MARINE STRATEGY

PART V. ENVIRONMENTAL TARGETS

1. Introduction

Law 41/2010 for the Protection of the Marine Environment establishes the legal regime governing the adoption of the necessary measures to achieve or maintain the good environmental status (GES) of marine environment, through its planning, conservation, protection and improvement. The main instruments for planning the marine environment are the marine strategies, with the following specific objectives:

- To protect and preserve the marine environment, including its biodiversity, avoid its degradation or restore, where practicable, the marine ecosystems in those areas where they have been adversely affected.
- To prevent and reduce inputs into the marine environment, in order to progressively phasing out its pollution, to ensure that no impacts or risks to marine biodiversity, marine ecosystems, human health or permitted uses at sea appear.
- To ensure that the activities and uses in the marine environment are compatible with the conservation of its biodiversity.

Article 10.1 defines environmental targets as the qualitative or quantitative expression of GES for the marine environment components of each marine subdivision, as well as for the pressures and impacts on the environment. Besides, Article 10.2 of Law 41/2010 establishes that "on the basis of the initial assessment, the Ministry of Agriculture and Fisheries, Food and Environment shall develop a proposal for environmental targets and associated indicators for each marine subdivision in order to achieve a good environmental status, considering the pressures and the impacts..." In this regard, the initial assessment and definition of GES for Spanish marine strategies and the environmental targets established are available at: https://www.miteco.gob.es/es/costas/temas/proteccion-medio-marino/estrategias-marinas/eemm_1erciclo.aspx

Annex III (2) recalls the need to establish: a) targets to determine the ideal conditions according to the definition of GES, b) measurable targets and associated indicators for the monitoring and evaluation, and c) operational targets related to specific measures to facilitate its implementation. Based on the above, a broad set of environmental targets and associated indicators, reflecting the necessary changes in status, pressures and impacts to achieve or maintain the GES, have been established.

Each environmental target must be associated with an indicator that allows measuring the progress towards the established aim. It is necessary to emphasize that the assessment of the achievement of the environmental targets through the associated indicators will only be carried out where information is available, eg. for the habitats, species and pressures at which the Monitoring programs address. The elements included in these monitoring programs should be selected according to criteria of

environmental relevance, such as representativeness, rarity, vulnerability, threats, ecological, economic and social importance, etc.

This document refers to the descriptors (defined in Annex II of Law 41/2010) of GES to which the environmental targets are related. These descriptors are the basis on which the initial assessment has been drawn up and GES defined:

- D1: Biodiversity
- D2: Non-indigenous species
- D3: Commercially exploited species
- D4: Food webs
- D5: Eutrophication
- D6: Sea-floor integrity
- D7: Alterations of hydrographical conditions
- D8: Contaminants and their effects
- D9: Contaminants in fish and other seafood
- D10: Marine litter
- D11: Underwater noise

Although all aspects of the marine environment to which these descriptors refer are closely interrelated, Descriptors 1, 2, 3, 4 and 6 are generally considered to be more related to biodiversity or natural characteristics of the marine environment, and Descriptors 5, 7, 8, 9, 10 and 11 are linked to the pressures that human activities exert on marine ecosystems.

State environmental targets provide an indication on the physical, chemical or biological properties to be considered when GES is achieved. State targets can also be established by comparing the current situation (initial assessment) with the desired state (GES). According to that, the target would be focus on defining this improvement.

These objectives are particularly useful when it is not possible to establish the link between a human activity and the changes resulting on the marine environment status from such pressure and for multiple pressures and impacts. Indeed, targets for state allow determining whether changes in pressures and impacts are having the desired effect and can therefore be used to directly determine the capacity and effectiveness of the implemented measures, in order to facilitate the evaluation of the achievement of GES.

The Descriptor 1 (Biodiversity) is linked with almost all other descriptors since most of impacts and pressures have a variable effect on it, locally or for the whole subdivision, according to the magnitude of impacts. Therefore, all environmental targets regarding the rest of descriptors should contribute positively to the achievement of GES for Descriptor 1. This is especially significant for Descriptors 2 (Non-indigenous species), 3 (Commercially exploited species), 4 (Food webs), 6 (Sea-floor integrity), 8 (Contaminants and their effects), 10 (Marine litter) and 11 (Underwater noise). On this

behalf there is no doubt that the GES established for commercially exploited species, food webs or sea-floor integrity contributes to improve biodiversity for both, species and habitats, included in Descriptor 1. Therefore, a large set within the environmental targets proposed should be address to achieve biodiversity GES.

Although the environmental targets for biodiversity are based on indicators and descriptors of the initial assessment, it is important to note that the constraints existing in the initial assessment have not allowed setting reference values, assessing the current status of marine environment or defining GES for biodiversity components. This impedes to set out additional state targets, being necessary to propose pressure targets, or operational targets in order to improve knowledge and available data.

Regarding non-indigenous species -constituting a pressure on marine diversity but also related to biodiversity descriptors-, the strategic objective for state is the achievement of GES in relation to Descriptors 1, 3, 4 and 6. Face to the inability to eradicate non-indigenous species once established, and even to completely avoid new introductions and to fully control the expansion by natural routes or secondary introductions by anthropic vectors, the targets for state at the scale of subdivision can only be defined on the basis of the current status and not on the ideal situation of ecosystems without non-indigenous species. Moreover, it is to be aware that acting decisively to achieve the pressure targets aimed at minimizing its introduction and secondary expansion, it is possible to reduce the increasing trends for these parameters in the short term, and in the medium or long term to get them tend to 0. At a local scale, particularly in serious cases, it would be possible to stablish targets involving eradication or decrease of the expansive process of invasive species.

In addition to the environmental state targets, several environmental targets of pressure or impact have been established, oriented to all those elements related to human activities which affect marine environment status and, consequently, the achievement of objectives of Law 41/2010.

Pressure targets may be used to articulate the acceptable or desired level of a particular pressure for the achievement or maintenance of GES. These targets are very useful because they can be related to management measures and their monitoring is simpler and more profitable than state targets. These targets should be raised when a relationship among pressure, status and impact exist. Where such a relationship has not been established, pressure targets may be employed under the precautionary principle. In cases where it is not possible to set quantitative targets, it may be possible to establish trend-based targets, aimed at maintaining temporary trends, decreasing or stable at certain pressures. Though it would be desirable that all pressure trends should be decreasing from form the beginning, it should be difficult to achieve this aim immediately on the marine environment. For example, in case of historical pollution or pollutants from marine sediments, the effects on concentrations resulting by corrective measures (even if the discharge of substances completely disappeared) would take a long time.

The impact targets provide an indication of the acceptable level of impact on the components of the marine environment listed in Table 1 of Annex I of Law 41/2010. Pressures can lead to a significant impact at a lower level than ecosystems (eg. on species and specific habitats within a region or sub region) so they should not be compatible with marine strategies targets (for example for biodiversity). This is why ecosystem components should be considered on an adequate environmental scale in the context of the marine subdivisions.

Pressure and impact targets allow acting on the cause of the deterioration of marine environment, which a priori results in the establishment of less costly and more effective measures than those aimed at the direct improvement of the status of marine environment, such as habitat restoration or species recovery.

Some of the targets set out in this document related to pressure descriptors refer to specific activities with significant impacts on which palliative measures are feasible. This is the case, for example, of environmental targets related to marine litter derived from fishing. The ideal would be to establish targets for litter from all activities, but it is complex to identify the sources of all types of marine litter and so on executing preventive actions. However, litter from fishing (traces of gear, etc.) is easily identifiable and measures to reduce this type of litter could be very effective with the collaboration of fishing sector.

In addition, operational environmental targets must be established, which may be directly related to the targets for state, pressure or impact, in order to contribute to the adoption of management measures to achieve or maintain GES. Operational targets will also be established in those cases where the management measure is necessary but it is not possible to establish links with pressure, state or impact targets. According to Annex IV of Law 41/2010, the operational targets are those implying concrete implementation measures in order to facilitate the achievement of the other targets. Therefore, they are directly related to the nature of the action required to achieve or maintain GES, without having to establish the specific measure. The operational targets also let to assess the progress made by implementing a specific measure.

In order to fulfil the obligations from marine strategies and especially in relation to operational environmental targets, specific management measures, depending on the implementation of sectoral policies, should be adopted. Therefore, it is essential that targets are studied, proposed and assumed by competent authorities. In case of fisheries, for example, measures are often taken over national level, since they are adopted by the Council of Ministers of the European Union or by Regional Fisheries Organizations. In these cases, for the operational targets involving the adoption of specific measures, the role of the competent Spanish authorities is to support the adoption of measures within these organizations.

Several operational targets proposed in this document are related to the need of a better knowledge on specific aspects of marine environment, since to achieve GES it is

necessary to know firstly about the characteristics of marine environment and the effects of pressures before applying the measures. However, operational targets are also set for specific activities. Other operational targets related to the need to implement measures are spatial protection, monitoring, citizen participation and awareness, and better procedures.

In addition, it should be mentioned that these targets are directly related to other European and international environmental policies, such as those related to the protection of the natural environment. Thus, when discussing the influence of anthropogenic pressures on biogenic and/or protected habitats, the types of habitats of community interest set out in Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora are expressly considered, as well as protected habitats under Regional Marine Conventions.

Besides, in the context of initiatives for species recovery and habitat restoration, one of the main objectives should be to maintain or achieve a favourable conservation status of existing habitat types and species of interest, and the reduction of the threat category for the species and habitats included in the Spanish Catalogues of Threatened Species and Habitats in Danger of Disappearance.

With regard to marine spatial protection through the strengthening of the Spanish Marine Protected Areas Network (RAMPE), which includes, among other, the Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) established under Natura 2000 Network, Spain will comply with the European commitments. The use of the figure “Marine Protected Area”, established in national legislation as a reference for management of marine environment, will also be encouraged.

Other environmental targets are closely linked and complemented by Directive 2000/60/EC, establishing a framework for water policy (Water Framework Directive), such as those targets related to the reduction of eutrophication and pollution. According to European and international initiatives, the aim is to find synergies between the different environmental policies applied to the oceans, so that the efforts are not duplicated and the joint application of legislation to achieve marine GES.

In order to facilitate the implementation of appropriate measures by competent administrations in compliance with marine strategies, it is essential to periodically review and update environmental targets by defining concrete, robust and easily drawing ones. On one hand it is necessary to adapt the recommendations to the current status of the Spanish marine subdivisions and, on the other hand, to promote the revision and update of technical guidelines adopted at the European and international level so that the assessment for each region and marine sub region includes its particularities. In addition, progress should be made by harmonizing methodologies, assessment and definition of targets at cross-border level and between national and supranational policies on the marine environment.

2. General Environmental targets of the Marine Strategies

Though specific environmental targets are only applied within a marine subdivision, it is necessary to establish general targets applied across all Spanish waters contributing the Spanish overall policy to protect the marine environment. These targets come up from the Spanish Law 41/2010 for the Protection of the Marine Environment, as follow:

ENVIRONMENTAL TARGETS APPLIED ACROSS ALL MARINE STRATEGIES			
Overall target (Law 41/2010 for the Protection of the Marine Environment) (art 1.1)	To achieve or maintain good environmental in the marine environment, through its planning, conservation, protection and improvement.		
Specific targets applied across the marine strategies (article 1.3 of the Law 41/2010 for the Protection of the Marine Environment)	A. To protect and preserve the marine environment, including its biodiversity, avoid its degradation and restore marine ecosystems in areas that have been adversely affected	B. To prevent and reduce inputs into the marine environment, in order to progressively phasing out its pollution, to ensure that no impacts or risks to marine biodiversity, marine ecosystems, human health or permitted uses at sea appear	C. To ensure that the activities and uses in the marine environment are compatible with the conservation of its biodiversity.
Particular targets for the development of the marine strategies.	1. To ensure the conservation and recovery of marine biodiversity through effective measures and instruments	1. To adopt and implement the necessary measures so that the introduction of substances or energy into the marine environment does not produce significant negative effects on marine ecosystems or the goods and services they provide	1. To ensure that sectoral policies and administrative actions with an impact on the marine environment are compatible with the achievement or maintenance of good environmental status defined in marine strategies
	2. To achieve a complete, ecologically representative, coherent and well-managed network of marine protected areas	2. To adopt and implement the necessary measures to ensure that concentration of contaminants is at levels that do not produce pollution effects	2. To adopt and implement the necessary measures so that the human activities do not have a significant impact on the physical conditions of the marine environment
	3. To ensure the conservation of marine habitats and species, especially those considered threatened or in decline.	3. To improve scientific knowledge of cause-effects and impacts in relation to the introduction of substances or energy in the marine environment	3. To promote a better knowledge of spanish marine ecosystems and their responses to human activities, as well as better access to the environmental information

The environmental targets established for each marine subdivision are defined under the above structure, and classified in: state, operational or pressure targets. The qualitative related descriptors for determining the good environmental status are as well set out in this document; their associated indicators will focus on the assessment of the consecution of target.

3. Environmental targets across the five marine subdivisions

Overall target: To achieve or maintain good environmental in the marine environment, through its planning, conservation, protection and improvement.

Target 0: To achieve or maintain the features and characteristics defined as good environment status for all the GES descriptors.
Type of target: state
Qualitative descriptor related to: all
Associated indicator: depending on GES definitions for each qualitative descriptor.

Environmental target A. To protect and preserve the marine environment, including its biodiversity, avoid its degradation and restore marine ecosystems in areas that have been adversely affected

A.1. To ensure the conservation and recovery of marine biodiversity through effective measures and instruments.

Environmental target A.1.1: To reduce the intensity of human pressures as well as the area affected by them on benthic habitats, with special attention to biogenic and/or protected habitats which are considered as biodiversity hot spots and key sites to ensure that the services and roles of the marine environment are provided: maërl beds, laminaria communities, cold-water corals communities, communities dominated by pennatulacea, deep circalittoral sponge aggregations, and coral gardens. Particularly, to avoid fishing with bottom gear over the most sensible habitats such as seamounts, maërl and coralline communities and cold water corals; to avoid or reduce the construction of infrastructures that may affect sensitive habitats; avoid/reduce direct and indirect effects of dredging on vulnerable benthic habitats; and to avoid the adverse effects of the exploitation of non-renewable marine resources on biogenic and/or protected habitats.
Type of target: pressure
Qualitative descriptor related to: D1, D6
Associated indicator: extension (or any type of indicator as appropriate) of biogenic and/or protected habitats potentially affected by human activities and their trends.
Subdivision: all

Environmental target A.1.2: To minimize the introduction or expansion of non-indigenous species focusing on the man-induced pathways of translocation (to avoid releases from aquaculture facilities or aquariums; to avoid the transportation and release into the environment of species associated to cultivated species in areas outside their natural range of distribution; to control the ballast water, the use of live baits, the discharges of sediments, the boat anchoring or the cleaning of ship hulls).
Type of target: pressure
Qualitative descriptor related to: D1, D2, D4, D6
Associated indicator: number of pathway management measures.
Subdivision: all

Environmental target A.1.3: To eradicate or decrease, preferably in the early stages of invasive processes, the abundance of invasive species in order to reduce the pressure on the habitats, in those cases in which the economic or biodiversity losses are significant, when technically feasible and not collateral damage is caused.
Type of target: pressure
Qualitative descriptor related to: D1, D2, D4, D6
Associated indicator: number of invasive species and area subject to treatment for their eradication or decrease.
Subdivision: all

Environmental target A.1.4: To reduce the main causes of mortality and decreases of the population of non-commercially exploited species which are at the top of food webs (marine mammals, reptiles, seabirds, pelagic and demersal elasmobranchs), such as by-catch, ship collisions, ingestion of marine litter, non-indigenous terrestrial depredators, pollution, habitat destruction and overfishing.
Type of target: pressure
Qualitative descriptor related to: D1, D3, D4
Associated indicator: mortality of the population of species at the top of the food web.
Subdivision: all

Environmental target A.1.5: To prevent the impacts produced by cultivated species on the food webs, putting special attention to the cultivation of non-indigenous and no common cultivated species.
Type of target: pressure
Qualitative descriptor related to: D1, D2, D3, D4
Associated indicator: existence of control programs.
Subdivision: all

Environmental target A.1.6: To promote a regulation to avoid the commercial exploitation and by-catch of elasmobranchs of deep waters, which are included in the Annex of national, European directives, or international conventions, if applicable.
Type of target: operational
Qualitative descriptor related to: D1, D3, D4
Associated indicator: captures of these species.
Subdivision: all

Environmental target A.1.7: To establish a national system to coordinate monitoring programs of by-catch and standings of birds, turtles and marine mammals.
Type of target: operational
Qualitative descriptor related to: D1, D4
Associated indicator: existence of coordination system.
Subdivision: all

Environmental target A.1.8: To develop activities to recovery species and restore habitats when their deterioration compromise the achievement of GES of biodiversity descriptors.
Type of target: operational
Qualitative descriptor related to: D1, D6
Associated indicator: habitats and species conservation status.
Subdivision: all

Environmental target A.1.9: To ensure an adequate marine surveillance using both, remote and in-situ systems.
Type of target: operational
Qualitative descriptor related to: all
Associated indicator: existence of surveillance systems.
Subdivision: all

Environmental target A.1.10: To establish control programs for those species or functional groups whose proliferation indicates a clear disturbance and/or a threat to local food webs (eg. *Diadema aff. antillarum*, species released from marine aquaculture facilities, etc.).
Type of target: operational
Qualitative descriptor related to: D1, D3, D4, D6
Associated indicator: existence of monitoring programs
Subdivision: CAN

Environmental target A.1.11: To reduce or avoid the increase of *Diadema aff. Antillarum* populations, from the previously updated knowledge of the distribution and extension of its population, favouring the regeneration of the trophic levels of the infra-littoral rocky habitats.
Type of target: pressure
Qualitative descriptor related to: D1, D4, D6
Associated indicator: distribution and extension of *Diadema aff. antillarum*
Subdivision: CAN

Environmental target A.1.12: To facilitate the regeneration of vegetation cover (algae and phanerogams), minimizing the effect of pressures on it.
Type of target: pressure
Qualitative descriptor related to: D1, D4, D6
Associated indicator: vegetation cover of algae and phanerogams
Subdivision: CAN

A.2. To achieve a complete, ecologically representative, coherent and well managed network of marine protected areas.

Environmental target A.2.1: To promote the Spanish Network of Marine Protected Areas, in order to protect the biogenic and protected habitats and others of especial interest identified in the initial assessment. A representative covered area and specific management measures should be attained.
Type of target: operational
Qualitative descriptor related to: D1, D6
Associated indicator: percentage of the subdivision included in the Spanish Network of Marine Protected Areas; percentage of biogenic and protected habitats and others of especial interest included in the Spanish Network of Marine Protected Areas; Existence and implementation of management plans.
Subdivision: all

Environmental target A.2.2: To complete the Natura 2000 network, including the designation of marine IBAs (Important Bird Areas) as Special Protected Areas for Birds, the proposal of new site of Community importance and the preparation and application of management plans addressed to ensure the preservation of the values that motivated the declaration of those sites.
Type of target: operational
Qualitative descriptor related to: D1
Associated indicator: percentage of the subdivision included in the Natura 2000 network; percentage of Natura 2000 network areas with management plans approved and under application.
Subdivision: all

A.3. To ensure the conservation of marine habitats and species, especially those considered threatened or in decline.

Environmental target A.3.1: To maintain stable the body size distribution of demersal teleost and elasmobranch and benthic species considering large individuals (according to the body size threshold established for the subdivision in relation to the indicator 4.2.1. as described in the initial assessment) in the historic data set provided by research vessel surveys, ensuring that the trends observed are not decreasing.
Type of target: state
Qualitative descriptor related to: D1, D3, D4
Associated indicator: trends in the 95 percentile on size distribution
Subdivision: NOR, SUD, ESAL Y LEBA

Environmental target A.3.2: To maintain the CSF (Conservation Status of Fish), calculated by the research vessel surveys for large individuals (according to the body size threshold established for the subdivision in relation to the indicator 4.2.1. as described in the initial assessment), with a value lower than 1 in the vulnerability scale used by the IUCN (O: no vulnerable; 1: vulnerable, 2: endangered, 3: critically endangered).
Type of target: state
Qualitative descriptor related to: D1, D3, D4
Associated indicator: CSF
Subdivision: NOR, SUD, ESAL Y LEBA

Environmental target A.3.3: To maintain the range of species distribution so there is no evidence of declines in species that cannot be considered statistically due to natural and climatic variability.
Type of target: state
Qualitative descriptor related to: D1, D3, D4
Associated indicator: range of distribution.
Subdivision: NOR, SUD, ESAL Y LEBA

Environmental target A.3.4: To maintain increasing or stable trends of key species population and apical predators (marine mammals, reptiles, seabirds, fish), and to maintain commercially exploited species within safe biological limits.
Type of target: state
Qualitative descriptor related to: D1, D3, D4
Associated indicator: population trends of those species used as assessment elements.
Subdivision: all

Environmental target A.3.5: To maintain increasing or stable trends in the distribution area of biogenic, and/or protected and singular habitats.
Type of target: state
Qualitative descriptor related to: D1, D6
Associated indicator: trends in the distribution area of habitats.
Subdivision: all

Environmental target A.3.6: To maintain the parameters and trends of the qualitative descriptors on the status of benthonic communities (and their different facies and associations) within values ensuring their durability and structure as well as the conservation of their characteristics and key and singular species.
Type of target: state
Qualitative descriptor related to: D1, D6
Associated indicator: indicators to assess the estate of benthic communities, of representative and key species, and the long term trends in the habitats selected for monitoring.
Subdivision: all

Environmental target B. To prevent and reduce inputs into the marine environment, in order to progressively phasing out its pollution, to ensure that no impacts or risks to marine biodiversity, marine ecosystems, human health or permitted uses at sea appear

B.1. To adopt and implement the necessary measures so that the introduction of substances or energy into the marine environment does not produce significant negative effects on marine ecosystems or the goods and services they provide.

Environmental target B.1.1: To reduce the volume of direct or indirect untreated discharges (industrial discharges, wastewater, river input discharges, run-off, etc.) to the marine environment and improve the efficiency of urban and industrial wastewater treatment plants and sewerage systems to minimize the inputs of litter, pollutants and nutrients to the marine environment.
Type of target: pressure
Qualitative descriptor related to: D5, D8, D9, D10
Associated indicator: Volume of direct and indirect discharges.
Subdivision: all

Environmental target B.1.2: To reduce frequency of untreated discharges to the sea from ships and off-shore platforms.
Type of target: pressure
Qualitative descriptor related to: D8, D9
Associated indicator: frequency of untreated discharges from ships and off-shore platforms.
Subdivision: all

Environmental target B.1.3: To reduce the growing trend unrelated to hydrological variability of nutrient concentration in the areas of contrasting productivity NorP2, NorC2 y NorC3, identified in the initial assessment of northatlantic subdivision, in which an increase has been detected.
Type of target: state
Qualitative descriptor related to: D5
Associated indicator: nutrient concentrations.
Subdivision: NOR

Environmental target B.1.4: To achieve or maintain a good or high ecological status in coastal waters in line with the assessment criteria established for nutrients in the Water Framework Directive, and in the rest of the subdivision do not exceed the reference levels calculated in the initial assessment; more often than statistically expected due to hydrological variability.
Type of target: state
Qualitative descriptor related to: D5
Associated indicator: nutrient levels.
Subdivision: NOR, ESAL y CAN

Environmental target B.1.5: Not exceed the nutrient assessment values established by the OSPAR Convention for the Protection of the North-East Atlantic in the SUR-C1 and SUR-C2 productivity areas identified in the initial assessment of the south atlantic subdivision.
Type of target: state
Qualitative descriptor related to: D5
Associated indicator: nutrient concentrations.
Subdivision: SUD

Environmental target B.1.6: To reduce the growing trend unrelated to hydrological variability of phosphate concentration in the areas of Estrecho and Alboran subdivision where it has been detected an increase during the annual period.
Type of target: state
Qualitative descriptor related to: D5
Associated indicator: phosphate concentration.
Subdivision: ESAL

Environmental target B.1.7: Do not exceed baseline values of nitrate and phosphate concentrations more frequently than is expected statistically due to hydrological variability throughout the demarcation.
Type of target: state
Qualitative descriptor related to: D5
Associated indicator: nitrate and phosphate concentrations.
Subdivision: LEBA

Environmental target B.1.8: Do not exceed baseline values of Chlorophyll a more frequently than is expected statistically due to hydrological variability throughout the demarcation.
Type of target: state
Qualitative descriptor related to: D5
Associated indicator: Chlorophyll a values.
Subdivision: LEBA

Environmental target B.1.9: To reduce the amount of marine litter generated both, by inland and marine sources.
Type of target: pressure
Qualitative descriptor related to: D10
Associated indicator: amount of marine litter on coastline and/or continental shelf.
Subdivision: all

Environmental target B.1.10: Overall reduction in the total number of visible litter items on coastlines by 2020.
Type of target: state
Qualitative descriptor related to: D10
Associated indicator: moving average in the number of visible litter items within a 5 year-interval.
Subdivision: all

Environmental target B.1.11: To reduce or not increase the surface of the continental shelf affected by marine litter generated by fishing activities considering the reference levels established in 2012.
Type of target: state
Qualitative descriptor related to: D10
Associated indicator: percentage of sample grids with marine litter.
Subdivision: all

Environmental target B.1.12: To reduce or not increase the quantity of marine litter generated by fishing activities (weight per area unit) in the continental platform considering the reference levels established in 2012.
Type of target: state
Qualitative descriptor related to: D10
Associated indicator: marine litter density .
Subdivision: NOR,SUD, ESAL Y LEBA

Environmental target B.1.13: To reduce or not increase the quantity of marine litter in beaches generated by fishing activities (number of items/ 100 metres of beach) considering the reference levels established in 2012.
Type of target: state
Qualitative descriptor related to: D10
Associated indicator: number of items/100 m of beach.
Subdivision: NOR Y SUD

Environmental target B.1.14: To ensure underwater noise doesn't produce significantly impacts on the marine biodiversity.
Type of target: state
Qualitative descriptor related to: D11
Associated indicator: registered cases of noise impact on the marine biodiversity.
Subdivision: NOR,SUD, ESAL Y LEBA

B.2. To adopt and implement the necessary measures to ensure that concentration of contaminants is at levels that do not produce pollution effects.

Environmental target B.2.1: To comply with legally established or internationally agreed contaminant levels in biota, and to ensure temporal trends are decreasing or stable if concentrations are sufficiently close to baseline values.
Type of target: state
Qualitative descriptor related to: D8
Associated indicator: levels and trends of contaminants in biota.
Subdivision: all

Environmental target B.2.2: To ensure that contaminant levels in marine sediments are decreasing or remaining stable over time.
Type of target: state
Qualitative descriptor related to: D8
Associated indicator: levels and trends of contaminants in sediments.
Subdivision: NOR,SUD, ESAL Y LEBA

Environmental target B.2.3: Not exceed the biological levels of response to contamination in indicator organisms for which criteria established by competent authorities and international bodies exist and that they remain within their baseline response ranges or close to them, along the time.
Type of target: state
Qualitative descriptor related to: D8
Associated indicator: levels and trends of biological effects.
Subdivision: all

Environmental target B.2.4: To minimize the impact and magnitude of significant pollution events (e.g. spills of oil or chemicals) and their impact on biota, through appropriate risk based approaches.
Type of target: operational
Qualitative descriptor related to: D8
Associated indicator: existence of risk based analysis processes.
Subdivision: all

Environmental target B.2.5: Not exceed maximum regulatory levels in any commercial species for all regulated contaminants established by community legislation and other regulation related to public health.
Type of target: state
Qualitative descriptor related to: D9
Associated indicator: level of contaminants in commercial species**.**
Subdivision: all

B.3. To improve scientific knowledge of cause-effects and impacts in relation to the introduction of substances or energy in the marine environment.

Environmental target B.3.1: To promote surveys addressed to quantify the impact of atmospheric deposits on the productivity of the subdivision.
Type of target: operational
Qualitative descriptor related to: D5
Associated indicator: surveys on atmospheric deposition impacts.
Subdivision: all

Environmental target B.3.2: To improve the understanding on pollution and their biological effects across the subdivision, in relation to spatial distribution, temporal evolution, types of contaminants and their biological effects agreed at national, regional and European level.
Type of target: operational
Qualitative descriptor related to: D8
Associated indicator: number of surveys and projects on this subject.
Subdivision: all

Environmental target B.3.3: To improve the understanding on marine litter characteristics and impacts, including their source and dispersion.
Type of target: operational
Qualitative descriptor related to: D10
Associated indicator: number of surveys and projects on this subject.
Subdivision: all

Environmental target B.3.4: To improve the understanding on underwater noise and other energy inputs on the marine environment as well as their impacts on the marine biodiversity.
Type of target: operational
Qualitative descriptor related to: D11
Associated indicator: number of surveys and projects on this subject.
Subdivision: all

Environmental target C. To ensure that the activities and uses in the marine environment are compatible with the conservation of its biodiversity.

C.1 To ensure that sectoral policies and administrative actions with an impact on the marine environment are compatible with the achievement or maintenance of good environmental status defined in marine strategies.

Environmental target C.1.1: To maintain updated both, the list and assessment of endangered species.
Type of target: operational
Qualitative descriptor related to: D1, D3, D4
Associated indicator: review of endangered species catalogues.
Subdivision: all

Environmental target C.1.2: To promote international cooperation for the assessment and monitoring of populations with a wide geographical distribution (e.g. cetaceans and reptiles).
Type of target: operational
Qualitative descriptor related to: D1, D3, D4
Associated indicator: number of international initiatives.
Subdivision: all

Environmental target C.1.3: To ensure public participation in the northatlantic marine strategy through public awareness, environmental education, volunteering activities and marine environment stakeholder´s initiatives.
Type of target: operational
Qualitative descriptor related to: all
Associated indicator: number of public participation initiatives and outcome assessments.
Subdivision: all

Environmental target C.1.4: To achieve a properly coordination between administrations, institutions and marine environmental sectors in order to avoid duplicities and take advantage of synergies within the subdivision.
Type of target: operational
Qualitative descriptor related to: all
Associated indicator: number of initiatives, projects and coordination meetings.
Subdivision: all

Environmental target C.1.5: To develop management plans for recreational activities, and/or their related uses such as boat anchoring, scuba diving, recreational fishing, nautical sports, whale watching, etc. in relevant areas across the subdivision.
Type of target: operational
Qualitative descriptor related to: D1, D3, D6
Associated indicator: Management plans on activities and/or uses.
Subdivision: all

Environmental target C.1.6: To ensure management of fish stocks is appropriate, within safe biologic limits.
Type of target: operational
Qualitative descriptor related to: D1, D3, D4
Associated indicator: management outcomes; percentage of assessed fish stocks; percentage of fish stocks within safe biological limits; percentage of fish stocks at maximum sustainable yield.
Subdivision: all

C.2 To adopt and implement the necessary measures so that the human activities do not have a significant impact on the physical conditions of the marine environment.

Environmental target C.2.1: To ensure that the area affected by permanent physical alterations caused by human activities is only a small part of the total area of the marine subdivision.
Type of target: state
Qualitative descriptor related to: D1, D4, D6, D7
Associated indicator: area affected by permanent physical alterations caused by human activities.
Subdivision: all

Environmental target C.2.2: To ensure that the localised and permanent physical alterations due to anthropogenic causes do not threat the durability and functioning of biogenic and/or protected habitats, and do not endanger the achievement or maintenance of GES for these habitats.
Type of target: state
Qualitative descriptor related to: D1, D4, D6, D7
Associated indicator: habitat affection
Subdivision: all

Environmental target C.2.3: To apply mitigation measures along the coast where permanent physical alterations, due to anthropogenic causes, have produced meaningful impacts, so the hydrographical and hydrodynamic processes remain compatible with habitat conservation.
Type of target: operational
Qualitative descriptor related to: D1, D4, D6, D7
Associated indicator: habitat conservation status.
Subdivision: all

Environmental target C.2.4: To ensure that the environmental impact studies of projects related to marine environment must be undertaken by taking into consideration any potential impacts arising from permanent changes in hydrographical conditions, including cumulative effects, at the most appropriate spatial scales, following the established guidelines.
Type of target: operational
Qualitative descriptor related to: D7
Associated indicator: percentage of environmental impact studies in marine projects related to hydrographical alterations.
Subdivision: all

Environmental target C.2.5: To promote that marine ecosystem depending on plumes associated to river mouths are considered on the establishment of environmental flows in river basin management plans.
Type of target: operational
Qualitative descriptor related to: D7
Associated indicator: percentage of river basin management plans which consider marine ecosystem for the establishment of environmental flows.
Subdivision: NOR,SUD, ESAL Y LEBA

C.3. To promote a better knowledge of spanish marine ecosystems and their responses to human activities, as well as better access to the environmental information

Environmental target C.3.1: To improve the access to environmental information on the marine environment, in particular in relation to qualitative descriptors for determining GES, pressures and impacts and the socioeconomic aspects, as well as to ensure the good quality of this information.
Type of target: operational
Qualitative descriptor related to: all
Associated indicator: level of access and quality of the available information on the marine environment.
Subdivision: all

Environmental target C.3.2: To increase the understating on the seabed, especially on topography, morphology, composition, depth and the associated variables, which have influence in the distribution of habitats
Type of target: operational
Qualitative descriptor related to: D1, D6
Associated indicator: percentage of the area studied within the subdivision.
Subdivision: all

Environmental target C.3.3: To increase and complete the understanding on the extension, distribution, structure and state of coastal habitats (until 50 m) and their long-term trends, paying special attention to the infra- and circa-littoral rocky communities and soft seabed communities of coastal waters.
Type of target: operational
Qualitative descriptor related to: D1, D6
Associated indicator: percentage of coastal habitats studied.
Subdivision: NOR,SUD, ESAL Y LEBA

Environmental target C.3.4: To increase and complete the understanding on the extension, distribution, structure and state as well as their long-term trends, of deep habitats, paying special attention on the biogenic and protected habitats, rocky seabed, circa-littoral detrital seabed, sea mountains and marine canyons, and seabed under 1000 metres.
Type of target: operational
Qualitative descriptor related to: D1, D6
Associated indicator: percentage of deep habitats studied.
Subdivision: NOR,SUD, ESAL Y LEBA

Environmental target C.3.5: To increase and complete the understanding on the extension, distribution, structure and state of littoral, infra and circa littoral, and deep habitats, paying special attention to biogenic and protected habitats.
Type of target: operational
Qualitative descriptor related to: D1, D6
Associated indicator: percentage of habitats studied.
Subdivision: CAN

Environmental target C.3.6: To improve the understanding on the effect of human activities on habitats, especially on the biogenic and protected habitats, their species, populations and communities, their sensitivity, tolerance limits and adaptive ability, particularly in relation to fishing, construction of infrastructures, dredging, extraction of non-renewable resources, pollution and interaction with climate change effects (acidification, warming, etc.).
Type of target: operational
Qualitative descriptor related to: D1, D6, D8, D10
Associated indicator: number of studies and scientific projects on these subjects.
Subdivision: all

Environmental target C.3.7: To improve the understanding on the presence, spatial distribution, abundance and impact of non-indigenous species, especially those with invasive potential, through promoting specific studies and developing monitoring programmes, coordinated at national level.
Type of target: operational
Qualitative descriptor related to: D2
Associated indicator: number of studies and percentage of the subdivision area covered by regular programs for the detection and quantification of non-indigenous species.
Subdivision: all

Environmental target C.3.8: To improve the quality of information obtained from professional and recreational fishing activities (captured volume, fishing or shellfish effort, captured species, fishing or shellfish areas, etc.) in order to be able to adequately assess the status and evolution of the functional commercial groups.
Type of target: operational
Qualitative descriptor related to: D1, D3, D4
Associated indicator: Availability of useful information.
Subdivision: CAN

Environmental target C.3.9: To have the information to assess the current status of commercially fish stocks in relation to GES aimed at: - Monitoring and generating basic information on commercially species that have not been part of the monitoring programmes and that have been currently included in the list of species for Descriptor 3. - Improving the understanding of the status of selected stocks which have not currently been assessed and therefore for those primary or secondary indicators that have not been developed yet (according to the definition of these indicators established in the Commission Decision 210/477/UE). - Moving forward the establishment of precautionary and management reference points.
Type of target: operational
Qualitative descriptor related to: D1, D3, D4
Associated indicator: number of fishing stocks in the forthcoming marine strategy assessments.
Subdivision: all

Environmental target C.3.10: To improve the understanding on food webs in the coastline and in the deep sea ecosystems, including the study of key organisms and the effect of seasonal variations in order to develop new indicators for a future assessment on the state of food webs, and therefore properly definition of GES.
Type of target: operational
Qualitative descriptor related to: D1, D4
Associated indicator: existence of proper indicators to assess food webs.
Subdivision: all

Environmental target C.3.11: To develop a national system for monitoring the hydrographical and hydrodynamic oceanic variability and to establish a system to detect climate anomalies that may affect the marine environment. The system must include a register on hydrological and biological variables as well as extreme and massive events affecting the marine ecosystems such as: unusual plankton blooms, appearance of unexpected species in specific areas and unseasonal massive occurrence of species or processes (mortality, reproduction, etc.).
Type of target: operational
Qualitative descriptor related to: D1, D7
Associated indicator: existence of a national system for monitoring the hydrographical and hydrodynamic oceanic variability and a system to detect climate extreme and massive events.
Subdivision: all

Environmental target C.3.12: To ensure the traceability of commercial species in order to identify the geographic origin, scientific name, as well as their biometric parameters (sex and body size), so the information obtained in the official controls addressed to assess the compliance of existing legislation regarding the possible presence of chemical products in fish for human consumption may be used to assess GES in relation to contaminants in fish.
Type of target: operational
Qualitative descriptor related to: D9
Associated indicator: percentage of fish products in the first and second point of sale whose origin is known.
Subdivision: all