic development
	(MO/3)OSP_TM 05	Strengthen the nautical and yachting sector by increasing the market
Energy	(MO/3)OSP_E 01	Stimulate policies to reduce climate-altering emissions by supporting research, experimentation and the installation of offshore plants powered by renewable sources and other innovative technologies for energy from the sea, and at the same time to implement the principle of de-carbonization of transport, including shipping

Planning units and vocations of use

The Planning Units identified for the MO/3 Sub-area are represented in Figure 25 e Figure 26.

The Planning Units were elaborated by the Lazio Region and were presented through the Deliberation of the Council n.710 of 26 October 2021 as object "Maritime Space Management Plans. Acknowledgement of the vision and specific objectives and identification of the Planning Units."



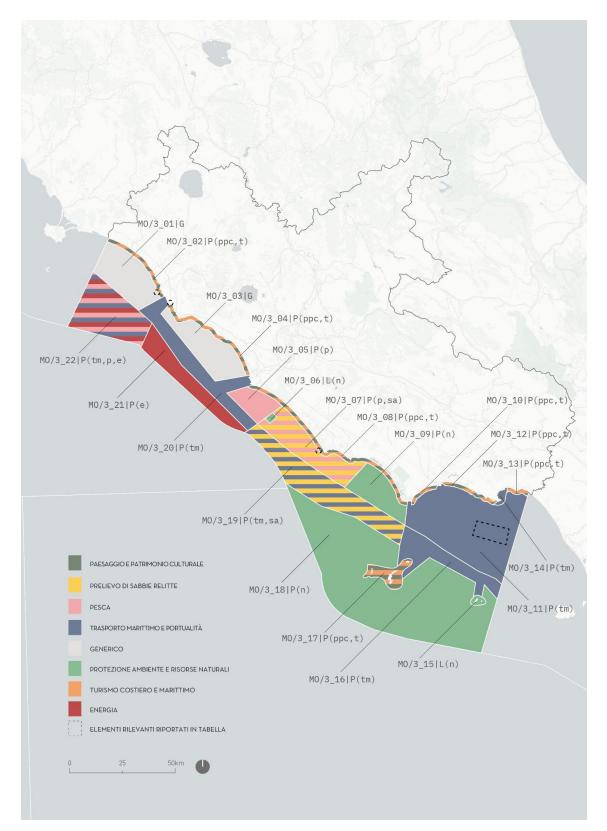




Figure 25 Identification of planning units in the MO/3 sub-area

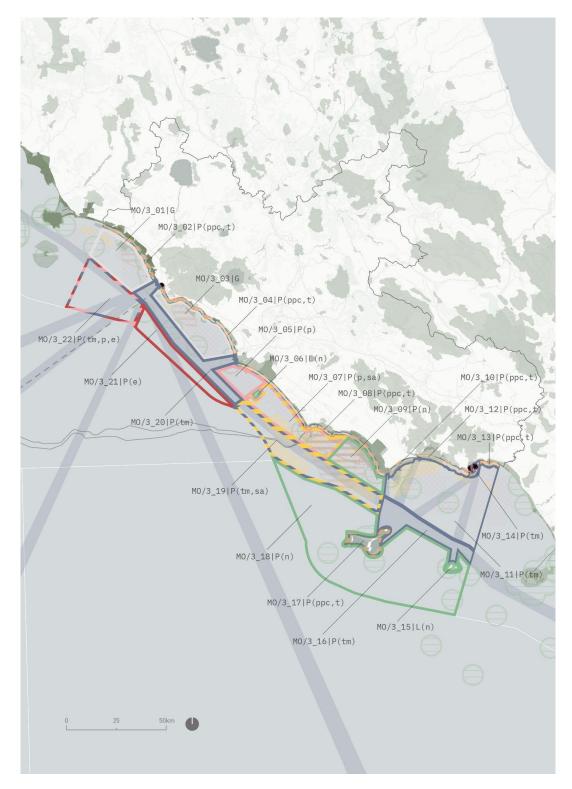


Figure 26 Overlap between the Principal Uses Map and the MO/3 Sub-area Planning Units.



7.3.4 Sub-area MO/4 - Territorial waters Campania, Basilicata

The main uses of the sea and the coast present in the MO/4 sub-area are represented in the Figure 27. The figure in question shows a synthetic and simplified representation of the maritime activities existing in the area, aimed at providing an overall framework and understanding the planning choices made in the area. In the maritime area in question, the main uses of the sea are: coastal tourism, maritime transport, protection of the environment and natural resources, protection of the landscape and cultural heritage, defence-related activities, aquaculture and fishing. The sources of the spatial data used are given in Figure 27 and represent information available at the national level through the contribution of the Ministries involved in the MSP process.

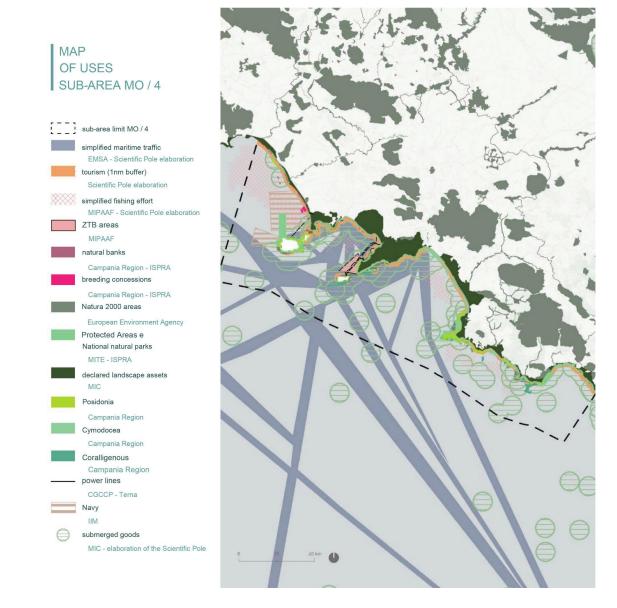


Figure 27 summary map of the main uses in the MO/4 sub-area



Vision and specific objectives

The vision and the specific objectives have been elaborated by the Campania Region and have been approved by means of DIRECTOR'S DECREE No. 68 on 13/07/2022 with the subject "Re-approval of the Maritime Spatial Plan Final Data Rectification DD. N. 66 of 11.07.2022".

The Urban Planning has traditionally considered the territorial planning limiting its field of intervention only to the land, delegating to sectorial disciplines the planning and management of marine spaces. There is a need to orient the discipline of town planning towards a broader and more organic vision. Today the largest slice of world economic competition passes through the seas and the management of this complexity requires a transversal approach capable of re-conceptualising the sea as a system of opportunities for territorial regeneration.

The region of Campania, at the centre of the Mediterranean, has been a crossroads for thousands of years for flows of different kinds and forms. With its coastline that includes tourist attractions of international level, a productive vocation in the shipbuilding industry, two industrial ports of primary level, a multitude of fishing ports, as well as a system of research and innovation of primary level, Campania is "naturally" one of the most important poles of the country for the supply chain of the sea.

Today, the region aims to build a vision for the coastal territory that looks at the sea as a system of material and immaterial relations with the metropolitan area. The vision consists of four main strands. The first concerns the **preservation of** the tangible and intangible heritage linked to the sea and along the coastline which can be characterised according to different landscape settings and uses. One thinks of the submerged architectural heritage, of the activities linked to fishing or aquaculture. The conservation and enhancement of these activities is also fundamental to trigger new tourist processes linked to the fruition of the maritime heritage. The second guideline concerns the regualification of areas close to the coastline which are often compromised and degraded as a result of the port's specialised activities. Think of the areas of logistics, energy or commercial and shipbuilding activities. The coexistence of these activities must be rethought in a systemic and sustainable way, also implementing courageous choices of delocalization and the use of energy sources more compatible with the urban system and the lives of the people who populate these places. This action aims very much at the requalification of the areas of land-sea interaction inside putting into system the different territorial fragments that interface with the sea system. The third guideline concerns the theme of safeguarding the landscape characteristics that develop along the coast in order to protect the environmental ecosystem while ensuring the conservation of biodiversity and less land consumption. This action aims to identify strategies that aim to protect the coastal and marine territory by adapting to the challenges related to climate change. Finally, the vision points to the identification of development lines able to put in system the urban planning with the sea planning. The Campania coastline is strongly characterized by the presence of two main ports: Naples and Salerno. These territories experience a strong spatial and cultural separation which sees the ports, with their flows and low-porous spaces, as hard machines within the urban fabric. The development line therefore proposes to go beyond the traditional idea of the port as a mosaic of functional enclaves. On the contrary, today the quality of the



landscape is played out in the transitional spaces, in the waste areas, in the non-uses of the territory, in the unresolved relationships between different environments and territorial typologies: residential areas, agricultural areas, industrial and natural sites, energy places. Therefore, looking at the regional coastline from the perspective of the sea could help to rethink these spaces of land-sea interaction as multifunctional landscapes in which to converge in an adaptive way different uses, times and practices related to the sea. Concrete examples could be an advanced tertiary sector behind the port, activities linked to maritime culture in the abandoned warehouses between land and sea, rethinking the spaces currently occupied by fuel depots so that they can be reinserted into the urban metabolism also through innovative processes of soil decontamination. All this can become the prerequisite to promote a new offer linked to the themes of the Blue Economy that in the long run can respond concretely to employment issues and enhancement of the Campania region in strong connection with its sea.

The *Blue Economy*, in fact, represents one of the sectors of the Intelligent Specialization Strategy for Research and Innovation of Campania (RIS3), that is a strategic area where to concentrate resources and interventions; it includes the main productive sectors (*Fish industry, Marine Extraction Industry, Renewable Energies, Ports Activities, Shipbuilding, Maritime Transport and Coastal Tourism*) in which to activate *cross fertilization* processes with other technological-productive sectors.

The opportunities arising from the economy of the sea are, moreover, also the subject of a specific article of the REGIONAL LAW 5/2021 (BURC n. 63 of 29 June 2021) "Measures for the efficiency of administrative action and the implementation of the objectives set by the DEFR 2021 - 2023 - Attached to the regional stability for 2021". In Article 10, the Law provides, with the support of the Campania Region, the launch of a development project of the "Campania Sea District" for the promotion of tourism, trade, services, research and local production systems focused on the sea economy, to be implemented in synergy with institutional, cultural, production, services, training and research realities.

Reference sector	Code	Specific Objective
Sustainable development	(MO/4)OSP_SS 01	Promote interventions for the improvement of the water quality of surface water bodies and for the strengthening of the sewage and purification systems of coastal municipalities in order to contrast marine pollution phenomena
	(MO/4)OSP_SS 02	Raising the level of protection of water quality, also by strengthening control and monitoring actions.
Environmental (MO/4)OSP_N 01 protection and natural resources		To conserve terrestrial and marine biodiversity, promoting strategies and management models that allow for the enjoyment and tourist enhancement of the protected marine areas, compatibly with the needs of safeguarding
	(MO/4)OSP_N 02	Promoting the creation of a continuous coastal belt of high nature spaces aimed at improving the ecological resilience of coastal ecotypes and enhancing ecological connectivity in areas of land-sea interaction

Table 6: Specific objectives for the Campania sub-area of territorial waters



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Reference sector Code **Specific Objective** (MO/4)OSP_N|03 Safeguard the system of non-urbanized spaces of the strip coastal as a key factor in maintaining and improving the multifunctionality of coastal areas, as a key resource for environmental and ecological balances. (MO/4)OSP N|04 Safeguard coastal and island areas that include semi-natural habitats of high naturalistic, aesthetic-perceptive and recreational value that play a key role within the regional ecological network Coastal defence (MO/4)OSP_DC|01 Promote actions to protect stretches of coastline subject to intense and persistent phenomena of coastal erosion that jeopardize the stability and functionality of infrastructure, tourist activities and natural areas (MO/4)OSP_DC|02 Safeguard the natural morphology of the coastline and control erosion processes induced by the combined action of anthropic transformations and climate change (MO/4)OSP_DC|03 Providing compatible and sustainable mitigation and contrast of coastal erosion processes and fragility of the coastal system by restoring, wherever possible, the natural systems of defense and nourishment of the beaches (MO/4)OSP_DC|04 Aim at the identification of strategies aimed at the mitigation of risk and vulnerability factors of the coastal landscape both in relation to natural and anthropic factors. Think of the risks related to water and climate change or vulnerability in relation to the Vesuvius risk. These strategies, if on the one hand they have to give concrete answers to the changes taking place, on the other hand they have to be able to reinsert visions for the dynamic and functional conservation of the heritage of natural areas of landscape and historical interest. Coastal and (MO/4)OSP T|01 Enhancement of cruise tourism by promoting alternative routes that aim at the enjoyment of the maritime historical-artistic and maritime tourism archaeological heritage. This involves the enhancement of marinas and historic villages; coastal archaeological sites and submerged archaeology; seabed, protected areas and reserves (MO/4)OSP_T|02 Promote and encourage the regualification of the offer of seaside tourism in terms of energy and water efficiency and waste reduction and establish the criteria for the use of state-owned areas for tourism and recreational purposes (MO/4)OSP_T|03 Promoting quality tourism related to bathing both by improving water quality and by combating coastal erosion (MO/4)OSP_T|04 Initiate development actions to improve the quality of land-sea interaction areas and urban waterfronts. (MO/4)OSP_T|05 Promote a sustainable and low-impact tourism by protecting the landscape characteristics of the coastal system and the most fragile environments (MO/4)OSP_T|06 Integrating the tourist offer connected to the use of the sea (bathing, boating and cruising) with that of cultural attractions and nature tourism or cycling and pedestrian use of the coastal landscape



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Reference sector	Code	Specific Objective
	(MO/4)OSP_T 07	Promote maintenance of the seabed functional to the activities of the tourist port system by promoting the sustainable management of sediments with the aim of beach nourishment for the beaches
	(MO/4)OSP_T 08	Open, where possible, the port's spaces to residents and visitors thus improving the visibility of the port and its maritime activities
Fishing	(MO/4)OSP_P 01	Support the protection and management plans of the activities in the marine protected areas of Campania such as the SPAs, MPAs and Natura 2000 sites (mapping of fishing activity and intensity and interactions with protected species and habitats).
Aquaculture	(MO/4)OSP_A 01	Identify suitable areas for aquaculture, both at sea and on land, and areas where intensive aquaculture activities should be excluded so that the role of these areas in ecosystem functioning is preserved.
	(MO/4)OSP_A 02	Promote sustainable aquaculture activities in particular by enhancing the competitiveness of production and ensuring that activities are environmentally sustainable in the long term.
	(MO/4)OSP_A 03	Improve technical skills in aquaculture and develop methodologies and indicators for improved environmental monitoring.
Maritime transport and ports	(MO/4)OSP_TM 01	Strengthening the Campania port system in a logic of environmental, social and cultural sustainability. This can be achieved, on the one hand, by improving infrastructural efficiency through interventions that link Campania's ports with European corridors, and on the other, by rethinking the ports as promoters of social and productive innovation and thus capable of triggering relationships with the territory.
	(MO/4)OSP_TM 02	To make Campania the main cruise port of call in the Mediterranean, increasing the productivity of the tourism sector and its allied industries.
	(MO/4)OSP_TM 03	Recover market shares of container traffic in Naples by completing the enlargement of the Darsena di Levante
	(MO/4)OSP_TM 04	Relaunch the development of small ports in Campania and their hinterland through strategies that include the implementation of new <i>business models</i> aimed at optimizing existing resources and new connections between the ports of the metropolitan and regional system
	(MO/4)OSP_TM 05	Strengthen the boating and yachting sector in small ports.
	(MO/4)OSP_TM 06	Supporting and promoting the development of the existing commercial and tourist ports, avoiding further artificialization of the coast for infrastructural purposes
	(MO/4)OSP_TM 07	Define a port plan on a regional scale that looks at the intersection of the different ports and their vocations and territorial specificities and, on the basis of that, implement systemic choices.
	(MO/4)OSP_TM 08	Ensuring the valorisation and requalification of port infrastructures with maintenance of the seabed, as well as restoration of the natural capacity altered by climate change or natural phenomena of erosion or bradyseism (raising or lowering of the sea level).
	(MO/4)OSP_TM 09	To favour the rejuvenation of the operating fleets, with investments for the purchase of new vessels with innovative and eco-sustainable



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Reference sector Code **Specific Objective** qualitative-quantitative performances in order to reduce environmental pollution (CO2 emissions) and acoustic pollution (noise). (MO/4)OSP_TM|10 Encourage the development of technologies and solutions for the creation of eco-ports, through the use of ICT solutions and advanced technologies (IoT, big data, advanced sensors, dashboards for measuring performance, etc.) to support the exchange of information between the actors of the port community (MO/4)OSP_TM|11 Promote the digitalization of port services for the optimization and sustainability of port activities (i.e. smart port) Energy (MO/4)OSP_E|01 Building processes for the gradual decarbonisation of Campania's ports as imposed by the Agenda 2030 Sustainable Development Goals. These processes go through the identification of strategies that promote the use of alternative energy sources (such as sea waves) or the electrification of the docks to reduce the impact of the presence of large ships (commercial and passenger) in the city. (MO/4)OSP_E|02 Encourage communities living in coastal areas to become an integral part of decision-making processes in relation to the use of new forms of energy, especially when concessions that are still in progress expire. (MO/4)OSP E|03 Improving the energy efficiency of naval and marine vessels (energy management and innovative and alternative propulsion systems, on-board thermal systems, hydrodynamic performance, performance of marine mechanical transmissions, etc.). (MO/4)OSP_E|04 To favour the development of technologies with reduced environmental impact for the realization of hulls, and/or parts, and/or nautical means with low environmental impact also with advanced composite materials. (MO/4)OSP_E|05 Stimulate policies aimed at reducing climate-altering emissions through support for research and experimentation for the installation of offshore installations powered by renewable sources and other innovative technologies for energy from the sea; (MO/4)OSP_E|06 Promote the energy self-sufficiency of port areas, mainly through wave energy production; (MO/4)OSP E|07 Support the use of multifunctional platforms that additionally provide for the production of energy from wind and waves. Landscape and (MO/4)OSP_PPC|01 Promote the preservation and enhancement of coastal interrelation basins, areas of land-sea interface, which are particularly relevant to cultural heritage the perception of the landscape of coastal areas (MO/4)OSP_PPC|02 Provide compatible and sustainable interventions to protect the submerged peri-coastal environments and protected marine areas and submerged archaeological parks such as that of Baia.

(MO/4)OSP_PPC|03 Promote the implementation of the European Strategy for ICZM, as coastal areas are characterised by high environmental sensitivity and biological diversity, and a high level of human pressure, they require integrated spatial development strategies, balancing the demands of protection and development by involving the communities concerned.



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Reference sector	Code	Specific Objective
	(MO/4)OSP_PPC 04	Promote measures and criteria for the correct environmental and landscape insertion of works and infrastructures, including those for coastal defence, to be carried out with highly reversible techniques, with a low impact on the integrity, continuity and multi-functionality of natural, semi-natural and agricultural spaces and on public accessibility to the coast, and identifying suitable protection strips for morphological elements and ridges with a greater visual fragility.
	(MO/4)OSP_PPC 05	Safeguard and enhance, through the creation of a unitary land-sea circuit, the relationships between cave or shelter sites mainly prehistoric (Paleolithic), marine ecosystem and coastal systems mitigating the environmental impacts resulting from the summer use of the coast.
	(MO/4)OSP_PPC 06	Safeguard and enhance the visual and functional relationships between areas and monumental complexes, volcanic contexts and coastal systems in order to promote ecological continuity in relation to the space of land-sea interaction.
	(MO/4)OSP_PPC 07	Safeguard and enhance coastal landscapes of exceptional ecological-functional, historical-architectural, perceptive and identity value. This is aimed at the identification of actions for the development and use of architectural heritage (such as historic buildings along the coastline or even abandoned or underused industrial heritage) and the landscape context in which they are inserted.
Scientific research and innovation	(MO/4)OSP_RI 01	Support research and innovation in the Blue Economy and promote the economic exploitation of results (<i>patents and research spinoffs</i>) with particular reference to the priority areas of RIS3 Campania, such as: <i>Maritime technologies, Nautical sustainability, Logistics and</i> <i>safety of the sea and port areas, Marine biotechnology for industry,</i> <i>food, medicine and the environment, Protection and enhancement of</i> <i>the marine environment.</i>
	(MO/4)OSP_RI 02	Promote the use of enabling technologies to support the digital and green transition of the Campania Maritime Space
	(MO/4)OSP_RI 03	Encourage and promote the economic uses of the sea (<i>bio-blue technologies</i>) also through technology transfer and support for the birth and consolidation of new innovative entrepreneurship (startups)
	(MO/4)OSP_RI 04	Support the Blue Economy also through the use of alternative financing practices, such as <i>crowdfunding</i> and <i>fund matching</i> , to pursue integrated and sustainable development.
	(MO/4)OSP_RI 05	Encourage the sustainable and innovative development of maritime services and the tourism and cultural sector related to the sea, including through forms of public-private partnership.
	(MO/4)OSP_RI 06	Safeguard and raise employment levels in the nautical and maritime sectors through training actions to promote upskilling and re-skilling of personnel
	(MO/4)OSP_RI 07	Encourage the construction of <i>port centers/learning centers</i> as places of experimentation to provide daily news and information to



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Reference sector	Code	Specific Objective
		citizens about the activities of the sea through the organization of temporary and permanent cultural events.
	(MO/4)OSP_RI 08	Organize scientific dissemination spaces on innovative technologies for the protection and enhancement of the marine ecosystem.
	(MO/4)OSP_RI 09	Aim for the construction of promenades and public open spaces in areas of land-sea interaction as an opportunity to promote a better understanding of the sea and its many uses and at the same time reduce the phenomena of social segregation.

Planning units and vocations of use

The Planning Units identified for the MO/4 Sub-area are represented in Figure 28 e Figure 29.

The Planning Units have been elaborated by the Campania Region and have been approved by means of DECREE DECREE No. 68 on 13/07/2022 with the subject "Re-approval of the Maritime Spatial Plan Drawings Rectification DD. N. 66 of 11.07.2022".



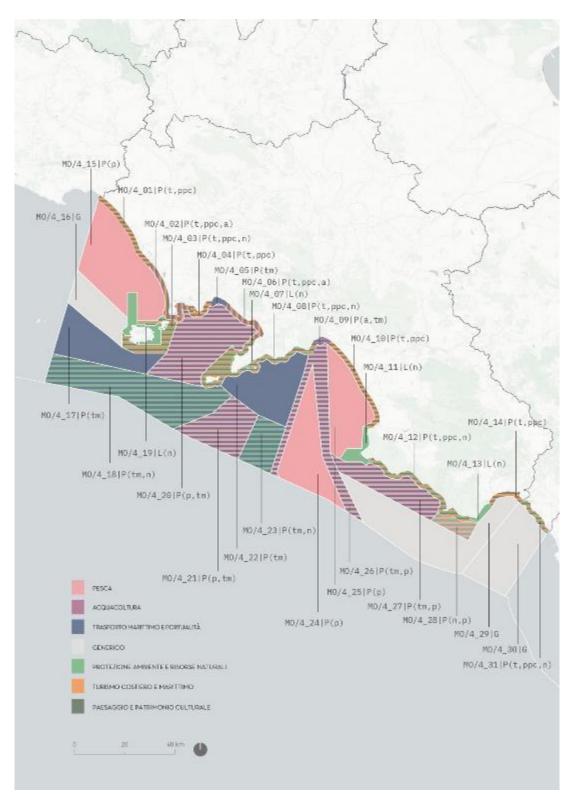


Figure 28 Identification of the planning units of the MO/4 sub-area



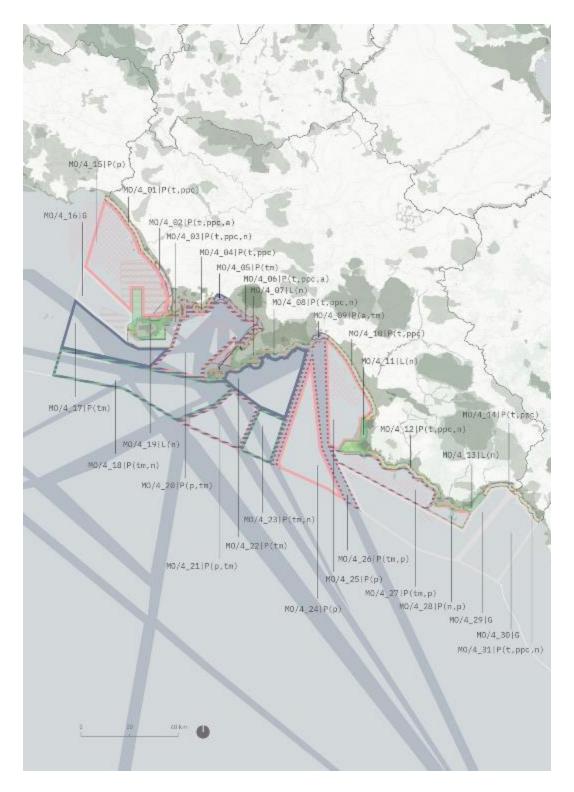


Figure 29 Overlap between the Principal Uses Map and the MO/4 Sub-area Planning Units.



7.3.5 Sub-area MO/5 - Territorial waters Calabria

The contents of this paragraph were prepared by the Region of Calabria and approved by the Regional Council at its meeting on 19 March 2021.

The main uses of the sea and coast present in the MO/5 sub-area are represented in the Figure 30. The figure in question shows a synthetic and simplified representation of the maritime activities existing in the area, aimed at providing an overall framework and understanding the planning choices made in the area. In the maritime area in question, the main uses of the sea are: coastal tourism, maritime transport, protection of the environment and natural resources, protection of the landscape and cultural heritage, defence-related activities, aquaculture and fishing. The sources of the spatial data used are given in Figure 30 and represent information available at the national level through the contribution of the Ministries involved in the MSP process.

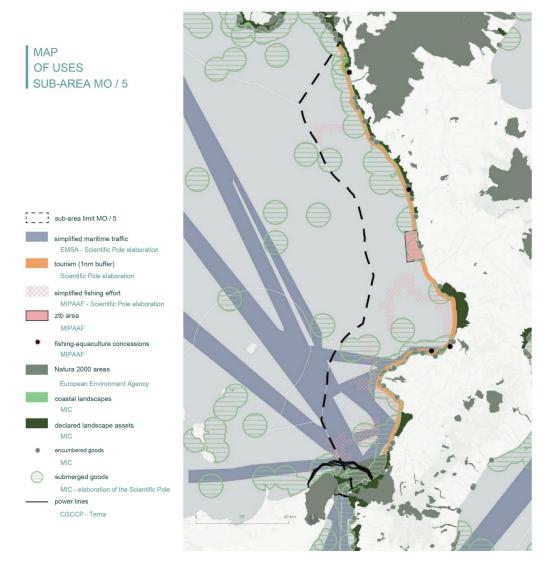


Figure 30 summary map of the main uses in the MO/5 sub-area



Vision and specific objectives

The protection of the natural, landscape and cultural heritage of coastal and marine areas is an essential prerequisite which must be taken into account when defining and implementing development strategies for the maritime economy and when defining permitted human uses.

Among the strategies, priority should be given to tourism development, which is based primarily on the natural, landscape and cultural heritage. This strategic priority must be pursued in a sustainable manner, limiting the impact of infrastructure and related activities.

The fact that the southern part of the sub-area is crossed by international routes and is close to Sicily and the Aeolian Islands is an opportunity for commercial and tourist development that needs to be consolidated and strengthened, as in the case of the Port of Gioia Tauro, or promoted in a sustainable manner through the port system.

Additional development strategies are compatible to the extent that they do not conflict with the protection and development requirements outlined above.

Reference sector	Code	Specific Objective
Sustainable development	(MO/5)OSP_SS 01	Enhancement of maritime state property areas and coastal contracts: in order to guarantee the sustainable use of space and resources in the land-sea interface, raise awareness among coastal Municipalities on the opportunity to equip themselves with the prescribed planning tools, combining the protection of the maritime and coastal environment with the entrepreneurial needs of the sector. Promote coastal contracts as voluntary planning tools able to pursue, through integrated actions, both the protection and enhancement of territories and local development.
Environmental protection and	(MO/5)OSP_N 01	Protection of the environment: maintaining the good conservation status of habitats and species in the long term
natural resources	(MO/5)OSP_N 02	Waste water treatment: Implement the necessary actions to overcome by 2024 the infringement procedures of Directive 1991/271/EEC concerning urban waste water treatment, ensuring reliable waste water sampling in order to preserve the environment, human health and bathing water quality.
Coastal defence	(MO/5)OSP_DC 01	Coastal erosion: fight coastal erosion in order to safeguard transport infrastructures, of considerable importance and with widespread criticality, the tourist use of the coasts and cultural and environmental assets.
Landscape and cultural heritage	(MO/5)OSP_PPC 01	Landscape and cultural heritage: enhancing the aesthetic perceptive structure of the landscape and promoting reciprocal and complementary relationships between inland and coastal landscapes in order to develop land-sea interaction and the fruition of cultural heritage, with particular regard to coastal sites and cultural heritage related to the defensive system (castles, fortified palaces, towers,

Table 7 Specific objectives for the Calabria sub-area of territorial waters



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Reference sector	Code	Specific Objective
		city walls), often inserted in valuable urban and environmental contexts.
		The enhancement should also be carried out through the inclusion in circuits linked to cruise and pleasure boating.
Coastal and maritime tourism	(MO/5)OSP_T 01	To promote and support the enjoyment of the seaside resort, also through the qualitatively adequate offer of complementary and support services connected to seaside tourism and nautical pleasure boating, with respect for environmental sustainability.
	(MO/5)OSP_T 02	Widespread port facilities, recreational boating and seaside tourism: make up the supply gap for nautical tourism, especially in terms of the availability of berths per length of coastline, through the development and creation of port infrastructures and the use of temporary mooring facilities for boats.
Maritime transport and ports	(MO/5)OSP_TM 01	Main ports: consolidate the role of the Port of Gioia Tauro, as the main Italian transhipment hub, and increase its relevance in the Mediterranean and international context. In the remaining ports, especially in the southern part, exploit the attractiveness resulting from the proximity to international routes, Sicily and the Aeolian Islands for commercial development and especially tourism, providing the ability to accommodate boats and pleasure boats (mega yachts, mini-cruises). Developing cruise tourism in the port of Vibo Valentia
Fishing	(MO/5)OSP_P 01	Guarantee in all port infrastructures, with justified exceptions, a fishing function, with an adequate supply of services in quantitative and qualitative terms.
Aquaculture	(MO/5)OSP_A 01	Promote and support the development of offshore aquaculture in suitably identified areas.
Energy	(MO/5)OSP_E 01	Renewable energy: transform ports into positive energy facilities, mainly through wave energy production. Promote, for offshore aquaculture, the use of multifunctional platforms that provide, in addition, the production of energy from wind and waves.
Maritime safety, navigation and surveillance	(MO/5)OSP_S 01	Legality and safety: encourage a widespread presence of the Coast Guard and other law enforcement agencies at port infrastructures, as a safeguard of legality and safety.

Planning units and vocations of use

The Planning Units identified for the MO/5 Sub-area are represented in Figure 31 e Figure 32.



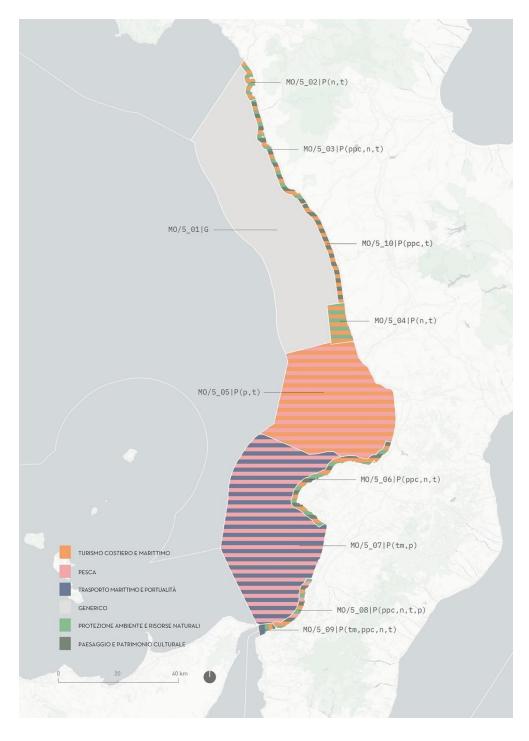


Figure 31 Identification of the planning units of the MO/5 sub-area



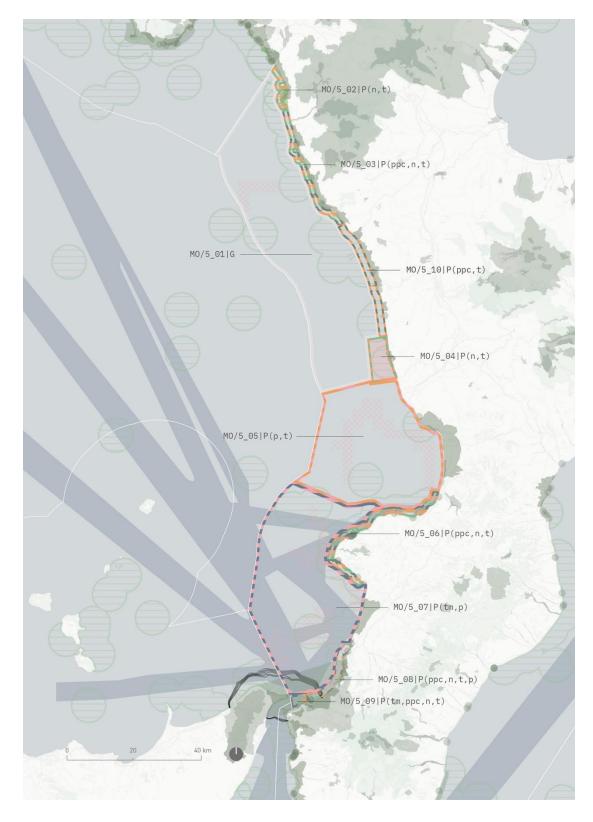


Figure 32 Overlap between the map of principal uses and the Planning Units of Sub-area MO/5



7.3.6 Sub-area MO/6 - Territorial waters Sicily



The main uses of the sea and coast present in the MO/6 sub-area are depicted in the Figure 33. The figure in question shows a synthetic and simplified representation of the maritime activities existing in the area, aimed at providing an overall framework and understanding the planning choices made in the area. In the maritime area in question, the main uses of the sea are: coastal tourism, maritime transport, protection of the environment and natural resources, protection of the landscape and cultural heritage, defence-related activities, aquaculture and fishing. The sources of the spatial data used are given in Figure 33 and represent information available at the national level through the contribution of the Ministries involved in the MSP process.

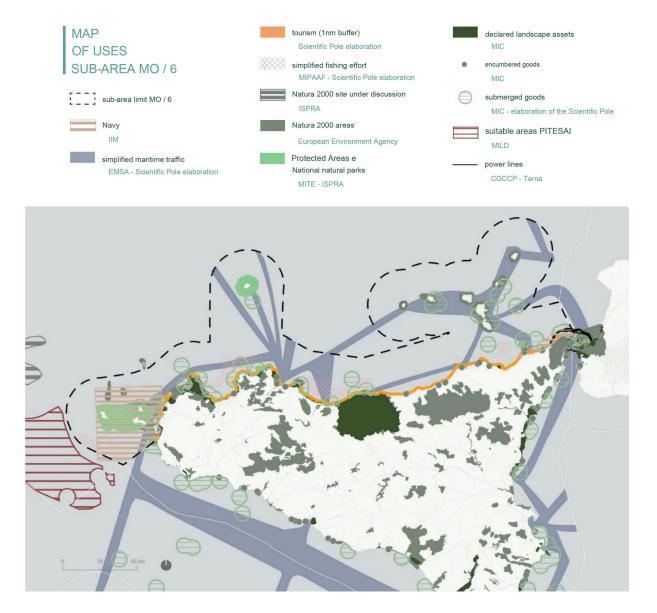


Figure 33 summary map of the main uses in the MO/6 sub-area



Vision and specific objectives

The Sicilian Region recognizes the maritime economy (so-called Blue Economy) and its sustainable development (so-called Sustainable Blue Growth) as being of strategic importance.

The sectors that currently make it up, from tourism (seaside and cruise tourism) to transport, from logistics to trade, from fishing to aquaculture, require an overall development strategy that must address the critical issues resulting from the interference between activities and the influence of climate change in progress, without prejudice to the need to ensure the protection of the environment and landscape, the only way to achieve harmonious and sustainable development.

In addition to the traditional sectors, there are emerging sectors with a high rate of innovation: energy from renewable marine sources, the circular economy linked to the recovery of waste at sea and blue biotechnology, sectors that need integrated support policies.

Above all, the real engine of development and progress is research, both basic and applied, and the continuous training of operators in all the sectors involved, which would undoubtedly also contribute to the consequent development of regional employment, reducing the unemployment rate.

General objective - transversal

The Sicilian Region, with its maritime vocation par excellence, identifies sustainable development as a general and transversal objective, in harmony with and in compliance with the United Nations 2030 Agenda, the National Strategy for Sustainable Development and the Regional Strategies for Sustainable Development, which are currently being defined, but also the treatment and recycling of waste and the consequent environmental remediation of heavily polluted areas, contributing to a Green Sicily. The Global Agenda for Sustainable Development 2030 requires to move from a sectorial governance approach to an integrated governance approach, which starts from the reading of the context dynamics in their complexity and identifies specific objectives that take into account the environmental, social and economic interactions. However, given the geographical location of Rigione, this objective is combined with the objective of strategic interest for safety at sea, coastal control, fisheries surveillance and the interception of migrants from the coasts of North Africa. The above in full awareness of the strategic role of the Sicilian Region in the Mediterranean. As a matter of fact, today the Mediterranean is the most frequented route for the transit of several thousand ships - cargo coming from Suez, therefore it becomes an important junction of the world politics. In this scenario, Sicily, which is strategically geo-located, certainly plays a geo-strategic frontier role for Europe.

The specific objectives

The specific vision and the general objective are articulated in specific planning objectives (SO), which take into account, in an integrated way, the system of existing uses, their current trends and the environmental characteristics and emergencies of the maritime area.

The specific objectives mainly concern, individually or combined, the following sea/coastal sectors and uses:



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Table 8 Specific objectives for the sub-area of territorial waters of Sicily, Western Mediterranean

Reference sector	Code	Specific Objective
Maritime safety, navigation and surveillance	(MO/6)OSP_S 01	To support a process of military control of the marine areas and coastal zones in the south of Sicily that face the Sicilian channel for the protection of fellow fishermen and for the control of the migratory phenomenon.
	(MO/6)OSP_S 02	Contribute to safe navigation and environmental protection.
Fishing	(MO/6)OSP_P 01	To promote the development and sustainability of the fishery with reference to the small fishery, promoting the multifunctionality and the integration with other sectors, tourism, enogastronomy, quality chains for the transformation of the ichthyic product and its valorisation, as well as the promotion of the maritime culture, of the fishery traditions, of the respect for the environment and the safeguard of the species.
	(MO/6)OSP_P 02	Promote compliance by the fishing fleet with the emission limitation regulations imposed by the IMO
Aquaculture	(MO/6)OSP_A 01	To guarantee the development of the existing marine and lagoon aquaculture activities, favouring the diversification of the productions, the sustainable use of the resources and the technological innovation.
	(MO/6)OSP_A 02	Promotion of aquaculture facilities according to guidelines and acts competing with an ecosystem and environmental approach.
Maritime transport and ports	(MO/6)OSP_TM 01	Guarantee maritime continuity for passengers and goods between Sicily and Italy and Europe, as well as with the smaller islands, favouring the opening of new national and international routes
	(MO/6)OSP_TM 02	Promotion of activities in crisis identified in port areas and commercial ports and contextual development of shipbuilding.
	(MO/6)OSP_TM 03	Implement the attractiveness of commercial ports.
Energy	(MO/6)OSP_E 01	Promotion of the development of renewable energy sources, including marine energy sources, such as wave energy to promote the electrification of ports or other urbanised areas, or offshore wind energy on floating installations, located in areas not visible from land and not subject to environmental protection and outside the usual fishing areas.
	(MO/6)OSP_E 02	Promote the development of the energy transition of port areas by bringing ports back to a concept of energy self-sufficiency according to current environmental and energy protection regulations.
Coastal defence	(MO/6)OSP_DC 01	Development of all the actions related to the protection of the coasts, contrast to the erosion phenomenon, protection from the floods and consequent restoration of the sandy and gravelly coasts, with particular attention to the mouths of the rivers, promoting appropriate naturalistic engineering interventions aimed at the containment of the degraded coasts, as well as a coherent development of the local flora.
	(MO/6)OSP_DC 02	Promotion of a sustainable development of coastal areas and environmental reclamation of port areas through a multi-year planning of activities, to be implemented also for the requalification, adaptation and strengthening of existing port structures.



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Reference sector	Code	Specific Objective
Coastal and maritime tourism	(MO/6)OSP_T 01	In order to implement the tourist fruition of the coasts, a coherent activity will be developed for the improvement and maintenance of the quality status of bathing waters (Directive 2006/7/EC), as well as strategies for the contrast of coastal erosion.
	(MO/6)OSP_T 02	Implementation of the tourist port, proposing new settlements, and in return, modernization, strengthening and adaptation of existing marinas.
	(MO/6)OSP_T 03	Operational proposals for an implementing regulation in the port area that identifies the rules for the usability of the spaces to be allocated to tourist landings and those to be allocated to commercial and fishing activities, improving the services available to tourists, yachtsmen or cruise passengers.
Environmental protection and natural resources	(MO/6)OSP_N 01	Enhancement of the system of protected areas already existing and those to be created, providing coherent actions for the reduction of pollution in port areas.
	(MO/6)OSP_N 02	Achievement and maintenance of the environmental rehabilitation objectives stemming from the Water Directive (Dir. 2000/60/EC) and the Marine Strategy Framework Directive.
Landscape and cultural heritage	(MO/6)OSP_PPC 01	Protection and enhancement of the environment and landscape of the assets and the context in which they insist, taking into account the respect of the constraints already defined
	(MO/6)OSP_PPC 02	Identification of assets belonging to the regional maritime - coastal heritage and consequent requalification and conservative restoration.
Scientific research and innovation	(MO/6)OSP_RI 01	Technical and scientific production on issues concerning the protection and preservation of the marine environment.
	(MO/6)OSP_RI 02	Creation of a "District of the Sea" that connects researchers, businesses and public structure, encouraging the birth of start-ups in the sector.
	(MO/6) OSP_RI 03	Promotion for research and development of innovative technologies at the service of the enhancement of the maritime heritage in its environmental and economic aspects.

Planning units and vocations of use

The Planning Units identified for the MO/6 Sub-area are represented in Figure 34 e Figure 35.



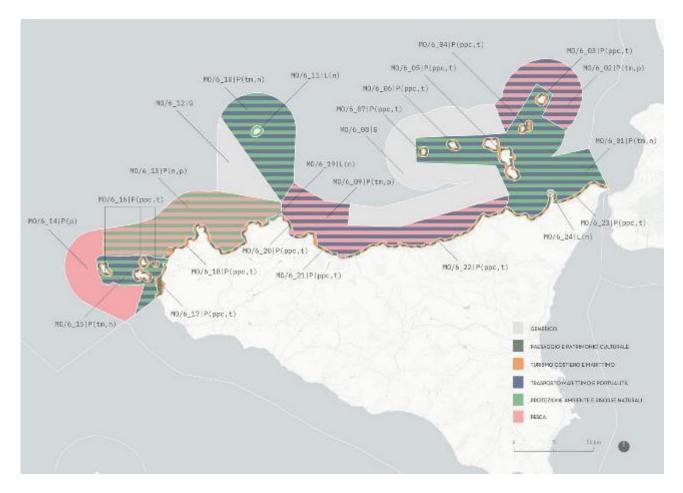


Figure 34 Identification of planning units in sub-area MO/6



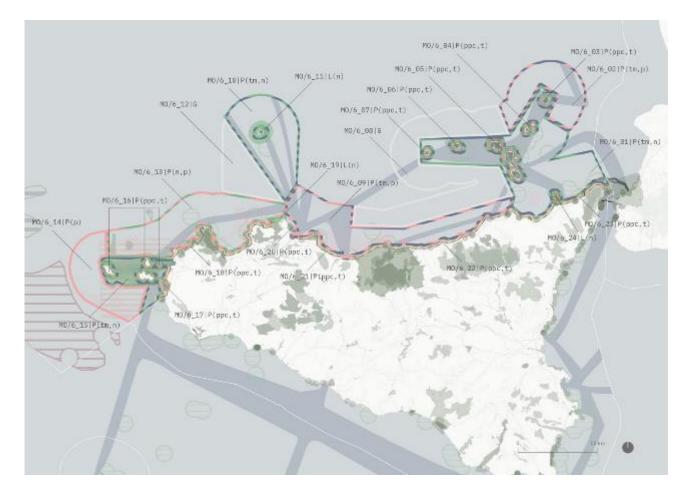


Figure 35 Overlap between the Principal Uses Map and the MO/6 Sub-area Planning Units.

7.3.7 Sub-area MO/7 - Territorial waters of Sardinia

The contents of this paragraph have been drafted by the Region of Sardinia. They have been drafted by the Inter-Assessorial Table established by Council Resolution No. 36/51 of 12 September 2019 Maritime Spatial Planning provided for by Directive 89/2014/EU and Legislative Decree No. 201 of 17 October 2016. Establishment of an Inter-Assessor's Table with the task of examining and coordinating the actions of the Regional Administration during the planning process, taking into account the objectives determined by the Regional Council by Resolution No. 11/66 of 24 March 2021 Maritime Space Planning provided for by Directive 89/2014/EU and Legislative Decree No. 201 of 17 October of the Autonomous Region of Sardinia within the national planning process.

The main uses of the sea and coast present in the MO/7 sub-area are depicted in the Figure 36. The figure in question shows a synthetic and simplified representation of the maritime activities existing in the area, aimed at providing an overall framework and understanding the planning choices made in the area. In the



maritime area in question, the main uses of the sea are: coastal tourism, maritime transport, protection of the environment and natural resources, protection of the landscape and cultural heritage, defence-related activities, aquaculture and fishing. The sources of the spatial data used are given in Figure 36 and represent information available at the national level through the contribution of the Ministries involved in the MSP process.

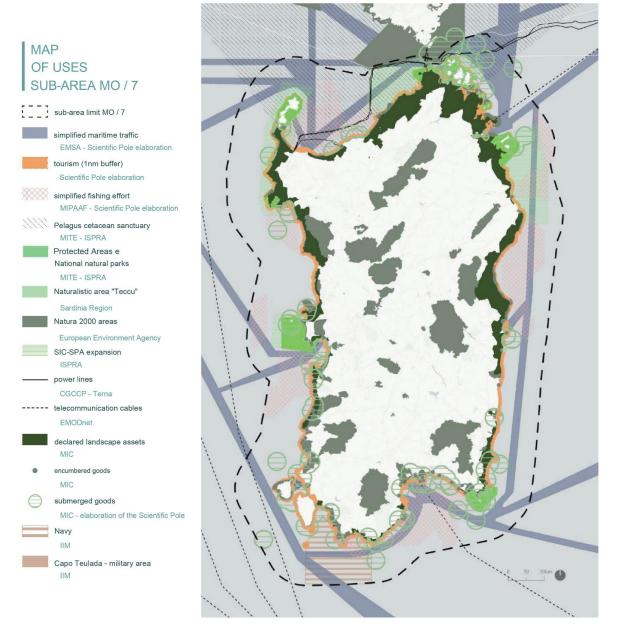


Figure 36 summary map of the main uses in the MO/7 sub-area



Vision and specific objectives

The Autonomous Region of Sardinia recognises the strategic importance of the maritime economy (the so-called Blue Economy) and its sustainable development (Sustainable Blue Growth).

The sectors that currently make it up, from tourism (seaside, yachting and cruising) to transport, from logistics to trade, from fishing to aquaculture, require an overall development strategy that must address the critical issues resulting from the interference between activities and the influence of climate change in progress, without prejudice to the need to ensure the protection of the environment and landscape, the only way to achieve a harmonious and sustainable systemic development.

In addition to the traditional sectors, there are emerging sectors with a high rate of innovation: energy from renewable marine sources, the circular economy linked to the recovery of waste at sea and blue biotechnology, sectors that need integrated support policies.

Above all, the real engine of development and progress, research, basic and applied, and the continuous training of operators in all sectors involved.

The Autonomous Region of Sardinia identifies sustainable development as a general and transversal objective, in harmony with and in compliance with the United Nations 2030 Agenda, the National Strategy for Sustainable Development and the Regional Strategy for Sustainable Development (SRSvS), the latter still under development, articulated in the five pillars (i) A Smarter Sardinia, (ii) A Greener Sardinia, (iii) A More Connected Sardinia, (iv) A More Social Sardinia, (v) A Sardinia Closer to Citizens. The Global Agenda for Sustainable Development 2030 calls for a shift from a sectoral governance approach to an integrated governance approach, which starts by reading the dynamics of the context in their complexity and identifies specific objectives that take into account environmental, social and economic interrelationships.

The specific vision and the general objective are articulated in thirty specific planning objectives (SO), which take into account, in an integrated way, the system of existing uses, their current trends and the environmental characteristics and emergencies of the maritime area.

The specific objectives mainly concern, individually or combined, the following sea/coastal sectors and uses:

- 1. Maritime safety, navigation and surveillance;
- 2. Fishing
- 3. Aquaculture;
- 4. Maritime transport and ports;
- 5. Energy;
- 6. Coastal defense;
- 7. Coastal and maritime tourism;
- 8. Environmental protection and natural resources;
- 9. Landscape and cultural heritage;
- 10. Scientific research and innovation.

Table 9 Specific objectives for the Sardinian sub-area of territorial waters



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General Objective

SUSTAINABLE DEVELOPMENT

Contribute to the achievement of the objectives of the National Strategy for Sustainable Development in line with the five pillars identified in the Regional Strategy for Sustainable Development: (i) A smarter Sardinia; (ii) A greener Sardinia; (iii) A more connected Sardinia; (iv) A more social Sardinia; (v) A Sardinia closer to the citizens

Reference sector	Code	Specific Objective
Maritime safety, navigation and surveillance	(MO/7)OSP_S 01	Support the process of reduction of military easements involving marine and coastal areas in order to facilitate, after the necessary reclamation, their return to civilian use.
	(MO/7)OSP_S 02	To contribute to safe navigation and environmental protection by promoting the introduction of compulsory pilotage in the Bocche di Bonifacio sea area.
Fishing	(MO/7)OSP_P 01	To favour the development and sustainability of fishing with particular reference to small-scale fishing and the income of the sector's operators, promoting multi-functionality and integration with other sectors (tourism, enogastronomy, processing, quality supply chains) and the valorisation of the product, with important positive indirect effects such as the promotion of the maritime culture and fishing traditions, food education, respect for the environment and the safeguarding of species.
	(MO/7)OSP_P 02	Encourage the fishing fleet to comply with the emission limitation regulations imposed by the IMO.
Aquaculture	(MO/7)OSP_A 01	To guarantee the development of the existing marine and lagoon aquaculture activities, favouring the diversification of the productions, the sustainable use of the resources and the technological innovation; to identify, through the spatial planning, the most suitable areas for the purpose (AZA) in order to defuse possible conflicts with other uses of the sea and to guarantee the protection of the marine environment.
	(MO/7)OSP_A 02	Promote aquaculture that follows an ecosystem approach and is in line with the principles of Blue Growth, Green Deal and Circular Economy.
	(MO/7)OSP_A 03	Promote multi-trophic (i.e.: IMTA) and low FFDR (FishFeedDependency Rate) and ecologically sustainable breeding practices, aiming at market diversification and favouring innovative and economically relevant species.
Maritime transport and ports	(MO/7)OSP_TM 01	Guarantee maritime continuity, for passengers and goods, between Sardinia and the mainland and with the smaller islands, and encourage the opening of new national and international routes.
	(MO/7)OSP_TM 02	Encourage the reconversion of activities in crisis in or near commercial ports into activities related to shipbuilding or the circular economy.
	(MO/7)OSP_TM 03	Implement the attractiveness of commercial ports (bunkering, logistics, storage facilities and LNG refuelling).



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Reference sector	Code	Specific Objective
Energy	(MO/7)OSP_E 01	Contribute to decarbonisation by promoting the use of marine renewable energies such as wave energy from the sea to promote the electrification of harbours or other urbanised areas, or off-shore wind energy on floating installations, located in areas, not visible from land, not subject to environmental protection and outside the usual fishing areas; promote the creation of a global value chain in the region based on marine renewable energies.
	(MO/7)OSP_E 02	Promote the energy self-sufficiency of ports and their classification as "Green Ports", through the use of new technologies for the production of energy from renewable sources in ports and new processes for the integration of environmental and energy issues.
	(MO/7)OSP_E 03	Promote the electrification of port docks in line with the provisions of the European Directive "on the establishment of an infrastructure for alternative fuels" - DAFI 2014/94/EU.
Coastal defence	(MO/7)OSP_DC 01	To promote the adoption of Integrated Coastal Zone Management as the main tool to achieve sustainable development of coastal zones through rational planning of activities, so as to reconcile economic, social and cultural development with respect for the environment and landscapes and to preserve coastal zones for the benefit of present and future generations.
	(MO/7)OSP_DC 02	To promote coastal defence, flood protection and the restoration of sandy-gravel coastlines by means of the retrieval and use of coastal and marine sediment deposits, or those deriving from artificial reservoirs, hydrographic reticulation or inland excavation activities.
Coastal and maritime tourism	(MO/7)OSP_T 01	Safeguard the tourist use of the coasts through the improvement and/or maintenance of the quality status of bathing waters (Directive 2006/7/EC), protection against flooding and a strategy to combat coastal erosion.
	(MO/7)OSP_T 02	Implement the network of tourist ports by creating new settlements and modernising existing ones.
	(MO/7)OSP_T 03	Encourage the modernisation of tourist port facilities and related services, in the logic of a new vision of the port and waterfront as a tourist destination and, as such, the fulcrum of the tourism system.
	(MO/7)OSP_T 04	Improving the services available to tourists, be they bathers, boaters or cruise passengers, and integrating the tourist offer with the cultural attractions present along the coasts and, above all, in the inland areas.
Environmental protection and natural resources	(MO/7)OSP_N 01	Enhance the system of protected areas in existence and in the process of being established, verifying the topicality of existing conservation measures, reducing pollution in ports and taking into account interactions with the coast, in synergy with other uses present
	(MO/7)OSP_N 02	Achieve and maintain the environmental objectives stemming from the Marine Strategy Framework Directive (MSFD) and the Water Framework Directive (WFD) (Dir 2000/60/EC)
	(MO/7)OSP_N 03	To promote the institution of the Transnational Park of the Strait of Bonifacio



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Reference sector Code Specific Objective (MO/7)OSP_N|04 Promoting the circular economy linked to waste from the sea and from ports Landscape and (MO/7)OSP_PPC|01 Promote interventions which, while taking into account the cultural heritage environmental and landscape values of the assets and the context in which they are located, in compliance with the constraints defined by the park areas and the SCI and SPA areas of the Natura2000 Network, favour the restoration and conservative recovery of coastal real estate of high historical-architectural value (coastal towers, military fortifications, lighthouses and signals) (MO/7)OSP_PPC|02 Create a network of assets belonging to the maritime and coastal heritage of Sardinia which, even if re-functionalised for tourist and/or cultural purposes, favours the conservation of their historical value and promotes the environmental culture of the sea and navigation (MO/7)OSP_PPC|03 Promoting the identification, conservation and enhancement of underwater archaeological heritage Scientific research (MO/7)OSP_RI|01 To promote scientific production on issues related to the economy of and innovation the sea and the protection and preservation of the marine environment (MO/7)OSP_RI|02 Stimulate applied research to encourage knowledge sharing and a multidisciplinary approach with the aim of creating a real "District of the Sea" that connects research operators and companies and promotes the birth of high-tech start-ups (MO/7)OSP_RI|03 Launching a continuous training system that guarantees the continuous updating of operators in the Blue Economy sectors and encourages the reconversion of those coming from sectors that are no longer in use (MO/7)OSP RI|04 Promoting research and activities in the field of blue biotechnology applied to the pharmaceutical and other industries (MO/7)OSP_RI|05 To support innovation procurement actions in order to strengthen and qualify in these public administrations the use, through research and development contracts, of innovative technologies at the service of the enhancement of the maritime heritage in its environmental and economic aspects.



Planning Unit and vocations of use

The Planning Units identified for the MO/7 Sub-area are represented in Figure 37 e Figure 38.

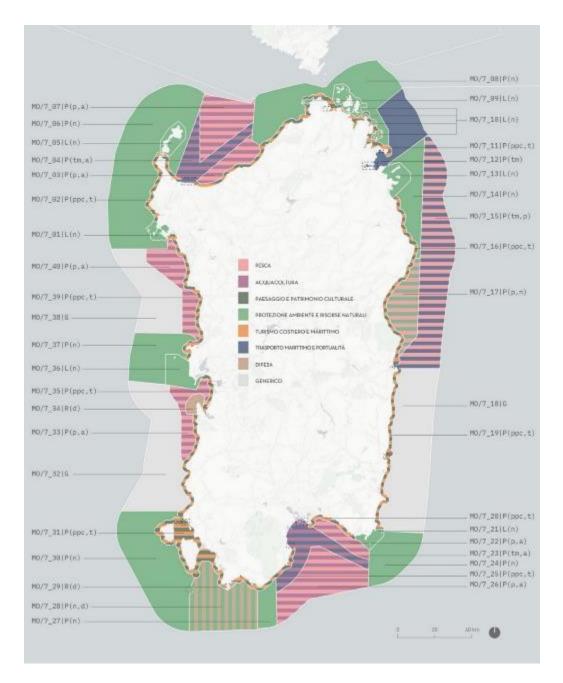


Figure 37 Identification of the planning units of sub-area MO/7



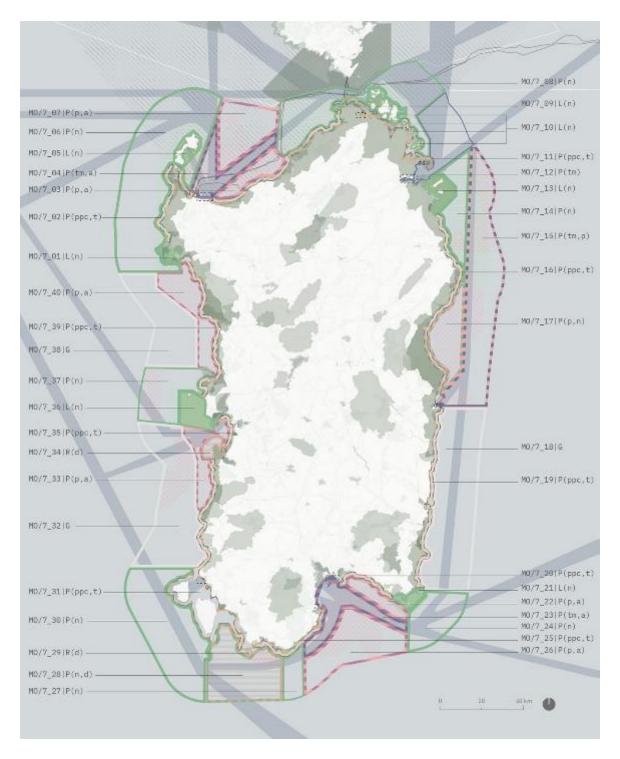


Figure 38 Overlap between the map of principal uses and the Planning Units of Sub-area MO/7



7.3.8 Sub-area MO/8 - EPZ Ligurian Sea

The main uses of the sea present in the MO/8 sub-area are represented in the Figure 39. The figure in question shows a synthetic and simplified representation of the maritime activities existing in the area, aimed at providing an overall framework and understanding the planning choices made in the area. In the maritime area in question, the main uses of the sea are: maritime transport, protection of the environment and natural resources, defence-related activities and fishing. The sources of the spatial data used are reported in Figure 39 and represent information available at national level through the contribution of the Ministries involved in the MSP process.

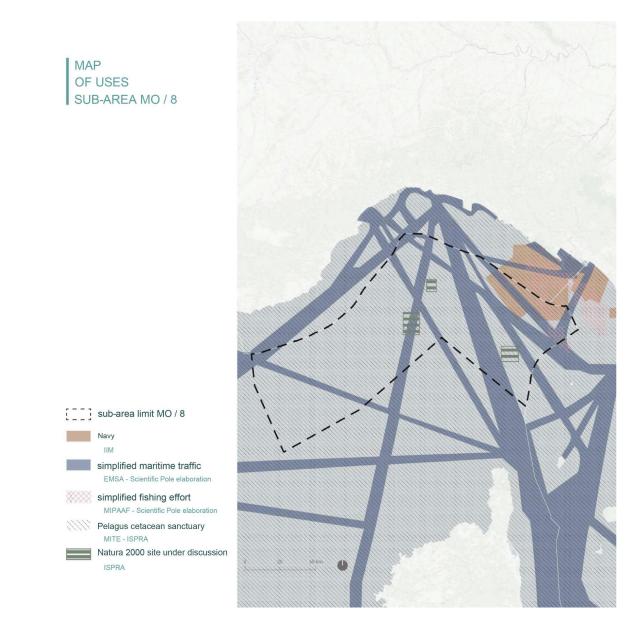


Figure 39 summary map of the main uses in the MO/8 sub-area



Vision and specific objectives

The strategy for the development of maritime activities in the MO/8 EPZ/Liguriurian Sea is hinged on the Sustainable Development Goals (SDGs), identified by the National Strategy for Sustainable Development and the 2030 Agenda. The development strategy for maritime activities aims at the balanced growth and development of mature and emerging maritime sectors in the medium-long term, in line with the European Green Deal. The Ligurian Sea presents heterogeneous characteristics from a morphological and ecological point of view, due to the variety of habitats, environmental conditions and biological communities present. One of the most relevant morphological features is the presence of numerous and important canyons that furrow the continental slope. The area has an evident ecological value as it is home to endemic species and communities and is included in the migratory routes of many species of fish, cetaceans and sea turtles, as well as avifauna. The high environmental value of the area is acknowledged by several protection and management tools, first of all the Pelagos Cetacean Sanctuary (Pelagos Agreement, 1999) and the EPZ -Ecological Protection Area of the North-Western Mediterranean, Ligurian Sea and Tyrrhenian Sea (Presidential Decree 209/2011), which need to be coordinated, integrated and strengthened to ensure the long-term protection of ecosystem services that this area provides to the benefit of the entire environmental and socio-economic system of the Western Mediterranean. Moreover, the Ligurian Sea historically represents a strategic crossroads for traffic in the Mediterranean. Maritime transport, in all its components (merchant, oil, passengers), represents, today and in the future, a characteristic activity of the area in question, in particular as regards the main port hubs (eg Genoa). The prospects for further growth of the sector in the entire Mediterranean require consolidating the transition towards environmental sustainability, strengthening initiatives to reduce impacts, which are particularly significant for the area in question. The Ligurian Sea is also characterized by a variety of fishing practices, which actively contribute to the livelihood of the economies of the territories overlooking it, and in this sense should be maintained in the future. It is worth mentioning the presence of boats coming from other areas which carry out the fishing season (especially in summer) in the area, particularly attracted by the demands of the Ligurian market. It is useful to point out that a particularly interested area is that of Western Liguria, where boats are dedicated to bathyal fishing, aimed at the capture of purple shrimp (Aristeus antennatus). With regard to small pelagics, on the basis of the albeit partial scientific evidence available on the state of exploitation of anchovy and sardine, the need to pursue a shared pathway, aimed at preserving the renewal capacity of commercial stocks, was highlighted.

The specific planning objectives (SOs) mainly cover the areas:

- 1. Maritime transport and ports
- 2. Fishing
- 3. Environmental protection and natural resources
- 4. Maritime safety, navigation and surveillance
- 5. Landscape and cultural heritage



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Table 10 Specific objectives for the MO/8 sub-area, Ligurian Sea EPZ

Reference sector	Code	Specific Objective
Maritime safety, navigation and surveillance	(MO/8)OSP_S 01	Prevent pollution from ships in the framework of international and European policies such as Marpol 73/78 and Directive 2005/35/EC
Maritime transport and ports	(MO/8)OSP_TM 01	Promote sustainable development of maritime transport and reduce its negative impacts, with specific rules to reduce risks and impacts in sensitive areas using, in particular, IMO guidelines
Fishing	(MO/8)OSP_P 01	To support the implementation of the provisions of the multi-annual management plans for Geographical Sub-Area 9 (GSA9)
	(MO/8)OSP_P 02	Encourage the protection of the main reproduction and growth areas, in accordance with the recommendations of the General Fisheries Commission for the Mediterranean
Environmental protection and natural resources	(MO/8)OSP_N 01	Strengthen the system of existing protected areas and conservation measures by promoting the implementation of key spatial measures in the MSFD Program of Measures and pursuing the establishment of internationally protected areas
	(MO/8)OSP_N 02	To consolidate and strengthen the system of areas with positive effects on environmental conservation, in particular the Pelagos Cetacean Sanctuary and the SPA, and to support the extension of the protection of EU seas to 30% by 2030
Landscape and cultural heritage	(MO/8)OSP_PPC 01	Promoting the identification, conservation and enhancement of underwater archaeological heritage



Planning Unit and vocations of use

The Planning Units identified for the MO/8 Sub-area are represented in Figure 40 e Figure 41.

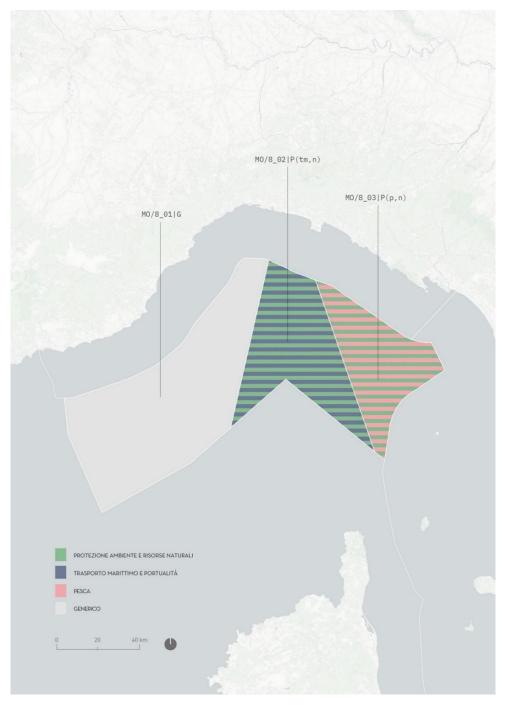


Figure 40 Identification of planning units in sub-area MO/8



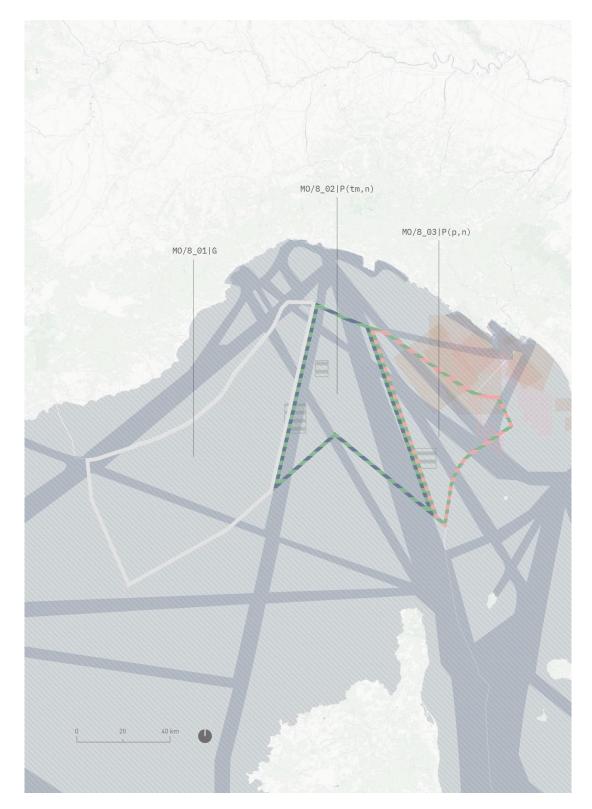


Figure 41 Overlap between the Principal Uses Map and the MO/8 Sub-area Planning Units.



7.3.9 Sub-area MO/9 - Northern Tyrrhenian EPZ

The main uses of the sea present in the MO/9 sub-area are represented in the Figure 42. This figure shows a synthetic and simplified representation of the maritime activities existing in the area, aimed at providing an overall framework and an understanding of the planning choices made in the area. In the maritime area in question the main uses of the sea are: maritime transport, protection of the environment and natural resources and telecommunication cables. The sources of the spatial data used are reported in Figure 42 and represent information available at a national level through the contribution of the Ministries involved in the MSP process.

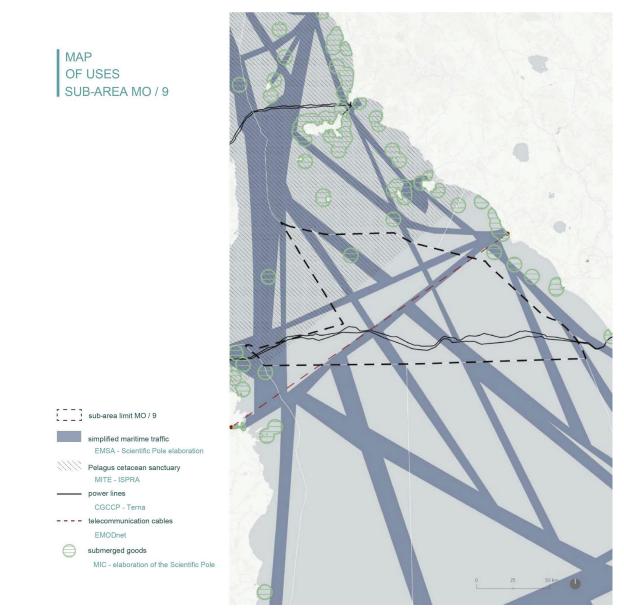


Figure 42: summary map of the main uses in the MO/9 sub-area



Vision and specific objectives

The strategy for the development of maritime activities in the Northern Tyrrhenian MO/9 EPZ is hinged on the Sustainable Development Goals (SDGs), identified by the National Strategy for Sustainable Development and the 2030 Agenda. The development strategy for maritime activities aims at the balanced growth and development of mature and emerging maritime sectors in the medium to long term, in line with the European Green Deal. The area in question presents heterogeneous characteristics from a morpho-bathymetric point of view, where most of the seabed is above the 1000m bathymetric line. Hence the need to preserve the sensitive habitats present due to their ecological importance and the resulting ecosystem services. The area is part of the Pelagos (Pelagos Agreement, 1999) and fully covered by the EPZ - Ecological Protection Area of the Northwest Mediterranean, Ligurian Sea and Tyrrhenian Sea (Presidential Decree 209/2011), instruments that need to be coordinated and strengthened to ensure the protection of the entire environmental and socio-economic system of the Western Mediterranean. The area hosts maritime traffic of great importance, being a crossroads of national and international transport. The prospects for further growth of the maritime transport sector in the entire Mediterranean require consolidating the transition towards environmental sustainability, strengthening initiatives to reduce the impacts generated by this activity. Especially in virtue of its morpho-bathymetric characteristics, the area is affected by fishing activities that contribute substantially to the economies of the territories bordering it. However, several evaluations conducted in the area have long indicated a condition of impoverishment of many of the exploited resources. For some of them, such as hake, there is a situation of chronic overexploitation. It was therefore clear that there was a need to move towards a shared pathway leading towards an improvement in the renewal capacity of this and other stocks of commercial interest (e.g. mullet, Norway lobster, pink shrimp and purple shrimp).

The specific planning objectives (SOs) mainly cover the areas:

- 1. Maritime transport and ports
- 2. Fishing
- 3. Environmental protection and natural resources
- 4. Maritime safety, navigation and surveillance
- 5. Landscape and cultural heritage



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Table 11 Specific objectives for sub-area MO/9, Northern Tyrrhenian EPZ

Reference sector	Code	Specific Objective
Maritime safety, navigation and surveillance	(MO/9)OSP_S 01	Prevent pollution from ships in the framework of international and European policies such as Marpol 73/78 and Directive 2005/35/EC
Maritime transport and ports	(MO/9)OSP_TM 01	Promote sustainable development of maritime transport and reduce its negative impacts, with specific rules to reduce risks and impacts in sensitive areas using, in particular, IMO guidelines
Fishing	(MO/9)OSP_P 01	Support the implementation of the provisions of the FAO-GFCM Geographical Sub-Area 9 (GSA9) Multi-year Management Plans
	(MO/9)OSP_P 02	Promote the protection of the main reproduction and growth areas, in accordance with the recommendations of the General Fisheries Commission for the Mediterranean
Environmental protection and natural resources	(MO/9)OSP_N 01	Strengthen the system of existing protected areas and conservation measures by promoting the implementation of key spatial measures in the MSFD Program of Measures and pursuing the establishment of internationally protected areas
	(MO/9)OSP_N 02	To consolidate and strengthen the system of areas with positive effects on environmental conservation, in particular the Pelagos Cetacean Sanctuary and the SPA, and to support the extension of the protection of EU seas to 30% by 2030
Landscape and cultural heritage	(MO/9)OSP_PPC 01	Promoting the identification, conservation and enhancement of underwater archaeological heritage

Planning Unit and vocations of use

The Planning Units identified for the MO/9 Sub-area are represented in Figure 43 e Figure 44.



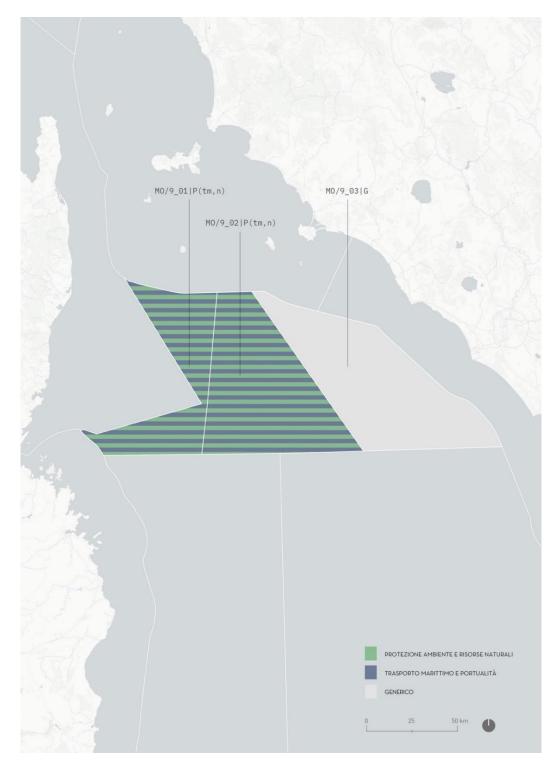


Figure 43 Identification of planning units in sub-area MO/9



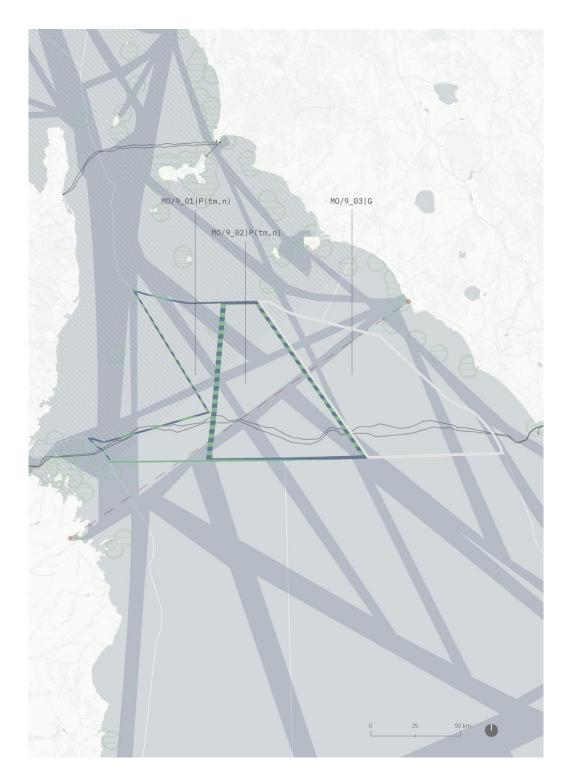


Figure 44 Overlap between the Principal Uses Map and the MO/9 Sub-area Planning Units.



7.3.10 Sub-area MO/10 - Continental Shelf and Southern and Eastern Tyrrhenian EPZ



The main uses of the sea present in the MO/10 sub-area are represented in the Figure 45. The figure in question shows a synthetic and simplified representation of the maritime activities existing in the area, aimed at providing an overall framework and understanding the planning choices made in the area. In the maritime area in question the main uses of the sea are: maritime transport, protection of the environment and natural resources, underwater archaeological finds, telecommunication cables and fishing. The sources of the spatial data used are reported in Figure 45 and represent information available at the national level through the contribution of the Ministries involved in the MSP process.

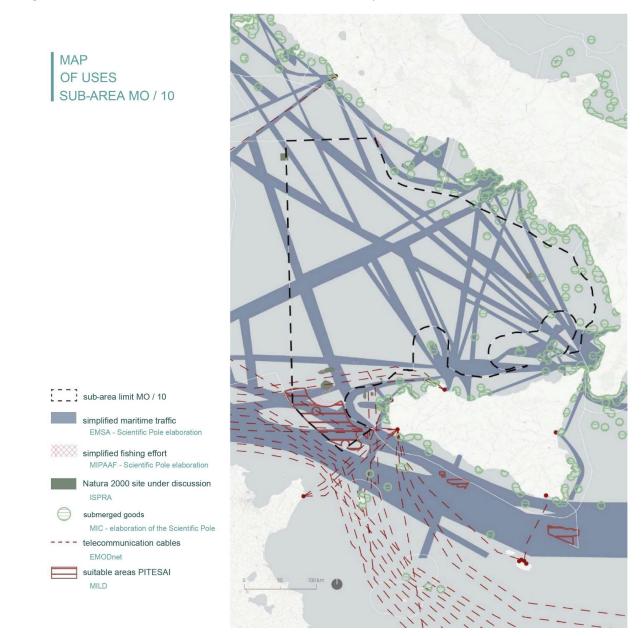


Figure 45: summary map of the main uses in the MO/10 sub-area



Vision and specific objectives

The strategy for the development of maritime activities in the MO/10 Continental Shelf and the Southern and Eastern Tyrrhenian EPZ is hinged on the Sustainable Development Goals (SDGs), identified by the National Strategy for Sustainable Development and the 2030 Agenda. The development strategy for maritime activities aims at the balanced growth and development of mature and emerging maritime sectors in the medium to long term, in line with the European Green Deal. The Central-Southern Tyrrhenian Sea area presents heterogeneous characteristics from a morpho-bathymetric point of view, where most of the seabed is below the 1000m bathymetric line with the exception of a few submarine outcrops and canyons. It is a key area where complex dynamics of water exchanges and biological fluxes develop between the sub-basins of the eastern and western Mediterranean, and where relevant mesoscale oceanographic phenomena are present. Because of these characteristics, and the limited knowledge of deep sea environments and the potential of ecosystem services associated with them, there is a need for precautionary conservation of these habitats. The area hosts maritime traffic of great importance, being the crossroads of national and international transport that mainly follows the N-S routes, but it is also fundamental for connections to and from the major Italian islands. The prospects for further growth of the maritime transport sector in the entire Mediterranean require consolidating the transition towards environmental sustainability, strengthening initiatives to reduce the impacts generated by this activity. In areas characterized by suitable morpho-bathymetry, several fishing activities are practiced, including trawling and fishing with encircling nets and gears, which contribute substantially to the economies of the territories surrounding them. Small pelagic fishing is particularly practiced in the area of Campania and Calabria Tirrenica, while the quadrant west of the coasts of Sicily is interested by an intense high seas trawling activity, whose target demersal species are pink shrimp, mullet, hake and red shrimp. Evaluations on the state of demersal resources conducted in the area, have long indicated a condition of impoverishment of the main demersal resources, thus indicating the need to continue towards a shared path that leads to an improvement of the renewal capacity of this and other stocks of commercial interest. The area also has a vocation with respect to the potential exploitation of renewable energy sources, both wind and wave energy. This vocation must be preserved and strengthened in the direction of the energy transition towards the development of the marine renewable energy sector. The area close to the Strait of Sicily is interested by important migratory routes that cross the Mediterranean Sea. In this context it is fundamental to promote the respect of the international conventions for the safeguard of human life at sea (SOLAS) and on search and rescue at sea (SAR).

The specific planning objectives (SOs) mainly cover the areas:

- 1. Maritime transport and ports
- 2. Fishing
- 3. Environmental protection and natural resources
- 4. Maritime safety, navigation and surveillance
- 5. Energy



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6. Landscape and cultural heritage

Table 12 Specific objectives for the MO/10 sub-area, Continental Shelf and Southern and Eastern Tyrrhenian EPZ

Reference sector	Code	Specific Objective
Maritime safety, navigation and	(MO/10)OSP_S 01	Prevent pollution from ships in the framework of international and European policies such as Marpol 73/78 and Directive 2005/35/EC
surveillance	(MO/10)OSP_S 02	Promote an integrated approach to meet the challenges of maritime safety and maritime interests, in particular as regards compliance with the International Conventions for the Safety of Life at Sea (SOLAS) and Search and Rescue at Sea (SAR)
Maritime transport and ports	(MO/10)OSP_TM 01	Promote sustainable development of maritime transport and reduce its negative impacts, with specific rules to reduce risks and impacts in sensitive areas using, in particular, IMO guidelines
Fishing	(MO/10)OSP_P 01	Support the implementation of the forecasts of the FAO-GFCM Geographical Sub-Area Multi-Annual Management Plans (GSA10)
	(MO/10)OSP_P 02	Promote the protection of the main reproduction and growth areas, in accordance with the recommendations of the General Fisheries Commission for the Mediterranean
Environmental protection and natural resources	(MO/10)OSP_N 01	Strengthen the system of existing protected areas and conservation measures by promoting the implementation of key spatial measures in the MSFD Program of Measures and pursuing the establishment of internationally protected areas
	(MO/10)OSP_N 02	Consolidate and strengthen the system of areas with positive effects on environmental conservation, in particular the EZ, and support the extension of EU marine protection to 30% by 2030
Energy	(MO/10)OSP_E 01	To contribute to the energy transition towards renewable and low-emission sources through the development of offshore renewable energy production
	(MO/10)OSP_E 02	Pursue the environmental, social and economic sustainability of offshore hydrocarbon prospection, exploration and production activities
Landscape and cultural heritage	(MO/10)OSP_PPC 01	Promoting the identification, conservation and enhancement of underwater archaeological heritage



Planning units and vocations of use

The Planning Units identified for the MO/10 Sub-area are represented in Figure 46 e Figure 47.

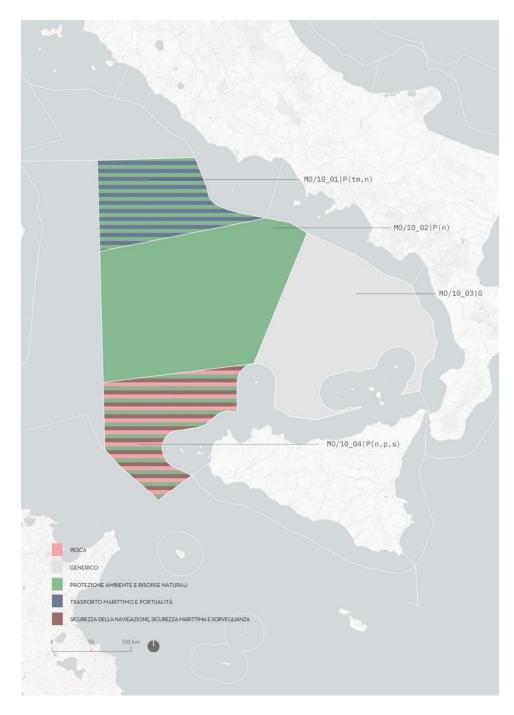


Figure 46: Identification of the planning units of the MO/10 sub-area



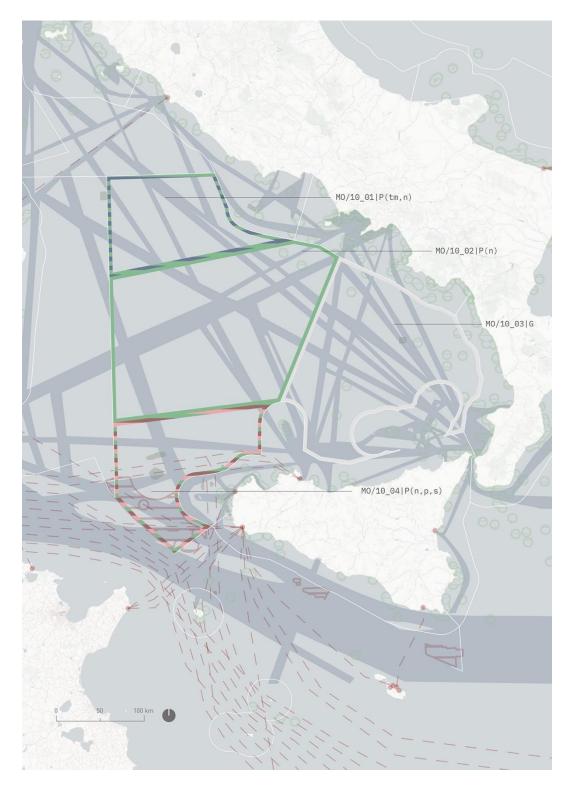


Figure 47 Overlap between the map of principal uses and the Planning Units of Sub-area MO/10



7.3.11 Sub-area MO/11 - Continental Shelf and Tyrrhenian-Western and Western Sardinia EPZ

The main uses of the sea present in the MO/11 sub-area are represented in the Figure 48. The figure in question shows a synthetic and simplified representation of the maritime activities existing in the area, aimed at providing an overall framework and understanding the planning choices made in the area. In the maritime area in question the main uses of the sea are: maritime transport, protection of the environment and natural resources, telecommunication cables and fishing. The sources of the spatial data used are reported in Figure 48 and represent information available at national level through the contribution of the Ministries involved in the MSP process.

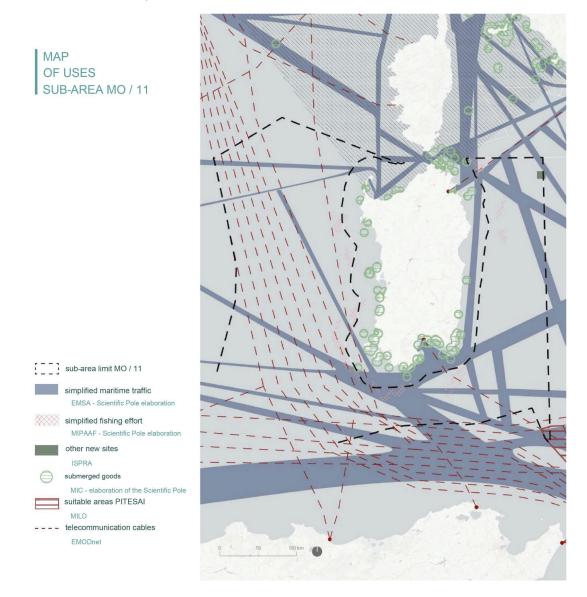


Figure 48: summary map of the main uses in the MO/11 sub-area





Vision and specific objectives

The strategy for the development of maritime activities in the MO/11 Continental Shelf and EPZ Tyrrhenian-Western and Western Sardinia is hinged on the Sustainable Development Goals (SDGs), identified by the National Strategy for Sustainable Development and the 2030 Agenda. The development strategy for maritime activities aims at the balanced growth and development of mature and emerging maritime sectors in the medium to long term, in line with the European Green Deal. The area of the Tyrrhenian-Western Sea and Western Sardinia presents heterogeneous characteristics from a morpho-bathymetric point of view, where most of the seabed lies below the 1000m bathymetric line with the exception of a few submarine outcrops and canyons. It also has a variety of habitats, environmental conditions and biological communities present and is included in the migratory routes of many species of fish, cetaceans and sea turtles. The high environmental value of the area is recognized by various protection and management tools, first of all the EPZ - Ecological Protection Zone of the north-western Mediterranean, the Ligurian Sea and the Tyrrhenian Sea and in part the Pelagos Cetacean Sanctuary, tools that need to be coordinated, integrated and strengthened, to ensure the long-term protection of ecosystem services that this area provides for the benefit of the entire environmental and socio-economic system of the Western Mediterranean. The area hosts maritime traffic of great importance, especially as regards connections to and from Sardinia. The northern part of the area also falls within the PSSA "Particularly Sensitive Sea Area" (IMO 2012 - Reccommendation on navigation through the Strait of Bonifacio) of the Strait of Bonifacio which highlights the need to strengthen the coordinated management of maritime traffic. The prospects of further growth of the maritime transport sector in the entire Mediterranean require consolidating the transition towards environmental sustainability, reinforcing the initiatives to reduce the impacts generated by this activity. In the areas characterized by suitable morpho-bathymetry (particularly in the south-west and south-east sectors), the area is affected by fishing activities that contribute substantially to the economies of the territories bordering it. Bottom trawling plays an important role in the regional panorama, as it represents the largest percentage in tonnage of the whole island's fleet and also holds a very consistent share of the regional catches. Apart from the peculiar condition of exploitation of deep resources such as red shrimps, the most recent analyses of the historical series have shown a condition of stability of the abundances of the main Sardinian demersal resources, for which, however, remains the need to maintain adequate management systems able to ensure the maintenance of the renewal capacity of stocks. The area also has a vocation with respect to the potential exploitation of renewable energy sources, both wind and wave energy. This vocation must be preserved and strengthened in the direction of energy transition towards the development of the marine renewable energy sector. The area south-east of the Sardinian coasts is affected by important migratory routes that cross the Mediterranean. In this context, it is essential to promote compliance with the international conventions for the protection of human life at sea (SOLAS) and on search and rescue at sea (SAR).

The specific planning objectives (SOs) mainly cover the areas:



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- 1. Maritime transport and ports
- 2. Fishing
- 3. Environmental protection and natural resources
- 4. Maritime safety, navigation and surveillance
- 5. Energy
- 6. Landscape and cultural heritage

Table 13 Specific objectives for the MO/11 sub-area, Continental Shelf and Tyrrhenian-Western and Western Sardinia EPZs

Reference sector	Code	Specific Objective
Maritime safety, navigation and surveillance	(MO/11)OSP_S 01	Prevent pollution from ships in the framework of international and European policies such as Marpol 73/78 and Directive 2005/35/EC - and IMO recommendations on PSSAs (IMO 2012 - Reccommendation on navigation through the Strait of Bonifacio)
	(MO/11)OSP_S 02	Promote an integrated approach to meet the challenges of maritime safety and maritime interests, in particular as regards compliance with the International Conventions for the Safety of Life at Sea (SOLAS) and Search and Rescue at Sea (SAR)
Maritime transport and ports	(MO/11)OSP_TM 01	Promote sustainable development of maritime transport and reduce its negative impacts, with specific rules to reduce risks and impacts in sensitive areas using, in particular, IMO guidelines
Fishing	(MO/11)OSP_P 01	To support the implementation of the provisions of the multi-annual management plans for Geographical Sub-Area 11 (GSA11)
	(MO/11)OSP_P 02	Encourage the protection of the main reproduction and growth areas, in accordance with the recommendations of the General Fisheries Commission for the Mediterranean
Environmental protection and natural resources	(MO/11)OSP_N 01	Strengthen the system of existing protected areas and conservation measures by promoting the implementation of key spatial measures in the MSFD Program of Measures and pursuing the establishment of internationally protected areas
	(MO/11)OSP_N 02	Consolidate and strengthen the system of areas with positive effects on environmental conservation, in particular the EPZ, and support the extension of EU marine protection to 30% by 2030
Energy	(MO/11)OSP_E 01	To contribute to the energy transition towards renewable and low-emission sources through the development of offshore renewable energy production
	(MO/11)OSP_E 02	Pursue the environmental, social and economic sustainability of offshore hydrocarbon prospection, exploration and production activities
Landscape and cultural heritage	(MO/11)OSP_PPC 01	Promoting the identification, conservation and enhancement of underwater archaeological heritage



Planning units and vocations of use

The Planning Units identified for the MO/11 Sub-area are represented in Figure 49 e Figure 50.

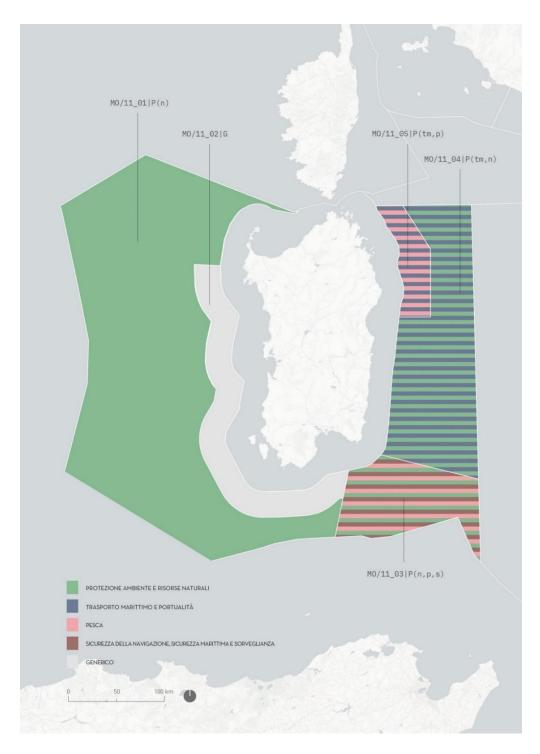


Figure 49: Identification of the planning units of the MO/11 sub-area



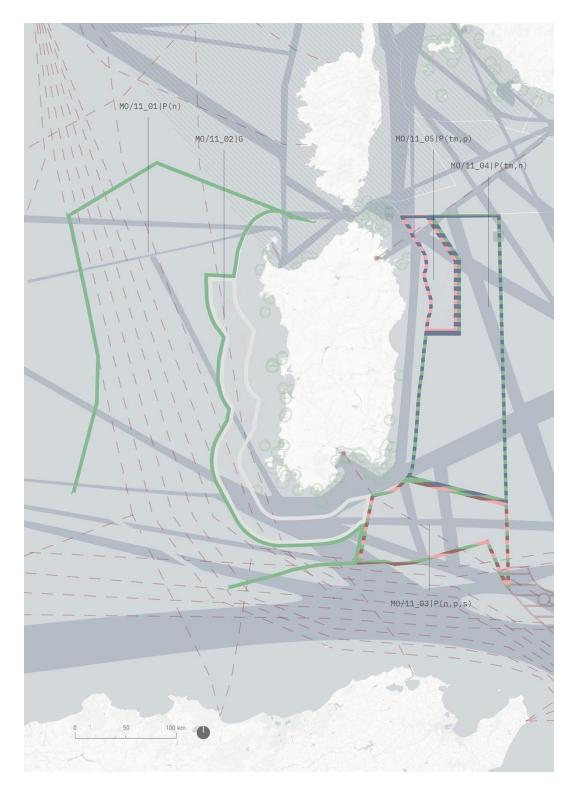


Figure 50 Overlap between the Principal Uses Map and the MO/11 Sub-area Planning Units.



7.4 Measures d i Plan

The management plan of the Maritime Area "Tyrrhenian-Western Mediterranean" is drawn up by integrating the existing discipline contained in sectoral regulations and in current plans and programs (as provided for in the guidelines of the D.P.C.M. 1 December 2017, par. 14), which remain fully in force. To complement and supplement the sectoral measures in force, the plan identifies a series of measures to achieve the vocations indicated in the plan itself, to improve the coexistence between uses (resolving any conflicts and developing reciprocal synergies), to contribute to the maintenance and achievement of good environmental status and to ensure the compatibility of uses with the requirements of landscape and cultural heritage protection. Therefore, unless the contents of the maritime spatial management plan make it necessary to modify them (art. 5, co. 3, Legislative Decree no. 201/2016), the forecasts contained in other plans and programs (integrated and sectoral) are intended to be confirmed and are not reported as measures within this document. The measures of the maritime spatial management plans, therefore, are not reproductive of the existing regulatory framework, but, they integrate it and, where necessary, modify its existing planning and programmatic forecasts.

The Maritime Spatial Management Plan considers national level measures and relevant measures at the scale of the individual sub-area. The national level measures apply to the entire Italian marine space and are therefore valid for all three maritime areas. For some sub-areas within the territorial waters of coastal regions, more detailed and specific measures have been defined for these sub-areas. In the case of the offshore sub-areas, no specific measures have been identified, as the national level measures are valid in these sub-areas. As provided by the guidelines containing the guidelines and criteria for the preparation of MSP plans (D.P.C.M. 1 December 2017, par. 20), the national level measures contribute to the achievement of strategic objectives (chapter 6), while those of regional level contribute to the achievement of the specific objectives declined for the different sub-areas.

The measures of the management plan of the Maritime Area "Tyrrhenian-Mediterranean West" elaborated at the national scale and at the sub-area scale, will be subject to implementation when the available economic-financial resources will be sufficient and budget neutral.

In Table 14 national level measures are shown, while please refer to Section 4 of the Plan for consultation on sub-area specific measures.



Table 14 - National level measures. **Measure category**: S - Spatial measures; are related to the definition of spatial aspects and areas in which activities can take place; T -Temporal measures; are related to the definition of limits or conditions that regulate or define the performance of activities over time; TE - Technical and technological measures; are related to the use or adoption of specific technologies or techniques; M - Monitoring, control and surveillance measures; these relate to the acquisition of data concerning the performance of maritime activities, compliance with rules or regulations, effects on the marine environment, effects in terms of interaction with other uses; G -Governance measures (G); these relate to procedural and organisational mechanisms, including multilevel; E - Economic and financial measures (E); identify actions related to financial resources to support maritime activities (also in the framework of existing programming, such as regional POR-FESR and/or EMFF); A - Other measures (A); such as training, education, communication activities. **Typology of the measure**: I - addresses, mainly addressed to public administrations or planning instruments; P - prescriptions that the plan provides to regulate the uses of the maritime space (e.g. in terms of modalities, also spatial and temporal - in which the uses can be exercised); I - incentives; A actions, i.e. concrete initiatives (e.g. consultations, studies, analyses) carried out by or on behalf of competent administrations, possibly in partnership with private subjects.

Code	Strategic objective	Reference use for measureme nt	Measure	Category (S, T, TE, M, G, EC, A)	Type (I/P/i/A)	Main actors
NAZ_MIS 01	Transverse measurements		Develop and implement a long-term strategy for the participation and involvement of stakeholders in the process of implementation, monitoring and evaluation of the Maritime Plans, with a view to their updating. Particular attention will be paid to the most socially embedded sectors, local administrations and the general public.	А	A	MIMS
NAZ_MIS 02	Transverse measurements		Consolidate, develop and update the National Portal of the Sea, in terms of content, functions and interface with different types of users.	TE, M	A	MIMS
NAZ_MIS 03	Transverse measurements		Develop methodologies and tools for the quantitative assessment of the socio-economic effects of plan choices, to support the adaptive management phases of the MSP.	м	A	MIMS



Code	Strategic objective	Reference use for measureme nt	Measure	Category (S, T, TE, M, G, EC, A)	Type (I/P/i/A)	Main actors
NAZ_MIS 04	OS_SS 01 - Developing a sustainable maritime economy, multiplying growth opportunities for the marine and maritime sectors	Sustainable developme nt	To carry out a study on the socio-economic characterization and evolutionary trends of the different sectors of the Italian sea economy. The study will consider the three maritime areas of reference of the Management Plans, in order to allow the identification of actions that favour the sustainable development of the Italian sea economy, to be conveyed in particular through the Maritime Area Management Plans. The study is configured as preparatory to the definition of a National Strategy for the sustainable development of the sea economy.	A	A	MISE
NAZ_MIS 05	SO_SS 02 - Contributing to the National Strategy for Sustainable Development	Sustainable developme nt	Elaborate a Maritime Strategy (National Strategy for the Sustainable Development of the Sea Economy) at a national level, to be implemented in synergy with the implementation of the Maritime Spatial Management Plans, in order to provide a structured impulse to the sustainable development of the Italian sea economy, in the short, medium and long term. The Maritime Strategy is also developed on the basis of the results of the study on the socio-economic characterisation and evolutionary trends of the sea economy.	A	A	MISE
NAZ_MIS 06	OS_SS 03 - Contributing to the European Green Deal	Sustainable developme nt	Taking into account the forecasts and implementation of the NIPEC, as well as the indications of the Report of the "Climate Change, Infrastructure and Sustainable Mobility Commission" (MIMS, 2022), develop a study on the impact of climate change on National Maritime Plans and related adaptation measures to be considered in a mid-term assessment of MSP Plans. The study will consider a multi-scale approach, assessing in the analysis and solutions also the dimensions of maritime area, sub-area, local area.	A	A	MITE



Code	Strategic objective	Reference use for measureme nt	Measure	Category (S, T, TE, M, G, EC, A)	Type (I/P/i/A)	Main actors
NAZ_MIS 07		Sustainable developme nt	Develop a study on the contribution of the MSP Plans to the achievement of national climate change reduction and carbon neutrality targets.	А	А	MITE
NAZ_MIS 08		Sustainable developme nt	To set up a Working Group of coastal Regions aimed at identifying common needs and strategies to fully exploit the opportunities that the objectives of the European Green Deal offer for the development of maritime territories and areas. The Working Group will also see the possibility to work in subgroups, one for each maritime area, to focus on the necessary specificities.	A	A	MISE, MITE, Regions
NAZ_MIS 09	OS_SS 04 - Fully grasp the economic and environmental sustainability opportunities arising from the circular economy	Sustainable developme nt	Strengthen the role of the maritime economy within the National Strategy for the Circular Economy, for example: enhancing the link and synergies between the Maritime Spatial Plans and the Strategy for the Circular Economy; specifying more detailed actions with reference to the "Blue Economy" Area of intervention, contemplating the efficient use of the maritime space among the tools envisaged to favour the transition towards a circular economy, envisaging proposals for specific actions for the sectors of the maritime economy.	A	1	MITE
NAZ_MIS 10		Sustainable developme nt	To support the structuring, strengthening, development and valorisation of shipbuilding and ship repair, maintenance, overhaul and restructuring, dismantling and component collection activities, structuring a circular naval economy supply chain, wherever possible in synergy with the actions aimed at reconverting the use of coastal industrial areas in crisis/decommissioning and environmental reclamation.	A	1	MIMS, Port Authority



Code	Strategic objective	Reference use for measureme nt	Measure	Category (S, T, TE, M, G, EC, A)	Type (I/P/i/A)	Main actors
NAZ_MIS 11		Sustainable developme nt	To support the structuring of a recovery, re-use and recycling chain of the by-products of the aquaculture and professional fishery activities (also in line with the relevant Measures of the MSFD PoM Descriptor 10), to be realized also at a wide area level including more sub-areas and wherever possible in synergy with the actions aimed at the reconversion of the use of the industrial coastal areas in crisis/decommission and at the environmental reclamation.	A	I	MISE, MIPAAF, Regions
NAZ_MIS 12		Sustainable developme nt	Support the structuring of a national supply chain for the recovery, disassembly, reuse/recycling of end-of-life pleasure, sport and fishing boats, wherever possible in synergy with actions aimed at the conversion of use of coastal industrial areas in crisis/decommissioning and environmental reclamation.	A	I	MISE



Code	Strategic objective	Reference use for measureme nt	Measure	Category (S, T, TE, M, G, EC, A)	Type (I/P/i/A)	Main actors
NAZ_MIS 13	OS_N 01 - Applying a coherent Ecosystem based approach (EBA) in the overall approach and guidance of Maritime Spatial Plans	Environmen tal protection and natural resources	In order to enable full integration between the implementation processes between MSFD Measure Programs and MSP Plans, establish an "MSFD-MSP" working group linked to the activities of the Technical Committee for MSP, aimed at: 1.1 Ensure the integration in the MSP Plans of the spatially explicit information related to species and habitats as well as their environmental status and expected trends, and their integrated assessment, contributing to fill the current knowledge gaps and reinforcing the activities foreseen within the MSFD Directives (with particular reference to the measures MADIT -M032-NEW3; MICIT -M032-NEW3; MWEIT -M035-NEW3 and Measure 3 of the POM MSFD 20/12/2021 Update) and Natura 2000. 1.2 Adopt analytical tools for analysis and continuous monitoring of potential cumulative impacts of anthropogenic activities on environmental components (in synergy with MSFD and Natura 2000 Directives) as well as of conflicts/synergies between anthropogenic uses.	M, G	Α, Ι	MITE, ISPRA



Code	Strategic objective	Reference use for measureme nt	Measure	Category (S, T, TE, M, G, EC, A)	Type (I/P/i/A)	Main actors
NAZ_MIS 14	SO_N 02 - Support the extension of EU marine protection to 30%, of which 10% in a stringent manner, by 2030	Environmen tal protection and natural resources	In order to enable full integration between the implementation processes between MSFD Measure Programs and MSP Plans, establish an "MSFD-MSP" working group linked to the activities of the Technical Committee for MSP, aimed at: 2.1 Identify priority areas for environmental conservation and/or marine resources for the purpose of expanding the network of Marine Protected Areas (MPAs) and/or Natura 2000 Network sites, in line with the forecasts and tools provided by the MSFD Directives (with particular reference to Measure 1 of Descriptor 1 of the MSFD 20/12/2021 PoM Update), Natura 2000 and the 2030 Biodiversity Strategy. 2.2 Promote studies and assessments of connectivity, ecological status, ecosystem functions and ecosystem services derived from them.	S, M, EC	A, I	MITE, ISPRA, Regions
NAZ_MIS 15	OS_N 03 - Transpose and promote the implementation of the main space measures foreseen in the MSFD Program of Measures	Environmen tal protection and natural resources	In order to enable full integration between the implementation processes between MSFD Measure Programs and MSP Plans, establish an "MSFD-MSP" working group linked to the activities of the Technical Committee for MSP, aimed at: 3. establish procedures aimed at the spatial definition, prioritization and application of the measures foreseen by PoM MSFD with an appropriate multi-scalar approach that also takes into account specific objectives (sub-areas) and suitability (U.P.).	S, TE, M	A, I	MITE, ISPRA



Code	Strategic objective	Reference use for measureme nt	Measure	Category (S, T, TE, M, G, EC, A)	Type (I/P/i/A)	Main actors
NAZ_MIS 16	OS_N 04 - Integrating aspects of land-sea interaction and integrated management of the coastal strip, with particular reference to environmental aspects	Environmen tal protection and natural resources	To support study and research activities aimed at improving the spatial knowledge of land-sea interactions, with particular reference to the areas identified as interaction hot spots and/or suitable for "environmental protection and natural resources" and landscape protection. These activities should favour the integrated management of the protection instruments in force and/or planned.	TE, M, G	I, A	MITE, ISPRA, Regions
NAZ_MIS 17	OS_N 05 - Take into account in the medium - long term the process and objectives of marine	Environmen tal protection and natural resources	Prepare the National Environmental Restoration Plan, identifying the priority areas to be restored and the restoration measures and methods to be adopted, in synergic and subsidiary relation with the implementation and monitoring process of the Maritime Space Plans.	S, T	I, A	MITE, Regions
NAZ_MIS 18	ecosystem restoration as outlined in the proposed European Law on Environmental Restoration	Environmen tal protection and natural resources	Improve the knowledge on the distribution of habitats and species indicated in the proposal for an EU Regulation on Environmental Restoration (COM(2022)304 final), capitalizing also on the results of European research projects and of the National Centre for Biodiversity (PNRR-MUR) being set up, and ensuring their effective and direct transfer to the National Plan for Environmental Restoration and, from there, to the Maritime Spatial Plans.	М	A	Research Institutions , Universitie s, ISPRA



Code	Strategic objective	Reference use for measureme nt	Measure	Category (S, T, TE, M, G, EC, A)	Type (I/P/i/A)	Main actors
NAZ_MIS 19		Landscape and cultural heritage	Initiate analysis to identify and prescribe in appropriate guidelines, principles, criteria and standards to minimize the visual impact on the coastal landscape of seawater facilities and structures (for energy, aquaculture, etc.).	S, TE	A	MIC, MITE
NAZ_MIS 20	OS_PPC 01 - Supporting the	Landscape and cultural heritage	Provide facilities or incentives for current holders of aquaculture concessions, in the case of activities to improve the characteristics (spatial distribution and color of the floats) of the facilities already under concession.	TE	i	Regions
NAZ_MIS 21	landscape value of the coastal strip	Landscape and cultural heritage	Integrate the Guidelines for the identification of AZAs with a methodology that allows to take into account also the visual perception of aquaculture facilities from the ground. Promote specific studies at a sub-area scale aimed at valorising and capitalising on the experiences already made in the field of compatibility between aquaculture facilities and landscape protection requirements, as well as at identifying further practices.	S, TE	1	ISPRA, Regions
NAZ_MIS 22	OS_PPC 02 - Promoting the recovery and redevelopment of buildings and areas subject to protection	Landscape and cultural heritage	Through the analysis of the landscape plans, carry out a reconnaissance of the systems of immovable assets characterising the coastal landscape (e.g. lighthouses, towers), also insisting on non-bound areas, in order to identify and plan enhancement interventions on a sub-area scale.	A	A	MIC, Regions



Code	Strategic objective	Reference use for measureme nt	Measure	Category (S, T, TE, M, G, EC, A)	Type (I/P/i/A)	Main actors
NAZ_MIS 23	OS_PPC 03 - Promoting and supporting the conservation of the underwater archaeological heritage	Landscape and cultural heritage	By systematizing the available knowledge and what has already been regulated, define a unitary picture (at the scale of the maritime area), accompanied by mapping, of the areas with the presence of submerged archaeological assets subject to protection or to be protected, of the anthropic activities in such areas prohibited or to be prohibited (including trawling), of the interventions carried out for this purpose or of those to be implemented (including through mechanical and technological means) and of the necessary monitoring activities.	S, M	A	MIC, Regions
NAZ_MIS 24	OS_PPC 05 - Promoting and creating awareness on intangible cultural heritage	Landscape and cultural heritage	Provide incentives and facilitations for the management, valorisation, conservation and/or restoration of tangible assets representing the intangible heritage linked to the uses of the sea (e.g. trabucchi, historical fishing tools, etc.). Providing incentives and facilitations for the valorisation of activities that constitute the intangible heritage linked to the uses of the sea, such as techniques and traditions of historical artisanal fishing, traditional shellfish farming activities or ephemeral events that are part of the intangible heritage of the sea (e.g. festivals and religious processions at sea).	A	i	MIC, Regions
NAZ_MIS 25	cultural nentage	Landscape and cultural	Provide for the historical boats, special forms of evaluation of their cultural value, in order to catalogue them, to carry out the necessary restoration works and to preserve them in suitable structures (e.g. Sea Museum).	А	I	МІС
NAZ_MIS 26	OS_PPC 06 - Combating unauthorised building in coastal areas	Landscape and cultural heritage	Systematize the information available in the national database on unauthorized building and from other sources, in order to develop a study on the consistency of the phenomenon of unauthorized building in the coastal strip (300 meters deep) at the scale of the maritime area, to be used in the planning of interventions to combat it.	М	A	Mi, Regions



Code	Strategic objective	Reference use for measureme nt	Measure	Category (S, T, TE, M, G, EC, A)	Type (I/P/i/A)	Main actors
NAZ_MIS 27	OS_S 02 Help promote maritime safety, the implementation of UNCLOS standards and the EU Maritime Safety Strategy	Maritime safety, navigation and surveillance	With particular reference to the area of the Strait of Sicily, strengthen the dialogue and international coordination for the management of emergency situations involving the safeguard of human life at sea.	A	I	Coastguard / National Maritime Rescue Coordinati on Centre
NAZ_MIS 28	SO_P 01 - Encouraging the sustainable development of the	Fishing	To guarantee the adequate spatial coverage of the fleet modernization actions (also regarding the energy efficiency of the vessels) for all fishing segments, in particular for the small artisanal fishery, and to incentivize adequate conditions for the fishing sector in the ports, in order to ensure safe and decent working conditions for the operators and to improve the competitiveness of the sector. In this context, foresee also the appropriate actions aimed at the training of the fishery operators on the sustainability aspects of the professional fishery as per Measure 8 (Descriptors 1 and 3) of the PoM MSFD 20/12/2021 Update.	TE	I	MIPAAF, ISPRA, Regions
NAZ_MIS 29	fisheries sector	Fishing	To encourage the application of solutions aimed at increasing energy efficiency (in particular as regards the energy efficiency of vessels) and the use of renewable energies in the fisheries sector with a view to the supply chain, including the processing and marketing of the product, considering the land-sea interactions of fishing activities.	TE	1	MIPAAF, ISPRA



Code	Strategic objective	Reference use for measureme nt	Measure	Category (S, T, TE, M, G, EC, A)	Type (I/P/i/A)	Main actors
NAZ_MIS 30	OS_P 02 - Support the implementation of the forecasts of the European and National Multiannual Management Plans in the Geographical Sub-Areas (GSA)	Fishing	Support the appropriate spatial distribution of investments to align fishing capacity with fishing opportunities as indicated by the European and National multi-annual plans for the Management of Sub-Geographical Areas (GSA), in order to contribute to the reduction of fishing pressure, also through studies aimed at assessing the balance between the capacity of fleet segments and the availability of resources, promoting their conservation and sustainable exploitation.	S,EC	A	MIPAAF
NAZ_MIS 31		Fishing	Encourage projects, studies and research aimed at promoting an adequate spatial presence of small-scale fisheries, their sustainability and direct actions to strengthen the related skills and develop human capital.	TE,G	I	MIPAAF, Regions
NAZ_MIS 32	OS_P 03 - Promotion, development and spatial management of small-scale coastal fishing using sustainable techniques	Fishing	Promote agreements between fishermen practising small-scale fishing and the bodies/bodies responsible for the management of coastal and marine areas subject to protection (MPAs, coastal and marine sites of the Natura 2000 Network, national or regional parks that include coastal and marine areas, etc.) in order to enhance the role of these areas in sustainable development and in the recognition of the quality, also environmental, of the products and services offered by small-scale artisanal fishing. This objective is aligned with the goal of favouring the extension of the protection of EU seas to 30% by 2030, generating positive effects for small-scale artisanal fishing, in synergy with the aims of nature protection.	S, T, G	A	MIPAAF, Regions, MPA managers
NAZ_MIS 33		Fishing	Develop local small-scale fisheries plans that also contain spatial forecasts and measures.	S, A	А	Regions



Code	Strategic objective	Reference use for measureme nt	Measure	Category (S, T, TE, M, G, EC, A)	Type (I/P/i/A)	Main actors
NAZ_MIS 34	OS_P 04 - Encourage the creation of areas for the recovery and protection of fish stocks and protection of Essential Fish Habitats (EFH)	Fishing	Launching an integrated evaluation of the knowledge on the Essential Fish Habitats (EFH) of the main alieutic species, aimed at the determination of the areas to be subjected to protection constraints as a priority, thus supporting the institution of spatial measures of resources management (e.g. ZTB) and related joint spatial planning actions of fishing activities. This survey activity and related periodic monitoring will have to be carried out as a priority within the 0-6 nautical miles from the coast, as well as capitalizing on the activities foreseen in Measure 3 (Descriptors 1, 3, 6) to support the implementation of the environmental target 6.3 of the PoM MSFD 20/12/2021 Update.	TE, EC, M, G	A, I	MIPAAF
NAZ_MIS 35	SO_P 05 - Encourage cooperation between States in order to achieve concerted measures	Fishing	In the context of national, EU and international cooperation initiatives (e.g. FAO-GFCM, CBD), identify, propose and/or strengthen multi-level governance systems (from transnational, to national, inter-regional and compartmental scales) that identify and promote concerted measures for monitoring, sustainable management of shared fishery resources, management of interactions between different fisheries systems, and protection of protected species at a broad range.	G	1	MIPAAF
NAZ_MIS 36	for the sustainable management of activities of their national fisheries sectors	Fishing	Strengthen international dialogue and coordination for the management of fishing activities in international waters, in order to prevent disputes and ensure the safe operation of Italian fishing fleets	A	1	MIPAAF, MAECI



Code	Strategic objective	Reference use for measureme nt	Measure	Category (S, T, TE, M, G, EC, A)	Type (I/P/i/A)	Main actors
NAZ_MIS 37	OS_P 06 -	Fishing	Support and strengthen the fight against illegal fishing through co-management schemes as well as through technological adaptation of control networks in all maritime areas.	M, G	A, I	MIPAAF, Captaincies
NAZ_MIS 38	Monitoring and combating illegal fishing	Fishing	Carry out studies and pilot projects for the registration and geo-referencing of fishing activities, in collaboration with the Harbour Offices, which evaluate the extension of the use of VMS and/or AIS systems also for non-compulsory segments (small boats) and possibly the development and adoption of low-cost systems, also using economic incentives (e.g. in the context of FEAMPA).	TE, M, G	A, I, i	MIPAAF, Regions
NAZ_MIS 39	SO_A 01 - Promoting the sustainable growth	Aquacultur e	To encourage the adoption of solutions aimed at increasing energy efficiency and the use of renewable energy in the aquaculture sector from a supply chain perspective that includes the processing and marketing aspects of the product, considering the land-sea interactions of the activities themselves.	TE	I	MIPAAF, Regions
NAZ_MIS 40	of the aquaculture sector	Aquacultur e	Promote coexistence between aquaculture growth and environmental conservation, through targeted studies and pilot projects for the integration of aquaculture activities and Natura 2000 sites.	TE	1	MIPAAF, ISPRA, Regions
NAZ_MIS 41	OS_A 02 - Promote quality aquaculture	Aquacultur e	Develop, adopt and implement AZA Plans at the regional scale, in line with the MSP Plans and with the support of the AZA Technical Guide (ISPRA /HIPAA).	S, G	A	Regions
NAZ_MIS 42	and support the process of establishing AZAs (Allocated Zones for Aquaculture)	Aquacultur e	Establish a permanent working table aimed at supporting the integration and progressive harmonization between regional AZA plans and MSPs in the different maritime areas, strengthening the already existing tools (e.g. ITAQUA).	G	A	MIPAAF, ISPRA, Regions



Code	Strategic objective	Reference use for measureme nt	Measure	Category (S, T, TE, M, G, EC, A)	Type (I/P/i/A)	Main actors
NAZ_MIS 43		Aquacultur e	Address through targeted studies an adequate spatial distribution of investments for the technological development and diversification of productions, and monitoring and support systems for the same.	А	А	MIPAAF, Regions
NAZ_MIS 44	SO_TM 01 - Promoting the sustainable development of maritime transport and reducing its negative impacts	Maritime transport and ports	Produce a study aimed at identifying the areas of highest concentration ("hot spot" areas) of pressures generated in the marine environment by maritime traffic: air emissions, water pollution, waste dispersion, underwater noise emissions, collisions with marine megafauna. The study will also include the definition of specific measures that will ensure, starting from what is indicated in the MSP Plans and with reference to the LSI analysis, the reduction of these pressures and the mitigation of negative impacts on the environment.	TE, M	A	MIMS, ISPRA, Port Authority
NAZ_MIS 45		Maritime transport and ports	Produce an analysis aimed at identifying new areas of spatial management of maritime traffic (PSSAs, ATBAs, TTSs) and strengthening existing ones, with the aim of improving the regulation of shipping lanes and reinforcing conservation actions for marine ecosystems and biodiversity.	TE, M	A	MIMS, MITE, Port System Authority
NAZ_MIS 46		Maritime transport and ports	Encourage the identification and adoption within the MSP of specific spatial, behavioral, and technological measures to reduce the impacts of underwater noise on biota, including in line with MSFD Descriptor 11 objectives and measures.	S, TE	А	MIMS, MITE



Code	Strategic objective	Reference use for measureme nt	Measure	Category (S, T, TE, M, G, EC, A)	Type (I/P/i/A)	Main actors
NAZ_MIS 47	OS_TM 02 - Promote the use of alternative fuels, reduce discharges into the sea, improve port	Maritime transport and ports	Prepare the mapping at the scale of the maritime area of the sites suitable for the delivery of dredged materials, also through the connection with the databases available at regional level; strengthen the harmonization and coordination of management practices of dredged sediments in the maritime area and at national level.	S, TE, G	A, I	MITE, MIMS, Regions, Port System Authorities
NAZ_MIS 48	facilities for the collection of waste and cargo residues and/or encourage the use of such facilities, improve the management of dredged sediments	Maritime transport and ports	Actively contribute to European and Mediterranean-wide harmonization initiatives of solid waste collection methods on ships and their delivery to ports, in order to optimize procedures (from the planning phase to the service assignment phase), maximize recyclable fractions and contribute to the development of circular economy supply chains. Particular attention must be paid to plastic waste, to activities to combat the abandonment of this waste at sea and on beaches, to the related collection and recovery activities and to environmental education and information.	TE, EC, M	I	Port System Authorities , Regions
NAZ_MIS 49	OS_TM 03 - Promoting European and regional cooperation on maritime transport and multimodality	Maritime transport and ports	Adapting multimodal transport networks, integrating the local scale with international and European traffic networks.	G, TE, M	A	MIMS, Port System Authority



Code	Strategic objective	Reference use for measureme nt	Measure	Category (S, T, TE, M, G, EC, A)	Type (I/P/i/A)	Main actors
NAZ_MIS 50	OS_TM 04 - Contributing to increase the competitiveness of Italian ports, the sharing of best practices and the implementation of the National Strategic Plan for Ports and Logistics (PSNPL)	Maritime transport and ports	Adapt the performance and functionality of Italian ports to the standards required to obtain the different existing certifications such as European Clean Ports, Environmental Management System (EMS), PERS (Port Environmental Review System) and Environmental Port Index.	G	A, I	Port System Authority



Code	Strategic objective	Reference use for measureme nt	Measure	Category (S, T, TE, M, G, EC, A)	Type (I/P/i/A)	Main actors
NAZ_MIS 51	OS_TM 05 - Promote the integration and dialogue between the planning systems in force in particular regarding the integration of strategic port planning, land planning and sea plans	Maritime transport and ports	Ensure the integration in the MSP Plans of the updates and adjustments of the Port Master Plans, as far as they are concerned and in particular as regards the needs in terms of new water spaces in the areas in front of the ports with the aim of ensuring the development of port activities.	G	A	MIMS, Port System Authority
NAZ_MIS 52	OS_E01 - Contributing to the energy transition towards renewable and low-emission sources through the development of offshore renewable energy production	Energy	Develop national Guidelines for the identification of suitable sites for offshore renewables (wind, solar, wave and current) and the assessment of single and cumulative environmental and landscape impacts, considering the elements of potential impact, during the construction, operation and decommissioning phases, and also considering the elements for the transport of the energy produced onshore. These Guidelines will allow to: i) refine the spatial planning (e.g. in terms of robustness and spatial resolution); ii) address the design of the plants; iii) facilitate the permitting phases (e.g. EIA and VINCA).	S	A,I	MITE, MIC



Code	Strategic objective	Reference use for measureme nt	Measure	Category (S, T, TE, M, G, EC, A)	Type (I/P/i/A)	Main actors
NAZ_MIS 53		Energy	To develop a Decision Support System (DST), dynamically linked to the National Portal of the Sea and also fed by the data deriving from the pre-operational and post-operational monitoring and investigation activities (pre-operational phases, including EIA, operation and decommissioning) for offshore renewable energy production plants. This DST aims to support - from an energy, environmental, technological and socio-economic point of view - the phases of feasibility analysis, preliminary design, assessment of environmental impacts, identification of solutions and mitigation measures and assessment of the social acceptability of offshore infrastructure for the production of energy from renewable sources, for the benefit of operators, administrations, local communities.	S, M	A	MITE
NAZ_MIS 54		Energy	Establish an observatory on the monitoring of the impacts of offshore wind farms on the environment and other uses of marine space and the coast, considering the definition, implementation and evaluation phases of the monitoring plans required for the installation and operation of wind farms. The assessments of this observatory will need to be taken into account in the implementation of the monitoring plans of the MSP plans, and therefore in the eventual revision of these plans.	М	A	MITE, MIC, Regions



Code	Strategic objective	Reference use for measureme nt	Measure	Category (S, T, TE, M, G, EC, A)	Type (I/P/i/A)	Main actors
NAZ_MIS 55		Energy	Initiate and support research and innovation activities, also through pilot projects, on various issues related to offshore renewable energy production, such as in particular: (i) energy production from sources other than wind (wave, tides and currents, solar, combination of different sources), (ii) plants and technologies in areas with clear added value (for synergy with other sectors and issues, for the self-sufficiency of marginalized areas, for the management of energy demand peaks in particular areas, etc.) such as ports, remote areas and minor islands, (iii) combination of offshore renewable energy production with other uses (multi-use) such as aquaculture, tourism, recreation, fishing, protection, (iv) innovative technologies, such as the use of renewable energy sources in the environment, in the tourism sector, in the tourism industry, in fishing, in the protection of the environment, etc.) such as ports, remote areas and small islands, (iii) combination of offshore renewable energy production with other (multi-use) uses such as aquaculture, tourism, boating, fishing, environmental protection, (iv) innovative technologies, also aimed at minimizing impacts on the environment and landscape; (v) experimental assessment of the environmental effects on specific habitats or target species of the solutions adopted.	TE, S	A	MUR, MITE
NAZ_MIS 56		Energy	Create a working group to improve authorization procedures, speeding up processes while respecting the principles of transparency and efficiency.	G	А	MITE, MIC, Regions



Code	Strategic objective	Reference use for measureme nt	Measure	Category (S, T, TE, M, G, EC, A)	Type (I/P/i/A)	Main actors
NAZ_MIS 57		Energy	Offshore renewable energy installations should adopt solutions to reduce conflicts and promote wherever possible and safe coexistence with other uses of the sea (e.g. permeability for shipping, fishing with gears, sand extraction for coastal defence works, offshore aquaculture facilities, managed tourism, scientific research).	S, T, TE	Ρ	MITE
NAZ_MIS 58		Energy	Within Marine Protected Areas and marine areas included in National or Regional Parks, the installation of offshore wind power plants is forbidden, with the exception of micro-wind power plants possibly used for self-consumption, also for the supply of energy to activities allowed in the protected area.	TE	Ρ	MITE
NAZ_MIS 59	OS_E02 - Pursue the environmental, social and economic sustainability of offshore hydrocarbon prospection, exploration and production activities	Energy	Create an MSP-PiTESAI working group, linked to the activities of the Technical Committee for the MSP, to align the two plans reciprocally and progressively in the implementation and possible revision phases of the plans themselves, favouring the energy transition objectives of the PiTESAI as far as the MSP is concerned, also through the sharing of data and portals.	S, M	Α, Ι	MITE, MIMS



Code	Strategic objective	Reference use for measureme nt	Measure	Category (S, T, TE, M, G, EC, A)	Type (I/P/i/A)	Main actors
NAZ_MIS 60	OS_E03 - Promote the reconversion of platforms and infrastructures associated with depleted fields and synergies between compatible maritime activities	Energy	Promote, within the scope of the MSP and in compliance with current regulations and the "National Guidelines for the decommissioning of offshore hydrocarbon production platforms and related infrastructures", experiments and projects for the reconversion of decommissioned platforms and related infrastructures (e.g. sealines).	TE	A	MITE



Code	Strategic objective	Reference use for measureme nt	Measure	Category (S, T, TE, M, G, EC, A)	Type (I/P/i/A)	Main actors
NAZ_MIS 61	OS_DC 01 - Promote the development, harmonization and implementation of strategies and measures to protect the coastline and to combat erosion, as foreseen in the Flood Risk Management Plans prepared at the level of the Hydrographic District in compliance with the provisions of the Floods Directive (2007/60/EC) and in the Coastal Plans / Integrated Coastal Zone Management Plans prepared by many regions	Coastal defence	Relaunch the mandate of the National Coastal Erosion Table (TNEC - Memorandum of Understanding MATTM-Regions signed 6.4.2016) in order to: (i) address in a coordinated manner Integrated Coastal Zone Management (ICZM) at the national scale; (ii) systematize existing strategies and plans (ICZM strategies and plans, coastal plans, flood risk management plans pursuant to Legislative Decree 49/2010, etc.(iii) to promote measures and actions for research and experimentation of climate change adaptation interventions (also in synergy with mitigation objectives) that are conceptually, environmentally and technologically advanced (e.g. nature-based solutions) implemented at the right spatial scales and on the basis of appropriate scenarios; (iv) to census and monitor these interventions at the national and regional scales; (v) to foster interregional cooperation on these issues. Within its mandate, the TNEC should regularly coordinate with the Technical Committee for MSP.	S, TE, G	Α, Ι	MITE, Regions



Code	Strategic objective	Reference use for measureme nt	Measure	Category (S, T, TE, M, G, EC, A)	Type (I/P/i/A)	Main actors
NAZ_MIS 62	OS_DC 02 - To guarantee the best coherence between the uses and vocations of sea use foreseen in the MSP Plans and the coastal uses, with reference to their safeguard in a scenario of necessary adaptation to the ongoing climate change	Coastal defence	Analyse the coherence between the existing coastal strategies and plans/GIZC, the projects that intervene on the coastal morphology (for conservation, restoration or modification) and the forecasts of the MSP plan; propose possible corrective actions, also taking into account the most recent climate scenarios, possibly elaborated at regional and/or local scale.	S, G	A, I	MITE, Regions



Code	Strategic objective	Reference use for measureme nt	Measure	Category (S, T, TE, M, G, EC, A)	Type (I/P/i/A)	Main actors
NAZ_MIS 63	OS_DC 03 - Adequately consider and address the issue of the use and protection of	Coastal defence	To complete the mapping, qualitative assessment and quantification of the volumes of underwater sand deposits available in the seabed, through dedicated funds, in order to plan the use of this (non-renewable) resource on the basis of current and future (erosion and flooding) risk mitigation needs (arising from climate change adaptation needs) in particular considering the increasing demand for sediment for the implementation of 'nature-based solutions'. Promote the systematic organization and sharing of information acquired at different management scales (regional and national).	S, M	A	MITE, Regions
NAZ_MIS 64	underwater sand for beach nourishment, to be considered as a strategic resource for coastal defence and adaptation	Coastal defence	Reduce conflicts and impacts related to the use of marine sands for defence works by: i) prioritising the use of deposits outside protected areas or with nature priority established by the MSP; ii) reducing conflicts with other uses (e.g. fishing and aquaculture) through the choice of the most suitable deposits and appropriate extraction methods and timing; iii) adopting impact mitigation measures to be assessed in a site-specific way.	S, T, TE	А, Р	MITE, Regions
NAZ_MIS 65	plans	Coastal defence	Create a working group to improve regulations and authorization procedures related to concessions and coastal nourishment interventions with underwater sand in order to clarify and speed up the authorization procedures in compliance with the principles of transparency and efficiency.	G	A	MITE, MIC, Regions



Code	Strategic objective	Reference use for measureme nt	Measure	Category (S, T, TE, M, G, EC, A)	Type (I/P/i/A)	Main actors
NAZ_MIS 66	SO_T 01 - Promoting sustainable forms of coastal and maritime tourism OS_T 02 - Promoting coherent planning actions on land and sea, also for tourism purposes	Coastal and maritime tourism	Facilitate the development of coastal and maritime eco-tourism initiatives also in a multi-use perspective and therefore promoting opportunities for co-planning between the tourism sector and other sectors of the sea economy (such as. fishing and aquaculture). In this sense, promote the spatial application of the awareness and information measures provided by Measure 2 (Descriptors 1 and 6) of the PoM MSFD 20/12/2021 Update.		A, I	Ministry of Tourism, ISPRA
NAZ_MIS 67	OS_T 02 - Promoting coherent	Coastal and maritime tourism	Designing and developing monitoring activities for pleasure boating, also on the basis of the systemisation of any existing initiatives, through collaboration between Regions and operators/local bodies, in order to acquire adequate knowledge of traffic flows and define management measures for the sustainable development of the sector.		А	Regions
NAZ_MIS 68	planning actions on land and sea, also for tourism purposes	Coastal and maritime tourism	At the sub-area scale, assess the establishment of areas for the regulation of recreational traffic and the creation of structures to ensure eco-friendly moorings, in order to preserve the most vulnerable benthic ecosystems and minimize conflicts with other activities. As far as this measure is concerned, the subjects responsible for the implementation and management of the various areas and structures will have to be identified.	A	A	Regions, municipal authorities



Code	Strategic objective	Reference use for measureme nt	Measure	Category (S, T, TE, M, G, EC, A)	Type (I/P/i/A)	Main actors
NAZ_MIS 69	SO_T 03 - Contributing to the diversification of tourism products and services and to countering the seasonality of	Coastal and maritime tourism	Identifying assets or coastal areas subject to strong tourism pressure, also by monitoring the number of accesses, in order to define, where necessary, specific actions for the development of sustainable tourism and the regulation of tourist flows at all or certain times of the year, such as: limiting the number of daily accesses, requiring the purchase of a special ticket whose proceeds are destined to finance interventions for the protection and enhancement of the environmental and cultural heritage, the creation of equipment and initiatives for sustainable tourism (e.g. buoy fields, sea and land visit routes, initiatives for sustainable tourism education, etc.). equipment and initiatives for sustainable tourism (e.g. buoy fields, sea and land visit routes, environmental education initiatives, etc.).	T, G, S	Α, Ι	MIC, Ministry of Tourism, Regions
NAZ_MIS 70	demand for inland, coastal and maritime tourism	Coastal and maritime tourism	To initiate a study, at the scale of the maritime area, aimed at identifying and promoting sustainable technologies and practices in the sector of navigation for tourism purposes (passenger transport and boating), orienting it spatially and temporally on areas that are particularly vulnerable and congested due to high tourist pressure.	Т, ТЕ, S	Α, Ι	MIMS, Regions



Code	Strategic objective	Reference use for measureme nt	Measure	Category (S, T, TE, M, G, EC, A)	Type (I/P/i/A)	Main actors
NAZ_MIS 71	OS_RI 01 - Target marine research activities on the knowledge needs of the Plan, to strengthen and support the planning process and its sustainable growth objectives	Scientific research and innovation	Design and establish a science-to-policy interface structure aimed at supporting the concrete and timely transfer and application of scientific research results in the MSP process, targeting marine research on the priority needs of the MSP process and disseminating this research to society	A	A	MUR, MIMS



8 Phase 5 - Monitoring the Plan

8.1 Introduction

The fundamental aims of the Monitoring Program (MOP) are to enable monitoring of the effectiveness of the Plan (achievement of the stated qualitative or quantitative objectives) and to monitor the progress of the Plan actions. Where the objectives of the plan are not expressed in the formula of a goal to be achieved (declared in quantitative or qualitative terms) the usefulness of the monitoring program is also to identify appropriate indicators that can make manifest the trend of the phenomena relating to the objective in question to understand whether the evolution of the situation is positive or negative.

In order for it to be adequately informative, the PoM must have adequate spatial and temporal connotations, so as to be able to produce timely information that reflects the real trajectory to which the MSP measures implemented tend and therefore the efficiency of the Plans themselves. The PdM is therefore a tool that has the objective of keeping track in space and time of the efficiency of the implementation of the MSPs and of suggesting improvement measures in the event that these are deemed necessary through mid-term reviews. This approach is in line with what is stated in the national guidelines in Art. 26: "The Plan will have a duration of 10 years, with the possibility of a mid-term review, i.e. if it is considered necessary downstream of the monitoring of the implementation of the Plan or events that require revision". This type of approach, moreover, makes it possible to propose a Plan monitoring tool capable of embracing possible variations in space and time of environmental, social, economic and management priorities should these emerge during the first cycle of its implementation. The role of monitoring in informing and communicating the evolution of the state of implementation of management measures and their objects, as well as the boundary conditions that may affect them and require their revision, is therefore again emphasized. The tool proposed here is therefore key to making MSPs able to adapt over time to respond to emerging needs, and not necessarily to do so at the end of the first decade of its implementation. Indeed, through the provision of mid-term reviews, the updating of MSPs can occur simultaneously with its implementation. This is what is referred to in this text as an adaptive plan.

The PdM also aims to be a tool that addresses the integration of information flows, considering both those that already exist on the national territory in terms of monitoring programs, and setting new monitoring strategies where the existing ones are not adequate or do not exist at all.

The approach taken follows the breakdown by cross-cutting principles and themes/sectors in Stage 3 and refers to the strategic objectives identified in that stage, as well as the specific sub-area level objectives identified in Stage 4 - Strategic Level Planning.

It is essential to remember the strong spatial connotation of MSPs and the consequent need to produce and collect data and information as spatially representable as possible regardless of their nature. Moreover, the approach proposed through this tool is an integrated approach. In fact, the implementation of the Plans can



be monitored only when the data and information collected and related to the different themes/sectors are integrated and interpolated to obtain a complete and integrated information picture.

The monitoring program linked to individual sectors must adapt over time according to their level of development. For each theme/sector, a set of selected indicators is proposed here that can monitor the implementation of the thematic/sectoral plan measures according to the objectives set. This set of indicators has the added purpose of ensuring that each objective, regardless of its degree of specificity, is as quantifiable and measurable as possible, as well as the progress towards or away from its achievement. In fact, the national guidelines in Art. 24, define that "*For each plan must provide a system of monitoring and control, as well as measurement of results, to be implemented through appropriate procedures and indicators provided in the drafting phase of the plan.* The proposed system of indicators must also be linked to the system of indicators that will be defined at the end of the Strategic Environmental Assessment (SEA).

This proposal of the PoM and monitoring indicators will have to be finalized through consultations among the competent authorities, in order to define the list of indicators to be used and the implementation procedures of the PoM integrated and linked to the SEA.

8.2 Conceptual framework for the development of the monitoring program

The MDP needs to be a flexible tool, capable of adapting to the different sectoral areas and the different spatial and temporal scales of detail on which the Plan operates. For this reason, a conceptual framework (Figure 51), which addresses and guides, through the development of six main steps, the process necessary to establish the integrated MSP.

Figure SEQ Figura * ARABIC51 Conceptual framework consisting of 6 Steps guiding the construction of the Integrated Monitoring Programme (MoP) of the Maritime Spatial Plans (MSP)

8.2.1 STEP 1 - Review the plan objectives

The preparation of the program is based on the strategic and specific objectives of the Plan, respectively defined during Step 3 and Step 4. Step 1 allows, starting from each objective taken into consideration,



regardless of whether it is strategic or specific and its level of detail, to effectively orient the PoM by preliminarily identifying the spatial and temporal scale on which monitoring is developed in order to adequately inform the Plans. This approach makes it possible to increase the effectiveness of the PoM by favouring its ability to give the necessary information to the MSPs respecting the different spatial and temporal scales in which they are articulated.

The spatial scale varies according to the territorial extension involved by the different objectives; the widest is the one configured by the basin dimension as well as by the three maritime areas object of the plans: Adriatic, Tyrrhenian and Ionian. Going down to a greater detail, especially in relation to the specific objectives, the monitoring shall be carried out at sub-area level and in specific cases at the level of the single Planning Unit (UP).

The choice of the spatial scale at which monitoring should be applied depends directly on (i) the objective of the monitoring program and (ii) the coherence and completeness of the data in the sector. These same factors also influence the choice of time scale. The time scale plays a key role in the MSP because, after the monitoring activity, the Plans will be subject to mid-term reviews (Art.26). The temporal dimension is linked both to the variability of the phenomena considered and to the monitoring capacity: it can vary from a multi-year monitoring to a monthly update according to the timing with which the collection and analysis of data is significant with respect to the selected monitoring indicators and to the objectives set.

The monitoring program has two levels of priority:

- Priority 1 with reference to Stage 3 strategic objectives and Maritime Area scale (possibly with aggregation of data at larger scale);
- Priority 2 with reference to the specific objectives of the individual sub-areas and the Sub-Area scale.

8.2.2 STEP 2 - Identify the actors

Once defined the objectives that are linked to a spatial scale of reference, it is identified or assigned (if absent) 'authority responsible for the monitoring activity in relation to each plan objective. In addition to setting up the monitoring activity, the authority in question is responsible for its implementation, and therefore for the handling and processing of the data, as well as its flow and sharing with the MSP Competent Authority. This data flow should be as facilitated and timely as possible. The MSP Competent Authority is responsible for the management of the different data flows from the different entities responsible for monitoring and their management and systemisation.

8.2.3 STEP 3 - Define the indicators

In step 3 the indicators for the individual strategic and specific objectives are defined, which can be traced back to four main families of indicators identified as priorities for informing the MSPs: ecological-environmental, pressure, socio-economic and governance indicators. The ecological-environmental indicators, together with the pressure indicators, make it possible to monitor over time the degree of environmental sustainability of the plan measures implemented. Socio-economic



indicators, on the other hand, mainly reflect the degree of productivity of a sector and the level of employment it provides in relation to its level of development. Finally, the term governance indicators refers to indicators that measure the performance, progress and quality of the management actions of the sector under review and of the MSPs themselves, as well as the financing and management programs to support sector development. These indicators are of particular importance for the purpose of monitoring sectors that are not yet developed and therefore not yet productive but for which an initial development plan needs to be prepared.

The proposed set of indicators (see Section 5 of the Plan for the full list of identified indicators) is currently made up of a rather large list (Table 15), also considering the fact that in case of existing monitoring programs it is more efficient to implement the whole set of indicators rather than managing the selection of the most relevant ones. In addition, composite indicators that are the result of the combination of several data streams will be refined during the implementation of the monitoring program. The proposed indicators have been related to the individual objectives. The degree of specificity of each individual indicator is established according to the level of detail of the formulated objectives and can be adapted to the definition of new specific objectives.

The indicators have been divided into priority and ancillary indicators, which in turn are divided into performance and progress indicators. Priority indicators are defined as such because they meet the following criteria:

- sensitivity: the ability of the indicator to reflect changes in the status of the systems or mechanisms being monitored and consequently to inform MSPs on the progress or effectiveness of plan measures with respect to their intended plan objectives
- technical feasibility (granularity): the ability to collect data against the indicator in technical terms and within the required timeframe
- availability of the data flow, as a data collection mechanism is already in place in relation to the indicator.

Theme/Sector	Total indicators	Priority indicators	Accessory indicators	Effectiveness indicators	Progress indicators	Indicators with existing data stream
Sustainable development	42	15	27	27	15	25
Environmental protection and		7	11	10	7	10
natural resources	18					
Landscape and cultural		5	8	2	11	1
heritage	13					
Maritime safety, navigation		2	2	4	0	2
and surveillance	4					
Fishing	33	16	17	18	15	20
Aquaculture	15	11	4	5	10	13

Table 15 Numerosity of the indicators identified for the MDP, broken down by Theme/Sector and by type.



Ministry of Sustainable Infrastructure and Mobility

DEPARTMENT FOR TRANSPORT AND NAVIGATION DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES, MARITIME AND INLAND WATERWAY TRANSPORT

Maritime transport and ports	30	9	21	17	13	9
Energy	20	13	7	9	11	10
Coastal defence	16	11	5	11	5	15
Coastal and maritime tourism	16	7	9	9	7	9
Scientific research and		7	6	0	13	6
innovation	13					
Total	220	103	117	112	107	120

8.2.4 STEP 4 - Integrate existing programs and new surveys

The MDP potentially serves as a collector of the various existing national monitoring programs. At this stage, existing sectoral monitoring strategies and tools are considered and their possible integration into the MSPs' MoP is assessed, depending on the qualitative and quantitative indicators adopted by the latter and the consistency and completeness of the data collected.

If the sector being monitored is developed, existing monitoring plans are identified, data sources and their production chain defined, to assess their adequacy to support the PoM. On the contrary, if the sector is at an early stage of development and there are no programs aimed at monitoring it, the PoM aims to monitor its readiness and early stages of development mainly through the use of governance indicators.

8.2.5 STEP 5 - Identify and evaluate sources of data and information

Having identified the status of the sector under consideration and analyzed the main monitoring programs already in place at the national level, if any, the adequacy of their monitoring indicators and the consistency and completeness of the data collected under these programs are assessed to verify their congruence with those identified by the PDM in Step 3. In addition, the primary source and additional secondary sources are characterized, whether the data collection is done automatically within an existing program or whether it is a new program to be established or whether existing surveys need to be deepened, e.g., by changing the spatial domain, resolution, or sampling period.

8.2.6 STEP 6 - Periodic Reporting

The integrated PdM is officially established, complete with indications regarding the modalities and timing with which the activity will be carried out in order to address and monitor the effective implementation of the MSPs. The characteristics and modalities of data processing and reporting are defined, which will be able to use qualitative or quantitative evaluations with respect to baseline and target; the aspects related to the spatialization of the data and to the overcoming of situations of inhomogeneity are clarified. Possible data presentations are set up, organized by theme or sector, by type of indicator and by type of evaluation (effectiveness or progress).

8.3 Implementation of the Monitoring Program

The MDP should be seen in a circular perspective (Figure 52). Its structure allows it to be constantly updated with respect to the needs of the plan. It is necessary for the PoM to be in continuous communication with



the MSP implementation process with two main objectives: 1. to adapt over time according to the level of development of each sector and the plan objectives that may vary in number, content and level of detail over time and space; 2. to support the development of an adaptive plan process by punctually informing the implementation of the MSPs on the basis of the knowledge acquired during their monitoring, thus guaranteeing the implementation of plan measures that are adequate to meet the objectives set.

A period of time is envisaged during which the integrated MoP is to be prepared through coordination by the MSP Competent Authority of the authorities responsible for existing sectoral monitoring programs. During this time frame, provision is made for the establishment of sectoral monitoring programs if absent but necessary.

Once the MSP is implemented, annual or seasonal monitoring of all proposed indicators is foreseen with related data collection to be transmitted to the competent authority and to the TC. Mid-term reviews are suggested to analyse the data within a suitable timeframe to trace the trajectory of the MSPs in terms of efficiency. A technical report is expected to be prepared at each mid-term review.

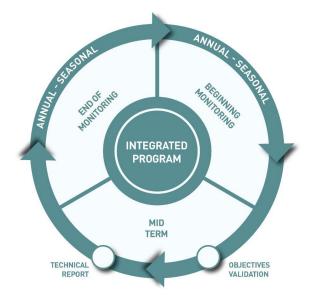


Figure SEQ Figura * ARABIC52 Graphic representation of the PdM in its characteristic of double circularity: an annual/seasonal cycle that foresees the continuous collection and organization of data (the first cycle coincides with the beginning of monitoring) and a broader cycle that foresees the mid-term review with the validation of the plan objectives



9 Phase 6 - Activities to consolidate, implement and update the Plans

The Plan developed for the "Tyrrhenian-Western Mediterranean" maritime area according to the national guidelines and the methodology adopted by the Technical Committee and summarised in the chapter 3as well as the Plans relative to the other Maritime Areas, represents the strategic reference for the development in the coming years of the uses of the sea and the interacting uses of the coast. At the same time, it represents the starting point of a process which will have to develop, update and adapt over time, as the information and knowledge available changes, as well as the environmental and socio-economic conditions around it.

The intrinsically dynamic nature of the Plans is considered operationally in the chapter 8which defines the methods and indicators through which the Plans will be monitored in order to assess their effectiveness and manage their adaptation and updating. However, it is already possible to identify a series of in-depth studies and actions, both general and specific, that should be implemented immediately after the approval of the Plan to support, within the operational flow of the monitoring program, the consolidation, implementation and updating of the Plan itself.

These are actions with very different characteristics, potentially involving a wide range of actors and competences, which can be fed both through institutional activities and dedicated national and European resources. These actions, many of which are already included in the national measures described in the paragraph above, can be divided into six groups. 7.4can be divided into six groups:

- i) cognitive integrations (Integration and updating of functional basic information for planning, Consolidation and development of the National Geoportal dedicated to PSM;
- Refinement of the preparatory analyses and refinement of the Plan choices (Refinement of the analyses by means of decision support tools, comparative evaluation of scenarios, more precise tools and evaluations on socio-economic effects of the Plan choices, spatial resolution of planning, clarification of the Plan measures);
- iii) consistency and harmonisation with other strategic and planning processes (linkage and harmonisation with implementation and updating processes of other standards and plans);
- iv) thematic aspects to be deepened (relations between Plans and climate change, sectoral insights on specific space demands, emerging sectors and technologies, landscape and cultural heritage);
- Multi-level governance (development and maintenance over time of information and stakeholder consultation processes, evolution of the situation of maritime areas and areas under jurisdiction, evolution of neighbouring countries' plans, EU indications and the international context, refinement of multi-level governance mechanisms);
- vi) initiation and implementation of the Plan's Monitoring Program.

It is important that these widespread actions, for a description of which please refer to the corresponding extended chapter of the Plan, are in part promoted, and in any case capitalized upon, by the Competent Authority and the Technical Committee within the MSP implementation process.



10 Bibliography

With regard to the bibliographical references, please refer to the relevant paragraphs of the extended chapters of the Plan.