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

Italian Maritime Spatial Plans

"Adriatic" Maritime Area

Summary

August 2022

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1 The Maritime Spatial Plan of the "Adriatic" Maritime Area

This document contains an extended summary of the Maritime Space Plan for the Maritime Area "Adriatic" drafted 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 drawn up in a coherent and coordinated manner with the Plans for the "Central Ionian-Mediterranean" and "Western Tyrrhenian-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 University IUAV 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 guidelines 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 authorizations. 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 programrs 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 intersectional 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 sectorial 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 harmonization 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 prevalent 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).

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 exactly 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 authorized 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 l. 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 plans, inclusion and harmonization 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 means that the Maritime Spatial Management Plan has the capacity to indicate objectives that will then have to be translated into planning or programming forecasts relating to land-based space.

Therefore, harmonization (and the superordinate character of the Plan), with respect to plans and programs that may have an impact on 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 harmonize 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 super ordination 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 also apply to port development plans, whose scope of application differs 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, in relation 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 in relation 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. Lastly, the Plan can regulate the behavior 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 should 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 ad hoc administrative acts or new plans and program 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, stating 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 drafting phase of the Plan. 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 recognized, 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 characterized 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 characterized 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.

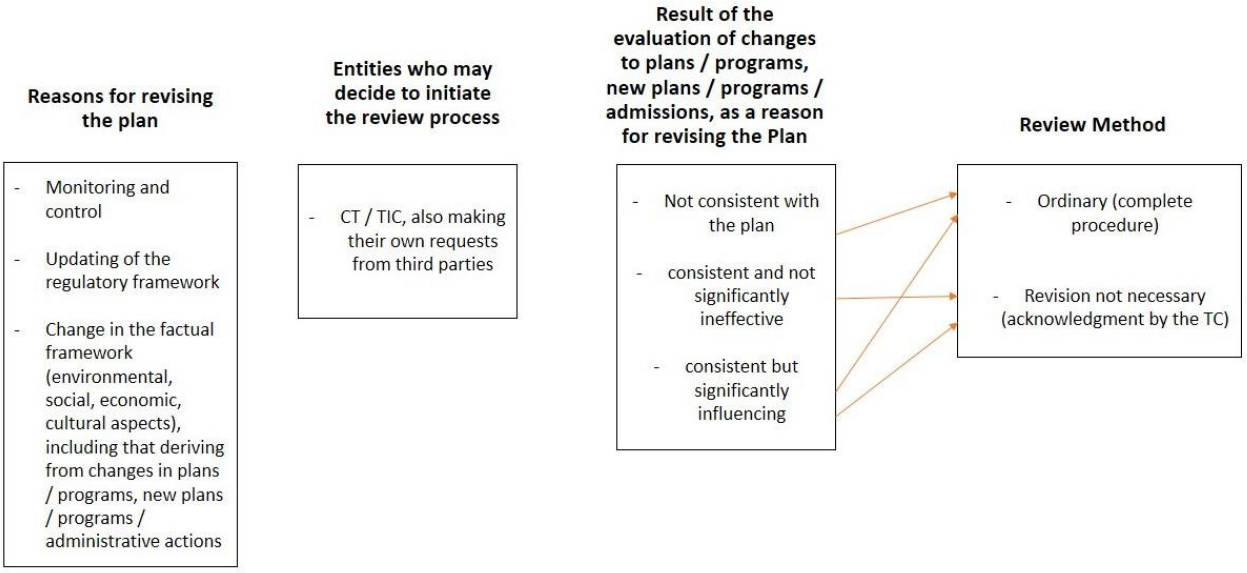


Figure 1 Outline of the review process of the Plans

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
- Step 3 - Vision and strategic objectives
- Step 4 - Strategic level planning
- Step 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 further 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. In order to be adequately informative, the PdM must have adequate spatial and temporal connotations so as to be able to produce timely information, reflecting 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 entire 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, and Western Tyrrhenian-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 neighboring 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 neighboring Countries for the settlement of 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).

Maritime Area "Adriatic"

The "Adriatic" area (Figure) has an extension of about 62,930 km^2 and is delimited in the East by the limits of the continental shelf already formally agreed with the neighboring countries (Yugoslavia, 1969; Albania, 1992; Greece, 1977 and 2020) and in the South by the delimitation line between the marine sub-regions "Adriatic Sea" and "Ionian Sea - Central Mediterranean" of the Marine Strategy Directive, as also indicated

in the Legislative Decree 201/2016. Within it, the area is divided into 9 sub-areas, which will be better illustrated in chapter 7, of which 6 within the territorial waters.

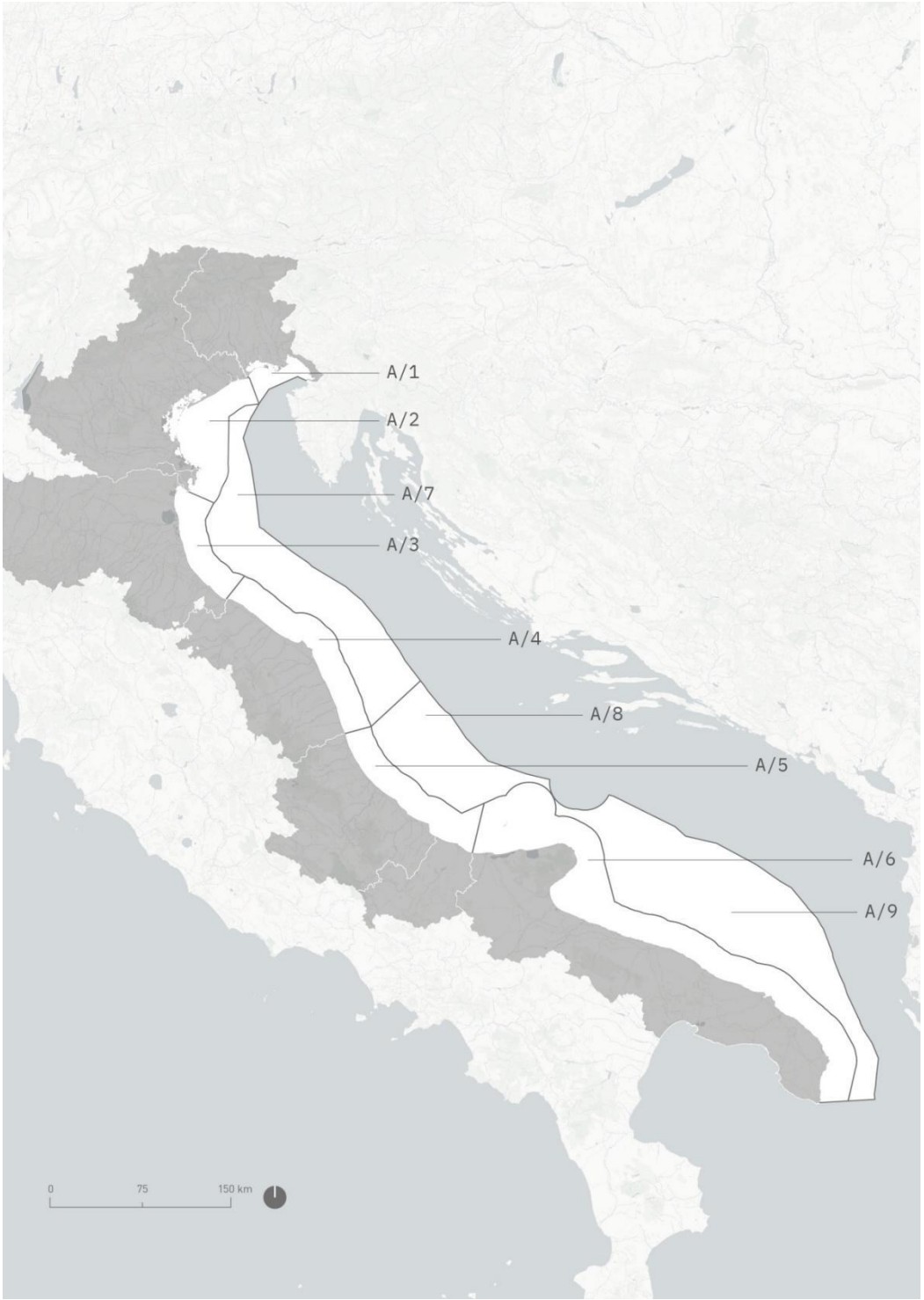


Figure 2 Delimitation and internal zoning of the "Adriatic" Area.

3.5 Development of strategic level planning

As a 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 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 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.

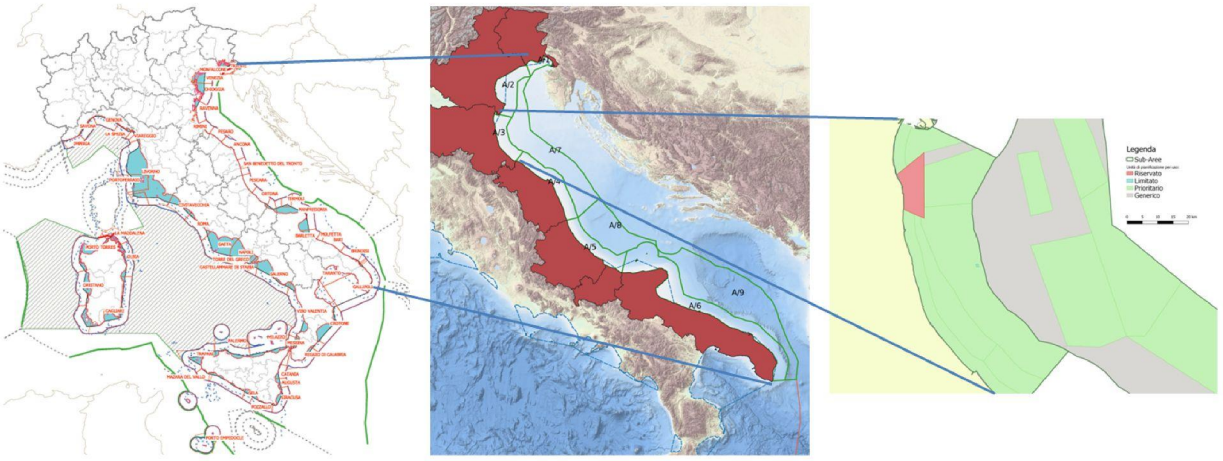


Figure 3 Spatial schematization within the Plans: from Maritime Areas to Sub Areas to Planning Units.

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 neighboring 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. 3.4.5).

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.

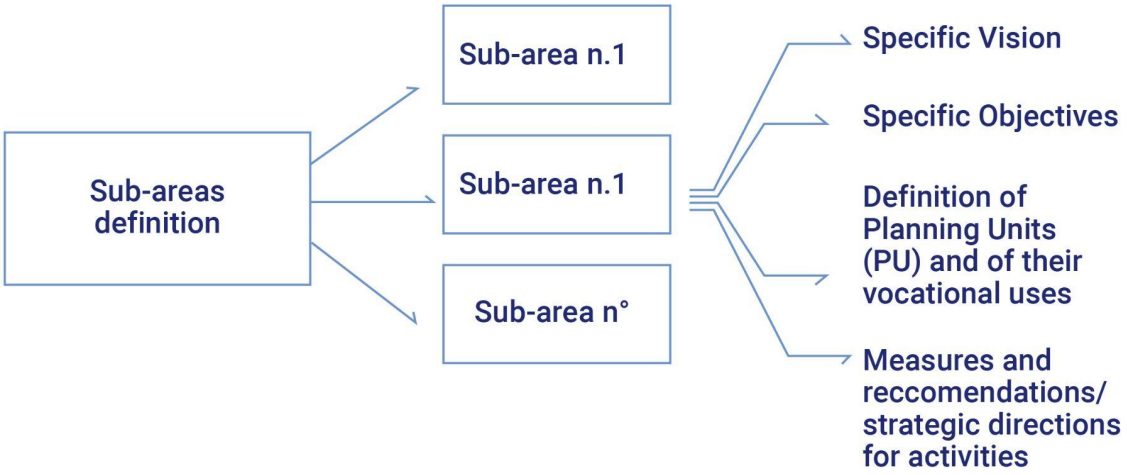


Figure 4 Outline of Plan content developed in each of the identified sub-areas.

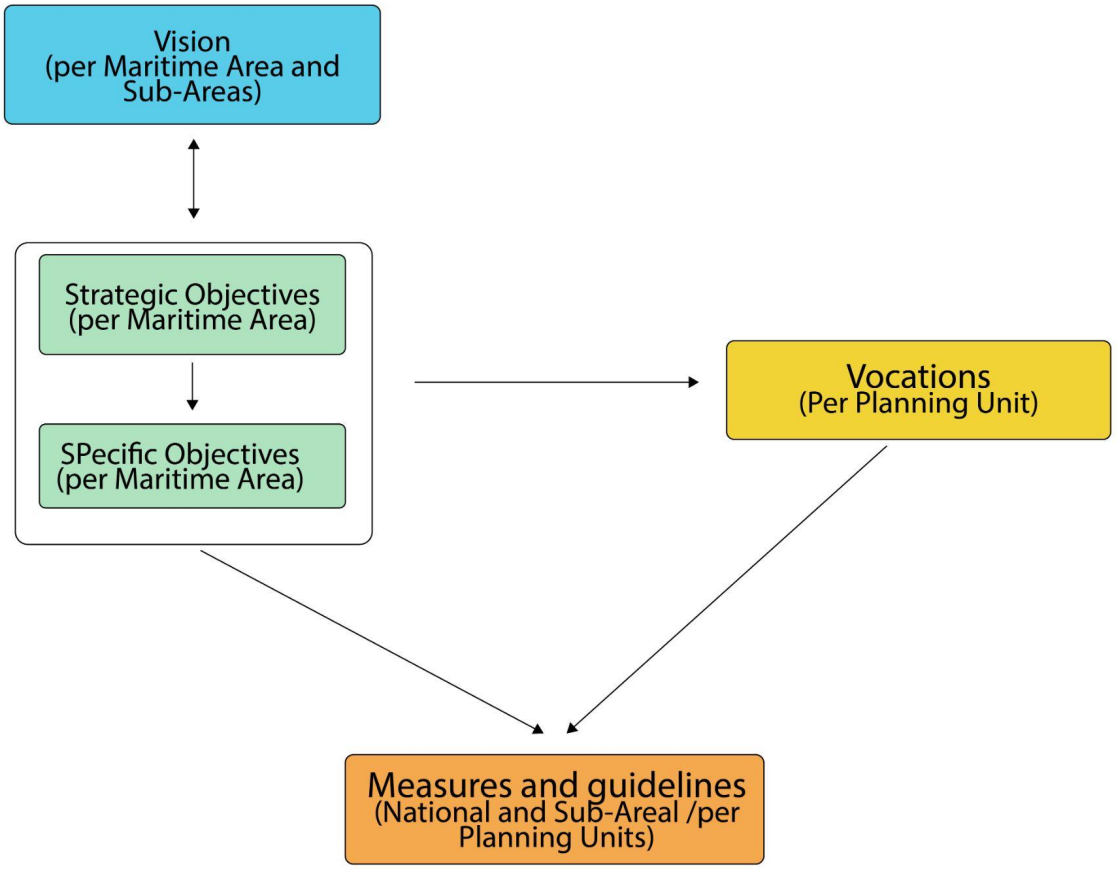


Figure 5 - Functional relationships between the main constituent components of the Plan.

3.5.2 The four-dimensional dimension of planning

If the previous paragraph focused on the description of how the plan has faced 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 goals. 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 minimizing 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 3.4.1paragraph, 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 super-ordinate level of the Maritime Area and the sub-ordinate 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.

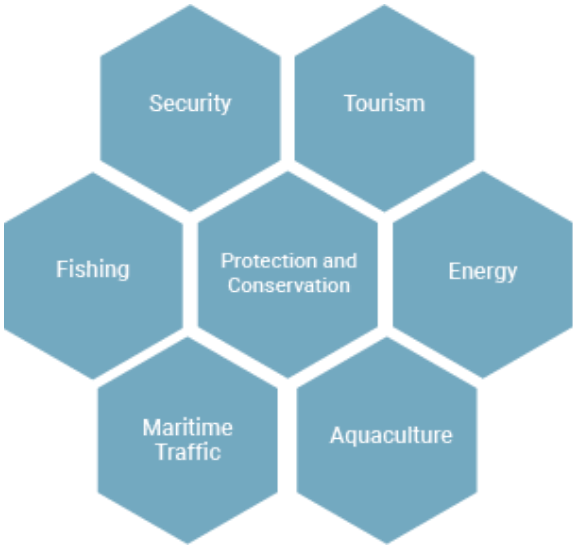
The criterion of consistency with existing standards and plans should be considered a prevailing criterion at this stage.

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

- G = Generic Use
  - *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
  - *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
  - *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
  - *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.*

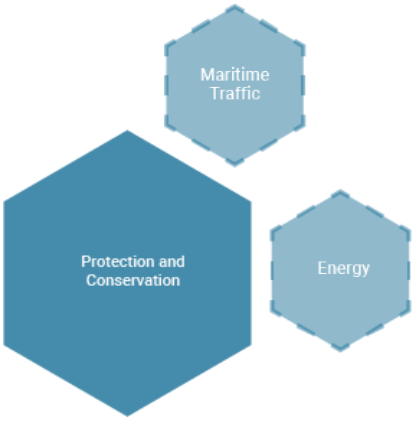
Finally, the Priority, Restricted and Reserved PUs are assigned specific indications that address priority use sectors and/or themes with cross-cutting significance, either individually or jointly.
This attribution of vocation does not in itself introduce at this stage new prohibitions on the exercise 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.

G - Generic Use



P - Priority Use

L - Limited Use



R - Reserved Use

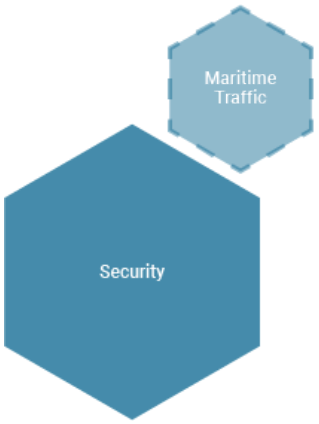


Figure 6 Graphical representation of the four typologies attributable to the Planning Units.

The Table 1 reposts the list of uses/sectors and themes with cross-cutting value used for vocation attributions to PUs. The table also provides a list of sub-uses used in the descriptive tables for the PUs in the 6 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 recognized. 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 recognizing 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.

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

	Uses / Sectors and Transversal Themes with "Strategic Objectives".	Code	Possible sub-uses
Transversal principles	**Sustainable development**	-	-
	Environmental protection and natural resources	n	-
	Landscape and cultural heritage	ppc	Coastal landscape
			Underwater cultural heritage
Uses and sectors	**Coastal and maritime tourism**	t	beach tourism
			Experiential tourism (e.g. ecotourism, fishing tourism, diving, etc.)
			nautical tourism
	Aquaculture	a	
	Fishing	p	commercial fishing
			artisanal fishing
			recreational fishing
	Maritime transport and ports	tm	Goods transport
			Passenger transport
	Energy	e	Renewable energies
			Cables and conduits
	Mining and hydrocarbon exploration and extraction		Extraction of hydrocarbons
	Maritime safety, navigation and surveillance	s	-
	Scientific research and innovation	re	-
	Coastal defense	dc	-
	Other Uses / Sectors to be considered for PUs		
	Telecommunications	tlc	-
	Dredged sediment sea-diving	isd	-

	Withdrawal of relict sands	sa	-
	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 UP 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 favoring 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 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 sectorial 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 specialized 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 each action derives, again in the light of the strategic and specific objectives, from 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 sectorial 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 visibility 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.

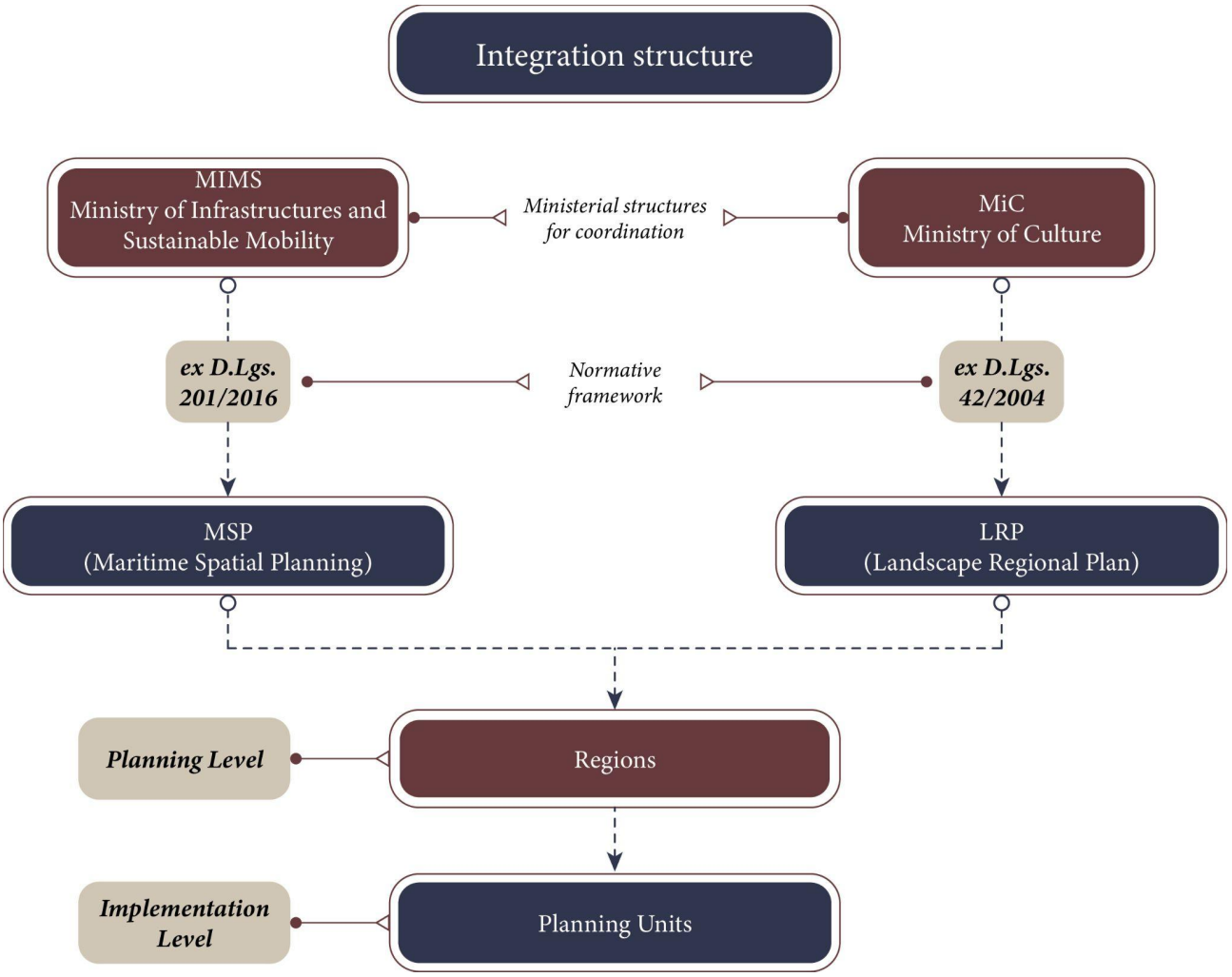


Figure 7 Inter-ministerial Integration Structure

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 in the 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.

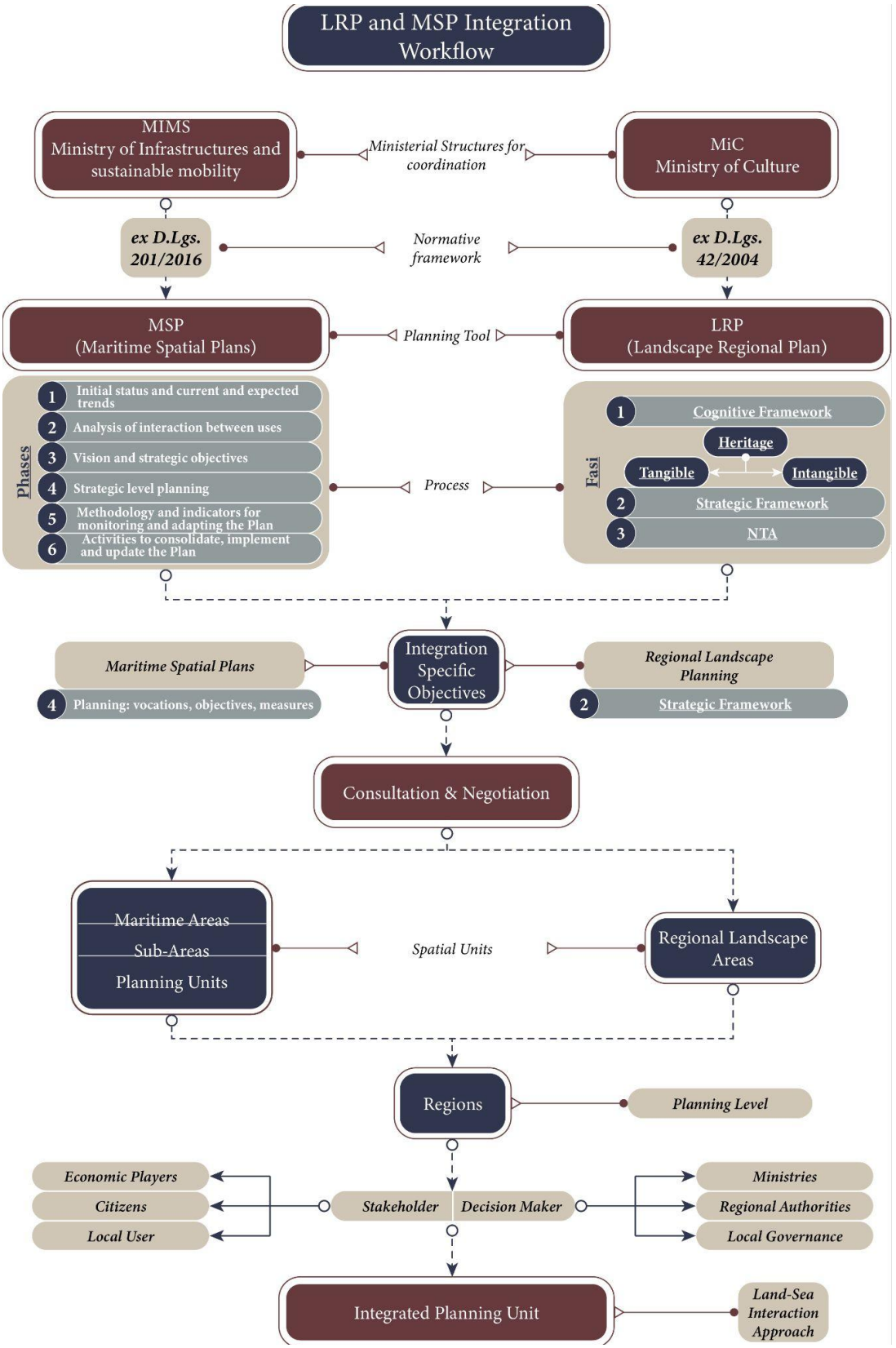
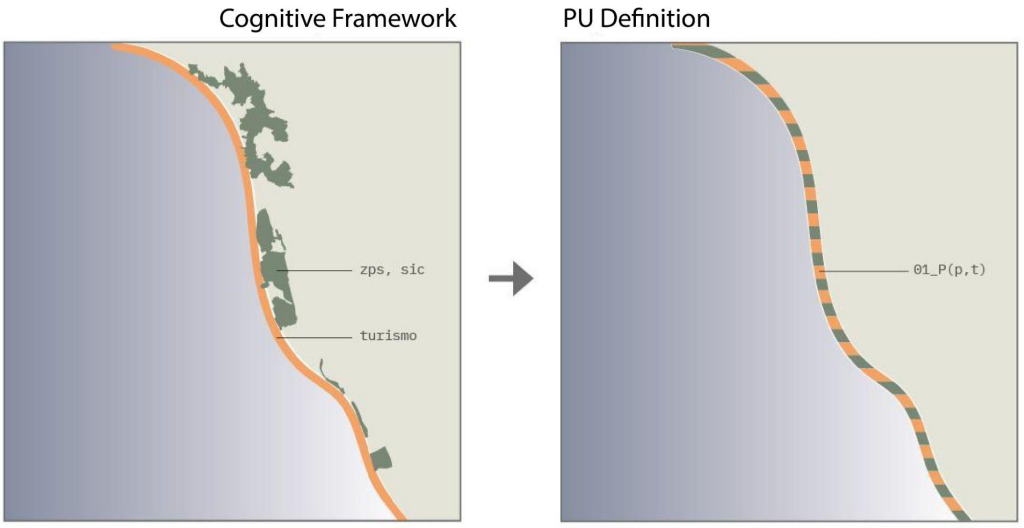


Figure 8 Workflow for the integration between MSP and LRP



PU	Use Typology	Motivation of typology attribution	Other Uses	Specific considerations 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

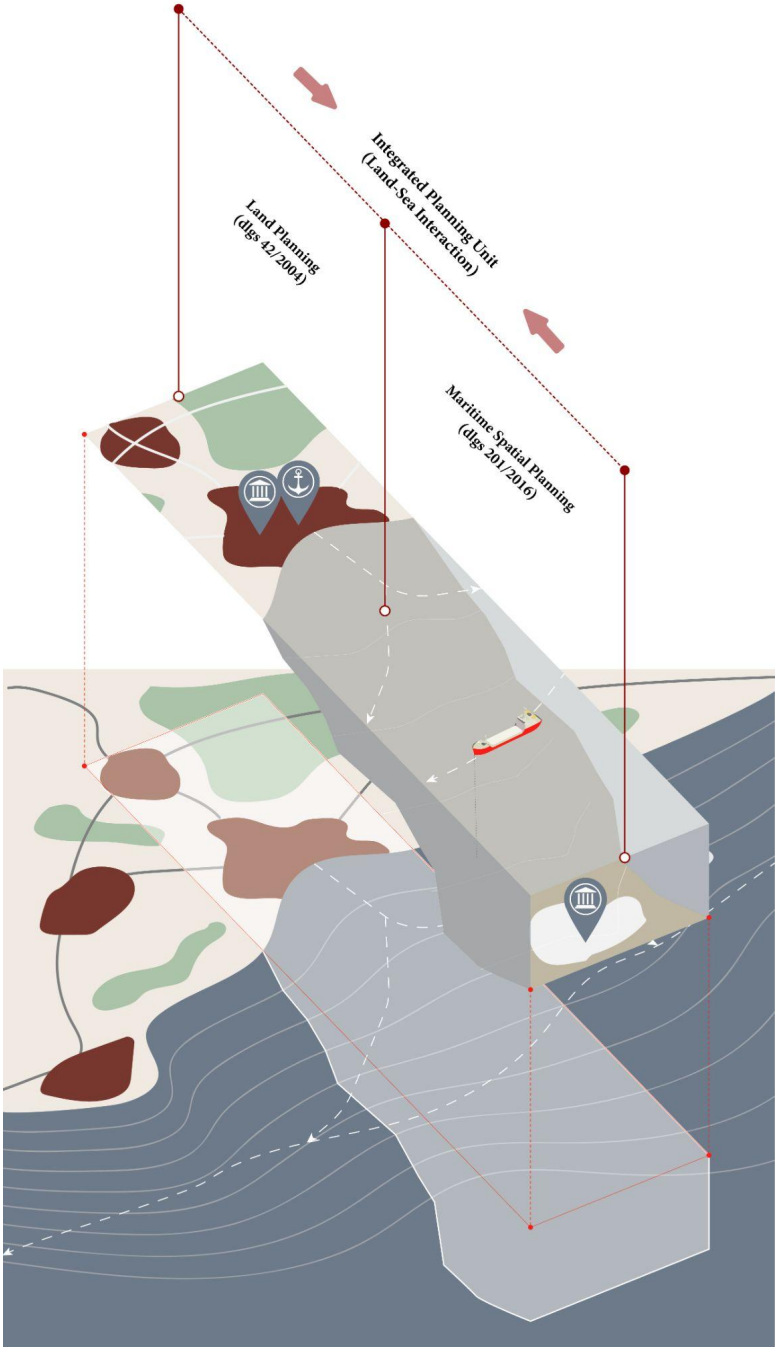


Figure 10 Concept of the coastal territorial unit

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 summarized as follows:

- Take the long view;
- 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, and 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).

Step 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), research and innovation (OS_RI).

Step 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, in order 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" if they are exclusively

dedicated to environmental protection, for example through 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.

Step 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

defense 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 Adriatic Sea is a semi-enclosed basin characterized by increasing depths and geomorphological features that vary markedly along a north-south gradient. The complex climatic (low winter temperatures, strong vertical stratification in summer) and oceanographic (surface and deep circulation, hydrology, prevailing winds that regulate the movement of water masses) characteristics of the Adriatic play an essential role in determining its ecological and morphological configuratiion, influencing both ecological and sedimentation processes.

The northern part of the Adriatic Sea, with a relatively poorly indented coastline and shallow waters that reach an average depth of about 35 m with gentle slopes, is the largest continental shelf area in the entire Mediterranean Sea. The central Adriatic has an average depth of about 150 m and is characterized by the presence of the Pomo Trench, a complex depression that reaches a depth of about 270 m. The Fossa di Pomo represents one of the most productive and important areas for the recruitment and first growth of fish species of high commercial value. Below the Gargano Promontory, the Southern Adriatic Sea shows a deep depression, down to -1225 m, enclosing platform areas of variable surface and a relatively large bathyal area.

The complex Adriatic hydrogeology is strongly characterized by the presence of river deltas, lagoons and wetlands, which characterize the dominant landscape of the Italian Adriatic coastal area, especially in its northern belt. The most significant fluvial inputs of the whole Adriatic Sea originate from the rivers between the delta of the river Po and the mouth of the river Isonzo, among which the Tagliamento, Piave, Adige and Brenta are also important. These contributions of fresh water make the basin one of the most productive in the Mediterranean, determine conditions of reduced salinity and variable density, movement of water masses with currents prevailing towards the south, and influence the structure of the communities present. Moreover, the lagoon areas constitute important transition areas which, among the most relevant, from north to south, are: Grado and Marano Lagoons, Venice Lagoon, Sacca di Goro and Comacchio Valleys and Lesina and Varano Lagoons. The Italian coast from Monfalcone to Rimini is bordered by sedimentary plains, deltas, sandy beaches, the central portion by sandy beaches with sporadic rocky promontories (e.g. Conero and Gargano), while the Adriatic coast in the area of Trieste and Apulia is rocky dominated, with

pronounced erosive phenomena due to the karst nature, determining wide morphological heterogeneity and a complex system of underground discharges into the sea.

The biotic characteristics are closely linked to the nature of the seabed, which is mainly composed of sandy and muddy sediments. The seabed is characterized by a longitudinal zonation to the shoreline, starting from low, regular and sandy coasts that decrease until they are enriched and then replaced by mud (silts and clays). The transition from the sandy to the pelitic component is mainly originated by fluvial sedimentary contributions, especially from the Po River. Although they are all ascribable to the biocoenosis of infralittoral and circalittoral soft bottoms, the distinction between the habitats is linked to specific abiotic conditions (sediment granulometry, light penetration, oxidation states) that strongly influence the corresponding bottom biological communities. Among the most relevant, there are Posidonia oceanica meadows and other marine phanerogams (*Zostera noltii* and *Cymodocea spp*.), as well as Mediterranean coralligenous formations, characterized by high biodiversity and specific and morphological variability, mainly consisting of coralline algae (e.g. *Peyssonneliaceae*) growing in low light conditions. The nature of the seabed and the biotic and abiotic factors mean that within the Adriatic Sea there are important areas of reproduction and growth of fish (*Essential Fish Habitats*) of high commercial value.

Visual, aerial and satellite surveys have also highlighted the resident presence of protected marine avifauna, elasmobranchs, turtles and marine mammals in the Adriatic Sea. Only one cetacean species is considered sedentary in the central-northern Italian Adriatic Sea, the bottlenose dolphin (*Tursiops truncatus*). Other species, such as the common dolphin (*Delphinus delphis*), striped dolphin (*Stenella coeruleoalba*), minke whale (*Balaenoptera physalus*), sperm whale (Physeter macrocephalus), bottlenose dolphin (*Grampus griseus*), zyphi (*Ziphius cavirostris*), and pilot whale (*Globicephala melas*), are considered sporadic or wandering, while they are much more frequent in the southern part of the basin. In the Italian Adriatic waters, the presence of the common turtle (*Caretta caretta*) is important, with extensive movements that include the migration of adults for foraging (e.g. towards the mouth of the Po River in spring and summer), and seasonal migrations of both adults of breeding age and juveniles southwards when temperatures fall during the cold seasons. Genetic diversity studies indicate that colonies from the Greek islands, western Turkey, and Crete, Cyprus, and eastern Turkey pass through the northern Adriatic, while no colonies of Atlantic origin arrive in the northern Adriatic. This highlights how pressures from multiple sources on populations in the northern Adriatic may have consequences for all populations in the eastern Mediterranean.

The Adriatic Sea hosts historical and intense anthropic activities, some of which are relevant for socio-economic value and for potential impacts on species, habitats and ecosystems. Among these, some of the most relevant are:

- Maritime transport: the Italian Adriatic Sea represents one of the most important maritime routes for the transit of goods from Asia, via Suez, to Europe thanks to the presence of important ports such as Venice, Trieste, Ravenna, Ancona, Bari. As a consequence, recent annual statistics show a constant increase of container transport for all ports considered.
- Coastal urbanization: the development of urban areas, often in the presence of large industrial and port works and intense urbanization of the coasts, also for tourist use, has determined, starting from the middle of the last century, a huge anthropization of the coasts throughout the maritime

area. Many Adriatic coastal areas (e.g. Trieste, Venice, Ravenna, Ancona, Pescara, Bari, Brindisi) have also undergone profound transformations over the past decades, linked to the development of industrial poles (oil, iron and steel) and/or commercial centers. The industrial realities settled in these areas have left important legacies in terms of contamination of terrestrial environmental matrices (soil, groundwater) but also of marine ecosystems (water, sediments, organisms).

- Fishery: the Adriatic Sea represents a hot-spot of Mediterranean biodiversity, especially considering the endemism of fish species. Within the basin, in fact, there are also important areas of reproduction and growth of fishes (*Essential Fish Habitats*) of high commercial value. This makes this area an area of strategic importance at national level for the fishing sector, and determines, as in the entire Eastern Mediterranean, a situation of ichthyic stocks far from exploitation within sustainable levels. Scientific assessments of the state of commercial stocks in the Italian seas are included in the National Three-Year Program for Fisheries and Aquaculture 2017-2019 (MIPAAFT 2016) and are derived from data collected within the National Program for Alimentary Data Collection (EC Reg. n. 199/08).
- Aquaculture: the Adriatic Sea hosts important productive realities, in particular as far as mussel farming is concerned. A very important fraction of the approximately 60,000 tons of Mediterranean mussels (*Mytilus galloprovincialis*) produced annually in Italy comes from the upper Adriatic regions.
- Tourism system: the Adriatic Sea is an important coastal tourism destination in the Mediterranean. The seaside tourism flow in the area has been constantly increasing in the last 20 years, with very positive dynamics at international level, with continuous growth of arrivals (Strategic Tourism Plan 2017-2022).
- Marine areas for hydrocarbon exploitation (O&G) (including cables and supporting pipelines): the energy sector is of high interest for the area, due to its strategic and socio-economic relevance, its cross-border dimension and its current and potential interactions with other uses and environmental components.

The whole Adriatic maritime area is characterized 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 area, 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 analyzed area requires to consider its boundaries in a flexible and permeable way. In fact, the interregional and international context in which the area is located 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 Il 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

[1] https://www.sid.mit.gov.it

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 Plan formulation process, in order to provide 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 allows to highlight the interactions between pairs of uses present in the "Adriatic" 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 available information, reported in detail in Annex 1 of Chapter 4 (Phase 2) of the extended version of the Plan, which analyzes 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 (↑↔↓) 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 (color). 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.

	Maritime transport	Tourism	Energy Production - Hydrocarbons	Routes for submarine cables and pipelines	Aquaculture-molluse farming	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 (only if	Scientific research
Maritime transport	↑ 24, 25															
Tourism	↑61,68, 51, 54															
Energy Production - Hydrocarbons	↑ 4, 5,6	↔ 7, 39														
Routes for submarine cables and pipelines		↑ 11														
Aquaculture-molluse farming	↑ 26, 77	↑ 72, 75	↑ 2,14,40	↑ 9												
Aquaculture-pisciculture																
Fishing-Trawl	↑19, 29,30, 33, 49,52,58,66	↔ 32,55,56,63, 67	↓ 1, 12,65	↔ 8,16	↔ 27, 31,47, 76		↑ 57,70									
Stationary fishing gear																
Small-scale coastal fishing	↑ 49,52	↑20,22,23,5 5,56,59,62,7	↓ 1,12	↔ 8,16	↑ 27,47, 76		↑ 18,28,46,60, 64,69									
Temporary military use	↑ 34, 35, 84	↑ 37			↑ 38		↓ 36		↓ 36							
Permanent military use	↑ 34, 35,84	↑ 37			↑ 38		↓ 36,84		↓ 36							
Extraction of raw materials	↑83	↑45	↔ 15,42,43	↑ 44			↔ 41, 84		↔ 41							
Nature and species conservation sites and protected areas	↑53	↑73	↑3, 13	↑ 8,10,17	↑ 78		↑48		↑48,50							
Underwater cultural heritage		↑74														
Energy production from renewable sources	↑81				↑79		↑82			↑80	↑80					
Scientific research																

Figure 11 Matrix of interactions for the Adriatic Sea 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 shown refer to the detailed information in Annex 1 of Chapter 4 (Phase 2) of the extended version of the Plan.

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 represented shapes indicate general macro-areas (e.g. North Adriatic area, port areas, gas platform development area, etc.) but do not delimit in a geo-referable way precise geographical boundaries. 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. It clearly emerges how the Northern Adriatic (Figure 12 a, b, c, d) is characterized by multiple overlapping interactions, which are the result of an effective high concentration of uses in a restricted marine space, and by the fact that the area has been investigated in a greater number of studies that have allowed not only to map the uses but also to characterize in terms of conflict or synergy the possible interactions.

Figure 12 (a)- Graphic representation of synthesis on map of the main interactions among uses in the Adriatic sea area (Table 1). The boundaries of the represented forms do not correspond to precise geographical references, but graphically identify generic macro-areas of analysis

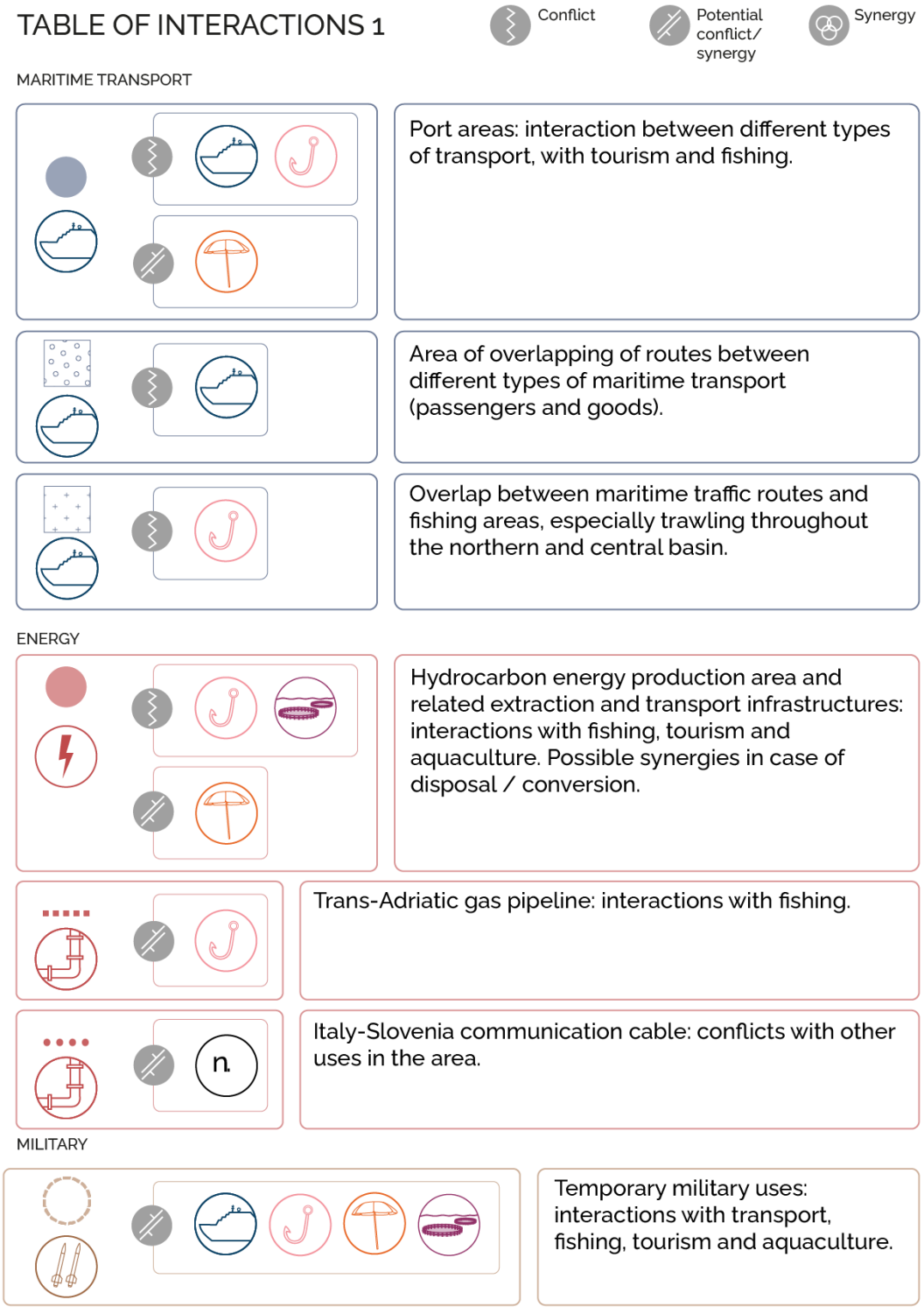


Figure 12 (b) - Meaning of the interactions reported in the map of Table 1 for the Adriatic Sea area. "Conflict" means conflict experienced or expected in the maritime area; "Potential conflict/synergy" means conflict reported as possible/potential or simultaneous presence of possible synergies and conflicts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

Figure 12 (c) - Graphic representation on map of the main interactions among uses in the Adriatic sea area (Table 2). The boundaries of the represented forms do not correspond to precise geographical references, but graphically identify generic macro-areas of analysis

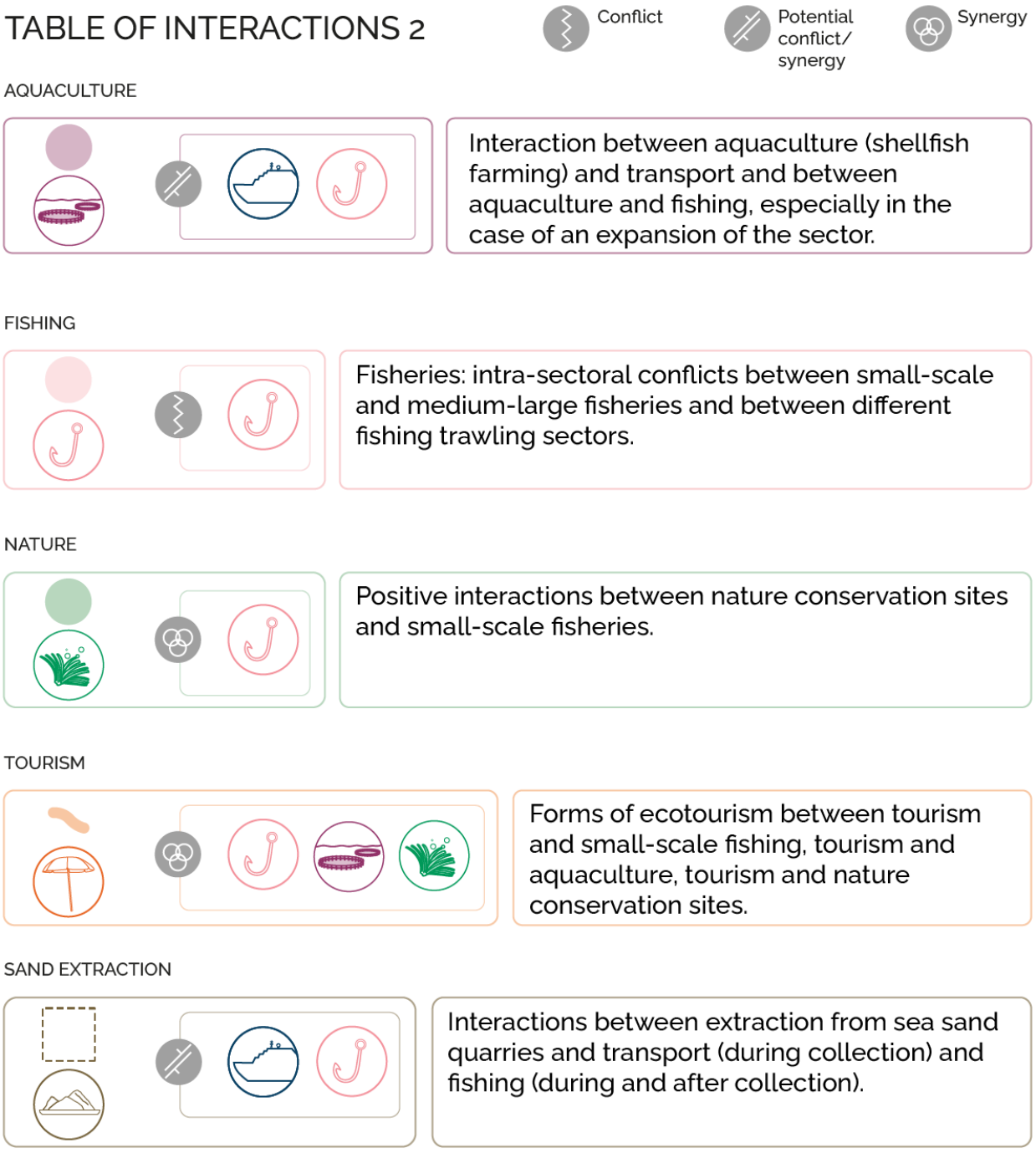


Figure 12 (d) - Meaning of the interactions reported in the map of Table 2 for the Adriatic Sea area. "Conflict" means conflict experienced or expected in the maritime area; "Potential conflict/synergy" means conflict reported as possible/potential or simultaneous presence of possible synergies and conflicts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

5.2 Analysis of interaction between uses and environment

5.2.1 Analysis methodology

The objective of the analysis of the interactions between uses and environmental components is to operationalize the principles of the ecosystem approach within marine plans. In particular, the analysis aims to analyze 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 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 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:

Conservation priorities and environmental values: 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;

Potential positive or negative interactions resulting from anthropogenic uses: 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.

Benefits: 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 Stage 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 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.

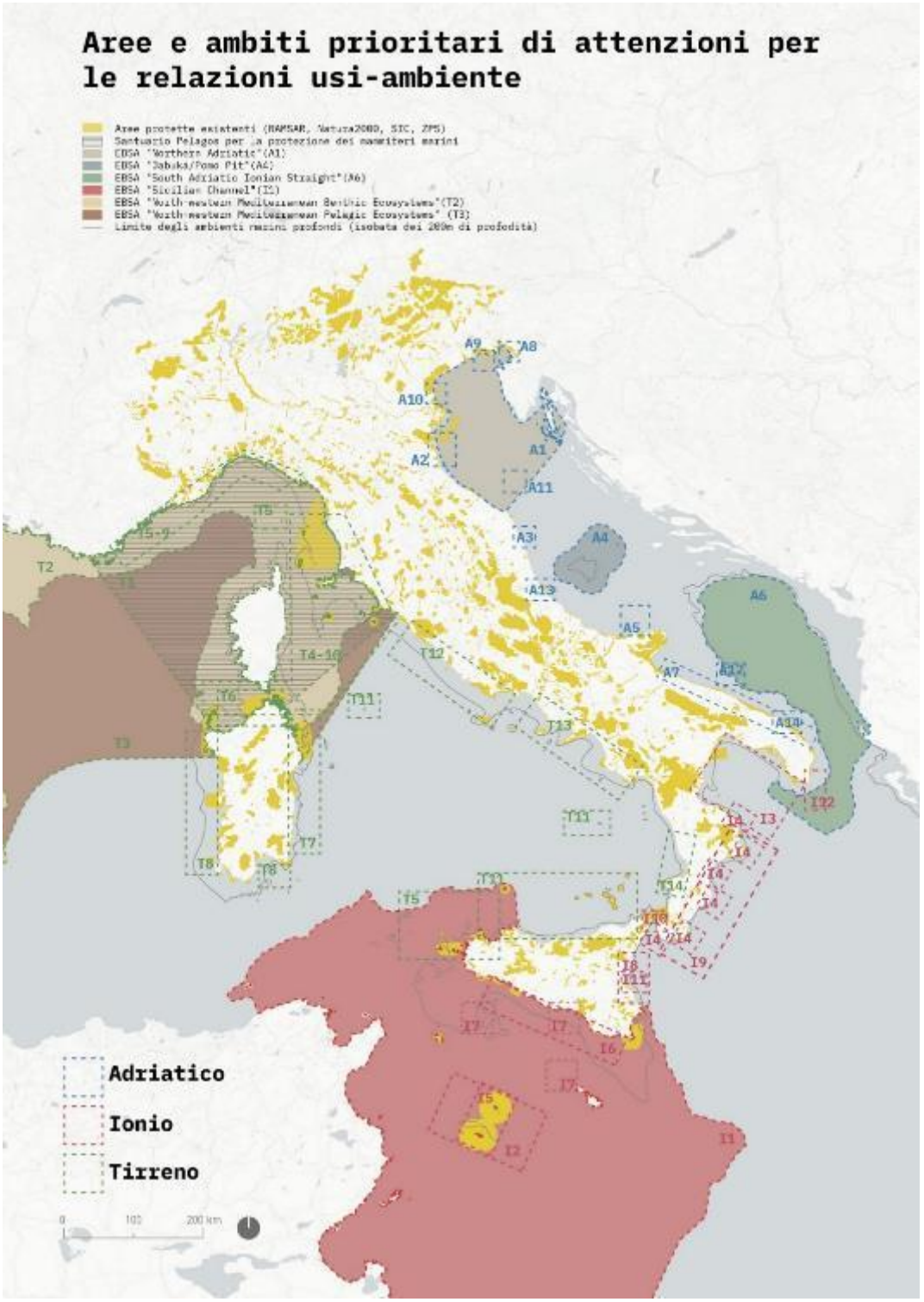


Figure 13 Priority areas and areas of attention for the use-environment relations. The areas are identified through alphanumeric codes, A= Adriatic Maritime Area, I= Ionian and Central Mediterranean Maritime Area, T= Tyrrhenian and Western Mediterranean Maritime Area; EBSA = Ecologically or Biologically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

6 Step 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
- Mining and hydrocarbon exploration and extraction
- Energy
- Coastal defense, 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 summary of what is contained in the many existing strategies, plans and reference standards;
- A focus 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 greater or lesser importance than is indicated more broadly in the guidance documents considered, where not an actual 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 identified strategic objectives are summarized in Table 2 and constitute a unitary and integrated *corpus* that contributes to form a Vision for the development of the three maritime areas and, specifically, of the "Adriatic" 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.

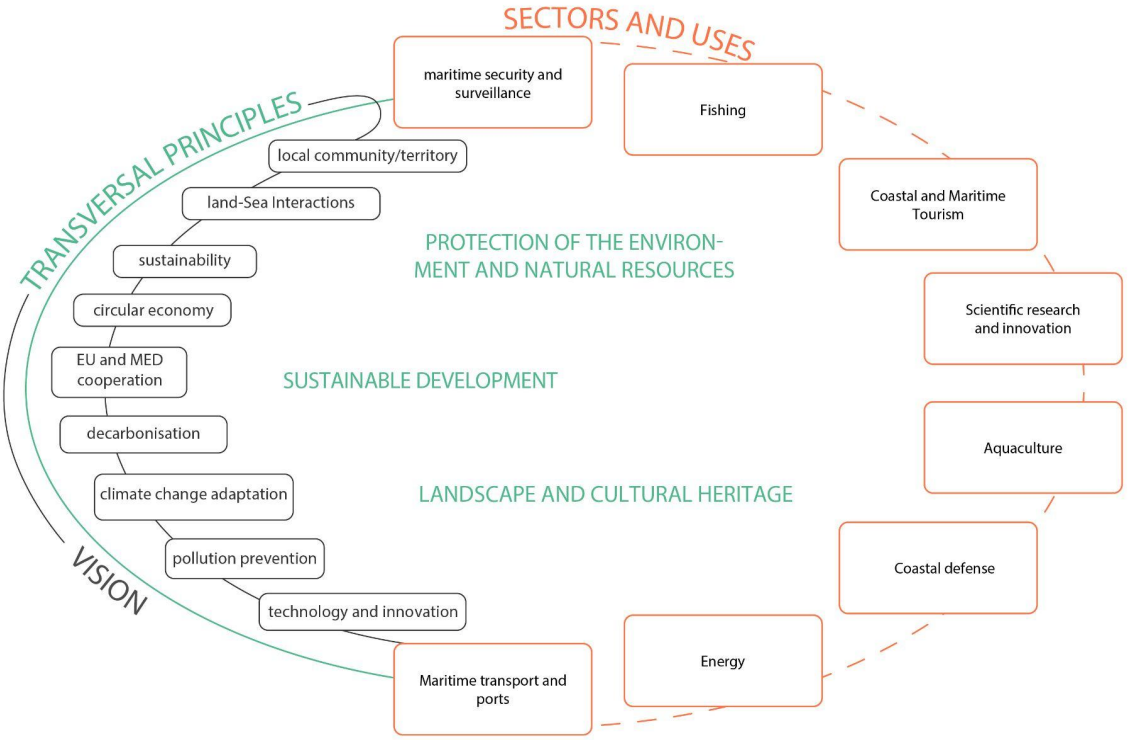


Figure 14 Principles that underpin the desired development of the maritime sectors and generate the Vision for the Plan.

Table 2 Strategic objectives of the Plan.

	THEMES/SECTORS/USES	Code	OBJECTIVES
Transversal principles	**Sustainable development**	OS_SS|01	Developing a sustainable marine economy, multiplying growth opportunities for marine and maritime sectors
		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 protection and natural resources	OS_N|01	Apply a consistent *Ecosystem Based Approach (*EBA) at all stages of drafting Maritime Spatial Plans
		OS_N|02	Supporting the extension of EU marine protection to 30% by 2030
		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 heritage	OS_PPC|01	Support the landscape value of the coastal strip
		OS_PPC|02	Promoting the recovery and redevelopment of buildings and areas subject to protection
		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 unauthorized building in coastal areas
Sectors/Uses	**Maritime safety, navigation and surveillance**	OS_S|01	Preventing pollution from ships and contributing to the implementation of the measures of the Marpol Convention
		OS_S|02	Help promote maritime safety, the implementation of UNCLOS standards and the EU Maritime Safety Strategy
	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

	THEMES/SECTORS/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
	Aquaculture	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)
	Maritime transport and ports	OS_TM|01	Promoting sustainable development of maritime transport and reducing its negative impacts
		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
	Energy	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 $_2$
	Coastal defense	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/SECTORS/USES	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 defense and adaptation plans
	Coastal and maritime tourism	OS_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
		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 innovation	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
		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 against and adaptation to climate change and to the European Green Deal is a priority. and its blue declination in the EU Strategy on Sustainable Blue Economy. 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 energy at sea is supported and accelerated in line with European and national decarbonisation and energy transition objectives.. Fisheries and aquaculture are developed in a sustainable and efficient way, pursuing a sustainable use of fishery resources, with the objective of protecting and rebuilding 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 practiced, 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 "Adriatic" area is influenced by the complex morpho-bathymetric characteristics and hydrological, geographical and environmental as well as social and economic dynamics of the Adriatic Sea. The interregional and international context in which the area insists, moreover, influences in a substantial way the planning needs of strategic level and address for the Maritime Area. Such characteristics have been taken into consideration in the definition of the sub-areas (Figure 15), according to the planning needs and the definition, for each sub-area, of an appropriate medium-long term vision and coherent specific planning objectives.

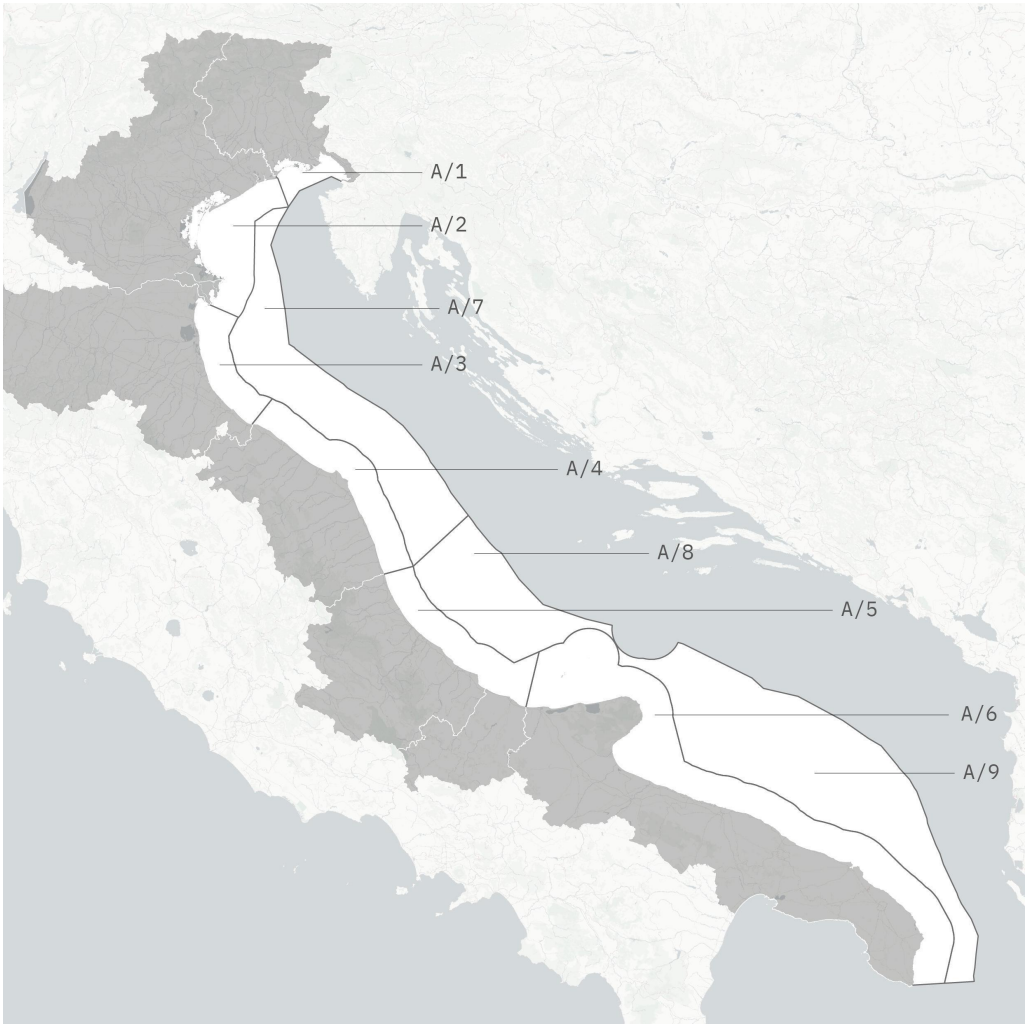
The limits of the sub-areas must be considered as permeable limits, from the point of view of uses, from the environmental/ecosystem point of view and from the point of view of the *governance* system, so as to ensure maximum coherence with respect to the planning of the vast area and neighboring sub-areas, as well as to meet the needs of a unified ecological and functional vision. Taking into account these objectives, the criteria and elements to be considered for the definition of the sub-areas, through their optimal combination and expert judgment, were as follows:

- National and international legal and administrative boundaries: The first distinction in determining the sub-areas was determined by the boundary between territorial waters (from the coastline to the 12 NM line) and continental shelf (from the 12 NM to the median line). The boundaries of the sub-areas along the coastline were defined taking into account the boundaries of the maritime areas and the regions Friuli Venezia Giulia (sub-area A/1), Veneto (A/2), Emilia-Romagna (A/3), Marche (A/4), Abruzzo and Molise (A/5) and Puglia up to Capo di Leuca, the boundary established by the Marine Reporting Unit MSFD (A/6). These boundaries have been extended up to the demarcation of the 12 NM by following boundaries demarcated by existing zones used for sectoral planning and management activities (e.g. between A/2 and A/3 along the separation line between the Natura 2000 Sites being established in the marine waters off the Po Delta) or by following the boundaries of the Maritime Directorates (zones);
- Morphological and oceanographic features: the proposed division into "off-shore" sub-areas (off the 12 NM) mainly took into account the geomorphological, oceanographic and hydrological features of the Adriatic Sea, which vary markedly along the north-south gradient. The northern portion of the Adriatic Sea, which constitutes the largest continental shelf area in the entire Mediterranean Sea, has been enclosed in sub-area A/7, delimited by the boundary of the escarpment that reaches the deep water up to about 270 m of the complex depression of the Fossa di Pomo. The boundary between sub-areas A/7 and A/8 has been drawn in continuity with the boundary between A/4 and A/5 to ensure consistency with planning in territorial waters. Considering instead that below the Gargano Promontory the southern Adriatic Sea shows a deep depression, up to -1225 m, enclosing platform areas of variable surface and a relatively large bathyal area, the boundary between sub-areas A/8 and A/9 has been identified at the point of

coincidence between the 12 NM line and the median line, at the agreed boundary between the archipelago of the Tremiti Islands (Italy) and that of Pelagosa (Croatia). This subdivision coincides with the demarcation line between Geographical Subareas (GSAs) 17 and 18, except for a limited northern portion of sub-area A/9 (about 70000 ha).

In addition, in delimiting the subareas, additional specific criteria were taken into account, such as: the distribution of peculiar or prevailing existing uses of the sea, existing areas used for planning and management activities, and the boundaries of marine areas open to hydrocarbon exploration and production identified by the MISE.

For general use and to support public consultation, the cartographic layers of the Plan (Areas, Subareas, Planning Units) with the relative attributes and the thematism assigned according to the priority uses of each PU are published on the SID platform - Portal of the Sea[2] and can be consulted together with all the cartographic layers used in the maps of the cognitive framework (Phase1).



[2] https://www.sid.mit.gov.it

Figure 15 Sub-areas of the maritime area "Adriatic".

7.2 Overall planning framework

7.2.1 Integrated vision of maritime area

The maritime economy of the Italian Adriatic system is linked to a multiplicity of sectors. Among the most relevant sectors there are commercial and passenger transport (including cruise transport), the related port activities, tourism (in particular bathing and recreational tourism), fishing, aquaculture and the exploitation of hydrocarbon deposits. The overall development and planning strategy for these sectors takes into account the critical issues related to the interference between uses and the environment, particularly in the context of climate change, in order to allow for a systemic, harmonious and sustainable development aimed at protecting and enhancing the landscape, environmental and historical-cultural heritage, in a marine and coastal environment in good environmental condition. The Plan recognizes the close link between this precious heritage and the economic activities characteristic of the Adriatic maritime area (tourism, fishing, aquaculture, boating, etc.). The landscape, the cultural heritage, the marine and coastal ecosystems and the resources present in them represent both valuable assets to be protected and opportunities for sustainable growth For them, the Plan for the Adriatic Maritime Area promotes development solutions aimed at implementing modes of coexistence and synergy with the need for protection. The Plan also highlights the need to identify and implement the necessary environmental restoration actions of degraded ecosystems and habitats.

The role of ports and maritime transport is very important for the Adriatic area, whose development is strictly connected with logistics aspects, with the modernization of port infrastructures with the integration in the trans-European transport network and with the intermodal connection between sea and land transport. In this context, the Plan reiterates the importance of maintaining suitable waterways and port areas.

Another important factor for the maritime economy of the coastal system is tourism, which requires sustainable management and strategic development of the landscape and environmental resources able to guarantee long-term environmental, economic and social sustainability. Coastal tourism, together with the supply chains connected to it, represents an economic sector of current and future reference for the Adriatic region and for this reason the Plan pursues the implementation of actions to (i) promote sustainable tourism development by creating the conditions to ensure the necessary space for natural marine dynamics and the growth of other anthropogenic uses, without compromising the conservation of the natural resources on which tourism depends (water, nature, landscape), (ii) encourage the conservation and protection of coastal and marine ecosystems, pursuing the balance between the maintenance and conservation of natural environments and the development of anthropogenic activities, (iii) encourage the protection and enhancement of the landscape and cultural heritage, as fundamental assets for the development of tourism itself.

The Italian regions of the Adriatic Sea preserve ancient and relevant fishing traditions. Consequently, the Plan contributes to strengthen the competitiveness and profitability of enterprises in the sector, the improvement of safety and working conditions and the appropriate support to technological development

and innovation policies towards a long-term sustainable fishery. With regard to this sector, the Plan recognizes and enhances the social, economic and cultural importance of artisanal fishing, defining specific objectives and measures for it. Furthermore, the Plan intends to strengthen the role of aquaculture (mollusk farming in particular) in the context of the economy of the Adriatic coastal regions, promoting the preparation and supporting the full implementation of AZA plans and promoting the development of the sector in line with the objectives of protection of ecosystems and landscape heritage.

As far as the energy sector is concerned, the Maritime Space Plan for the Adriatic Area aims at contributing to the European objectives in terms of decarbonisation. To this end, the Plan intends to promote the development of renewable energy sources at sea, taking into account the existing energy potential, the characteristics of the marine areas and their seabed, the environmental and landscape features, the interaction with other present or expected. With regard to fossil fuels, which are present in the area in the form of gaseous hydrocarbons, the Plan takes into account the provisions of the Plan for the Sustainable Energy Transition of the Eligible Areas (PiTESAI), which envisages maintaining the exploitation until the technical and/or economic feasibility of the deposits with existing cultivation concessions is no longer viable, in a manner that is safe for man and the environment, reducing conflicts and increasing synergies with other sectors of the marine economy. Also with regard to the granting of new concessions, the Plan incorporates the provisions of PITESAI, as described in the following paragraph 7.2.2.

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 spatially expressed and 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, numerosity and coexistence.

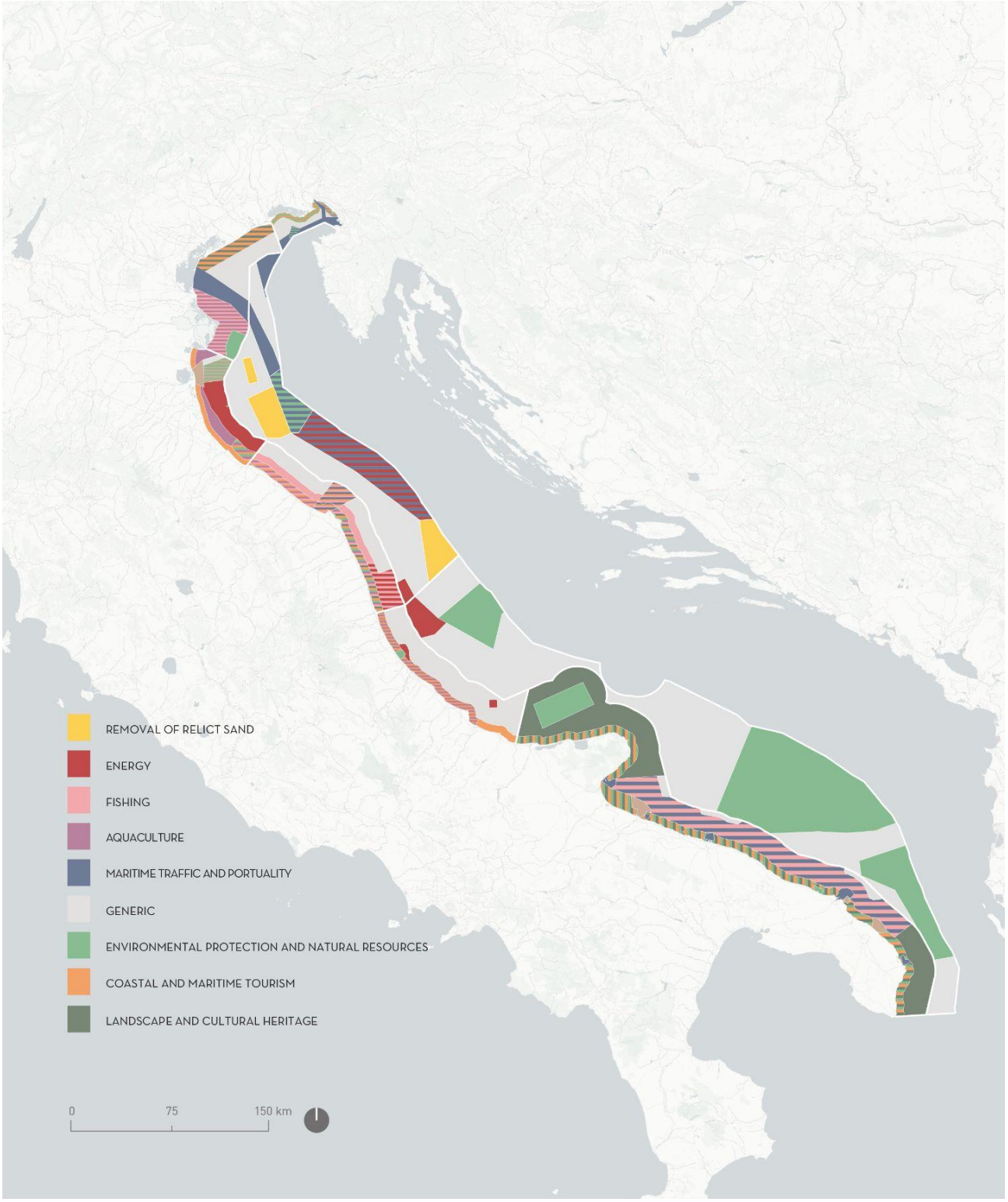


Figure 16 Planning Unit of the Maritime Area "Adriatic".

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

Sustainable development

The Plan acknowledges and intends to enhance the close link existing between the natural and cultural heritage and the landscape of the Adriatic Sea and the human activities characterizing this maritime area that depend on them, such as tourism, fishery, aquaculture and boating. With the aim to contribute to the National Strategy for Sustainable Development and to favor a durable and harmonic Blue Growth, the planning of the Adriatic maritime area foresees the implementation of actions able to ensure the sustainable development of the economic activities present in it, in such a way that they do not jeopardize the integrity of the landscape and of the cultural heritage, the functioning of the ecosystems and their ability to provide ecosystem services. The safeguard of environmental, landscape and cultural emergencies is therefore considered fundamental both to contribute to the achievement of the objectives deriving from the international, European and national strategies on the subject and to fully grasp the opportunities for sustainable development linked to Blue Growth.

Particular attention is also paid to the land-sea interface, in order to ensure planning continuity. In this perspective, the Plan considers particularly important the resilience and adaptation of the coastal strip to climate change, underlining how this strip plays a fundamental role for several coastal and maritime activities (tourism, ports, maritime transport, etc.). Always in a perspective of sustainable development, the planning of the Adriatic area highlights not only the importance of solving the conflicts between different uses but also of seizing the opportunities of coexistence and synergy (e.g. between artisanal fishing and tourism or between tourism and landscape and cultural heritage protection).

Ultimately, the Plan considers sustainability as a principle and a transversal approach to all the objectives defined for the Adriatic maritime area, underlining how the health of the sea and the protection of marine resources are essential factors for long-term economic development and the wellbeing of local communities.

Environmental protection and natural resources

For the purposes of environmental protection and the protection of species, habitats and ecosystems, the Adriatic Area Maritime Spatial Plan is developed according to a coherent Ecosystem Based Approach (EBA) in all phases of its drafting. As a consequence, the Plan acknowledges and promotes the implementation of the environmental objectives deriving from the Marine Strategy Framework Directive (MSFD) with related spatial measures provided in the Program of Measures of the Marine Strategy Directive (2008/56/EC) and the Water Framework Directive (2000/60/EC). The plan contributes to integrate the aspects of land-sea interaction and integrated coastal zone management in order to maintain coastal biodiversity (e.g. for the protection and restoration of dune areas) and the conservation of coastal and natural heritage.

The relevant objective for the Adriatic area is the enhancement and implementation of the system of protected areas, taking into account the interactions with the coast and in synergy with the other uses present. In the framework of the suitability definition, protected areas were taken into consideration, both those with specific environmental protection objectives (Protected Marine Areas, Natura 2000 sites) and

those which, directly and/or indirectly, pursue environmental and resource protection objectives (e.g. ZTB, FRA), attributing specific vocations of use in the corresponding Planning Units. Specifically, some of these have been assigned a priority use (e.g. in the case of LTZs and SCI sites without a Management Plan) or limited use (in the case of MPAs) for the protection of the environment and natural resources, depending on the form of protection and regulation in force or in the process of being established. Particular attention is paid to the spatial management of the protection of species, habitats and ecosystems protected under the Habitats and Birds Directives (Natura 2000 Network), highlighting the areas and marine habitats of relevant environmental value in order to implement conservation strategies and monitor conservation over time, and to consolidate existing conservation measures in a framework of overall ecological coherence that aims to achieve a coherent and effective extension of the protection of EU seas to 30% by 2030.

The general vision of a marine and coastal environment in good environmental status contributes to the implementation of specific protection objectives in all sectors and in the whole Adriatic area. The transversal principle of environmental sustainability of human activities contributes to the development of a sustainable economy of the sea, multiplying growth opportunities for the marine and maritime sectors. Among the most relevant examples in the Adriatic context, specific objectives of pollution prevention and sustainable exercise of human activities concern maritime traffic, fishery, aquaculture, tourism and the "energy" sector. To this end, the Maritime Space Plan identifies for each Planning Unit (PU) the "Environmentally Relevant Elements", which, except for further emergencies at local scale, in the central-northern Adriatic Sea are mainly the inconsistent seabed habitats essential in the reproduction and growth phases of fish species of commercial interest, while in the southern portion of the basin the hard-bottom and deep-bottom habitats increase. In the whole area, moreover, the need for protection of *Caretta* and *Tursiops truncatus is* reported.

The environmental restoration constitutes an important need in the Adriatic maritime area. In this area there are areas where the impacts of anthropic uses (past and present) are relevant and have compromised the recovery and regeneration capacity of the ecosystems. These impacts consist, for example, in the contamination of environmental matrices and in the degradation or disappearance of valuable ecosystems, both marine and coastal. Posidonia beds, particularly in the southern portion of the maritime area (sub-area A/6), are among the ecosystems for which it is appropriate not only to implement protection measures, but also environmental restoration and recovery actions in cases of areas heavily impacted by pollution, nautical tourism, illegal fishing activities, etc. Other marine ecosystems for which it appears necessary to complete the mapping and the evaluation of the state and, in case of degradation conditions, to implement environmental restoration actions include, among others: the rocky outcrops (trezze or tegnue) present in the Northern Adriatic Sea, as well as the submerged and semi-submerged caves, the submarine canyons and, in general, coral reefs present in particular in the southern part of the Adriatic maritime area. More in general, restoration is also necessary in marine areas where fauna and flora are impoverished and fishery resources are reduced (e.g. port or neighbouring areas). Reclamation and restoration are necessary in many areas at the land-sea interface (e.g. lagoons and deltas), where, in addition to or as an alternative to the impacts of industrial or port activities, the effects of soil consumption, urbanization, coastal erosion, etc. are manifest. It is important to consider that the maritime area includes

some Contaminated Sites of National Interest (SIN) that refer to industrial and/or port areas and therefore include areas at sea. Some SIN include sea areas and fall directly within the application area of the Adriatic Maritime Space Plan: Trieste - Muggia (subarea A/1), Falconara Marittima (subarea A/4), Manfredonia (A/6) and Brindisi (A/6). Others, although including a water portion, are located in areas outside those included in the Adriatic Maritime Spatial Plan (Porto Marghera - Venice) or are predominantly terrestrial (Caffaro di Torviscosa - formerly Grado and Marano Lagoon; Bari - Fibronit). These sites, along with numerous other Contaminated Sites of Regional Interest (e.g., hazardous material deposits, active or disused landfills, etc.) represent hot-spot areas of contamination in need of remediation and environmental restoration. The plan identifies environmental restoration as a specific strategic objective, accompanied by two measures of national relevance. The theme is also considered at the sub-area scale through specific objectives and indications included in the tables of the planning units, directly or indirectly relevant to environmental restoration, which will enable actions such as: the completion of the state of knowledge on ecosystems and habitats, the restoration and rehabilitation of seagrass beds and other degraded ecosystems and habitats, the creation of artificial structures for the protection of existing habitats and the development of marine biological communities, the environmental remediation of contaminated areas, the restoration of degraded stretches of coastline and other types of intervention.

Landscape and cultural heritage

The Adriatic Sea Maritime Space Plan considers landscape and cultural heritage (emerged and submerged) as fundamental resources for social development, the valorisation of cultural diversity, the promotion of intercultural dialogue and the promotion of an economic development model based on the principles of sustainability. Therefore, the integration of landscape and cultural heritage protection and enhancement elements within the maritime spatial planning of the Adriatic area assumes a role of primary importance for the whole maritime area, and in particular for the marine-coastal sub-areas (within 12 nautical miles). For this reason, at methodological level, in the development of the Plan, an articulated path of meetings was undertaken which saw the pro-active involvement of the Superintendencies for each coastal Region. The contribution of these subjects has made it possible to reconstruct the cognitive framework relative to the landscape heritage, the cultural assets present along the coast and the submerged assets, and therefore to enhance it, together with the Regions, in the process of defining the planning choices (delimitation of the UP, definition of the relative vocations and identification of measures).

The landscape and the cultural heritage are an essential element of the specific sub-area visions and objectives, which highlight their relevance not only for appropriate protection purposes but also in relation to the role they play in supporting relevant socio-economic activities for the Adriatic area, such as coastal and maritime tourism in primis. For the Adriatic marine-coastal sub-areas, the Plan identifies specific objectives that contribute to enhancing and guaranteeing the protection of the aesthetic perceptive structure of the landscape, promoting reciprocity and complementarity relations between inland, coastal and underwater landscapes. The Plan also promotes the exercise and development of anthropic activities along the coast (e.g. tourist use, port infrastructures, works to contrast erosive phenomena) towards forms that do not destroy the natural features and landscape quality of the coastal strips. The Plan aims at containing the phenomena of continuous and compact urbanisation along the coastline, with particular

attention to the safeguard and enhancement of the historical settlement structures and of the scenic and panoramic values of the land-sea inter-visibility relationship, as well as to pursue the enhancement of the archaeological, historical-architectural and landscape heritage of the coastal strips, while safeguarding the intangible heritage of maritime activities of historical-identity value (e.g. small-scale coastal fishing and traditional aquaculture). To this end, for several PUs closer to the coast, the important priority vocation of landscape and cultural heritage protection is underlined. In addition, regardless of the priority vocation, for each PU the relevant elements for the coastal landscape and cultural heritage to be taken into account in terms of protection have been reported, with particular reference to landscape constraint areas and constrained coastal assets.

The Plan also contributes to the protection and enhancement of the submerged cultural heritage, including all available knowledge on the presence of relevant elements among the elements relevant to each UP, in order to promote a deeper knowledge of what is still preserved on the seabed, and as a tool for the proper management and protection of these assets.

Maritime navigation safety and surveillance

As far as safety is concerned, the Plan for the Adriatic maritime area implements the objectives outlined in Phase 3, that is: (i) to prevent pollution caused by ships and to contribute to the implementation of the measures of the Marpol Convention; (ii) to contribute to the promotion of maritime safety, the implementation of the UNCLOS rules and the EU Maritime Safety Strategy. The second objective is expressed in activities aimed at ensuring the safety of navigation and in search and rescue of human lives at sea, with particular reference for the latter to the SAR areas in the Adriatic Sea under Italian jurisdiction.

Fishing

The vision of a sustainable management and development for the fishery is articulated in the Adriatic Area Maritime Space Plan by favoring the implementation in the marine space of the forecasts of the Multiannual Management Plans of the Geographical Sub-Areas (GSA 17 and 18), which represent the main management tools of the activity, and by guaranteeing the respect of the Common Fisheries Policy (CFP) rules.

The specific reference objectives for the whole area are the promotion of sustainable fishery development and management, through specific regulation and spatial definition of priorities on a regional scale, as well as of the use of fishing tools, aiming at the sustainable use of resources, at the protection of priority habitats, through management measures suitable to the different fishery activities. The spatial definition of the vocations of use for the sector respects the dynamic nature in space and time of the fishery activities in the Adriatic Sea, framing the specific management needs, in order to support the regulation actions of the trawl fishery, taking into account the effects on the seabed and on the stocks, and to favor the development and the spatial management of the artisanal fishery practiced with sustainable techniques, through the definition of the areas, especially coastal, more suitable for its development. Concerning the artisanal fishery, the Plan also proposes to stimulate income integration activities, facilitating the synergy with other sectors (such as tourism, food and wine, quality chains for the transformation of the ichthyic product,

valorisation of fishing traditions in the respect of environment and territory). In order to support artisanal fishery, the Plan identifies measures at national level such as, for example, the realization of projects, studies and researches aimed to promote an adequate spatial presence of small fishery, its sustainability and to address actions to strengthen the related skills and develop human capital. The Plan also foresees the promotion of agreements between artisanal fishery operators and bodies/bodies responsible for the management of protected marine areas, coastal and marine sites of the Natura 2000 Network, national or regional parks, in order to promote the sustainable development of the sector in the recognition of the quality, also environmental, of the products and services offered by artisanal fishery. The valorization of this fishery segment is highlighted also at the sub-area level in all the Adriatic Regions, in terms of specific objectives, indications for specific UP and/or regional scale measures.

As part of the measures to rationalize the capacity and sustainability of the fishing sector, the Plan supports the establishment of new areas for the protection of stocks and areas for various fishing activities, taking into consideration first of all the conservation areas that already exist and/or are being established. The efficient inclusion in the Plan of protected areas, reserves and areas for the recovery and protection of fish stocks (e.g. ZTB) aims in fact to support the reduction of the impacts of fishing on juvenile fish and reproducers thus ensuring long-term sustainability for the sector.

The spatial and vocational component of the plan confirms the widespread possibilities of exercising fishing according to current plans and legislation, with the exclusion of areas already precluded for specific reasons (e.g. protected areas or subject to other constraints for fishing deriving from other uses), with specific priorities of use aimed at favoring locally relevant activities and economies and/or ongoing planning processes of the sector. The spatial allocation of fishing activities developed in the Plan also allows the adaptation of processes aimed at the development of complementary economic activities (in particular with regard to artisanal fishing), such as fishing tourism and ichthyic tourism, promoting fishing traditions, maritime culture and respect for the environment. The integration of spatial knowledge on fishing activities and on the ecological and environmental components within the Plan will spatially explicitly favor policies of technological development and innovation towards ecologically, economically and socially sustainable fishing, while fostering synergies with other sectors (e.g. tourism and food, food sector, local distribution chains, processing industry) in order to increase the added value of the fished product. To this end, it is necessary that the planning contributes to the coastal structural adjustment, in particular of dedicated port infrastructures appropriate for the development of the supply chains. Moreover, it is particularly important to favor efficient spatial control and contrast of illegal fishing, also through the monitoring and surveillance of the activities carried out by fleets in coastal areas, in the territorial sea and in international waters. In this sense, considering that illegal fishing is one of the activities that clearly endangers the marine ecosystem and the ichthyic resources, it is considered more necessary than ever to contrast this practice through the integration of spatially explicit management measures.

Aquaculture

The Plan underlines the importance of aquaculture in marine waters, highlighting for the sector wide potentialities of further development in the Adriatic Area, promoting the sustainable growth of the sector.

The strengthening of aquaculture activities is in line with the EU strategies (e.g. Sustainable Blue Economy Communication, COM/2021/240 final). The coherent integration of the sector in the Plan could favor a strengthening of the aquaculture supply chains and their inter-sectorial integration, promoting efficient connections of the sea production with the land supply chains and managing potential conflicts with other uses.

Integrated visions and specific objectives between the sub-areas in territorial waters will contribute to favor the maintenance of marine aquaculture activities (almost exclusively shellfish farming) in synergy with the other uses present in the area and in contiguity with lagoon and valley aquaculture, and the development of aquaculture activities in the territorial sea areas, contributing to the sustainability of the activities in synergy with the other uses present in the area, with particular attention to the development of income-generating activities such as aqua-tourism.

Of primary importance is the theme of water management in the areas destined to aquaculture, in relation to the European directives of reference: Therefore, the Plan promotes the development of the aquaculture sector, compatibly with the objectives of ecosystem and biodiversity protection, and supports the future development of efficient productions in terms of resources use, above all by favoring the identification of aquaculture areas (AZA) in order to defuse possible conflicts with other sea uses and to guarantee the protection of the marine environment, using farming systems that minimize environmental impacts (e.g. reducing the use of plastics). Reducing the use of plastics). The definition of the suitability for aquaculture in the Planning Unit allows to promote and accelerate the elaboration of the regional plans for the AZA, favoring their harmonization at basin and national scale, aiming at a development of the different forms of aquaculture in favorable or suitable areas. These actions are aimed both at increasing the competitiveness of this sector and at favoring inter-sectorial integration with other activities and with the objectives of protection, integrating the provisions of the CFP and of the Strategic Plan for Italian Aquaculture 2014 - 2020. The Plan, in synergy with the AZA definition process, aims at a planned and coherent development of aquaculture, especially within 3 nautical miles (the limit within which fishing with towed gear is banned), while foreseeing its expansion towards more offshore areas, also in connection with other future uses (e.g. marine renewable energy plants). A tool to facilitate the understanding of the planning processes and the identification of areas suitable for aquaculture on the basis of constraints, pressures, existing uses and the state of the marine environment and the carrying capacity of ecosystems has been provided by the AZA Technical Guide (ISPRA-MiPAAF, 2020), the result of a participatory process with different stakeholders involved, including central and regional administrations and production associations.

Maritime transport and ports

The maritime economy of the Adriatic system is historically linked to maritime transport, be it commercial, passenger or cruise sector. The complex geographic and productive configuration of the Adriatic Sea makes the area one of the main maritime hubs of the Mediterranean and for this reason, in line with the European planning on TEN-T networks, it is a priority to develop policies for the efficiency of its ports. Of great importance in this context is the role of commercial ports, whose development is closely connected with aspects of logistics and functional infrastructure, as well as land transport. These activities are historically

linked to the territory and, also in view of the geopolitical context and the TEN-T Networks, will continue to be of strategic international importance. The overall development strategy for these sectors, in coherence with the regional and urban planning tools, foresees within the Plan the spatial definition of sustainable development objectives for maritime transport, aimed at reducing negative impacts (e.g. using alternative fuels, reducing discharges and waste, managing dredged sediments, mitigating underwater noise emissions, etc.), also in the face of climate change, in order to allow for harmonious and sustainable systemic development.

The Plan for the Adriatic Maritime Space promotes the integration and dialogue between the planning systems in force, in particular regarding the integration of port strategic planning with land planning, contributing to increase the competitiveness of the Italian ports and the implementation of the National Strategic Plan for Ports and Logistics (PSNPL). Maritime transport is allowed and developed in the entire maritime area, with the exception of areas that, due to pre-existing constraints, limit/exclude access. The definition of the suitability in the Plan highlights the relevance of this use along the north-south axis of the Adriatic Sea, aiming at integrating the international flow management tools (e.g. IMO Adriatic corridors), identifying for them specific priorities, with the analysis of the traffics along the corridors afferent to the main Adriatic ports. In order to guarantee the development of maritime commercial traffic that involves the Adriatic port system, it is necessary to maintain the infrastructural conditions and suitable sea beds for the waterways through periodical maintenance interventions and by promoting the sustainable management of sediments (from port dredging, excavations, hydraulic systems, etc.), with the aim of coastal nourishment for emerged and submerged beaches, also foreseeing a monitoring and management system of silting up in the ports. The suitability of the areas can contribute to the reconversion of activities in crisis insisting in or near commercial ports in activities related to shipbuilding or the circular economy, encouraging logistical innovation and the modernization of port infrastructure.

Energy

The Plan for the Maritime Space of the Adriatic Area intends to contribute to the objectives of increasing the share of energy produced from renewable sources defined by the PNIEC of 2019 (30% of the gross final energy consumption by 2030), as well as to the more ambitious objectives of decarbonisation of society set by the EU (reduction of CO_2 emissions by 55% by 2030). To this end, the Plan highlights the need to explore the potential for renewable energy production at sea, depending on local climatic, landscape and environmental conditions, and therefore to find new areas to be allocated for this purpose. In this perspective, also for the Adriatic area, the Plan proposes to favor the experimentation and the possible development of technologies and plants for the generation of energy from renewable sources in the sea (with particular reference to the wind energy), both in the coastal sub-areas and in the offshore ones, compatibly with the current policies and requirements of environmental and landscape protection.

With regard to fossil fuels, present in the area in the form of gaseous hydrocarbons, the Plan takes into account the provisions of the Plan for the Sustainable Energy Transition of the Eligible Areas (PiTESAI), both with regard to prospecting and exploration activities and with regard to production concessions that have already been presented and are being evaluated, or are currently in force.

For the concessions in a state of productivity in the central-northern Adriatic (Emilia Romagna, Marche, Abruzzo and Molise) falling within 12 miles from the coastline or from the external perimeter of protected marine and coastal areas, the Plan for the Maritime Space foresees, implementing the PiTESAI indications, the possibility of maintaining the exploitation until the technical and/or economic feasibility of the reservoir ceases, reducing conflicts and increasing synergies with other sectors of the sea economy.

For offshore areas, the Plan provides for a similar approach to the exploitation of offshore deposits within 12 miles. In the eligible areas covered by PITESAI, the possibility of submitting exploration and concession applications and continuing exploration activities already under way is maintained, as far as the gas resource is concerned. Following the adoption of PiTESAI, the submission of new applications for prospecting and exploration permits in the areas in question is considered admissible, provided they relate only to gas exploration, and not also to oil. In the case of programs of work submitted, or to be submitted, under the same license for both oil and gas exploration, only gas exploration will be permitted. However, the European decarbonisation targets for 2050 make the scenario of opening new marine mining areas in addition to the current ones inconsistent, and it is also desirable to close all marine areas that have never been open to hydrocarbon exploration and production and open marine areas where no mining applications have ever been submitted.

The Plan also incorporates the environmental and socio-economic criteria established by the PITESAI and aimed at determining the areas that will be indicated as suitable for the continuation of the administrative procedures and those, already occupied by mining titles, that will be declared compatible for the continuation of research or cultivation activities that are already in place. As part of the decommissioning of platforms following their mining closure, the Maritime Space Plan intends to promote the reconversion of these infrastructures for other uses, such as supporting the production, transformation and storage of energy from renewable sources at sea, the creation of 'biological protection' areas and/or sites of interest for tourism and underwater fishing, aquaculture and marine research.

Where there is a high presence of platforms for the extraction of hydrocarbons and related support structures and submarine pipelines (both in the sub-areas within 12 miles and offshore), the Plan identifies PUs with a priority vocation for energy use, where the strategic guidelines mentioned above will be given priority, even in the knowledge that the existing deposits will be exhausted by 2040 (as per paragraph 6.2 of the PiTESAI Environmental Report). In any case, other uses compatible with the priority use, such as fishing, aquaculture, maritime traffic, etc., are foreseen in these areas, in accordance with the specificities of the area considered.

Coastal defense

A large part of the Adriatic coasts, particularly those in the northern and central portion of the area, are particularly vulnerable to storm surges and related flooding phenomena, as well as being subject to erosive phenomena. This vulnerability is likely to increase due to the expected effects of climate change and sea level rise. The Adriatic Maritime Spatial Plan intends to promote an integrated approach to coastal zone management, incorporating coastal defense into the broader objective of increasing the resilience and progressive adaptation to climate change of these systems. To this end, the Plan promotes the updating,

further development and integration of existing strategic and planning tools, such as the Flood Risk Management Plans according to the Floods Directive (2007/60/CE) and the Coastal Plans or ICZM Plans prepared by many regions. The Plan for the Maritime Space also highlights the need to proceed with the development of regional adaptation plans, which contribute to overcoming the purely defensive logic. Coastal defense, and more generally the increase of resilience of the Adriatic coasts, is an essential prerequisite for the safeguard in the medium and long term of some of the economic activities characterizing this area, first of all the tourist and port ones. It is also important that the coastal defense measures are implemented in the respect of the protection of the environmental and landscape emergencies of the Adriatic coasts.

The implementation of an integrated approach to coastal defense passes through the combination of management and structural measures, and among these, naturalistic and engineering measures, which include the maintenance and restoration of the beach system and the protection and recovery of dune systems. Many defense and adaptation strategies are therefore based on the use of large volumes of sand, whose origin in the Adriatic Sea is mainly of marine origin. Among its objectives, the Plan proposes to adequately address the use and protection of the Adriatic submarine sand deposits, promoting their census and characterization, ensuring the prudent management of this non-renewable resource, pursuing criteria to minimize the environmental impact and to reduce conflicts with other uses (first of all, fishing). Consistently with this guideline, in the central-northern Adriatic basin, the Plan identifies offshore PUs with a priority vocation for "removal of relict sands" and highlights the presence of this use, as well as its environmentally sustainable management, in various priority or generic PUs within 12 miles.

Coastal and maritime tourism

In line with the Strategic Tourism Plan 2017 - 2022, the Plan as a whole intends to promote sustainable forms of coastal and maritime tourism, which are therefore in line with the objectives of protection and enhancement of the natural heritage, cultural heritage and landscape, elements that contribute in an essential way to the high tourist attractiveness of Italian coastal areas. The Plan promotes this approach also in the Adriatic maritime area, considering the importance of the tourism sector for the economy of the region.

In line with the described approach, the long-term sustainability of the tourist fruition passes through the safeguard of the environmental, landscape and cultural emergencies of the coastal strip, the improvement and/or maintenance of the quality of the marine waters and in particular of the quality status of the bathing waters, the defense against flooding, the contrast of coastal erosion, the maintenance and restoration of the beach system and its natural habitats (e.g. dune systems). These objectives are synergic with those aimed at promoting a quality coastal and marine tourism, which includes: the improvement of the services available for the different segments of the tourist activity, the diversification and the seasonal adjustment of the tourist offer (also through offers for the experiential tourism), the integration of the marine fruition with the hinterland one, the activation of synergies with other maritime activities typical of the Adriatic coastal strip (such as fishery and aquaculture), the development of synergies with the needs of environmental protection and cultural heritage (e.g. ecotourism). eco-tourism).

In order to diversify and depersonalize the tourist offer, the development of pleasure boating in the Adriatic area is also important, also through the improvement and modernization of the existing ports and marinas. To this end, innovation and research can provide important support for the sustainability of the sector. In this maritime area the importance of the cruise sector is also confirmed, which the plan considers as important for the tourist and port development of the Adriatic regions.

Consistently with these objectives, the Plan highlights the important priority tourism vocation of the coastal PUs of the Adriatic regions (not only for seasonal seaside tourism, but also for other types of tourism activities, such as recreational boating, sports and excursion tourism, experiential tourism, nature tourism, underwater tourism, etc.), with particular reference to the strip within 2-3 nautical miles. In these areas, the importance of limiting conflict and developing synergies with other characteristic uses, such as fishing, aquaculture, environmental protection and natural resources, landscape and cultural heritage protection, is also highlighted. For example, the presence of various natural areas (including some protected areas), artificial *reefs* and wrecks of high value for the consolidation and development of naturalistic and underwater tourism is noted along the strip in question. Important synergies are also promoted with fishing (fishing tourism and ichthyic tourism) and aquaculture (aquaculture).

Scientific research and innovation

The Adriatic Maritime Space Plan is based on the best available knowledge, capitalizing on the results of national and European research projects and promoting new research activities in line with the knowledge needs of the Plan.

The specific objectives and vocations help to direct marine research activities to strengthen the planning process, taking into account future developments in technology and with a view to promoting its application and benefits. New technologies can significantly improve the efficiency of some production processes (e.g. fishing and aquaculture, maritime transport, energy production and transport), reduce their impact on the environment (e.g. increased selectivity in fishing, reduced impact on habitats and target species, more environmentally sustainable feed for aquaculture, reduction of emissions to water and the atmosphere from ships) and enable new uses of the sea, e.g. offshore aquaculture, large-scale exploitation of wave energy, floating wind turbines, cultivation or exploitation of biomass and compounds for blue biotechnologies (energy, pharmaceuticals, food uses, biomaterials), multi-use platforms. The Plan thus aims to encourage the development of the marine economy in highly innovative sectors, thereby pursuing its sustainable growth objectives.

Other Uses

In addition to the sectorial objectives considered in the previous paragraphs, the Plan highlights the importance of allowing the development of shipbuilding activities in the vicinity of active ports, in line with production trends in the sector. In addition, among the additional uses considered, the Plan highlights the need to maintain the military functions of some areas (e.g. the Echo 346 exercise area overlooking the mouth of the Rhine River), reducing conflicts with other uses and also strengthening their compatibility, in particular through the use for different purposes at different times of the areas concerned.

7.2.3 Coexistence and synergy between uses

Phase 2 of the planning process has highlighted how the Adriatic Sea, similarly to other marine areas of relatively limited extension, is characterized by a high density of uses, particularly in the areas closest to the coast, and therefore by potential and real conflicts between some activities. At the same time, however, different uses can coexist in the same area and develop synergies leading to the effective sharing of the maritime space and its resources (multi-use), with advantages for all the sectors involved.

Coastal and marine tourism certainly represents an economic activity of central importance for the Adriatic coastal communities. The Maritime Space Plan for the Adriatic Area proposes to support through spatial and other measures (e.g. involvement, training, administrative aspects, etc.) the evolution of the sector towards more sustainable activities, including the strengthening or development of synergies with other sectors, such as in particular artisanal fishing (fishing tourism and ichthyic tourism) and aquaculture (aquaculture). The Plan also underlines the need to develop tourist offers (e.g. ecotourism) that are synergic with the objectives of environmental protection and protection of landscape and cultural heritage, also considering the key role that these elements play in supporting the tourist economy of the Adriatic region.

In the central area of the Adriatic basin there is a historical coexistence of tourism and offshore mining activities, locally characterized by direct or indirect conflicts. The process of discharging platforms that are no longer active offers the opportunity for synergic developments between the two sectors. These structures can in fact be potentially reused for various tourism-recreational purposes, such as support for boating, diving activities, recreational fishing or environmental education. The issue of the potential reuse of decommissioned platforms also concerns other sectors, such as the production of energy from renewable sources at sea, the creation of biological protection areas (as in the case of the SCI-SPA "Relitto Piattaforma del Paguro"), aquaculture and scientific research, thus also looking at the multi-use logic of these infrastructures.

The analysis of Phase 2 and the planning indications described in the following sections of this chapter of the Plan, highlight possible synergies also between the objectives of fishing and those of environmental protection and natural resources. The Biological Protection Zones (ZTB), established by the Ministry of Agricultural, Food and Forestry Policies with the aim of protecting fishery resources, have positive effects on environmental protection in general. In the same way, well-managed marine protected areas can represent a useful tool for the reconstitution of ichthyic stocks and therefore bring benefits to local fishing. In the ZTB and marine protected areas can also be promoted forms of sustainable tourism, as for example experimented in the AMP of Miramare and in the SCI-SPA of Paguro.

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

This section summarizes the key focus of attention 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 related to the Adriatic maritime area

presented in Figure 13 is here resumed, considering the main anthropic uses identified for each "area" previously defined, then translating them into elements of attention for planning and indicating the related sub-areas of relevance. 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 how the extension of the current knowledge on the distribution of habitats and species indicated in the proposed 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.

Reference area	Main anthropic uses	Attention items to be considered in the plan in response to pressures from major uses	Sub-areas of interest
A1 - "Ecologically or Biologically Significant Marine Areas" of the North Adriatic Sea	The area is subject to high anthropogenic pressure, mainly due to maritime transport, fishing, coastal and maritime tourism and the high degree of urbanisation of the coastal strip. The area is crossed by important trade routes, resulting in high density of maritime traffic, in the presence of transit corridors and IMO maritime traffic separation schemes. Anthropogenic pressure in the area is expected to increase in the short and medium term, particularly as a consequence of the progressive expansion of tourism (coastal and maritime) and the increase in maritime traffic and activity of the North Adriatic ports (Ravenna, Venice, Trieste, Koper and Rijeka). Pressures on environmental components are also related to offshore hydrocarbon extraction activities in the southernmost part of the area, as well as related prospecting and exploration activities (with significant effects also on mobile species).	Considering the vastness of the area and the multiple uses present in it, promote the continuous monitoring of interactions between uses and between uses and environmental components 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. Increase knowledge of the areas of highest incidence of air emissions and water pollution related to maritime transport Strengthening maritime traffic management, through existing spatial measures (transit corridors and traffic separation schemes) Identify the areas with the greatest impact on coastal and maritime tourism, with particular reference to pleasure boating Strengthen multi-level governance systems that identify and promote concerted measures for the monitoring and sustainable management of fisheries, also with a view to international cooperation. To promote actions aimed at the training of the operators of the ichthyic sector about the sustainability aspects of the professional fishing Systematise and strengthen knowledge on Essential Fish Habitats of key fish species Identify priority areas for environmental and/or marine resource conservation, using an ecosystem-based approach that therefore considers connections at the whole sphere scale	A/1, A/2, A/3, A/4, A/7

Reference area	Main anthropic uses	Attention items to be considered in the plan in response to pressures from major uses	Sub-areas of interest
A2 - ZTB outside Ravenna and neighbouring areas	The Decree of 22 January 2009 of the Ministry of Agricultural, Food and Forestry Policies "Biological protection zones: new determinations" published in the Official Gazette 37 of 14/02/2009 regulates fishing methods within the Z.T.B. "Outside Ravenna". With regard to professional fishing, the use of creels, gillnets and longlines is allowed. Sport fishing is allowed with a maximum of 5 hooks per fisherman, while underwater fishing is forbidden. There is very little maritime traffic in the area.	Highlight the environmental significance of this area in the PU of the A/3 sub-area in which it falls. For regulation of uses (fishing in particular) refer to the specific rules defined for the ZTB. Promote co-management of the ZTB through the involvement of fisheries stakeholders Promote monitoring of the effects of the establishment and management of the ZTB on key fish species and associated Essential Fish Habitats.	A/3
A3 - SCI IT5340001 "Litorale di Porto d'Ascoli", SCI IT5340022 "Costa del Piceno - San Nicola a mare".	Three of the most relevant pressures present in this area are those of professional fishing. The total biomass of *Chamelea gallina*, a species characteristic of the SFBC biocenosis (fine graded sands) and at the same time commercially very relevant, has undergone in general a significant decrease, contrary to what has been observed for *Anadara inaequivalvis, a* potential allochthonous (indopacific) replacement organism.	The area coincides with two coastal-marine SCIs. For the regulation of the uses present in it (in particular with regard to fishing activities) refer to the management plans of these sites and to the relative conservation measures foreseen and any modifications and integrations. In addition to the above, assess and promote the coexistence with activities compatible with the establishment of marine SCIs (e.g. aquaculture, small-scale fisheries and sustainable tourism) through the involvement of the operators of these sectors.	A/4

Reference area	Main anthropic uses	Attention items to be considered in the plan in response to pressures from major uses	Sub-areas of interest
A4 - Central Adriatic EBSA and ZTB/FRA Jabuka/Pomo Pit	The EBSA of the Central Adriatic is one of the most important fishery zones of the Adriatic Sea, especially for the trawl fishery, with consequent direct pressure on the ichthyic resources and the bottom habitats of the area. Within the EBSA it has been defined a Fishery Restricted Area (FRA), corresponding to the Jabuka/Pomo Pit. In this specific area, fishing with set gillnets, bottom trawls, bottom longlines and traps is prohibited. Maritime transport, particularly along the south-east - north-west Adriatic route, is another of the main anthropogenic uses in the area, with consequent pressures on the environment. Additional uses include hydrocarbon exploration and production, as defined by PITESAI and activities related to military defense (temporary use areas).	Considering the vastness of the area and the multiple uses present in it, promote the continuous monitoring of interactions between uses and between uses and environmental components 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. Increase knowledge of the areas of highest incidence of air emissions and water pollution related to maritime transport Need to identify a specific UP that includes the ZTB/FRA of the Fossa di Pomo, given its high naturalistic value and as an area of reproduction and growth of fish species of commercial interest. Strengthen multi-level governance systems that identify and promote concerted measures for the monitoring and sustainable management of fisheries throughout the EBSA area, including building on the co-management experience implemented in the Pomo Pit BZ/FRA. Systematize and strengthen knowledge on Essential Fish Habitats of key fish species Identify priority areas for environmental and/or marine resource conservation, using an ecosystem-based approach that therefore considers connections at the whole sphere scale Highlight the ecological relevance of the Pomo trench's ZTB/FRA by defining the priority 'protection of the environment and natural resources'.	A/8

Reference area	**Main anthropic uses**	**Attention items to be considered in the plan in response to pressures from major uses**	**Sub-areas of interest**
A5 - Tremiti Islands, SPAIT9110011; biological protection area named "Tremiti Area	Within the Tremiti Islands MPA, anthropic activities (navigation, anchoring and mooring, guided tours, diving, bathing, professional fishing, sport fishing, fishing tourism) are regulated differently in the three areas of increasing protection C, B and A, as defined by the management body. In the ZTB "Tremiti Area" fishing is regulated as follows: trawling and fishing with flying nets is allowed in the period between 1st November and 31st March; the use of drift nets, longlines, surrounding nets and creels is allowed; for sport fishing, fishing is allowed with a maximum of 5 hooks per fisherman.	The area is already included in the MPA "Tremiti Islands" Marine Nature Reserve. Need to include this area in a PU with priority "environmental protection and natural resources". As regards other uses, refer to the provisions of the Regulations for the Implementation and Organisation of the Tremiti Islands Marine Protected Area, as well as the specific regulations for fishing in the Tremiti Area.	A/6

Reference area	Main anthropic uses	Attention items to be considered in the plan in response to pressures from major uses	Sub-areas of interest
A6 - South Adriatic EBSA	The area in question is of high ecological value for the reproduction and growth of fish species, including those of commercial interest, due to the presence of important benthic communities (deep-water corals and aggregations of deep-water sponges) and the constant presence of various species of marine megafauna. The greatest pressures on environmental components arise from shipping and fishing activities (particularly trawling, where permitted). Bottom trawling activities are prohibited in areas deeper than 1000 m occupying the central portion of the EBSA, as well as in the recently established Bari Canyon FRA. Other activities present in the area are nautical tourism (particularly in the more coastal areas outside the EBSA) and activities related to military operations. Pressure factors also arise from activities that will keep pollutants at sea. Further pressures could be generated in the future by offshore wind development, as well as gas prospecting, exploration and extraction activities as regulated by the PITESAI.	Given the ecological and environmental importance of the area in question, include at least part of it in the UP with priority "environmental protection and natural resources". Considering the vastness of the area and the multiple uses present in it, promote the continuous monitoring of interactions between uses and between uses and environmental components 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. Increase knowledge of the areas of highest incidence of air emissions and water pollution related to maritime transport Evaluate the identification of new areas for spatial management of vessel traffic (PSSA, ATBA, TTS). Strengthen multi-level governance systems that identify and promote concerted measures for the monitoring and sustainable management of fisheries, also with a view to international cooperation. To promote actions aimed at the training of the operators of the ichthyic sector about the sustainability aspects of the professional fishing Systematise and strengthen knowledge on Essential Fish Habitats of key fish species Systematise available information on habitats and species and fill knowledge gaps Identify priority areas for environmental and/or marine resource conservation, using an ecosystem-based approach that therefore considers connections at the whole-scope scale.	A/6, A/9

Reference area	Main anthropic uses	Attention items to be considered in the plan in response to pressures from major uses	Sub-areas of interest
A7 - Apulia Region Marine SCIs	The Apulia coasts are characterized by the presence of numerous marine SCIs. The Puglia Region has identified pressures on the various priority habitats and species present. These pressures can be attributed to various human activities, including urban development, coastal tourism, recreational boating, fishing, dredging activities, the laying of cables and pipelines, the possible development of facilities for offshore energy production, etc..	Highlight the environmental and landscape relevance of these sites in the PUs of sub-area A/6 that include them. Please refer to the management plans of these sites and their conservation measures and any amendments and additions for the regulation of the uses therein. In addition to the above, assess and promote the coexistence with activities compatible with the establishment of marine SCIs (e.g. aquaculture, small-scale fisheries and sustainable tourism) through the involvement of the operators of these sectors	A/6
A8 - AMP Miramare and ZTB Miramare	The Miramare MPA protects 30 hectares of marine-coastal biodiversity under integral protection and 90 hectares of buffer zone. The MPA includes within it the Natura 2000 SPA IT3340007 "Marine Area of Miramare". Guided underwater visits and research activities are allowed in the MPA; pressures are therefore rather limited. The ZTB Miramare has been set up around the marine protected area of Miramare, near Trieste, to manage for fishing purposes the spread of the species that escape from the marine protected area	Need to identify a specific PU with priority "environmental protection and natural resources" for this area, given its high nature value and the protection mechanisms already in place. As far as the allowed uses are concerned, please refer to what is provided for by the Managing Authority of the marine protected area and to what is provided for by the specific rules defined for the ZTB (in particular concerning the fishing activities). Promote co-management of the ZTB with the involvement of fisheries stakeholders Promote monitoring of the effects of the establishment and management of the ZTB on key fish species and associated Essential Fish Habitats.	A/1

Reference area	Main anthropic uses	Attention items to be considered in the plan in response to pressures from major uses	Sub-areas of interest
A9 - ZTB Porto Falconera - Caorle - ZSC (Habitats Directive) IT3250048 Tegnùe di Porto Falconera	Marine area with the presence of the rocky outcrops of the "Tegnua di Porto Falconera". In this area there is a total protection and prohibition of any form of fishing. Anchoring, mooring and bathing are also prohibited. Diving activities are allowed only in the presence of the managing body's staff.	Highlight the environmental significance of this area in the PU of the A/2 sub-area in which it falls. For the regulation of permitted uses refer to the management plan for this site and the relevant conservation measures provided for and any amendments and additions. Promote co-management of the ZTB with the involvement of fisheries stakeholders Promote monitoring of the effects of the establishment and management of the ZTB on key fish species and associated Essential Fish Habitats.	A/2
A10 - ZTB Tegnue di Chioggia - ZSC (Habitats Directive) IT3250047 Tegnùe di Chioggia	Marine area with the presence of the rocky outcrops of the "Tegnue di Chioggia". This area has been the subject of subsequent measures and comprises two distinct zones. The first provides for the total protection of four areas where there are rocky outcrops of an organic nature. In the second, the use of selective gear for shooting is allowed.	Highlight the environmental relevance of this area in the PU of the A/2 sub-area in which it falls For the regulation of permitted uses, please refer to the management plan of this site and the relevant conservation measures provided for and any amendments and additions. Promote co-management of the ZTB with the involvement of fisheries stakeholders Promote monitoring of the effects of the establishment and management of the ZTB on key fish species and associated Essential Fish Habitats.	A/2
A11 - ZTB Barbare	This biological protection zone is situated almost 30 miles off the coast of Ancona, on a seabed of about 70 metres, and has the characteristic of enclosing hydrocarbon extraction platforms, which due to their depth constitute particular environments with the presence of hard substrate species. Fishing with towed nets and deep-set longlines is prohibited in the area, while fishing with creels and bottom-set nets is allowed, as well as surrounding nets and surface longlines for pelagic resources.	Highlight the environmental significance of this area in the UP of the A/7 sub-area in which it falls. For the regulation of fishing activities, please refer to the specific rules defined for the ZTB in question. Promote co-management of the ZTB with the involvement of fisheries stakeholders Promote monitoring of the effects of the establishment and management of the ZTB on key fish species and Essential Fish Habitats.	A/7

Reference area	Main anthropic uses	Attention items to be considered in the plan in response to pressures from major uses	Sub-areas of interest
A12 - ZTB Off the coast of Apulia	In the ZTB "Off the coasts of Puglia" trawling is forbidden, the use of gillnets and longlines is allowed from 1st January to 30th June, while sport fishing is allowed with a maximum of 5 hooks per fisherman. The area has the function of repopulation for numerous fish species of commercial interest.	Highlight the environmental significance of this area in the PUs of the A/6 and A/9 sub-areas in which it falls. For the regulation of fishing activities, please refer to the specific rules defined for the ZTB in question. Promote co-management of the ZTB with the involvement of fisheries stakeholders Promote monitoring of the effects of the establishment and management of the ZTB on key fish species and Essential Fish Habitats.	A/6, A/9
A13 - Torre del Cerrano MPA, SCI IT7120215	The MPA "Torre del Cerrano" is one of the few areas along the Italian side of the Adriatic coast where anthropic impacts are minor; consequently, the coastal profile is little altered. Professional fishing with hydraulic dredges is prohibited in order to improve the protection of sandbanks and associated species. Artisanal fishing is allowed in the MPA, in regulated areas. Bathing tourism activities are allowed, according to the regulations.	Need to identify a specific PU with priority "environment protection and natural resources" for this area, given its high nature value and the protection mechanisms already in place. As regards the allowed uses, please refer to what is provided for by the managing body of the marine protected area. In particular, Title III of the Regulation for the execution and organization of the MPA (D.M. n.11 of 12-01-2017) and related regulations and ordinances establish the detailed rules and conditions for the exercise of the activities allowed within the area.	A/5
A14 - AMP Torre Guaceto	The Torre Guaceto MPA extends for about 2,200 ha up to the 50 m bathymetric line, covering an 8 km stretch of coastline. The results of the environmental monitoring of the AMP show evidence of effective management of the area. Artisanal fishing is allowed in the MPA, in regulated areas. The activities of bathing tourism are allowed, according to the regulations.	Need to identify a specific PU with priority "environment protection and natural resources" for this area, given its high nature value and the protection mechanisms already in place. With regard to the permitted uses, please refer to the regulations of the marine protected area. High value also for the protection of the landscape and cultural heritage.	A/6

7.2.5 Elements of land-sea interaction

The Plan for the Adriatic Sea Maritime Area takes into account characteristics and dynamics, both natural and anthropic, which determine important land-sea interactions relevant to the basin scale, as analysed and described in Phase 1. The Adriatic maritime area is characterized by land-sea interactions of natural origin, strongly linked to the presence of river deltas, lagoons and wetlands, which characterize the dominant landscape of the Italian Adriatic coastal area, especially in its northern strip. Among the natural factors considered in the analysis of land-sea interactions, the erosive processes of the coast, determined by the combination of natural and anthropic factors. The specific suitability of coastal areas has also taken into account the potential influences on the marine areas facing the coastal areas where human activities on land are located. In particular, relevant interactions at basin scale have been identified, determined by urbanized areas, also for tourism use, industrial areas, port areas (including cruise ports), and areas of primary interest for the tourism system (including marinas and pleasure ports).

Furthermore, land-sea connections that characterize numerous maritime activities, such as marine areas for hydrocarbon exploitation (including cables and supporting pipelines), the presence of fishing ports and national military activities have also been taken into consideration. In particular, in order to promote and support the development of tourism in the area, it is necessary to protect the Adriatic beaches with appropriate measures to combat erosion and emissions of pollutants of land-based origin. Furthermore, in consideration of the expected increase in maritime traffic, in line with the Maritime Spatial Plan it will be necessary to verify the robustness and the appropriate integration of land transport systems interconnected with the marine one, as well as the related needs for new infrastructures.

The whole Adriatic coastal area is also characterized by the presence of sites of important environmental value and by areas relevant for the protection and enhancement of landscape and cultural heritage (e.g. Natura 2000 network areas, Regional Parks, UNESCO sites, etc.). In many cases these areas extend between the land and the sea or at least include numerous land-sea interactions that are a constituent part of their natural and/or landscape value.

The elements of land-sea interaction highlighted at the scale of the maritime area have been considered for the definition of the Plan elements described below; 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 with regard to the measures of the Plan at national and sub-area level. With regard to the measures, in fact, in the extended document of the Plan of the "Adriatic" maritime area, it is highlighted the possible relevance for the management of land-sea interactions, for example, in relation to the withdrawal of relict sands for coastal defense, the realization of shore connections of offshore plants or the improvement of environmental and energy sustainability of ports (hot-spot of land-sea interactions).

7.2.6 Relevant elements for transnational cooperation

Italy plays a central role in the transnational cooperation of the Adriatic Sea, also in consideration of its geographical position that extends along the axis of the entire basin. Italy's commitment concerns both

strategic and multi-sectoral cooperation initiatives, such as the EU strategy for the Adriatic and Ionian Region (EUSAIR), and sectoral cooperation mechanisms, such as those of the Regional Fisheries Organisations (RFOs, including the General Fisheries Commission for the Mediterranean (GFCM) of the FAO).

The Maritime Spatial Plan represents a fundamental instrument useful to enhance the role of Italy in the framework of the cooperation in the Adriatic basin and therefore to contribute to solve some of the problems of transnational nature. The Plan contributes to the transboundary management of environment and natural resources, through the systematization of the network of environmental protection tools (MPAs, Natura 2000 network, EBSAs - CBD, SPAMI, etc.), and through planning choices consistent with the measures agreed at transnational level for the protection of fishery resources (e.g. FRAs - GFCM) and through choices consistent with the common European objectives defined in terms of quality of the marine environment (MSFD). The Plan contributes to the recognition of the importance of underwater cultural heritage as an integral part of the cultural heritage of mankind, supporting international cooperation on the subject and implementing the indications and measures established under the UNESCO Convention on the Protection of Underwater Cultural Heritage, adopted in Paris on 2 November 2001, ratified and entered into force in Italy through Law 157/2009, which integrates and expands the protection provisions inherent in the underwater cultural heritage already in the UNESCO Convention on the Law of the Sea. The MSP Plan also promotes a systemic, European and regional vision of maritime transport and the theme of multimodality. This vision is reflected in the Plan's objectives, which foresee the sustainable growth of Adriatic port systems also on the basis of the strengthening and extension of existing cooperation networks between ports, the further development of Motorways of the Sea as a complementary solution to road transport, the integration of maritime transport with the land transport network in the trans-European perspective of TNT-T multimodal networks, the harmonisation of the Plan's choices with existing international planning tools (first and foremost those defined by the IMO such as shipping corridors). The sustainable management of energy resources and the transition towards renewable ones are a further relevant element for the transnational cooperation, both to promote consistent choices between the two sides of the Adriatic Sea and to strengthen the energy distribution networks, consistently with the EUSAIR Pillar 2.

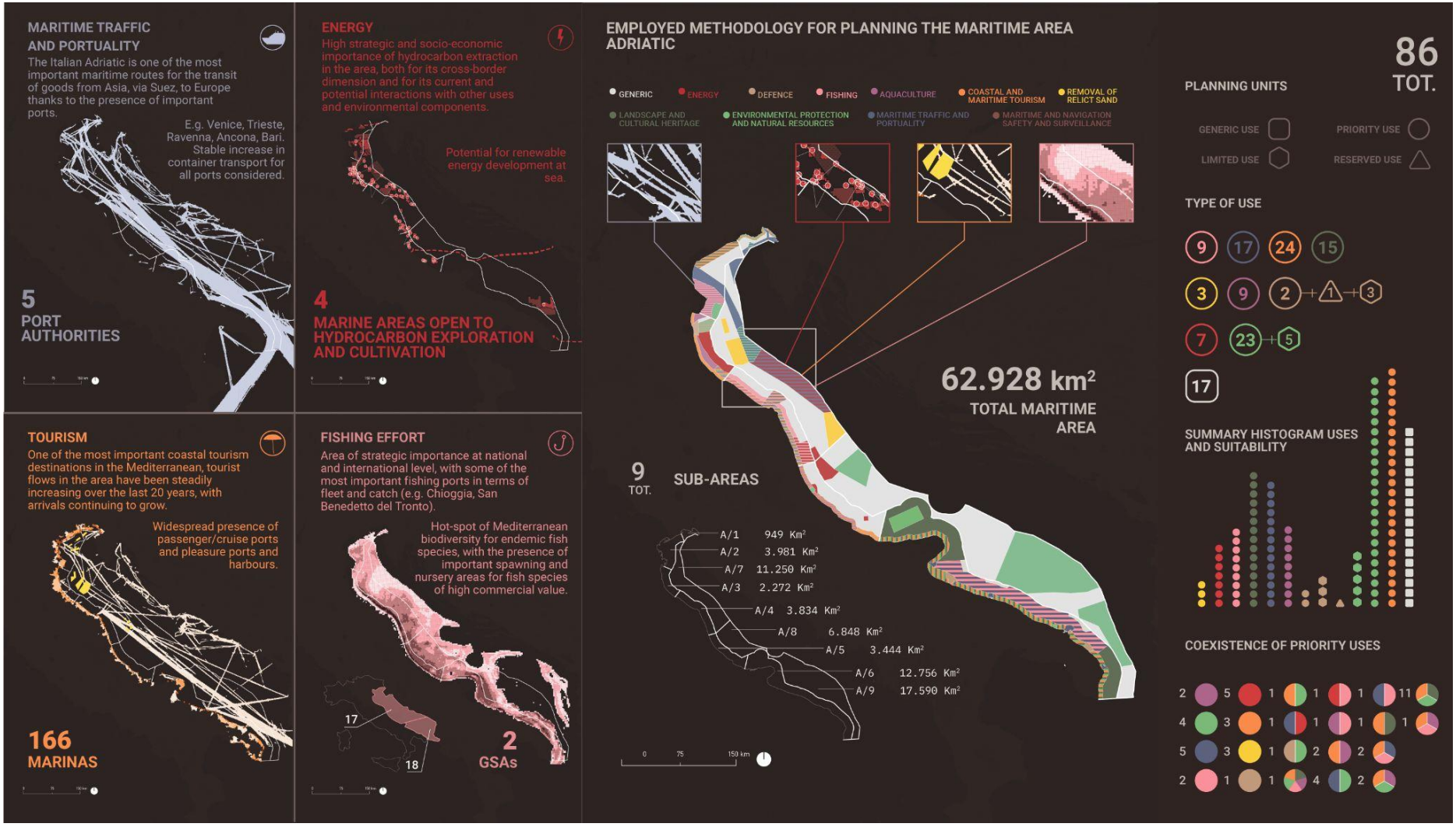

MARITIME TRAFFIC AND PORTUALITY
The Italian Adriatic is one of the most important maritime routes for the transit of goods from Asia, via Suez, to Europe thanks to the presence of important ports.
E.g. Venice, Trieste, Ravenna, Ancona, Bari. Stable increase in container transport for all ports considered.
5
PORT AUTHORITIES
ENERGY
High strategic and socio-economic importance of hydrocarbon extraction in the area, both for its cross-border dimension and for its current and potential interactions with other uses and environmental components.
Potential for renewable energy development at sea.
4
MARINE AREAS OPEN TO HYDROCARBON EXPLORATION AND CULTIVATION
TOURISM
One of the most important coastal tourism destinations in the Mediterranean, tourist flows in the area have been steadily increasing over the last 20 years, with arrivals continuing to grow.
Widespread presence of passenger/cruise ports and pleasure ports and harbours.
166
MARINAS
FISHING EFFORT
Area of strategic importance at national and international level, with some of the most important fishing ports in terms of fleet and catch (e.g. Chioggia, San Benedetto del Tronto).
Hot-spot of Mediterranean biodiversity for endemic fish species, with the presence of important spawning and nursery areas for fish species of high commercial value.
17
18
2
GSAs
EMPLOYED METHODOLOGY FOR PLANNING THE MARITIME AREA ADRIATIC
GENERIC
ENERGY
DEFENCE
FISHING
AQUACULTURE
COASTAL AND MARITIME TOURISM
REMOVAL OF RELICT SAND
LANDSCAPE AND CULTURAL HERITAGE
ENVIRONMENTAL PROTECTION AND NATURAL RESOURCES
MARITIME TRAFFIC AND PORTUALITY
MARITIME AND NAVIGATION SAFETY AND SURVEILLANCE
62.928 km²
TOTAL MARITIME AREA
9
TOT.
SUB-AREAS
A/1 949 Km²
A/2 3.981 Km²
A/7 11.250 Km²
A/3 2.272 Km²
A/4 3.834 Km²
A/8 6.848 Km²
A/5 3.444 Km²
A/6 12.756 Km²
A/9 17.590 Km²
0 75 150 km
PLANNING UNITS
86
TOT.
GENERIC USE
PRIORITY USE
LIMITED USE
RESERVED USE
TYPE OF USE
9 17 24 15
3 9 2 1 3
7 23 5
17
SUMMARY HISTOGRAM USES AND SUITABILITY
COEXISTENCE OF PRIORITY USES
2 5 1 1 1 1 11
4 3 1 1 1 1 1
5 3 1 2 2 2
2 1 1 4 2

Figure 17 Infographic summarizing uses and planning units for the Adriatic maritime area

7.3 Summary of planning for each Sub-area

7.3.1 Sub-area A/1 - Territorial waters of Friuli Venezia Giulia

[Proposal approved by the Giunta Regionale Friuli Venezia Giulia with Giunta generality n. 348-2021].

The main uses of the sea and coast present in the 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 and maritime tourism, maritime transport and related port activities, fishing, aquaculture, protection of the environment and natural resources, protection of the landscape and cultural heritage. The sources of the spatial data used are given in Figure 18 and represent information available at the national level through the contribution of the Ministries involved in the MSP process.

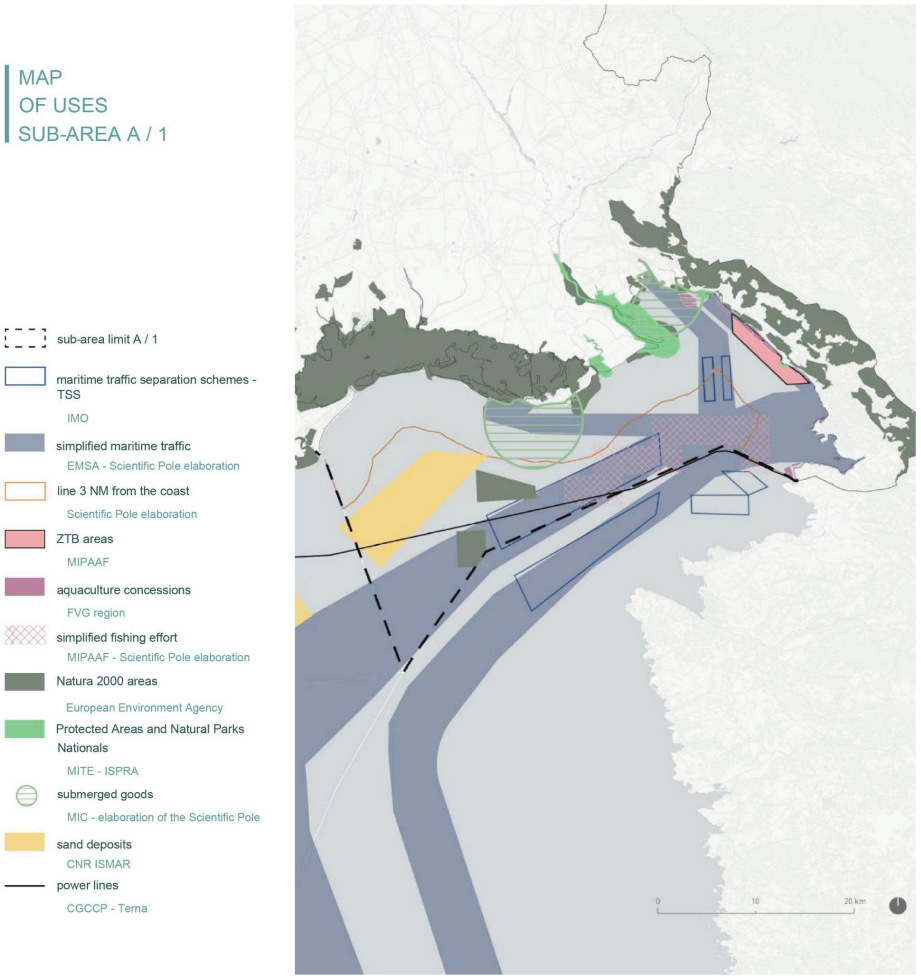


Figure 18 Summary map of the main uses in Sub-area A/1

Vision

For Friuli Venezia Giulia Region, the maritime economy of the coastal system is linked to a variety of sectors: commercial, tourism (including cruise tourism), recreational, fishing and aquaculture. The overall development strategy for these sectors, in coherence with regional territorial and urban planning tools, shall necessarily envisage the maintenance of suitable sea beds for waterways and address critical issues related to interferences, as well as climate change and environmental emergencies, in order to allow a harmonious and sustainable systemic development.

Of great importance in this context is the role of commercial ports, the development of which is closely linked to aspects of logistics and functional infrastructure, including land transport and shipbuilding activities. These activities are in fact historically linked to the territory and, also in consideration of the geopolitical context and the TEN-T Networks, will continue to be of strategic international importance.

Another important factor for the maritime economy of the coastal system is the development of tourism, which nowadays increasingly requires a sustainably managed natural environment.

Specific objectives

The specific vision is articulated in the specific planning objectives (SO), which take into account, in an integrated manner, the system of existing uses, their current trends and the environmental characteristics and emergencies of the maritime area. The specific objectives for sub-area A/1 are reported in the following table. Table 3.

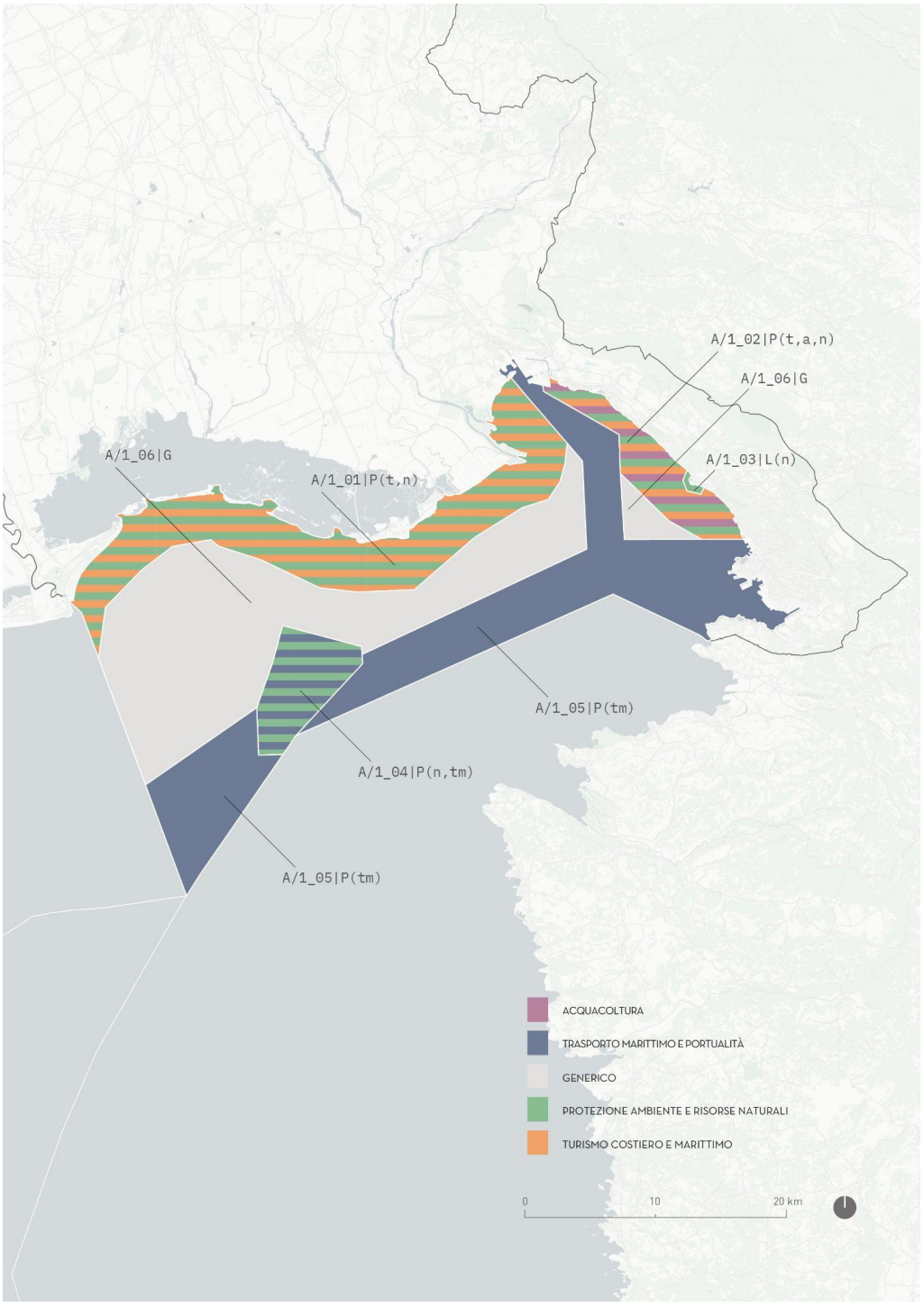
Table 3 Specific objectives for sub-area A/1

Sectors concerned	Code	Specific objectives
Maritime transport and ports *with particular reference to commercial ports and shipbuilding*	(A/1)OSP_TM|01	Ensure the development of commercial maritime traffic involving the regional commercial port system, in the context of TEN-T networks and international and global traffic scenarios, with a view to sustainable development.
	(A/1)OSP_TM|02	Ensure the periodicity of maintenance work on the seabed functional to the activities of the regional commercial port system.
	(A/1)OSP_TM|03	Enable the development of shipbuilding activities in line with sector production trends.
Maritime transport and ports *with particular reference to dredging and maintenance of the seabed and related sediment management*	(A/1)OSP_TM|04	Provide, through a specific planning, maintenance interventions of the seabed, waterways and marinas for a periodic management of sediments at sea and within the lagoon, also in function of the protection of fishing and aquaculture activities
Dredged sediment sea-diving	(A/1)OSP_ISD|01	Identify sea areas and bounded areas compatible with the management and transfer of sediments deriving from dredging activities and maintenance of the seabed and lagoon and port waterways, in line with what is allowed by the regulations in force and with regard to fishing activities.
Environmental protection and natural resources *Including protection of Special Areas of Conservation*	(A/1)OSP_N|01	Enhance the system of protected areas within a framework of overall ecological coherence, considering existing conservation measures, including reducing pollution in ports and taking into account interactions with the coast and lagoon environments, in synergy with other present uses
	(A/1)OSP_N|02	Highlight marine environments and habitats of relevant environmental value and monitor their conservation over time.
	(A/1)OSP_N|03	Achieve and maintain the environmental objectives stemming from the Marine Strategy Framework Directive (MSFD) and the Water Framework Directive (WFD) (Dir. 2000/60/EC).
Fishing	(A/1)OSP_P|01	Promoting the sustainable management of small-scale fisheries, through the regulated management of fishing grounds.

Sectors concerned	**Code**	**Specific objectives**
	(A/1)OSP_P|02	To favor the sustainable management of fishery, through specific local regulation of the use of gears, different from the artisanal ones, within the national management plans for target species (small pelagics, demersal and bivalve mollusks).
Aquaculture	(A/1)OSP_A|01	To encourage the maintenance of marine and lagoon aquaculture activities.
Coastal and maritime tourism *with particular reference to seaside tourism, nautical tourism and cruise tourism*	(A/1)OSP_T|01	Safeguarding the tourist use of the coasts by improving and/or maintaining the quality of bathing water (Directive 2006/7/EC), protection against flooding and a strategy to combat coastal erosion
	(A/1)OSP_T|02	Developing pleasure boating, with a view to diversifying the tourist offer, while ensuring accessibility to waterways and environmental sustainability
	(A/1)OSP_T|03	To favor the activities functional to the development of the cruise sector
Landscape and cultural heritage	(A/1)OSP_PPC|01	Encourage the protection and enhancement of coastal scenic beauty, while respecting the uses already permitted, also identifying maritime stretches of water as additional contexts for the protection of the landscape of coastal areas, enhancing the *skyline*, visual cones, intervisibility of places.
	(A/1)OSP_PPC|02	Promote interventions that favor the restoration and conservative recovery of coastal real estate assets of high historical-architectural and archaeological value in coherence with the objectives and guidelines of the Regional Landscape Plan (coastal fortifications, lighthouses and markers).
	(A/1)OSP_PPC|03	To support conservation interventions and the promotion of assets and places that constitute the historical testimony of the environmental culture of the sea and navigation.

Planning Unit and vocations of use

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



Figur a 19 Planning Unit one of Sub-area A/1

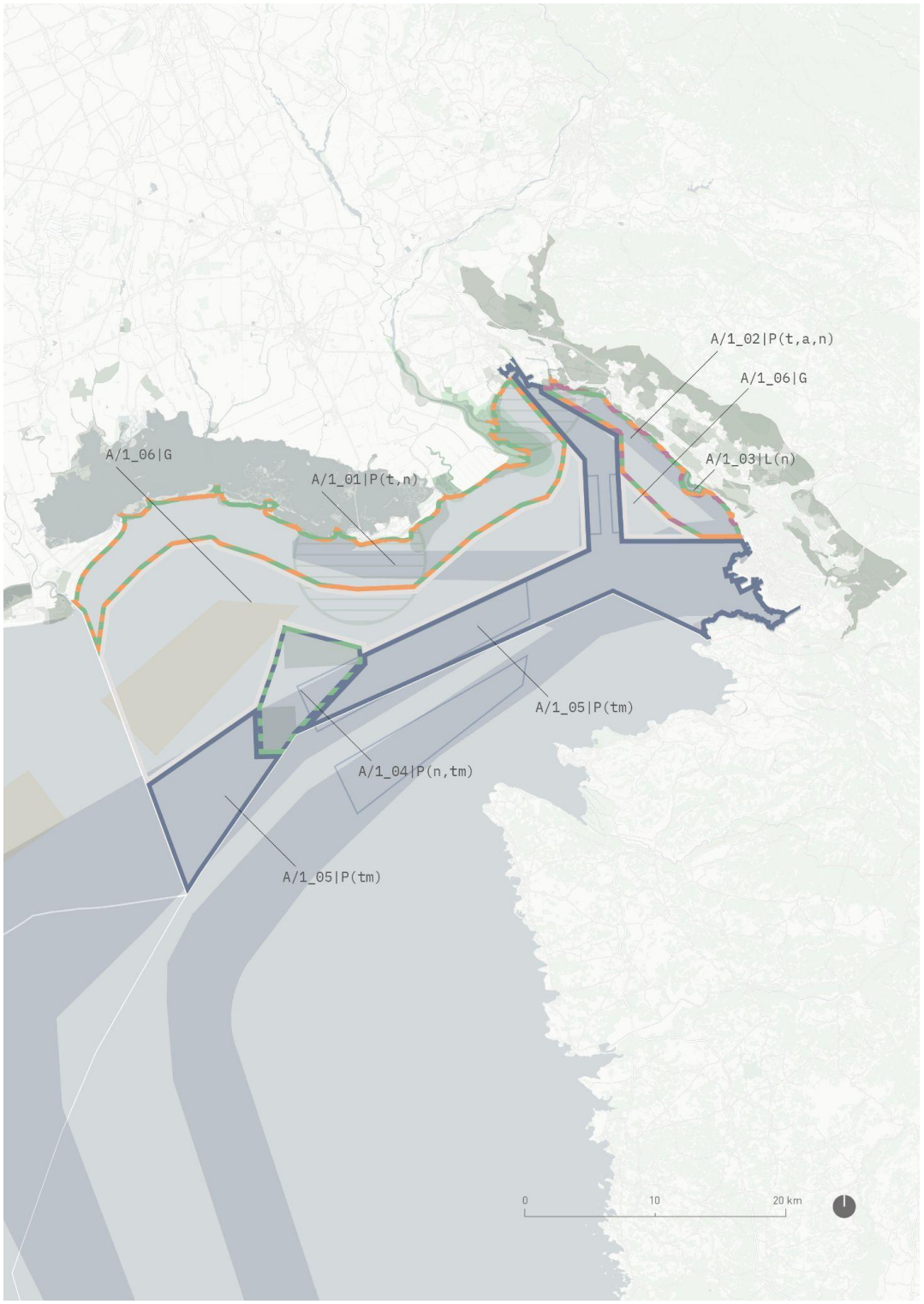


Figure 20 Overlap between the Principal Uses Map and the Planning Units of Sub-area A/1

7.3.2 Sub-area A/2 - Territorial waters Veneto

[Proposal approved by the Veneto Regional Council - DGR 441 of 06/04/2021].

The main uses of the sea and coast present in the sub-area are depicted 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 and maritime tourism, maritime transport and related port activities, management of the Porto Viro offshore regasification plant, fishing, aquaculture, protection of the environment and natural resources, protection of the landscape and cultural heritage, aquaculture. The sources of the spatial data used are reported in Figure 21 and represent information available at national level through the contribution of the Ministries involved in the MSP process.

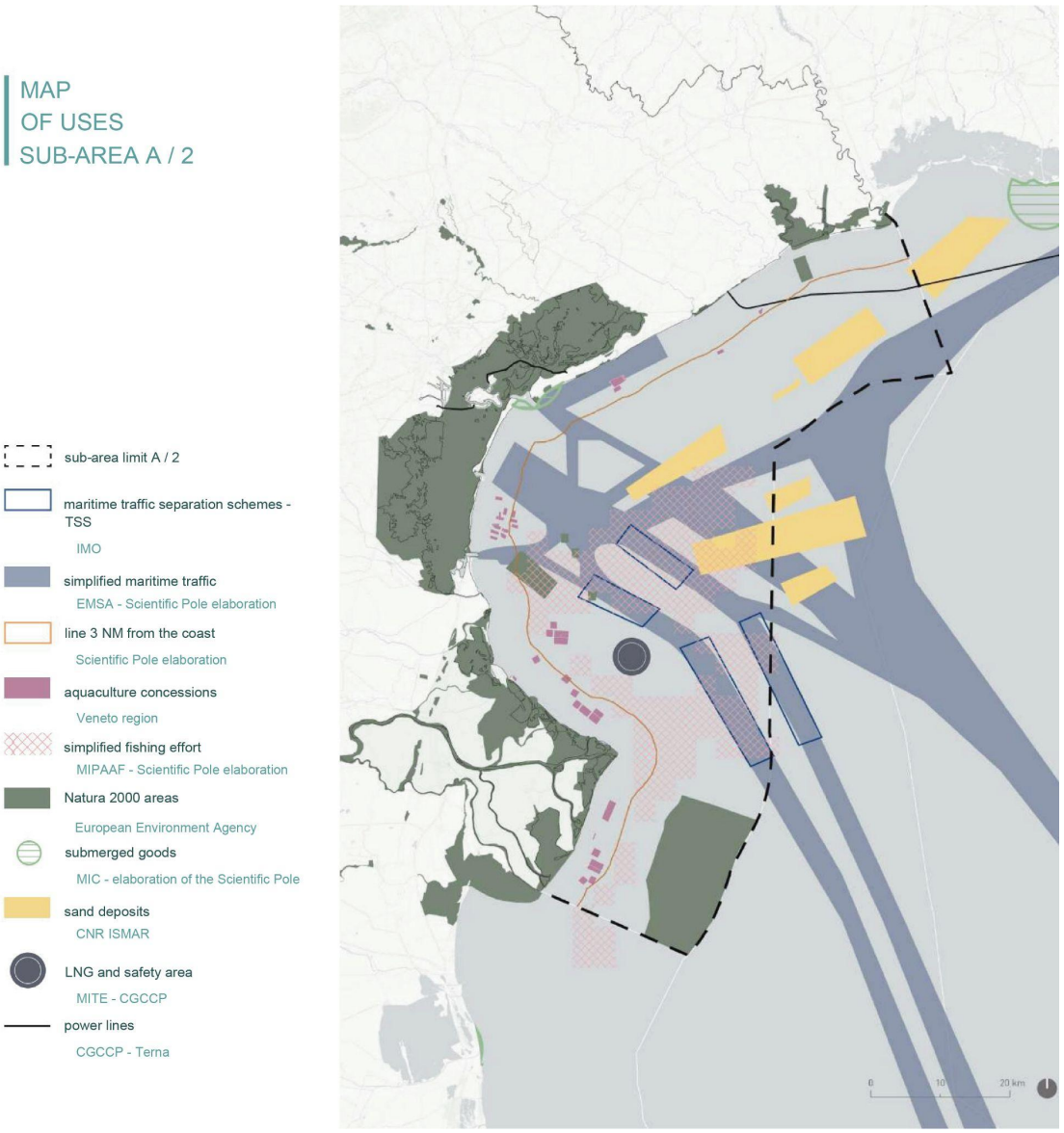


Figure 21 Summary map of the main uses in Sub-area A/2

Vision

The marine and maritime sector represents for Veneto one of the essential elements for the regional economic development, but at the same time also a paradigm of its landscape and cultural identity. The complex productive conFiguretion makes the region one of the main maritime hubs, and for this reason it is a priority, coherently with the European planning on TEN-T networks, to develop policies for the nautical efficiency of its ports, with particular reference to the management of the seabed and the maintenance of the routes, to relaunch the commercial functions of the terms in close connection with the rail and road network, to solve the issue of accessibility of cruise traffic. The latter is closely connected with the sustainable development of tourism on the coastal cities and its beaches, a tourism increasingly projected towards the experimentation of new experiences linking it to the culture of the sea (such as ichthyic-tourism, slow and experiential tourism activities, sustainable visit of coastal environments, endolittoral navigation and underwater tourism). In this perspective the pursuit of the quality of the coastal landscape remains relevant, with particular attention to the land-sea interface, both for tourism purposes but also for integrated management ensuring planning continuity. This aspect is closely connected to the development and experimentation of policies to increase the resilience of the coastal strip to climate change, but also to guarantee to the category of fishermen and fish farmers the maintenance of an adequate income for the professional consolidation and the development of their activities, favoring the generational change, reconciling the needs of protection of marine flora and fauna in a perspective of global sustainability.

Specific objectives

The specific vision is articulated in the specific planning objectives (SO), which take into account in an integrated manner the system of existing uses, their current trends and the environmental characteristics and emergencies of the maritime area. The specific objectives for sub-area A/2 are reported in Table 4.

Table 4 Specific objectives for sub-area A/2

Reference sector	**Code**	**Specific objective**
Maritime transport and ports *with particular reference to port infrastructure and the development of commercial and passenger traffic*	(A/2)OSP_TM|01	Guarantee the infrastructural conditions of nautical accessibility for the strengthening of commercial maritime traffic involving the Veneto Port System in support of the regional economy.
	(A/2)OSP_TM|02	To favor the competitiveness of Veneto ports in relation to their specificity of "regulated ports".
	(A/2)OSP_TM|03	Relaunch the Veneto cruise economy through the resumption of traffic with O/D Venice by solving the terminal problem.
Maritime transport and ports *with particular reference to dredging activities*	(A/2)OSP_TM|04	Activate a program of dredging of waterways and lagoons, protecting habitats and through careful consultation with fishermen
Dredged sediment sea-diving	(A/2)OSP_ISD|01	Identify, in agreement with the fishermen's categories, areas in the sea for the transfer of sediments deriving from the dredging and maintenance activities of the seabed and of the lagoon and port waterways
Environmental protection and natural resources	(A/2)OSP_N|01	Promote uses of the sea that are compatible with conservation areas.
	(A/2)OSP_N|02	Protect marine habitats and species of Community interest by monitoring their presence and conservation status.
	(A/2)OSP_N|03	Achieve and maintain the environmental objectives stemming from the Marine Strategy Framework Directive (MSFD) and the Water Framework Directive (WFD) (Dir. 2000/60/EC).
Fishing	(A/2)OSP_P|01	Promote sustainable fisheries management within the framework of national management plans for target species (in particular small pelagics, demersal and bivalve molluscs).
	(A/2)OSP_P|02	Promote the sustainable management of small-scale coastal artisanal fisheries through regulated management of fishing grounds.
	(A/2)OSP_P|03	Promoting the adaptation of structures and processes that enable the development of economic activities in the fisheries and aquaculture sector, including complementary activities such as fishing tourism and ichthyic tourism
Aquaculture	(A/2)OSP_A|01	Promoting the development of aquaculture activities in the territorial sea areas

Reference sector	**Code**	**Specific objective**
Coastal and maritime tourism *with particular reference to sustainable tourism and the identity of places*	(A/2)OSP_T|01	Promote a quality tourism that sees in the achievement of high quality standards (such as the maintenance of the state of quality of bathing water) the elements for its promotion
	(A/2)OSP_T|02	Developing slow and experiential tourism on the coastal strip in synergy with inland and endolittoral navigation and yachting, favoring the redevelopment of small ports, integrating the land and sea planning system, protecting the landscape characteristics of the coastal system and the architectural features of seaside towns
Coastal defense	(A/2)OSP_DC|01	Programming integrated actions for coastal defense that combine sea defense works and planned beach nourishment with naturalistic interventions for the recovery of dune systems.
	(A/2)OSP_DC|02	Reduce fluid and gas extraction in coastal areas generating accelerated subsidence and increased flood risk areas
Landscape and cultural heritage	(A/2)OSP_PPC|01	Promote land-sea interactions in the new landscape planning of the coastal strip. Identify actions for the knowledge and enhancement of the underwater archaeological heritage

Planning Unit and vocations of use

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

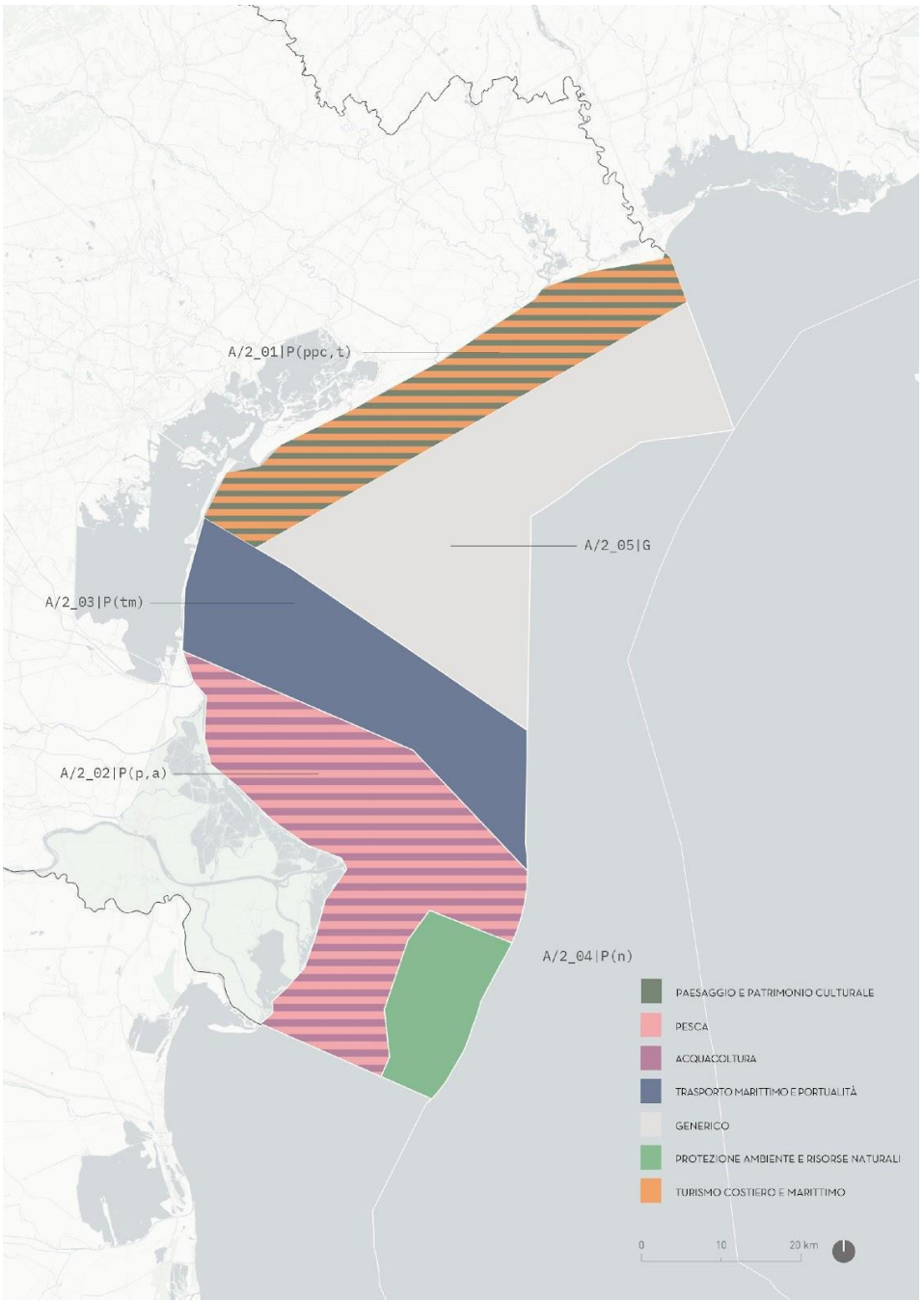


Figure 22 Identification of planning units in sub-area A/2

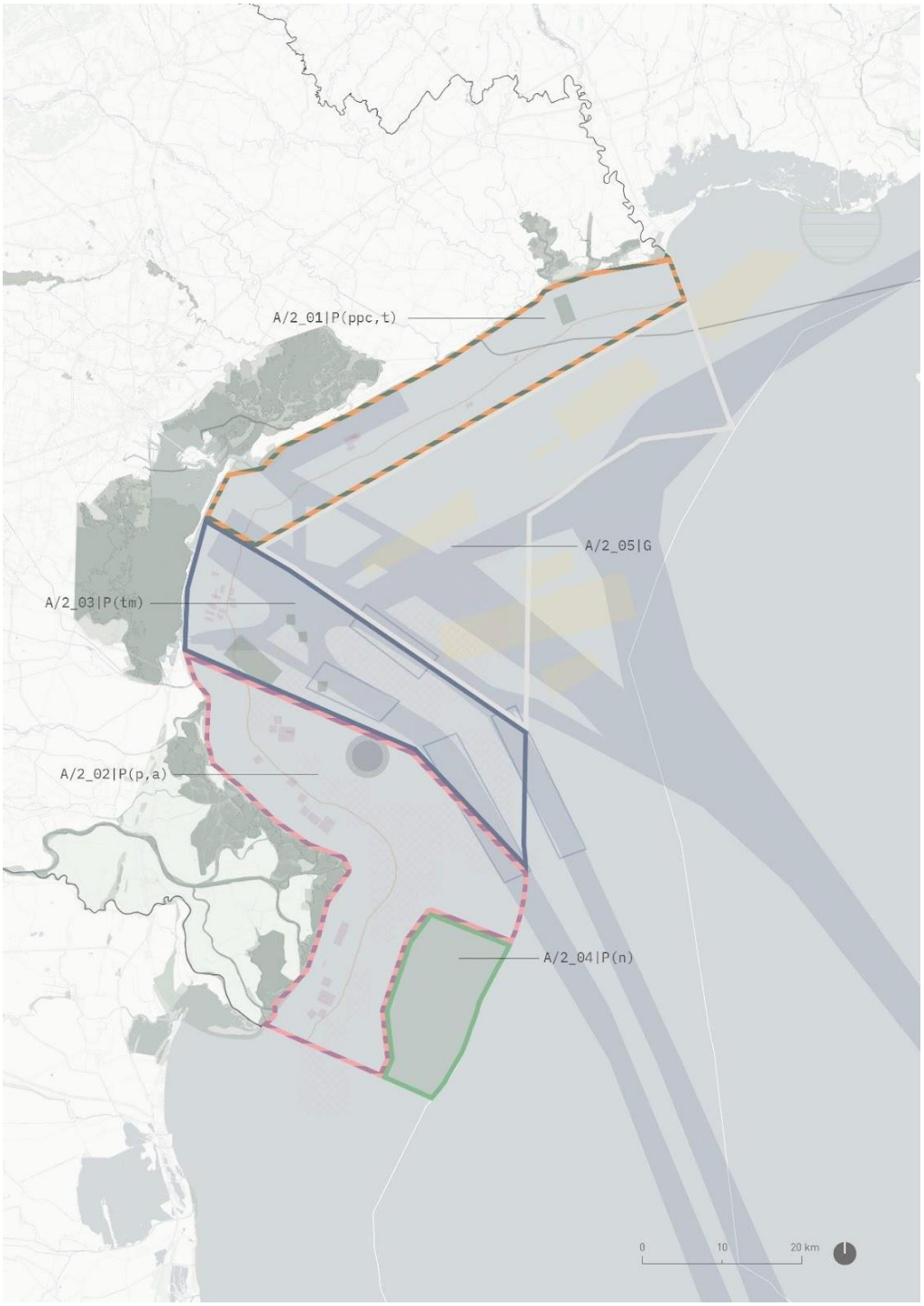


Figure 23 Overlap between the Principal Uses Map and the Planning Units of Sub-area A/2

7.3.3 Sub-area A/3 - Territorial waters of Emilia-Romagna

[Proposal approved by DGR Emilia-Romagna Region n. 277 of 01/03/2021].

The main uses of the sea and coast present in the sub-area are depicted in the Figure 24. 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 and maritime tourism, maritime transport and connected port activities, fishing, aquaculture, protection of the environment and natural resources, protection of the landscape and cultural heritage, hydrocarbon research and cultivation, and activities connected to military defense. The sources of the spatial data used are reported in Figure 24 and represent information available at national level through the contribution of the Ministries involved in the MSP process.

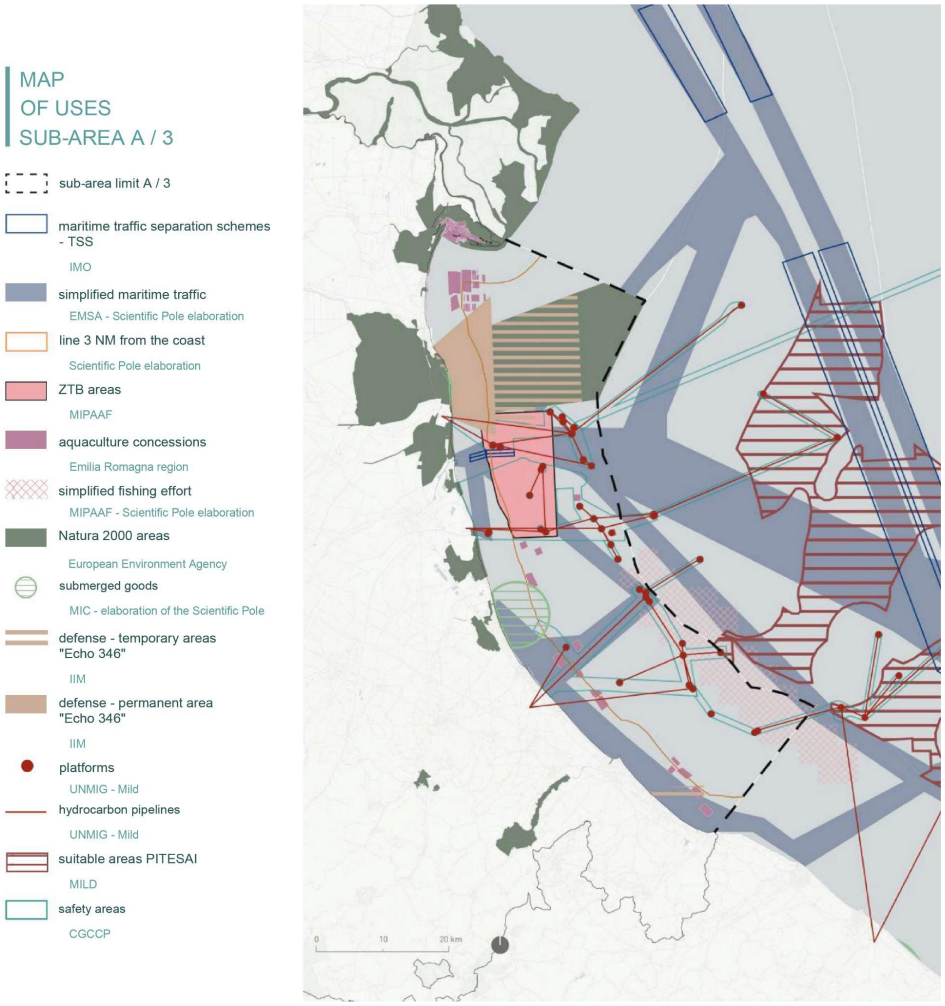


Figure 24 Summary map of the main uses in Sub-area A/3

Vision and specific objectives

Marine resources and coastal environments represent precious assets and growth opportunities for the economy of Emilia-Romagna which, in this part of the regional territory, is linked to a multiplicity of strategic sectors: tourism, commercial ports and cruise ships, energy, fishing and aquaculture. They require development spaces and solutions to address the critical issues related to their coexistence, environmental aspects, ongoing processes of energy transition, climate change and to allow a harmonious and sustainable systemic development.

Coastal tourism, with its related sectors, represents the current and future reference sector for the coastal and maritime economy of the region, and because of this, actions should be implemented to: promote sustainable tourism development by creating the conditions to guarantee the necessary space for natural marine dynamics and the growth of other anthropic uses, without compromising the conservation of the natural resources on which tourism depends (water, nature, landscape), encourage the conservation and protection of coastal and marine ecosystems, pursuing the balance between the maintenance and conservation of natural environments and the development of anthropic activities.

The vision is articulated in some specific planning objectives that take into account, in an integrated way, the system of existing uses, the expected trends, and the environmental characteristics and criticalities of the maritime area. The specific objectives for sub-area A/3 are reported in Table 5.

Table 5 Specific objectives for sub-area A/3

Reference sector	**Code**	**Specific objective**
Coastal and maritime tourism *also relevant for coastal defense*	(A/3)OSP_T|01	Safeguard the tourist use of the coasts (seaside tourism) by protecting them from flooding, combating erosion, maintaining and restoring the beach system
Coastal defense	(A/3)OSP_DC|01	Allowing the exploitation of underwater sand deposits, indispensable for beach nourishment; reducing conflicts with other uses; ensuring the prudent management of this non-renewable resource and minimizing and impact on the environment
Energy	(A/3)OSP_E|01	Manage the exploitation over time of the methane fields already authorized in a way that is safe for man and the environment, in line with the guidelines and forecasts of PiTESAI. reducing conflicts and increasing synergies with other sectors of the marine economy (tourism, aquaculture, environmental protection)
	(A/3)OSP_E|02	Promote the generation of energy from renewable sources at sea, also promoting, where possible, the conversion of decommissioned platforms for multi-purpose projects that include the storage of energy produced from renewable sources (hydrogen), the creation of areas of 'biological protection' and/or sites of interest for tourism and underwater fishing and aquaculture
Fishing	(A/3)OSP_P|01	Promoting the sustainable and regulated expansion of small-scale fishing with particular attention to the development of income-generating activities such as fishing tourism and ichthyic tourism
	(A/3)OSP_P|02	To review the regulation of trawling, taking into account the effects on the seabed, the areas with EFH, the sustainability of the exploitation of stocks, with particular attention to the development of income-generating activities such as fishing tourism and fishing tourism
Aquaculture	(A/3)OSP_A|01	To favor the sustainable development of the aquaculture activities in synergy with the other uses present in the area, with particular attention to the development of income-generating activities such as Acqui-tourism and through the identification of Aquaculture Areas (AZA), as per European indications.

Reference sector	Code	Specific objective
Environmental protection and natural resources	(A/3)OSP_N|01	Consolidate the existing system of protected areas and conservation measures, within a framework of overall ecological coherence and in synergy with other present uses.
	(A/3)OSP_N|02	Maintain/achieve WFD, MSFD and H&BD environmental objectives.
Maritime transport and ports	(A/3)OSP_TM|01	To favor the development of maritime (and/or tourist/fishing) commercial traffic involving the regional commercial port system, in the context of TEN-T networks and international and global traffic scenarios, with a view to sustainable development
	(A/3)OSP_TM|02	Manage the periodicity of maintenance of the seabed functional to the activities of the commercial and tourist port system by promoting the sustainable management of sediments (from port dredging, excavations, hydraulic systems, etc.), with the aim of coastal nourishment for emerged and submerged beaches.
	(A/3)OSP_TM|03	Developing recreational boating, with a view to diversifying the tourist offer, promoting environmental sustainability and at the same time ensuring accessibility to waterways
Defense	(A/3)OSP_D|01	Allowing the maintenance of the military functions of certain areas, reducing conflicts with other present uses
Landscape and cultural heritage	(A/3)OSP_PPC|01	Promoting the coordination of Maritime Spatial Planning with the Landscape Planning of the regional territory and with the needs of conservation, recovery and enhancement of historical, architectural and archaeological heritage

Planning Unit and vocations of use

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

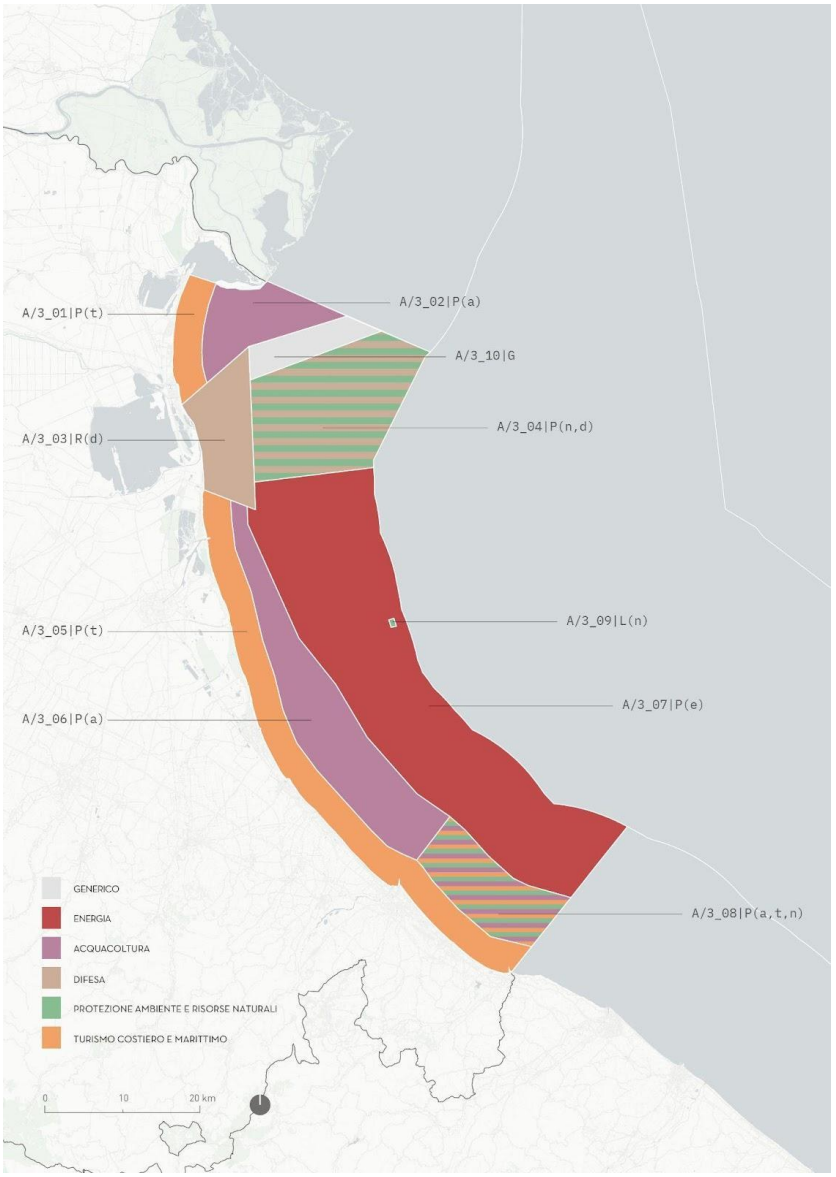


Figure 25 Identification of planning units in sub-area A/3

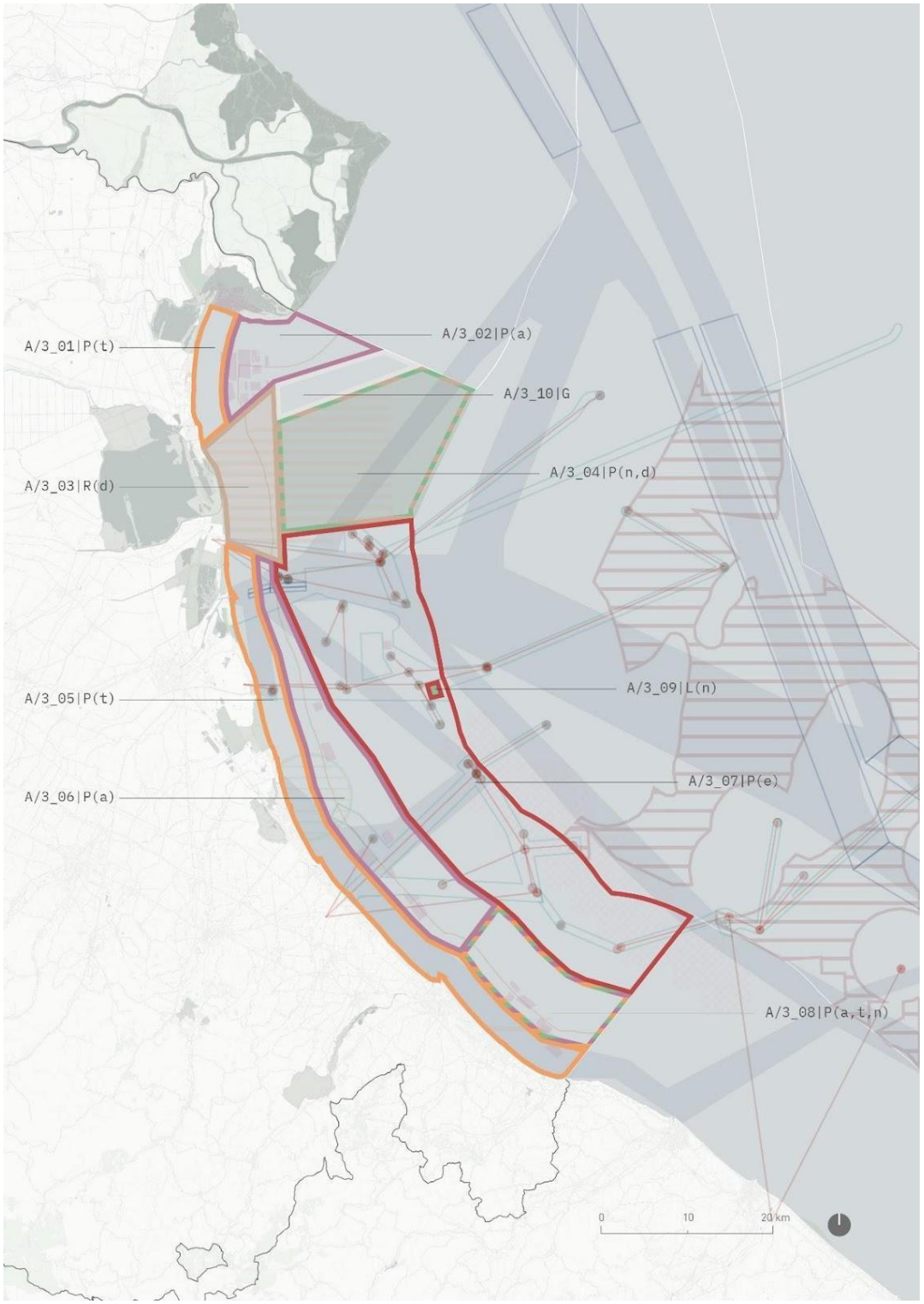


Figure 26 Overlap between the Principal Uses Map and the Planning Units of Sub-area A/3

7.3.4 Sub-area A/4 - Marches territorial waters

[Proposal approved by the Marche Regional Council with Council Resolution no. 1335-2022].

The main sea and shoreline uses present in the sub-area are depicted 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 and maritime tourism, maritime transport and connected port activities, fishing, aquaculture, protection of the environment and natural resources, protection of the landscape and cultural heritage, hydrocarbon research and cultivation, and activities connected to military defense. The sources of the spatial data used are reported in Figure 27 and represent information available at national level through the contribution of the Ministries involved in the MSP process.

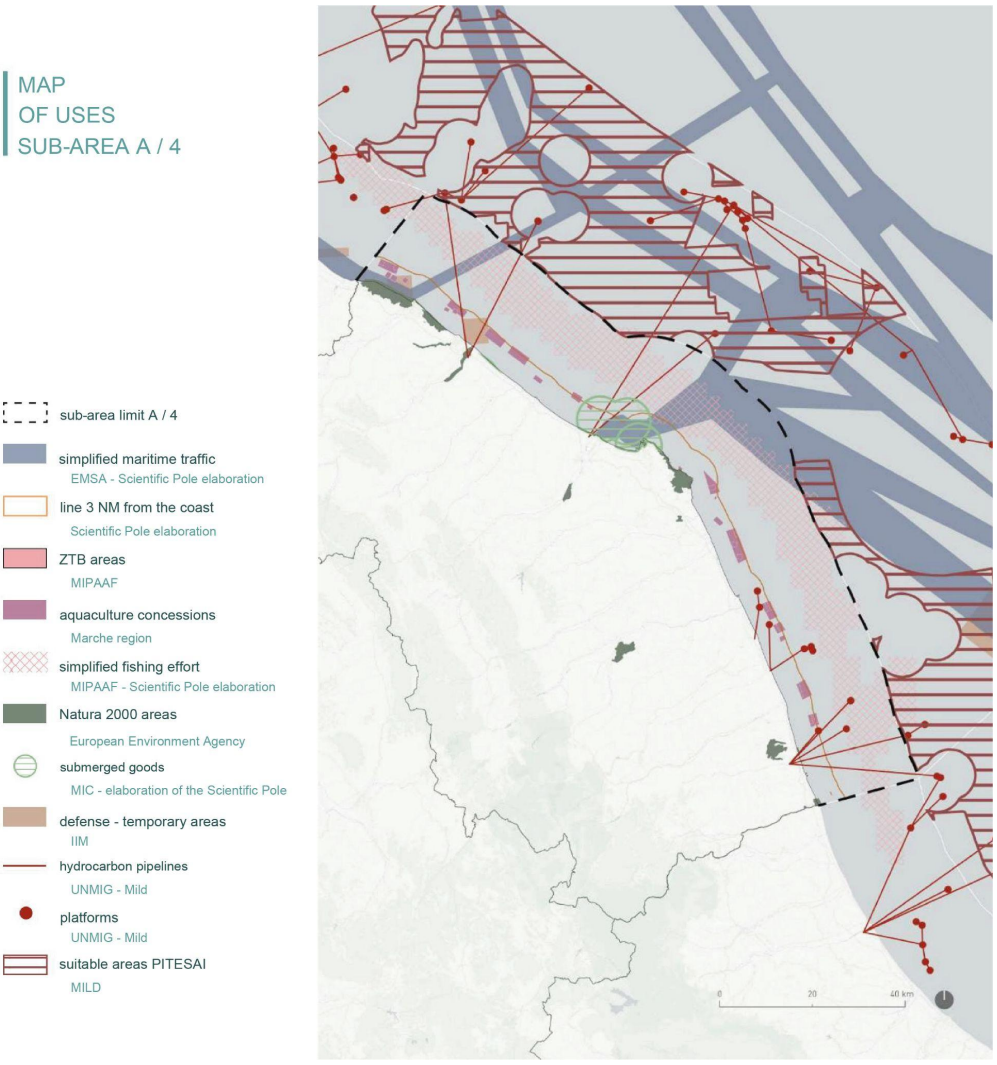


Figure 27 Summary map of the main uses present in Sub-area A/4

Specific vision

The Marche Region considers as fundamental the sustainable development of the maritime economy of its coastal system, which involves many sectors ranging from coastal and maritime tourism to fishing, aquaculture and trade. The overall strategy to allow a harmonious and sustainable systemic development of these sectors will necessarily have to guarantee the protection of the environment and landscape, addressing the criticalities resulting from interferences. To this end, the following actions should be implemented:

- To develop the tourism system integrated with the development of the territory through a strategic management of its landscape and environmental resources able to guarantee environmental, economic and social sustainability;
- Combat coastal erosion to maintain the dynamic equilibrium of the shoreline also for the conservation of marine ecosystems and promote the usability and sustainable management of protected areas;
- To favor 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;
- 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 actions and prevention of environmental risks, also through the improvement of the observation and monitoring capacity of the sea;
- Monitor and support ongoing experimentation on sustainable energy production projects at sea with innovative technologies that ensure landscape protection and environmental sustainability;
- To protect the particular landscape value of the Marche marine coast, carefully evaluating the individual interventions in the sea through the analysis of the intervisibility from the coast, with particular reference to the cultural heritage present there (with a constraint decree or ope legis), as well as the areas identified by the PPAR of particular visual perception.

General transversal objectives

The Marche Region identifies two general and transversal objectives, namely Sustainable Development and Scientific Research and Innovation in harmony with international/European objectives.

In particular, it considers that sustainable development is a mainstreaming policy across all the Goals. The "2030 Agenda on Sustainable Development", adopted on 25 September 2015 by the countries of the United Nations has identified 17 Sustainable Development Goals (SDGs) articulated in 169 Targets. This is a collective reference framework with which the entire world can achieve a common pathway, aimed at producing sustainable change in the current development model. The 17 Sustainable Development Goals and 169 targets are interconnected and indivisible and balance the three dimensions of sustainable

development: the economic, social and environmental dimensions. The interconnectedness of the Sustainable Development Goals is crucial in ensuring that the purpose of the new Agenda is realized.

In this context, the Marche Region intends to contribute to the achievement of the objectives of the National Strategy for Sustainable Development in line with the 5 strategic choices identified in the Regional Strategy for Sustainable Development:

A Prevent and reduce disaster risks by reducing hazard exposure and vulnerability, increasing response and recovery capacity, thereby strengthening resilience.

B Addressing climate change and related social and economic dissimilarities.

C Recognize the value of ecosystem services and thus protect biodiversity.

D Pursue equity by striving towards the elimination of poverty, the inequality of the benefits of development and the realization of conditions of dignity for the life of every person

E Promote industrial research and technological innovation towards the development of new sustainable production solutions, in terms of innovation and energy efficiency, reduction of emissions into the environment, recovery and reuse of by-products and waste, development of biocompatible production.

Specific objectives

The specific vision and the general transversal objectives are articulated in some 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 for sub-area A/4 are reported in Table 6.

Table 6 Specific objectives for sub-area A/4

Reference sector	Code	Specific objective
Coastal and maritime tourism	(A/4)OSP_T|01	Improving the services available to tourists, whether seaside, yachtsmen or cruise passengers, and integrating the tourist offer with the cultural attractions present on the coasts and, above all, in the inland areas
	(A/4)OSP_T|02	Improving the network of tourist ports through the modernization of existing ports
	(A/4)OSP_T|03	Encourage the modernization 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 hub of the tourism system
	(A/4)OSP_T|04	Developing pleasure boating, with a view to diversifying the tourist offer, while ensuring environmental sustainability
	(A/4)OSP_T|05	Favoring activities functional to the development of the cruise sector, enhancing the value of the ports of call as tourist infrastructures, not just transport infrastructures
Coastal defense *including flood protection, and restoration of seabed morphology*	(A/4)OSP_DC|01	Implementing the measures related to the "buffer zone" connected to the regulations (NTA ICZM Plan/Title III), in terms of seasonality of the bathing establishments, minimization of the interference with the hydrodynamic balance and limitation of soil consumption also in implementation of the Floods Directive (2007/60/CE)
	(A/4)OSP_DC|02	Reduce vulnerability in favor of increased resilience of the coastal strip in implementation of the ICZM Plan including through actions to reactivate solid river transport feeding the coastal strip
	(A/4)OSP_DC|03	Pursue the objectives and principles of the Mediterranean Protocol (art. 28 NTA ICZM Plan) through specific actions including the renaturalisation of the coastal strip (art. 24 NTA ICZM Plan) and the harmonisation between public use and the tourist and recreational development of the coastal area
Aquaculture	(A/4)OSP_A|01	Sustainable development of aquaculture, with increased production and use of farming systems that minimise the use of plastics
Fishing	(A/4)OSP_P|01	Maintain current fishing capacity in a sustainable manner.
	(A/4)OSP_P|02	Promote sustainable fisheries also through the development of dedicated port infrastructure.
Environmental protection and natural resources	(A/4)OSP_N|01	Implementation of policies to ensure conservation of habitats and species and restoration of the most threatened habitats.
	(A/4)OSP_N|02	Protect and preserve the quality of the marine environment (Directive 2008/56/EC and Directive 2000/60/EC) and increase the effectiveness of control actions also through sea monitoring.

Reference sector	**Code**	**Specific objective**
Landscape and cultural heritage	(A/4)OSP_PPC|01	Promote interventions that promote the restoration and conservation of coastal real estate of high historical and architectural value (coastal fortifications, lighthouses and signals)
	(A/4)OSP_PPC|02	To encourage the conservation and promotion of the assets that constitute the historical testimony of the environmental culture of the sea and navigation.
	(A/4)OSP_PPC|03	Encourage the preservation of coastal scenic beauty.
Maritime transport and ports	(A/4)OSP_TM|01	Ensuring a major freight flow for the "traditional" ferry lines, "crucial" to maintaining the line and remaining sustainable.
	(A/4)OSP_TM|02	Encourage the reconversion of activities in crisis in or near commercial ports into activities related to shipbuilding or the circular economy.
	(A/4)OSP_TM|03	Encourage logistical innovation and the modernisation of port infrastructure in order to boost maritime transport of both goods and people and cruise passengers.
Energy *with particular reference to renewable energies*	(A/4)OSP_E|01	Contribute to decarbonisation by promoting the use of marine renewable energies, provided they are compatible with landscape protection and environmental sustainability.
	(A/4)OSP_E|02	Promote the creation of a global value chain in the region based on marine renewable energies by protecting the marine environment and coastal landscape.

Planning Unit and vocations of use

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

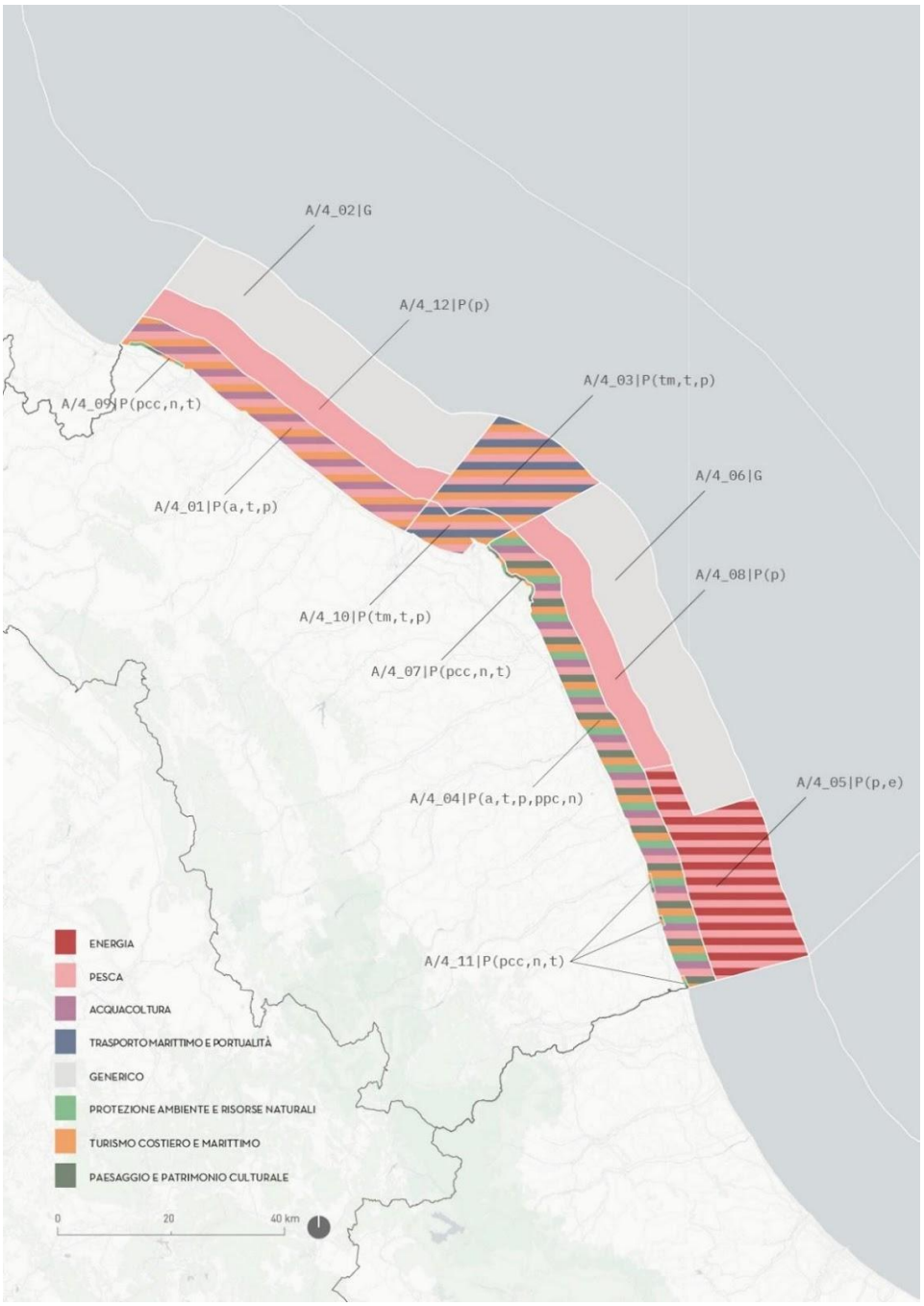


Fig ura 28 Planning Unit of Sub-area A/4

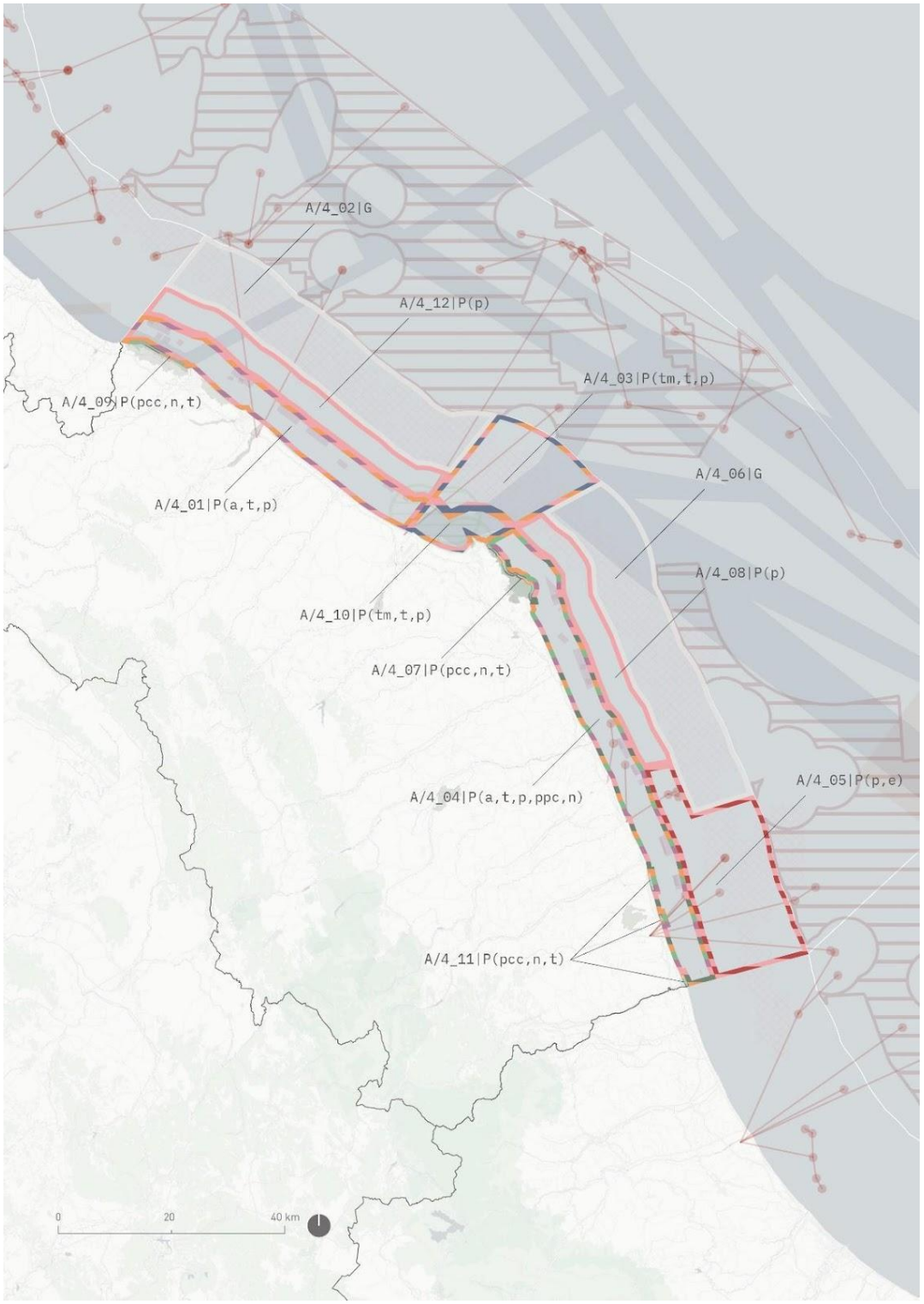


Figure 29 Overlap between the Principal Uses Map and the Planning Units of Sub-area A/4

7.3.5 Sub-area A/5 - Abruzzo and Molise territorial waters

The main uses of the sea and coast present in the sub-area are depicted 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 and maritime tourism, maritime transport and connected port activities, fishing, protection of the environment and natural resources, protection of the landscape and cultural heritage, hydrocarbon exploration and production, and activities connected to military defense. The sources of the spatial data used are reported in Figure 30 and represent information available at national level through the contribution of the Ministries involved in the MSP process.

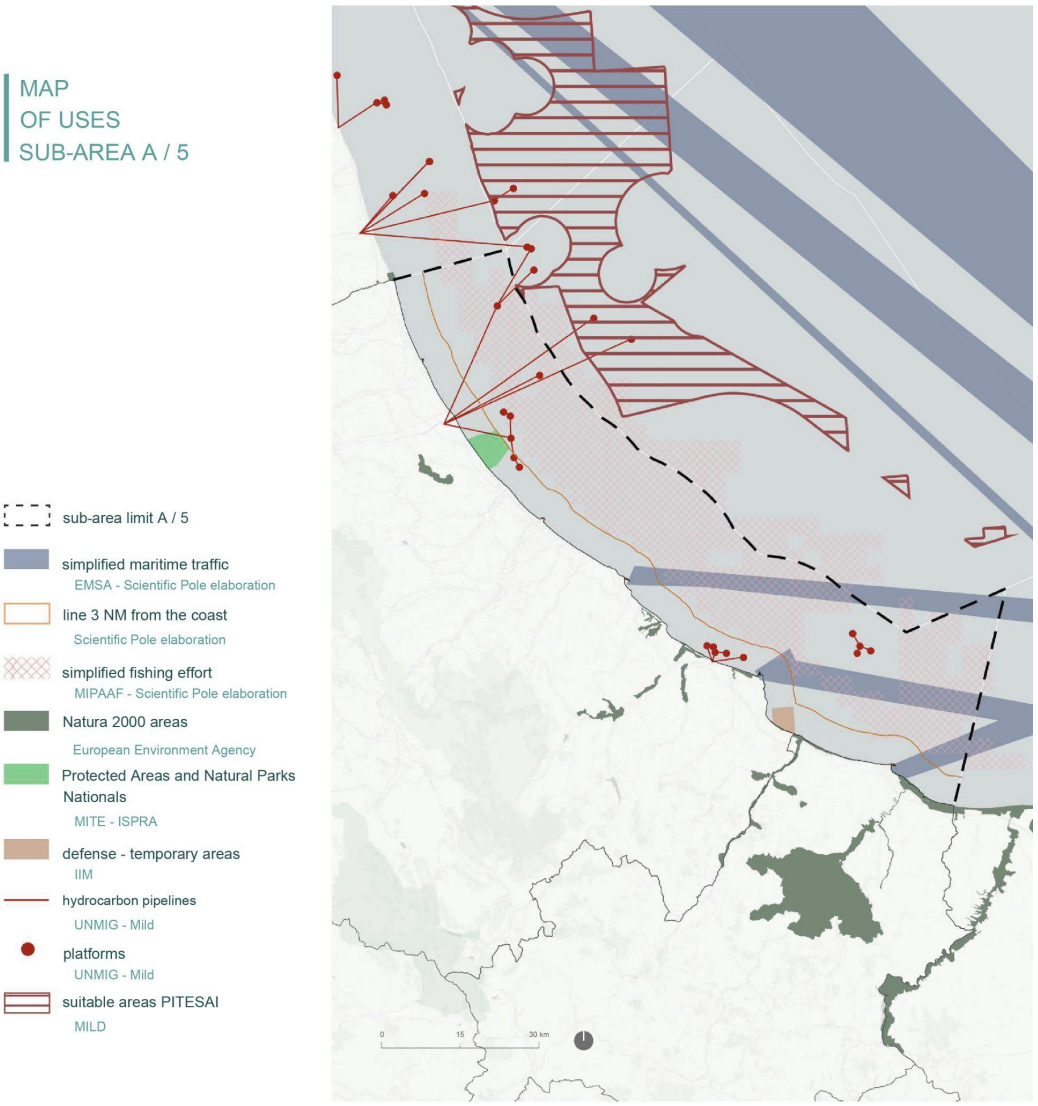


Figure 30 Summary map of the main uses in Sub-area A/5

Specific vision

The maritime economy of the coastal system is linked to a variety of sectors. Among the most important are commercial and passenger transport (including cruise shipping), beach and recreational tourism, fisheries, aquaculture and energy. The overall development strategy for these sectors will necessarily have to address critical issues related to interference between uses and the environment, as well as climate change and environmental emergencies, in order to allow for harmonious and sustainable systemic development aimed at protecting and enhancing the landscape, environmental and historical-cultural heritage.

Of relevance for the sub-area is the role of ports, the development of which is closely connected with logistics aspects and functional infrastructures, including land transport infrastructures, and includes the maintenance of suitable waterways.

Another important factor for the maritime economy of the coastal system is tourism, which requires sustainable management and strategic development of landscape and environmental resources capable of ensuring long-term environmental, economic and social sustainability with a view to the circular economy.

Specific objectives

The specific vision is articulated in the specific planning objectives, 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 for sub-area A/5 are reported in Table 7.

Table 7 Specific objectives for sub-area A/5

Reference sector	**Code**	**Specific objective**
Maritime transport and port activities *with particular reference to commercial ports and shipbuilding*	(A/5)OSP_TM|01	To ensure the development of commercial maritime traffic involving the regional commercial port system, in the context of TEN-T Networks and international and global traffic scenarios, with a view to sustainable development. To promote cross-border cooperation by establishing an active and long-term partnership through the improvement of multimodal connections and maritime transport.
	(A/5)OSP_TM|02	Enhancing the port areas through a process of urban requalification and integration.
	(A/5)OSP_TM|03	Guaranteeing the periodicity of maintenance interventions on the seabed functional to the activities of the regional commercial and tourist port system. Favoring the implementation of a monitoring and management system of silting in the ports that allows a dynamic collection of data necessary to develop a planning and forecasting system for ordinary and extraordinary maintenance of the seabed.
	(A/5)OSP_TM|04	Enable the development of shipbuilding activities in line with sector production trends.
Maritime transport and ports With particular reference to dredging and seabed maintenance	(A/5)OSP_TM|05	Providing for a planning of maintenance interventions of the seabed, waterways and marinas also in function of the protection of fishing and aquaculture activities.
Dredged sediment sea-diving	(A/5)OSP_ISD|01	Identify sea areas and defined coastal areas compatible with the management and delivery of sediments deriving from dredging activities and maintenance of the seabed and port waterways, in line with what is allowed by the regulations in force and having regard to fishing activities. Propose strategies for the re-use of sediments deriving from the dredging of port areas aimed at the nourishment of eroding stretches of coastline.

Reference sector	Code	Specific objective
Environmental protection natural resources	(A/5)OSP_N|01	Enhancing the protected area system within a framework of overall ecological coherence, considering the existing conservation measures and defining a valorization strategy capable of virtuously combining conservation and valorization aims, adopting a unitary view of promoting sustainable development. Safeguard relict dune areas and backdune areas for the maintenance of biodiversity with the proposal of actions aimed at their restoration and conservation. Promote the exchange of experiences and best practices for the management and conservation of coastal and natural heritage through the participatory involvement of stakeholders.
	(A/5)OSP_N|02	Highlight marine environments and habitats of relevant environmental value and monitor their conservation over time, also with reference to the expansion of the Natura 2000 network of sites at sea.
	(A/5)OSP_N|03	Achieve and maintain the environmental objectives stemming from the Marine Strategy Framework Directive (MSFD) and the Water Framework Directive (WFD) (Dir 2000/60/EC)
Coastal defense	(A/5)OSP_DC|01	Implement actions aimed at protecting the coast from erosion phenomena, storm surges and the critical issues resulting from climate change. Identify structural and non-structural coastal hazard mitigation interventions based on exposed assets. Provide for monitoring activities of structural interventions with particular attention to water and sediment quality aspects.
Energy	(A/5)OSP_E|01	To allow the exploitation over time of the methane fields already authorised in a safe manner for man and the environment, reducing conflicts and increasing synergies with other sectors of the marine economy, in accordance with the guidelines and forecasts of PiTESAI.
	(A/5)OSP_E|02	To favor the experimentation and the use of technologies for the generation of energy from renewable sources at sea, with particular reference to wind power, compatibly with the policies in force for the protection of the environment and the landscape.
Fishing	(A/5)OSP_P|01	To favor the sustainable management of artisanal fishing, through the regulated management of fishing areas, and the increase of the income of the sector's operators with particular attention to the development of income-generating activities such as fishing tourism and ichthyic tourism, promoting fishing traditions, maritime culture and respect for the environment

Reference sector	**Code**	**Specific objective**
	(A/5)OSP_P|02	To favor the sustainable management of fishery, through specific local regulations on the use of gears, different from those of artisanal fishing, within the national management plans for target species (small pelagics, demersal and bivalve molluscs)
Aquaculture	(A/5)OSP_A|01	Identify the most suitable areas (AZA) in order to defuse possible conflicts with other uses of the sea and ensure the protection of the marine environment. Promote the maintenance and sustainable development of aquaculture activities in synergy with other uses in the area
Coastal and maritime tourism *with particular reference to seaside tourism, nautical tourism and cruise tourism*	(A/5)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) and a strategy to combat coastal erosion.
	(A/5)OSP_T|02	Developing pleasure boating, with a view to diversifying the tourism offer, while ensuring accessibility to waterways and environmental sustainability
	(A/5)OSP_T|03	To favor the activities functional to the development of the cruise sector
	(A/5)OSP_T|04	Promote the recovery and enhancement of the archaeological heritage of the coast and the emergencies of historical and architectural value of considerable interest. Enhance the historical and cultural heritage of the coast by promoting the recovery of trabucchi respecting their natural destination and compliance with their traditional value.
	(A/5)OSP_T|05	Promote sustainable mobility linking coastal and marine fruition also through the development of cycle tourism in an overall context of diversification of the tourist offer.

Planning units and vocations of use

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

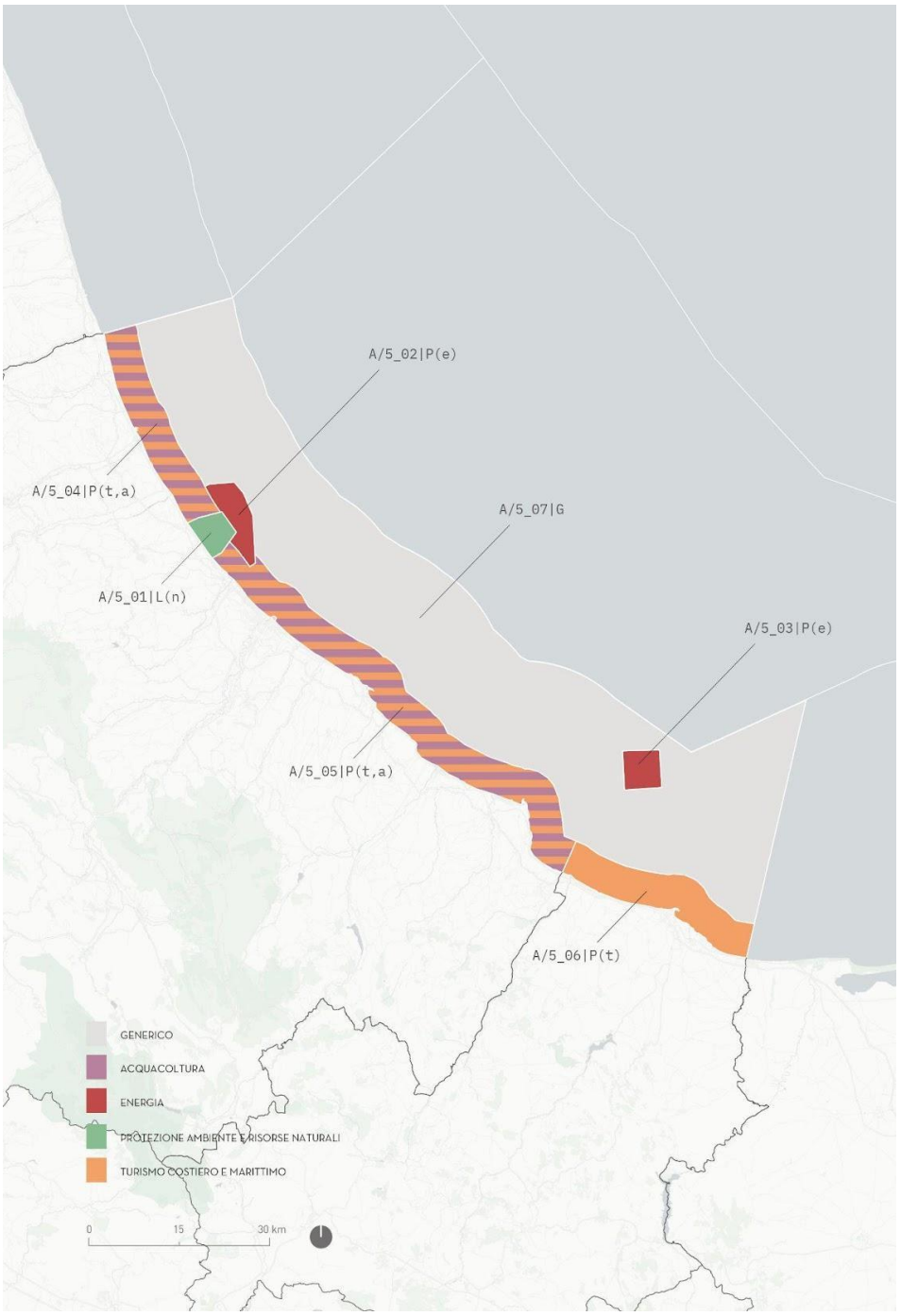


Fig ura 31 Planning Unit of Sub-area A/5

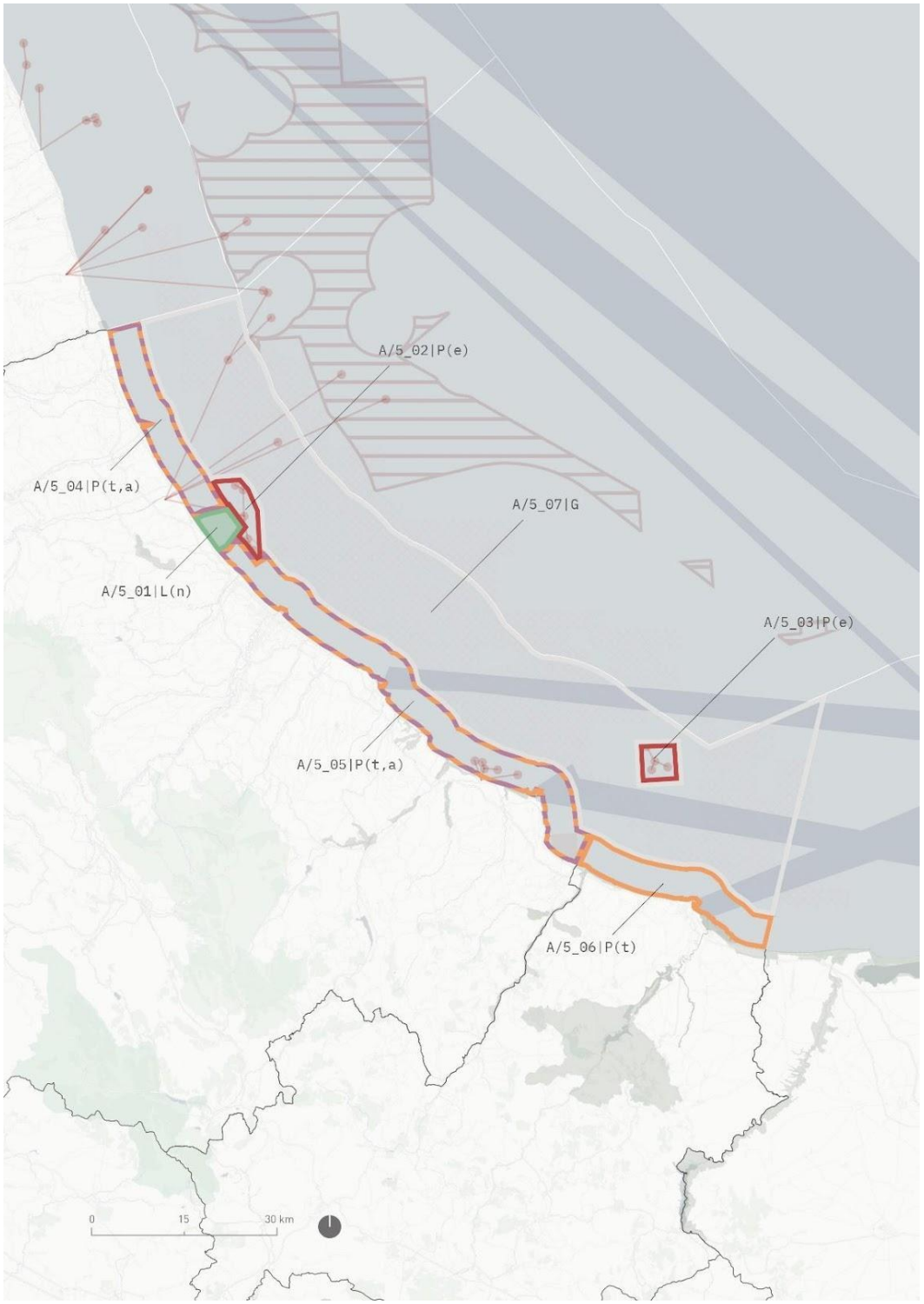


Figure 32 Overlap between the map of principal uses and the Planning Units of Sub-area A/5

7.3.6 Sub-area A/6 - Territorial waters of eastern Apulia

[*Proposed Vision and Objectives approved by the Apulia Regional Council with Council Resolutions Nos. 311/2022 and 761/2022*].

The main uses of the sea and coast present in the 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 and maritime tourism, maritime transport and related port activities, fishing, protection of the environment and natural resources, protection of the landscape and cultural heritage, and activities related to military defense. The sources of the spatial data used are reported in Figure 33 and represent information available at national level through the contribution of the Ministries involved in the MSP process.

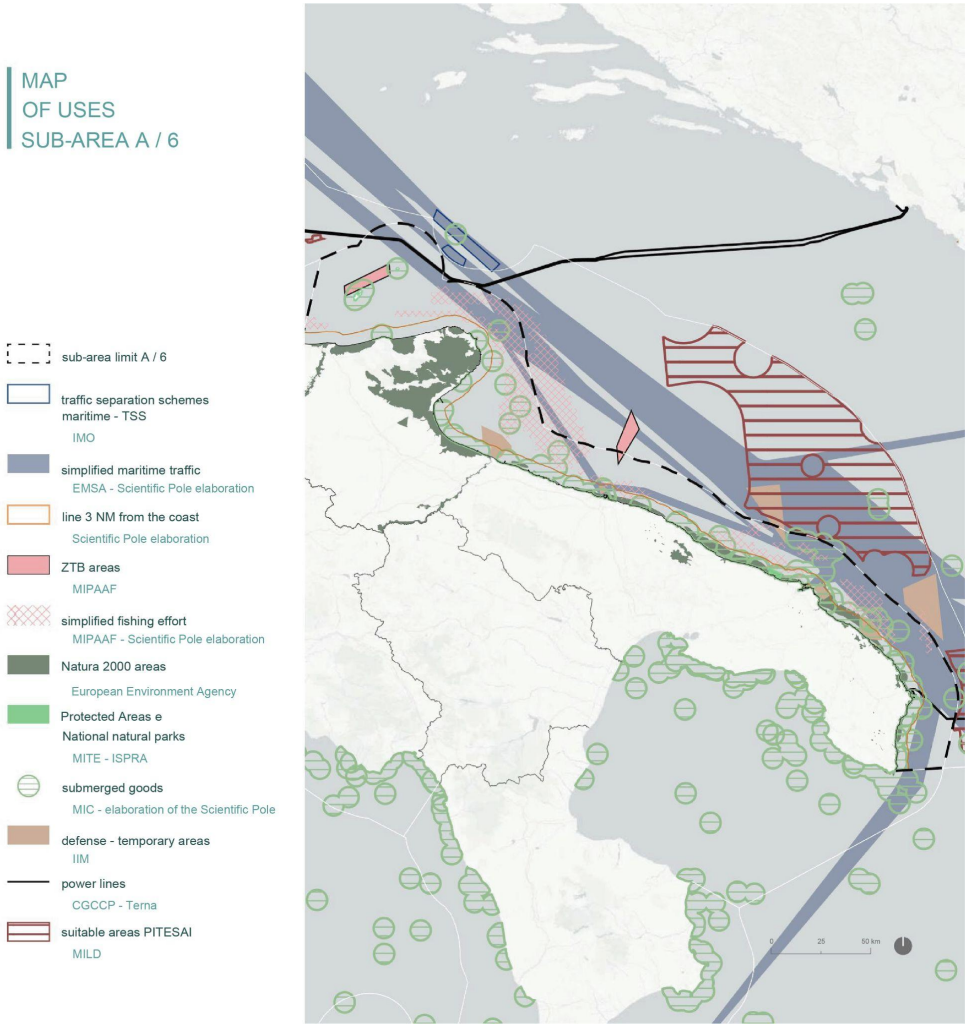


Figure 33 Summary map of the main uses in Sub-area A/6

Vision and objectives

The Apulia Region intends to preserve and enhance the value of the sea and the seafaring vocation as paradigmatic identity elements of the Apulian community and territory and recognises the strong natural vocation for the sea economy of its business system. The dynamics affecting the Region's sea economy are characterised by the following strengths:

- Growing tourist sector and presence of areas with great tourist and naturalistic potential;
- Presence of 3 Marine Protected Areas and an extensive NATURA2000 network (including regional local management initiatives called OASI BLU)
- Deep-rooted tradition in the maritime, fisheries and aquaculture sector and related skills;
- Competitive entrepreneurial fabric in the nautical, fishing and tourism sectors;
- Branched regional innovation system, also composed of non-traditional actors;

and the following weaknesses:

- Reduction of fish stocks and impairment of marine flora and fauna resulting from overfishing;
- Structural deficiencies in port areas and landing points and excessive segmentation of the fishing industry;
- Inadequate regulatory system and standards for the development of non-traditional sectors of the blue economy;
- Reduction of the competitive advantage of the regional port system related to the geographical centrality in the Mediterranean;
- Intensive use of the marine resource.

The Apulia Region, acting appropriately through the levers of sustainable development and adopting an integrated and ecosystem approach, intends to:

- fostering the harmonious, equitable and sustainable development and use of the sea and its resources by ensuring that the ecosystem is managed and maintained in a healthy, productive and resilient condition so that it can be an avenue for wellbeing and can provide the community with the goods and services it requires, taking into account the cumulative impacts of the different maritime sectors, enhancing positive synergies between uses of the sea and minimising, where possible resolving, conflicts between uses of the sea in favor of uses which are more sustainable for the marine ecosystem;
- contribute to and develop a planning and management of marine and maritime activities integrated and coordinated with those on land, guaranteeing ecological continuity and compatibility of uses between land and sea and preserving the landscape value of coastal territories, solving or minimizing the criticalities generated by land-sea interactions and enhancing their synergies;
- to encourage the protection, rational use and biological rebalancing of aquatic ecosystems, fish fauna and flora, socio-economic development and modernisation of fishing and aquaculture;

- contribute to the development of supply chain infrastructure, including producers' markets, wholesale fish markets, ports and landing points;
- implement a strategy aimed at the creation of a sustainable, integrated development system based on local resources, aimed at the valorisation and networking of the production potential of the fishing and aquaculture sectors, through support for innovation, the involvement of the research world and the activation of intersectoral economic levers;
- strengthen the strategic role it plays in the Mediterranean due to its geographical location by enhancing cross-border and international cooperation activities;
- to bring the *Blue Economy* to the center of development policies and innovation by adopting new strategic levers both in traditional sectors such as fishing, which is subject to a constant contraction of local fishery resources and where innovation is necessary in terms of economic and environmental sustainability, and in expanding sectors such as the blue bio-economy in which research, development and experimentation are an essential competitive factor.

Overall transversal objective

In line with what is outlined in the United Nations 2030 Agenda and what is defined by the National Strategy for Sustainable Development and the Preliminary Document approved with DGR 26 April 2021, n. 687 "Strategy for Sustainable Development of the Region of Puglia (SRSvS). Approval of Preliminary Document", Article 63 paragraph 1 of the Regional Law 30 December 2021, n. 51 provides that the Apulia Region, in the implementation of regional policies, *pursues the management and maintenance of ecosystems in a healthy, productive and resilient condition for the well-being of the community and for the ability to cope with global changes and contributes to the protection of natural biodiversity recognizing its role also for the purposes of combating climate change and for the purposes of sustainable development*. Therefore, in accordance with the provisions of regional regulations, the general and transversal objective is represented by sustainable development to be implemented through the adoption of an integrated and ecosystem-based approach to planning that takes into account the dynamics of the context in their complexity and environmental, social and economic interrelationships.

In line with the integrated and ecosystem approach, the Region recognizes the complementarity between the following existing tools at EU and national level: Maritime Spatial Planning, Marine Strategy, Integrated Coastal Zone Management Principles of the ICZM Protocol and EU Biodiversity Strategy 2030, and therefore sets itself the general transversal objective of ensuring an integrated and ecosystem approach at regional level for sea and coasts. With regard to land-sea interactions and landscape protection, the Apulia Region identifies the current Regional Territorial Landscape Plan as the reference planning tool in coherence with which to decline the specific objectives and identify the planning units.

Specific objectives

The specific vision and the general transversal objectives are articulated in some 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 for sub-area A/6 are reported in Table 8.

Table 8 Specific objectives for sub-area A/6

Reference sector	Code	Specific objective
Environmental protection and natural resources	(A/6)OSP_N|01	Contribute to the achievement and maintenance of the environmental objectives deriving from the Marine Strategy Framework Directive (MSFD) and the Water Framework Directive (WFD) (Dir. 2000/60/EC), also by filling the knowledge gaps in the descriptors and providing structural interventions for the modernization and proper management of urban and industrial discharges
	(A/6)OSP_N|02	Conserving, restoring and monitoring marine biodiversity (e.g. *Posidonia oceanica* meadows, coralligenous and deep biocoenosis, marine mammals) in line with the objectives of the Biodiversity Strategy and with the provisions of the FAP, enhancing, expanding and strengthening the system of protected areas and the Regional Ecological Network within a framework of overall ecological coherence
	(A/6)OSP_N|03	To improve the environmental quality of the coastal system by raising its ecological gradient; to integrate the aspects of land-sea interaction and integrated management of the coastal strip, with particular reference to environmental and naturalistic aspects, also with regard to terrestrial habitats and species
	(A/6)OSP_N|04	Protecting the marine environment from the impacts of human activity
	(A/6)OSP_N|05	Promote measures to manage waste that can be found in the sea and on beaches, through policies to combat "Marine Litter", including better waste management, reducing packaging waste, increasing recycling rates (of plastics in particular), improving the treatment of waste water, promoting the recovery of waste already dispersed
Landscape and cultural heritage	(A/6)OSP_PPC|01	Increasing the degree of naturalness of the coastal system, redesigning and redeveloping rural coastal landscapes and historic urban *waterfronts*, restoring natural and historic-cultural coastal places of scenic value when degraded by uncontrolled human development
	(A/6)OSP_PPC|02	Enhance the aesthetic-perceptual structure of the landscape and promote 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 defense system (historical centres, castles, fortified palaces, towers, city walls), often inserted in valuable urban and environmental contexts; prevent transformations that alter or compromise the functional, historical, visual, cultural, symbolic and ecological components and relations that characterise and identify the structure of the regional coastal landscape

Reference sector	Code	Specific objective
	(A/6)OSP_PPC|03	Recovering dune systems, cliffs, wetlands, water basins and canals, as well as marginal areas close to the coast that are severely degraded and reinforcing ecological connections, also through the relocation of existing infrastructures lacking in landscape and identity value
	(A/6)OSP_PPC|04	Strengthen the interventions aimed at promoting slow mobility systems also for the connections between the coast and the hinterland
	(A/6)OSP_PPC|05	Safeguard the great sceneries characterizing the regional image: safeguard the panoramic views of relevant landscape value, characterized by particular environmental, naturalistic and historical-cultural values
	(A/6)OSP_PPC|06	Encourage the protection and enhancement of coastal scenic beauty, in compliance with the uses already permitted, preserving the horizon line as a valuable element of the coastal seascape, also by identifying maritime stretches of water as additional contexts for the protection of the coastal landscape, enhancing the *skyline*, visual cones, intervisibility of places. panoramic points and natural and anthropic visual landmarks, main settlements, castles, towers, lighthouses and any other architectural and cultural asset, located in a privileged orographic position, from which it is possible to get panoramic views of the landscapes characterizing the regional identity
	(A/6)OSP_PPC|07	Protecting the submerged archaeological heritage also through the strengthening and adjustment of the knowledge base, the deepening of impact assessments and the strengthening of seabed monitoring actions related to the implementation of interventions (e.g. beach nourishment, dredging, small movements) that may have an impact on known and potential sites
	(A/6)OSP_PPC|08	Strengthening interventions to promote and conserve *in situ* the underwater cultural heritage and archaeological, monumental and cultural heritage values through the protection of context values and conserving the seascape and coastal landscape to integrate the landscape and cultural dimensions of heritage assets
Maritime safety, navigation and surveillance	(A/6)OSP_S|01	Increasing legality and safety in sea areas and within port activities and infrastructures, also by favoring a widespread presence of Coast Guard and other Law Enforcement Agencies.
Coastal and maritime tourism	(A/6)OSP_T|01	Promote a quality tourism focused on innovative products and on products characterized by a strong territorial imprint and that sees in the achievement of high quality standards (such as the maintenance of the state of quality of bathing water, the maintenance and respect for nature) the elements for its promotion

Reference sector	Code	Specific objective
	(A/6)OSP_T|02	Promoting the seasonal adjustment of tourist flows through the enhancement of the hinterland and the reduction of *hotspots* of high concentration of tourist flows and establishing criteria based on an ecosystem approach for the use of state-owned areas for tourism and recreational purposes
	(A/6)OSP_T|03	Promoting pleasure boating through the networking of dedicated sustainable infrastructures, the promotion of innovation in the shipbuilding sector and the promotion of an experiential tourism on the coastal strip by protecting the landscape characteristics of the coastal system and the architectural features of the seaside towns
	(A/6)OSP_T|04	Favoring the integrated development of sustainable tourist-sport activities (e.g. cycling tourism, rowing, sailing, *kite-surfing*, *windsurfing*, recreational diving) through appropriate spatial planning of the same, providing adequate infrastructural support on land (landing places, support structures, etc.) and enhancing the use of new technologies
	(A/6)OSP_T|05	Promote the panoramic viewpoints as a resource for the tourist fruition of the territory, as points from which it is possible to catch panoramic views of the whole regional landscape
	(A/6)OSP_T|06	Strengthen interventions to promote the experiential tourism of the sea "from the sea", enhancing the perception of the coastal landscape from the sea with appropriate transport systems (environmentally friendly propulsion systems), and through the protection of intervisibility
	(A/6)OSP_T|07	Strengthen the actions to promote underwater tourism by enhancing the use of new technologies
Fishing *some aspects also relevant to aquaculture*	(A/6)OSP_P|01	To promote the conservation and rational management of the biological resources of the sea and inland waters in respect of the protection of the environment and marine ecosystems, also through the planning of the fishing effort, the adoption of selective fishing systems and the study and control of the interrelationships between the marine, lagoon, lake and river environment and fishing and aquaculture
	(A/6)OSP_P|02	To support and apply the integrated management approach of the coastal strip through effective governance tools (including local ones) of coastal resources and territories, favoring generational change and the adaptation of related infrastructures and services
	(A/6)OSP_P|03	Combating illegal fishing in line with EU regulations, in particular for the protection of fish stocks during the spawning and growth phases, including through the establishment of biological rest areas and *nursery* and restocking areas
	(A/6)OSP_P|04	Encouraging a reduction in the use of plastics, tackling ghost fishing and the spread of microplastics

Reference sector	Code	Specific objective
	(A/6)OSP_P|05	Reinforce efforts to promote the recycling of waste products and the proper disposal of waste from fisheries, recreational boating, etc.
	(A/6)OSP_P|06	To guarantee in all the area to the fishing sector the necessary aids for the maintenance and transmissibility of the traditional fishing systems and of the equipments linked to them (traditional reed pots, fishing with the "lampara", etc.).
Aquaculture	(A/6)OSP_A|01	Identify suitable areas for aquaculture (AZA) to be used for breeding purposes, as well as the service areas necessary to carry out this activity
Coastal defense *considered within the framework of Integrated Coastal Zone Management*	(A/6)OSP_DC|01	To protect the morpho-dynamic equilibrium of coastal environments from erosive phenomena through the predisposition of a cognitive framework that frames the phenomenon of coastal erosion in its complexity, areal and temporal dimension, identification of areas at risk and predisposing/incident factors (subsidence, solid transport, etc.), determination of the interference of the phenomenon with other processes (e.g. loss of habitat) at the scale of the coastal physiographic unit
	(A/6)OSP_DC|02	Elaborate at the scale of the physiographic unit methodologies and strategies of intervention to contrast coastal erosion, subsidence of coastal plains and defense against flooding of coastal areas generated by meteo-sea events, according to the population and the exposed elements as well as the constraints present, ensuring the connection with the management plan of the flood risk and with the planning of civil protection
	(A/6)OSP_DC|03	The sea as a great public park: to regulate the use of the areas of the maritime domain, preserving them from incongruous uses and from illegal activities, promoting free use and the development of eco-compatible tourist and recreational activities, guaranteeing the safeguard of the environmental, naturalistic and landscape aspects of the Apulian coastline

Reference sector	Code	Specific objective
	(A/6)OSP_DC|04	Guaranteeing an 'active protection' of the coast in order to contrast the ever-increasing demand for coastal land transformation through: (i) Rewarding systems to favor the adaptation of the existing built environment to weather and climate changes; (ii) Modification of the seabed system of existing structures in order to reduce interference with wave motion and coastal dynamics; (iii) Identification of areas with elements at risk (buildings, structures, etc.) within or close to the maritime state property; (iv) Identification of buffer strips; (v) Adoption of mechanisms for the acquisition of public property areas and the relocation of the public domain.(iv) Identification of buffer strips; (v) Adoption of mechanisms for the acquisition of areas of public property and the delocalisation/retreat of elements at risk; (vi) Activation of pilot projects on stretches of coastline (even limited stretches), through economic/urban incentives aimed at restoring the natural capacity of the coast to adapt to climate change, including those caused by the rise in sea level; (vii) Regulation of interventions on existing or new structures within the buffer strips; (viii) Restoration and creation of green infrastructures with strategic objectives for the fight against coastal hydrogeological instability such as coastal cordons and coastal wetlands
	(A/6)OSP_DC|05	Promote the natural nourishment of the coast and the management and artificial nourishment of the coastal strip by enhancing the sediments as a strategic resource and developing appropriate management programs for sediments from dredging activities
	(A/6)OSP_DC|06	Promote coastal contracts as voluntary planning tools to pursue, through integrated actions, both the protection and enhancement of the territories and local development
	(A/6)OSP_DC|07	Promoting the implementation of programs for the reclamation of large industrial areas, the reconversion of areas in crisis/decommissioning and the carrying out of emergency response exercises for the defense of the sea and coasts from pollution by hydrocarbons and other harmful substances
	(A/6)OSP_DC|08	Raising the urban quality of coastal areas, through redevelopment of *waterfronts* and *waterfront areas*
	(A/6)OSP_DC|09	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
	(A/6)OSP_DC|10	To favor the decrease of terrigenous inputs in the sea area
	(A/6)OSP_DC|11	Encourage the transformation of fixed structures used as bathing establishments into easy-to-remove structures, in order to allow the pursuit of the objectives of protecting the significant landscape value and restoring the balance during the winter season

Reference sector	Code	Specific objective
Maritime transport and ports	(A/6)OSP_TM|01	Guaranteeing, by seizing all the opportunities given by the establishment of interregional EPZs, the development of commercial maritime traffic involving the regional commercial port system, in the context of TEN-T networks and international and global traffic scenarios, with a view to sustainable development
	(A/6)OSP_TM|02	Enable the development of shipbuilding activities in line with the sector's production trends
	(A/6)OSP_TM|03	Manage the periodicity of maintenance of the seabed functional to the activities of the commercial and tourist port system ensuring the sustainable management of sediments
	(A/6)OSP_TM|04	Promoting cross-border cooperation by establishing an active and long-term partnership through the improvement of multimodal connections and maritime transport
	(A/6)OSP_TM|05	Enhancement of the port areas through a redevelopment process, with development of passenger and cruise ports and urban integration and application of the standards defined by MITE for *green ports* adapted to the different regional port realities
	(A/6)OSP_TM|06	To promote the recycling of obsolete nautical and naval units through the definition and research of new standards for the execution of activities adopting the principles of circular economy
	(A/6)OSP_TM|07	Promote the reduction of CO_2 and noise emissions from vessels (decrease in speed, use of non-traditional energy sources and fuels, etc.).
	(A/6)OSP_TM|08	Combating the introduction of non-indigenous species through shipping (biofouling and ballast water)
Energy	(A/6)OSP_E|01	Promoting research in the field of sustainable exploitation of wave energy, compatible with the protection of the landscape and biodiversity
	(A/6)OSP_E|02	Promoting the transformation of ports into facilities with a positive energy balance, including through the production of energy from wave motion, encouraging the reduction of CO2 emissions and other pollutants related to the combustion of fossil fuels linked to port activities
	(A/6)OSP_E|03	Reconcile the protection of the marine-coastal habitat, landscape and visual integrity with innovative forms of energy production from renewable sources (e.g. *offshore* wind on existing and disused platforms integrated with the production of green hydrogen and similar).
Defense	(A/6)OSP_D|01	Allow certain areas to maintain their military functions, reducing conflicts with other present uses
	(A/6)OSP_D|02	Compatibly with institutional use, promote the representative redevelopment and usability of fortifications and military sites of cultural value (e.g. Taranto Castle)

Planning Unit and vocations of use

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

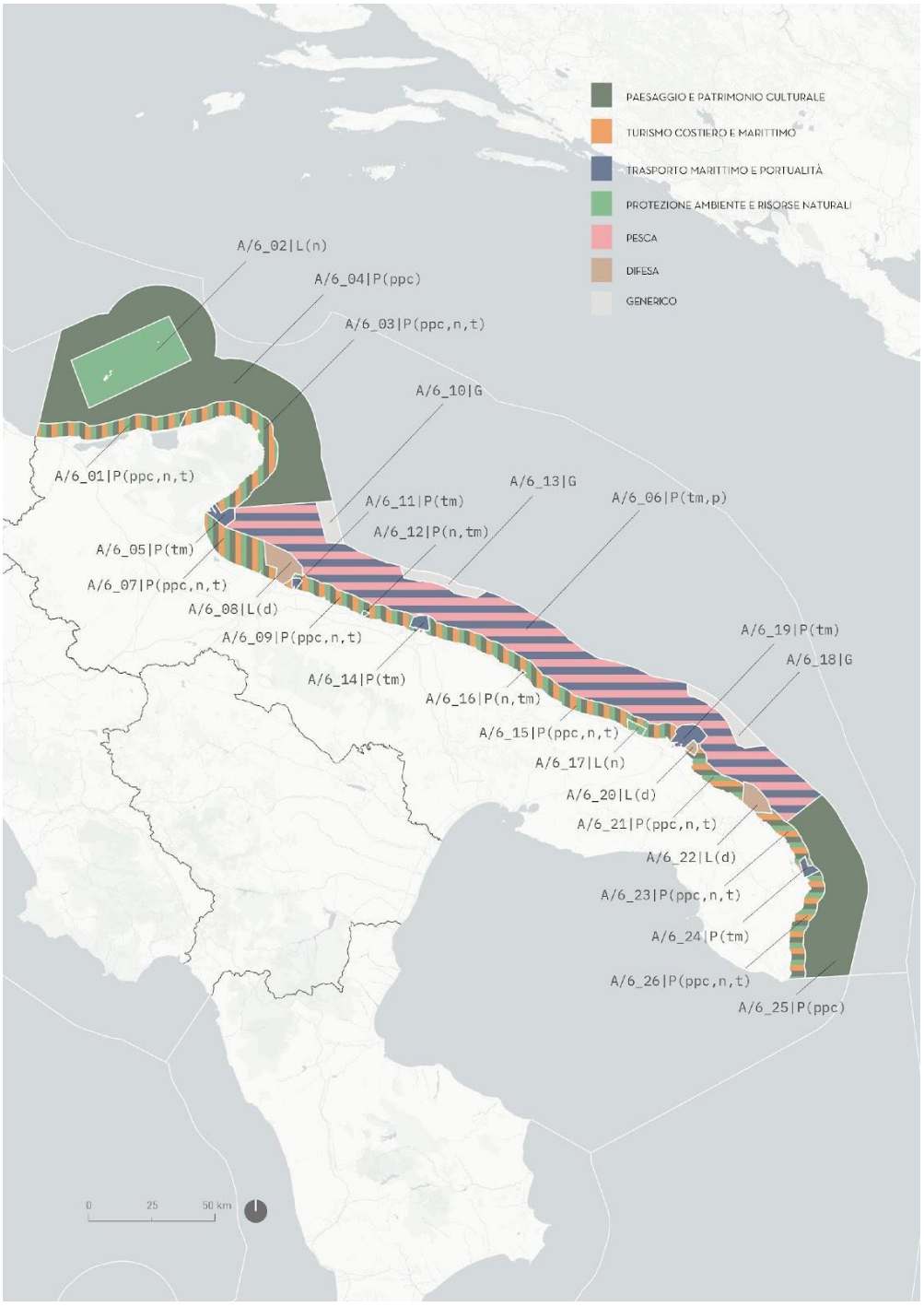


Fig ura 34 Sub-area A/6 Planning Unit

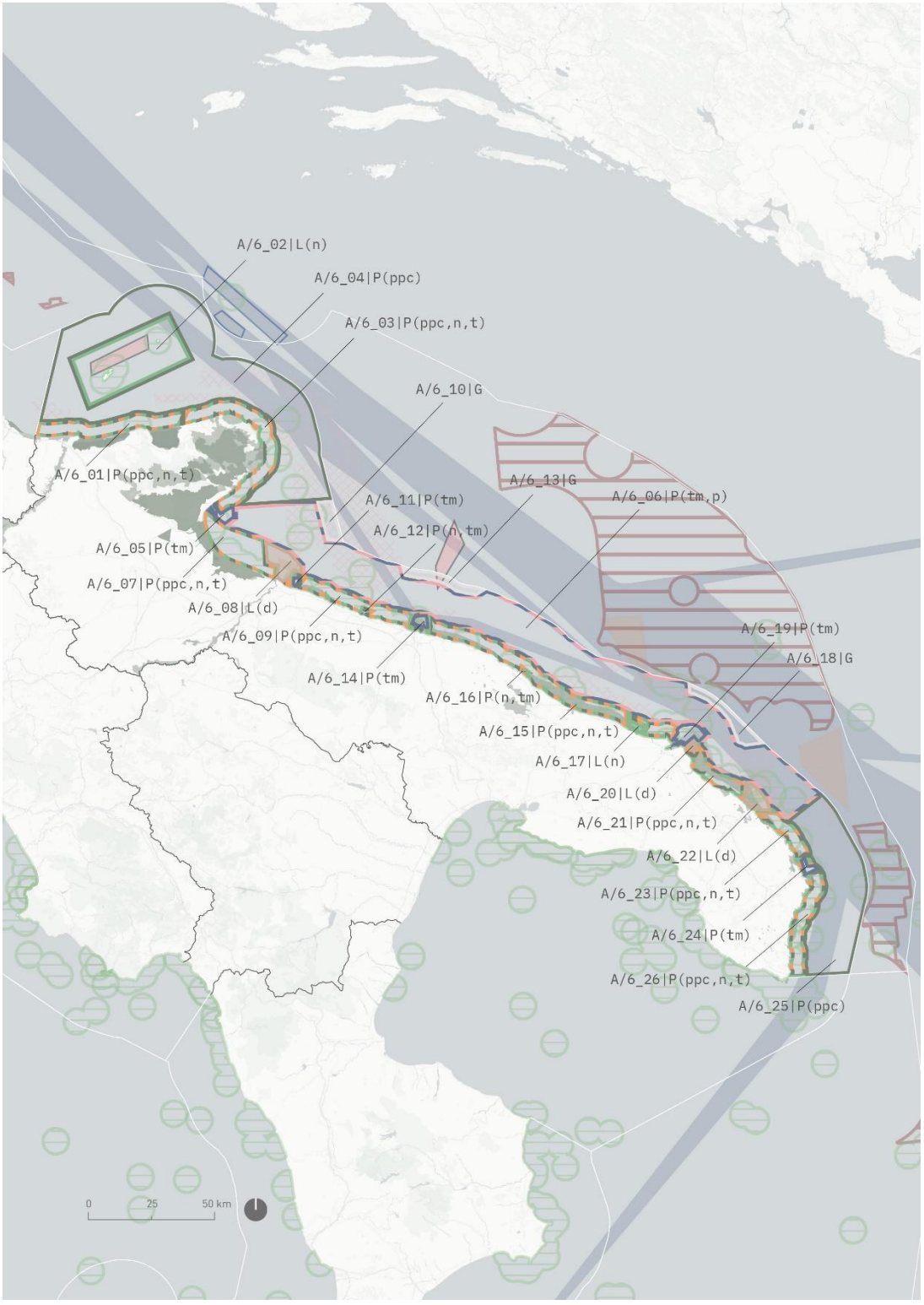


Figure 35 Overlay between the Principal Uses Map and the Planning Units of Sub-area A/6

7.3.7 Sub-area A/7 - Northern Central Adriatic Continental Shelf

[The proposal has been approved with DGR Emilia-Romagna Region n. 277 of 01/03/2021 for the part in front of the Region itself].

The main uses of the sea and coast present in the 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: maritime transport, fishing, protection of the environment and natural resources, protection of the landscape and cultural heritage, hydrocarbon exploration and production, and activities connected to military defense. The sources of the spatial data used are reported in Figure 36 and represent information available at national level through the contribution of the Ministries involved in the MSP process.

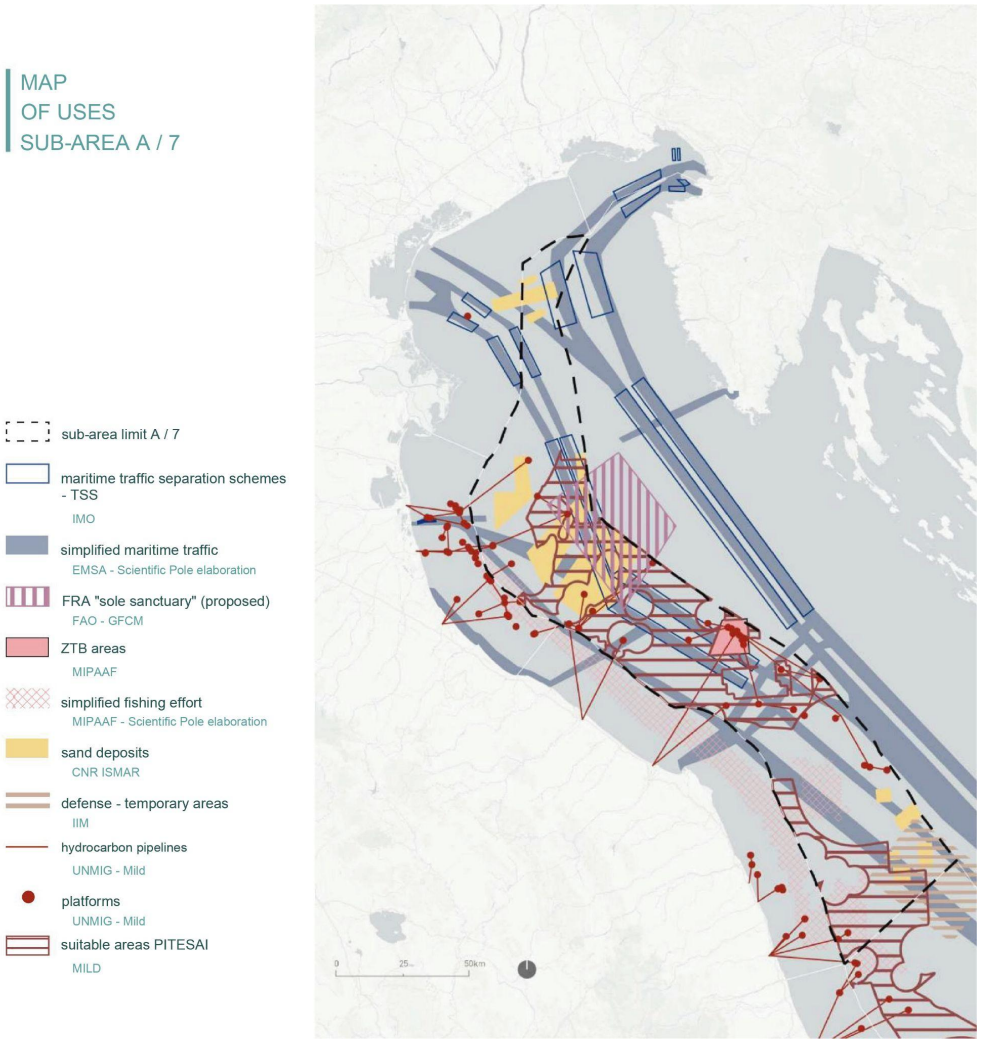


Figure 36 Summary map of the main uses in Sub-area A/7

Vision and specific objectives

The Adriatic Sea hosts historical and intense anthropic activities, some of which are traditionally relevant for socio-economic value (e.g. fishing) and for which significant growth is expected in the coming years (commercial and passenger maritime traffic, offshore renewable energy), with potential increase of conflicts with other uses and pressures on the environment. In view of this, actions need to be implemented to: ensure a harmonious and sustainable systemic development of activities and infrastructures in the marine space, which does not undermine the functioning of ecosystems and their capacity to provide ecosystem services; create the conditions for balanced and synergistic development of human uses.

The definition of PUs in each of the offshore sub-areas took into account criteria of:

- compliance with existing regulations, strategies and plans;
- hydrological and morpho-bathymetric characteristics;
- presence of important commercial and/or passenger maritime transport routes and IMO corridors;
- presence of infrastructures and concessions for the extraction of hydrocarbons;
- presence of protected areas established and/or under discussion (e.g. Natura 2000 sites);
- Spatial elements of fisheries and fishery resource management established and/or under discussion (e.g. GSAs, Biological Protection Areas, FRA-GFCM sub-areas);
- known relict sand deposits;
- submerged cultural and archaeological heritage.

The typological attribution to the PUs has been complemented by a series of complementary indications, to specify uses, limitations, aspects and particular considerations, indicating for each planning unit specific recommendations on the environmental, landscape and cultural heritage aspects or characteristics or dynamics, which must be taken into account when defining potential compatible uses, or which must be safeguarded.

The specific objectives for sub-area A/7 are set out in Table 9.

Table 9 Specific objectives for sub-area A/7

Reference sector	Code	Specific objective
Maritime transport and ports	(A/7)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
Energy	(A/7)OSP_E|01	Enable the exploitation over time of the already licensed methane fields in a manner safe for human health and the environment, reducing conflicts and increasing synergies with other sectors of the marine economy, in accordance with the PiTESAI guidelines and forecasts.
	(A/7)OSP_E|02	Favoring the experimentation and use of technologies for the generation of energy from renewable sources at sea, with particular reference to wind power, compatibly with the policies in force for the protection of the environment and the landscape
Fishing	(A/7)OSP_P|01	Promote the pursuit of the sustainable use of fishery resources, taking into account the sustainability of stock exploitation, the presence of Essential Fish Habitats (EFH), potential effects on the seabed, non-fished species (bycatch) and ecosystems, as well as existing and planned protected areas and BZs.
	(A/7)OSP_P|01	Promoting transnational action for concerted measures for the protection of resources and the sustainability of fisheries
Environmental protection and natural resources	(A/7)OSP_N|01	Consolidate the existing system of protected areas and conservation measures, within a framework of overall ecological coherence and by promoting the implementation of the main spatial measures foreseen in the MSFD Program of Measures
Withdrawal of relict sands	(A/7)OSP_SA|01	Properly address the use and protection of underwater sand for beach nourishment, to be considered as a strategic resource for coastal defense and adaptation plans
Landscape and cultural heritage	(A/7)OSP_PPC|01	Promote the conservation, recovery and enhancement of the landscape and underwater archaeological heritage, as well as the emergencies of historical and cultural value of considerable interest.

Planning Unit and vocations of use

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

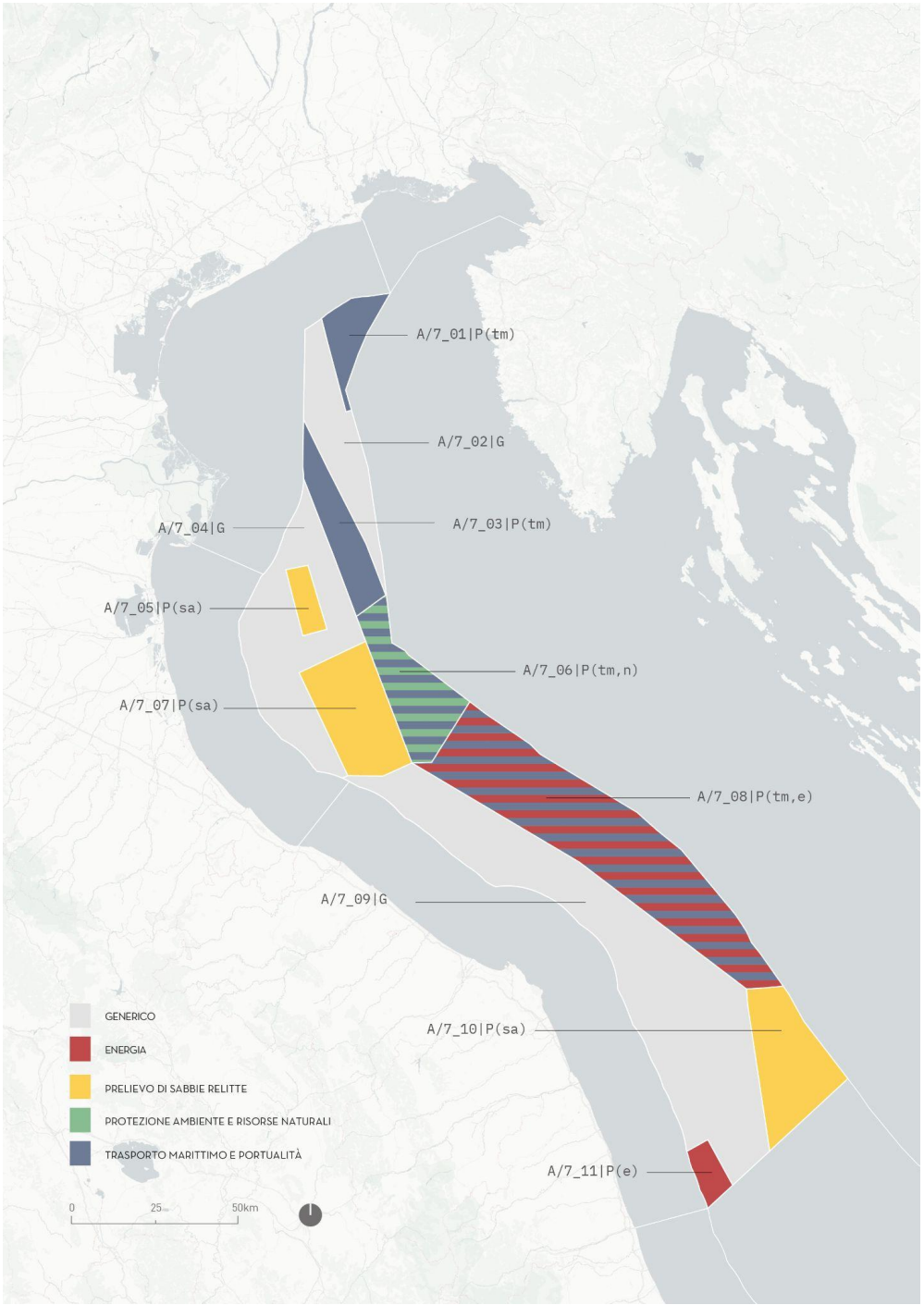


Figure 37 Identification of the planning units in sub-area A/7

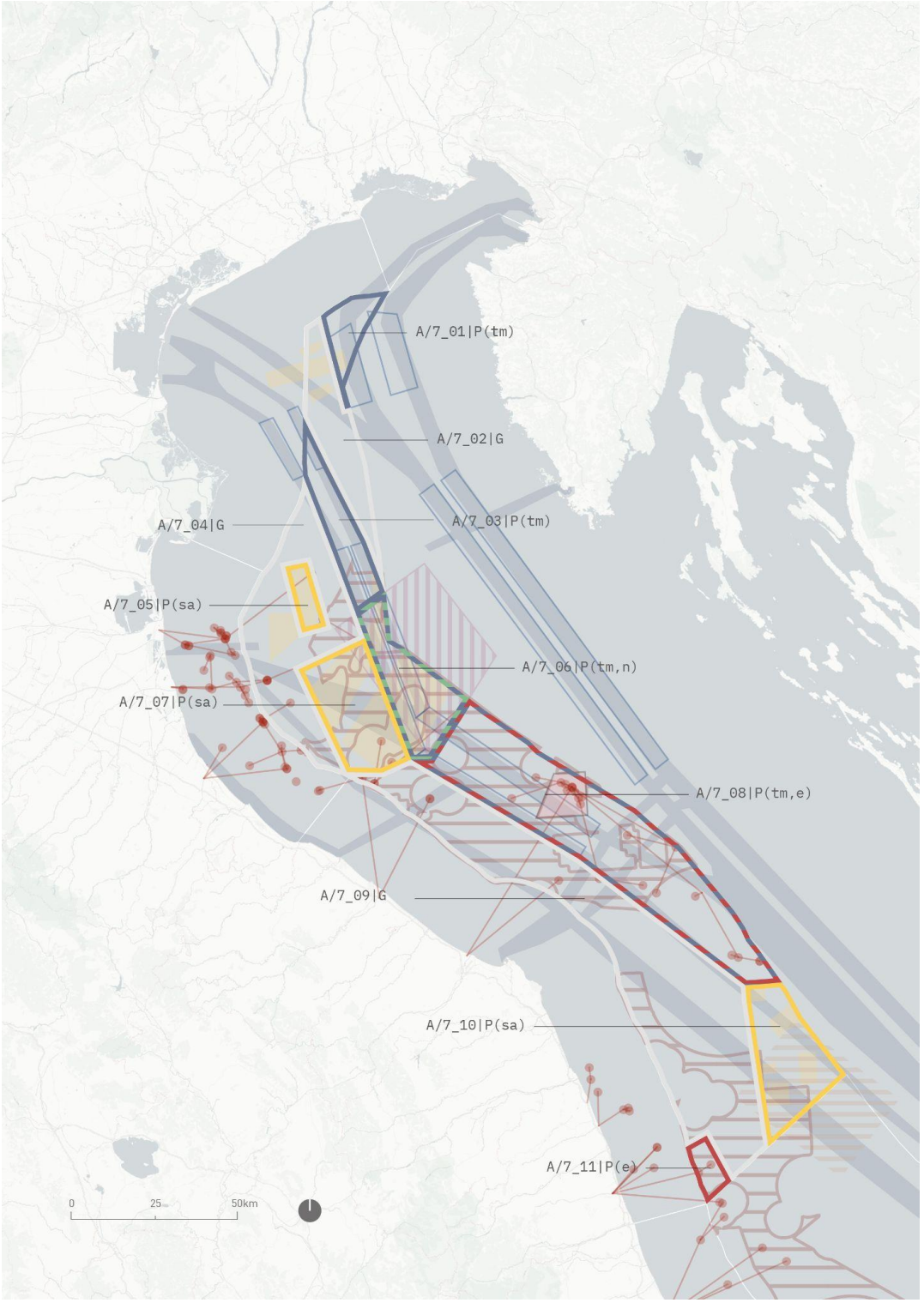


Figure 38 Overlap between the Principal Uses Map and the Planning Units of Sub-area A/7

7.3.8 Sub-area A/8 - Central-Southern Adriatic Continental Shelf

The main uses of the sea and coast present in the sub-area are depicted 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, fishing, protection of the environment and natural resources, protection of the landscape and cultural heritage, hydrocarbon exploration and production, and activities connected to military defense. The sources of the spatial data used are reported in Figure 39 and represent information available at the national level through the contribution of the Ministries involved in the MSP process.

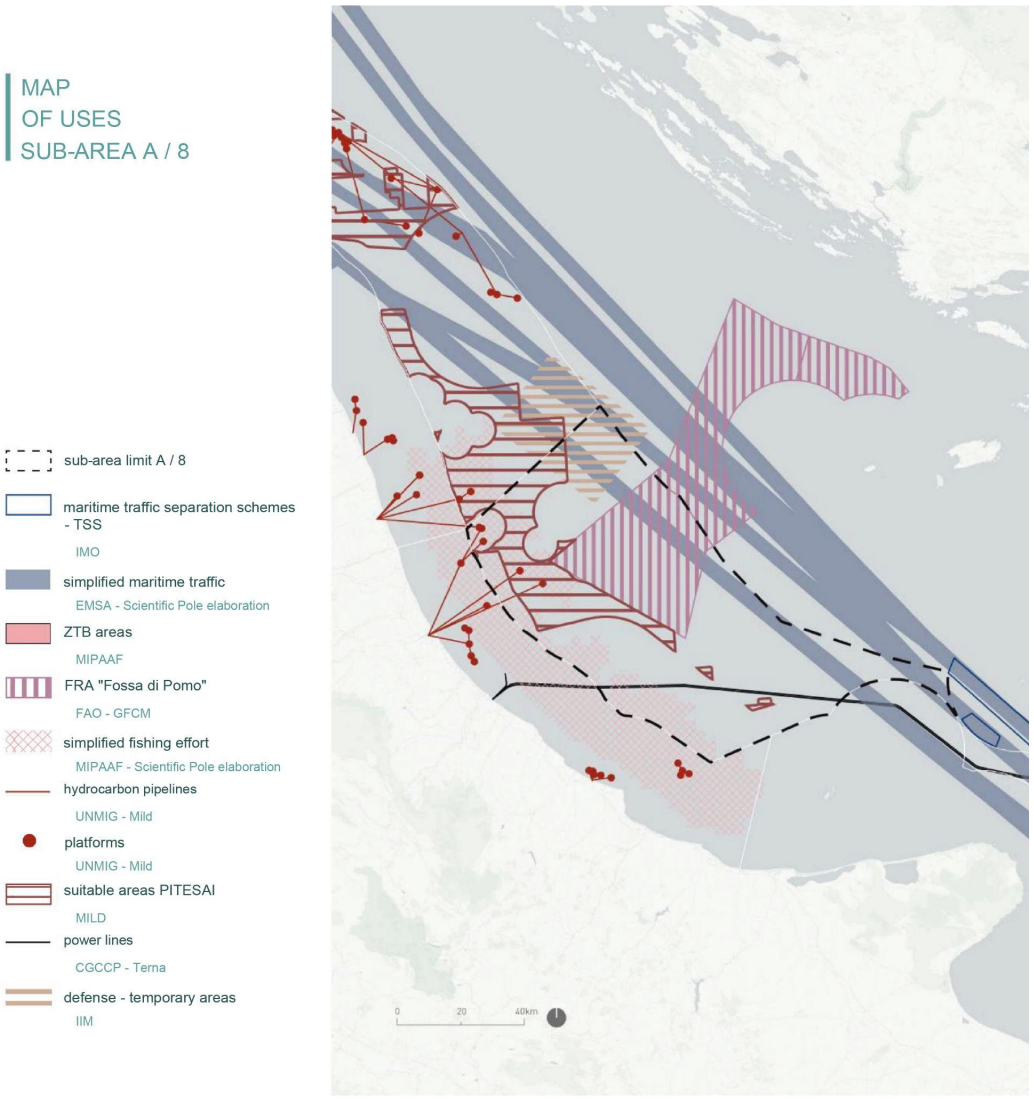


Figure 39 Summary map of the main uses in Sub-area A/8

Vision and specific objectives

The Adriatic Sea hosts historical and intense anthropic activities, some of which are traditionally relevant for their socio-economic value (e.g. fishing) and for which significant growth is expected in the next years (commercial and passenger maritime traffic), with potential increase of conflicts with other uses and pressures on the environment. In view of this, actions should be implemented to:

- ensure harmonious and sustainable systemic development of activities and infrastructure in the marine space, without compromising the functioning of ecosystems and their capacity to provide ecosystem services;
- create the conditions for a balanced and synergic development of anthropogenic uses.

The specific objectives for sub-area A/8 are set out in Table 10.

Table 10 Specific objectives for sub-area A/8

Reference sector	Code	Specific objective
Maritime transport and ports	(A/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
Energy	(A/8)OSP_E|01	Enable the exploitation over time of the already licensed methane fields in a manner safe for human health and the environment, reducing conflicts and increasing synergies with other sectors of the marine economy, in accordance with the PiTESAI guidelines and forecasts.
	(A/8)OSP_E|02	To favor the experimentation and use of technologies for the generation of energy from renewable sources in the sea, with particular reference to wind power, compatibly with the policies in force for the protection of the environment and the landscape
Fishing	(A/8)OSP_P|01	Promote the pursuit of sustainable use of fishery resources, taking into account the sustainability of stock exploitation, the presence of Essential Fish Habitats (EFH), the potential effects on the seabed, non-fished species (bycatch) and ecosystems, as well as protected areas and existing FRAs (Pomo Pit).
	(A/8)OSP_P|02	Promoting transnational action for concerted measures for the protection of resources and the sustainability of fisheries
Environmental protection and natural resources	(A/8)OSP_N|01	Consolidate the existing system of protected areas and conservation measures, within a framework of overall ecological coherence and by promoting the implementation of the main spatial measures foreseen in the MSFD Program of Measures
Landscape and cultural heritage	(A/8)OSP_PPC|01	SO 5.a To favor the conservation, recovery and valorisation of the underwater landscape and archaeological heritage, as well as of the emergencies of historical and cultural value of remarkable interest.

Planning Unit and vocations of use

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

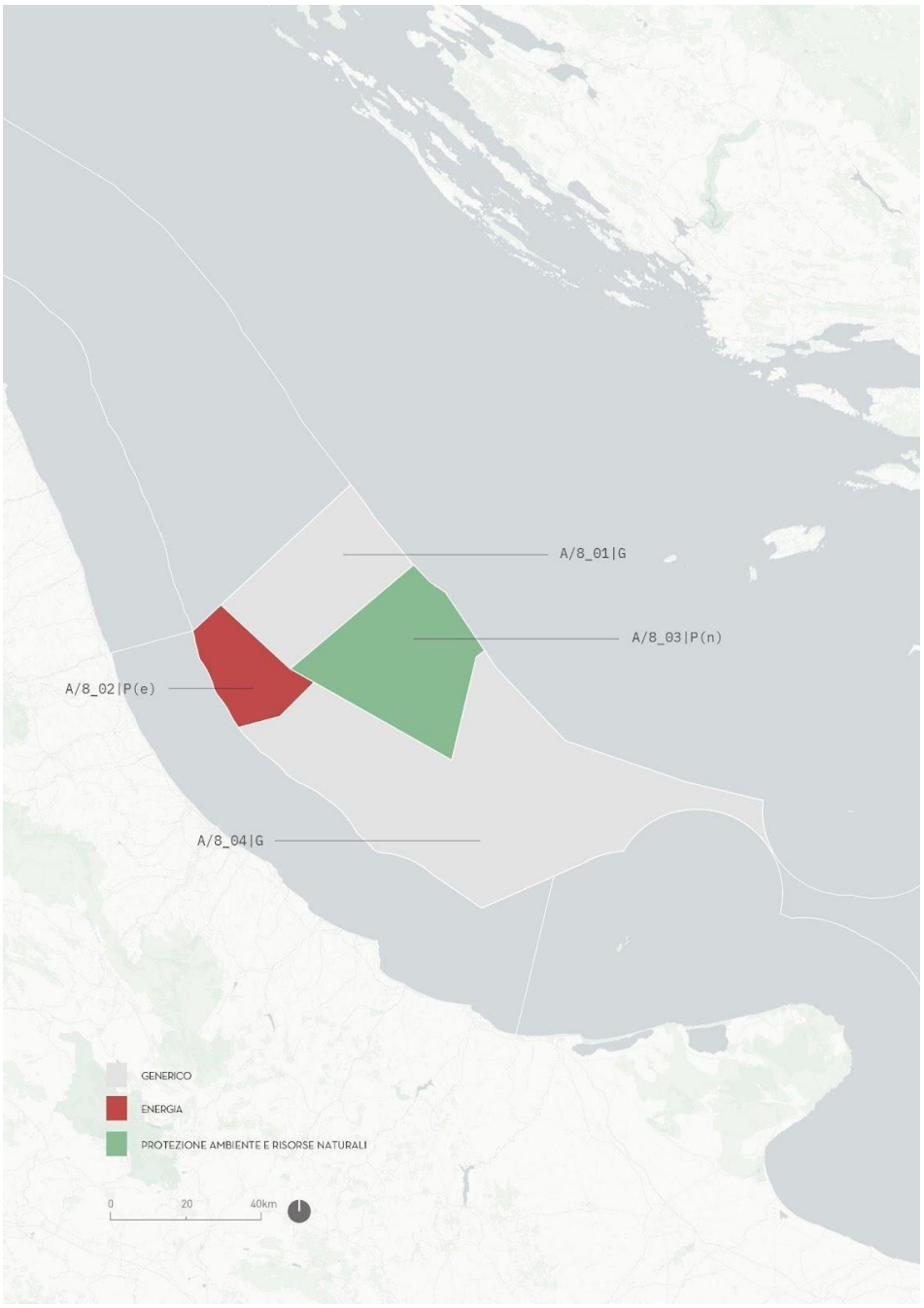


Figure 40 Identification of planning units in sub-area A/8

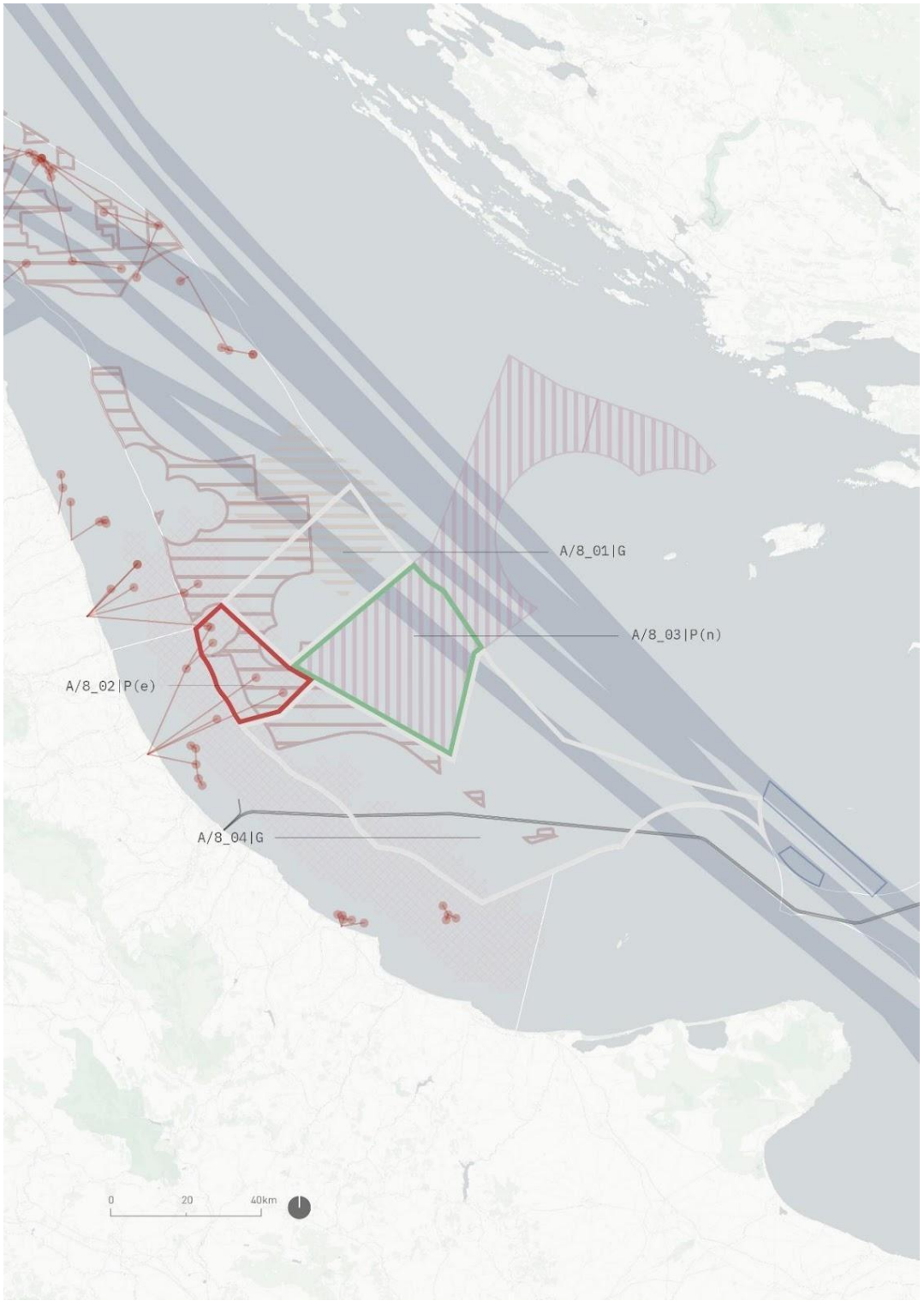


Figure 41 Overlap between the Principal Uses Map and the Planning Units of Sub-area A/8

7.3.9 Sub-area A/9 - Southern Adriatic Continental Shelf

The main uses of the sea and coast present in the sub-area are depicted in the Figure 42. 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, fishing, protection of the environment and natural resources, protection of the landscape and cultural heritage, hydrocarbon exploration and production, and activities connected to military defense. The sources of the spatial data used are reported in Figure 42 and represent information available at the national level through the contribution of the Ministries involved in the MSP process.

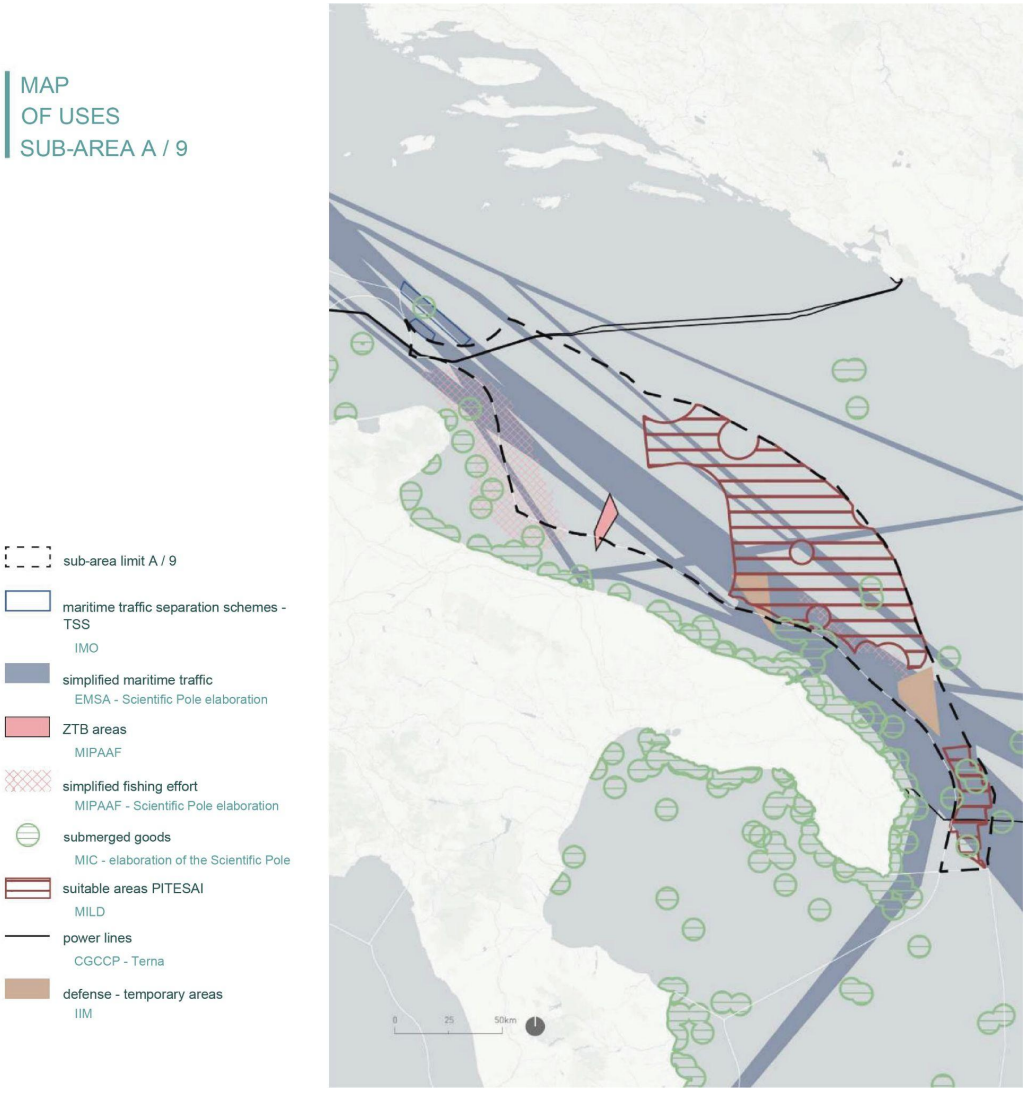


Figure 42 Summary map of the main uses in Sub-area A/9

Vision and specific objectives

The Adriatic Sea hosts historical and intense anthropic activities, some of which are traditionally relevant for their socio-economic value (e.g. fishery) and for which significant growth is expected in the next years (commercial and passenger maritime traffic), with potential increase of conflicts with other uses and pressures on the environment. In view of this, actions should be implemented to:

- ensure harmonious and sustainable systemic development of activities and infrastructure in the marine space, without compromising the functioning of ecosystems and their capacity to provide ecosystem services;
- create the conditions for a balanced and synergic development of anthropogenic uses.

The specific objectives for sub-area A/8 are set out in Table 11.

Table 11 Specific objectives for sub-area A/9

Reference sector	Code	Specific objective
Maritime transport and ports	(A/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
Energy	(A/9)OSP_E|01	Favoring the experimentation and use of technologies for the generation of energy from renewable sources at sea, with particular reference to wind power, compatibly with the policies in force for the protection of the environment and the landscape
Fishing	(A/9)OSP_P|01	Promote the pursuit of the sustainable use of fishery resources, taking into account the sustainability of stock exploitation, the presence of Essential Fish Habitats (EFH), potential effects on the seabed, non-fished species (bycatch) and ecosystems, as well as existing and planned protected areas and BZs.
	(A/9)OSP_P|02	Promoting transnational actions for concerted measures for the protection of resources and the sustainability of fisheries
Environmental protection and natural resources	(A/9)OSP_N|01	Consolidate the system of existing protected areas and conservation measures, within a framework of overall ecological coherence and promoting the implementation of the main spatial measures foreseen in the MSFD Program of Measures, with particular reference to the deep sea
Withdrawal of relict sands	(A/9)OSP_SA|01	Properly address the use and protection of underwater sand for beach nourishment, to be considered as a strategic resource for coastal defense and adaptation plans
Landscape and cultural heritage	(A/9)OSP_PPC|01	To promote the conservation, recovery and enhancement of the underwater landscape and archaeological heritage, as well as emergencies of historical and cultural value of considerable interest.

Planning Unit and vocations of use

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

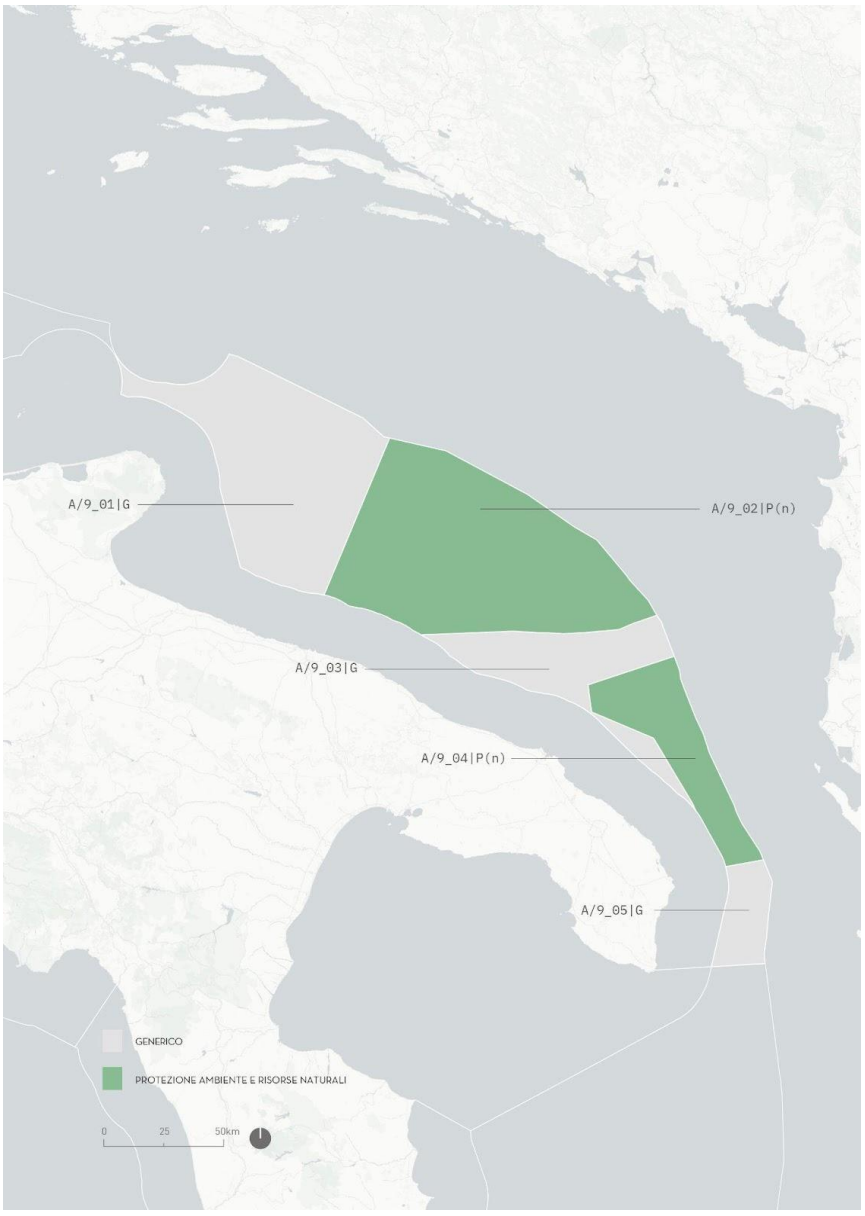


Figure 43 Identification of planning units in sub-area A/9

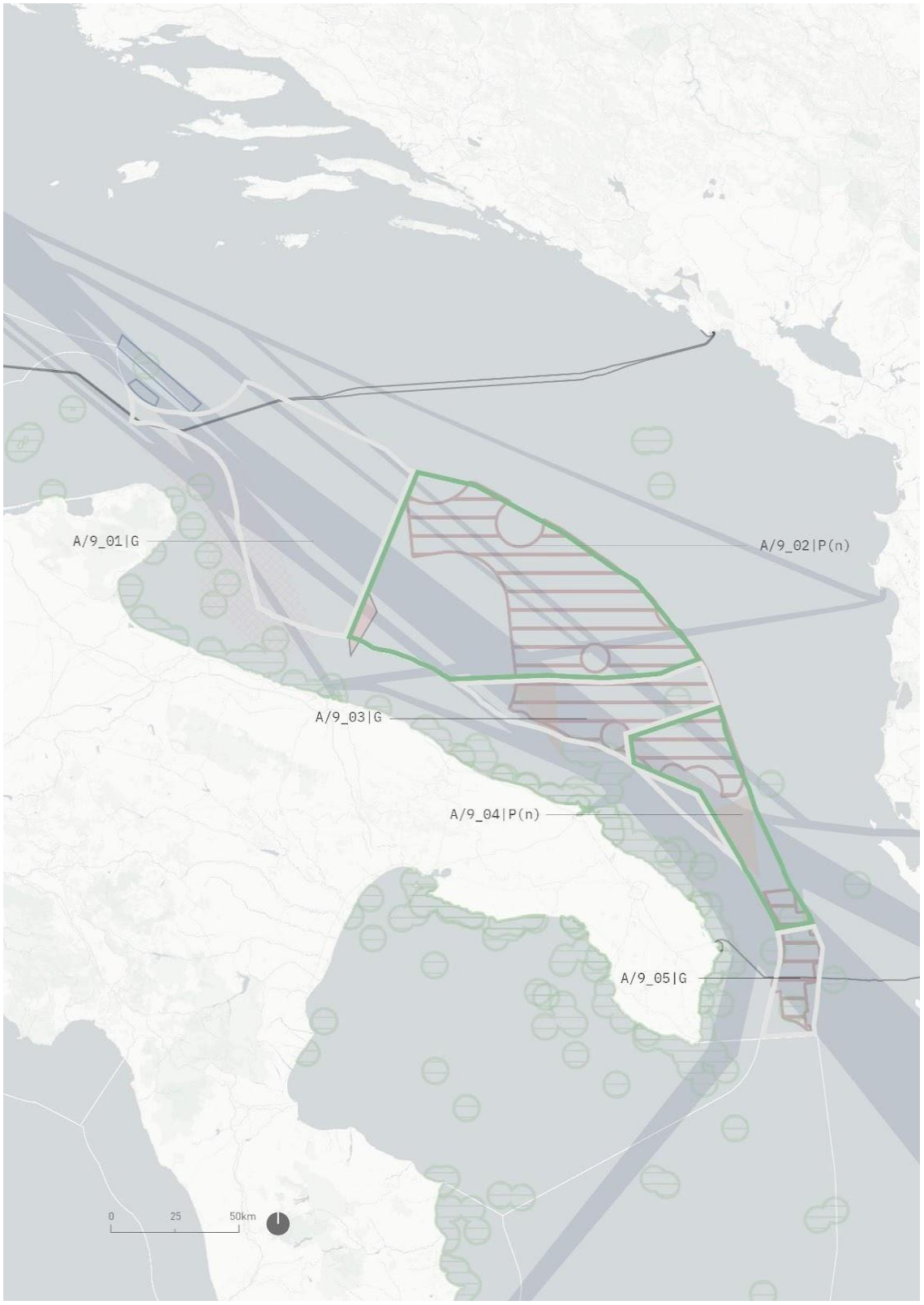

A/9_01|G
A/9_02|P(n)
A/9_03|G
A/9_04|P(n)
A/9_05|G
0
25
50km

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

7.4 Measures d i Plan

The management plan of the Maritime Area "Adriatic" is elaborated by integrating the existing discipline contained in sectoral regulations and in plans and programs in force (as provided by 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, complement it and where necessary amend 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, since 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 "Adriatic" Maritime Area, elaborated at the national and sub-area scale, will be subjected to the implementation, when the available economic-financial resources will result sufficient, without any budgetary consequences.

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

Table 4 - 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 organizational 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 measurement	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.	A	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.	M	A	MIMS

Code	Strategic objective	Reference use for measurement	Measure	Category (S, T, TE, M, G, FC, 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 development	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 favor 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 development	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 characterization and evolutionary trends of the sea economy.	A	A	MISE
NAZ_MIS|06	OS_SS|03 - Contributing to the European Green Deal	Sustainable development	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
NAZ_MIS|07		Sustainable development	Prepare a study on the contribution of MSP Plans to the achievement of national climate change reduction and carbon neutrality targets.	A	A	MITE

Code	Strategic objective	Reference use for measurement	Measure	Category (S, T, TE, M, G, FC, A)	Type (I/P/i/A)	Main actors
NAZ_MIS|08		Sustainable development	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 development	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 favor the transition towards a circular economy, envisaging proposals for specific actions for the sectors of the maritime economy.	A	I	MITE
NAZ_MIS|10		Sustainable development	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	I	MIMS, Port Authority
NAZ_MIS|11		Sustainable development	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

Code	Strategic objective	Reference use for measurement	Measure	Category (S, T, TE, M, G, FC, A)	Type (I/P/i/A)	Main actors
NAZ_MIS|12		Sustainable development	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
NAZ_MIS|13	OS_N|01 - Applying a coherent Ecosystem based approach (EBA) in the overall approach and guidance of Maritime Spatial Plans	Environmental 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	A, I	MITE, ISPRA

Code	Strategic objective	Reference use for measurement	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	Environmental 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	Environmental 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 measurement	Measure	Category (S, T, TE, M, G, FC, 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	Environmental 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 favor 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 ecosystem restoration as outlined in the proposed European Law on Environmental Restoration	Environmental 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		Environmental 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.	M	A	Research Institutions, Universities, ISPRA
NAZ_MIS|19	OS_PPC|01 - Supporting the landscape value of the coastal strip	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

Code	Strategic objective	Reference use for measureme	Measure	Category (S, T, TE, M, G, FC, A)	Type (I/P/i/A)	Main actors
NAZ_MIS|20		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 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	I	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
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

Code	Strategic objective	Reference use for measurement	Measure	Category (S, T, TE, M, G, FC, A)	Type (I/P/i/A)	Main actors
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		Landscape and cultural heritage	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).	A	I	MIC
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 extent 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.	M	A	Mi, Regions
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 Coordination Centre

Code	Strategic objective	Reference use for measurement	Measure	Category (S, T, TE, M, G, EC, A)	Type (I/P/i/A)	Main actors
NAZ_MIS|28	SO_P|01 - Encouraging the sustainable development of the fisheries sector	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		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	I	MIPAAF, ISPRA
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

Code	Strategic objective	Reference use for measurement	Measure	Category (S, T, TE, M, G, EC, A)	Type (I/P/i/A)	Main actors
NAZ_MIS|31	OS_P|03 - Promotion, development and spatial management of small-scale coastal fishing using sustainable techniques	Fishing	Stimulate 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		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 favoring 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	A	Regions
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 actions of joint spatial planning 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

Code	Strategic objective	Reference use for measurement	Measure	Category (S, T, TE, M, G, FC, A)	Type (I/P/i/A)	Main actors
NAZ_MIS|35	SO_P|05 - Encourage cooperation between States in order to achieve concerted measures for the sustainable management of activities of their national fisheries sectors	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	I	MIPAAF
NAZ_MIS|36		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	I	MIPAAF, MAECI
NAZ_MIS|37	OS_P|06 - Monitoring and combating illegal fishing	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		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 of the aquaculture sector	Aquaculture	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

Code	Strategic objective	Reference use for measurement	Measure	Category (S, T, TE, M, G, FC, A)	Type (I/P/i/A)	Main actors
NAZ_MIS|40		Aquaculture	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	I	MIPAAF, ISPRA, Regions
NAZ_MIS|41	OS_A|02 - Promote quality aquaculture and support the process of establishing AZAs (Allocated Zones for Aquaculture)	Aquaculture	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		Aquaculture	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
NAZ_MIS|43		Aquaculture	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.	A	A	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

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|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	A	MIMS, MITE
NAZ_MIS|47	OS_TM|02 - Promote the use of alternative fuels, reduce discharges into the sea, improve port 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	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		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 activities.	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 measurement	Measure	Category (S, T, TE, M, G, FC, 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
NAZ_MIS|51	OS_TM|05 - Promote the integration and dialogue between the planning systems in force in particular regarding the integration of port strategic 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

Code	Strategic objective	Reference use for measurement	Measure	Category (S, T, TE, M, G, FC, A)	Type (I/P/i/A)	Main actors
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
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.	M	A	MITE, MIC, Regions

Code	Strategic objective	Reference use for measurement	Measure	Category (S, T, TE, M, G, FC, 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	A	MITE, MIC, Regions
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 defense works, offshore aquaculture facilities, managed tourism, scientific research).	S, T, TE	P	MITE

Code	Strategic objective	Reference use for measurement	Measure	Category (S, T, TE, M, G, FC, A)	Type (I/P/i/A)	Main actors
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	P	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, favoring the energy transition objectives of the PiTESAI as far as the MSP is concerned, also through the sharing of data and portals.	S, M	A, I	MITE, MIMS
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 measurement	Measure	Category (S, T, TE, M, G, FC, 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 defense	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	A, I	MITE, Regions

Code	Strategic objective	Reference use for measurement	Measure	Category (S, T, TE, M, G, FC, 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 defense	Analyze 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
NAZ_MIS|63	OS_DC|03 - Adequately consider and address the issue of the use and protection of underwater sand for beach nourishment, to be considered as a strategic resource for coastal defense and adaptation plans	Coastal defense	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

Code	Strategic objective	Reference use for measurement	Measure	Category (S, T, TE, M, G, FC, A)	Type (I/P/i/A)	Main actors
NAZ_MIS|64		Coastal defense	Reduce conflicts and impacts related to the use of marine sands for defense works by: i) prioritizing 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	A, P	MITE, Regions
NAZ_MIS|65		Coastal defense	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
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.	S, G	A, I	Ministry of Tourism, ISPRA
NAZ_MIS|67	OS_T|02 - Promoting coherent planning actions on land and sea, also for tourism purposes	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.	A	A	Regions

Code	Strategic objective	Reference use for measurement	Measure	Category (S, T, TE, M, G, FC, A)	Type (I/P/i/A)	Main actors
NAZ_MIS|68		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
NAZ_MIS|69	SO_T|03 - Contributing to the diversification of tourism products and services and to countering the seasonality of demand for inland, coastal and maritime tourism	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	A, I	MIC, Ministry of Tourism, Regions
NAZ_MIS|70		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.	T, TE, S	A, I	MIMS, Regions

Code	Strategic objective	Reference use for measurement	Measure	Category (S, T, TE, M, G, FC, 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 targets) and monitoring of 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 45), which addresses and guides, through the development of six main steps, the process necessary to establish the integrated MSP.

Figure SEQ Figura * ARABIC45 Conceptual framework consisting of 6 Steps guiding the construction of the Integrated Monitoring Program (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 favoring 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 must 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 Phase 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 5), 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.

Table 5 Number of indicators identified for the MDP, broken down by Theme/Sector and by type.

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 natural resources	18	7	11	10	7	10
Landscape and cultural heritage	13	5	8	2	11	1
Maritime safety, navigation and surveillance	4	2	2	4	0	2
Fishing	33	16	17	18	15	20
Aquaculture	15	11	4	5	10	13
Maritime transport and ports	30	9	21	17	13	9
Energy	20	13	7	9	11	10
Coastal defense	16	11	5	11	5	15
Coastal and maritime tourism	16	7	9	9	7	9
Scientific research and innovation	13	7	6	0	13	6
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 46). 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.

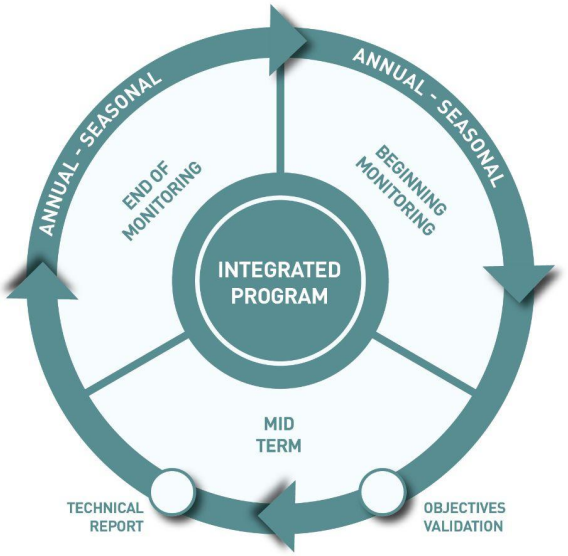


Figure SEQ Figura * ARABIC52 Graphic representation of the PdM in its characteristic of double circularity: an annual/seasonal cycle that foresees the continuous collection and organization of data (the first cycle coincides with the beginning of monitoring) and a broader cycle that foresees the mid-term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

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

The Plan developed for the "Adriatic" maritime area according to the national guidelines and the methodology adopted by the Technical Committee and summarized in the chapter 3as well as the Plans related to the other Maritime Areas, represents the strategic reference for the development in the next years of the sea uses and of the interacting coastal uses. 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 basic information functional to planning, Consolidation and development of the National Geoportal dedicated to PSM;
ii) 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);
v) 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.