

DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

MARITIME AND INLAND WATERWAY TRANSPORT

Italian Maritime Spatial Plans

"Ionian-Central Mediterranean" maritime area

Summary

August 2022



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

Index

1	The Maritime Spatial Plan of the "Ionian-Central Mediterranean" Maritime Area				
2	Dire	Directive 2014/89/EU and its transposition into national law			
3	Cha	racte	ristics of the Plan and its legal effectiveness	4	
	3.1	Leg	al effectiveness of the Plan	4	
	3.2 Adjustment and verification of conformity of administrative acts with the MSP and revupdating of the MSP following the adoption of administrative acts				
	3.3	.3 Structure and methodology for drawing up the Plans		9	
	3.4	Are	a of interest of the Plan and its spatial articulation	11	
	3.5	Dev	relopment of strategic level planning	13	
	3.5.	.1	Multi-scalar approach and spatial scale of planning	13	
	3.5.	.2	The four-dimensional dimension of planning	16	
	3.5.	.3	Vision and objectives of the Plan	16	
	3.5.	.4	Allocation of vocations and general prioritisation criteria	17	
	3.5.	.5	Methodology for the definition of the Plan measures	21	
	3.6	Inte	gration between Maritime Spatial Management Plan and Landscape Planning	22	
	3.7	The	Ecosystem-Based Approach in the Plan	28	
	3.8	Clin	nate change in the Plan	31	
4	Pha	se 1	- Initial status and current and expected trends	32	
5	Pha	se 2	- Analysis of interaction between uses and impacts on environmental components	37	
	5.1	Inte	raction analysis between uses in the marine space	37	
	5.1.1		Methodology of analysis	37	
	5.1.	.2	Analysis of interactions between uses	38	
	5.2	Ana	lysis of interaction between uses and environment	44	
	5.2.	.1	Methodology of analysis	44	
6	Pha	se 3	- Vision and strategic objectives	47	
	6.1	Intr	oduction	47	
	6.2	Stra	itegic objectives by theme/area	48	
	6.3	Visi	on	53	
7	Pha	se 4	- Strategic planning	55	
	7.1	Def	inition of sub-areas	55	
	7.2	Ove	erall planning framework	56	
	7.2.	.1	Integrated vision of maritime area	56	



DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES, MARITIME AND INLAND WATERWAY TRANSPORT Objectives and main sector shared for the supervision of the supervision of

	7.2.	2	Objectives and main sector choices of the plan for the maritime area	59
	7.2.	3	Coexistence and synergy between uses	67
	7.2. mar		Elements of attention related to single and multiple impacts on biodiversity pastal habitats	and 68
	7.2.	5	Land-sea interaction elements	75
	7.2.	6	Elements relevant to transnational cooperation	76
	7.3	Sum	mary of planning for each Sub-area	79
	7.3.	1	Sub-area IMC/1 - Southern Sicily territorial waters	79
	7.3.	2	Sub-area IMC/2 - Territorial waters of eastern Sicily	87
	7.3.	3	Sub-area IMC/3 - Territorial waters Eastern Calabria	94
	7.3.	4	Sub-area IMC/4 - Territorial waters of the Gulf of Taranto	100
	7.3.	5	Sub-area IMC/5 - Territorial waters Pantelleria and Pelagie Islands	110
	7.3.	6	Sub-area IMC/6 - Southern Sicily Continental Shelf	116
	7.3.	7	Sub-area IMC/7 - Ionian Continental Shelf - Central Mediterranean	122
	7.4	Plan	measures	129
8	Pha	se 5 -	Monitoring the Plan	148
	8.1	Intro	oduction	148
	8.2	Cond	ceptual framework for the development of the monitoring program	149
	8.2.	1	STEP 1 - Resume Plan Objectives	149
	8.2.	2	STEP 2 - Identifying the actors	150
	8.2.	3	STEP 3 - Define the indicators	150
	8.2.	4	STEP 4 - Integrating existing programs and new surveys	151
	8.2.	5	STEP 5 - Identify and evaluate sources of data and information	152
	8.2.	6	STEP 6 - Periodic Reporting	152
	8.3	Impl	lementation of the Monitoring Program	152
9	Pha	se 6 -	Activities to consolidate, implement and update the Plans	153
10	В	ibliog	raphy	154



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

1 The Maritime Spatial Plan of the "Ionian-Central Mediterranean" Maritime Area

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

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

The Plan has been drawn up in a coherent and coordinated way with the Plans for the "Adriatic" 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 IUAV University of Venice for the drafting of the Plans.

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

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

- establishes that the Ministry of Infrastructure and Transport (now the Ministry of Infrastructure and Sustainable Mobility) is the Competent Authority (art. 8), to which specific activities are assigned (art. 8, 9, 10, 11);
- establishes the Inter-Ministerial Coordination Table (TIC) at the Presidency of the Council of Ministers Department for European Policies (DPE), which includes all the central Administrations involved in marine-maritime issues (art. 6);
- establishes the Technical Committee at the Ministry of Infrastructures and Transport (now the Ministry of Infrastructures and Sustainable Mobility), as the Competent Authority, which includes five central Administrations and the Maritime Regions (art. 7);
- provides that the management plans of the maritime space are drawn up by the Technical Committee mentioned in article 7 and, before approval, are transmitted to the Interministerial Coordination Table mentioned in article 6, which certifies the correspondence with the planning process defined in the guidelines mentioned in article 6, paragraph 2. The maritime space management plans are approved by decree of the Minister of Infrastructures and Transport (now Ministry of Infrastructures and Sustainable Mobility), subject to the opinion of the Permanent



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

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 authorisations. Depending on the characteristics of the sub-areas and planning needs, the Plan provides more or less detailed indications, both in terms of spatial resolution and in terms of defining measures and recommendations.

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

3.1 Legal effectiveness of the Plan

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



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

single management act, which acquires the character of an "integrated plan" and of a "comprehensive plan", suitable for identifying the different uses of the maritime space.

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

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

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

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

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



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

terminology used textually takes up the content of the Directive, which leaves the "urban and rural planning" of the Member State unaffected).

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

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

For these plans, inclusion and harmonisation cannot be equivalent to that for plans whose scope is marine waters. For plans and programs whose scope of application is land, inclusion and harmonization by the new Maritime Spatial Management Plan concern only those aspects relevant to land-sea interactions, and the superordinate relationship of the Maritime Spatial Management Plan over land-based plans and programs 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, harmonisation (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 harmonise their forecasts by introducing the necessary modifications to improve the use of the maritime areas. On the other hand, with reference to existing plans and programs concerning land-based activities relevant to land-sea interactions, in accordance with the objectives set out in Directive 2014/89/EU the approach followed by the Italian legislator consists in having provided for a superordination relationship between plans that do not have the same scope of application, so that the Maritime Spatial Management



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

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 complies with the interests of the users and licensees of maritime space and regulates their behavior.

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. Finally, the Plan can regulate the behaviour of concessionaires and users, with provisions which, in this case, are binding not only for the administrations when issuing any extension measures, but also for individual concessionaires or users of the maritime space.

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

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

With reference to plans and programs concerning marine waters, the adjustment procedure is configured as a due activity, without margins of discretion. Where, on the contrary, the adjustment has to do with land plans and programs, the administration responsible for the Plan or program will have to pursue the objectives fixed by the Plan for the management of the maritime space, evaluating, at its own discretion,



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

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 programs or amendments to plans and programs that may affect maritime spatial management plans, the question of updating them arises.

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

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

This means that, in addition to the monitoring, if the regulatory framework, i.e. the discipline contained in the guidelines, or the factual framework, i.e. social, economic, environmental and cultural aspects, should change, the possibility of revising the Plan is recognised, based on criteria of "consistency" and "significance/relevance" of the new forecasts. In the latter case (change of 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, there are two different situations: the first one 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 one is characterised by the considerable relevance of such consequences.

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



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

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.

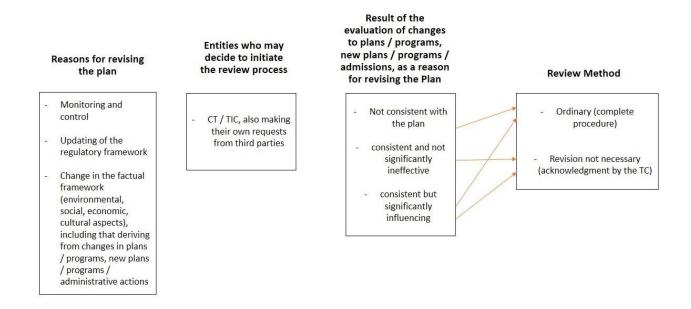


Figure 1 Outline of the review process of the Plans

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 contrast 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.



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

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 later on), starting from the definition of specific visions and objectives, up to the indication of vocations and measures, recommendations, addresses at local scale. Specific *research by design* approaches contribute to the definition of measures of a spatial nature on a local scale.

Phase 5 defines the characteristics of the Monitoring Program (PdM) which, in line with the provisions of the National Guidelines, has the objective of keeping track in space and time of the efficiency of the implementation of the Plans and of informing them of improvement measures in the event that these are deemed necessary, through adaptations and mid-term or end-of-term reviews of the Plans. 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.



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

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

3.4 Area of interest of the Plan and its spatial articulation

The drafting of the Italian Maritime Spatial Plans is implemented in three parallel and coordinated processes in the three Maritime Areas identified by the Guidelines (Adriatic, Ionian-Central Mediterranean, 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 neighbouring countries, made available by the Istituto Idrografico della Marina - IIM (e.g. 12mn limits, continental shelf limits);
- delimitations between marine sub-regions of the Marine Strategy Directive;
- boundaries of marine areas open to hydrocarbon exploration and production as identified by the MISE;
- virtual equidistance lines.

The delimitations reported in the following do not prejudice in any way the outcome of future negotiations with neighbouring Countries 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).

Ionian-Central Mediterranean Maritime Area

The "Ionian - Central Mediterranean" area (Figure 2) has an extension of about 176,310 km2 and is delimited to the North and West by the delimitation lines between the marine sub-regions "Adriatic Sea", "Ionian Sea - Central Mediterranean" and "Western Mediterranean" of the Marine Strategy Directive, as also indicated in Legislative Decree 201/2016, and to the East by the continental shelf boundary agreed with the neighboring country (Greece, 1977 and 2020). Along the Southern boundary, the continental shelf boundary with Malta according to the *Modus Vivendi* (1970) and with Tunisia (1971) and the delimitations derived from the perimeters of the marine areas open to hydrocarbon exploration and production identified by the MISE (zones C and G) were considered. In the South-Eastern part, the equidistance lines reported by Marine Regions (https://www.marineregions.org/gazetteer.php?p=details&id=5682; Flanders Marine Institute, 2019) were used.

Within it, the area is divided into 7 sub-areas, which will be further explained in Phase 4, 5 of which are within territorial waters.



DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

MARITIME AND INLAND WATERWAY TRANSPORT

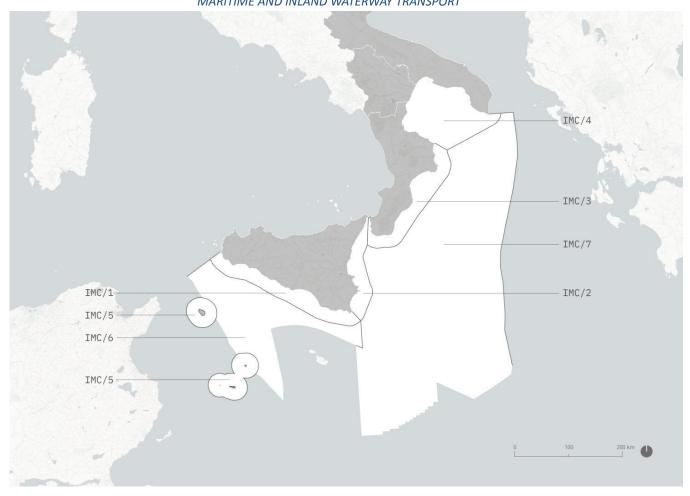


Figure 2 Delimitation and internal zoning of the "Ionian - Central Mediterranean" Area.



DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

MARITIME AND INLAND WATERWAY TRANSPORT

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 the strategic and specific objectives of the Plan, the overall framework of available information, the system of *governance* in place, the instances of stakeholders involved collected during the consultation process.

3.5.1 Multi-scalar approach and spatial scale of planning

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

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

- the possibility of scaling up objectives, choices and plan measures on the basis of the actual environmental characteristics and the system of uses of the areas, increasing the resolution where actually possible and necessary, on the basis of the existing cognitive framework, the objectives of the plan, the will of 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;



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

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

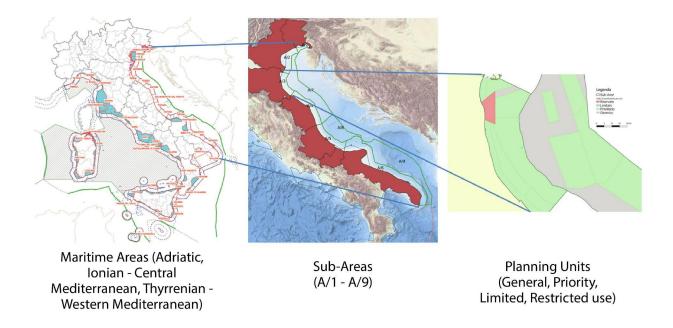


Figure 3 Spatial schematization within the Plans: from Maritime Areas to Sub Areas to Planning Units.

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. 3.5.5).

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



DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

MARITIME AND INLAND WATERWAY TRANSPORT

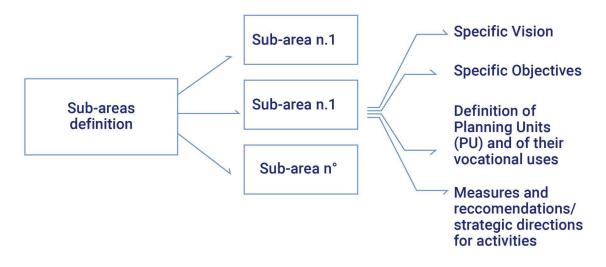


Figure 4 Outline of Plan content developed in each of the identified sub-areas.

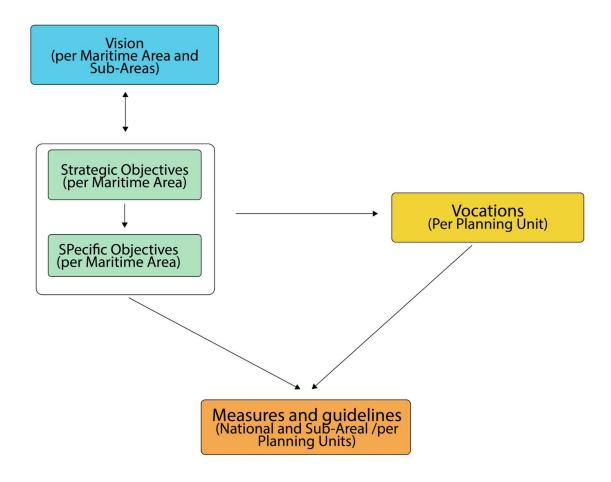


Figure 5 - Functional relationships between the main constituent components of the Plan.



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

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 minimising conflicts between existing activities, but also with anticipating and avoiding the emergence of conflicts in the future, in order to promote the harmonious development of maritime activities in the planning areas. It is necessary, therefore, to understand and direct the future development of the uses of the sea and the coast towards what is defined as "Vision". We can define "Vision" (Lukic et al., 2018), as "the preferred evolution of developments of maritime activities over a given time horizon, which has been generally agreed between those developing the vision or with various stakeholders. In some cases, a vision is considered the best agreed evolutionary scenario, implying that different scenarios must have been developed and discussed before the actual adoption of the vision."

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



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

In the Plan, with reference to the multi-scalar approach described in the paragraph 3.5.1paragraph, the cycle of defining the vision and objectives is repeated twice: once at the level of the Maritime Area (Vision and Strategic Objectives) and a second time at the level of each Sub-area (Vision and Specific Objectives), obviously maintaining consistency between the 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 cross-cutting principles (Sustainable Development, Protection and conservation of species, habitats and ecosystems, Landscape and cultural heritage) and 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 neighbouring Regions, and by the Regions submitted to the Technical Committee for the necessary evaluations of coherence with Vision and Strategic Objectives and harmonisation 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 prioritisation

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;



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

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

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

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

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

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

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



DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

MARITIME AND INLAND WATERWAY TRANSPORT

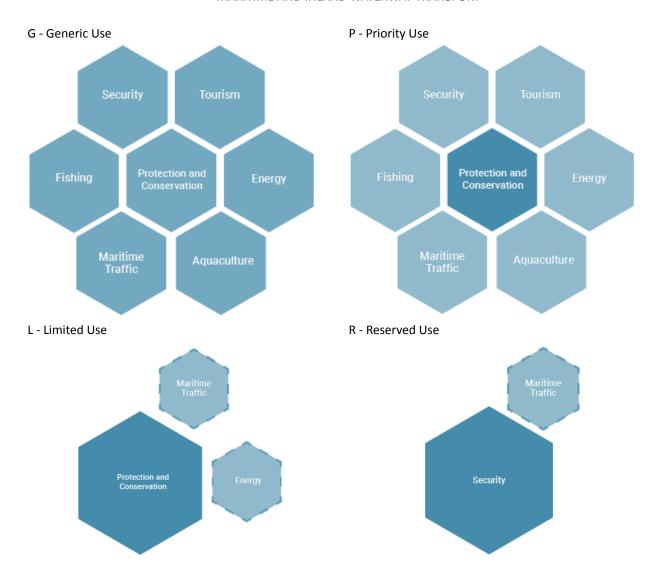


Figure 6 Graphical representation of the four typologies attributable to the Planning Units.

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

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



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

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

	Table 1 List of Cross-cutting Themes, Uses / sectors and sub-uses.				
	Uses / Sectors and Transversal Themes with "Strategic Objectives".	Code	Possible sub-uses		
	Sustainable development	-	-		
	Environmental protection and natural resources	n	-		
Transversal principles	Landscape and cultural heritage		Coastal landscape		
			Underwater cultural heritage		
	Coastal and maritime tourism	t	beach tourism experiential tourism (e.g. ecotourism, fishing tourism, diving, etc.) nautical tourism		
	Aquaculture	а			
	Fishing	р	commercial fishing artisanal fishing recreational fishing		
Uses and sectors	Maritime transport and ports	tm	Goods transport Passenger transport		
	Energy		Renewable energies		
			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 UPs				
	Telecommunications	tlc	-		
	Dredged sediment sea-diving	isd	-		
	Withdrawal of relict sands	sa	-		
	Infrastructure (industrial uses related to port activities)	i	-		



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

	Military Areas	d	-

For this reason, indications regarding the relevant environmental, landscape and cultural heritage aspects of each Planning Unit that support the definition of the compatibility of uses, not only with other uses or with the prevailing use, but also with the environmental, landscape and cultural aspects relevant to the specific unit are made explicit in the PU description tables. These indications are considered and expressed on the basis of available knowledge derived from studies or other ongoing processes, with particular reference to those related to MSFD, fisheries management, current landscape plans and the Water Framework Directive. Important references will also be derived from the indication of habitats and species of Community importance (Habitats and Birds Directives), or endangered species according to IUCN, or indications derived from ecologically or biologically significant marine areas according to the Convention on Biological Diversity. The attribution to the PUs of the specific indications regarding the sectors of use and/or priority themes with transversal value, singly or jointly, has been carried out, in strict coherence with the general objectives of the Maritime Spatial Planning Directive, with the aim of 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 UPs that have been given multiple priorities.

3.5.5 Methodology for defining Plan measures

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

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



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

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

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

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

As for scale, maritime spatial management plans identify:

- -measures and actions on a national scale, for the three maritime areas covered by the Plan: transversal and coordination measures;
- -measures and actions at sub-area scale: measures aimed at the sustainable development of the sectors, the promotion of coexistence between uses of the sea and the enhancement of synergies between them. For coastal sub-areas, measures/actions related to land-sea interactions are also identified. Wherever possible, measures are spatialised within the sub-areas in relation to the vocations identified in the different PUs;
- -any specific measures for individual PUs.

The choice of the content, type, scale and level of detail of each measure and 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



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

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

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

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



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

Integration structure

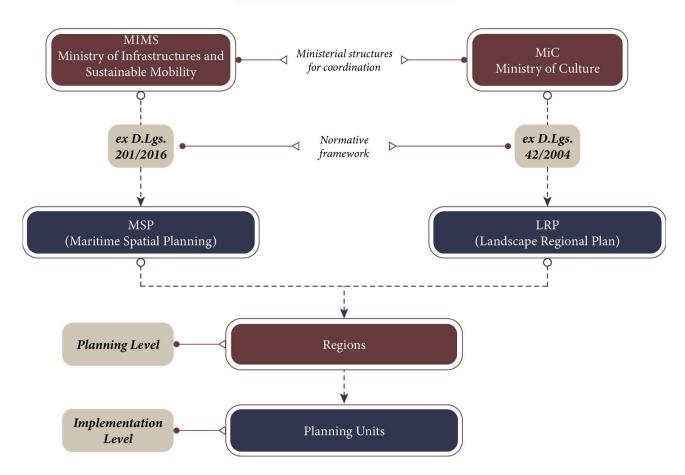


Figure 7 Interministerial Integration Structure

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

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



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

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 highlighted 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.



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

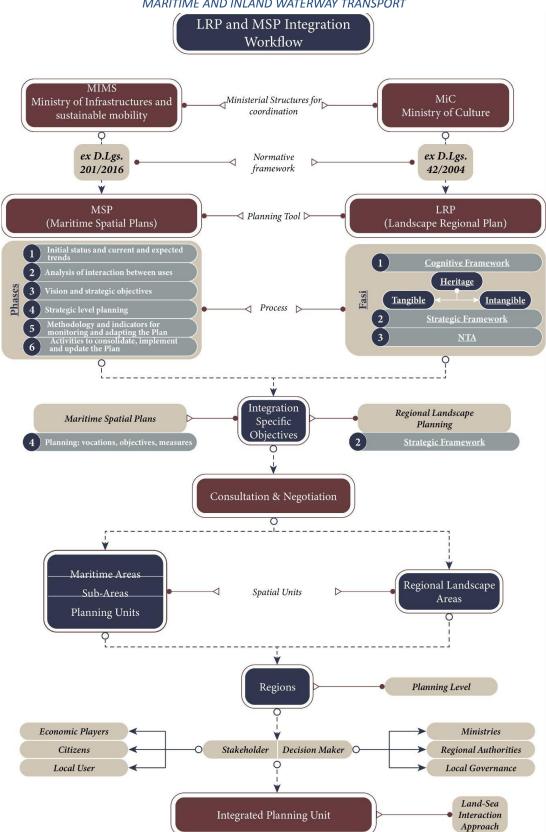


Figure 8 Workflow for the integration between MSP and LRP



DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

MARITIME AND INLAND WATERWAY TRANSPORT

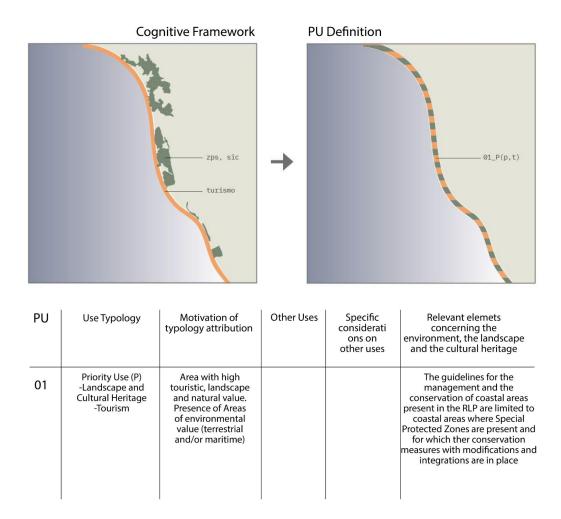


Figure 9 Sample Allocation Process for Planning Units



DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

MARITIME AND INLAND WATERWAY TRANSPORT

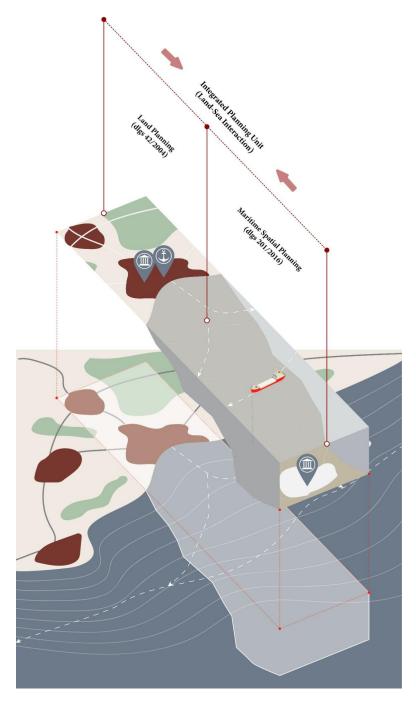


Figure 10 Concept of the coastal territorial unit

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



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

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

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

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

- 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, reserves.



DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

OKATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES MARITIME AND INLAND WATERWAY TRANSPORT

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) the areas with environmental protection value (e.g. Marine Protected Areas, Sites of Community Interest), and also the environmental components such as habitats and species prioritized by the Habitats and Birds Directives, and the state of the environment according to the MSFD Descriptors, (ii) the interactions with anthropogenic uses that may produce pressures and potential negative impacts on the same areas and components, and (iii) the potential benefits that arise from the areas with environmental protection value and the 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), and 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" in case they are exclusively dedicated to environmental protection, through, for example, the establishment of new marine protected areas, or the presence of marine protected areas or other instruments for environmental



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

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 the D.lgs.201/2016.

3.8 Climate change in the Plan

In this first planning cycle, the issue of 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.



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

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 Ionian-Central Mediterranean area covers an area of approximately 214,000 km² and includes the areas of the Ionian Sea and the Central Mediterranean Sea over which Italy has jurisdiction. The Central Mediterranean, located between the western and eastern Mediterranean, includes the Strait of Sicily and the Strait of Messina. To the southwest of the Sicilian coast is the island of Pantelleria, and further south, the archipelago of the Pelagie Islands, which includes Lampedusa and Linosa. The Ionian Sea, connected to the Tyrrhenian Sea by the Strait of Messina and to the Adriatic Sea by the Strait of Otranto, includes, in the area covered by the plan, the gulfs of Catania, Squillace and Taranto.

The Strait of Sicily is the transition area between the western and eastern Mediterranean. From a morphological point of view, it belongs to the continental shelf and slope, but other morphological sub-units are identified within it: basins, submarine mountains (*guyot*) and shallows also known as shoals or shoal. The platform is fragmented by basins of tectonic origin extending in the direction of the Sicilian coast. One of these separates the shoal area from the Sicilian coast, with depths of up to -800 m. The others, with greater depths, separate the Sicilian platform from the Tunisian platform: Pantelleria basin (depth - 1300 m), Linosa basin (depth - 1500 m), Malta basin (depth - 1700 m). The profile of the continental escarpment between Sicily and Tunisia is steep and irregular. The escarpment again becomes very steep to the east of the Malta Basin.

The Strait of Messina separates Sicily from the Italian peninsula and is the link between the Ionian Sea and the Tyrrhenian Sea. The narrowest part of this arm of sea is situated to the north, between Capo Peloro and Torre Cavallo where it has a width of 1.7 miles, while to the south it gradually opens up to reach a width of 7.5 miles, between Capo Scaletta and Punta Pellaro. In correspondence of the Ganzirri-Punta Pezzo junction there is a threshold whose highest part is about 80 meters from the surface. Starting from this section, the seabed slopes down rapidly until it reaches about 2000 metres in the stretch in front of Capo dell'Armi in the Ionian Sea and 500 metres in the Tyrrhenian Sea.

The Ionian Sea is the deepest basin in the Mediterranean (maximum depth of 5270 m in the Calypso basin, in Greek waters). The central part of the Ionian is free of islands, and these are also lacking on the western side under Italian jurisdiction. In the plan area, the continental shelf is rather wide in the Gulf of Taranto, where it collects the contribution of numerous watercourses from the Lucanian and Calabrian-northern slopes (the most important is the Crati River). On the Calabrian side, from the Gulf of Squillace to Cape Spartivento, the platform is very small and the escarpment is furrowed by numerous canyons and erosive



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

channels. The Sicilian side of the Ionian Sea and along the southern tip of Calabria has a very narrow continental shelf, almost non-existent, with the exception of the gulfs of Catania, Augusta and Noto and a very steep continental escarpment. To the west, the Ionian Sea is bounded by the Malta Escarpment, which, with a drop of 3,000 m, separates the Ionian Sea from the western Mediterranean.

Thanks to their peculiar hydrological and geomorphological characteristics, the area of the central Mediterranean and the Strait of Messina host unique ecosystems, of very high value in terms of biodiversity. The two areas are part of the migratory routes of many species of fish (many of commercial interest) and cetaceans. The whole area supports important endemic species and communities that interact with two adjacent basins, eastern and western, concentrating and redistributing an important flow of species.

In the Strait of Sicily, benthic communities are dominated by species with Atlantic affinity. Large prairies of *Posidonia oceanica* characterize the wide extension of the infra-littoral bottoms up to 40-50 m. The hard substrates of the infralittoral and of the deeper circalittoral bottoms are colonized by large populations of large brown algae such as Cystoseira, Sargassum and especially *Laminaria rodriguezi*. The sandy bottoms between 40 and 120 m host populations of calcareous red algae, the so-called 'maerl'. In the hard substrates of the circalittoral layer (between 30-50 and 150-200 m) there is a peculiar biocenotic series called 'coralligenous bottoms', thanks to the presence of red coral (*Corallium rubrum*). The hard bottoms of the deepest bathymetric zones, those of the bathyal layer, are characterised by biogenic structures produced by madrepores which generally form scattered lumps and give rise to 'white coral assemblages'.

The Strait of Sicily also represents a fundamental area for fish populations and has the function of *nursery*, reproduction and recruitment for many species of commercial interest. The area is therefore the most important fishing zone for large and medium-sized pelagics such as bluefin tuna, swordfish, amberjack, dolphinfish and skipjack, as well as demersal species such as hake, pink shrimp, Norway lobster, pike, dentex, mackerel and groupers. There are also large stocks of small pelagics in the area, such as anchovies, mackerel and sardines, which have allowed the development of an important canning industry in the area.

The Strait of Messina has unique biological communities and animal organisms and extremely rare algae and is a great reservoir of biodiversity. Because of its peculiarities and the algae and animals that populate it, it is considered a sort of "Atlantic Island" in the middle of the Mediterranean Sea. In specific areas of the Strait, where the *upwelling* phenomena are more intense, there are organisms belonging to the batipelagic fauna (commonly called abyssal fauna) which usually live at depths between 200 and 900 metres. Many species, strictly Atlantic, such as the "algae forest" (Laminaria sp), live in this area. The seabed is characterized by the abundance of coelenterates (sea anemones and corals), such as forests of yellow and red gorgonians. The fish biodiversity is allowed by a large number of species, such as groupers, breams, snappers, amberjacks.

The Strait of Messina is a crucial point for the migration of many species, located along one of the main routes of the Mediterranean. Among these, certainly the most important from an economic and environmental point of view are the large pelagic fish, including tuna, albacore, Atlantic bonito, Mediterranean spearfish and swordfish. In addition to pelagic fish, cetaceans also pass through the Strait of Messina; it is probably the most important route in the Mediterranean in terms of fish diversity. All species of dolphins present in the Mediterranean have been reported in the Strait, in addition to whales and sperm whales. Finally, the migration of large sharks has also been extensively documented in the Strait. A further



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

distinctive feature of the Strait of Messina is the presence of bathy-pelagic fauna (commonly called abyssal fauna), which, transported to the surface by the upwelling, can be easily found at points of turbulence, or stranded along the shore in particular weather conditions.

The Ionian Sea is considered a "sea of passage" due to the presence of typically Mediterranean fauna and flora, species characteristic of warmer, tropical waters, coming from the Suez Canal, and colder ones, coming from the Strait of Gibraltar. Alien species can be found here, such as the trigger fish, the barracuda, the parrot fish, the puffer fish and many others. The proliferation of the Caluerpa seaweed has been a cause for concern for years because of its attack on the posidonia meadows. The sandy and slightly sloping seabed typically hosts bivalve molluscs while the fish fauna is represented by species such as sole and tracina. In addition to the presence of Posidonia meadows, the seabed hosts expanses of algae such as Acetabularia and Mediterranean Corallina as the lithophyllum. There are gorgonians, numerous sponges and other marine phanerogams in addition to posidonia.

The fish fauna is represented by a variety of species of commercial value such as anchovies, sea basses, groupers, dentexes, dogfish, rays, breams, bluefin tuna, but also squids, cuttlefish, mantis shrimps and a wide variety of bivalve molluscs such as mussels, clams and date mussels. Among the species of particular environmental importance are starfish, sea anemones, seahorses. There are also many species of sharks, which often choose these areas as key feeding grounds or nursery grounds. For sea turtles the Ionian Sea is a key habitat, both for the seasonal migration linked to feeding and for that linked to the deposition in the increasingly numerous nesting sites.

The whole area has an enormous value, of world level, for its cultural, landscape and archaeological heritage. Syracuse is among the UNESCO world heritage sites. Marsala, Pantelleria, Capo Passero, Noto, Aci Trezza, Taormina are important places for the underwater archaeological heritage.

Thanks to its very high ecological, landscape and cultural value, the area in question is covered by numerous instruments of environmental and cultural protection, including numerous marine protected areas (MPAs), for example the MPA of Plemririo in Syracuse and Porto Cesareo in the province of Lecce, which are also Specially Protected Areas of Mediterranean Interest (ASPIM), the MPA of the Pelagie Islands and that of Capo Rizzuto; the ecologically or biologically significant marine areas (EBSAs) of the Sicilian Channel and the Southern Adriatic-Ionian Sea; the Critical Habitats for Cetaceans (CCH) of the waters around the island of Malta and south-east of Sicily and the Strait of Sicily; the Fisheries Restriction Areas (FRA) of the General Fisheries Commission for the Mediterranean (GFCM) the numerous areas of the Natura 2000 network including the Special Protection Area (SPA) of the Peloritani Mountains, Dorsale Curcuraci, Antennamare and the marine area of the Strait of Messina (ITA030042) which includes areas of strategic importance for the migratory flows of birdlife moving in the Mediterranean basin.

There are numerous maritime and coastal activities of national strategic interest in the area, including:

Maritime Transport: The strategic position in the centre of the Mediterranean Sea determines the
importance of the traffic to and from the ports located in the area but also of the routes through
the Strait of Sicily, along the Bosforo/Suez-Gibraltar route (containers, oil tankers). The maritime
area also includes the Strait of Messina, which is of strategic importance for the traffic connecting



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

the Eastern Mediterranean and the Ionian Sea with the Tyrrhenian Sea. Of relevance in the area is the passenger traffic between Sicily, Pantelleria, the Pelagie Islands and Malta.

- Fishing: the Strait of Sicily 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 fish (*Essential Fish Habitats*) of high commercial value. This makes this area an area of strategic importance at national and international level for the fishing sector. With 12,933 gross tonnage (GRT) (2017) Mazara del Vallo represents the main Italian fishing port with 206 vessels. Scientific assessments of the state of commercial stocks in the Italian seas are included in the National Triennial Program for Fisheries and Aquaculture 2017-2019 (MIPAAFT 2016) and are derived from data collected under the National Program for Alimentary Data Collection (EC Reg. no. 199/08).
- Aquaculture: the Ionian-Mediterranean Maritime Area hosts different productive realities, which
 include both ichthyic productions with systems in sea cages (e.g. Puglia, Calabria and Sicily) and
 mussels breeding in sea systems (some plants are distributed along the Apulian coast).
- Tourism system: The whole area hosts coastal sites with a tourist vocation. Syracuse, declared a UNESCO World Heritage Site, together with the Rock Necropolis of Pantalica, is an important tourist destination. A little further north, along the Sicilian coast, is Taormina, one of the most important international tourist centres of the Sicilian region, it has been one of the main tourist destinations in Europe since the nineteenth century. Isola Capo Rizzuto, in Calabria, with its famous marine reserve, is another destination of excellence for tourism in the area, together with Lampedusa, the Pelagie archipelago and many others.
- Marine areas for the exploitation of hydrocarbons and renewable energy at sea. The energy sector is of high interest for the area: marine areas open to the exploration and production of hydrocarbons are located in it, in particular zones C and G in the Strait of Sicily and part of zone F in the Ionian Sea. The area is crossed by important electricity and gas pipelines, both existing and planned, such as the pipelines of the Transmediterranean gas pipeline that connects Algeria to Italy via Tunisia and arrives in Italy at Mazara del Vallo. The area also has development prospects in relation to offshore renewable energy. A plant for the exploitation of wind energy with fixed foundation is currently under construction (Renexia Project, total capacity of 30 MW and expected production of 80 GWh) in the Gulf of Taranto. The area of the plant in this case is close to the coast (about 3 km).
- Security and Defense. Due to its position in the centre of the Mediterranean, the area is of strategic interest for activities related to surveillance at sea, security and national defense. The area hosts two of the three maritime arsenals, in Augusta and Taranto with the Old Naval Station overlooking the Mar Piccolo and the New Naval Station on the Mar Grande. The port of Augusta is the headquarters and operational base of the Command of Patrolling Forces for Surveillance and Coastal Defense (COMFORPART). Messina is also home to a military arsenal.



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

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 analysed 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 II portale del mare" -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.

1

¹ https://www.sid.mit.gov.it



DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

MARITIME AND INLAND WATERWAY TRANSPORT

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

5.1 Analysis of interaction between uses in marine space

5.1.1 Analysis methodology

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

The compatibility matrix adopted by this Plan was developed from what was already available in the literature. Starting from the matrices developed in particular in the study by 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 evaluations on the evolution of interactions expected for the next decade were carried out on the basis of an examination of the development trends of each sector (Phase 1), identifying for each interaction an increasing, stable or decreasing trend. Finally, the compatibility matrix and the three interaction matrices were integrated and revised in the light of the specific knowledge of the various experts involved in the process of formulating the Plan, in order to return 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



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

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



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

	Transport	Tourism	Energy Production - Hydrocarbons	Routes for submarine cables and pipelines	Aquaculture - shellfish faming	Aquaculture-pisciculture	Trawling	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	Renewable energy production	Scientific research
Transport	↑4, 31						**									
Tourism	↑16															
Energy Production - Hydrocarbons	19	↔ 8														
Routes for submarine cables and pipelines																
Aquaculture - shellfish farming	130	个6														
Aquaculture-pisciculture	130															
Trawling	↔5,13, 15	↔ 35	↓10,12,13	↔ 25			↑11,18									
Stationary fishing gear	↔13, 15	↔ 35	↓10,12,13													
Small-scale coastal fishing	↔13 ,15	↑1, 35	↓10,12,13				↑ 3									
Temporary military use	↑34				↑28	↑28	↓ 27	↓ 27	↓ 27							
Permanent military use																
Extraction of raw materials																
Nature and species conservation sites and protected areas	↑14.21,2 2, 32	↑2, 26	↑20				↑17, 19, 23		↑23	↑29	↑29					
Underwater cultural heritage		个7, 33														
Energy production from renewable sources	↑24															
Scientific research																

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

Annex1_Ionian_Central Mediterranean.xls)

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

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



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

On the basis of the information available and analysed, it clearly emerges that the Strait of Sicily is the area characterised by the greatest conflict, above all due to the presence of intense exploitation for fishing purposes, which is superimposed by maritime transport (international and local routes) and, to a lesser extent, the presence of areas under concession for the extraction of hydrocarbons in areas of high ecological value. Local interactions between different uses are expected in port areas (emblematic case of the port of Taranto) as well as in the Strait of Messina (interference between different types of traffic, with possible impacts also on environmental components along the coast).



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



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

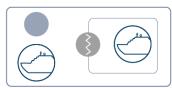
TABLE OF INTERACTIONS 1







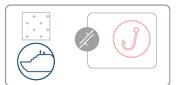
MARITIME TRANSPORT



Port areas: interaction between different types of transport.



Area of overlapping of routes between different types of maritime transport (passengers and goods).



Overlap between maritime traffic routes and fishing areas.

ENERGY



Hydrocarbon energy production area and related extraction and transport infrastructures: interactions with fisheries.



Italy-Tunisia and Italy-Libya gas pipelines: interactions with fisheries.



Plant with wind turbines at the port of Taranto: possible synergies.

MILITARY



Temporary prohibitions to navigation for military exercises.

Figure 13 (b) Meaning of the interactions reported in the map of Table 1 for the Ionian - Central Mediterranean maritime 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



DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

MARITIME AND INLAND WATERWAY TRANSPORT

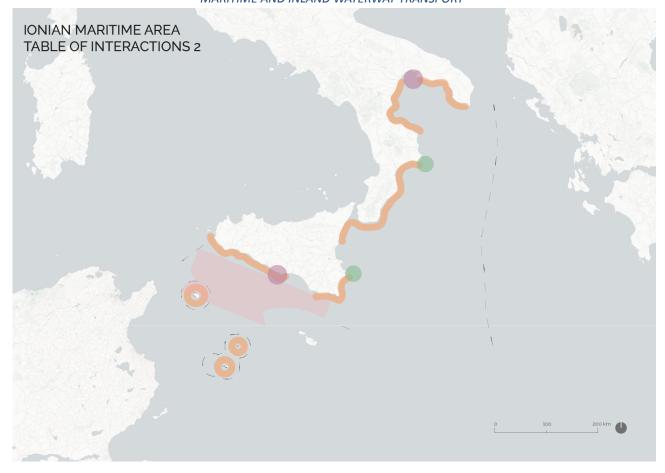


Figure 14 (c) Graphic representation of synthesis on a map of the main interactions between uses in the Ionian - Central Mediterranean maritime area (Table 2). The boundaries of the represented forms do not correspond to precise geographical references but graphically identify generic macro-areas of analysis



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

TABLE OF INTERACTIONS 2







AQUACULTURE



Aquaculture: conflicts in the port area (impact on the environmental quality of maritime transport).

FISHING



Fisheries: intra-sectoral conflicts between different fishing fleets, national and foreign and between different fishing mètier.

NATURE



Interaction between nature conservation sites and fishing: possible synergies with small-scale coastal fishing in protected marine areas.

TOURISM



Forms of ecotourism between tourism and small-scale fishing, tourism and nature conservation sites, tourism and underwater cultural heritage.

Figure 15 (d) Meaning of the interactions reported in the map of Table 2 for the Ionian - Central Mediterranean maritime 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



DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

MARITIME AND INLAND WATERWAY TRANSPORT

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

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

The first part of the analysis aims to identify potential pressures and benefits arising from areas of environmental protection value already established or defined through national or international processes as defined by environmental and marine protection policies. In Part 1, the areas with environmental protection value that have already been officially established or recognised by the competent national bodies (e.g., Marine Protected Areas), or by international bodies (e.g., Pelagos, Ecologically and Biologically Significant Areas) were highlighted for the three maritime areas. 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 16). The location of the areas is indicative of the presence of environmental components with naturalistic value, but has no normative, legal or binding value.

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

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

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

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



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

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

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

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

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

The areas of environmental protection value already officially established or recognized by 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 16. 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.



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

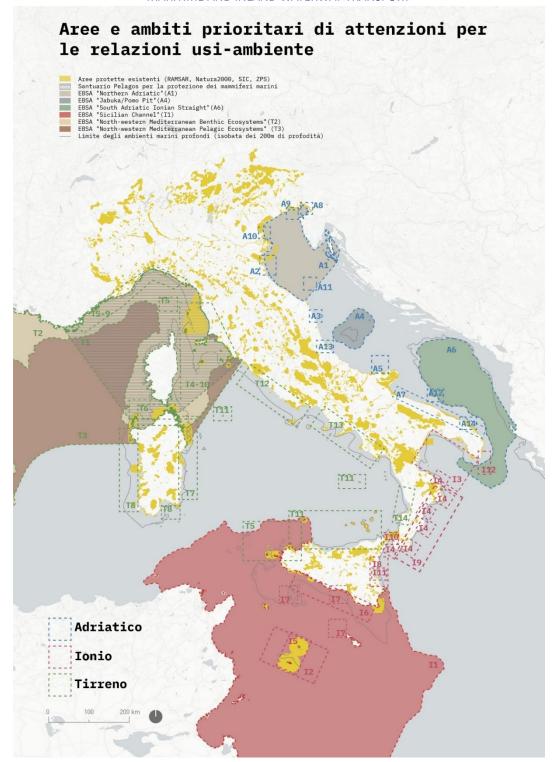


Figure 16 Priority areas and areas of attention for the use-environment relations. The areas are identified through alphanumeric codes, A= Adriatic Maritime Area, I= Ionian and Central Mediterranean Maritime Area, T= Tyrrhenian and Western Mediterranean Maritime Area; EBSA = Ecologically or Biologically Significant Marine Areas.



DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

MARITIME AND INLAND WATERWAY TRANSPORT

Phase 3 - Vision and strategic objectives

6.1 Introduction

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

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

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

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

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



DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

MARITIME AND INLAND WATERWAY TRANSPORT

- Maritime transport and ports
- Exploration and extraction of minerals and hydrocarbons
- 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 <u>focus</u> on what is required and desired for the MSP Plans, trying to identify and indicate what each theme/sector primarily pours into the Plans (sector objectives of particular relevance to the Plans, because of their spatial declination or their general relevance) and what it asks of the Plans (sector objectives to the achievement of which the Plans are expected to make a relevant contribution).
- An indication of greater or lesser importance than is indicated more broadly in the guidance documents considered, where not a real priority.

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

6.2 Strategic objectives by theme/sector

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



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

The 42 strategic objectives identified are summarised in Table 2 and constitute a unitary and integrated *corpus* that contributes to forming a Vision for the development of the three maritime areas and, specifically, of the "Ionian-Mediterranean Central" 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 17 which also includes the various themes/sectors/uses considered. The Vision that derives from principles and objectives is described in the paragraph 6.3.

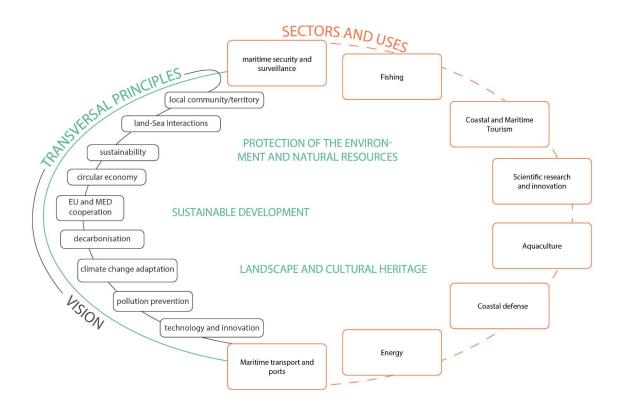


Figure 17 Principles that underpin the desired development of the maritime sectors and generate the Vision for the Plan.



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

Table 2 Strategic objectives of the Plan.

	THEMES/SECTO RS/USES	Code	OBJECTIVES OBJECTIVES
Transversal	Sustainable development	OS_SS 01	Developing a sustainable marine economy, multiplying growth opportunities for marine and maritime sectors
principles		OS_SS 02	Contribute to the National Strategy for Sustainable Development
		OS_SS 03	Contributing to the European Green Deal
		OS_SS 04	Fully grasp the economic and environmental sustainability opportunities arising from the circular economy
	Environmental	OS_N 01	Apply a consistent Ecosystem Based Approach (EBA) at all stages of drafting Maritime Spatial Plans
	protection and	OS_N 02	Supporting the extension of EU marine protection to 30% by 2030
	natural resources	OS_N 03	Transpose and promote the implementation of the main space measures foreseen in the MSFD Program of Measures
	resources	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	Encourage 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 unauthorised building in coastal areas
Sectors/Use	Maritime	OS_S 01	Preventing pollution from ships and contributing to the implementation of the measures of the Marpol Convention
S	safety, navigation and surveillance	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



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

THEMES/SECTO RS/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	OS_TM 01	Promoting sustainable development of maritime transport and reducing its negative impacts
transport and ports	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



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

THEMES/SECTO RS/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	OS_T 01	Promoting sustainable forms of coastal and maritime tourism
maritime	OS_T 02	Promoting coherent planning actions on land and sea, also for tourism purposes
tourism	OS_T 03	To contribute to the diversification of tourist products and services and to counter the seasonality of demand for inland, coastal and maritime tourism
Scientific research an	OS_RI 01	Target marine research activities on the knowledge needs of the Plan to strengthen and support the planning process and its sustainable growth objectives
innovation	OS_RI 02	To encourage the development of technologies and innovative solutions to be used to improve the effectiveness of the Plan and to promote their dissemination in the various sectors of the marine economy and in the various marine areas
	OS_RI 03	Support the maintenance and consolidation of the observation network and specific needs for experimentation and research, also in order to evaluate the effects and effectiveness of the Plan and support its updating



DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

MARITIME AND INLAND WATERWAY TRANSPORT

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



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

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



DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

MARITIME AND INLAND WATERWAY TRANSPORT

7 Phase 4 - Strategic planning a

7.1 Definition of sub-areas

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

- jurisdictional boundaries, where defined (12mn limits, existing agreements about the continental shelf)
- regional administrative limits
- perimeters of the geographical sub-areas of fishing (FAO-GFCM GSAs)
- boundaries of marine areas open to hydrocarbon exploration and production identified by MITE (formerly MISE).

Regional administrative boundaries were considered in order to identify, wherever possible, portions of the maritime space of territorial waters falling under the competence of a single region. In the case of the Gulf of Taranto, however, priority was given to the need to identify a unitary area, representative of the unitary identity, at a geomorphological and environmental level, of this marine area. In this sense, an interregional sub-area has been identified. Similarly, as far as the Strait of Messina is concerned, the physiographic unity and the uniqueness of the maritime space have been considered, identifying harmonised planning choices, respecting the essential functions and in a perspective of planning balance between the two facing regions (Sicily and Calabria).

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

The perimeters of the marine areas open to the exploration and production of hydrocarbons identified by MITE as reference areas for activities in the sector have been considered, as well as on the basis of their morpho-bathymetric characteristics (200m isobath line) which are in any case of interest for the zoning of the marine space.

In the Figure 18 is shown the zonation identifying 5 sub-areas in territorial waters (IMC1-IMC5) and 2 sub-areas in continental shelf areas (IMC6-IMC7), as specified below.

- IMC1 Territorial waters of southern Sicily
- IMC2 Territorial waters of eastern Sicily
- IMC3 Territorial waters of eastern Calabria
- IMC4 Territorial waters of the Gulf of Taranto
- IMC5 Territorial waters of Pantelleria and Pelagie Islands
- IMC6 Southern Sicily Continental Shelf
- IMC7 Ionian Continental Shelf Central Mediterranean.



DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

MARITIME AND INLAND WATERWAY TRANSPORT

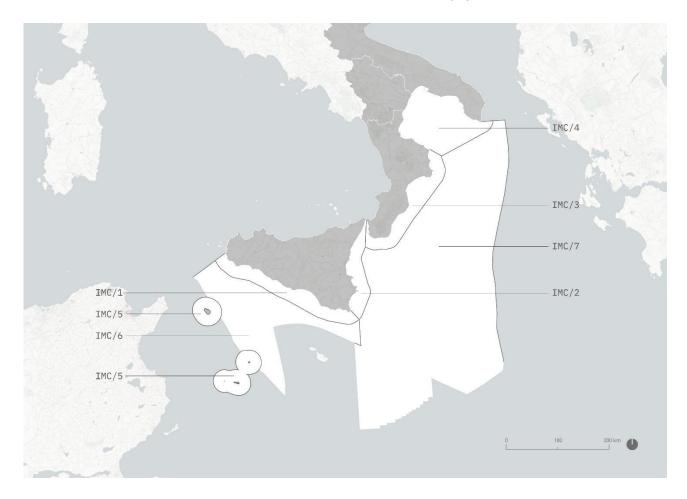


Figure 18 Definition of the sub-areas of the Ionian - Central Mediterranean maritime area

7.2 Overall planning framework

7.2.1 Integrated vision of maritime area

The maritime economy and its sustainable development are of strategic importance for the Ionian - Central Mediterranean area. The development strategy in the area is hinged on the Sustainable Development Goals (SDGs), identified by the National Strategy for Sustainable Development and the 2030 Agenda, and has as its objective the growth and balanced development and projected in the medium to long term of the maritime sectors, mature or emerging, in ways that ensure the achievement and maintenance of the good environmental status of the sea, which enhance the vocational characteristics of the territories and the welfare of coastal communities and the entire national community.

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



DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

MARITIME AND INLAND WATERWAY TRANSPORT

The very high environmental values of the area, in terms of habitats and species and ecosystem services, require the full implementation of pollution prevention actions - in particular those generated by maritime traffic and ports - and the protection of habitats and species foreseen by existing plans. Concrete opportunities are also pursued for the coordination and extension of the existing instruments for the protection of marine ecosystems, also in a cross-border perspective. Environmental restoration is used as a tool for active intervention in the most polluted and degraded areas, with particular reference to those in which contaminated Sites of National Interest (SIN) are located, whether coastal or with and/or with portions overlooking the sea. The landscape, the cultural heritage and the submerged archaeological heritage in which the maritime area is particularly rich represent a fundamental priority for conservation and enhancement, in themselves but also as indispensable resources for the tourism sector.

The safety of navigation, maritime safety and surveillance are intensified and extended, particularly in the areas of the Strait of Sicily subject to transits of vessels linked to migratory phenomena, and along the southern coasts of Sicily, as well as in all the ports of the area. Coastal control, legality and safety in port infrastructures, the management of situations related to vessel traffic associated with migratory flows from the coasts of North Africa, fishing surveillance and the protection of operators in the sector are fully implemented, strengthened and extended.

Maritime transport, in all its components, represents, today and in the future, a strategic activity. The prospects for further growth of the sector in the area and in the entire Mediterranean require consolidating its transition towards environmental sustainability. Innovative integrated solutions for intermodality are being developed in port areas, guaranteeing maritime continuity for passengers and goods between sea and land, with particular attention to the smaller islands.

The fishery contributes in a fundamental way to the sustenance of the economies of the territories facing the maritime area, contributing to characterize the maritime traditions and the socio-cultural values. Fishing is developed in a sustainable and efficient way, pursuing a sustainable use of the ichthyic resources, with the aim of protecting and reconstituting the stocks and favouring the development of the small fishery, also in synergy with other sectors (e.g. tourism, enogastronomy, local distribution chains, processing industry), in order to increase the product value chain. Aquaculture is developed according to characteristics of full environmental sustainability, taking advantage of the opportunities offered by the latest practices and technologies and synergies with other maritime sectors (multi-use).

In the development perspective of maritime activities in the area, the traditional sectors of the blue economy are joined by those with a high rate of innovation: energy from marine renewable sources, circular economy - including opportunities related to the recovery of waste at sea - and blue biotechnologies. Opportunities for the exploitation of marine renewable energies are explored, tested and implemented in compliance with environmental and landscape constraints, in harmony and, wherever possible, in synergy with other uses of the sea (multi-use). Ports and minor islands represent sites of excellence for the development of this sector.

With regard to fossil fuels, present in the area in the form of liquid hydrocarbons, the Plan takes into account the provisions of the Plan for the Sustainable Energy Transition of the Eligible Areas (PiTESAI),



DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

MARITIME AND INLAND WATERWAY TRANSPORT

which envisages maintaining the exploitation until exhaustion of the deposits with existing production concessions, in a manner that is safe for man and the environment, reducing conflicts and increasing synergies with other sectors of the marine economy.

Coastal and maritime tourism is being developed and redirected towards sustainable modes compatible with environmental protection and with the needs of the territories and communities in which it is inserted, becoming a model of excellence in the Mediterranean and beyond.

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 19, which shows the set of defined Planning Units and the relative typologies and vocations. The Figure 20 offers an integrated representation of the characterizing elements of the Plan in the area: main uses, sub-areas and planning units, vocations, described on the basis of typology, sector, number and coexistence.

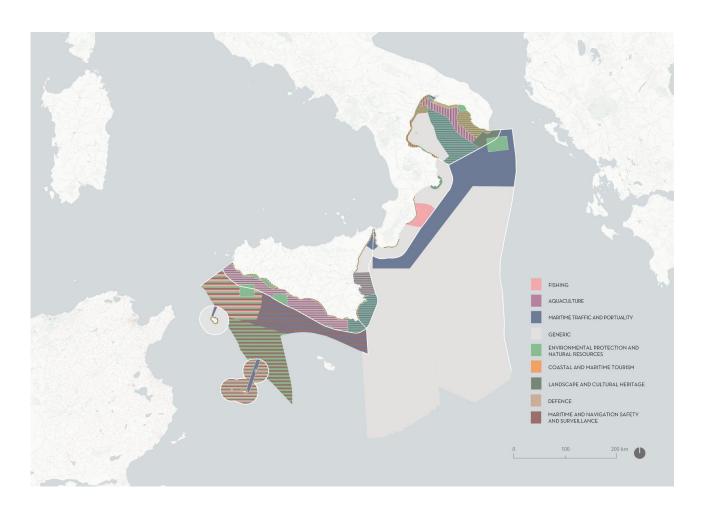


Figure 19 Planning units, typologies and vocations of the Ionian - Central Mediterranean maritime area.



DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

MARITIME AND INLAND WATERWAY TRANSPORT

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

In accordance with the strategic objectives of the Plan, the transversal principles (i) sustainability of development, (ii) conservation and protection of species, habitats and ecosystems and (iii) landscape and cultural heritage protection are considered as guiding transversal principles for the Plan, against which the objectives and planning choices in the maritime area are identified.

Sustainable development. The sustainable development of the sea economy (Blue Economy) represents the superordinate criterion of reference for the planning of the maritime area. This objective is closely related to the need for an integrated government of the sea and the coast that starts from a reading of the dynamics of the context of their complexity and identifies specific objectives that take into account the environmental, social and economic interrelations. With reference to the United Nations 2030 Agenda and the goals of the National Strategy for Sustainable Development (SDGs), the objectives of the Plan are configured to contribute in a targeted way to the achievement of SDG14 (Life Under Water) and SDG12 (Responsible Consumption and Production), through the promotion of sustainable production models in the fisheries and aquaculture sectors, along the entire supply chain, as well as through the adoption of sustainable practices in the coastal and maritime tourism sector. As a contribution to the European Green Deal and in accordance with the 2030 National Integrated Energy and Climate Plan (PNIEC), the Maritime Area Plan identifies among the development objectives the experimentation and gradual implementation of energy production from marine renewable sources, under conditions that ensure full respect for environmental protection and landscape, and in co-existence with other uses. The Plan intends to bring benefits to coastal communities also through the opportunity to create jobs linked to innovation and the modern enhancement of ancient sea professions, for example through the activation of training and refresher courses for operators.

Environmental protection and natural resources. Thanks to its particular position in the centre of the Mediterranean, the maritime area in question is characterised by extremely high environmental values in terms of species (e.g. marine mammals) and habitats (e.g. *Posidonia oceanica* meadows, coralligenous reefs, deep biocoenosis). It is therefore configured as a biodiversity *hot-spot* that provides important ecosystem services (e.g. climate regulation, biogeochemical processes of importance for the specific chemical-biological characteristics of the area, production linked to fish stocks, aesthetic and cultural values linked to the environment and landscape). The enhancement and extension of the protected areas system (also through the expansion of the Natura 2000 network of sites to the sea), in a framework of overall ecological coherence, represents one of the instruments foreseen by the Plan, in synergy with the implementation pathway of the spatial measures foreseen by the Marine Strategy Program of Measures (MSFD), in order to achieve/maintain the Good Conservation Status (GES) of habitats and species in the long term. The area presents concrete opportunities for the integration, coordination and extension of existing protection tools of marine ecosystems, also in a transboundary perspective, through the identification of transnational marine protected areas.

In order to enable the achievement of the above-mentioned objectives, the Plan identifies the protection and preservation of species, habitats and ecosystems (*nature*) as a priority use in numerous and extensive



DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

MARITIME AND INLAND WATERWAY TRANSPORT

areas of the maritime area in most of the offshore areas of the Strait of Sicily (within sub-area IMC/6), in the territorial waters of south-eastern Sicily (Capo Passero area, within sub-area IMC1), in the area of the Strait of Messina (both within sub-area IMC/2 and sub-area IMC/3) in the area south of the Strait of Messina, as far as Catania and in the area between the Plemmirio promontory and the Gulf of Noto (within sub-area IMC/2), in the entire area of territorial waters pertaining to the Pelagie islands (within sub-area IMC/5). All the marine SCI/SAC areas or those with a seaward portion along the Sicilian and Calabrian coasts are identified as *natural* priority UPs. Finally, the following marine protected areas are identified as *nature* restricted (L) UPs: AMP del Plemmirio (Syracuse, eastern Sicily) and AMP di Isola di Capo Rizzuto (Crotone, Ionian Calabria).

Preventing pollution, particularly from maritime traffic and ports, is a primary objective. Similarly, it is necessary to intervene throughout the area with actions for the modernization and proper management of urban and industrial wastewater, for full compliance with the requirements of Directive 1991/271/EEC. This aim is indicated in the specific objectives of all the sub-areas included in the maritime area, referring to the achievement of the good environmental quality status, pursued according to the Marine Strategy Directive and the Water Framework Directive, i.e. with reference to the proper management of wastewater (Directive 1991/271/EEC).

Environmental restoration is an important need in the Ionian-CentralMediterranean maritime area. In fact, in the area there are many areas where the impacts of anthropic uses (past and present) are relevant and have compromised the recovery and regeneration capacity of ecosystems. These impacts consist, for example, in high degrees of contamination of environmental matrices, in terms of degradation or disappearance of valuable ecosystems, etc.. A striking example is that of posidonia beds, which are extensively impacted by pollution, fishing activities, nautical tourism, etc. More in general, restoration is also necessary in areas where the marine fauna and flora are impoverished and, consequently, the 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, coastal lakes, estuaries), where, in addition to or as an alternative to the impacts of industrial or port activities, the effects of land consumption, land use and coastal erosion are manifest.

It is important to consider that the maritime area includes some Contaminated Sites of National Interest located near the coast and that, in some cases, include areas at sea. They refer to the industrial and port areas of Gela, Priolo, Crotone and Taranto. These sites, along with numerous other contaminated coastal sites, such as deposits of hazardous materials, active or disused landfills, etc., represent hot-spot areas of contamination that require remediation and environmental restoration. for IMC1/, IMC/2, IMC/4, IMC/5) or specific measures (for prevention and restoration, IMC/3) that will allow to activate restoration actions such as environmental remediation of contaminated areas, restoration of degraded seagrass beds, creation of artificial bottom structures for the development of marine biological communities, restoration of degraded stretches of coastline and other types of intervention.

As a further element of attention to the environmental values of the area, along the coasts of southern and eastern Sicily, as well as in some stretches of the eastern coast of Calabria and the Gulf of Taranto, a coastal



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

strip extending 1 mn from the coast has been identified in which the protection of the landscape and cultural heritage and tourism are defined as priorities. It should be remembered that the landscape and cultural heritage elements include areas of environmental value such as SCIs/SACs, SPAs, regional parks and other protected areas.

Landscape and cultural heritage. The protection of the naturalistic, landscape and cultural heritage of the coastal and marine space is an essential prerequisite that must be taken into account - in compliance with the constraints already established - in the definition and implementation of development strategies of the maritime economy and in the definition of the allowed anthropic uses. For this reason, a long process of meetings was undertaken during the planning stages, which saw the pro-active involvement of the SABAPs for each coastal region. The important contribution acquired has allowed to reconstruct the cognitive framework of landscape assets, cultural assets along the coast and submerged assets and to enhance it jointly with the Regions during the definition of planning choices for the respective sub-areas. The two reference planning tools defined by the Legislative Decree 201/2016 and the Legislative Decree 42/2004 and the strategic objectives identified in the operational phase 3 of the MSP have been transposed and explicitly integrated in the different Regional realities through an executive process that allowed to make the landscape and cultural prescriptions converge within the maritime planning process.

In particular, the Plan pursues the enhancement of the aesthetic-perceptual structure of the landscape and the activation of connections between inland and coastal landscapes. The enhancement of the cultural heritage is also read in function of the development of coastal tourism that finds its main assumption in the natural, landscape and cultural heritage. In line with the "Code of Cultural Heritage and Landscape", the Plan also identifies the opportunity to undertake redevelopment and restoration of assets belonging to the maritime heritage - coastal worthy of interest. In line with the UNESCO convention on the protection of underwater cultural heritage, the Plan also pays particular attention to protection and enhancement of underwater archaeological heritage of which the maritime area is particularly rich.

In order to implement these objectives, the Plan identifies various areas in which the protection of the landscape and cultural heritage are considered a priority use of the sea. As mentioned above, along the coasts of southern and eastern Sicily and large stretches of the Ionian coasts of Calabria and the Gulf of Taranto, as well as along the coasts of the Pelagie Islands and Pantelleria, a strip of 1mn from the coast is identified in which the protection of the landscape and cultural heritage and tourism are defined as priority uses. In particular, along the Ionian Calabria coasts, the following SACs have been identified as *landscape* and cultural heritage priorities: Brancaleone Beach, Capo Spartivento, Capo S. Giovanni, Fiumara Amendolea - Costa dei Gelsomini, Punta Pezzo to Capo dell'Armi, Locride coastal area and the Catanzaro Ionian area.

It should be remembered that the landscape and cultural heritage also include areas of environmental value such as land SCIs/SACs, SPAs, regional parks and other areas subject to environmental protection. This strip is interrupted in correspondence with port areas or areas with a high level of anthropization where other uses (generally maritime transport) become a priority.



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

The Plan also identifies a series of measures at a national level aimed at improving the coexistence between the protection of the landscape and cultural heritage and the use of the sea, such as, for example, the preparation of guidelines for the definition of new projects or incentives for the adaptation of existing ones or the carrying out of cognitive surveys preparatory to a better protection and enhancement of the assets. At the sub-area level, the specific objectives and measures reinforce those at national level.

Maritime safety, navigation and surveillance. This use of the sea, in the various forms of activities associated with it, is a priority and a prerequisite for the smooth running of other maritime and coastal activities. Considering the geographical characteristics, the distribution of sea uses in the area (with particular reference to the routes and intensity of maritime traffic) and the particular geopolitical context in which the maritime area is inserted, this use is crucial in particular for the areas of the Strait of Sicily, the southern coasts of Sicily and for all the ports present in the maritime area.

The safety of navigation is of particular relevance in all areas in the vicinity of ports and, with significance at maritime area level, in the area of the Strait of Messina, where a Traffic Separation Scheme and associated management measures are in place.

The prevention of pollution from ships and the implementation of the measures of the MARPOL Convention is an important objective for the maritime area, given the intensity and presence of all types of maritime traffic in the area.

It is considered essential to pursue, among the objectives of the Plan, every possible initiative aimed at maintaining and strengthening the defense of freedom of navigation in the area and the lawfulness of maritime traffic (in accordance with UNCLOS regulations and the EU Maritime Safety Strategy), as well as the safeguarding of human life and search and rescue at sea (International Conventions for the Safety of Life at Sea - SOLAS and Search and Rescue at Sea - SAR).

The objectives for these areas are expressed in particular (i) in the need to ensure coastal control, (ii) to manage risk situations related to vessel traffic associated with migration flows from the coasts of North Africa and (iii) to ensure the supervision of fishing and the protection of operators in the sector during fishing operations. It is also necessary (iv) to increase legality and security in port infrastructures, including by promoting the widespread presence of Coast Guard and other law enforcement agencies.

The relevance of this use of the sea is concretized in the Plan through the specific objectives identified in all the sub-areas. Furthermore, the use of *safety* is indicated as a priority in the entire IMC/6 sub-area corresponding to the continental shelf areas of southern Sicily and in the PU of territorial waters corresponding to the Pelagie islands (within the IMC/5 sub-area), in relation to the particular exposure of the areas in question to the transit of vessels linked to migratory flows. In the PUs of the Strait of Messina area (PUs IMC/2_03 and IMC/3_08) this priority is not made explicit since in the PUs in question 4 other priorities are already identified, but it is to be considered included and functional to the use of *maritime transport and ports* (traffic separation scheme and VTS system arranged in the Strait area). In addition, the Plan identifies a measure at a national level, but with specific reference to the maritime area of the



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

Ionian-Central Mediterranean (area of the Strait of Sicily) aimed at strengthening dialogue and international coordination for the management of emergency situations involving the safeguarding of human life at sea.

Fishing. The sector is of undoubted importance in the maritime area and particularly in the Strait of Sicily, a strategic area for fishing at national and international level: Mazara del Vallo is in fact the main Italian fishing port. The Plan intends to promote the sustainable management of fisheries within the national management plans for target species (small and large pelagics, demersal and bivalve molluscs) and the existing local management plans in the area. The objectives of the Plans of GSA 16 (Strait of Sicily) and GSA 19 (Western Ionian Sea), with reference to the demersal species (hake, white shrimp, red shrimp), pursue the improvement of the spawning stock biomass through the reduction of the exploitation rate to a level compatible with the sustainability standards of the Common Fisheries Policy, the reduction of catches of undersized individuals and the protection of *nursery* areas and *Essential Fish Habitats in* general, also in accordance with the practices identified by the General Fishery Commission For the Mediterranean (GFCM). Measures to fight illegal fishing and protect bycatch species are also relevant.

The Plan aims at favouring the sustainable management of artisanal fishery and the incentive of income integration activities for the operators of this fishery segment, facilitating the integration with other sectors (such as tourism, food and wine, quality chains for the transformation of the ichthyic product, valorisation of fishery traditions in the respect of environment and territory). For this purpose, the Plan identifies measures at national level such as, for example, the realization of projects, studies and researches aimed at promoting an adequate spatial presence of small fishery, its sustainability and directing 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 MPAs, 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 valorisation of fishing traditions and the integration with other sectors are identified for example among the specific objectives of the sub-areas IMC/1, IMC/2 and IMC/5.

The importance of fishing among the maritime sectors considered by the Plan is considered by indicating this sector as a priority in a large part of the territorial waters of southern Sicily (within sub-area IMC/1), in the territorial waters around the Pelagie Islands (within sub-area IMC/5), in a stretch of the territorial waters along the Ionian coast of Calabria (within sub-area IMC/3) and in the north-western portion of sub-area IMC/6, corresponding to the continental shelf areas of southern Sicily. The objectives of protecting nursery areas and Essential Fish Habitats in the area are achieved through the identification of PUs with priority nature in correspondence with Fisheries Restricted Areas (FRA - GFCM) where these are located within areas where fishing effort is important and where, therefore, the priority assigned by the Plan is fishing. The Plan also identifies various measures at national scale identified to favour the sustainable development of the sector. Specific measures, reinforcing and adapting the national ones, are also identified at sub-area level.

Aquaculture. In accordance with the strategic objectives, the Plan recognizes in the sector an activity with high development potential, both in territorial and extraterritorial waters. Based on available knowledge



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

(UNIMAR, 2016), the coasts of southern Sicily are characterized by a high development potential for aquaculture, both in terms of fish farming and mussel farming. Similar considerations apply to the areas of the Gulf of Noto (Ionian Sicily) and various coastal stretches of Ionian Calabria. The current development of the sector in these areas is still limited compared to the potential offered by the environmental characteristics.

The Plan aims at supporting and accelerating the identification and possible updating of the AZAs, at the moment identified only in the Sicilian coastal waters, aiming at a development of the different forms of aquaculture in favourable-vocated areas, in which the spatial planning is coordinated with the increase of the productive potential of the sites. In relation to this objective, the Plan indicates aquaculture as a potential development sector in all the PUs that fall in potentially suitable areas (within the sub-areas IMC/1, IMC/2, IMC/5, IMC/3, IMC/6). In all these areas, the Plan draws attention to evaluations of opportunities for the joint development of this sector with other uses of the sea (e.g. production of marine renewable energy), in a multi-use perspective, in order to exploit synergies (e.g. reduction of the maritime space used, reduction of management costs, containment of overall energy consumption and contribution to decarbonisation) and promote innovation in the sectors involved. The Plan also identifies various measures on a national scale to promote the development of the sector, its sustainability and coexistence with other uses of the sea. Specific measures, to reinforce and adapt the national ones, are also identified at the sub-area level.

Maritime transport and ports. The strategic position in the centre of the Mediterranean Sea determines the relevance of maritime traffic to and from the ports located in the area but also of the routes that cross the Strait of Sicily, along the Bosforo/Suez-Gibraltar route (commercial and oil traffic). The maritime area also includes the Strait of Messina, which is of strategic importance for the traffic connecting the Eastern Mediterranean and the Ionian Sea with the Tyrrhenian Sea. Of relevance in the area is the passenger traffic between Sicily, Pantelleria, the Pelagie Islands and Malta.

In line with the EU Maritime Transport Strategy (COM(2009) 0008), aimed at facilitating the launch of innovative integrated solutions in intermodal transport, and with the Regional Transport Plan for the Mediterranean (RTAP) and the Trans-European Transport Network (TEN-T), the Plan aims at maritime continuity of passenger and freight transport between sea and land, with a focus on smaller islands.

The Plan aims at increasing the attractiveness of commercial ports, reconverting and developing other activities and services in industrial ports in crisis/transformation, promoting the development of shipbuilding or reconversion to a tourist offer (possibly also envisaging the development of new ports for cruise ships).

In the perspective of further growth of the maritime transport sector in the area, the Plan's objectives aim at the sustainable development of the sector, through the strengthening of measures to reduce the environmental impacts generated by these activities (water and air pollution, emission of climate-altering substances, dispersion of waste, underwater noise emission, introduction of alien species), in line with the measures provided for under the MARPOL Convention. Also for ports, the Plan indicates the need for



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

technological modernization of facilities and services provided, in the direction of minimizing environmental impacts (e.g. pollution control, development of renewable energy).

The relevance of the sector for the Maritime Area Plan is made explicit in the indication of maritime transport as a priority use in large portions of the area itself and in particular in a large part of the territorial waters of southern Sicily (within the IMC/1 sub-area), and in the entire southern portion of the IMC/2 sub-area (eastern Sicily), in the PU corresponding to the Strait of Messina both on the Sicilian (IMC/2) and Calabrian (IMC/3) sides, along the entire offshore route of maritime traffic that runs parallel to the Ionian coasts of Calabria (within the IMC/7 sub-area): In the territorial waters of the Pelagie Islands and Pantelleria, corridors dedicated to maritime traffic are identified (within sub-area IMC/5), given the strategic importance of maritime connections for the island realities. Near the main ports the 1mn width strip from the coast with priority landscape and cultural heritage + tourism is interrupted and maritime traffic becomes a priority use.

Energy. In accordance with the provisions of the Energy and Climate Plan (PNIEC, 2019), The Plan contributes to fostering the energy transition to renewable and low-emission sources through the development of marine renewable energy production. In fact, the Maritime Area Plan promotes the development of energy production from marine renewable sources. It should be mentioned how the smaller islands in particular are recognized by the PNIEC as laboratories for high levels of renewable penetration and electrification of consumption.

The exploitation of wave energy represents a very interesting option to be favoured in the ports of the area, serving the port infrastructures and services, in order to promote their energy autonomy, or the urban areas near the ports. The Plan also intends to promote the experimentation and use of offshore wind energy technologies, in ways compatible with the protection of the landscape and the environment (e.g. through the use of floating plants, located in areas not visible from the mainland) and in areas where there are no conflicts with other activities (e.g. fishing or maritime traffic). The Plan also intends to promote the development of multi-purpose platforms, with energy production (e.g. from waves or wind) coupled with other activities (e.g. aquaculture, marine biotechnology or other).

In order to give implementation to such objectives, the Plan of the maritime area indicates the *energy*, in the declination of the exploitation of the renewable energies at sea, between the possible uses with potential of development in the areas of territorial waters of southern Sicily and Calabria, in the Strait of Messina, in the territorial waters around Pantelleria and Pelagie and in all the areas of continental platform (in the ambit of the sub-areas IMC/6 and IMC/7).

Insofar as offshore hydrocarbon exploration and production activities are concerned, the Plan takes into account the provisions of the Plan for Sustainable Energy Transition in Eligible Areas (PiTESAI), with regard both to exploration and prospecting activities and to production concessions that have already been submitted and are being evaluated or are currently in effect.

For the concessions in a state of productivity in the Ionian Sea and central Mediterranean (Calabria, Sicily) falling within 12 miles from the coastline or the outer perimeter of protected marine and coastal areas (i.e.



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

"unsuitable areas" according to PiTESAI), the Maritime Spatial Plan provides, implementing the indications of PiTESAI, the possibility of maintaining exploitation until the cessation of the technical and / or economic viability of the deposit, reducing conflicts and increasing synergies with other sectors of the economy of the sea.

For offshore areas, the Plan provides for a similar approach to the exploitation of offshore deposits within 12 miles. In the suitable areas envisaged by PITESAI, it is still possible to submit research and concession applications and continue research activities already under way, as far as gas is concerned.

The Maritime Area Plan does not identify any area as a priority for energy use in the declination of offshore hydrocarbon exploration and production.

Energy infrastructures of strategic interest are located in the maritime area, including the TransMed (Italy-Algeria Western Med. area) and GreenStream (Libya-Italy Central Med. area) gas pipelines, other gas pipelines under construction (Melita Transgas pipeline, Malta-Italy) or planned (Poseidon pipeline, Greece-Italy) and several power lines (a new cable of the ELMED Electricity Interconnection Network, Sicily-Tunisia, is planned).

Coastal defense. The Plan promotes the development of all actions related to coastal protection: contrasting the phenomenon of erosion, flood protection, coastal restoration - with particular attention to river mouths, in particular through naturalistic engineering interventions and taking care of the coherent development of local flora. The fight against coastal erosion is also promoted in relation to the safeguard of cultural and environmental heritage, transport infrastructures and coastal tourism. The safeguard of the coasts is also linked to the environmental reclamation of contaminated port or industrial areas, in a perspective of requalification, adaptation or enhancement, according to the different specificities. Combating unauthorised building and restoring the state of places where this has been compromised represent other modes of action promoted by the Plan.

The Plan recognizes the opportunity of Coastal Contracts as operational tools suitable for sustainable planning and management of coastal activities, recommending their preparation and adoption by coastal municipalities.

Coastal and Maritime Tourism. The maritime area is characterised by a development potential for coastal and maritime tourism which is not yet fully expressed. On the other hand, there is the need to undertake rapid paths for the reconversion of tourism activities in the direction of environmental sustainability and protection of territories and cultural and landscape heritage. In order to fully develop the development potential it is necessary to contrast some threats and overcome some conditions that limit the full maturity of the sector. The protection of the coast in a broad sense is an essential prerequisite for the development of the sector, both in relation to protection from erosion and in terms of protection of transport infrastructure and accessibility. It is also necessary, particularly in some areas (e.g. the Ionian coasts of Calabria), to strengthen and adapt the infrastructure for nautical tourism and to promote and support tourism also through the offer of complementary services to seaside tourism and pleasure boating. The Plan also identifies the possibility of further developing cruise tourism in the area (e.g. Crotone, Reggio Calabria).



DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

MARITIME AND INLAND WATERWAY TRANSPORT

Precisely because of the inseparable link between landscape and cultural heritage, environmental quality (beaches, waters, seabed) and tourist attraction, the Plan proposes the joint priority development of these uses of coastal marine areas in various areas. As indicated above, in fact, along the coasts of southern and eastern Sicily, as well as along the coasts of the Pelagie Islands and Pantelleria, a strip of 1mn extension from the coast is identified in which the *protection of the landscape and cultural heritage* and *tourism* are defined as priority uses, as well as in various stretches of coastal waters of Ionian Calabria (within the IMC/3 sub-area).

Scientific research and innovation. The Plan identifies the need for specific technical-scientific production on issues concerning the protection and safeguarding of the marine environment. This aspect can be applied in particular in relation to the areas and characteristics of the ecosystems that characterise the maritime area (e.g. deep seabed environments) that are still little known, the ecosystem services provided, and the opportunities for defining cross-border protection tools. The Plan promotes research and development of innovative technologies for the enhancement of the maritime heritage in its environmental and economic aspects. The technological development, the experimentation and implementation of innovative technologies, as well as the experimentation and implementation of innovative business models refer in particular to the sectors of ports, marine renewable energy production, aquaculture, marine biotechnologies, multifunctional platforms capable of hosting more than one activity and, more generally, the multi-use of the sea, with a view to enhancing synergies between uses.

7.2.3 Coexistence and synergy between uses

The maritime area is characterised by the presence of many different uses, with different concentrations in the various areas. As happens in all seas, the coastal areas, and in particular the areas near the ports and straits, are those in which the uses of the sea are concentrated, and this is also the case for the maritime area in question: relevant examples are the areas of Syracuse/Augusta (tourism, maritime transport and ports, protection of the landscape and cultural heritage, defense), the Strait of Messina (maritime transport, fishing), the Port of Taranto (maritime transport, fishing, aquaculture, defense, marine renewable energy). Furthermore, the entire area of the Strait of Sicily is characterised by a high concentration of uses and a consequent greater conflict, particularly in relation to the very significant fishing activities, which are overlaid by intense and diversified maritime traffic (international and local routes).

The development trajectories identified by the Plan identify many opportunities for the enhancement and development of synergies between sea uses. The identification within the maritime area of coastal planning units where the priority uses are the protection of the landscape and cultural heritage (including environmental values), environmental protection and tourism is an emblematic example of such synergies, in part already existing, but very strengthenable through actions to implement the objectives of the Plan.

Other synergies, only limitedly developed nowadays, but with a good development potential, concern the fishery sector, and in particular the artisanal fishery, through the integration with sectors belonging to the tourism field: fishery tourism, enogastronomy, quality chains for the transformation of the ichthyic product, valorisation of fishery traditions in the respect of environment and territory.



DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

MARITIME AND INLAND WATERWAY TRANSPORT

Also for the aquaculture, indicated in the Plan as a sector of potential development in various areas in the territorial waters, but also in the continental shelf areas, the Plan identifies the opportunity for joint development with other uses of the sea, in particular with the production of marine renewable energy, with a view to multi-use, in order to exploit the synergies (e.g. reduction of the maritime space used, reduction of management costs, containment of overall energy consumption and contribution to decarbonisation) and promote innovation in the sectors involved.

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

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

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

This section summarises the key elements of attention relating to single and multiple impacts on biodiversity and marine-coastal habitats to be considered in developing the vocations and defining the Plan measures described below. This summary is based on the results of the analysis of interactions between uses and the environment outlined in Chapter 4, Phase 2 of the Plan. In particular, the overall analysis relating to the Ionian-Central Mediterranean maritime area, presented in Table 2 and Figure 4 of Chapter 4 (Phase 2), is taken up here (cf. Table 3), considering the pressures identified for each previously defined "area", then translating them into elements of attention for planning and indicating the relative 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 Table 3, it is deemed appropriate to emphasize how the extension of current knowledge on the distribution of habitats and species indicated in the proposal for an EU Regulation on Environmental Restoration (COM(2022)304 final) is of transversal importance for all areas of reference, and therefore for the sub-areas involved.



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

Table 3 Attention items related to impacts on biodiversity and marine-coastal habitats to be considered in the Plan

Reference area	Main anthropogenic uses and related pressures	Attention items to be considered in the plan in response to pressures	Sub-areas of interest
I1 - EBSA in the Strait of Sicily	The following anthropogenic uses produce criticalities with respect to the protection of species and habitats in the area: maritime transport; fishing; tourism activities. The area is affected by a high intensity of maritime, commercial, oil and passenger (high speed ferry) traffic. The Sicily Channel is one of the most important fishing areas in the Mediterranean Sea, where significant fleets (Italian and North African) operate with high fish production (pelagic and demersal species). The number of tourists in the area is high and can represent a significant threat to coastal habitats (e.g. posidonia) and to some species (e.g. Caretta caretta). The main pressures generated include: atmospheric emissions and inputs of pollutants and hazardous substances into the water; underwater litter dispersion and accumulation; continuous and/or impulsive underwater noise emissions; collisions with marine megafauna; harvesting of biological resources; incidental catches; and damage to the seabed near the coast.	Identification of areas with the highest incidence of impacts caused by maritime traffic, with particular attention to oil spills and collisions with marine megafauna. Identification and adoption of practices to reduce the impacts of underwater noise on biota Harmonise the way solid waste is collected from ships and delivered in ports Improve recreational traffic management to preserve benthic ecosystems. Improve the management of seaside tourism, protecting coastal ecosystems. Improve management of fisheries resources at local, national and international levels.	IMC/1, IMC/5, IMC/6, IMC/7
I2 -Large area around the Pelagie Islands	The following anthropogenic uses produce criticalities with respect to the protection of species and habitats in the area: maritime transport; fishing; tourism activities.	Identification of actions to prevent impacts caused by maritime traffic, with particular attention to oil spills and collisions with marine megafauna.	BMI/5, BMI/6



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

Reference area	Main anthropogenic uses and related pressures	Attention items to be considered in the plan in response to pressures	Sub-areas of interest
	The main pressures generated include: high risk of collision with ships and vessels in general due to the high maritime traffic in the area; high risk of impacts related to ingestion/impoundment/by-catch due to the presence of abandoned fishing gear (nets, ropes); impacts related to water contamination due to high maritime traffic, the presence of O&G research and production activities and the presence of oil pipelines. Impacts related to underwater noise from vessel traffic and O&G activities. In areas closer to the coast, impacts related to disturbance related to high tourism use.	Identification and adoption of practices to reduce the impacts of underwater noise on biota Harmonise the way solid waste is collected from ships and delivered in ports Improve recreational traffic management to preserve benthic ecosystems. Improve the management of seaside tourism, protecting coastal ecosystems. Improve management of fisheries resources at local, national and international levels.	
I3 - Gulf of Taranto	The following anthropogenic uses produce criticality with respect to the protection of species and habitats in the area: marine traffic; industrial activities; military activities; O&G research and production activities; and tourism activities. The main pressures generated include (pressures relevant to cetaceans): generation of marine litter that may be ingested by cetaceans; water contamination associated with high levels of marine traffic, the presence of O&G research and production activities and the presence of pipelines; and underwater noise emissions from marine traffic and O&G activities.	Identification of actions to prevent impacts caused by maritime traffic, with particular attention to oil spills and collisions with marine megafauna. Identification and adoption of practices to reduce the impacts of underwater noise on biota Harmonise the way solid waste is collected from ships and delivered in ports Improve recreational traffic management to preserve cetacean populations and benthic ecosystems. Improve the management of seaside tourism, protecting coastal ecosystems.	IMC/4



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

Reference area	Main anthropogenic uses and related pressures	Attention items to be considered in the plan in response to pressures	Sub-areas of interest
	In coastal areas, impacts related to disturbance associated with high tourist use, especially from beach tourism and tourist boat routes.		
14 - Caretta caretta nesting sites	The following anthropogenic uses produce criticalities with respect to the protection of species and habitats in the area: urbanization and coastal infrastructures; tourism and recreational activities, in particular tourist use of beaches and recreational traffic. The main pressures generated include (turtle-relevant pressures): reduction of nesting areas and anthropogenic disturbance in the available areas on land and sea related to the high visitation.	Improve integrated coastal management, controlling urban development and combating illegal building. Improve recreational traffic management to conserve turtle populations and benthic ecosystems. Improve the management of seaside tourism, protecting beaches and coastal ecosystems.	BMI/3
15 - Pelagie Islands Marine Protected Area	The following anthropogenic uses produce criticalities with respect to the protection of species and habitats in the area: tourist use of beaches and recreational traffic. The main pressures generated include: disturbance to turtle nesting along beaches; disturbance to benthic ecosystems linked to anchorages; noise pollution; and pollutant emissions to water.	Improve recreational traffic management to conserve turtle populations and benthic ecosystems. Improve the management of seaside tourism, protecting beaches and coastal ecosystems.	BMI/5
16 - Caretta caretta nesting sites in Southern Sicily	The following anthropogenic uses produce criticalities with respect to the protection of species and habitats in the area: urbanization and coastal infrastructures; tourism and recreational activities, in particular tourist use of beaches and recreational traffic.	Improve integrated coastal management, controlling urban development and combating illegal building. Improve recreational traffic management to conserve turtle populations and benthic ecosystems.	IMC/1



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

Reference area	Main anthropogenic uses and related pressures	Attention items to be considered in the plan in response to pressures	Sub-areas of interest
	The main pressures generated include (turtle-relevant pressures): reduction of nesting areas and anthropogenic disturbance in the available areas on land and sea related to the high visitation.	Improve the management of seaside tourism, protecting beaches and coastal ecosystems.	
Area 17 - Fisheries restricted zones in the Strait of Sicily'.	The following anthropogenic uses produce criticalities with respect to the protection of species and habitats in the area: maritime traffic; in some areas hydrocarbon exploration and production activities. Fishing activities are regulated through ZTB Art. 1, co. 3 of Regulation (EU) 2019/982 of the European Parliament and of the Council of 5 June 2019. The main pressures generated include: water	Identification of actions to prevent impacts caused by maritime traffic, with particular attention to oil spills. Identification and adoption of practices to reduce the impacts of underwater noise on biota Harmonise the way solid waste is collected from ships and delivered in ports	IMC/01, IMC/06
	contamination, release of waste at sea, underwater noise emissions related to the high maritime traffic, and, in part, the presence of O&G research and production activities and the presence of oil pipelines.		
18 - Coastal marine areas off the east coast of Sicily	The following anthropogenic uses produce criticalities with respect to the protection of species and habitats in the area: fishing, urbanization, coastal tourism and related activities (e.g. boating), marine traffic, O&G mining, submarine cable laying, presence of industrial sites. The main pressures generated include: contamination of water, sediments and organisms, removal of biological	Improve integrated coastal management, controlling urban development and combating illegal building. Improve recreational traffic management to conserve turtle populations and benthic ecosystems. Improve the management of seaside tourism, protecting beaches and coastal ecosystems.	IMC/2
	resources, disturbance to coastal areas (beaches) and coastal benthic ecosystems.	Need for redevelopment and remediation of contaminated areas.	



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

Reference area	Main anthropogenic uses and related pressures	Attention items to be considered in the plan in response to pressures	Sub-areas of interest
I9 - Coastal marine areas off the Ionian coast of Calabria	The following anthropic uses produce criticalities with respect to the protection of species and habitats in the area: Infrastructures (jetties/marinas; sea defense works); Maritime traffic; Bottom trawling, including inshore fishing; Nautical tourism; Water sports. The main pressures generated include: induction of invasive alien species; disturbance of benthic ecosystems due to anchoring and trawling; harvesting of biological resources; beach disturbance, noise emissions, water pollution.	Improving the integrated management of the coastal strip, rationalising infrastructure, stopping urbanisation and combating illegal building. Combat illegal fishing and encourage small-scale sustainable fishing. Improve management of recreational traffic to preserve benthic ecosystems.	BMI/3
I10 -Antennamare and the Strait of Messina	The area of Antennamare and the Strait of Messina represent, together with the Bosphorus and Gibraltar, the three areas in which the migratory flows of avifauna are concentrated in the Mediterranean, especially during the spring period. The Strait of Messina also represents a migratory corridor for cetaceans, turtles, elasmobranchs and many species of fish. The following anthropogenic uses produce criticality with respect to the protection of species and habitats in the area: marine traffic. The main pressures generated include: Light pollution from urban centres, port infrastructure, marine traffic; collision	Identification of actions to prevent impacts caused by maritime traffic, with particular attention to oil spills and collisions with marine megafauna. Identification and adoption of practices to reduce the impacts of underwater noise on biota Harmonise the way solid waste is collected from ships and delivered in ports Reduction of light pollution.	IMC/2, IMC/3



Reference area	Main anthropogenic uses and related pressures	Attention items to be considered in the plan in response to pressures	Sub-areas of interest
	risk; underwater runore emissions; water pollution and waste releases.		
I11 - Regional zone ZTB "Gulf of Catania	The following anthropic uses produce criticalities with respect to the protection of species and habitats in the area: ubana area of Catania: maritime traffic. The main pressures generated include: water pollution; waste release; underwater noise emission.	Preventing releases of contaminants into the sea.	IMC/2
I12 - Deep Sea fisheries restricted area 'Lophelia reef off Capo Santa Maria di Leuca	The following anthropogenic uses produce criticalities with respect to the protection of species and habitats in the area: fishing; marine traffic. The main pressures generated include: seabed damage; waste release.	Fisheries Management. Harmonise the way solid waste is collected from ships and delivered in ports.	IMC/4, IMC/7.



DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

MARITIME AND INLAND WATERWAY TRANSPORT

7.2.5 Elements of land-sea interaction

The maritime area is characterised by land-sea interactions of natural origin linked to coastal erosive processes, determined by the combination of natural factors (intensification of sea storms, also in a context of changed climatic conditions) and anthropic factors (drastic reduction of outflows from hydrographic basins due to water derivations and exploitation, urbanisation of the coastal strip: port areas, industrial sites, tourism development) with interruption of the dune feeding circuit of the beaches, cementification of the shores, morphological alteration of the coastal circulation in relation to the realization of infrastructures at sea, and consequent loss of the land-sea interface areas (wetlands, estuaries, coastal lakes) and the natural functionalities that they hosted. In this regard, the Plan promotes the development of actions for the protection of the coastline, combating erosion, protection from flooding, restoration of the coastline, also in relation to the preservation of cultural and environmental heritage, transport infrastructure and tourism. To this end, the Plan identifies a series of measures on a national scale that make specific reference to the use of coastal defense, flood protection, restoration of the morphology of the seabed (called Coastal Defense) and provide, for example, to address in a coordinated way the Integrated Management of the Coastal Zone, to integrate existing strategies and Coastal Plans, to improve the management of submarine sands for the mitigation of risks from erosion and flooding. The Plan also identifies several other specific actions at the sub-area level.

The area is characterized by the presence of important port areas, of different size and vocation, all multifunctional in some way (industrial, commercial, passenger, cruise and pleasure ports). The presence of numerous fishing ports determines further important land-sea interactions. Some ports (Syracuse-Augusta, Crotone, Taranto) are associated with industrial areas which have left heavy legacies in terms of environmental contamination. In a scenario of further intensification of maritime transport and the desired strengthening of intermodality, as well as the reconversion of some port areas (e.g. for tourism) and the development of other maritime activities (aquaculture, blue biotechnologies, renewable energies), port areas are confirmed as strategic hubs for transport and for numerous new functions and require adequate planning ashore to guarantee the infrastructural and service needs of the various maritime activities. The Plan promotes the reconversion of use of areas in crisis/decommissioning and environmental reclamation through the identification of specific actions oriented to the reconversion of use in the context of national measures (Sustainable Development sector) aimed at the promotion of circular economy supply chains in the shipbuilding, pleasure boat repair, fishing and aquaculture sectors. Specific objectives on this theme are also identified at sub-area level (ref. IMC/1, IMC/2, IMC/4).

The entire maritime area is characterised by the presence of coastal sites of important environmental value and for the protection of the landscape and cultural heritage (Natura 2000 network areas, Protected Marine Areas, UNESCO sites, landscape constrained areas). The Plan recognises the value of these areas in terms of land-sea interactions, identifying extensive coastal strips where landscape and cultural heritage protection (including environmental protection) and tourism are considered priority uses.



DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

MARITIME AND INLAND WATERWAY TRANSPORT

The elements of land-sea interaction highlighted at the scale of the maritime area have been considered for the purposes of defining the elements of the Plan, in particular with regard to the determination of the suitability and mode of use of the Planning Units closest to the coast or hot-spots of land-sea interaction, as well as with regard to the measures of the Plan of national level and sub-areas. With reference to the measures, the relevance for the management of land-sea interactions, e.g. in relation to the removal of relict sands for coastal defense, the construction of onshore connections of offshore plants or the improvement of environmental and energy sustainability of ports (hot-spots of land-sea interactions).

7.2.6 Relevant elements for transnational cooperation

- Theme 1 Strengthening and extending navigation safety, maritime security and surveillance, particularly in the area of the Strait of Sicily, and guaranteeing legality and safety in all ports in the area. Among these elements, particularly relevant is the need to manage the situations related to vessel traffic associated with migratory flows from the coasts of North Africa, in accordance with international standards for the protection of human life at sea (SOLAS) and search and rescue at sea (SAR).
- Theme 2 Coordinate, strengthen and extend the tools for the protection of marine ecosystems also through the identification of transnational marine protected areas, in line with the strategic objectives of UN Agenda 2030, EU Green Deal and EU Biodiversity Strategy 2030. In particular, consider the identification of a marine protected area between Italy, Malta and Tunisia in the Strait of Sicily and of a marine protected area, with particular reference to deep-sea ecosystems, between Italy and Greece in the Ionian Sea.
- Theme 3 Pursue a shared and peaceful transnational management, sustainable in the long term from the point of view of fish populations and biodiversity in general, between Italy, Malta, Tunisia and Libya of the fishing areas and operations in the Strait of Sicily, guarantee the supervision of fishing activities and ensure the safety of operators in the sector.
- Theme 4 Strengthen transnationally coordinated implementation across the area of measures to reduce the environmental impacts generated by maritime traffic (water and air pollution, emission of climate-altering substances, litter dispersal, underwater noise emissions, introduction of alien species, collisions with marine megafauna), in line with measures foreseen under the MARPOL Convention and the Agreement for the Conservation of Cetaceans in the Black Sea, Mediterranean Sea and Atlantic Contiguous Area (ACCOBAMS). Intensify maritime surveillance to prevent illegal discharges of pollutants and wastes at sea and rapidly implement contingency plans in case of accidental events involving ships or offshore O&G infrastructure (under the coordination of the Regional Marine Pollution Emergency Control Center for the Mediterranean REMPEC).
- Theme 5 Develop transnational cooperation across the area for research on marine ecosystems, in particular on lesser known aspects (e.g. deep seabed ecosystems, ecosystem services) and on impacts related to maritime and human activities in general (including those related to climate change). Develop transnational cooperation on research and innovation as well as financial and



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

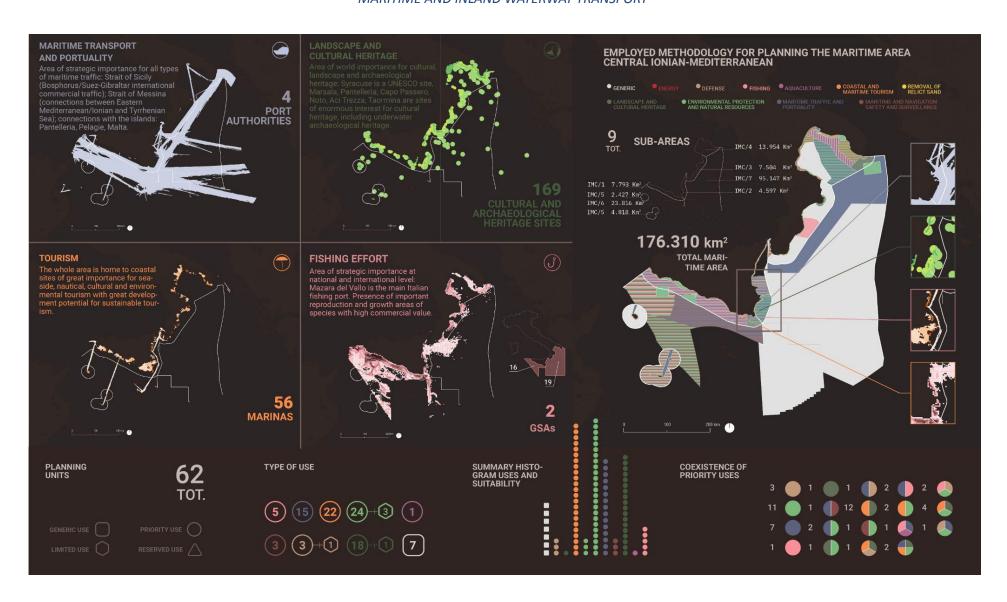
industrial cooperation in emerging maritime sectors: marine renewable energies, blue biotechnologies, offshore aquaculture, multi-functional platforms.

- Theme 6 Reinforcing transnational cooperation on the sustainability of coastal and maritime tourism, encouraging offers which respect the environment, places, traditions and the social fabric of the territories in which these activities take place. Promote cooperation on the conversion of tourism offers linked to mass tourism towards other innovative market segments (responsible tourism, ecotourism) and promote synergies between the tourism sector and other maritime and coastal economic sectors (artisanal fishing, aquaculture, maritime practices) to the benefit of local economies.
- Theme 7 Strengthening collaboration on energy infrastructures and networks, to be developed according to shared strategic criteria and in accordance with sustainability objectives.



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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





DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

MARITIME AND INLAND WATERWAY TRANSPORT

Figure 20 Summary infographic between uses and planning units for the Ionian-Central Mediterranean maritime area.



DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

MARITIME AND INLAND WATERWAY TRANSPORT

7.3 Summary of planning for each Sub-area

7.3.1 Sub-area IMC/1 - Southern Sicily territorial waters

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 tourism, maritime transport, fishing, protection of the environment and natural resources, protection of the landscape and cultural heritage, hydrocarbon exploration and production, and defense-related activities. The sources of the spatial data used are reported in Figure 21 and represent information available at the national level through the contribution of the Ministries involved in the MSP process.

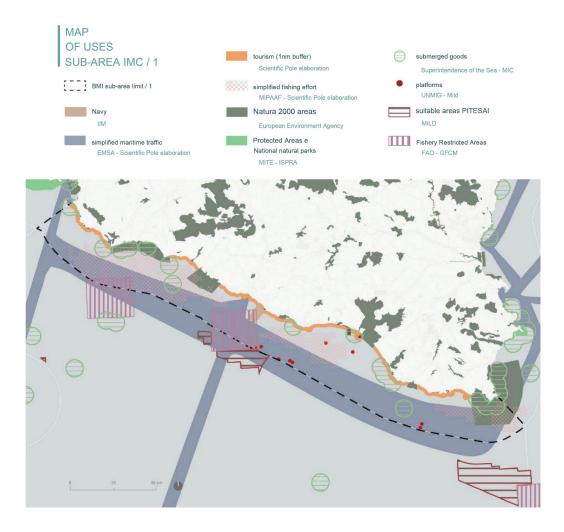


Figure 21 Summary map of the main uses in the IMC/1 Sub-area Waters of Southern Sicily



DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

MARITIME AND INLAND WATERWAY TRANSPORT

Vision and specific objectives

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

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

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

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

General objective - transversal

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

The specific objectives

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

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



Table 4 Specific objectives for the IMC/1 sub-area

Reference sector	Code	Specific Objective
Maritime safety, navigation and surveillance	(IMC/1)OSP_S 01	To support a process of military control of the marine areas and coastal zones in the south of Sicily that face the Sicilian channel for the protection of fellow fishermen and for the control of the migratory phenomenon
	(IMC/1)OSP_S 02	Contribute to safe navigation and environmental protection
Fishing	(IMC/1)OSP_P 01	To promote the development and sustainability of fishing with reference to small-scale fishing, promoting multi-functionality and integration with other sectors, tourism, food and wine, quality chains for the processing of fish products and their valorisation, as well as the promotion of maritime culture, fishing traditions, respect for the environment and protection of species
	(IMC/1)OSP_P 02	Promote compliance by the fishing fleet with the emission limitation regulations imposed by the IMO
Aquaculture	(IMC/1)OSP_A 01	Ensure the development of existing marine and lagoon aquaculture activities, favouring the diversification of production, the sustainable use of resources and technological innovation
	(IMC/1)OSP_A 02	Promotion of aquaculture facilities according to guidelines and acts competing with an ecosystem and environmental approach
Maritime transport and ports	(IMC/1)OSP_TM 01	To guarantee maritime continuity for passengers and goods between Sicily and Italy and Europe, as well as with the smaller islands, favouring the opening of new national and international routes.
	(IMC/1)OSP_TM 02	Promotion of activities in crisis identified in port areas and commercial ports and contextual development of shipbuilding.
	(IMC/1)OSP_TM 03	Implement the attractiveness of commercial ports.
Energy	(IMC/1)OSP_E 01	Promotion of the development of renewable energy sources, including marine energy, such as wave energy to promote the electrification of ports or other urbanized areas, or offshore wind energy on floating plants, located in areas not visible from land. In identifying the areas, it will be essential to produce a cost-benefit analysis of all the socio-economic components, taking into account conflicts with other uses (fishing <i>in primis</i>) and the needs of the territories, as well as activating discussion tables with all interested parties.



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

Reference sector	Code	Specific Objective
	(IMC/1)OSP_E 02	Promote the development of the energy transition of port areas by bringing ports back to a concept of energy self-sufficiency according to current environmental and energy protection regulations.
Coastal defense	(IMC/1)OSP_DC 01	Development of all the actions related to the protection of the coasts, contrast to the erosion phenomenon, protection from the floods and consequent restoration of the sandy and gravelly coasts, with particular attention to the mouths of the rivers, promoting appropriate naturalistic engineering interventions aimed at the containment of the degraded coasts, as well as a coherent development of the local flora.
	(IMC/1)OSP_DC 02	Promotion of a sustainable development of coastal areas and environmental reclamation of port areas through a multi-year planning of activities, to be implemented also for the requalification, adaptation and strengthening of existing port structures.
Coastal and maritime tourism	(IMC /1)OSP_T 01	In order to implement the tourist fruition of the coasts, a coherent activity will be developed for the improvement and maintenance of the quality status of bathing waters (Directive 2006/7/EC), as well as strategies for the contrast of coastal erosion.
	(IMC /1)OSP_T 02	Implementation of the tourist port, proposing new settlements, and in return, modernization, strengthening and adaptation of existing marinas.
	(IMC /1)OSP_T 03	Operational proposals for an implementing regulation in the port area that identifies the rules for the usability of the spaces to be allocated to tourist landings and those to be allocated to commercial and fishing activities, improving the services available to tourists, yachtsmen or cruise passengers.
Environmental protection and natural resources	(IMC/1)OSP_N 01	Enhancement of the system of protected areas already existing and those to be created, providing coherent actions for the reduction of pollution in port areas.
	(IMC/1)OSP_N 02	Achievement and maintenance of environmental rehabilitation objectives deriving from the Water Directive (Dir. 2000/60/EC) and the Marine Strategy Framework Directive.
Landscape and cultural heritage	(IMC /1)OSP_PPC 01	Protection and enhancement of the environment and landscape of the assets and the context in which they insist, taking into account the respect of the constraints already defined.



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

Reference sector	Code	Specific Objective
	(IMC/1)OSP_PPC 02	Identification of assets belonging to the regional maritime - coastal heritage and consequent requalification and conservative restoration.
Scientific research and innovation	(IMC/1)OSP_RI 01	Technical and scientific production on issues concerning the protection and preservation of the marine environment.
	(IMC/1)OSP_RI 02	Creation of a "District of the Sea" that connects researchers, businesses and public structure, encouraging the birth of start-ups in the sector.
	(IMC/1)OSP_RI 03	Promotion for research and development of innovative technologies at the service of the enhancement of the maritime heritage in its environmental and economic aspects.

Planning units and vocations of use

The Planning Units identified for the IMC/1 Sub-area are represented in Figure 22 and in Figure 23 (in the latter the representation of the PUs is superimposed on that of the main sea uses).





Figure 22 Identification of the planning units of sub-areas IMC/1 Southern Sicily





Figure 23 Overlap between the Main Uses Map and the Planning Units of Sub-area IMC/1 Southern Sicily



DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

MARITIME AND INLAND WATERWAY TRANSPORT

7.3.2 Sub-area IMC/2 - Territorial waters of eastern Sicily

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, fishing, protection of the environment and natural resources, protection of the landscape and cultural heritage, and defense-related activities. The sources of the spatial data used are reported in Figure 24 and represent information available at the national level through the contribution of the Ministries involved in the MSP process.

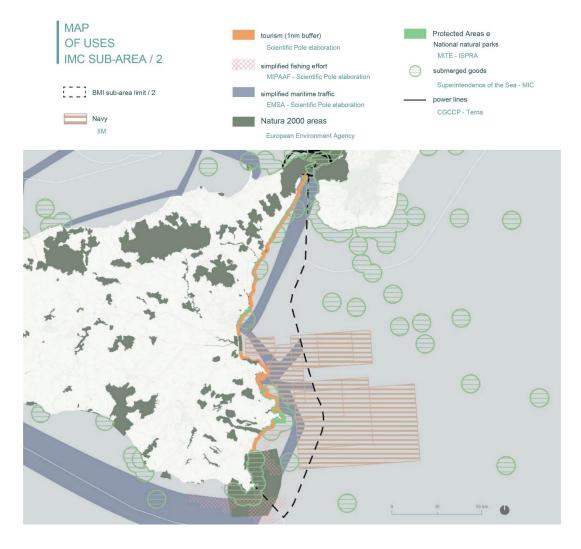


Figure 24 Summary map of the main uses in the IMC/2 Sub-area Waters of Eastern Sicily



DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

MARITIME AND INLAND WATERWAY TRANSPORT

Vision and specific objectives

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

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

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

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

General objective - transversal

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

The specific objectives

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

The specific objectives mainly concern, individually or in combination, the following sectors and uses of the sea/coast:



Table 5 Specific objectives for the IMC/2 sub-area

Reference sector	Code	Specific Objective
Maritime safety, navigation and surveillance	(IMC/2)OSP_S 01	To support a process of military control of the marine areas and coastal zones in the south of Sicily that face the Sicilian channel for the protection of fellow fishermen and for the control of the migratory phenomenon
	(IMC/2)OSP_S 02	Contribute to safe navigation and environmental protection
Fishing	(IMC/2)OSP_P 01	To promote the development and sustainability of fishing with reference to small-scale fishing, promoting multi-functionality and integration with other sectors, tourism, food and wine, quality chains for the processing of fish products and their valorisation, as well as the promotion of maritime culture, fishing traditions, respect for the environment and protection of species
	(IMC/2)OSP_P 02	Promote compliance by the fishing fleet with the emission limitation regulations imposed by the IMO
Aquaculture	(IMC/2)OSP_A 01	Ensure the development of existing marine and lagoon aquaculture activities, favouring the diversification of production, the sustainable use of resources and technological innovation
	(IMC/2)OSP_A 02	Promotion of aquaculture facilities according to guidelines and acts competing with an ecosystem and environmental approach
Maritime transport and ports	(IMC/2)OSP_TM 01	To guarantee maritime continuity for passengers and goods between Sicily and Italy and Europe, as well as with the smaller islands, favouring the opening of new national and international routes.
	(IMC/2)OSP_TM 02	Promotion of activities in crisis identified in port areas and commercial ports and contextual development of shipbuilding.
	(IMC/2)OSP_TM 03	Implement the attractiveness of commercial ports.
Energy	(IMC/2)OSP_E 01	Promotion of the development of renewable energy sources, including marine energy, such as wave energy to promote the electrification of ports or other urbanized areas, or offshore wind energy on floating plants, located in areas not visible from land. In identifying the areas, it will be essential to produce a cost-benefit analysis of all the socio-economic components, taking into account conflicts with other uses (fishing in primis) and the needs of the territories, as well as activating discussion tables with all interested parties.
	(IMC/2)OSP_E 02	Promote the development of the energy transition of port areas by bringing ports back to a concept of energy self-sufficiency according to current environmental and energy protection regulations.
Coastal defense	(IMC/2)OSP_DC 01	Development of all the actions related to the protection of the coasts, contrast to the erosion phenomenon, protection from the floods and consequent restoration of the sandy and gravelly coasts, with particular attention to the mouths of the rivers, promoting appropriate naturalistic engineering interventions aimed at the containment of the degraded coasts, as well as a coherent development of the local flora.



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

Reference sector	Code	Specific Objective
	(IMC/2)OSP_DC 02	Promotion of a sustainable development of coastal areas and environmental reclamation of port areas through a multi-year planning of activities, to be implemented also for the requalification, adaptation and strengthening of existing port structures.
Coastal and maritime tourism	(IMC/2)OSP_T 01	In order to implement the tourist fruition of the coasts, a coherent activity will be developed for the improvement and maintenance of the quality status of bathing waters (Directive 2006/7/EC), as well as strategies for the contrast of coastal erosion.
	(IMC/2)OSP_T 02	Implementation of the tourist port, proposing new settlements, and in return, modernization, strengthening and adaptation of existing marinas.
	(IMC/2)OSP_T 03	Operational proposals for an implementing regulation in the port area that identifies the rules for the usability of the spaces to be allocated to tourist landings and those to be allocated to commercial and fishing activities, improving the services available to tourists, yachtsmen or cruise passengers.
Environmental protection and natural resources	(IMC/2)OSP_N 01	Enhancement of the system of protected areas already existing and those to be created, providing coherent actions for the reduction of pollution in port areas.
	(IMC/2)OSP_N 02	Achievement and maintenance of the environmental rehabilitation objectives stemming from the Water Directive (Dir. 2000/60/EC) and the Marine Strategy Framework Directive.
Landscape and cultural heritage	(IMC /2)OSP_PPC 01	Protection and enhancement of the environment and landscape of the assets and the context in which they insist, taking into account the respect of the constraints already defined.
	(IMC/2)OSP_PPC 02	Identification of assets belonging to the regional maritime - coastal heritage and consequent requalification and conservative restoration.
Scientific research and innovation	(IMC/2)OSP_RI 01	Technical and scientific production on issues concerning the protection and preservation of the marine environment.
	(IMC/2)OSP_RI 02	Creation of a "District of the Sea" that connects researchers, businesses and public structure, encouraging the birth of start-ups in the sector.
	(IMC/2)OSP_RI 03	Promotion for research and development of innovative technologies at the service of the enhancement of the maritime heritage in its environmental and economic aspects.

Planning units and vocations of use

The Planning Units identified for the IMC/2 Sub-area are represented in Figure 25 and in Figure 26 (in the latter the representation of the PUs is superimposed on that of the main sea uses).

For the planning of the areas belonging to the Strait of Messina an ecological and functional approach has been adopted, harmonizing the planning choices with those relative to the sub-areas IMC/3 and MO/5,



DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

MARITIME AND INLAND WATERWAY TRANSPORT

being that the Strait constitutes an *unicum* from the point of view of the environment and the uses of the sea.

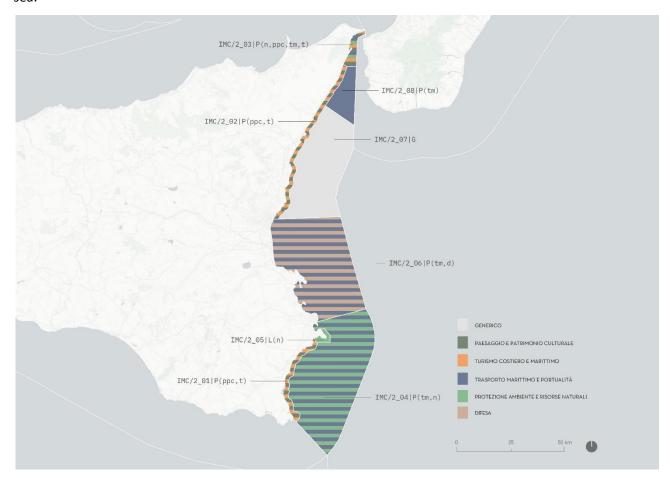


Figure 25 Identification of the planning units of the sub-areas of territorial waters IMC/2 Eastern Sicily





Figure 26 Overlap between the map of principal uses and the Planning Units of the IMC/2 Eastern Sicily Sub-area of territorial waters



DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

MARITIME AND INLAND WATERWAY TRANSPORT

7.3.3 Sub-area IMC/3 - Territorial waters of eastern Calabria

The contents of this paragraph have been prepared by the Region of Calabria on the basis of the contents of the following resolutions: Delibera di Giunta regionale n. 104 of 19 March 2021; Delibera di Giunta regionale n. 152 of 12 April 2022

The main sea and coastal uses present in the sub-area are depicted in 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, fishing, protection of the environment and natural resources, protection of the landscape and cultural heritage, hydrocarbon exploration and production, and defense-related activities. The sources of the spatial data used are reported in Figure 27 and represent information available at the national level through the contribution of the Ministries involved in the MSP process.

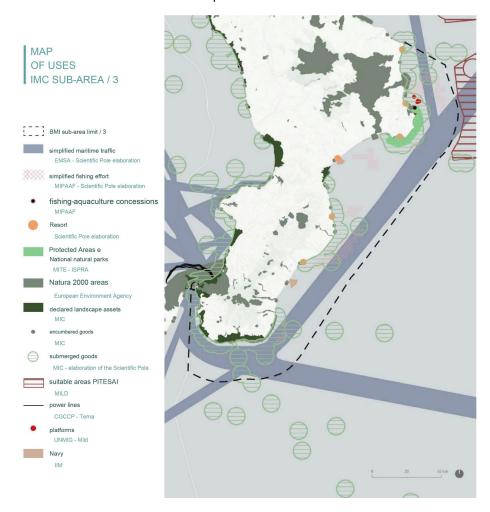


Figure 27 Summary map of the main uses in the IMC/3 Sub-area Territorial waters of eastern Calabria



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

Vision and specific objectives

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

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

Particular attention must be paid to the area of the Strait of Messina, which is crossed both by international routes and by routes connecting Calabria and Sicily, in a context that is important from a naturalistic, landscape and cultural point of view. In this area the development of the port system and the high density of maritime traffic must necessarily find a balanced synthesis with the needs of protection, in any case in the perspective of the realisation of the stable crossing of the Strait.

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

Table 6 Specific objectives for the eastern Calabria sub-area of territorial waters

Reference sector	Code	Specific Objective
Sustainable development	(IMC/3)OSP_SS 01	Enhancement of maritime state property areas and coastal contracts: in order to guarantee the sustainable use of space and resources in the land-sea interface, raise awareness among coastal Municipalities on the opportunity to equip themselves with the prescribed planning tools, combining the protection of the maritime and coastal environment with the entrepreneurial needs of the sector. Promote coastal contracts as voluntary planning tools to pursue, through integrated actions, both the protection and enhancement of the territories and local development
Environmental protection and natural resources	(IMC/3)OSP_N 01	Protection of the environment: maintaining the good conservation status of habitats and species in the long term
	(IMC/3)OSP_N 02	Waste water treatment: Implement the necessary actions to overcome by 2024 the infringement procedures of Directive 1991/271/EEC concerning urban waste water treatment, ensuring reliable waste water sampling in order to preserve the environment, human health and bathing water quality.
Coastal defense	(IMC/3)OSP_DC 01	Coastal erosion: fight coastal erosion in order to safeguard transport infrastructures, of considerable importance and with widespread criticality, the tourist use of the coasts and cultural and environmental assets.
Landscape and cultural heritage	(IMC/3)OSP_PPC 01	Landscape and cultural heritage: enhancing the aesthetic perceptive structure of the landscape and promoting reciprocal and complementary relationships between inland and coastal landscapes in order to develop land-sea interaction and the fruition of cultural heritage, with particular regard to coastal sites and cultural heritage



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

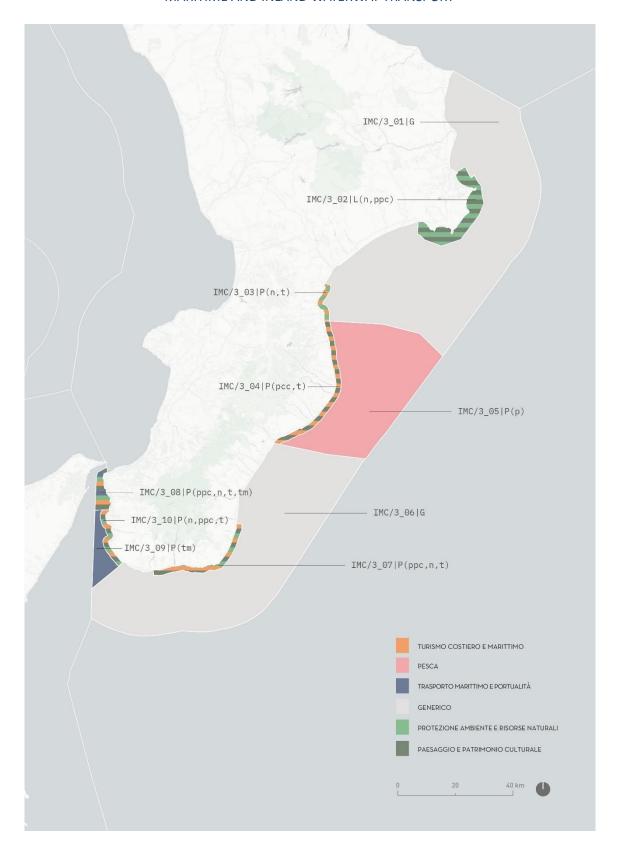
Reference sector	Code	Specific Objective
		related to the defensive system (castles, fortified palaces, towers, city walls), often inserted in valuable urban and environmental contexts. The enhancement should also be carried out through the inclusion in circuits linked to cruise and pleasure boating.
Coastal and maritime tourism	(IMC/3)OSP_T 01	To promote and support the enjoyment of the seaside resort, also through the qualitatively adequate offer of complementary and support services connected to seaside tourism and nautical pleasure boating, with respect for environmental sustainability.
	(IMC/3)OSP_T 02	Widespread port facilities, recreational boating and seaside tourism: make up the supply gap for nautical tourism, especially in terms of the availability of berths per length of coastline, through the development and creation of port infrastructures and the use of temporary mooring facilities for boats.
Maritime transport and ports	(IMC/3)OSP_TM 01	Main ports: consolidate the role of the Port of Gioia Tauro, as the main Italian transhipment hub, and increase its relevance in the Mediterranean and international context. In the remaining ports, especially in the southern part, exploit the attractiveness resulting from the proximity to international routes, Sicily and the Aeolian Islands for commercial development and especially tourism, providing the ability to accommodate boats and pleasure boats (mega yachts, mini-cruises). Developing cruise tourism in the port of Vibo Valentia
Fishing	(IMC/3)OSP_P 01	Guarantee in all port infrastructures, with justified exceptions, a fishing function, with an adequate supply of services in quantitative and qualitative terms.
Aquaculture	(IMC/3)OSP_A 01	Promote and support the development of offshore aquaculture in suitably identified areas.
Energy	(IMC/3)OSP_E 01	Renewable energy: transform ports into positive energy facilities, mainly through wave energy production. Promote, for offshore aquaculture, the use of multifunctional platforms that provide, in addition, the production of energy from wind and waves.
Maritime safety, navigation and surveillance	(IMC/3)OSP_S 01	Legality and safety: encourage a widespread presence of the Coast Guard and other law enforcement agencies at port infrastructures, as a safeguard of legality and safety.

Planning units and vocations of use

The Planning Units identified for the IMC/3 Sub-area are represented in Figure 28 and in Figure 29 (in the latter the representation of the PUs is superimposed on that of the main sea uses).

For the planning of the areas belonging to the Strait of Messina, an ecological and functional approach has been adopted, harmonizing the planning choices with those relative to the IMC/3 and MO/5 sub-areas, since the Strait constitutes a *unicum* from the point of view of the environment and the uses of the sea.







DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

MARITIME AND INLAND WATERWAY TRANSPORT

Figure 28 Identification of the planning units of the sub-areas of territorial waters IMC/3 Eastern Calabria.

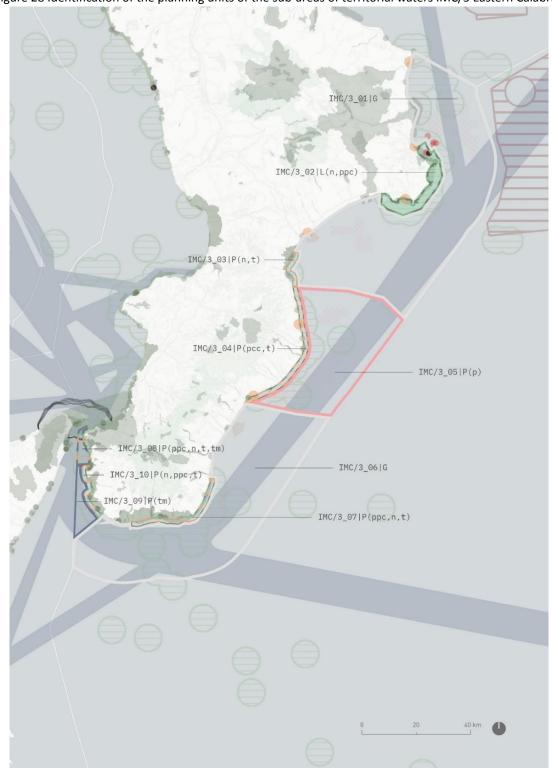


Figure 29 Overlap between the map of principal uses and the Planning Units of the IMC/3 Eastern Calabria Sub-area of territorial waters



DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

MARITIME AND INLAND WATERWAY TRANSPORT

7.3.4 Sub-area IMC/4 - Territorial waters of the Gulf of Taranto

The contents of this paragraph have been jointly developed by the Regions of Calabria, Basilicata and Apulia, based on the contents of the following resolutions: Calabria Region - Regional Council Resolution no. 104 of 19 March 2021; Regional Council Resolution no. 152 of 12 April 2022. Apulia Region - Regional Council Resolution no. 311/2022.

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 tourism, maritime transport, fishing, aquaculture, protection of the environment and natural resources, protection of the landscape and cultural heritage, and defense-related activities. There are areas suitable for hydrocarbon exploration and exploitation under the PITESAI.

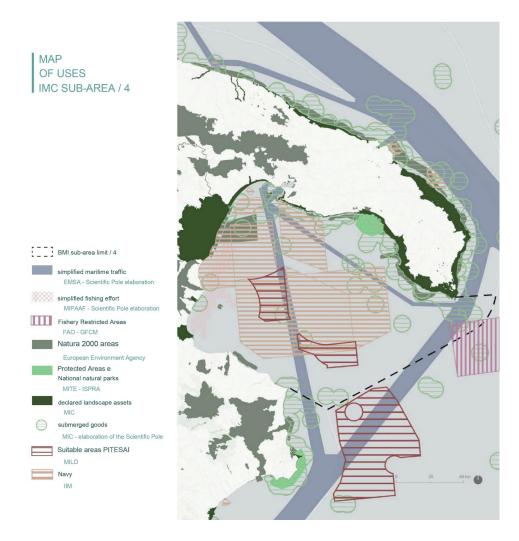


Figure 30 Summary map of the main uses in the IMC/4 Gulf of Taranto sub-area Waters



DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

MARITIME AND INLAND WATERWAY TRANSPORT

Vision

The development of maritime and coastal activities in the sub-area is planned in line with what is outlined in the UN 2030 Agenda and what is defined in the National Strategy for Sustainable Development, thus pursuing 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, contributing to the protection of natural biodiversity and recognizing its role also for the purposes of combating climate change and for sustainable development.

The planning of the sub-area therefore aims at the general transversal objective of sustainable development, to be implemented through the adoption of an integrated and ecosystemic approach to planning that takes into account the dynamics of the context in their complexity and the environmental, social and economic interrelationships.

In line with this approach, planning in the sub-area recognizes the complementarity between existing EU and national instruments, with particular reference to: Maritime Spatial Planning, Marine Strategy, Principles for Integrated Management of the Mediterranean Coastal Zones defined by the ICZM Protocol and EU Biodiversity Strategy 2030 and therefore has as an overarching cross-cutting objective to ensure an integrated and ecosystem-based approach for the sea and coasts.

In line with the general transversal objective, the protection of the natural, landscape and cultural heritage of the coastal and marine area is an essential prerequisite which must be taken into account when defining and implementing development strategies for the maritime economy and when defining permitted human uses.

The planning and management of marine and maritime activities in the sub-area pursue the integration and coordination with the planning and management of land-based activities, guaranteeing the 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.

The planning of the sub-area is aimed at enhancing its strategic role within the Mediterranean, which it plays due to its geographical location, by strengthening cross-border and international cooperation activities.

Sub-area planning intends to bring the Blue Economy to the centre of development and innovation policies, adopting new strategic levers both in traditional sectors (fishing, tourism, ports) and in expanding sectors, such as the blue bio-economy, in which research, development and experimentation are an essential competitive factor.

Among the strategies for the development of the sub-area, the development of tourism plays a priority role, which finds its main premise in the natural, landscape and cultural heritage. This strategic priority must be pursued in a sustainable way, limiting the impact of infrastructure and related activities. Further



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

development strategies are compatible insofar as they do not conflict with the protection of the natural, landscape and cultural heritage and with tourism development.

Specific objectives

The specific vision is articulated in the specific planning objectives (SO), which take into account, in an integrated way, the system of existing uses, their current trends and the environmental characteristics and emergencies of the maritime area. The specific objectives mainly concern, in a single or combined way, the following sectors and uses of the sea/coast:

- Environmental protection and natural resources
- Landscape and cultural heritage
- Maritime safety, navigation and surveillance
- Fishing
- Aquaculture
- Maritime transport and ports
- Energy
- Coastal Defense, considered within the broader framework of Integrated Coastal Zone Management.
- Coastal and maritime tourism.



Table 7 Specific objectives for the IMC/4 sub-area

Reference	Code	Specific objective
sector		
	(IMC/4)OSP_N 01	To achieve and maintain good conservation status of habitats and species in the long term, with reference to the objectives of the Marine Strategy Framework Directive (MSFD) and the Water Framework Directive (WFD) (Dir. 2000/60/EC); to conserve and restore marine biodiversity, with reference to the objectives of the Biodiversity Strategy, also by enhancing, extending and strengthening the system of protected areas
Environmental protection and natural resources	IMC/4)OSP_N 02	Improving the environmental quality of the coastal system; integrating 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
resources	IMC/4)OSP_N 04	Promote waste management actions at sea and on beaches (better waste management, reduction of packaging waste, increase of recycling rates, improvement of waste water treatment, promotion of recovery activities of waste already dispersed)
	IMC/4)OSP_N 05	Wastewater treatment. Provide structural measures for the modernization, monitoring and proper management of urban and industrial discharges throughout the sub-area, in order to preserve the environment, human health and bathing facilities
	(IMC/4)OSP_PPC 0 1	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
	(IMC/4)OSP_PPC 0 1	Recovering dune systems, cliffs, wetlands, reservoirs and canals, marginal areas close to the coast and heavily degraded and strengthening ecological connections
Landscape and cultural heritage	(IMC/4)OSP_PPC 0 2	To safeguard the great sceneries of relevant landscape, environmental, naturalistic and historical-cultural value, preventing transformations that compromise their functional, historical, visual, cultural, symbolic and ecological components and relations; enhancing the aesthetic perceptive structure of the landscape, promoting reciprocal and complementary relationships between inland and coastal landscapes, in order to develop the interaction between land and sea and the fruition of cultural heritage, with particular regard to coastal sites and cultural heritage related to the defensive system (historical centres, castles, fortified palaces, towers, city walls), often inserted in urban and environmental contexts of value.
	(IMC/4)OSP_PPC 0 3	Preserving the horizon line as a valuable element of the coastal seascape, also by identifying maritime stretches of water as further contexts for the protection of the landscape of coastal areas, enhancing the architectural, cultural and landscape assets from which it is possible to enjoy panoramic views characterising the identity of the sub-area
	(IMC/4)OSP_PPC 0 4	To protect the submerged archaeological heritage also through the strengthening and adjustment of the knowledge base, the deepening of



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

Reference sector	Code	Specific objective
		impact assessments and the strengthening of seabed monitoring actions related to the implementation of interventions
	(IMC/4)OSP_PPC 0 5	Strengthen interventions to integrate the landscape dimension with the cultural dimension of heritage assets, preserving <i>in situ</i> the underwater cultural heritage, archaeological, monumental and cultural heritage values, and the seascape and coastal landscape
Maritime safety, navigation and surveillance	(IMC/4)OSP_S 01	Increasing legality and safety in sea areas and in port activities and infrastructures, also by favouring a widespread presence of Coast Guard and other Police Forces
	(IMC/4)OSP_T 01	Promoting quality tourism focused on innovative products and products with a strong territorial imprint
	(IMC/4)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
	(IMC/4)OSP_T 03	Regulate seaside tourism, develop programmatic strategies and regulatory measures for the management of the flow of presences, network services, traffic and parking, bathers' safety, fire prevention in the areas facing the sea
Coastal and maritime tourism	(IMC/4)OSP_T 04	Promote pleasure boating through the networking of dedicated sustainable infrastructures, the promotion of innovation in the shipbuilding sector and the promotion of experiential tourism on the coastal strip. Recover, where it exists, the gap in supply with respect to the national average (number of berths per km of coastline) for nautical tourism, as long as it is compatible with the needs of environmental protection and the landscape heritage
	(IMC/4)OSP_T 05	Favouring the integrated development of sustainable tourist-sport activities (e.g. cycling tourism, rowing, sailing, kite-surfing, wind-surfing, scuba 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
	(IMC/4)OSP_T 06	Promoting panoramic viewpoints as a resource for the tourist fruition of the territory
	(IMC/4)OSP_P 01	To favour the conservation and rational management of the biological resources of the sea, also through the planning of the fishing effort, the adoption of selective fishing systems, the study and control of the interrelationships between the marine and lagoon environments and fishing and aquaculture
Fishing - some aspects also relevant	(IMC/4)OSP_P 02	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
to aquaculture	(IMC/4)OSP_P 03	Encourage the reduction of the use of plastics in the fisheries and aquaculture sectors, strengthen measures to promote the recycling of waste products and the proper disposal of waste from fisheries and aquaculture,



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

Reference sector	Code	Specific objective
	(IMC/4)OSP_P 04	Ensure throughout the area the necessary infrastructure and services for the fisheries sector, as well as the necessary aids for the maintenance and transmissibility of traditional fishing systems and related equipment
Aquaculture	(IMC/4)OSP_A 01	Identify suitable areas for aquaculture (AZA) to be allocated for breeding purposes, as well as the service areas necessary to carry out this activity; Promote and support the development of offshore aquaculture in suitably identified areas.
Coastal defense Considered within the Integrated Management of the Coastal Zone	(IMC/4)OSP_DC 01	Promote the eco-systemic approach in the municipal planning of maritime state property areas in order to achieve the development of the territories without affecting the identity values of the places; guarantee an "active protection" of the coast to counter the demand for soil transformation; fight illegal building and take care of the restoration of the state of the places (e.g. stretches of beach) where this has been compromised by inappropriate interventions
	(IMC/4)OSP_DC 02	Enhancing maritime state-owned areas and river/lake/coastal contracts; making coastal Municipalities aware of the opportunity to equip themselves with the required planning tools; promoting coastal contracts as voluntary planning tools able to pursue, through integrated actions, both the protection and enhancement of territories and local development
	(IMC/4)OSP_DC 03	Protecting the morphodynamic equilibrium of coastal environments from erosive phenomena through actions aimed at protecting the coastline, safeguarding the tourist use, cultural and environmental heritage and transport infrastructure and giving particular emphasis to aspects related to water quality and sediments
	(IMC/4)OSP_DC 04	Identify the structural and non-structural interventions (e.g. civil protection plans) for the management of the risk of flooding of coastal areas from meteo - marine events, according to the population exposed, the assets to be protected and the constraints present
	(IMC/4)OSP_DC 05	Implement clean-up and remediation programs in marine and coastal areas, supporting the sustainable reconversion/relocation of industrial areas
Maritime transport and ports	(IMC/4)OSP_TM 01	Guaranteeing, by seizing all the opportunities given by the establishment of interregional EPZs, the development of commercial maritime traffic involving the commercial port system of the sub-area, in the context of the TEN-T Networks and international and global traffic scenarios, with a view to sustainable development. In particular: - Promote the interregional EPZ that has its centre of gravity in the Port of Taranto in accordance with the provisions of the relevant Strategic Plans - the port of Corigliano Calabro to serve as a regional intermodal node
	(IMC/4)OSP_TM 02	Support the development of shipbuilding activities in line with sector production trends



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

Reference sector	Code	Specific objective
	(IMC/4)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
	(IMC/4)OSP_TM 04	Promoting cross-border cooperation by establishing an active and long-term partnership through the improvement of multimodal connections and maritime transport
	(IMC/4)OSP_TM 05	Enhance the port areas through a requalification process, with the development of passenger and cruise ports and urban integration and the application of the standards defined by MITE for green ports adapted to the different port realities of the area. Develop cruise tourism at least in the ports of Corigliano Calabro and Taranto
	(IMC/4)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
	(IMC/4)OSP_TM 07	Promote the reduction of CO ₂ and noise emissions from vessels (speed reduction, use of non-traditional energy sources and fuels, etc.) and combat the introduction of non-native species through shipping (biofouling and ballast water management)
Energy	(IMC/4)OSP_E 01	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
	(IMC/4)OSP_E 02	Reconcile the protection of the marine-coastal habitat, landscape and visual integrity with innovative forms of energy production from renewable sources (e.g. off-shore wind power on existing and disused platforms integrated with the green hydrogen production chain and so on).
Defense	(IMC/4)OSP_D 01	Allow certain areas to maintain their military functions, reducing conflicts with other present uses

Planning units and vocations of use

The Planning Units identified for the IMC/4 Sub-area are represented in Figure 31 and in Figure 32 (in the latter the representation of the PUs is superimposed on that of the main sea uses).



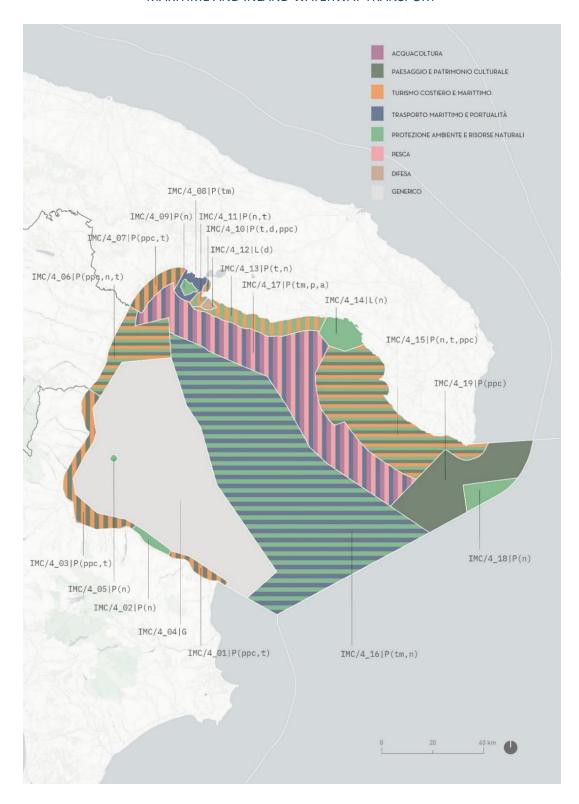
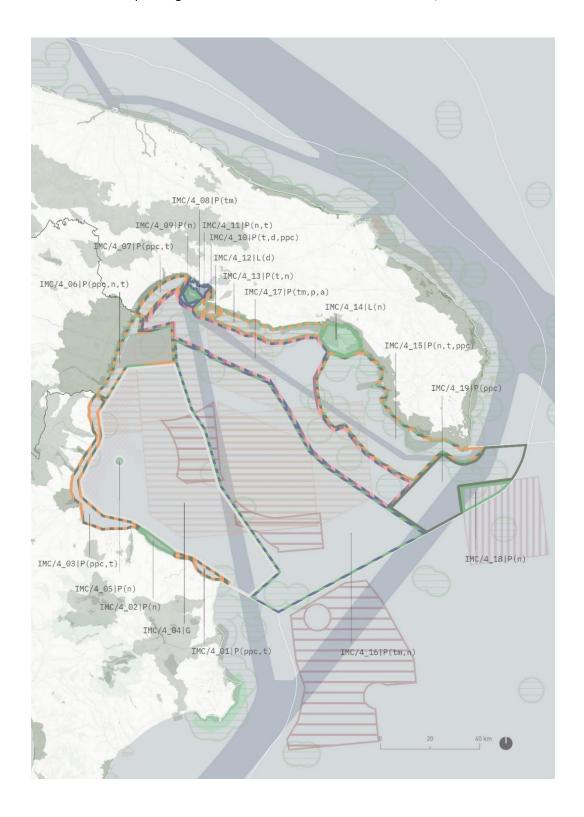




Figure 31 Identification of the planning units of the sub-areas of territorial waters IMC/4 Gulf of Taranto





DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

MARITIME AND INLAND WATERWAY TRANSPORT

Figure 32 Overlap between the map of main uses and the Planning Units of the Sub-area of territorial waters IMC/4 Gulf of Taranto



DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

MARITIME AND INLAND WATERWAY TRANSPORT

7.3.5 Sub-area IMC/5 - Territorial waters Pantelleria and Pelagie Islands

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 tourism, maritime transport, fishing, protection of the environment and natural resources, protection of the landscape and cultural heritage. 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.

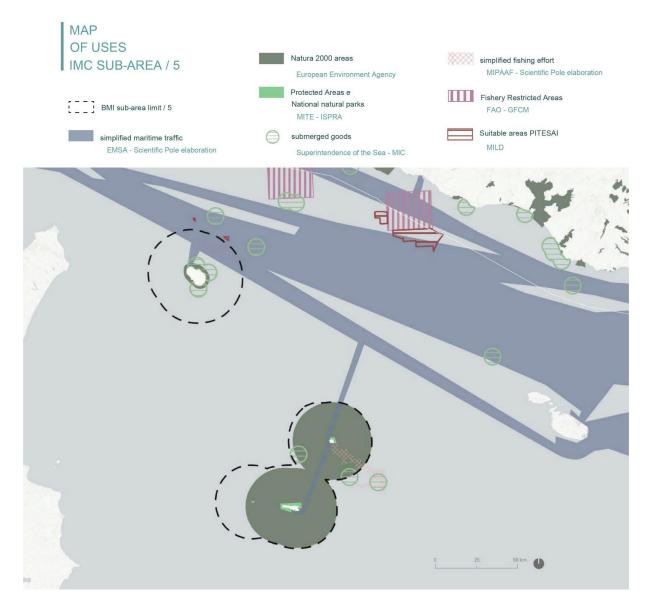


Figure 33 Summary map of the main uses in the IMC/5 sub-area Waters of Pantelleria and Pelagie Islands



DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

MARITIME AND INLAND WATERWAY TRANSPORT

Vision and specific objectives

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

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

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

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

General objective - transversal

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

The specific objectives

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

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



Table 8 Specific objectives for the IMC/5 sub-area

Reference sector	Code	Specific Objective
Maritime safety, navigation and surveillance	(IMC/5)OSP_S 01	To support a process of military control of the marine areas and coastal zones in the south of Sicily that face the Sicilian channel for the protection of fellow fishermen and for the control of the migratory phenomenon.
	(IMC/5)OSP_S 02	Contribute to safe navigation and environmental protection
Fishing	(IMC/5)OSP_P 01	To promote the development and sustainability of fishing with reference to small-scale fishing, promoting multi-functionality and integration with other sectors, tourism, food and wine, quality chains for the processing of fish products and their enhancement, as well as the promotion of maritime culture, fishing traditions, respect for the environment and preservation of species
	(IMC/5)OSP_P 02	Promote compliance by the fishing fleet with the emission limitation regulations imposed by the IMO
Aquaculture	(IMC/5)OSP_A 01	Ensure the development of the existing marine and lagoon aquaculture activities, favouring the diversification of production, the sustainable use of resources and technological innovation
	(IMC/5)OSP_A 02	Promotion of aquaculture facilities according to guidelines and acts competing with an ecosystem and environmental approach
Maritime transport and ports	(IMC/5)OSP_TM 01	To guarantee maritime continuity for passengers and goods between Sicily and Italy and Europe, as well as with the smaller islands, favouring the opening of new national and international routes.
	(IMC/5)OSP_TM 02	Promotion of activities in crisis identified in port areas and commercial ports and contextual development of shipbuilding.
	(IMC/5)OSP_TM 03	Implement the attractiveness of commercial ports.
Energy	(IMC/5)OSP_E 01	Promotion of the development of renewable energy sources, including marine energy, such as wave energy to promote the electrification of ports or other urbanized areas, or offshore wind energy on floating plants, located in areas not visible from land. In identifying the areas, it will be essential to produce a cost-benefit analysis of all the socio-economic components, taking into account conflicts with other uses (fishing in primis) and the needs of the territories, as well as activating discussion tables with all interested parties.
	(IMC/5)OSP_E 02	Promote the development of the energy transition of port areas by bringing ports back to a concept of energy self-sufficiency according to current environmental and energy protection regulations.
Coastal defense	(IMC /5)OSP_DC 01	Development of all the actions related to the protection of the coasts, contrast to the erosion phenomenon, protection from the floods and consequent restoration of the sandy and gravelly coasts, with particular attention to the mouths of the rivers, promoting appropriate naturalistic engineering interventions



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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

Reference sector	Code	Specific Objective
		aimed at the containment of the degraded coasts, as well as a coherent development of the local flora.
	(IMC /5)OSP_DC 02	Promotion of a sustainable development of coastal areas and environmental reclamation of port areas through a multi-year planning of activities, to be implemented also for the requalification, adaptation and strengthening of existing port structures.
Coastal and maritime tourism	(IMC /5)OSP_T 01	In order to implement the tourist fruition of the coasts, a coherent activity will be developed for the improvement and maintenance of the quality status of bathing waters (Directive 2006/7/EC), as well as strategies for the contrast of coastal erosion.
	(IMC /5)OSP_T 02	Implementation of the tourist port, proposing new settlements, and in return, modernization, strengthening and adaptation of existing marinas.
	(IMC /5)OSP_T 03	Operational proposals for an implementing regulation in the port area that identifies the rules for the usability of the spaces to be allocated to tourist landings and those to be allocated to commercial and fishing activities, improving the services available to tourists, yachtsmen or cruise passengers.
Environmental protection and natural resources	(IMC/5)OSP_N 01	Enhancement of the system of protected areas already existing and those to be created, providing coherent actions for the reduction of pollution in port areas.
	(IMC/5)OSP_N 02	Achievement and maintenance of the environmental rehabilitation objectives stemming from the Water Directive (Dir. 2000/60/EC) and the Marine Strategy Framework Directive.
Landscape and cultural heritage	(IMC /5)OSP_PPC 01	Protection and enhancement of the environment and landscape of the assets and the context in which they insist, taking into account the respect of the constraints already defined.
	(IMC/5)OSP_PPC 02	Identification of assets belonging to the regional maritime - coastal heritage and consequent requalification and conservative restoration.
Scientific research and innovation	(IMC/5)OSP_RI 01	Technical and scientific production on issues concerning the protection and preservation of the marine environment.
	(IMC/5)OSP_RI 02	Creation of a "District of the Sea" that connects researchers, businesses and public structure, encouraging the birth of start-ups in the sector.
	(IMC/5)OSP_RI 03	Promotion for research and development of innovative technologies at the service of the enhancement of the maritime heritage in its environmental and economic aspects.

Planning units and vocations of use

The Planning Units identified for the IMC/5 Sub-area are represented in Figure 34 and in Figure 35 Figure 32 (in the latter the representation of the PUs is superimposed on that of the main sea uses).



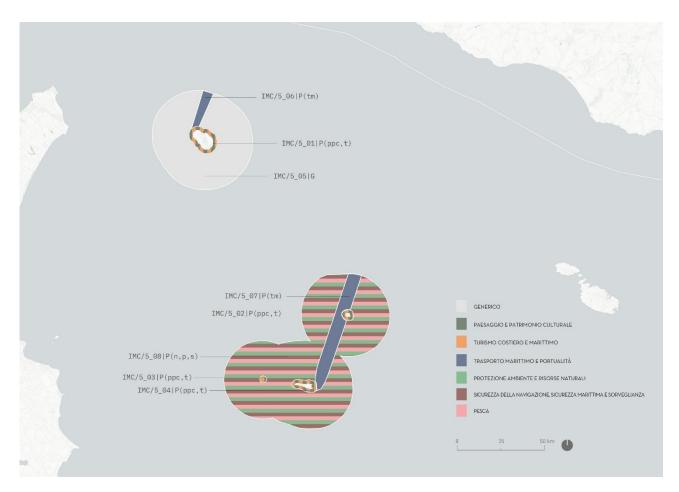


Figure 34 Identification of the planning units of the sub-area IMC/5 Pantelleria and Pelagie Islands



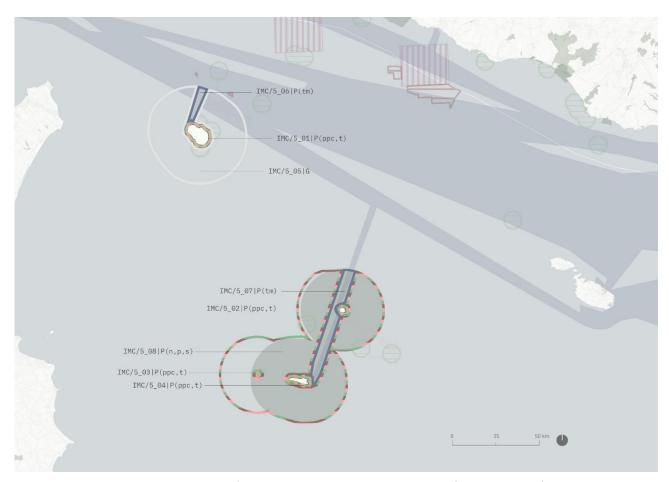


Figure 35 Overlap between the map of the main uses and the Planning Units of the Sub-area of territorial waters IMC/5 Pantelleria and Pelagie Islands



DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

MARITIME AND INLAND WATERWAY TRANSPORT

7.3.6 Sub-area IMC/6 - Southern Sicily Continental Shelf

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 coastal tourism, maritime transport, fishing, protection of the environment and natural resources, protection of the landscape and cultural heritage. 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 the IMC/6 Sub-area Continental Shelf Southern Sicily



DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

MARITIME AND INLAND WATERWAY TRANSPORT

Vision and specific objectives

The Strait of Sicily historically represents a strategic crossroads for traffic in the Mediterranean. Maritime transport, in all its components (merchant, oil, passengers), represents, today and in the future, a characteristic activity of the area in question. The prospects for further growth of the sector in the entire Mediterranean require consolidating the transition towards environmental sustainability, strengthening initiatives to reduce the impacts generated by this activity, which are particularly significant for the area in question.

The area also has a vocation for energy production, both in terms of extraction of hydrocarbons and their transfer (gas pipelines). This vocation must be preserved, although in the direction of energy transition towards the development of the marine renewable energy sector.

The Strait of Sicily is also one of the most fished areas of the Mediterranean Sea and supports fishing activities whose productivity contributes in a fundamental way to the sustenance of the economies of the territories that overlook it. The scientific analyses of the state of exploitation related to the stocks of the main species show, however, a condition of overfishing and, therefore, the need to continue the path to make more compatible the modalities and the intensity of fishing with the potential biological renewability of the species and the communities that support it.

The area in question is of great ecological value: it hosts endemic species and communities that interact with two adjacent basins, the Eastern and Western Mediterranean, and is included in the migratory routes of many species of fish, cetaceans and sea turtles, as well as birdlife. The high environmental value of the area is recognized by various protection and management tools that need to be coordinated, integrated and strengthened to ensure the long-term protection of the ecosystem services that this area provides to the benefit of the entire environmental and socio-economic system of the central Mediterranean.

Last but not least, with particular reference to the geopolitical context in which the area is inserted, it is essential to pursue every possible initiative aimed at maintaining and strengthening the defense of freedom of navigation and the lawfulness of maritime traffic, as well as the safeguarding of human life and search and rescue at sea. For this reason, in the entire sub-area, Maritime Safety, Navigation and Surveillance is identified as a priority use.

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

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



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

Table 9 Specific objectives for the Southern Sicily continental shelf sub-area

Reference sector	Code	Specific objective
Maritime transport and ports	(IMC/6)OSP_TM 0 1	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
Maritime safety,	IMC/6)OSP_S 01	Prevent pollution from ships in the framework of international and European policies such as Marpol 73/78 and Directive 2005/35/EC.
surveillance	IMC/6)OSP_S 02	Adopt an integrated approach to maritime safety and maritime interests, taking into account international rules for the Safety of Life at Sea (SOLAS) and Search and Rescue at Sea (SAR).
Energy	IMC/6)OSP_E 01	Allowing the possible submission of new applications for hydrocarbon prospection and exploration permits (limited to gas) and for the performance of related potential activities in "potentially suitable areas" consistent with European decarbonization scenarios and in a manner that is safe for people and the environment
	IMC/6)OSP_E 02	Promote the generation of energy from renewable sources at sea, with particular reference to wind power
<i>Eighi</i>	IMC/6)OSP_P 01	to achieve an improvement in spawning stock biomass in demersal fisheries by reducing the exploitation rate (hake and white shrimp) from the current level to a level compatible with the sustainability standards of the new Common Fisheries Policy
Fishing	IMC/6)OSP_P 02	Reduce the catch of undersized individuals through the protection of the main nurseries of cod and pink shrimp in the area, in accordance with the recent recommendation of the General Fisheries Commission for the Mediterranean
Environmental	IMC/6)OSP_N 01	Strengthen the existing system of protected areas and conservation measures by promoting the implementation of key spatial measures in the MSFD Program of Measures and pursuing the establishment of internationally protected areas.
Environmental protection and natural resources	IMC/6)OSP_N 02	Consolidate and strengthen the system of areas that promote positive effects on environmental conservation, even though they are not formally subject to protection and conservation objectives (Other effective area-based conservation measures - OECM), including areas prioritised or licensed for offshore renewable energy production.

Planning Unit and vocations of use

The Planning Units identified for the IMC/6 Sub-area are represented in Figure 37 and in Figure 38 (in the latter the representation of the PUs is superimposed on that of the main sea uses).



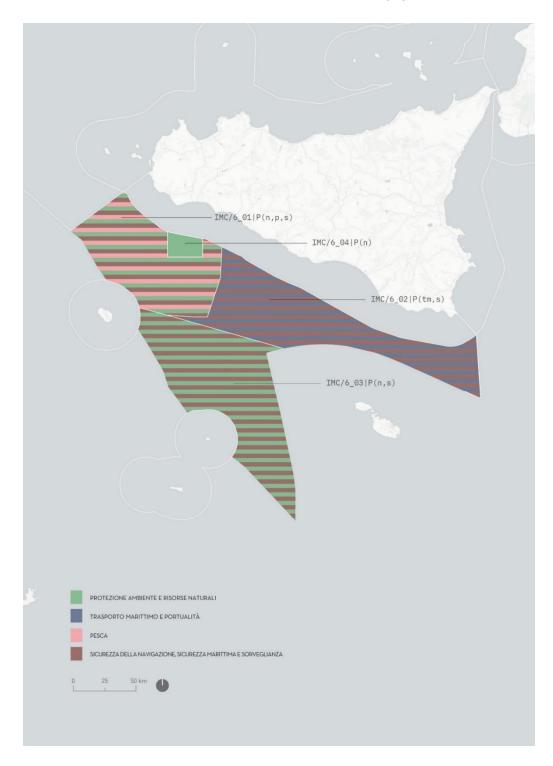


Figure 37 Identification of the planning units of the continental shelf sub-area IMC/6 Southern Sicily



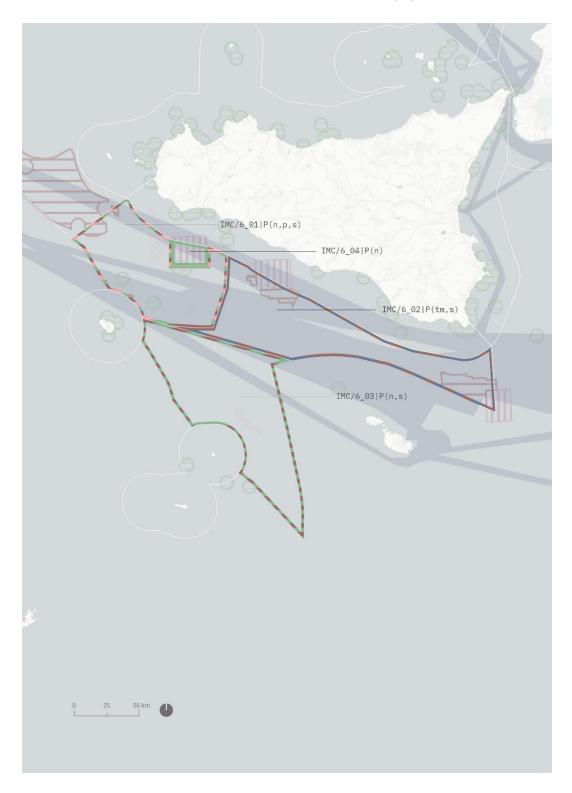


Figure 38 Overlap between the Main Uses Map and the Planning Units of the Continental Shelf Sub-area IMC/6 Southern Sicily



DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

MARITIME AND INLAND WATERWAY TRANSPORT

7.3.7 Sub-area IMC/7 - Ionian Continental Shelf - Central Mediterranean

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, and the search for and cultivation of hydrocarbons. The sources of the spatial data used are reported in Figure 39 and represent information available at national level through the contribution of the Ministries involved in the MSP process.

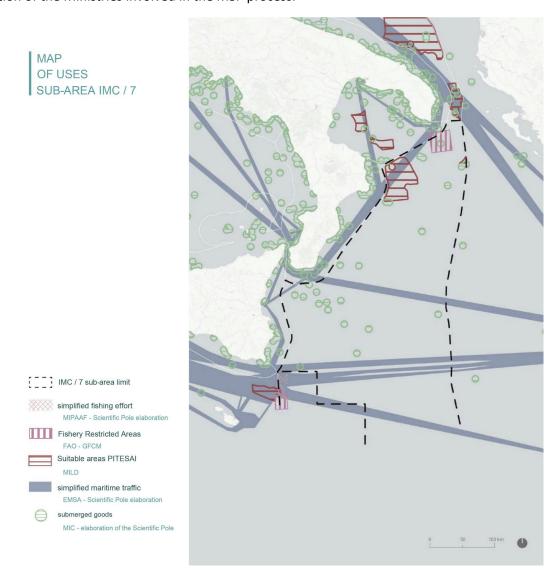


Figure 39. Summary map of the main uses present in the IMC/7 Sub-area Ionian-Central Mediterranean Continental Shelf



DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

MARITIME AND INLAND WATERWAY TRANSPORT

Vision and specific objectives

This area hosts maritime traffic of great importance, to and from the Strait of Sicily and the Strait of Messina. Ships transiting these areas proceed to or from the Adriatic, the Eastern Ionian, the Strait of Corinth and the Aegean, the Suez Canal and the Eastern Mediterranean. The prospects for further growth of the maritime transport sector in the entire Mediterranean require that its transition towards environmental sustainability be consolidated by strengthening initiatives to reduce the impacts generated by this activity.

The area has a vocation for energy production in terms of hydrocarbon extraction. This vocation should be preserved although in the direction of energy transition towards the development of the marine renewable energy sector.

The entire area is characterized by the presence of deep seabed habitats, with bathymetry everywhere above 1000m. From this characteristic stems the need to preserve the marine ecosystems of this area for their ecological importance linked, among other things, to the high functional diversity of the organisms that inhabit them. The need for conservation and protection is also essential in order to maintain and enhance the ecosystem services provided by the habitats present in this area, including the generation of important biogeochemical processes and the mitigation of climate change and CO2 emissions.

Also thanks to its morpho-bathymetric characteristics, as well as its position and the current state of uses, the area assumes strategic value within the Plan for the development of emerging maritime sectors such as marine biotechnologies, offshore renewable marine energy production (wind), also in association (multi-use) with other offshore activities such as aquaculture. As a reaction to these activities, this area has a strong vocation for research and innovation activities, including the acquisition of more knowledge about deep seabed habitats and their protection.

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

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



Table 10 Specific objectives for the Ionian - Central Mediterranean continental shelf sub-area

Reference sector	Code	Specific objective
	IMC/7)OSP_TM 01	Promote sustainable development of maritime transport
Maritime transport		and reduce its negative impacts, with specific rules to
and ports	IMC/7)OSP_TM 02	reduce risks and impacts in sensitive areas using, in
		particular, IMO guidelines
	IMC/7)OSP_E 01	Allowing the possible submission of new applications for
		hydrocarbon prospection and exploration permits (limited
		to gas) and for the performance of related potential
Energy		activities in "potentially suitable areas" consistent with
Litergy		European decarbonization scenarios and in a manner that is
		safe for people and the environment
	IMC/7)OSP_E 02	Promote the generation of energy from renewable sources
		at sea, with particular reference to wind power
	IMC/7)OSP_P 01	to achieve an improvement in spawning stock biomass in
		demersal fisheries by reducing the exploitation rate (hake,
Fishing		white shrimp and red shrimp) from the current level to a
		level compatible with the sustainability standards of the
		new Common Fisheries Policy
	IMC/7)OSP_N 01	Strengthen the system of existing protected areas and
		conservation measures by promoting the implementation of
		key spatial measures in the MSFD Program of Measures and
		pursuing the establishment of internationally protected
Environmental		areas
protection and	IMC/7)OSP_N 02	Consolidate and strengthen the system of areas that
natural resources		promote positive effects on environmental conservation,
		even though they are not formally subject to protection and
		conservation objectives (Other effective area-based conservation measures - OECM), including areas prioritised
		or licensed for <i>offshore</i> renewable energy production.
	IMC/7\OCD CCIO1	
Sustainable	IMC/7)OSP_SS 01	Developing a sustainable marine economy, multiplying growth opportunities for marine and maritime sectors,
development		including developing and innovative ones
	IMC/7)OSP_RS 01	To encourage the development of innovative technologies
	11110/ / 100r_10101	and solutions to promote their dissemination in the various
		sectors of the maritime economy
Scientific research	IMC/7)OSP_RS 02	To encourage the maintenance and consolidation of the
and innovation		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, with
		specific reference to deep seabed ecosystems.



DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

MARITIME AND INLAND WATERWAY TRANSPORT

The Planning Units identified for the IMC/7 Sub-area are represented in Figure 40 and in Figure 41 (in the latter the representation of the PUs is superimposed on that of the main sea uses).



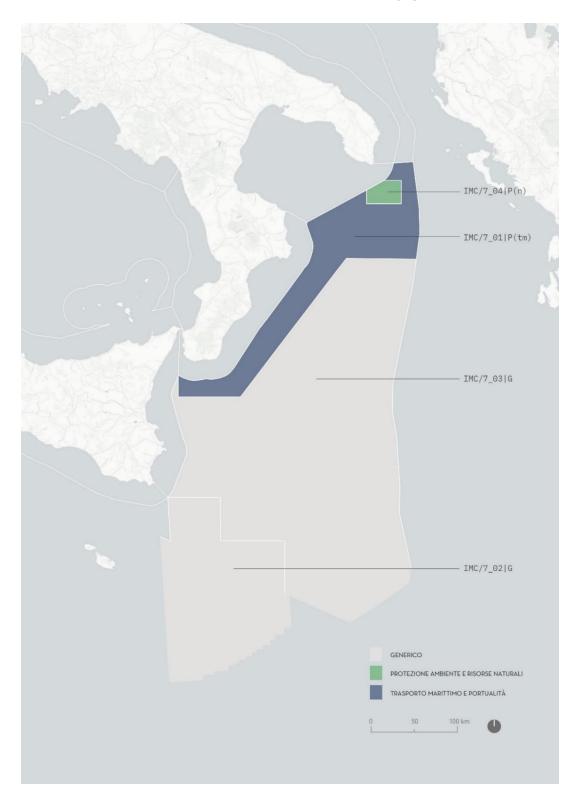


Figure 40 Identification of the planning units of the continental shelf sub-areas IMC/7 Ionian-Central Mediterranean Continental Shelf



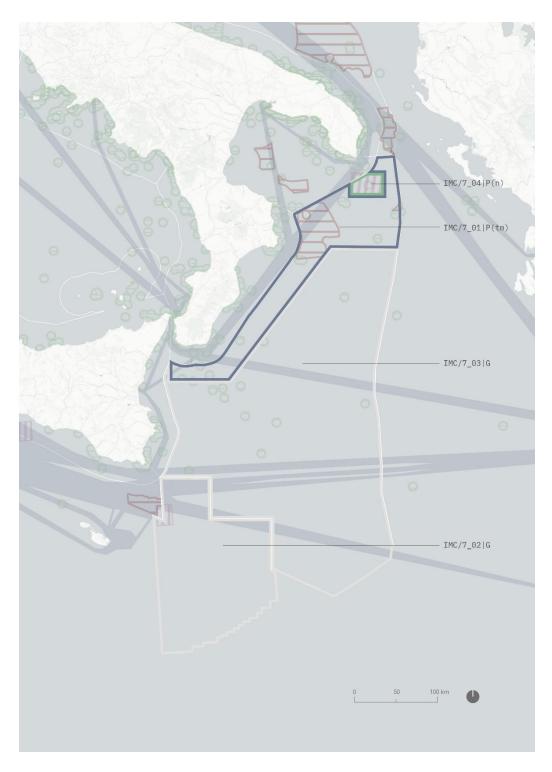


Figure 41 Overlap between the Main Uses Map and the Planning Units of the Continental Shelf Sub-area IMC/7 Ionian-Central Mediterranean



DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

MARITIME AND INLAND WATERWAY TRANSPORT

7.4 Measures di Plan

The management plan of the "Ionian-Central Mediterranean" Maritime Area is drawn up 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, they integrate it and, where necessary, modify its existing planning and programmatic forecasts.

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

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

In Table 11 national level measures are shown, while please refer to Section 4 of the Plan for consultation on sub-area specific measures.



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

Table 11 - 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 measureme nt	Measure	Category (S, T, TE, M, G, EC, A)	Type (I/P/i/A)	Main actors
NAZ_MIS 0	Transverse measurements		Develop and implement a long-term strategy for the participation and involvement of stakeholders in the process of implementation, monitoring and evaluation of the Maritime Plans, with a view to their updating. Particular attention will be paid to the most socially embedded sectors, local administrations and the general public.	А	А	MIMS
NAZ_MIS 0 2	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	А	MIMS
NAZ_MIS 0	Transverse measurements		Develop methodologies and tools for the quantitative assessment of the socio-economic effects of plan choices, to support the adaptive management phases of the MSP.	М	А	MIMS



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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 0 4	OS_SS 01 - Developing a sustainable maritime economy, multiplying growth opportunities for the marine and maritime sectors	Sustainable developme nt	To carry out a study on the socio-economic characterization and evolutionary trends of the different sectors of the Italian sea economy. The study will consider the three maritime areas of reference of the Management Plans, in order to allow the identification of actions that favour the sustainable development of the Italian sea economy, to be conveyed in particular through the Maritime Area Management Plans. The study is configured as preparatory to the definition of a National Strategy for the sustainable development of the sea economy.	А	А	MISE
NAZ_MIS 0 5	SO_SS 02 - Contributing to the National Strategy for Sustainable Development	Sustainable developme nt	Elaborate a Maritime Strategy (National Strategy for the Sustainable Development of the Sea Economy) at a national level, to be implemented in synergy with the implementation of the Maritime Spatial Management Plans, in order to provide a structured impulse to the sustainable development of the Italian sea economy, in the short, medium and long term. The Maritime Strategy is also developed on the basis of the results of the study on the socio-economic characterisation and evolutionary trends of the sea economy.	А	А	MISE
NAZ_MIS 0 6	OS_SS 03 - Contributing to the European Green Deal	Sustainable developme nt	Taking into account the forecasts and implementation of the NIPEC, as well as the indications of the Report of the "Commission on Climate Change, Infrastructure and Sustainable Mobility" (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.	Α	А	MITE



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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 0 7		Sustainable developme nt	Prepare a study on the contribution of MSP Plans to the achievement of national climate change reduction and carbon neutrality targets.	А	А	MITE
NAZ_MIS 0 8		Sustainable developme nt	To set up a Working Group of coastal Regions aimed at identifying common needs and strategies to fully exploit the opportunities that the objectives of the European Green Deal offer for the development of maritime territories and areas. The Working Group will also see the possibility to work in subgroups, one for each maritime area, to focus on the necessary specificities.	А	A	MISE, MITE, Regions
NAZ_MIS 0 9	OS_SS 04 - Fully grasp the economic and environmental sustainability	Sustainable developme nt	Strengthen the role of the maritime economy within the National Strategy for the Circular Economy, for example: enhancing the link and synergies between the Maritime Spatial Plans and the Strategy for the Circular Economy; specifying more detailed actions with reference to the "Blue Economy" Area of intervention, contemplating the efficient use of the maritime space among the tools envisaged to favour the transition towards a circular economy, envisaging proposals for specific actions for the sectors of the maritime economy.	А	I	MITE
NAZ_MIS 1 0	opportunities arising from the circular economy	Sustainable developme nt	To support the structuring, strengthening, development and valorisation of shipbuilding and ship repair, maintenance, overhaul and restructuring, dismantling and component collection activities, structuring a circular naval economy supply chain, wherever possible in synergy with the actions aimed at reconverting the use of coastal industrial areas in crisis/decommissioning and environmental reclamation.	Α	ı	MIMS, Port Authority



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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 1		Sustainable developme nt	To support the structuring of a recovery, re-use and recycling chain of the by-products of the aquaculture and professional fishery activities (also in line with the relevant Measures of the MSFD PoM Descriptor 10), to be realized also at a wide area level including more sub-areas and wherever possible in synergy with the actions aimed at the reconversion of the use of the industrial coastal areas in crisis/decommission and at the environmental reclamation.	А	I	MISE, MIPAAF, Regions
NAZ_MIS 1		Sustainable developme nt	Support the structuring of a national supply chain for the recovery, disassembly, reuse/recycling of end-of-life pleasure, sport and fishing boats, wherever possible in synergy with actions aimed at the conversion of use of coastal industrial areas in crisis/decommissioning and environmental reclamation.	А	I	MISE



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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 1	SO_N 02 - Support the extension of EU marine protection to 30%, of which 10% in a stringent manner, by 2030	Environmen tal protection and natural resources	In order to enable full integration between the implementation processes between MSFD Measure Programs and MSP Plans, establish an "MSFD-MSP" working group linked to the activities of the Technical Committee for MSP, aimed at: 2.1 Identify priority areas for environmental conservation and/or marine resources for the purpose of expanding the network of Marine Protected Areas (MPAs) and/or Natura 2000 Network sites, in line with the forecasts and tools provided by the MSFD Directives (with particular reference to Measure 1 of Descriptor 1 of the MSFD 20/12/2021 PoM Update), Natura 2000 and the 2030 Biodiversity Strategy. 2.2 Promote studies and assessments of connectivity, ecological status, ecosystem functions and ecosystem services derived from them.	S, M, EC	Α, Ι	MITE, ISPRA, Regions
NAZ_MIS 1 5	OS_N 03 - Transpose and promote the implementation of the main space measures foreseen in the MSFD Program of Measures	Environmen tal protection and natural resources	In order to enable full integration between the implementation processes between MSFD Measure Programs and MSP Plans, establish an "MSFD-MSP" working group linked to the activities of the Technical Committee for MSP, aimed at: 3. establish procedures aimed at 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	Α, Ι	MITE, ISPRA



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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 1 6	OS_N 04 - Integrating aspects of land-sea interaction and integrated management of the coastal strip, with particular reference to environmental aspects	Environmen tal protection and natural resources	To support study and research activities aimed at improving the spatial knowledge of land-sea interactions, with particular reference to the areas identified as interaction hot spots and/or suitable for "environmental protection and natural resources" and landscape protection. These activities should favour the integrated management of the protection instruments in force and/or planned.	TE, M, G	I, A	MITE, ISPRA, Regions
NAZ_MIS 1 7	OS_N 05 - Take into account in the medium - long term the process and objectives of marine	Environmen tal protection and natural resources	Prepare the National Environmental Restoration Plan, identifying the priority areas to be restored and the restoration measures and methods to be adopted, in synergic and subsidiary relation with the implementation and monitoring process of the Maritime Space Plans.	S, T	I, A	MITE, Regions
NAZ_MIS 1 8	ecosystem restoration as outlined in the proposed European Law on Environmental Restoration	Environmen tal protection and natural resources	Improve knowledge on the distribution of habitats and species indicated in the proposal for an EU Regulation on Environmental Restoration (COM(2022)304 final), also capitalizing 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 into the National Plan for Environmental Restoration and, from there, into the Maritime Spatial Plans.	М	А	Research Institutions , Universitie s, ISPRA



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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 1		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	А	MIC, MITE
NAZ_MIS 2 0	OS_PPC 01 - Supporting the	Landscape and cultural heritage	Provide facilities or incentives for current holders of aquaculture concessions, in the case of activities to improve the characteristics (spatial distribution and color of the floats) of the facilities already under concession.	TE	i	Regions
NAZ_MIS 2 1	landscape value of the coastal strip	Landscape and cultural heritage	Integrate the Guidelines for the identification of AZAs with a methodology that allows to take into account also the visual perception of aquaculture facilities from the ground. Promote specific studies at a sub-area scale aimed at valorising and capitalising on the experiences already made in the field of compatibility between aquaculture facilities and landscape protection requirements, as well as at identifying further practices.	S, TE	I	ISPRA, Regions
NAZ_MIS 2 2	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.	А	А	MIC, Regions



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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 2 3	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	А	MIC, Regions
NAZ_MIS 2 4	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).	А	i	MIC, Regions
NAZ_MIS 2 5	neritage	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).	А	I	MIC
NAZ_MIS 2 6	OS_PPC 06 - Combating unauthorised building in coastal areas	Landscape and cultural heritage	Systematize the information available in the national database on unauthorized building and from other sources, in order to develop a study on the consistency of the phenomenon of unauthorized building in the coastal strip (300 meters deep) at the scale of the maritime area, to be used in the planning of interventions to combat it.	М	А	Mi, Regions



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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 2 7	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.	А	I	Coastguard / National Maritime Rescue Coordinati on Centre
NAZ_MIS 2 8		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 opportune 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 2 9	fisheries sectors	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



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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 3 0	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	А	MIPAAF
NAZ_MIS 3		Fishing	Encourage projects, studies and research aimed at promoting an adequate spatial presence of small-scale fisheries, their sustainability and direct actions to strengthen the related skills and develop human capital.	TE,G	I	MIPAAF, Regions
NAZ_MIS 3 2	OS_P 03 - Promotion, development and spatial management of small-scale coastal fishing using sustainable techniques	Fishing	Promote agreements between fishermen practising small-scale fishing and the bodies/bodies responsible for the management of coastal and marine areas subject to protection (MPAs, coastal and marine sites of the Natura 2000 Network, national or regional parks that include coastal and marine areas, etc.) in order to enhance the role of these areas in sustainable development and in the recognition of the quality, also environmental, of the products and services offered by small-scale artisanal fishing. This objective is aligned with the goal of favouring the extension of the protection of EU seas to 30% by 2030, generating positive effects for small-scale artisanal fishing, in synergy with the aims of nature protection.	S, T, G	А	MIPAAF, Regions, MPA managers
NAZ_MIS 3		Fishing	Develop local small-scale fisheries plans that also contain spatial forecasts and measures.	S, A	А	Regions



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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 3	OS_P 04 - Encourage the creation of areas for the recovery and protection of fish stocks and protection of Essential Fish Habitats (EFH)	Fishing	Launching an integrated evaluation of the knowledge on the Essential Fish Habitats (EFH) of the main alieutic species, aimed at the determination of the areas to be subjected to protection constraints as a priority, thus supporting the institution of spatial measures of resources management (e.g. ZTB) and related joint spatial planning actions of fishing activities. This survey activity and related periodic monitoring will have to be carried out as a priority within the 0-6 nautical miles from the coast, as well as capitalizing on the activities foreseen in Measure 3 (Descriptors 1, 3, 6) to support the implementation of the environmental target 6.3 of the PoM MSFD 20/12/2021 Update.	TE, EC, M, G	Α, Ι	MIPAAF
NAZ_MIS 3 5	SO_P 05 - Encourage cooperation between States in order to achieve concerted measures for the sustainable	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	ı	MIPAAF
NAZ_MIS 3	management of activities of their national fisheries sectors	Fishing	Strengthen international dialogue and coordination for the management of fishing activities in international waters, in order to prevent disputes and ensure the safe operation of Italian fishing fleets	А	I	MIPAAF, MAECI
NAZ_MIS 3	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	Α, Ι	MIPAAF, Captaincies



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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 3 8		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 3	SO_A 01 - Promoting the sustainable	Aquacultur e	Promoting 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	ı	MIPAAF, Regions
NAZ_MIS 4 0	growth of the aquaculture sector	Aquacultur e	Promote coexistence between aquaculture growth and environmental conservation, through targeted studies and pilot projects for the integration of aquaculture activities and Natura 2000 sites.	TE	I	MIPAAF, ISPRA, Regions
NAZ_MIS 4 1	OS_A 02 - Promote	Aquacultur e	Develop, adopt and implement AZA Plans at the regional scale, in line with the MSP Plans and with the support of the AZA Technical Guide (ISPRA /HIPAA).	S, G	А	Regions
NAZ_MIS 4 2	quality aquaculture and support the process of establishing AZAs (Allocated Zones for Aquaculture)	Aquacultur e	Establish a permanent working table aimed at supporting the integration and progressive harmonization between regional AZA plans and MSPs in the different maritime areas, strengthening the already existing tools (e.g. ITAQUA).	G	А	MIPAAF, ISPRA, Regions
NAZ_MIS 4 3		Aquacultur e	Address through targeted studies an adequate spatial distribution of investments for the technological development and diversification of productions, and monitoring and support systems for the same.	А	А	MIPAAF, Regions



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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 4 4	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	А	MIMS, ISPRA, Port Authority
NAZ_MIS 4 5		Maritime transport and ports	Produce an analysis aimed at identifying new areas of spatial management of maritime traffic (PSSA, ATBA, TTS) and strengthening existing ones, with the aim of improving the regulation of shipping lanes and reinforcing conservation actions for marine ecosystems and biodiversity.	TE, M	A	MIMS, MITE, Port System Authority
NAZ_MIS 4		Maritime transport and ports	Encourage the identification and adoption within the MSP of specific spatial, behavioral, and technological measures to reduce the impacts of underwater noise on biota, including in line with MSFD Descriptor 11 objectives and measures.	S, TE	А	MIMS, MITE



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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 4 7	OS_TM 02 - Promote the use of alternative fuels, reduce discharges into the sea, improve port	Maritime transport and ports	Prepare the mapping at the scale of the maritime area of the sites suitable for the delivery of dredged materials, also through the connection with the databases available at regional level; strengthen the harmonization and coordination of management practices of dredged sediments in the maritime area and at national level.	S, TE, G	Α, Ι	MITE, MIMS, Regions, Port System Authorities
NAZ_MIS 4 8	facilities for the collection of waste and cargo residues and/or encourage the use of such facilities, improve the management of dredged sediments	Maritime transport and ports	Actively contribute to European and Mediterranean-wide harmonization initiatives of solid waste collection methods on ships and their delivery to ports, in order to optimize procedures (from the planning phase to the service assignment phase), maximize recyclable fractions and contribute to the development of circular economy supply chains. Particular attention must be paid to plastic waste, to activities to combat the abandonment of this waste at sea and on beaches, to the related collection and recovery activities and to environmental education and information.	TE, EC, M	I	Port System Authorities , Regions
NAZ_MIS 4 9	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	А	MIMS, Port System Authority



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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 5 0	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	Α, Ι	Port System Authority
NAZ_MIS 5 1	OS_TM 05 - Promote the integration and dialogue between the planning systems in force in particular regarding the integration of strategic port planning, land planning and sea plans	Maritime transport and ports	Ensure the integration in the MSP Plans of the updates and adjustments of the Port Master Plans, as far as they are concerned and in particular as regards the needs in terms of new water spaces in the areas in front of the ports with the aim of ensuring the development of port activities.	G	А	MIMS, Port System Authority



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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 5 2	OS_E01 - Contributing to the energy transition	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 5 3	towards renewable and low-emission sources through the development of offshore renewable energy production	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	А	MITE



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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 5 4		Energy	Establish an observatory on the monitoring of the impacts of offshore wind farms on the environment and other uses of marine space and the coast, considering the definition, implementation and evaluation phases of the monitoring plans required for the installation and operation of wind farms. The assessments of this observatory will need to be taken into account in the implementation of the monitoring plans of the MSP plans, and therefore in the eventual revision of these plans.	М	А	MITE, MIC, Regions



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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 5 5		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	Α	MUR, MITE
NAZ_MIS 5		Energy	Create a working group to improve authorization procedures, speeding up processes while respecting the principles of transparency and efficiency.	G	А	MITE, MIC, Regions



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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 5 7		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	Р	MITE
NAZ_MIS 5 8		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 5 9	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 MSP, to align the two plans reciprocally and progressively in the implementation and possible revision phases of the plans themselves, favouring the energy transition objectives of PiTESAI as far as MSP is concerned, also through the sharing of data and portals.	S, M	Α, Ι	MITE, MIMS



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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 6 0	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	А	MITE



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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 6 1	OS_DC 01 - Promote the development, harmonization and implementation of strategies and measures to protect the coastline and combat erosion provided in the Flood Risk Management Plans prepared at the scale of the river basin 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	Α, Ι	MITE, Regions



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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 6 2	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	Analyse the coherence between the existing coastal strategies and plans/GIZC, the projects that intervene on the coastal morphology (for conservation, restoration or modification) and the forecasts of the MSP plan; propose possible corrective actions, also taking into account the most recent climate scenarios, possibly elaborated at regional and/or local scale.	S, G	Α, Ι	MITE, Regions



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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 6 3	OS_DC 03 - Adequately consider and address the issue of the use and	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	А	MITE, Regions
NAZ_MIS 6 4	protection of underwater sand for beach nourishment, to be considered as a strategic resource for coastal defense and		Reduce conflicts and impacts related to the use of marine sands for defense works by: i) prioritising the use of deposits outside protected areas or with nature priority established by the MSP; ii) reducing conflicts with other uses (e.g. fishing and aquaculture) through the choice of the most suitable deposits and appropriate extraction methods and timing; iii) adopting impact mitigation measures to be assessed in a site-specific way.	S, T, TE	А, Р	MITE, Regions
NAZ_MIS 6 5	adaptation plans	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	А	MITE, MIC, Regions



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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 MIGIG	SO_T 01 - Promoting sustainable forms of coastal and maritime tourism	of me Coastal and	Facilitate the development of coastal and maritime eco-tourism initiatives also in a multi-use perspective and therefore promoting opportunities for co-planning			Ministry of
6)	maritime tourism	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.		Α, Ι	Tourism, ISPRA
NAZ_MIS 6	OS_T 02 - Promoting coherent planning	Coastal and maritime tourism	Design and develop monitoring activities of pleasure boating, also on the basis of the systemisation of any existing initiatives, through collaboration between Regions and local operators/entities, in order to acquire an adequate knowledge of traffic flows and define management measures for the sustainable development of the sector.	А	A	Regions
NAZ_MIS 6 8	actions on land and sea, also for tourism purposes	Coastal and maritime tourism	At the sub-area scale, assess the establishment of areas for the regulation of recreational traffic and the creation of structures to ensure eco-friendly moorings, in order to preserve the most vulnerable benthic ecosystems and minimize conflicts with other activities. As far as this measure is concerned, the subjects responsible for the implementation and management of the various areas and structures will have to be identified.	А	А	Regions, municipal authorities



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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 6 9	SO_T 03 - Contributing to the diversification of tourism products and services and to countering the seasonality of	Coastal and maritime tourism	Identifying assets or coastal areas subject to strong tourism pressure, also by monitoring the number of accesses, in order to define, where necessary, specific actions for the development of sustainable tourism and the regulation of tourist flows at all or certain times of the year, such as: limiting the number of daily accesses, requiring the purchase of a special ticket whose proceeds are destined to finance interventions for the protection and enhancement of the environmental and cultural heritage, the creation of equipment and initiatives for sustainable tourism (e.g. buoy fields, sea and land visit routes, initiatives for sustainable tourism education, etc.). equipment and initiatives for sustainable tourism (e.g. buoy fields, sea and land visit routes, environmental education initiatives, etc.).	T, G, S	Α, Ι	MIC, Ministry of Tourism, Regions
NAZ_MIS 7 0	demand for inland, coastal and maritime tourism Coastal and maritime tourism		To initiate a study, at the scale of the maritime area, aimed at identifying and promoting sustainable technologies and practices in the sector of navigation for tourism purposes (passenger transport and boating), orienting it spatially and temporally on areas that are particularly vulnerable and congested due to high tourist pressure.	T, TE, S	Α, Ι	MIMS, Regions



DEPARTMENT FOR TRANSPORT AND NAVIGATION

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 7 1	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	А	А	MUR, MIMS



DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

MARITIME AND INLAND WATERWAY TRANSPORT

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



DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

MARITIME AND INLAND WATERWAY TRANSPORT

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 favouring its ability to give the necessary information to the MSPs respecting the different spatial and temporal scales in which they are articulated.

The spatial scale varies according to the territorial extension involved by the different objectives; the widest is the one configured by the basin dimension as well as by the three maritime areas object of the plans: Adriatic, Tyrrhenian and Ionian. Going down to a greater detail, especially in relation to the specific



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

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

8.2.2 STEP 2 - Identify the actors

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

8.2.3 STEP 3 - Define the indicators

In step 3 the indicators for the individual strategic and specific objectives are defined, which can be traced back to four main families of indicators identified as priorities for informing the MSPs: ecological-environmental, socio-economic and pressure, governance 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 12), 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



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

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 12 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



DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

MARITIME AND INLAND WATERWAY TRANSPORT

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 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.



DEPARTMENT FOR TRANSPORT AND NAVIGATION

DIRECTORATE-GENERAL FOR THE SUPERVISION OF PORT SYSTEM AUTHORITIES,

MARITIME AND INLAND WATERWAY TRANSPORT

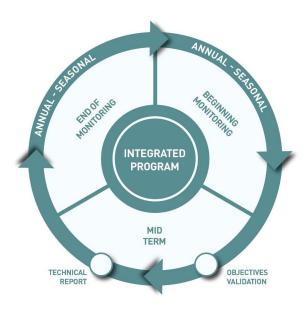


Figure SEQ Figura * ARABIC52 Graphic representation of the PdM in its characteristic of double circularity: an annual/seasonal cycle that foresees the continuous collection and organization of data (the first cycle coincides with the beginning of monitoring) and a broader cycle that foresees the mid-term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

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

The Plan developed for the "Ionian-Mediterranean Central" 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 for the other Maritime Areas, represents the strategic reference for the development in the coming years of the uses of the sea and the interacting uses of the coast. At the same time, it represents the starting point of a process which will have to develop, update and adapt over time, as the information and knowledge available changes, as well as the environmental and socio-economic conditions around it. The intrinsically dynamic nature of the Plans is considered operationally in the chapter 8which defines the methods and indicators through which the Plans will be monitored in order to assess their effectiveness and manage their adaptation and updating. However, it is already possible to identify a series of in-depth studies and actions, both general and specific, that should be implemented immediately after the approval of the Plan to support, within the operational flow of the monitoring program, the consolidation, implementation and updating of the Plan itself.



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

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:

- 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 neighboring 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.