



WP2: Scoping and gap analysis

**D2.2 Summary report of existing
criteria, species and habitat lists
used in conservation and
restoration initiatives**



Grant Agreement number	101060707
Project title	MSP4BIO: IMPROVED SCIENCE-BASED MARITIME SPATIAL PLANNING TO SAFEGUARD AND RESTORE BIODIVERSITY IN A COHERENT EUROPEAN MPA NETWORK
Deliverable title	Summary report of existing criteria, species and habitat lists used in conservation and restoration initiatives
Deliverable number	D2.2
Deliverable version	1
Contractual date of delivery	31/07/2023
Actual date of delivery	31/07/2023
Document status	Final – Stage 1 (will be updated throughout the project when more details/information is available)
Document version	1
Online access	No
Diffusion	Public
Nature of deliverable	Report
Work Package	2
Partner responsible	VLIZ
Contributing Partners	CNR, CCMS, UAC, NIMRD, UCA, WWF-MED, UN, PAP-RAC
Author(s)	Inne Withouck, Fien De Raedemaecker, Panagiotis Georgiou, Débora Gutierrez, Helena Calado, Ana C. Costa, Camila Pegorelli, Javier Garcia Sanábria, Javier Garcia Onetti, Maria de Andres, Margarita Stancheva, Hristo Stanchev, Alina Spinu, Lucia Bongiorno, Matthieu Bekaert, Alessandra Conversi, Eleonore Cambra, Anna Barbanti, Mauro Randone, Marina Markovic, Volcy Boilevin, Francisco R. Barboza, Kemal Pınarbaşı, Ivana Stojanovic, Ivana Lukic
Editor	Helena Calado, Jonne Kotta
Approved by	Text here



Project Officer

Victoria Beaz Hidalgo

Abstract

Existing conservation and restoration initiatives were reviewed in this report to compile lists of criteria, species and habitats related to area designations for conservation. These lists assist in the selection of suitable sites for protection, as well as monitoring. The collected criteria were organised into different categories to distinguish between ecological, abiotic, anthropogenic, climatic and socio-economic criteria. Ecological criteria were the most frequently utilised, but the reviewed initiatives also considered cultural values, climate change variables and anthropogenic impacts. The results of this report will provide valuable insights for the MSP4BIO project, helping to develop improved criteria for site selection and protection.

Keywords

criteria, ecological criteria, species lists, habitat lists, conservation, restoration, area-based management tools, significant areas, monitoring

Suggested citation

Withouck I., De Raedemaeker F., Georgiou P., Gutierrez D., Calado H., Costa A.C., Pegorelli C., Garcia Sanábria J., Garcia Onetti J., de Andres M., Stancheva M., Stanchev, H., Spinu A., Bongiorno, L., Bekaert, M., Conversi, A., Cambra, E., Barbanti A., Randone M., Markovic, M., Boilevin, V., Barboza, F. R., Pınarbaşı K., Stojanovic I., Lukic I., (2023) Summary report of existing criteria, species and habitat lists used in conservation and restoration initiatives (Deliverable – D2.2., under the WP2 of MSP4BIO project (GA n° 101060707))

Acknowledgements

Many thanks to Stefanie Dekeyzer (VLIZ) for the guidance on navigating the WoRMS taxonomic database for the species list compilation and for feedback on the draft deliverable.



Table of Contents

Table of Contents	4
List of Figures.....	6
List of Tables	7
Acronyms	8
Glossary	9
Executive Summary	10
1 Introduction	11
2 Methods	12
2.1 Overview of the approach to criteria, species and habitat compilations	12
2.2 Screening of existing initiatives	13
2.2.1 Inclusion parameters	13
2.2.2 Screening workflow	14
2.3 Extraction and compilation of lists	15
2.3.1 Creation of unique identifiers for the compiled lists	15
2.3.2 Species/taxa list compilation.....	15
2.3.3 Habitat list compilation.....	17
2.3.4 Criteria list compilation.....	18
2.4 Description of criteria lists	19
2.5 Categorisation of the individual criteria extracted from criteria lists	19
3 Results	23
3.1 Compilation of criteria lists, species lists and habitat lists	23
3.1.1 Species and habitat list compilation.....	23
3.1.2 Criteria list compilation.....	23
3.1.3 Description of criteria lists.....	28
3.2 Criteria categorisation	30
3.2.1 Ecological and genetic criteria	31
3.2.2 Abiotic criteria	32
3.2.3 Anthropogenic criteria.....	33
3.2.4 Climate criteria.....	34
3.2.5 Socio-economic criteria	35
3.2.6 Consideration of ecological features in the ecological criteria	36



3.3	Consideration of genetic information	39
4	Discussion.....	41
4.1	Conclusions.....	44
5	References.....	45
	Annex 1: Definitions and keywords of the criteria categories	49
	Annex 2: Species and habitat lists catalogue	59
	Annex 3: Criteria list catalogue.....	62



List of Figures

Figure 1 Workflow of the approach to extract lists of criteria, species and habitats from the screened policy-related documents and the compilation of individual criteria, species and habitats.....	12
Figure 2 Pie charts illustrating the relative proportion of criteria assigned to the five criteria categories for criteria used for a) Identification of significant areas b) Identification of significant ecological features c) Designation of ABMTs d) Monitoring. For each list type, the total number of collected criteria is indicated in brackets.	31
Figure 3 Pie charts illustrating the relative proportion of functional, structural, ecological status and genetic subcategories assigned to the identified ecological and genetic criteria, used for a) Identification of significant areas b) Identification of significant ecological features c) Designation of ABMTs d) Monitoring. For each list type, the total number of collected criteria is indicated in brackets.	31
Figure 4 Pie charts illustrating the relative proportion of oceanographic, geological / geomorphological or meteorological subcategories assigned on the identified abiotic criteria used for a) Identification of significant areas b) Designation of ABMTs d) Monitoring. For each list type, the total number of collected criteria is indicated in brackets.	33
Figure 5 Pie charts illustrating the relative proportion of the anthropogenic activities and impacts subcategories assigned to the anthropogenic criteria used for a) Identification of significant areas b) Identification of significant ecological features c) Designation of ABMTs d) Monitoring. For each list type, the total number of collected criteria is indicated in brackets.	34
Figure 6 Pie charts illustrating the relative proportion of the climate subcategories within the climate category, for a) Identification of significant areas b) Designation of ABMTs c) Monitoring. For each list type, the total number of collected criteria is indicated in brackets.	35
Figure 7 Pie charts illustrating the relative proportion of criteria assigned to socio-cultural, economic, governance and management measures subcategories within the socio-economic category, for a) Identification of significant areas b) Identification of significant ecological features c) Designation of ABMTs d) Monitoring. For each list type, the total number of collected criteria is indicated in brackets.	36
Figure 8 Taxonomic groups referred to by the collected criteria, per criteria list category: a) Identification of significant areas b) Identification of significant ecological features c) Designation of ABMTs d) Monitoring. For each list type, the total number of collected ecological criteria is indicated in brackets. The y-axis has been cut off for a better visualisation.....	37
Figure 9 Bar chart to depict ecological criteria identified that refer to specified functional groups, per criteria list category: a) Identification of significant areas b) Identification of significant ecological features c) Designation of ABMTs d) Monitoring. For each list type, the total number of collected criteria is indicated in brackets.	38



List of Tables

Table 1 Breakdown of information included in the list identifiers.	15
Table 2 Definitions of different statuses of the taxonomic names found in the WoRMS database (definitions taken from the WoRMS Editorial Board manual (2023), which is based on Horton et al. (2017))	16
Table 3 Example of how the presence (1) or absence (0) of a species in each list is presented in the species compilation.	17
Table 4 Example of how habitats are included in the habitat compilation.	17
Table 5 Metadata collected for the individual criteria (the last three fields are only relevant for criteria that are part of the DEVOTES list).	19
Table 6 Overview of the defined criteria categories and subcategories with their definitions.	21
Table 7 Taxonomic species groups assigned to ecological criteria.	22
Table 8 Functional species groups assigned to ecological criteria	22
Table 9 Overview of species and habitat lists compiled during the screening exercise at global, European and regional levels. Lists are organised based on their purpose and geographic origin. The list types were renamed to type A and B to avoid confusion with Table 10. Annex 2 provides an overview and brief description of the compiled species/habitat lists.	24
Table 10 Overview of criteria lists compiled during the screening exercise at global, European and regional levels. Lists are organised based on their purpose and geographic origin. Annex 3 provides an overview and brief description of the compiled criteria lists.	26
Table 11. Grouping of the criteria based on area of application.	28
Table 12. Criteria lists and the number of the criteria that have been collected per list type and per list.....	29
Table 13 Sum of criteria identified per category for each of the four criteria list types. .	30
Table 14 Number of criteria labelled with ecological and genetic criteria subcategories for each criteria list type.....	31
Table 15 Number of criteria labelled with abiotic criteria subcategories for each criteria list type.	32
Table 16 Number of criteria labelled with the anthropogenic activities and impacts subcategories for each criteria list type.	33
Table 17 Number of criteria labelled with the climate criteria subcategories for each criteria list type.	34
Table 18 Number of criteria labelled with socio-economic criteria subcategories for each criteria list type.	35



Table 19 The consideration of different organisms by the criteria, per criteria list type.	37
Table 20 The consideration of different functional groups by the criteria, per criteria list type	38
Table 21 Criteria identified that refer to genetic properties of ecological features	39

Acronyms

ABMT	Area-based management tool
ABNJ	Areas beyond national jurisdiction
CBD	Convention on Biological Diversity
CCH	Cetacean Critical Habitat
EBSA	Ecologically or Biologically Significant Areas
EBV	Essential Biodiversity Variables
ECA	Emission Control Areas
EFH	Essential Fish Habitats
EOV	Essential Ocean Variables
IBA	Important Bird and Biodiversity Area
IMMA	Important Marine Mammal Area
KBA	Key Biodiversity Area
LME	Large Marine Ecosystem
MPA	Marine Protected Area
MSFD	Marine Strategy Framework Directive
NGO	Non-governmental organisation
OECD	Other effective area-based conservation measure
PSSA	Particularly Sensitive Sea Area
RFMO	Regional Fisheries Management Organisations
SA	Special Areas
SAC	Special Areas of Conservation
SCI	Site of Community Interest
SOx	Sulphur oxides
SPA	Special Protection Areas
SPAMI	Specially Protected Areas of Mediterranean Importance
VME	Vulnerable Marine Ecosystem
WFD	Water Framework Directive
WH	World Heritage
WNBR	World National Biosphere Reserves



Glossary

Term	Definition used in MSP4BIO
Area-based Management Tools (ABMTs)	Instruments that entail “the implementation of a system of rights and duties in a particular management area, under the responsibility of a designated authority, and [ABMTs] tend to afford high levels of protection” ” (definition from Gissi et al., 2022, based on Prior et al., 2010; UNGA, 2007). ABMTs include marine protected areas (MPAs) and Other Effective area-based Conservation Measures (OECMs).
Criterion (plural: criteria)	A standard or principle for judging, evaluating, or selecting something. Particular requirements must be met in order to be considered or qualify. Standard/principle can be ecological, environmental or socio-economic in nature.
Criteria list	A list of multiple criteria used for a specific purpose (such as to designate ABMTs or identify significant areas)
Ecologically or Biologically Significant areas (EBSAs)	EBSAs are an example of ‘significant areas’ (defined below) and are defined as “special areas in the ocean that serve important purposes, in one way or another, to support the healthy functioning of oceans and the many services that it provides” (CBD, n.d.)
Habitat list	A list of multiple habitats used for a specific purpose (such as to designate ABMTs or identify significant areas)
List compilation	The collation of elements from multiple lists combined into one inventory (be it species, habitat or criteria list compilations)
Marine Protected Areas (MPAs)	“A clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values.” (IUCN-WCPA, 2008)
Other Effective area-based Conservation Measures (OECMs)	“A geographically defined area other than a Protected Area, which is governed and managed in ways that achieve positive and sustained long-term outcomes for the in situ conservation of biodiversity with associated ecosystem functions and services and where applicable, cultural, spiritual, socio–economic, and other locally relevant values.” (CBD, 2018)
Significant areas	Areas that host an outstanding proportion of a biodiversity element (e.g. a species, habitat or ecosystem) (definition based on definition of ‘significant’ by IUCN, (IUCN, 2016))
Species list	A list of multiple species/taxa used for a specific purpose (such as to designate ABMTs or identify significant areas)
Status of an area	A defined characteristic of an area that can be monitored, such as “Good Environmental Status” as defined by the MSFD, “Good Ecological Status” as defined by the WFD, or any other definitions of environmental state.



Executive Summary

The MSP4BIO project aims to provide decision support for safeguarding biodiversity in line with the EU Biodiversity Strategy 2030, the Convention on Biological Diversity Post-2020 Framework, and the EU Green Deal. To understand how areas and ecological features are currently prioritised for conservation and restoration, a screening exercise of existing conservation and restoration initiatives (global, European and regional) that identify, designate and monitor areas and use species lists, habitat lists or criteria lists was conducted. This has led to a comprehensive compilation of 1,055 criteria from 37 lists, as well as 15 species lists and six habitat lists. To understand current practice, the collected criteria were labelled with predefined categories and subcategories, to understand how ecological, abiotic, anthropogenic, climatic and socio-economic aspects are represented in the criteria used for marine conservation and restoration.

A strong representation of ecological criteria has been identified, but the reviewed initiatives also considered cultural values, climate change variables and anthropogenic impacts. Within the category of ecological criteria, functional, structural, and ecological status attributes were considered, with structural aspects being the most common. Both the compilation and categorisation provide an overview of how ecological features and areas are identified and used for the designation and monitoring in the context of area-based management tools.

The results of this report will provide valuable insights for the MSP4BIO project, helping to develop improved criteria for site selection and protection.



1 Introduction

The MSP4BIO project (“Improved Science-Based Maritime Spatial Planning to Safeguard and Restore Biodiversity in a coherent European MPA network”), financed by Horizon Europe, runs for three years and will develop an Ecological-Socio-Economic (ESE) management framework, to protect and restore marine ecosystems. The aim of work package 2 (WP2) is to form the basis for the rest of the project by giving an overview of existing data and information that is used to inform the safeguarding of biodiversity.

To safeguard biodiversity and maintain marine ecosystem health and the supply of ecosystem services, a multitude of initiatives are in place at global, European or intergovernmental/sea basin levels. Existing conservation and restoration initiatives include i) identifying significant areas for conservation, ii) identifying ecological features for conservation, iii) designating area-based management measures, such as marine protected areas (MPAs), and iv) monitoring of the environmental state of an area. These initiatives specify lists of criteria, species or habitats for informing their implementation. To understand which criteria, species and habitats currently shape conservation and restoration initiatives, a screening exercise was undertaken to collect and compile lists from initiatives at global, European and regional levels.

To understand how ecological, abiotic, anthropogenic, climatic and socio-economic aspects were represented in the criteria used for marine conservation and restoration, the collected criteria were labelled with predefined categories and subcategories. Existing research indicates that criteria currently in place prioritise areas using a taxonomic approach, generally related to the conservation status/health of a single or few species, the use of simple taxonomic diversity indices, and the physical characteristics of habitats, overlooking their ecological role and contribution to key processes in marine ecosystems, or socio-economic values (Frid et al., 2008; Miatta et al., 2021; Trouillet and Jay, 2021; Van der Biest et al., 2020). Grouping the criteria into meaningful categories will allow an assessment of whether this is true for the criteria used in the reviewed conservation and restoration initiatives. In addition, MSP4BIO partners are interested in whether the criteria consider abiotic characteristics, such as oceanographic or geomorphological features, or climate change aspects.

This study aimed to answer two questions:

- Which criteria, species and habitat lists are being used by conservation and restoration initiatives at global, European and regional levels?
- Which ecological, abiotic, anthropogenic, climatic and socio-economic features are considered by existing conservation and restoration initiatives through established criteria, species or habitat lists?

The first part of the study consists of a screening of existing initiatives, and the extraction and compilation of criteria, species and habitat lists from these initiatives. The second part of the study involves a categorisation of the collected criteria.

The findings of this report will establish the current state-of-the-art on criteria from existing conservation and restoration initiatives to build on in future work packages (WP3 and WP4).



2 Methods

2.1 Overview of the approach to criteria, species and habitat compilations

Lists of criteria, species and habitats were compiled through a screening of existing policy-related documents focusing on conservation and/or restoration initiatives. Documents include agreements, directives, conventions but also documents by task forces set up to implement those legal instruments, as well as guidance documents by NGOs. After identifying relevant documents through a screening exercise, the lists of species, habitats and criteria were extracted (Figure 1). The species and habitat lists were delivered as the milestone M2.1 for further use in the MSP4BIO project. The criteria lists were further analysed by grouping the criteria into meaningful categories.

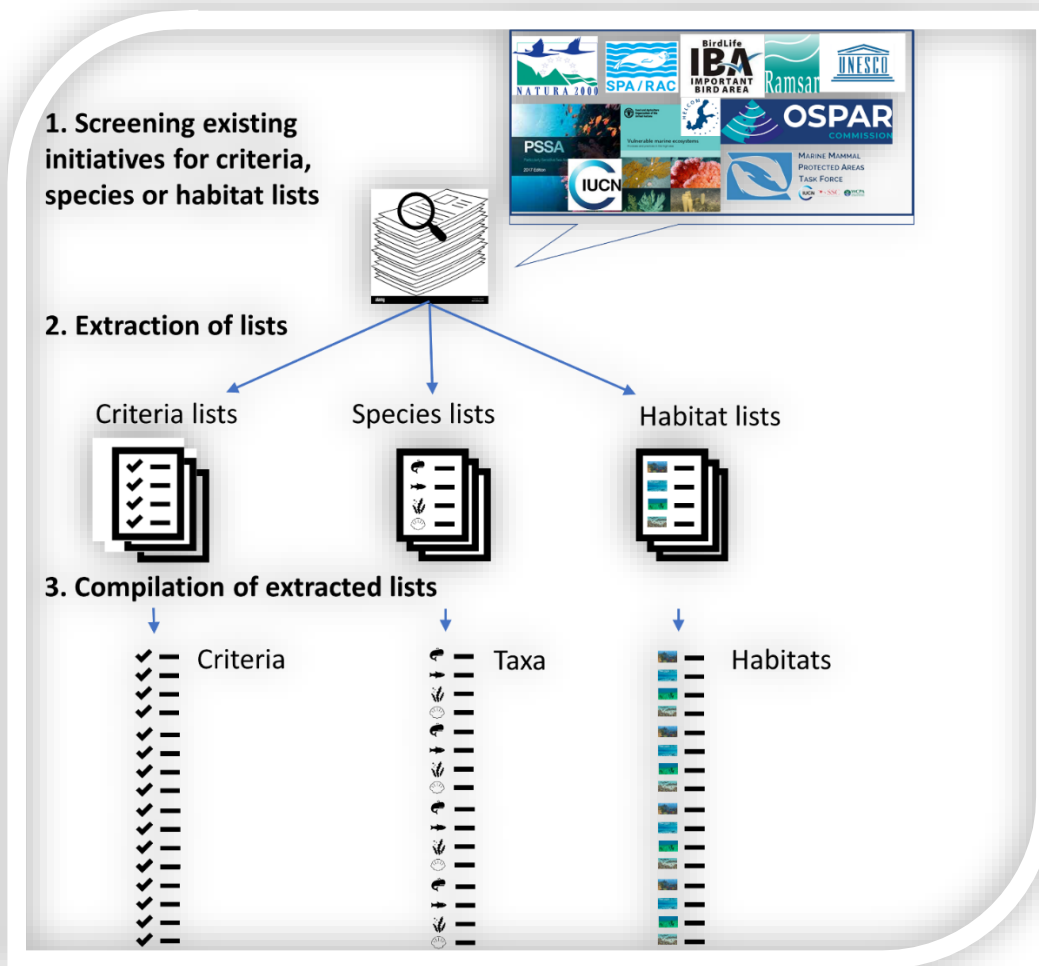


Figure 1 Workflow of the approach to extract lists of criteria, species and habitats from the screened policy-related documents and the compilation of individual criteria, species and habitats.



2.2 Screening of existing initiatives

As a first step, initiatives at global, European and regional levels related to marine conservation and restoration were screened (see Figure 1). To understand how areas and ecological features are currently prioritised for conservation and/or restoration, a screening exercise of initiatives related to marine conservation and restoration, including the identification of important areas for biodiversity, MPAs and Other Effective Area-based Conservation Measures (OECMs) and indicators used to measure environmental state of an area, were screened to identify species, habitat and criteria lists. Documents such as conventions, directives and associated annexes, but also documents that are not legally binding such as guidance documents developed by non-governmental organisations (NGOs) were included. The scope of the screening and the screening workflow, including how the documents were searched for, are elaborated on in the following subsections.

2.2.1 Inclusion parameters

Based on the policy-mapping method by Bowen et al. (2022), inclusion parameters were defined for delineating the scope of the screening exercise to identify criteria, species and habitat lists (Bowen et al., 2022).

The following requirements were defined for documents to be included in the compilation:

1. Documents need to include explicit criteria lists, habitat lists or species lists (e.g., numbered/listed, may be included as an annex)
2. The lists need to be applicable to one of the four stages to achieve effective area-based management tools (ABMTs), defined here as four typologies:

Type 1: Lists used for the **identification of significant areas** for conservation

These lists are used to identify significant areas, such as those for birds (Important Bird and Biodiversity Area) and cetaceans (Cetacean Critical Habitat) or for their ecological or biological significance (Ecologically or Biologically Significant Marine Areas (EBSAs)), which can inform decision making for the identification of areas to be protected.

Type 2: Lists used for the **identification of significant ecological features** for conservation, including lists of species and habitats for conservation purposes

These lists relate to lists of ecological features (such as species/habitats/ecosystems), and the criteria lists that are used to decide which ecological features should be included in these lists. For example, the IUCN developed criteria to decide which species or other ecological features should be on their red list. These lists, such as the IUCN red list and the conservation status categories they defined with criteria lists, inform the identification of significant areas or the designation of ABMTs.

Type 3: Lists used for the **designation of suitable areas** for implementing area-based management tools (ABMTs)

These lists are used to delineate an area for which conservation measures will be implemented through officially recognised MPAs, as well as OECMs. For example,



criteria used to inform the designation of Natura 2000 sites, or criteria for suitable areas for designating Particularly Sensitive Sea Areas, an OECM managed by the International Maritime Organisation (IMO).

Type 4: Lists, indicators* and definitions** used for **monitoring** the status of an area

This type includes lists, definitions and indicators used for monitoring the status of an area, e.g., by evaluating the environmental state or the rate of recovery because of restoration initiatives.

* Indicators were originally not in the scope of this study but the DEVOTES project catalogue of marine biodiversity indicators (with 613 entries collected from various sources such as regional sea conventions, EU Directives and research activities) was considered a relevant compilation to include (see Teixeira et al., (2016)). The catalogue was included for analysis after it was screened to check if any lists were already included in the MSP4BIO compilation.

** Definitions of ecological status included as an annex to the Water Framework Directive were included because they align with the definition of criteria used for this study (the reader is referred to the glossary for the definition of “criteria” used in this study).

3. **Relevant actors** included in the screening exercise need to relate to one of the typologies as defined by Maribus (2015):
 - 3.1. Institutions exclusively dedicated to the ocean (e.g., IMO)
 - 3.2. Institutions with broader mandates but also dealing with ocean affairs (e.g., FAO)
 - 3.3. Intergovernmental organisations (e.g., EU, OSPAR)
 - 3.4. Nongovernmental organisations (NGOs, e.g., IUCN)Even though they have no legal mandate, NGOs were also included because the EU guidance on criteria for area designations recommended the use of existing criteria from various sources including NGOs, to identify additional protected areas (European Commission, 2022).
4. The **geographic scope** need to include the global, European, regional or sea basin level. Global initiatives should have an EU relevance (e.g., they should relate to designations that are present in European waters, such as Ramsar sites).
5. Lists should be relevant to the four defined MSFD marine regions: (1) North Sea and Northeast Atlantic, 2) Mediterranean Sea, 3) Baltic Sea, 4) Black Sea, which include both the **marine and brackish realm**.

2.2.2 Screening workflow

As a starting point for the identification and collection of relevant policy-related documents concerning conservation and restoration initiatives, the marine protection policy mapping results by Boyes and Elliott (2014), and the compilation of ABMTs by Gissi et al. (2022) were used. The policies and their related documents were screened and filtered using the inclusion parameters defined in Section 2.2.1. Additional initiatives were added using



snowball sampling – initiatives referred to in already included documents were screened and included in the mapping when the parameters were met. For example, the identification of documents including ABMT criteria lists (Type 3 list, see typology in Section 2.2.1) led to the identification of significant area criteria lists (Type 2 list). Another example is the reference to Essential Ocean Variables (EOVs, Type 4 list) by a study on EBSA criteria (Type 1 list), which then also led to the inclusion of Essential Biodiversity Variables (EBVs) (Johnson et al., 2018; Muller-Karger et al., 2018). To verify comprehensiveness, the initiatives included were cross-checked with compilations from other studies, such as the 4th World Ocean Review (Maribus, 2015), and the Commission Staff Working Document on Criteria and guidance for protected areas designations (European Commission, 2022). Furthermore, an MSP4BIO Expert Group reviewed comprehensiveness of the included lists.

2.3 Extraction and compilation of lists

After relevant initiatives were identified during the screening exercise, the lists were extracted from the related documentation and organised into three compilations: 1) species list compilation, 2) habitat list compilation and 3) criteria list compilation (see Figure 1). The lists were arranged according to list type, and area of application (global, European or regional).

2.3.1 Creation of unique identifiers for the compiled lists

For each criteria list, species/taxa list and habitat list a unique identifier was created, which has been used to link the individual criteria, taxa and habitats (for which unique identifiers have also been created) to information on the list to which they belong. The structure of the list identifiers is shown in Table 1.

Table 1 Breakdown of information included in the list identifiers.

Example list identifier: “ACL_EU_02_HD_AnnIII”	
“ACL”	criteria list (“CL”) related to area identification/designation (“A”) (“SH” is used instead of “CL” for species/habitat lists)
“EU”	list relevant at which level (regional “REG”, European “EU” or global “INTL”)
“02”	list number
“HD_AnnIII”	further list information

2.3.2 Species/taxa list compilation

To aid in the compilation of species/taxa lists, the World Register of Marine Species (WoRMS) was used, which has already compiled some of the species lists identified during the screening step. The WoRMS database is an online portal that provides a comprehensive inventory of the names and taxonomic information of marine organisms (World Register of Marine Species, 2023). As well as taxonomic information, the register also includes information on traits (such as biological or ecological traits) of the included species (Costello et al., 2015). This includes the human-defined trait ‘Species importance to society’, which indicates whether a taxon is part of any defined species list (Marine Species Traits editorial board, 2023). These species lists can be consulted using the



LifeWatch Traits Data Explorer (LifeWatch Belgium, 2023). Each list was downloaded from the register individually using the LifeWatch Traits Data Explorer by selecting the 'Species importance to society' trait. The tab files were downloaded on 29-30th of September 2022, and loaded into R for reformatting (R Core Team, 2022). The lists were combined and reformatted using R packages 'reshape2' (v.1.4.4; (Wickham, 2007)), 'stringr' (v.1.4.1, (Wickham, 2022)) and 'dplyr' (v.1.0.9, (Wickham et al., 2023)). For each list, only marine and brackish species were considered.

The WoRMS database uses a unique identifier, called the AphiaID, to distinguish between different taxa (Vandepitte et al., 2015). Each taxonomic name is assigned a status (see Table 2). If the listed taxonomic name of collected species/taxa had a status that was either 'unaccepted', 'uncertain', 'alternate representation' or 'temporary name' (so if it did not have 'accepted' as a status), the listed AphiaID of that taxon name was replaced with the AphiaID of the accepted name of that taxon. This allowed a standardisation of how species were included in the compilation, so that the presence of species in different lists could be compared. If the taxonomic name had an unaccepted or uncertain status and no accepted name AphiaID was given, the AphiaID of the 'unaccepted' or 'uncertain' name was kept, but this was only necessary for on average 3% of the records per list. This means not all records have an accepted status but they all have an AphiaID which can be used to retrieve the latest taxonomic status. Once the records were given their accepted name rather than their listed name (when available), each list was checked for duplicates.

Table 2 Definitions of different statuses of the taxonomic names found in the WoRMS database (definitions taken from the WoRMS Editorial Board manual (2023), which is based on Horton et al. (2017))

Status of taxonomic name	Definition (taken from the WoRMS Editorial Board manual (2023), which is based on Horton et al. (2017))
Accepted	Valid name (ICZN) or name considered to be taxonomically correct (ICBN)
Unaccepted	Synonym name, or anything that is not accepted (subcategories: nomen nudum, interim unpublished, superseded combination, junior homonym, junior subjective synonym, junior objective synonym, nomen oblatum, incorrect original spelling, misspelling, unjustified emendation, incorrect grammatical agreement of specific epithet, misapplication, unavailable name, superseded rank)
Alternate representation	An accepted name with (or without) a subgenus, but slightly less preferred
Temporary name	Ad-hoc higher rank taxa of convenience to accommodate child taxa for which the classification is not yet finalised. i.e. incertae sedis, sp. a, ...
Uncertain	To indicate taxonomic or nomenclatural uncertainty for cases which cannot be classed as either 'accepted' or 'unaccepted' (subcategories: nomen dubium, taxon inquirendum, unassessed)

As well as the lists already included in WoRMS, additional species lists identified during the screening were extracted and converted into CSV files. These CSV files were then loaded into R to add them to the compilation. Once the compilation of species/taxa was complete, it was exported as a CSV file and converted to an Excel worksheet.



Species compilation format

For the species compilation, species/taxa were listed as rows, with a column included with the associated AphiaID and scientific name. Each list is included as a column, and the presence/absence of each species in a given list is indicated with a 1 or 0 (see example in Table 3). Additional columns included in the compilation give further details on how each species is included in a particular list. The metadata table includes background information on each species list, including the source.

Table 3 Example of how the presence (1) or absence (0) of a species in each list is presented in the species compilation.

AphiaID	Scientific name	List identifiers	
		SH_INTL_14_FAO_ASFIS	A_SH_EU_02_HD_AnnII_IV
101172	<i>Lampanyctus fluviatilis</i>	0	1
1000621	<i>Peringia mabilli</i>	0	0
1006787	<i>Polysteganus flavodorsalis</i>	0	0

2.3.3 Habitat list compilation

For the habitat compilation, habitats listed were compiled in an Excel worksheet, and when the listed habitats were linked to any existing habitat classifications (such as EUNIS), the habitat classification codes were included as a column.

Habitat compilation format

For the habitat compilation, habitats were listed as rows with a column indicating the list the habitat belongs to using the list identifiers (Table 4). Unique identifiers were created for each of the listed habitats by numbering the habitats that are part of a list. Alternatively, if the habitats of a list were already numbered or given a unique code, this was used for creating the identifier. This numbering was then added to the unique identifier of the list the criteria are part of (see example in Table 4, where the Habitat Directive codes are used to create the unique habitat identifiers). The metadata table includes background information on each habitat list, including the source.

Table 4 Example of how habitats are included in the habitat compilation.

List identifier	Habitat identifier	Habitat name
A_SH_EU_01_HD_AnnI_hb	A_SH_EU_01_HD_AnnI_hb_1110	Sandbanks which are slightly covered by sea water all the time
A_SH_EU_01_HD_AnnI_hb	A_SH_EU_01_HD_AnnI_hb_1120	Posidonia beds (<i>Posidonia oceanica</i>)
A_SH_EU_01_HD_AnnI_hb	A_SH_EU_01_HD_AnnI_hb_1130	Estuaries
SH_EU_04_MSFD_hb	SH_EU_04_MSFD_hb_1	Littoral rock and biogenic reef
SH_EU_04_MSFD_hb	SH_EU_04_MSFD_hb_2	Littoral sediment



2.3.4 Criteria list compilation

For the criteria compilation, the individual criteria from the lists were compiled into an Excel worksheet. When additional (quantitative) guidance on how to implement the criteria is provided along with the criteria list or for a specific criterion, this is specified in the notes section, and if other criteria that are also included in the compilation are used as a guidance, the appropriate criteria (list) code is given.

Criteria compilation format

Each criterion was included as a row in an Excel worksheet. Unique identifiers were created for the individual criteria by numbering the individual criteria that are part of a list (if the criteria of a list were already numbered, the existing numbering was used). This numbering was then added to the unique identifier of the list the criteria are part of (e.g. the first criterion of the list in stage 1 part A of Annex III of the Habitats Directive (list identifier: “ACL_EU_01_HD_AnnIII”) has the unique identifier “ACL_EU_02_HD_AnnIII_S1_A.a”).

At the list level, a dedicated column for links with other criteria lists, (“Notes_links_othercrit”) was included. At the individual criteria level, Table 5 lists the metadata compiled for the individual criteria.



Table 5 Metadata collected for the individual criteria (the last three fields are only relevant for criteria that are part of the DEVOTES list).

Sheet '03 criteria compilation'	
Criteria list name	Name of criteria list
Criterion_listidentifier	Unique code for criteria list
Criteria sublist name	Subsection within criteria list
Criterion no.	Criterion number
Criterion_identifier	Unique code for criterion
Criterion	Content of criterion
Clarification terminology	Any further guidance on how to interpret the criterion
Focus of criterion	Core feature of criterion
Links with other criteria	Any mention of other criteria in the compilation
Notes	Anything that needs to be considered
Previous name criterion	Information on previous naming of criterion
Source	DEVOTES indicator info (source information in access file)
Contributor	DEVOTES indicator source
Data requirements	Data needed to calculate DEVOTES indicator

2.4 Description of criteria lists

The collected criteria lists were organised based on a few characteristics:

- A grouping by **realm** to see how many of the criteria refer to marine only or to marine and non-marine environments.
- A grouping according to the **geographic scope** of the criteria lists to assess the relevance for global, regional, European or national contexts.

2.5 Categorisation of the individual criteria extracted from criteria lists

The MSP4BIO Expert Panel defined categories and subcategories based on the thematic aspects of the criteria (Table 6). Annex 1 provides a definition for each of the criteria categories and subcategories, as well as examples of relevant keywords. After final agreement on the categories and subcategories useful for the MSP4BIO project, a two-level categorisation on the collected individual criteria was carried out. The aim of this exercise was to understand how ecological, abiotic, anthropogenic, climatic and socio-economic aspects are represented in the criteria used for marine conservation and restoration. In addition, **species groups** were also assigned to the ecological criteria, using the classification in Table 7.

The categorisation of the thematic aspects and the species groups was carried out by multiple MSP4BIO partners, and to verify consistency, each criterion was categorised by at least two partners. The criteria compilation was split up into eight sub-compilations and distributed to each independent research team. To carry out the joint exercise, guidelines



were developed. After verification and finalisation of the categories assigned to the criteria, the number of criteria per category was then calculated for each of the list types, and categories were compared based on how many criteria were found per category.

Multiple categories can be assigned to one criterion. The presence of combinations of multiple categories assigned to one criterion was checked, for two specific combinations (the combination of functional and structural aspects as well as the combination of ecological and socio-economic aspects).

Species groups were assigned to ecological criteria depending either on the nature of the criteria list (e.g., all criteria in the criteria list for identifying Important Bird and Biodiversity Areas were assigned to the bird group), or on the wording of the individual criteria (which may mention specific species groups). Ecological criteria were assigned the label 'Not relevant' when the criterion did not mention species/organisms specifically, e.g. when the criterion describes physical habitat characteristics.



Table 6 Overview of the defined criteria categories and subcategories with their definitions.

Criteria (sub)category	Definition
1. <u>Ecological and genetic criteria</u>	<i>Criteria that relate to living organisms, habitats and ecosystems, and their genetic structure</i>
1.1 Functional	Criteria that refer to processes and properties of ecosystems and their components, that relate to functioning, from ecosystem level to species level
1.2 Structural	Criteria that refer to the structure of ecosystems, habitats and species (e.g. which species are there and how many, how complex is the habitat)
1.3 Genetic	Criteria related to the genetic structure of organisms
1.4 Ecological status	Criteria related to the condition/state of ecological features and the environment, including references to IUCN Red List Categories (e.g. near threatened, endangered), references to ecological status or to the degree of conservation, references to naturalness and the degree of disturbance of a particular ecological feature
2. <u>Abiotic criteria</u>	<i>Criteria that refer to non-living elements of the environment that influence the way organisms and ecosystems function</i>
2.1 Oceanographic conditions	Physical and chemical condition of oceans and habitats
2.2 Geological and geomorphological features	Physical features of the seabed
2.3 Meteorological conditions	Any criteria referring to weather conditions / meteorology
3. <u>Anthropogenic criteria</u>	<i>Criteria that consider the presence of anthropogenic activities that might generate some effect/pressures on biotic/ecological elements</i>
3.1 Anthropogenic activities	Anthropogenic activities that can cause a threat to living organisms or the environment
3.2 Anthropogenic impacts	Changes caused by an anthropogenic activity on the surrounding area
4. <u>Climate criteria</u>	<i>Criteria related to climate impact, climate change or climate mitigation on living organisms and their vulnerability or capacity to adapt/ability to recover from climate change or their environment</i>
4.1 Climate drivers	Criteria related to activities that contribute to climate change
4.2 Climate impacts	Criteria related to the impact of climate change on living organisms and their capacity to adapt/ability to recover from climate change
4.3 Climate mitigation	Criteria related to capability of mitigating climate change
4.4 Climate change resilience	MPA resilience in the face of environmental changes over time



Table 6 (continued)

Criteria (sub)category	Definition
<u>5. Socio-economic criteria</u>	<i>Criteria that relate to social, economic or cultural values that should be considered when prioritising/designating an area, which can for example be ecosystem services with social, economic or cultural value. This category also includes criteria related to governance and existing measures.</i>
5.1 Social and cultural	Social and cultural values that are included as criteria
5.2 Economic	Economic considerations that are valued and included as criteria
5.3 Governance	Criteria related to how risks and interests are represented in decision making
5.4 Existing measures	The consideration of existing measures already in place in the area of interest

Table 7 Taxonomic species groups assigned to ecological criteria.

Taxonomic species group	Description of species group	Source description
Birds	Species that belong to the taxonomic class Aves: Species primarily adapted for flight with feathers	Encyclopaedia Britannica, Frank Gill (2002)
Fish	Species that belong to the superclass Pisces: Grouping that includes bony fish and cartilaginous fish, including elasmobranch species	World Register of Marine Species (AphiaID 11676)
Mammals	Species that belong to the grouping that includes cetaceans and pinnipeds (incl. seals),	NOAA
Reptiles	Marine reptile species such as sea turtles	Encyclopaedia of Life Support Systems
Invertebrates	Species that lack a backbone	Encyclopaedia Britannica
Angiosperms	Marine flowering plant species	Encyclopaedia Britannica
Macroalgae	Non-flowering marine plants visible to the naked eye	eAtlas.org.au
Microbes	Organisms that are too small to be seen with the naked eye, such as bacteria	Learn.Genetics.utah.edu
Taxonomic group not specified	Group for which no reference is made to taxonomic groups, but reference is made to functional groups	-

Table 8 Functional species groups assigned to ecological criteria

Functional species group	Description of species group	Source description
Benthic species	Organisms that live on the sea floor	NOAA
Demersal species	Species living near the seabed	Merriam-Webster dictionary
Pelagic species	Drifting organisms that are carried along by tides and currents in the water column	NOAA



3 Results

3.1 Compilation of criteria lists, species lists and habitat lists

In total, 37 criteria lists (including 1,055 criteria), 16 species lists (including 24,816 taxa) and six habitat lists (including 322 habitats) were identified and compiled. 11/16 species lists were already present in the WoRMS database. Criteria lists were found for each of the four defined list types (types 1-4), and species and habitat lists were identified for type 2 and type 4. The compilations and background information on the compiled lists are found in Supplementary Materials S1-S5.

3.1.1 Species and habitat list compilation

Table 9 provides an overview of the compiled species and habitat lists at regional, European and global levels, grouped according to the purpose of the list. Background information on the species and habitat lists is found in Supplementary Material S1, and the species and habitat lists compilations can be found in Supplementary Materials S2-S3.

3.1.2 Criteria list compilation

Table 10 provides an overview of the compiled criteria lists at regional, European and global levels, grouped according to the purpose of the list. Background information on the criteria lists is found in Supplementary Material S4, and the criteria lists compilation can be found as Supplementary Material S5.



This project has received funding from the European Union's Horizon Europe research and innovation programme. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union. Neither the European Union nor the granting authority can be held responsible for them.



Table 9 Overview of species and habitat lists compiled during the screening exercise at global, European and regional levels. Lists are organised based on their purpose and geographic origin. The list types were renamed to type A and B to avoid confusion with Table 10. Annex 2 provides an overview and brief description of the compiled species/habitat lists.

Species/habitats list type	Global	European	Regional
A. Species and habitat lists used for the identification of significant ecological features for conservation/restoration	A.1 IUCN Red List of species A.2 CITES Appendix I-III species lists A.3 FAO-ASFIS List of Species for Fishery Statistics Purposes	A.4 Habitats Directive Annex I: Natural habitat types of community interest whose conservation requires the designation of special areas of conservation A.5 Habitats Directive Annex II,IV: species lists ¹ A.6 Nature Restoration Law Annex II: marine habitat types A.7 Nature Restoration Law Annex III: marine species A.8 Birds Directive Annexes I-III: wild bird species	<u>Baltic Sea</u> A.9 HELCOM Red List of Species <u>Black Sea</u> A.10 Black Sea Biodiversity and Landscape Conservation Protocol Annex II,IV <u>ICES region</u> A.11 ICES VME indicators and habitats <u>Mediterranean Sea</u> A.12 SPA/BD Protocol Annexes II-III: list of endangered or threatened species A.13 GFCM Mediterranean VME indicator features, habitats and taxa <u>NE Atlantic & North Sea</u> A.14 OSPAR List of Threatened and/or Declining Species and Habitats A.15 NEAFC VME Indicator Species

¹ Habitats Directive Annex V was not included because no marine or brackish species were found in this list



This project has received funding from the European Union's Horizon Europe research and innovation programme. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union. Neither the European Union nor the granting authority can be held responsible for them.



Species/habitats list type	Global	European	Regional
B. Species lists, habitat lists and indicators used for monitoring the status of an area		B.1 COM DEC 2017/848/EU MSFD Benthic broad habitats	<u>Baltic Sea</u> B.2 HELCOM Core Biodiversity Indicator species for monitoring MSFD targets <u>Black Sea</u> B.3 Black Sea Proposed Indicators species MSFD <u>Mediterranean Sea</u> B.4 Mediterranean Common/Proposed Indicators species MSFD <u>NE Atlantic & North Sea</u> B.5 OSPAR Common and Candidate Indicators species MSFD



This project has received funding from the European Union's Horizon Europe research and innovation programme. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union. Neither the European Union nor the granting authority can be held responsible for them.



Table 10 Overview of criteria lists compiled during the screening exercise at global, European and regional levels. Lists are organised based on their purpose and geographic origin. Annex 3 provides an overview and brief description of the compiled criteria lists.

Criteria list type	Global	European	Regional
1. Criteria used for the identification of significant areas for conservation	1.1 Birdlife International Important Bird Area (IBA) criteria 1.2 CBD Ecologically or Biologically Significant Marine Areas (EBSA) criteria 1.3 MPA Task Force Important Marine Mammal Areas (IMMA) criteria 1.4 UNESCO-IOC Large Marine Ecosystem (LME) criteria 1.5 IUCN Key Biodiversity Area (KBA) criteria 1.6 FAO Vulnerable Marine Ecosystem (VME) criteria		<u>Black Sea, Mediterranean Sea and Contiguous Atlantic Area</u> 1.7 ACCOBAMS Cetacean Critical Habitat (CCH) criteria <u>Mediterranean Sea</u> 1.8 OCEANA Essential Fish Habitats (EFHs) criteria
2. Criteria used for the identification of significant ecological features for conservation	2.1 IUCN Red List species criteria 2.2 IUCN Red List ecosystems criteria	2.3 Birds Directive Article 4 criteria concerning species requiring spatial conservation measures	<u>Black Sea</u> 2.4 Black Sea Commission criteria for the selection of species whose exploitation should be regulated <u>NE Atlantic & North Sea</u> 2.5 OSPAR criteria for the identification of species and habitats in need of protection (Texel-Faial criteria)



This project has received funding from the European Union's Horizon Europe research and innovation programme. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union. Neither the European Union nor the granting authority can be held responsible for them.



Criteria list type	Global	European	Regional
3. Criteria used for the designation of suitable areas for implementing area-based management tools (ABMTs)	3.1 IMO Particularly Sensitive Sea Area (PSSA) criteria 3.2 IMO Special Area (SA) criteria 3.3 IMO Emission Control Areas (ECA) criteria 3.4 UNESCO World National Biosphere Reserves (WNBR) criteria 3.5 UNESCO World Heritage (WH) sites criteria 3.6 Ramsar sites criteria 3.7 UNCLOS Areas Beyond National Jurisdiction (ABNJ) MPA criteria	3.8 Habitats Directive criteria for selection of eligible sites 3.9 Hab. 97/2 rev. 4 18/11/97 criteria for assessing national lists of proposed Sites of Community Importance (pSCI) at biogeographical level 3.10 Common Fisheries Policy Article 8 criteria concerning fish stock recovery areas 3.11 Nature Restoration Law Article 11 (2) criteria concerning habitats to be restored	<u>Baltic Sea</u> 3.12 HELCOM MPAs criteria <u>Mediterranean Sea</u> 3.13 SPA/RAC Specially Protected Areas of Mediterranean Importance (SPAMI) criteria
4. Criteria and indicators used for monitoring the status of an area	4.1 GEO BON Essential Biodiversity Variables (EBVs) 4.2 GOOS Essential Ocean Variables (EOVs) 4.3 SER Ecosystem attributes to evaluate recovery	4.4 MSFD Annex III Indicative list of characteristics 4.5 COM DEC 2017/848/EU MSFD criteria to monitor descriptors 4.6 COM DEC 2017/848/EU MSFD Scientific criteria for the selection of species and habitats 4.7 WFD Annex V definitions ecological status 4.8 Natura 2000 parameters used to monitor areas (HD Art 17 and BD Art 12) 4.9 DEVOTES Catalogue of Marine Biodiversity Indicators	<u>NE Atlantic & North Sea</u> 4.10 OSPAR Common Indicators for MSFD monitoring



3.1.3 Description of criteria lists

16 criteria lists were relevant to both marine and non-marine contexts, and 21 criteria lists were specifically for the marine environment. Most of the criteria lists are defined for application on a global level, followed by lists defined for European waters and then the lists defined at the regional level (Table 11). The DEVOTES compilation of indicators also includes indicators defined for national waters or at the sea basin level. The number of criteria per list can be found in Table 12.

Table 11. Grouping of the criteria based on area of application.

Area of application	Number of collected criteria lists
Global	18
European waters	12
Regional - Baltic Sea	1
Regional - Black Sea	1
Regional - Black Sea, Mediterranean Sea and Contiguous Atlantic Area	1
Regional - Mediterranean Sea	2
Regional - Northeast Atlantic and North Sea (OSPAR region)	2
Total	37



Table 12. Criteria lists and the number of the criteria that have been collected per list type and per list.

Criteria list (type)	Number of criteria
1. Total for list type 1: significant area identification	72
1.1 Birdlife International Important Bird and Biodiversity Area (IBA) criteria	16
1.2 CBD Ecologically or Biologically Significant Marine Areas (EBSA) criteria	7
1.3 MMPA Task Force Important Marine Mammal Areas (IMMA) criteria	8
1.4 UNESCO-IOC Large Marine Ecosystem (LME) criteria	4
1.5 IUCN Key Biodiversity Area (KBA) criteria	11
1.6 FAO Vulnerable Marine Ecosystem (VME) criteria	5
1.7 ACCOBAMS Cetacean Critical Habitat (CCH) criteria	12
1.8 OCEANA Essential Fish Habitats (EFHs) criteria	9
2. Total for list type 2: significant ecological features identification	54
2.1 IUCN Red List species criteria	27
2.2 IUCN Red List ecosystems criteria	5
2.3 Birds Directive Article 4 criteria concerning species requiring spatial conservation measures	4
2.4 Black Sea Commission criteria for the selection of species	6
2.5 OSPAR Texel-Faial criteria	12
3. Total for list type 3: ABMT designation	143
3.1 IMO Particularly Sensitive Sea Area (PSSA) criteria	17
3.2 IMO Special Area (SA) criteria	10
3.3 IMO Emission Control Areas (ECA) criteria	6
3.4 UNESCO World National Biosphere Reserves (WNBR) criteria	7
3.5 UNESCO World Heritage (WH) sites criteria	10
3.6 Ramsar sites criteria	9
3.7 UNCLOS Areas Beyond National Jurisdiction (ABNJ) MPA criteria	22
3.8 Habitats Directive criteria for selecting sites eligible	10
3.9 Hab. 97/2 rev. 4 18/11/97 criteria	9
3.10 Common Fisheries Policy Article 8 criteria concerning fish stock recovery areas	3
3.11 Nature Restoration Law Article 11 (2) criteria concerning habitats to be restored	5
3.12 HELCOM MPAs criteria	20
3.13 SPA/RAC Specially Protected Areas of Mediterranean Importance (SPAMI) criteria	15



Table 12 (continued)

Criteria list (type)	Number of criteria
4. Total for list type 4: monitoring status of areas	763
4.1 GEO BON Essential Biodiversity Variables (EBVs)	27
4.2 GOOS Essential Ocean Variables (EOVs)	32
4.3 SER Ecosystem attributes to evaluate recovery	18
4.4 MSFD Annex III Indicative list of characteristics	17
4.5 COM DEC 2017/848/EU MSFD criteria to monitor descriptors	29
4.6 COM DEC 2017/848/EU MSFD Scientific criteria for the selection of species and habitats	5
4.7 WFD Annex V definitions ecological status	21
4.8.1 Natura 2000 parameters used to monitor areas (BD Art 12)	4
4.8.2 Natura 2000 parameters used to monitor areas (HD Art 17)	3
4.9 DEVOTES Catalogue of Marine Biodiversity Indicators	590
4.10 OSPAR Common Indicators for MSFD monitoring	17

3.2 Criteria categorisation

For each of the four criteria list types (identification of areas, identification of ecological features, designation of ABMTs and monitoring), Table 13 and Figure 2 indicate that ecological and genetic criteria are the most represented category, followed by anthropogenic and abiotic criteria. For the criteria used to identify important ecological features, all criteria were categorised as ecological criteria (as well as 15 criteria being considered both anthropogenic and ecological criteria, and 6 criteria were considered both socio-economic and ecological criteria). For the designation criteria lists, socio-economic criteria were more prevalent than anthropogenic or abiotic criteria. Overall, climate criteria are the least represented in the compilation (Table 13). For an overview of the categories and subcategories and their definitions, the reader is referred to Table 6.

Table 13 Sum of criteria identified per category for each of the four criteria list types.

	Ecological and genetic criteria	Abiotic criteria	Anthropogenic criteria	Climate criteria	Socio-economic criteria
IDENTIFICATION - areas	62	4	9	1	6
IDENTIFICATION - ecological features	54	0	15	0	6
DESIGNATION	104	10	13	10	32
MONITORING	685	66	131	1	6
Total	905	80	168	12	50

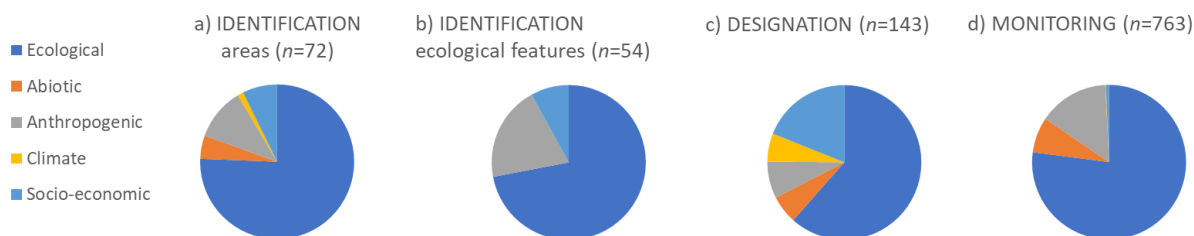


Figure 2 Pie charts illustrating the relative proportion of criteria assigned to the five criteria categories for criteria used for a) Identification of significant areas b) Identification of significant ecological features c) Designation of ABMTs d) Monitoring. For each list type, the total number of collected criteria is indicated in brackets.

3.2.1 Ecological and genetic criteria

As can be seen in Table 14 and Figure 3, structural aspects are the most prevalent among ecological criteria, followed by functional aspects and ecological status aspects.

Table 14 Number of criteria labelled with ecological and genetic criteria subcategories for each criteria list type.

	Functional	Structural	Genetic	Ecological status
IDENTIFICATION - areas	34	38	1	20
IDENTIFICATION - ecological features	32	42	0	37
DESIGNATION	49	60	3	27
MONITORING	298	446	9	206
Total	413	586	13	290

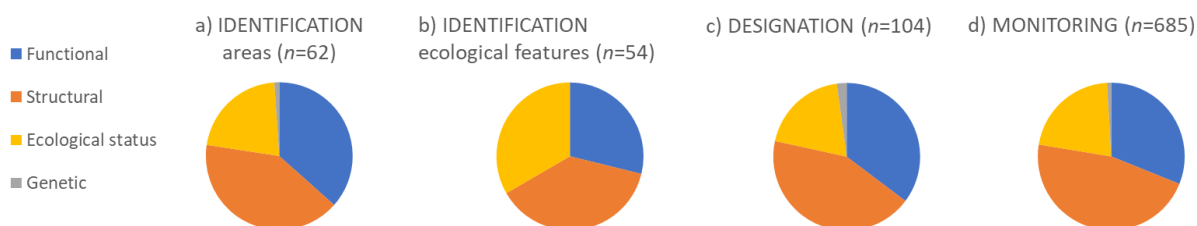


Figure 3 Pie charts illustrating the relative proportion of functional, structural, ecological status and genetic subcategories assigned to the identified ecological and genetic criteria, used for a) Identification of significant areas b) Identification of significant ecological features c) Designation of ABMTs d) Monitoring. For each list type, the total number of collected criteria is indicated in brackets.



Out of the 413 criteria labelled as ‘functional ecological criteria’, a subset of 224 criteria were also labelled as ‘structural ecological criteria’, meaning both functional and structural aspects were present in a single criterion for 224 criteria. Box 1 is an example of a criterion that considers both functional (fragility, see Annex 1) and structural (rarity, see Annex 1) aspects. 189 criteria were considered to be functional ecological criteria without also considering structural aspects, and 362 criteria were labelled as structural ecological criteria without any mention of functional ecological aspects.

Box 1 Example of a criterion that contains both structural and functional ecological aspects (criterion is part of the criteria list used to designate Special Areas under the MARPOL convention)

“Conditions indicating that protection of the area from harmful substances is needed to preserve rare or fragile ecosystems such as coral reefs, mangroves, seagrass beds and wetlands”

3.2.2 Abiotic criteria

As can be seen in Table 15 and Figure 4, a relatively balanced combination of both oceanographic and geological/geomorphological features are represented in the abiotic criteria, with only one criterion related to meteorological conditions. Oceanographic conditions are considered the most in criteria used for monitoring, and they are less represented in criteria used for identifying or designating conservation areas.

Table 15 Number of criteria labelled with abiotic criteria subcategories for each criteria list type.

	Oceanographic conditions	Geological and geomorphological features	Meteorological conditions
IDENTIFICATION - areas	2	2	0
IDENTIFICATION - ecological features	0	0	0
DESIGNATION	8	3	1
MONITORING	43	26	0
Total	53	31	1

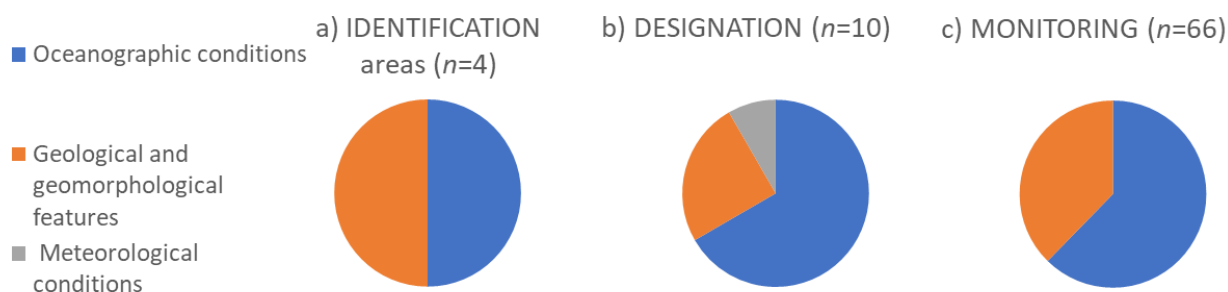


Figure 4 Pie charts illustrating the relative proportion of oceanographic, geological / geomorphological or meteorological subcategories assigned on the identified abiotic criteria used for a) Identification of significant areas b) Designation of ABMTs d) Monitoring. For each list type, the total number of collected criteria is indicated in brackets.

3.2.3 Anthropogenic criteria

As can be seen in Table 16 and Figure 5, anthropogenic impacts are more prevalent than anthropogenic activities in each of the criteria list types.

Table 16 Number of criteria labelled with the anthropogenic activities and impacts subcategories for each criteria list type.

	Anthropogenic activities	Anthropogenic impacts
IDENTIFICATION -areas	4	5
IDENTIFICATION -ecological features	12	15
DESIGNATION	3	10
MONITORING	10	124
Total	29	154

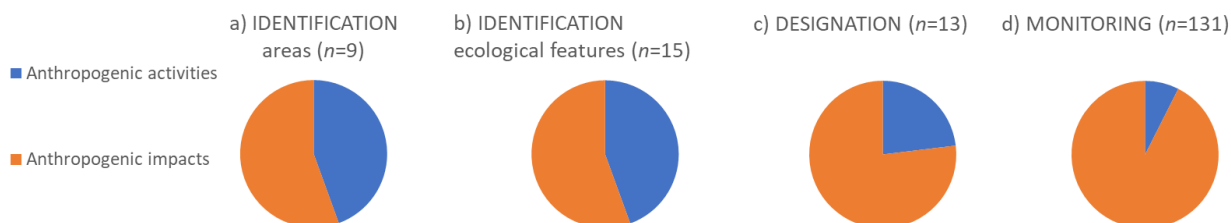


Figure 5 Pie charts illustrating the relative proportion of the anthropogenic activities and impacts subcategories assigned to the anthropogenic criteria used for a) Identification of significant areas b) Identification of significant ecological features c) Designation of ABMTs d) Monitoring. For each list type, the total number of collected criteria is indicated in brackets.

3.2.4 Climate criteria

As can be seen in Table 17 and Figure 6, climate impact, mitigation and climate change resilience aspects are more prevalent than climate drivers, which was only identified as a category for one of the monitoring criteria.

Table 17 Number of criteria labelled with the climate criteria subcategories for each criteria list type.

	Climate Drivers	Climate Impacts	Climate mitigation	Climate change resilience
IDENTIFICATION -areas	0	0	0	1
IDENTIFICATION -ecological features	0	0	0	0
DESIGNATION	0	4	5	4
MONITORING	1	0	0	0
Total	1	4	5	5

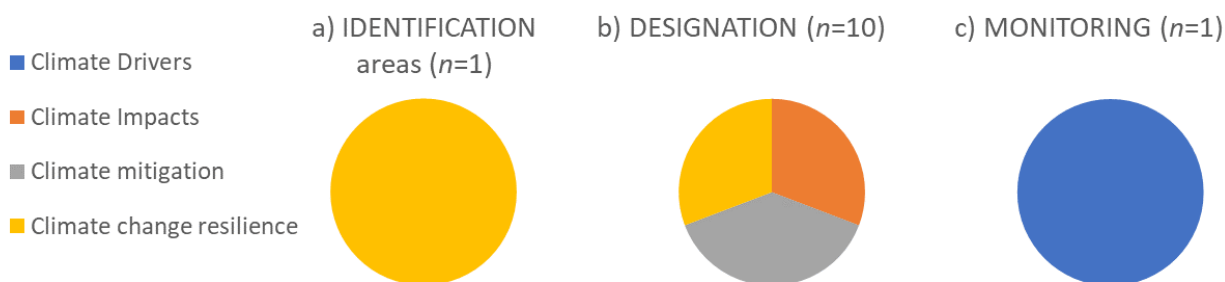


Figure 6 Pie charts illustrating the relative proportion of the climate subcategories within the climate category, for a) Identification of significant areas b) Designation of ABMTs c) Monitoring. For each list type, the total number of collected criteria is indicated in brackets.

3.2.5 Socio-economic criteria

As can be seen in Table 18 and Figure 7, between criteria list types there is a large discrepancy of which subcategories are the most represented. The designation list type includes mostly socio-cultural criteria, whilst economic criteria are better represented for the identification of areas and ecological features. For the monitoring criteria, only existing management measures were identified as a type of socio-economic criteria (Figure 7).

Table 18 Number of criteria labelled with socio-economic criteria subcategories for each criteria list type.

	Social - Cultural	Economic	Governance	Existing management measures
IDENTIFICATION - areas	0	4	1	1
IDENTIFICATION - ecological features	0	6	5	0
DESIGNATION	22	7	4	4
MONITORING	0	0	1	5
Total	22	17	11	10

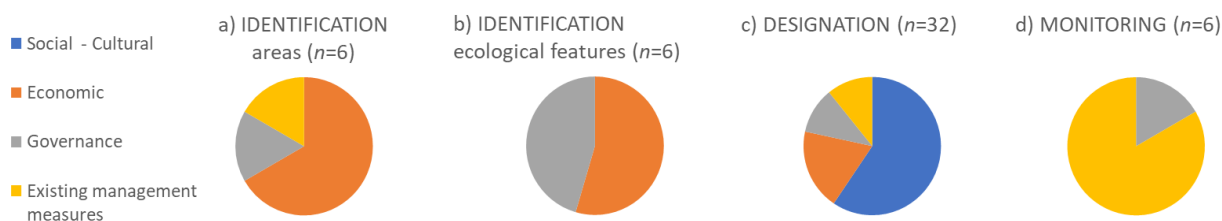


Figure 7 Pie charts illustrating the relative proportion of criteria assigned to socio-cultural, economic, governance and management measures subcategories within the socio-economic category, for a) Identification of significant areas b) Identification of significant ecological features c) Designation of ABMTs d) Monitoring. For each list type, the total number of collected criteria is indicated in brackets.

18 of the 50 socio-economic criteria identified also mentioned ecological aspects, indicating an integration of ecological and socio-economic elements within a single criterion. An example of such an integrated criterion is given in Box 2, where ecological aspects are represented through the mention of “conservation objectives”, and socio-economic interests with “sustainable resource management” and “activities compatible with the conservation objectives”.

Box 2 Example of a criterion including both ecological and socio-economic aspects (criterion is part of the criteria list used to designate biosphere reserves)

“It should include these functions, through appropriate zonation, recognizing:

(a) a legally constituted core area or areas devoted to long-term protection, according to the conservation objectives of the biosphere reserve, and of sufficient size to meet these objectives;

(b) a buffer zone or zones clearly identified and surrounding or contiguous to the core area or areas, where only activities compatible with the conservation objectives can take place;

(c) an outer transition area where sustainable resource management practices are promoted and developed.”

3.2.6 Consideration of ecological features in the ecological criteria

For each ecological criterion it was recorded whether a specific mention was included of specified taxonomic and/or functional groups (Table 19 and Table 20). 45% did not specify any taxonomic or functional group. Figure 8 gives a graphical representation of the proportion of criteria that mention the specified taxonomic groups. The most mentioned organisms were fish and birds. Figure 9 shows the mention of demersal, benthic or pelagic species as the predefined functional groups within the collected criteria. Most references are found in the monitoring criteria, with pelagic species being more represented than benthic or demersal fish species.



This project has received funding from the European Union's Horizon Europe research and innovation programme. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union. Neither the European Union nor the granting authority can be held responsible for them.



Table 19 *The consideration of different organisms by the criteria, per criteria list type.*

	ID - ecological				
	ID - areas	features	DESIGNATION	MONITORING	Total
Birds	16	4	5	38	63
Fish	7	6	9	81	103
Mammals	14	0	3	35	52
Reptiles	0	0	2	9	11
Invertebrates	0	0	2	64	66
Angiosperms	0	0	0	37	37
Macroalgae	0	0	0	56	56
Microbes	0	0	0	3	3
Taxonomic group not specified	25	39	71	401	536

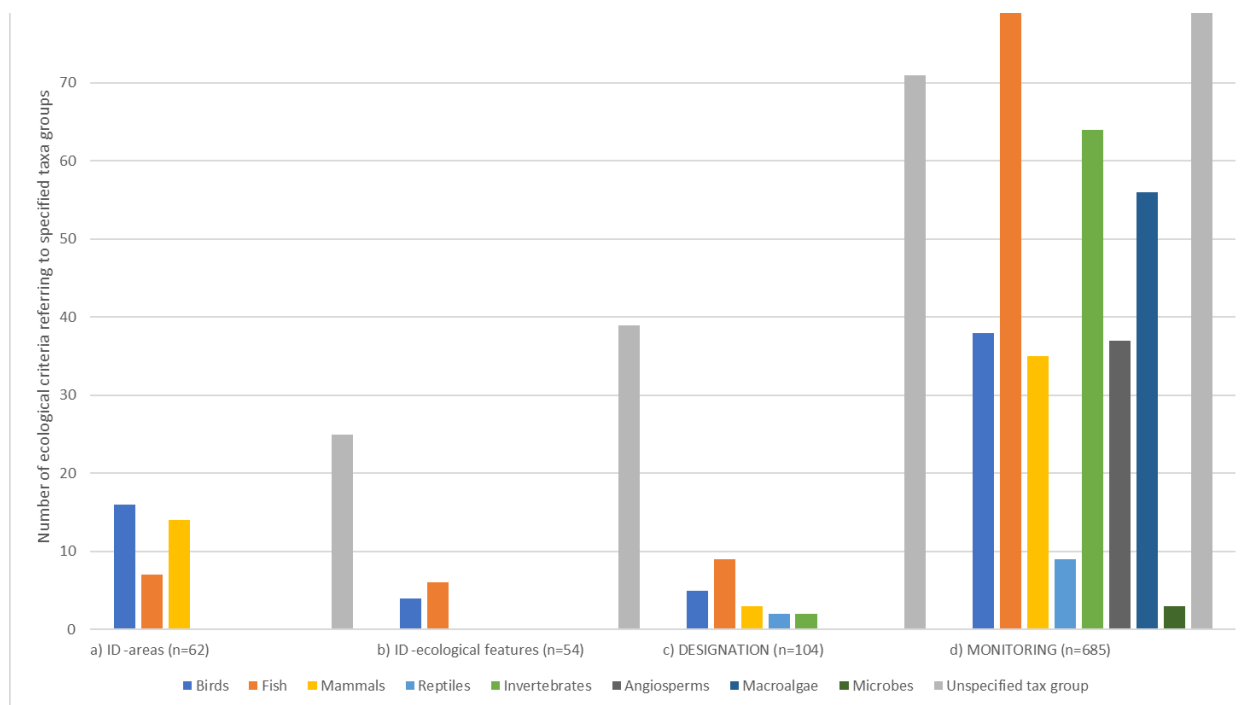


Figure 8 *Taxonomic groups referred to by the collected criteria, per criteria list category: a) Identification of significant areas b) Identification of significant ecological features c) Designation of ABMTs d) Monitoring. For each list type, the total number of collected ecological criteria is indicated in brackets. The y-axis has been cut off for a better visualisation.*



Table 20 *The consideration of different functional groups by the criteria, per criteria list type*

	ID - areas	ID - ecological features	DESIGNATION	MONITORING	Total
Benthic species	0	0	0	38	38
Demersal species	1	0	0	16	17
Pelagic species	0	0	0	98	98

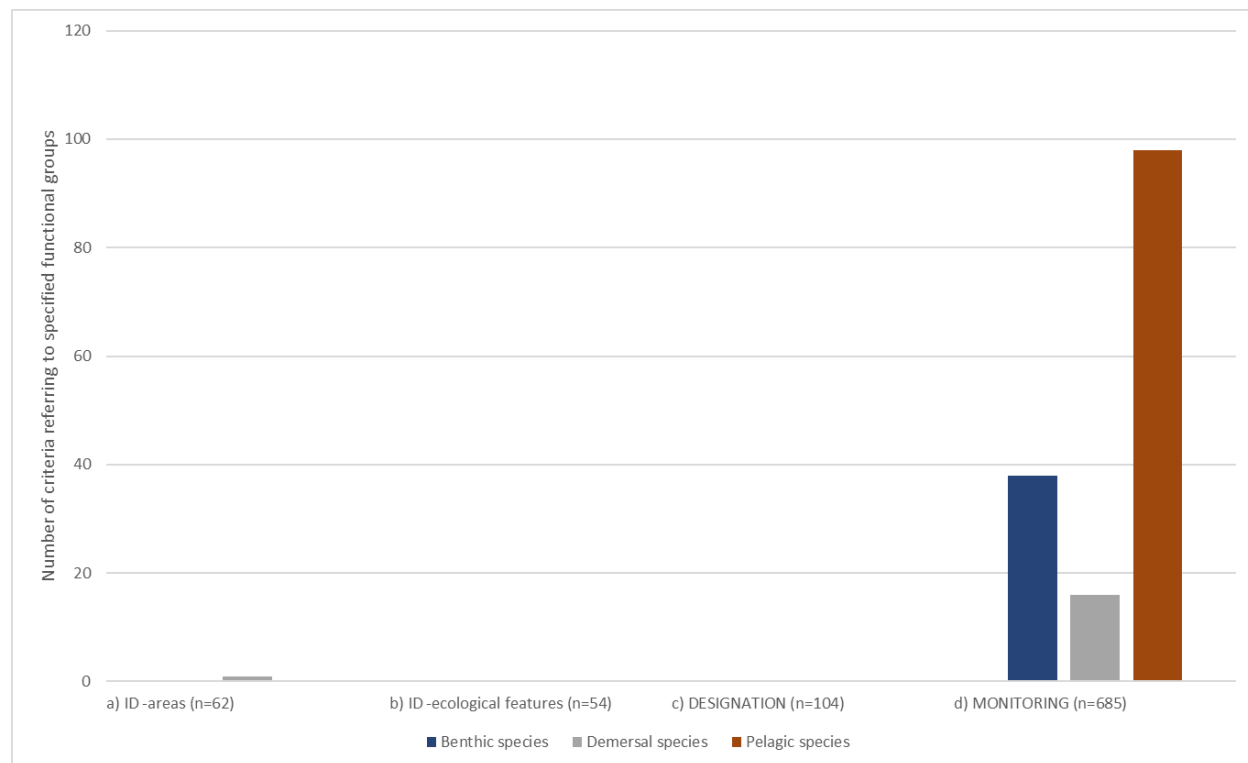


Figure 9 Bar chart to depict ecological criteria identified that refer to specified functional groups, per criteria list category: a) Identification of significant areas b) Identification of significant ecological features c) Designation of ABMTs d) Monitoring. For each list type, the total number of collected criteria is indicated in brackets.



3.3 Consideration of genetic information

In total, 13 (out of 1,055) criteria were identified that explicitly refer to genetic properties, which are marked in bold in Table 21. For list type 1, one genetic criterion was identified as part of the criteria list to designate IMMAs, for list type 2 none were identified, three were identified for list type 3 and nine for type 4.

Table 21 Criteria identified that refer to genetic properties of ecological features

Criteria list type	Criteria list number	Criterion ID	Criterion referring to genetic information
1. Criteria for significant area identification	1.3 Important Marine Mammal Area (IMMA) criteria	ACL_INTL_05_IMMA_D1	Distinctiveness: Areas which sustain populations with important genetic , behavioural or ecologically distinctive characteristics.
3. Criteria for implementation ABMTs	3.1 Particularly Sensitive Sea Area (PSSA) criteria	ACL_INTL_04_PSSA_4.4.5	Diversity – An area that may have an exceptional variety of species or genetic diversity or includes highly varied ecosystems, habitats, and communities.
	3.4 World National Biosphere Reserves (WNBR) criteria	ACL_INTL_03_BR_4	It should have an appropriate size to serve the three functions of biosphere reserves, as set out in Article 3 (conservation, development, logistic support). Conservation refers to contribute to the conservation of landscapes, ecosystems, species and genetic variation
	3.12 HELCOM MPAs criteria	ACL_REG_06_HELCOM_MPAs_#10	Area with high natural biodiversity. Area that contains comparatively higher diversity of ecosystems, habitats, communities, or species, or has higher genetic diversity .
4. Criteria for monitoring	4.1 Essential Biodiversity Variables (EBVs)	CL_INTL_02_EBV_A1	Intraspecific genetic diversity: The variation in DNA sequences among individuals of the same species.
		CL_INTL_02_EBV_A2	Genetic differentiation: Divergence in genetic composition (identity and frequencies of alleles) among multiple populations.
		CL_INTL_02_EBV_A3	Effective population size: The number of individuals in an idealized population that will exhibit the same amount of genetic diversity loss as the population under consideration.
		CL_INTL_02_EBV_A4	Inbreeding: Mating between related individuals.
	4.3 Ecosystem attributes to evaluate recovery	CL_INTL_18_SER_A6b	External exchanges: Gene flows



This project has received funding from the European Union's Horizon Europe research and innovation programme. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union. Neither the European Union nor the granting authority can be held responsible for them.



Criteria list type	Criteria list number	Criterion ID	Criterion referring to genetic information
	4.4 MSFD Annex III Indicative list of characteristics	CL_EU_06_MSFD_AnIII_B7	an inventory of the temporal occurrence, abundance and spatial distribution of nonindigenous, exotic species or, where relevant, genetically distinct forms of native species , which are present in the marine region or subregion
	4.5 MSFD criteria to monitor descriptors	CL_EU_08_MSFD_cri tDs_D1C2	The population abundance of the species is not adversely affected due to anthropogenic pressures, such that its long-term viability is ensured (primary)
		CL_EU_08_MSFD_cri tDs_D3C3	The age and size distribution of individuals in the populations of commercially-exploited species is indicative of a healthy population. This shall include a high proportion of old/large individuals and limited adverse effects of exploitation on genetic diversity (primary)
	4.9 DEVOTES Catalogue of Marine Biodiversity Indicators	CL_EU_11_DEV_8159	Genetic population structure of selected biological components



4 Discussion

This deliverable aimed to provide an overview of criteria, species and habitat lists used for conservation and restoration purposes and an analysis of which ecological and socio-economic dimensions are considered in the identification, designation and monitoring of area-based protection measures at the regional, European and global level. To understand what themes were covered by the criteria, they were assigned one or more categories and subcategories. Overlap between combinations of categories assigned to the same criteria was also examined. The largest proportion of criteria collected are ecological criteria, of which the highest number of criteria were structural, followed by functional and ecological status ecological criteria. A large proportion of ecological criteria considered both structural and functional aspects.

Abiotic criteria, such as criteria related to oceanographic conditions, do not seem to be as widely used as ecological criteria. They are better represented in monitoring criteria than in criteria used to identify or designate areas of interest for conservation. However, abiotic features may be considered indirectly in ecological criteria that refer to habitats, which will include an abiotic component, such as wave action associated with intertidal habitats.

Other studies such as Frid et al.(2008); Van der Biest et al. (2020); Miatta, Bates and Snelgrove (2021) state that it is predominantly the static spatial distribution of 'key' species, or the extent of physical habitats, that inform the delimitation of conservation sites. In contrast, the results presented here demonstrate that not only structural aspects but also functional characteristics of ecological features are formulated into criteria, and as a third aspect, also their ecological status (their condition). However, actual application of the formulated criteria for identifying, designating and monitoring areas will determine the extent to which functional characteristics as well as the presence/absence of species are taken into account during the planning of conservation areas.

Importantly, whilst other studies compare the relative consideration of functional as well as structural aspects during conservation planning, this study shows that a third aspect that is prominent in the criteria lists is the state or condition of the ecological features being considered, for example whether species are endangered or whether environments are degraded or not. These types of criteria are used to prioritise the protection of already threatened areas/ecological features that require a removal of pressures. Even though some of these criteria refer to the condition of biotic processes or interactions, the majority refer to population sizes of threatened species present in the area of interest; therefore the conservation status is currently defined rather with structural aspects than with process-based functional properties.

Barriers to implementing functional criteria, and specifically process-based functional criteria such as carbon sequestration or primary production, have been discussed in the literature, such as a lack of knowledge, or data, or both, or a lack of appropriate tools to systematically monitor processes (Miatta et al., 2021; Van der Biest et al., 2020). In this study, the distinction was not made between process-based and more static aspects of



ecosystem functioning such as biomass of organisms, but further analysis of the collected criteria using this distinction in the future could give information about the relative consideration of process-based criteria and more static criteria.

As well as the consideration of the state/condition of ecological aspects, anthropogenic activities and impacts were also considered as criteria, albeit to a lesser extent than ecological criteria. Some legislation, such as the Birds Directive, does not allow the consideration of human activities during the designation of protected sites (Haelters et al., 2004). However, some ABMTs, such as the delineation of emission control areas, depend on information related to ship activity. Therefore, the variety of ABMTs considered in this study, including MPAs but also OECMs, show a more comprehensive picture of different ways in which area-based measures are spatially defined.

Compared to ecological aspects, there was a limited number of criteria considering socio-economic aspects. This resonates with previous research which highlights a lack of consideration of social aspects in conservation planning (Ban et al., 2019; Bennett and Dearden, 2014; Trouillet and Jay, 2021). Socio-economic criteria may define which social values should be considered when identifying (or monitoring) an area of interest. These included socio-cultural aspects, but also economic interests. Incorporating socio-economic requirements into the process of identifying, designating and monitoring sites and their associated ecological features can help to reconcile biodiversity objectives with socio-economic objectives (Van der Biest et al., 2020). Using socio-economic criteria during significant ecological features and area identification, designation and monitoring can be a mechanism to include the interests of local communities at an early stage and in a continuous way, which can help foster stewardship, as well as equitable conservation outcomes. The development and testing of socio-economic criteria to complement ecological criteria for conservation is a key component of the MSP4BIO project.

As with the socio-economic criteria, a limited number of criteria were identified that explicitly considered climate aspects. This aligns with work from other researchers that argue climate change is considered separately from conservation, which can result in a misalignment of climate mitigation and conservation agendas (Roberts et al., 2020). For the designation criteria, in terms of climate criteria, a large proportion consists of climate mitigation criteria, such as imposing emission reduction measures on ships in sensitive areas. The commission staff working document 'Criteria and guidance for protected areas designations' recommends the consideration of carbon-rich ecosystems during the designation of area-based management tools for conservation (European Commission, 2022). This is indirectly considered in the criteria compilation through the specific mention of blue carbon habitats such as seagrass beds, but no explicit link is made with carbon storage in these criteria, or with climate mitigation.

Another recommendation in the commission staff working document is the "focus on areas of high biodiversity value" (European Commission, 2022). This focus was prevalent in the criteria compilation; criteria that refer to biodiversity value were categorised as structural ecological criteria (see Annex 1). Functional ecological criteria were also



recommended by the commission staff working document, such as ecological connectivity for migrating fish or spawning and nursery sites, or socio-economic criteria such as the consideration of areas important for fish stocks. As reflected in the distribution of species groups mentioned in the criteria, fish are well represented, which aligns with how their importance is also reflected in the commission staff working document.

A comparison of results for each of the list types (identification areas/identification ecological features/designation ABMTs/monitoring indicates some differences. For the monitoring criteria, a higher number of different species groups is considered than for the identification and designation list types, which also have a higher proportion of criteria that do not specify a species group (unspecified). This could be related to how a large number of the monitoring criteria are developed for specific ecosystems, whilst the identification and designation criteria may be defined in a way so that it can be applied to a diversity of ecosystems that host differing species groups.

For the identification of important areas, a larger number of criteria referred to bird species as well as marine mammal species compared criteria used for the identification of ecological features or the designation of ABMTs. This could relate to how birds and marine mammals are charismatic species, but it could also be due to their status as top predators. The importance of fish in the criteria overall could relate to their socio-economic importance.

This study considered ecological, abiotic, anthropogenic, climate and socio-economic themes present in the collected criteria. However, coherence of protected area networks is also highlighted as an important prerequisite for designating future areas for protection in the commission staff working document (European Commission, 2022). As a follow up study, criteria could also be collected that specifically concern ecological coherence of the networks of MPAs to be designated or monitored. For example, representativity, replication, adequacy and connectivity are indicators used in HELCOM's coherence assessment of the marine protected area network in the Baltic Sea (HELCOM, 2016). For the Northeast Atlantic and North Sea region, OSPAR has developed the Madrid criteria for assessing marine protected area network status (OSPAR, 2019). Further work could also analyse the presence of these aspects in the already collected criteria.

As well as criteria lists, lists of species and habitats were also collected as part of this study. Previous research has highlighted the lack of marine habitats defined in Annex I of the Habitats Directive (online nine marine habitats) (Olsen et al., 2013). The proposed EU Nature Restoration Law on the other hand includes a more detailed overview of different marine habitats to be protected and restored (231 marine EUNIS habitats are included), indicating an improvement in the consideration of EU marine habitats in European legislation. However, another critique of the Habitats Directive was the lack of consideration of deep-sea habitats such as seamounts and hydrothermal vents (Olsen et al., 2013), which are also not included in the more recent Nature Restoration Law. Other instruments to protect deep sea habitats such as Vulnerable Marine Ecosystems (VMEs) have been identified in this study, such as the criteria lists, taxa lists, indicators and habitat lists provided by ICES, FAO, GFCM and NEAFC.



4.1 Conclusions

This study provides a comprehensive overview of existing criteria, species, and habitat lists that provide decision support for the identification of significant areas and ecological features, the designation of area-based management tools and the monitoring of the status of an area. Ecological, abiotic, anthropogenic, climate and socio-economic aspects are considered to varying degrees in the collected criteria. This work can guide the formulation of new criteria that address shortcomings in the existing criteria, which is part of the work of MSP4BIO.

The screening that led to the collection of the criteria was relatively broad in scope, meaning criteria related to monitoring were included as well as criteria related to assigning a conservation status to species. Having these applications of criteria in one compilation can be valuable to compare different applications of specific types of criteria, such as functional ecological criteria.

This overview will feed into MSP4BIO WP3 and WP4 where the information will be used as a baseline to identify those criteria types or criteria that have been systematically overlooked in existing directives and frameworks. There is a strong representation of structural ecological criteria, but non-static functional criteria are less prevalent. A large proportion of the criteria are ecological criteria, and climate criteria as well as socio-economic criteria are less represented. As well as that, abiotic features are not as widely used as ecological features. WP3 will in fact consider relevant but missing ecological and environmental dimensions in the process of identification of significant areas, and the designation and monitoring of area-based management measures. WP4 will consider how socio-economic and governance aspects are currently included as criteria, and whether any elements are missing.



5 References

- ACCOBAMS, 2017. Reports of the Workshop “Inputs to the ACCOBAMS ongoing effort to map human threats on cetaceans in the Mediterranean and Black Seas.”
- Ban, N., Gurney, G., Marshall, N., Whitney, C., Mills, M., Gelcich, S., Bennett, N., Miller-Meehan, M., Butler, C., Ban, S., Tran, T., Cox, M., Breslow, S., 2019. Well-being outcomes of marine protected areas. *Nat. Sustain.* 2, 524–524. <https://doi.org/10.1038/s41893-019-0306-2>
- Bennett, N.J., Dearden, P., 2014. Why local people do not support conservation: Community perceptions of marine protected area livelihood impacts, governance and management in Thailand. *Mar. Policy* 44, 107–116. <https://doi.org/10.1016/j.marpol.2013.08.017>
- Bowen, E., Irish, A., Lightfoot, E., 2022. A Policy-Mapping Primer for Social Work Researchers and Advocates. *Soc. Work Res.* 46, 79–83. <https://doi.org/10.1093/swr/svab029>
- Boyes, S.J., Elliott, M., 2014. Marine legislation - The ultimate “horrendogram”: International law, European directives & national implementation. *Mar. Pollut. Bull.* 86, 39–47. <https://doi.org/10.1016/j.marpolbul.2014.06.055>
- CBD, 2018. Protected areas and other effective area-based conservation measures (Decision 14/8).
- CBD, n.d. Ecologically or Biologically Significant Marine Areas (EBSAs) [WWW Document]. Backgr. EBSA Process. URL <https://www.cbd.int/ebsa/about> (accessed 6.13.23).
- Costello, M.J., Claus, S., Dekeyzer, S., Vandepitte, L., Tuama, É.Ó., Lear, D., Tyler-Walters, H., 2015. Biological and ecological traits of marine species. *PeerJ* 3, e1201. <https://doi.org/10.7717/peerj.1201>
- Donald, P.F., Fishpool, L.D.C., Ajagbe, A., Bennun, L.A., Bunting, G., Burfield, I.J., Butchart, S.H.M., Capellan, S., Crosby, M.J., Dias, M.P., Diaz, D., Evans, M.I., Grimmett, R., Heath, M., Jones, V.R., Lascelles, B.G., Merriman, J.C., O'brien, M., Ramírez, I., Waliczky, Z., Wege, D.C., 2019. Important Bird and Biodiversity Areas (IBAs): the development and characteristics of a global inventory of key sites for biodiversity. *Bird Conserv. Int.* 29, 177–198. <https://doi.org/10.1017/S0959270918000102>
- European Commission, 2022. Commission staff working document: Criteria and guidance for protected areas designations. Brussels.
- FAO, 2008. International Guidelines for the Management of Deep-Sea Fisheries in the High Seas.
- Frid, C.L.J., Paramor, O.A.L., Brockington, S., Bremner, J., 2008. Incorporating ecological functioning into the designation and management of marine protected areas, in: Davenport, J., Burnell, G.M., Cross, T., Emmerson, M., McAllen, R., Ramsay, R., Rogan, E. (Eds.), *Challenges to Marine Ecosystems, Developments in Hydrobiology*. Springer Netherlands, Dordrecht, pp. 69–79. https://doi.org/10.1007/978-1-4020-8808-7_7



- Gissi, E., Maes, F., Kyriazi, Z., Ruiz-Frau, A., Santos, C.F., Neumann, B., Quintela, A., Alves, F.L., Borg, S., Chen, W., da Luz Fernandes, M., Hadjimichael, M., Manea, E., Marques, M., Platjouw, F.M., Portman, M.E., Sousa, L.P., Bolognini, L., Flannery, W., Grati, F., Pita, C., Nataşa Văidianu, Stojanov, R., van Tatenhove, J., Micheli, F., Hornidge, A.-K., Unger, S., 2022. Contributions of marine area-based management tools to the UN sustainable development goals. *J. Clean. Prod.* 330, 129910. <https://doi.org/10.1016/j.jclepro.2021.129910>
- Haelters, J., Vigin, L., Stienen, E.W.M., Scory, S., Kuijken, E., Jacques, T.G., 2004. Ornithologisch belang van de Belgische zeegebieden. Beheerseenheid van het Mathematisch Model van de Noordzee (BMM/KBIN) en het Instituut voor Natuurbehoud (IN).
- HELCOM, 2016. Ecological coherence assessment of the Marine Protected Area network in the Baltic Sea. *Balt. Sea Environ. Proc.* 148.
- Horton, T., Gofas, S., Kroh, A., Poore, G.C.B., Read, G., Rosenberg, G., Stöhr, S., Bailly, N., Boury-Esnault, N., Brandão, S.N., Costello, M.J., Decock, W., Dekeyser, S., Hernandez, F., Mees, J., Paulay, G., Vandepitte, L., Vanhoorne, B., Vranken, S., 2017. Improving nomenclatural consistency: a decade of experience in the World Register of Marine Species. *Eur. J. Taxon.* <https://doi.org/10.5852/ejt.2017.389>
- IMO, 2019. Particularly Sensitive Sea Areas [WWW Document]. URL <https://www.imo.org/en/ourwork/environment/pages/pssas.aspx> (accessed 6.15.23).
- IUCN, 2023. The IUCN Red List of Threatened Species [WWW Document]. IUCN Red List Threat. Species. URL <https://www.iucnredlist.org/en> (accessed 6.27.23).
- IUCN, 2016. A Global Standard for the Identification of Key Biodiversity Areas, Version 1.0.
- IUCN-WCPA, 2008. Establishing resilient marine protected area networks--making it happen. IUCN-WCPA: National Oceanic and Atmospheric Association: The Nature Conservancy, Washington, D.C.
- Johnson, D.E., Barrio Froján, C., Turner, P.J., Weaver, P., Gunn, V., Dunn, D.C., Halpin, P., Bax, N.J., Dunstan, P.K., 2018. Reviewing the EBSA process: Improving on success. *Mar. Policy* 88, 75–85. <https://doi.org/10.1016/j.marpol.2017.11.014>
- KBA, 2023. Key Biodiversity Areas: Keep nature thriving [WWW Document]. URL <https://www.keybiodiversityareas.org/> (accessed 6.13.23).
- LifeWatch Belgium, 2023. LifeWatch Data Explorer [WWW Document]. URL <https://rshiny.vsc.lifewatch.be/traits-data/> (accessed 6.8.23).
- Maribus, 2015. World Ocean Review 4: Sustainable Use of Our Oceans - Making Ideas Work.
- Marine Species Traits editorial board, 2023. Marine Species Traits. <https://doi.org/10.14284/580>
- Miatta, M., Bates, A.E., Snelgrove, P.V.R., 2021. Incorporating Biological Traits into Conservation Strategies. *Annu. Rev. Mar. Sci.* 13, 421–443. <https://doi.org/10.1146/annurev-marine-032320-094121>



- MMPA Task Force, 2020. IMMA definitions. Mar. Mammal Prot. Areas Task Force. URL <https://www.marinemammalhabitat.org/immas/imma-definitions/> (accessed 6.13.23).
- Muller-Karger, F.E., Miloslavich, P., Bax, N.J., Simmons, S., Costello, M.J., Sousa Pinto, I., Canonico, G., Turner, W., Gill, M., Montes, E., Best, B.D., Pearlman, J., Halpin, P., Dunn, D., Benson, A., Martin, C.S., Weatherdon, L.V., Appeltans, W., Provoost, P., Klein, E., Kelble, C.R., Miller, R.J., Chavez, F.P., Iken, K., Chiba, S., Obura, D., Navarro, L.M., Pereira, H.M., Allain, V., Batten, S., Benedetti-Checchi, L., Duffy, J.E., Kudela, R.M., Rebelo, L.-M., Shin, Y., Geller, G., 2018. Advancing Marine Biological Observations and Data Requirements of the Complementary Essential Ocean Variables (EOVs) and Essential Biodiversity Variables (EBVs) Frameworks. *Front. Mar. Sci.* 5, 211. <https://doi.org/10.3389/fmars.2018.00211>
- Oceana, 2019. Essential Fish Habitats [WWW Document]. Oceana Eur. URL <https://europe.oceana.org/essential-fish-habitats/> (accessed 6.13.23).
- Olsen, E.M., Johnson, D., Weaver, P., Goñi, R., Ribeiro, M.C., Rabaut, M., Macpherson, E., Pelletier, D., Fonseca, L., Katsanevakis, S., Zaharia, T., 2013. Achieving Ecologically Coherent MPA Networks in Europe: Science Needs and Priorities (Position Paper). European Marine Board, Ostend, Belgium.
- OSPAR, 2019. 2018 Status Report on the OSPAR Network of Marine Protected Areas.
- Prior, S., Chircop, A., Roberts, J., 2010. Area-based Management on the High Seas: Possible Application of the IMO's Particularly Sensitive Sea Area Concept. *Int. J. Mar. Coast. Law* 25, 483–522. <https://doi.org/10.1163/157180810X525403>
- R Core Team, 2022. R: A Language and Environment for Statistical Computing.
- Roberts, C., O'Leary, B., Hawkins, J.P., 2020. Climate change mitigation and nature conservation both require higher protected area targets. *Philos. Trans. R. Soc. B* 375. <https://doi.org/10.1098/rstb.2019.0121>
- Teixeira, H., Berg, T., Uusitalo, L., Fürhaupter, K., Heiskanen, A.-S., Mazik, K., Lynam, C.P., Neville, S., Rodriguez, J.G., Papadopoulou, N., Moncheva, S., Churilova, T., Kryvenko, O., Krause-Jensen, D., Zaiko, A., Veríssimo, H., Pantazi, M., Carvalho, S., Patrício, J., Uyarra, M.C., Borja, À., 2016. A Catalogue of Marine Biodiversity Indicators. *Front. Mar. Sci.* 3.
- Trouillet, B., Jay, S., 2021. The complex relationships between marine protected areas and marine spatial planning: Towards an analytical framework. *Mar. Policy* 127, 104441. <https://doi.org/10.1016/j.marpol.2021.104441>
- UNGA, 2007. Report of the Secretary-General of the United Nations General Assembly on Oceans and the Law of the Sea.
- Van der Biest, K., Meire, P., Schellekens, T., D'hondt, B., Bonte, D., Vanagt, T., Ysebaert, T., 2020. Aligning biodiversity conservation and ecosystem services in spatial planning: Focus on ecosystem processes. *Sci. Total Environ.* 712, 136350. <https://doi.org/10.1016/j.scitotenv.2019.136350>
- Vandepitte, L., Vanhoorne, B., Decock, W., Dekeyser, S., Trias Verbeeck, A., Bovit, L., Hernandez, F., Mees, J., 2015. How Aphia—The Platform behind Several Online and Taxonomically Oriented Databases—Can Serve Both the Taxonomic



This project has received funding from the European Union's Horizon Europe research and innovation programme. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union. Neither the European Union nor the granting authority can be held responsible for them.



- Community and the Field of Biodiversity Informatics. *J. Mar. Sci. Eng.* 3, 1448–1473. <https://doi.org/10.3390/jmse3041448>
- Wickham, H., 2022. stringr: Simple, Consistent Wrappers for Common String Operations.
- Wickham, H., 2007. Reshaping Data with the reshape Package. *J. Stat. Softw.* 21, 1–20.
- Wickham, H., François, R., Henry, L., Müller, K., Vaughan, D., 2023. dplyr: A Grammar of Data Manipulation.
- World Register of Marine Species, 2023. Definitions [WWW Document]. *Mar. Species Traits*. URL <https://www.marinespecies.org/traits/aphia.php?p=attrdefinitions> (accessed 6.8.23).
- WoRMS Editorial Board, 2023. World Register of Marine Species. Instructions to editors. Topic 16: Change the status of a name [WWW Document]. URL <https://www.marinespecies.org/aphia.php?p=manual#topic16>



This project has received funding from the European Union's Horizon Europe research and innovation programme. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union. Neither the European Union nor the granting authority can be held responsible for them.



Annex 1: Definitions and keywords of the criteria categories

Table A3.1 Definitions and example keywords of proposed criteria categories for the two category levels. Keywords marked in blue are relevant for multiple categories.

Criteria category and subcategory	Definition	Example keywords
1. <u>Ecological and genetic criteria</u>	Criteria related to living organisms, habitats and ecosystems, and their genetic structure	
1.1 Functional	Criteria that refer to processes and properties of ecosystems and their components, that relate to functioning, from ecosystem level to species level	<ul style="list-style-type: none"> - Processes <ul style="list-style-type: none"> o C fluxes through food webs (e.g., carbon sequestration) o Energy and elemental cycling o Phenology (the study of cyclic and seasonal natural phenomena, especially in relation to climate and plant and animal life) o Biotic processes (such as migration, migration routes, ecological connectivity) - Biological traits (capturing inter-specific interactions and the connections between species and their environment) <ul style="list-style-type: none"> o Physiology o Morphology – morphological diversity (e.g., blubber thickness, body length, fatty acid composition) o gonadosomatic index (GSI), indicator of changes in the nutritional and energy condition of organisms o Life history o Behaviour (e.g., foraging behaviour, predation) - Life history traits <ul style="list-style-type: none"> o Number, size and sex ration of offspring (incl. Shoot density) o Sex ratio o Timing of reproduction - Reproductive units o Age and size at maturity



This project has received funding from the European Union's Horizon Europe research and innovation programme. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union. Neither the European Union nor the granting authority can be held responsible for them.



		<ul style="list-style-type: none"> ○ Number of mature individuals ○ Growth pattern (incl. growth rate) - size classes - body length distribution, slow-growing species ○ Longevity ○ Breeding population size - Breeding failures ○ Mortality rate ○ Survival rate ○ Flowering index - Species/communities properties <ul style="list-style-type: none"> ○ ecological groups (AMBI): sensitive species, indifferent species, tolerant species, opportunistic species, pollution indicating species ○ Keystone species (such as habitat forming species; main species, key species) ○ Non-indigenous species (synonymous to introduced – exotic – non-native species) ○ Invasive species (type of non-indigenous species) ○ Trophic group (e.g., top predator) ○ Food web length and/or complexity ○ Structuring/engineering species, builder species ○ Habitat forming species/ reef-forming species ○ Toxic/toxicity ○ Communities associated with low oxygen ○ Nutritional status ○ Dominant species ○ Shade-adapted species ○ K-strategy/r-strategy species (incl. long-living species) ○ Reproductive health ○ Biomass, Biomass ratio - Habitat properties <ul style="list-style-type: none"> ○ Biogenic habitat (habitats formed by key animal or algal species) ○ Vulnerable habitat - Habitat functions
--	--	--



This project has received funding from the European Union's Horizon Europe research and innovation programme. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union. Neither the European Union nor the granting authority can be held responsible for them.



		<ul style="list-style-type: none"> ○ Refuge areas / Resting areas ○ Foraging areas / Feeding grounds ○ Nursery function / Nesting grounds ○ Reproduction areas / Spawning grounds ○ Critical habitats - Primary, secondary production <ul style="list-style-type: none"> ○ Biological productivity ○ Areas of natural productivity ○ Phytoplankton bloom, bloom frequency ○ Chl a, chlorophyll a, nutrient content of organism - Criteria related to the capacity to adapt/ability to recover from direct human activities, climate change, or natural disasters <ul style="list-style-type: none"> ○ Populations' health indicators ○ Indicator species ○ Sensitivity to disturbance ○ Vulnerability/Fragility ○ Ecosystems resilience ○ Integrity ○ DMS (Dimethyl Sulfide) - Bio-geographically sensitive (e.g., seamounts)
1.2 Structural	Biotic criteria that refer to the structure of ecosystems, habitats and species (e.g., which species are there and how many, how complex is the habitat)	<p>SPECIES/ORGANISMS/POPULATIONS/COMMUNITIES/BIOCENOSIS</p> <ul style="list-style-type: none"> - Species composition (e.g., Species diversity indices) - Species stratification - Distributional pattern /range/ distribution changes (incl. spatiotemporal variation of structural descriptors, might also be characterised by demographic aggregations) - Demographic characteristics - Endemic – Indigenous – Alien species - Range-restricted species / confined distribution - Taxonomic approach - Rarity of ecological feature (e.g., species or habitat)



This project has received funding from the European Union's Horizon Europe research and innovation programme. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union. Neither the European Union nor the granting authority can be held responsible for them.



		<ul style="list-style-type: none"> - Distinctiveness - Uniqueness - Irreplaceability - Abundance / Numbers of a species / Effective population size - Abundance rank - Abundance ratio - Degree of isolation of population - Presence rank (meaning: "rank of the percentage of sites at which the presence or absence of each taxon") - Presence/absence - Biomass, Biomass ratio - Density - Diversity - Ecological value - Bio-geographic importance - Population structure (if not specified that it's a genetic measure), population size - Growth pattern (incl. growth rate) - size classes/spectrum - body length distribution <p>HABITATS/ECOSYSTEMS</p> <ul style="list-style-type: none"> - physical amount / areal extent / perimeters / frequency of occurrence - spatial/depth distribution of habitat (i.e., structural connectivity) - Shape complexity - Patches/polygons - Nature of habitat - Representativity of natural habitat type
1.3 Genetic	Criteria related to the genetic structure of organisms	<ul style="list-style-type: none"> - Genetic diversity - Intraspecific genetic diversity - Genetic differentiation



This project has received funding from the European Union's Horizon Europe research and innovation programme. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union. Neither the European Union nor the granting authority can be held responsible for them.



1.4 Ecological status	Ecological criteria related to the conditions/state of ecological features and the environment	<ul style="list-style-type: none"> - Reference to IUCN categories: Least Concern, Near Threatened, Vulnerable, Endangered, Critically Endangered, Extinct in the Wild and Extinct - State/condition of species - State/condition of communities - State/condition of habitats (e.g., habitat at risk of environmental degradation, - Good ecological status (for specific ecological features) - Degree of conservation ecological features - Restoration possibilities - Naturalness (Following the definition of EBSA criterion 'naturalness') - Good environmental status in the context of MSFD - Good ecological/chemical status in the context of WFD - "Assessment of" and "Assessment system of" biotic features - Assessment of potentially impacted areas - Index/Toolkit related to ecological quality - Bad/altered condition of the environment - Hydrological condition (e.g., of specific habitats)
2. <u>Abiotic criteria</u>	Criteria that refer to non-living elements of the environment that influence the way organisms and ecosystems function. e.g., sunlight, temperature, nutrient availability and geomorphological features.	
2.1 Oceanographic conditions	Physical and chemical condition of oceans and habitats	<ul style="list-style-type: none"> - Gyres - Upwelling areas - Stratification - Currents - Retention - Convergence zones - Ocean circulation - Wave action - Salinity - pH - Nutrient levels, nutrient concentration - Freshwater inputs (river flows, estuaries)



This project has received funding from the European Union's Horizon Europe research and innovation programme. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union. Neither the European Union nor the granting authority can be held responsible for them.



		<ul style="list-style-type: none"> - Sea ice - Oxygen – oxygen depletion, hypoxia - Hydrogen sulfide - Hydrography - Oceanic fronts - Tides - Particulate matter - Chemical features
2.2 Geological and geomorphological features	Physical features of the seabed	<ul style="list-style-type: none"> - Seabed substrate - Seismic activities - Coastal geomorphological structure - Oxygenated/anoxic conditions in sediments - Facies - Bio-geographically sensitive (e.g., seamounts) - Bathymetry
2.3 Meteorological conditions	Any criteria referring to weather conditions / meteorology	<ul style="list-style-type: none"> - Meteorological conditions - Weather conditions - Topographical features above the water that affect wind patterns
3. <u>Anthropogenic criteria</u>	Criteria that consider the presence of anthropogenic activities that might generate some effect/pressures on biotic/ecological elements. Human activities that are known to cause disturbance may be considered during the design of an area to implement area-based measures that mitigate the disturbance mentioned (mostly OECMs).	
3.1 Anthropogenic activities	Anthropogenic activities that can cause a threat to living organisms or the environment	<ul style="list-style-type: none"> - Fishing / Fisheries / Fishing effort (incl. recreational fishing) - Dredging / harbour dredging - Mining / extraction of substrate / discharge of materials - Maritime traffic - Military activities - Cable and pipeline laying - Land-based activities that impact the marine environment - Urban sprawl - Hunting - Coastal armouring (artificial coastline)



This project has received funding from the European Union's Horizon Europe research and innovation programme. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union. Neither the European Union nor the granting authority can be held responsible for them.



		<ul style="list-style-type: none"> - Disposal grounds - Aquaculture / Mariculture - Transport / anchoring - Port infrastructure development - Beach nourishment and artificial beach creation - Construction works in marine environment - Tourism - Research
3.2 Anthropogenic impacts		<ul style="list-style-type: none"> - Pollution (pollutants concentration - contaminants) - Eutrophication - Acidification - Underwater noise - Marine litter (e.g., Plastic pollution) - Oil pollution (oiled birds) - By-catch (marine mammals, sea-birds and non-target fish) - Cumulative effect of human activities - Sedimentation rate – deposition of fine-grained sediments - Changes in seafloor topography - Altered seagrass meadows - Impact from aquaculture (incl. hypoxia due to aquaculture, change in nutrient levels due to aquaculture, change in sediment composition due to aquaculture, spread of disease from farmed organisms to wild species) - Impact from cables and pipelines - Impact from highly modified coast - Impact from dredging activities (e.g., discharge of materials) - Impact from anchoring - Impact from dredging disposal - Impact from port infrastructure - Impact from artificial beaches or beach nourishment - Impact from fishing/fishing gear (incl. CPUE, bag size, fishing mortality) - Impact from whale watching or other marine tourism activities occur (harassment)



This project has received funding from the European Union's Horizon Europe research and innovation programme. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union. Neither the European Union nor the granting authority can be held responsible for them.



		<ul style="list-style-type: none"> - Impact from shipping (e.g., SOx emissions) - Impact from research activities - Land-based sources Sox emissions - Light pollution - Non-indigenous species (synonymous to introduced – exotic – non-native species) - Invasive species (type of non-indigenous species)
4. <u>Climate criteria</u>	Criteria related to climate impact, climate change or climate mitigation on living organisms and their vulnerability or capacity to adapt/ability to recover from climate change or their environment.	
4.1 Climate driver	Criteria related to activities that contribute to climate change	<ul style="list-style-type: none"> - Natural climate drivers in the industrial era: changes in solar irradiance, volcanic eruptions, the El Niño–Southern Oscillation, North Atlantic Oscillation, Atlantic Multidecadal Oscillation - Anthropogenic drivers can be divided into several categories, including well-mixed greenhouse gases (WMGHGs), short lived climate forcers (SLCFs, which include methane, some hydrofluorocarbons [HFCs], ozone, and aerosols), contrails, and changes in albedo (for example, land-use changes).
4.2 Climate impact	Criteria related to the impact of climate change on living organisms and their capacity to adapt/ability to recover from climate change	<ul style="list-style-type: none"> - Heat waves - Sea level rise - Climate change impact on marine environment (sea temperature (incl. sea surface temperature (SST)), salinity, currents, waves, river freshwater inputs and river sediments, precipitation, deoxygenation, UV ratio etc.) - Areas at risk from the (climate) impacts (exposure)
4.3 Climate mitigation	Criteria related to capability of mitigating climate change	<ul style="list-style-type: none"> - MPA capability (e.g., carbon sequestration potential within MPA) - Habitat capability (e.g., carbon sequestration potential) - Controls on SOx emissions (e.g., ship control)
4.4 Climate change resilience	MPA resilience in the face of environmental changes over time	<ul style="list-style-type: none"> - Resilience - Climate change refugia - Vulnerability/Exposure/Fragility



This project has received funding from the European Union's Horizon Europe research and innovation programme. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union. Neither the European Union nor the granting authority can be held responsible for them.



		<ul style="list-style-type: none"> - MPA morphology and Location/Connectivity (Including place in network (Source/Sink/centrality/Number or CC resistance of species using the area as stepping-stone/Importance of fluxes)) - Is consideration given to a change in location of features to be protected, e.g., due to climate change?
5. <u>Socio--economic criteria</u>	Criteria that relate to social, economic or cultural values that should be considered when prioritising/designating an area, which can for example be ecosystem services with social, economic or cultural value. This category also includes criteria related to governance and existing measures.	
5.1 Social and cultural criteria	Social and cultural values that are included as criteria	<ul style="list-style-type: none"> - Landscape/seascape (incl. seascape aesthetics, traditional landscapes) - Ocean literacy - Education - Training - Valuable for research (activities) - Traditional knowledge - Human wellbeing - Areas of scientific significance - Cultural heritage - Tourism - Recreation potential - Important spiritual areas/ values (an area of particular importance because of religious and intangible values) - Archaeological/geoarchaeological sites - Monumental arts - Areas of cultural significance
5.2 Economic criteria	Economic considerations that are valued and included as criteria (could include things like revenue, cumulative value of economic activity, market and non-market benefits or improvement of welfare etc.)	<ul style="list-style-type: none"> - Fisheries, commercial fish - Traditional fishing areas/techniques - Traditional ways of using/extracting resources, ... - Sustainable development
5.3 Governance criteria	Criteria related to how risks and interests are represented in decision making	<ul style="list-style-type: none"> - Presence of representative body - Inclusive decision making - Blue justice



This project has received funding from the European Union's Horizon Europe research and innovation programme. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union. Neither the European Union nor the granting authority can be held responsible for them.



		<ul style="list-style-type: none">- Enforcement (depends also on available human resources)- Integrated coastal zone management (ICZM)- Precautionary principle
5.4 Existing measures	The consideration of existing measures already in place in the area of interest	<ul style="list-style-type: none">- Conservation measures/objectives- Management measures- Fisheries management measures- Restoration measures



Annex 2: Species and habitat lists catalogue

A. Species and habitat lists used for the identification of significant ecological features for conservation/restoration

Global

A.1 IUCN Red List of Species

The IUCN Red List was established in 1964, and provides a comprehensive overview of species at risk of extinction (IUCN, 2023). Red List categories and criteria have been defined to guide decision making on the inclusion or exclusion of species on the list, and this criteria list is included in the criteria list compilation (2.1 IUCN Red List Species Criteria, see Annex 3 of this deliverable) (more info [here](#)).

A.2 CITES Appendix I-III species lists

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) is an international agreement in place to regulate international trade of organisms to ensure trade does not threaten species survival. Appendix I of the Convention is a list of species threatened with extinction, Appendix II consists of species which are not threatened with extinction but for which trade should be regulated to avoid endangering the species, and Appendix III is a list of species which are protected in at least one country, which has asked for assistance to control trade of listed species (more info [here](#)).

A.3 FAO-ASFIS List of Species for Fishery Statistics Purposes

The FAO-ASFIS List includes species of interest for fisheries or aquaculture at a global level. The species on the list have been selected based on publications, species catalogues, field guides and identification sheets (more info [here](#)).

European

A.4 Habitats Directive Annex I: Natural habitat types of community interest whose conservation requires the designation of special areas of conservation

Annex I of the Habitats Directive lists habitat types which are either in danger of disappearing, have a limited natural range, or represent typical characteristics of a particular biogeographic region (Article 1, (c), Habitats Directive), more info [here](#).

A.5 Habitats Directive Annex II,IV: species lists

Annex II and IV of the Habitats Directive include species that are endangered, vulnerable, rare or endemic (Article 1, (g), Habitats Directive, more info [here](#)).

A.6 Nature Restoration Law Annex II: marine habitat types

The EU Nature Restoration Law composed a list of marine habitat types that should be restored if not in good condition (more info [here](#)).

A.7 Nature Restoration Law Annex III: marine species



The EU Nature Restoration Law composed a list of marine species whose habitats should be restored if not in good condition (more info [here](#)).

A.8 Birds Directive Annexes I-III: wild bird species

Annexes I-III of the Birds Directive are lists of wild bird species that are in danger of extinction, vulnerable, rare or require specific attention, taking into account variations in population levels (see Article 4 paragraph 1 of the Birds Directive, more info [here](#)).

Regional: Baltic Sea

A.9 HELCOM Red List of Species

Following the IUCN Red List Species Criteria (criteria list # 2.1 in Annex 3 of this deliverable), HELCOM has listed species that specifically occur in the Baltic Sea under each of the conservation status categories defined by IUCN (more info [here](#)).

Regional: Black Sea

A.10 Black Sea Biodiversity and Landscape Conservation Protocol Annex II,IV

Annex II to the Black Sea Biodiversity and Landscape Conservation Protocol lists species of Black Sea Importance. Annex IV lists species whose exploitation should be regulated by the protocol, following the criteria list 2.4 Black Sea Commission criteria for the selection of species whose exploitation should be regulated (see Annex 3 of this deliverable, more info [here](#)).

Regional: ICES Region

A.11 ICES VME indicators and habitats

ICES developed a list of vulnerable marine ecosystem (VME) indicators and habitats which can be used to identify VMEs (more info [here](#)).

Regional: Mediterranean Sea

A.12 SPA/BD Protocol Annexes II-III: list of endangered or threatened species

Annex II of the SPA/BD protocol lists endangered or threatened species, and Annex III lists species whose exploitation is regulated (more info [here](#)).

A.13 GFCM Mediterranean VME indicator features, habitats and taxa

Annex I of the report of the 42nd session of the General Fisheries Commission for the Mediterranean (GFCM) includes a list of VME indicator features, habitats and taxa (more info [here](#)).

Regional: NE Atlantic and North Sea

A.14 OSPAR List of Threatened and/or Declining Habitats

The OSPAR Commission has identified species and habitats in need of protection, based on the Texel-Faial criteria included in Annex 3 of this deliverable (criteria list # 2.5) (more info [here](#)).



A.15 NEAFC VME Indicator Species

The North East Atlantic Fisheries Commission (NEAFC) Recommendation 19 lists VME Indicator Species in Annex 5 (more info [here](#)).

B. Species lists, habitat lists and indicators used for monitoring the status of an area

European

B.1 COM DEC 2017/848/EU MSFD Benthic broad habitats

To inform the monitoring for the reporting of good environmental status in the context of the MSFD, a list of benthic broad habitats have been defined in COM DEC 2017/848/EU, to monitor Descriptors 1 and 6 (more info [here](#)).

Regional: Baltic Sea

B.2 HELCOM Core Biodiversity Indicator species for monitoring MSFD targets

These indicators defined by HELCOM are used to evaluate the status of the Baltic Sea (more info [here](#)).

Regional: Black Sea

B.3 Black Sea Proposed Indicators species MSFD

For the Black Sea, species have been identified to be used to monitor indicators for multiple descriptors (more info [here](#)).

Regional: Mediterranean Sea

B.4 Mediterranean Common/Proposed Indicators species MSFD

Mediterranean Common Indicator species, as well as proposed indicator species, are used to monitor Good Environmental Status as part of the MSFD in the Mediterranean. This species list includes the species used for the indicators, and in the DEVOTES catalogue (criteria list #4.9), the indicators that are based on the species on the list are included (more info [here](#)).

Regional: NE Atlantic and North Sea

B.5 OSPAR Common and Candidate Indicators species MSFD

The OSPAR Common Indicators are specific to each of the five OSPAR regions and are used to assess the change in status of the marine environment. The species list referred to here lists the species used to operationalise these indicators (more info [here](#)).



Annex 3: Criteria list catalogue

Annex 1 provides an overview and brief description of the compiled criteria lists organised in four divisions based on the purpose of the criteria lists. A further distinction is made based on the geographic scale (Global, European, Regional) the criteria lists are used:

1. Criteria used for the identification of significant areas for conservation

Global

1.1 BirdLife International Important Bird and Biodiversity Area (IBA) criteria

The IBA Programme of BirdLife International aims to ensure the long-term conservation of sites that are important for birds and biodiversity. IBAs are considered as areas of global importance for the conservation of bird populations (Donald et al., 2019). The IBA site selection criteria were developed at the global level and for some regions at sub-global levels (region and sub-region included) (more info [here](#)).

1.2 CBD Ecologically or Biologically Significant Marine Areas (EBSA) criteria

As part of the “Decision adopted by the Conference of the Parties to the Convention on Biological Diversity at its Ninth Meeting” (Bonn, 2008), EBSAs were defined. EBSAs “support the healthy functioning of oceans and the many services that it provides” (CBD, n.d.). Scientific criteria were defined in Annex 1 of COP Decision UNEP/CBD/COP/DEC/IX/20, to identify EBSAs that need protection, such as deep-sea habitats, or open ocean waters (more info [here](#)).

1.3 MMPA Task Force Important Marine Mammal Areas (IMMAs) criteria

The Marine Mammal Protected Areas Task Force (MMPA Task Force) developed the IMMA concept, based on the successful process for determining Important Bird Areas (IBAs). IMMAs are “a discrete portion of habitat, important to marine mammal species, that has the potential to be delineated and managed for conservation” (MMPA Task Force, 2020). The IMMA criteria were informed by scientific and public consultation and consider aspects such as key life cycle processes, vulnerability and species attributes (more info [here](#)).

1.4 UNESCO-IOC Large Marine Ecosystem (LME) criteria

The methodology for identifying LMEs was developed under the Transboundary Waters Assessment Programme (TWAP). LMEs are defined as coastal oceanic regions that can include waters from river basins/estuaries up to the edges of continental shelves. They can also be defined through limits of coastal currents or water margins. They are identified using four ecological criteria: bathymetry, hydrography, productivity, and trophically related populations (more info [here](#)).



1.5 IUCN Key Biodiversity Area (KBA) criteria

Members of IUCN requested a process to agree on a methodology for the identification of 'Key Biodiversity Areas', at the 2004 World Conservation Congress held in Bangkok, Thailand, which led to the KBA Standard. KBAs are "the most important places in the world for species and their habitats" (KBA, 2023). The KBA Standard consists of criteria with quantitative thresholds to enable an objective and transparent identification of KBAs (more info [here](#)).

1.6 FAO Vulnerable Marine Ecosystem (VME) criteria

As part of the 'International Guidelines for the Management of Deep-sea Fisheries in the High Seas', criteria have been defined to identify vulnerable marine ecosystems (VMEs) in areas beyond national jurisdiction (ABNJ). VMEs are ecosystems where populations, communities or habitats are likely to "experience substantial alteration from short-term or chronic disturbance" (FAO, 2008). Identification is envisaged to enable the adoption and implementation of conservation and management measures by regional fisheries management organisations/associations (RFMO/As) as well as flag states (more info [here](#)).

Regional: Black Sea, Mediterranean Sea and Contiguous Atlantic Area

1.7 ACCOBAMS Cetacean Critical Habitats (CCHs) criteria

CCHs are defined differently on a case by case basis using spatial modelling, and take into account threats to cetaceans at the population level (ACCOBAMS, 2017). In the workshop entitled "Inputs to the ACCOBAMS ongoing effort to map human threats on cetaceans in the Mediterranean and Black Seas", the relevance of threat-based areas and spatial mapping of immediate threats to cetaceans in the ACCOBAMS region was discussed, including criteria that can be used to identify CCH (more info [here](#)).

Regional: Mediterranean Sea

1.8 OCEANA Essential Fish Habitats (EFHs) criteria

EFHs are essential for the survival of fish, crucial for life stages such as spawning and breeding. Protecting EFHs should contribute to the recovery of overfished stocks, and include habitats such as coral gardens, kelp forests and sea grass meadows (Oceana, 2019). At the 20th session of the Scientific Advisory Committee on Fisheries (26-29 June 2018, Tangier, Morocco), Oceana defined a set of criteria that should be considered for selecting EFHs (more info [here](#)).

2. Criteria used for the identification of species and ecosystems for conservation

Global

2.1 IUCN Red List Species Criteria

The IUCN Red List Categories and Criteria are a system for classifying species at high risk of global extinction. The general aim of the system is to provide a clear, objective framework for classifying the widest range of species according to their risk of extinction (more info [here](#)).

2.2 IUCN Red Ecosystems Criteria



The IUCN Red List of Ecosystems protocol includes criteria for assessing the risk of ecosystem collapse, based on the assumption that ecosystem risk is a function of the species that compose them, their interactions and the ecological processes on which they depend (more info [here](#)).

European

2.3 Birds Directive Article 4 criteria concerning species requiring spatial conservation measures

Annex I of the Birds Directive lists species that are subject to special conservation measures. Article 4 of the Birds Directive lists four characteristics of species that will be especially taken into account (more info [here](#)).

Regional: Black Sea

2.4 Black Sea Commission criteria for the selection of species whose exploitation should be regulated

Annex 4 of the Black Sea Biodiversity and Landscape Conservation Protocol lists species for which their exploitation should be regulated (more info [here](#)).

Regional: Northeast Atlantic and North Sea (OSPAR Region)

2.5 OSPAR criteria for the identification of species and habitats in need of protection (Texel-Faial criteria)

Criteria for the selection of species and habitats that need to be protected (more info [here](#)).

3. Criteria used for the designation of suitable areas for conservation by implementing area-based management tools (ABMTs)

Global

3.1 IMO Particularly Sensitive Sea Area (PSSA) criteria

A Particularly Sensitive Sea Area (PSSA) is an area where measures can be implemented through the International Maritime Organization (IMO) to manage activities in that area, e.g. through routing measures (IMO, 2019). PSSAs are designated because of their importance for recognised ecological, socio-economic or scientific features where such features may be vulnerable to damage by international shipping activities (more info [here](#)).

3.2 IMO Special Area (SA) criteria

A SA is defined as "a sea area where for recognised technical reasons in relation to its oceanographical and ecological conditions and to the particular character of its traffic, the adoption of special mandatory methods for the prevention of sea pollution by oil, noxious liquid substances, or garbage, as applicable, is required." Criteria to designate an SA are found in Annex 1 of "Guidelines for the designation of Special Areas under MARPOL 73/78 (more info [here](#)).

3.3 IMO Emission Control Areas (ECA) criteria

ECAs, including SO_x ECAs, are in place to prevent, reduce and control air pollution from ship emissions, and their resulting impacts on land and sea areas. Criteria for designating ECAs are found as an Appendix to Annex VI of the MARPOL Convention (more info [here](#)).



3.4 UNESCO World National Biosphere Reserves (WNBR) criteria

Biosphere Reserves “promote and demonstrate a balanced relationship between humans and the biosphere”. Criteria have been defined for the designation of areas as Biosphere Reserves (more info [here](#)).

3.5 UNESCO World Heritage (WH) sites criteria

UNESCO World Heritage Sites are areas protected for their cultural and/or natural heritage. Ten selection criteria have been defined (cultural and natural) (more info [here](#)).

3.6 Ramsar sites criteria

Ramsar sites are Wetlands of International Importance. They contain important wetland types and are important for conserving biological diversity (more info [here](#)).

3.7 UNCLOS Areas Beyond National Jurisdiction (ABNJ) MPA criteria

An agreement has been drafted on “the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction”. This includes the establishment of area-based management tools such as marine protected areas. To designate areas to protect, criteria are defined in Annex I of the draft agreement (more info [here](#)).

European

3.8 Habitats Directive criteria for selecting sites eligible

Sites of Community Importance (SCIs) and Special Areas of Conservation (SACs) are designated under the Habitats Directive and aim to maintain and restore the conservation status of habitats and species. Annex III of the Habitats Directive lists criteria used to select sites (more info [here](#)).

3.9 Hab. 97/2 rev. 4 18/11/97 criteria for assessing national lists of proposed Sites of Community Importance (pSCI) at biogeographical level

DG Environment published a document (Hab. 97/2 rev. 4 18/11/97) which provides instructions and criteria for assessing proposed SCIs (more info [here](#)).

3.10 Common Fisheries Policy Article 8 criteria concerning fish stock recovery areas

Article 8 of the Common Fisheries Policy concerns the “Establishment of fish stock recovery areas”. Fish stock recovery areas are protected areas put in place which are biologically sensitive and where there are high concentrations of small-sized fish or spawning grounds (more info [here](#)).

3.11 Nature Restoration Law Article 11 (2) criteria concerning habitats to be restored

The EU Nature Restoration Law stipulates the preparation of national restoration plans in Article 11. This includes the quantification of areas to be restored, which depends on a list of criteria (more info [here](#)).

Regional: Baltic Sea

3.12 HELCOM MPAs criteria

The main aim of the coastal and marine Baltic Sea protected areas (HELCOM MPAs) is the protection of the valuable marine and coastal habitats in the Baltic Sea. This is done by designating suitable areas of special natural value as protected areas and by managing human activities in these areas. A list of selection criteria has been defined based on existing guidelines (more info [here](#)).



Regional: Mediterranean Sea

3.13 SPA/RAC Specially Protected Areas of Mediterranean Importance (SPAMI) criteria

The main aim of SPAMIs are to conserve natural heritage. Other objectives such as the conservation of the cultural heritage, the promotion of scientific research, education, participation, and collaboration, are also important to be pursued in SPAMIs as long as they remain congruent with the aims of conservation. Annex I of the SPA/BD protocol defines criteria to be used to select areas to be included on the SPAMI list (more info [here](#)).

4. Criteria and indicators suitable for the monitoring of protected areas

Global

4.1 GEO BON Essential Biodiversity Variables (EBVs)

EBVs have been defined to enable the study, reporting and management of biodiversity change, and should function as a translation step for decision makers of primary observation data (more info [here](#)).

4.2 GOOS Essential Ocean Variables (EOVs)

EOVs are designed to support the delivery of “ocean forecasts and early warnings, climate projections and assessments”, to “protect ocean health and its benefits” (more info [here](#)).

4.3 SER Ecosystem attributes to evaluate recovery

The listed ecosystem attributes have been developed to evaluate recovery in response to a restoration measure (more info [here](#)).

European

4.4 MSFD Annex III Indicative list of characteristics

The indicative list of characteristics in Table 1 of Annex III of the MSFD describes features to consider whilst assessing good environmental status, such as bathymetry, biological communities and habitat types (more info [here](#)).

4.5 COM DEC 2017/848/EU MSFD criteria to monitor descriptors

For each of the MSFD descriptors, criteria have been defined to implement methodological standards for assessing good environmental status of marine waters (more info [here](#)).

4.6 COM DEC 2017/848/EU MSFD Scientific criteria for the selection of species and habitats

The selection of species and habitats to be included in MSFD monitoring depends on the scientific criteria listed on p. 72-73 (more info [here](#)).

4.7 WFD Annex V definitions ecological status

Annex V of the WFD provides definitions of good ecological status in terms of the biology, hydromorphology and chemistry of coastal waters (more info [here](#)).

4.8 Natura 2000 parameters used to monitor areas (HD Art 17 and BD Art 12)

For Natura 2000 reporting, parameters were defined to be used to monitor Natura 2000 areas, under the Article 17 of the Habitats Directive (more info [here](#)) and Article 12 of the Birds Directive (more info [here](#)).



This project has received funding from the European Union's Horizon Europe research and innovation programme. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union. Neither the European Union nor the granting authority can be held responsible for them.



4.9 DEVOTES Catalogue of Marine Biodiversity Indicators

“A Catalogue of Marine Biodiversity Indicators was developed with the aim of providing the basis for assessing the environmental status of the marine ecosystems” , which are envisioned to be of use for implementing the MSFD (more info [here](#)).

Regional: Northeast Atlantic and North Sea (OSPAR Region)

4.10 OSPAR Biodiversity Common Indicators

Biodiversity Common Indicators are used as indicators by OSPAR to assess biodiversity status in the Northeast Atlantic (more info [here](#)).

Supplementary Materials

Supplementary Material S1: Background information on the compiled species and habitat lists

Supplementary Material S2: Habitat compilation

Supplementary Material S3: Species compilation

Supplementary Material S4: Background information on the compiled criteria lists

Supplementary Material S5: Criteria compilation

Supplementary Material S1

Background information on the compiled species and habitat lists

			Institution type (ocean institution, institution broader mandate, if species/habitats: reason for consideration)			sectoral/conservatio n related (if sectoral: specify)	If area: Area identifier	From WoRMS database?	Name of document	URL criteria list	Notes, links, othercrit	Area covered	
List identifier	Type of list	Spec/hab	Institution /Conventi on										
A_SH_EU_01_HD_AnnI_hb	area habitats	hab	EU	IGO	HD Art1(c)(i-iii) definition VMEs (vulnerable marine ecosystems)	Habitats Directive Annex I: Natural habitat types of community interest whose conservation requires the designation of special areas of conservation	conservation	A_EU_02_SAC	yes	Annex I: Natural habitat types of community interest whose conservation requires the designation of special areas of conservation	https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31992L0043&from=EN	EU marine regions	
A_SH_REG_10_VMEICES	area habitat	hab	ICES	IGO	ICES VME indicators and habitats	ICES VME indicators and habitats	sectoral:fishing	A_REG_02_VME_NEAFC	no	VME Indicators and Habitats	https://vme.ices.dk/indicatorAndHabitats.aspx	North Atlantic	
SH_REG_06_OSPAR_RRL	list habitats	hab	OSPAR	IGO	ACL_REG_08_OSPAR_MPAs	OSPAR List of Threatened and/or Declining Habitats	conservation		no	OSPAR Agreement 2008-06 COMMISSION DECISION (EU) 2017/848 of 17 May 2017 laying down criteria and methodological standards on good environmental status of marine waters and specifications and standardised methods for monitoring and assessment, and repealing Decision 2010/477/EU (Table 2)	https://www.ospar.org/work-areas/bds/species-habitats	NE Atlantic and North Sea	
SH_EU_04_MSFD_hb	monitoring habitats	hab	EU	IGO	biodiversity, seafloor integrity (D1, D6 MSFD)	COM DEC 2017/848/EU MSFD Benthic broad habitats	conservation	NA	no	ANNEXES to the proposal for a Regulation of the European Parliament and of the Council on nature restoration	https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32020D1478&from=EN	maybe not necessary if we include the JRC list	EU marine regions
SH_EU_06_nature st_hb	area habitats	hab	EU	IGO	"Member States shall put in place the restoration measures that are necessary to improve to good condition areas of habitat types listed in Annex II which are not in good condition" (restoration)	Nature Restoration Law Annex II: marine habitat types	restoration	NA	no	ANNEXES to the proposal for a Regulation of the European Parliament and of the Council on nature restoration	https://environment.ec.europa.eu/system/files/2022-06/Annexes%20to%20the%20proposal%20for%20a%20Regulation%20on%20nature%20restoration.pdf		
A_SH_EU_03_BD_sp	area species	spec	EU	IGO	4 criteria (ACL_EU_01_BD)	Birds Directive Annexes I,II,III: wild bird species	conservation	A_EU_01_SPA	yes	Birds Directive Annexes I,II,III	https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32009L0147&from=EN	EU marine regions	
A_SH_REG_02_VME_NEAFC	area species	spec	NEAFC	IGO	definition VMEs (vulnerable marine ecosystems)	NEAFC VME Indicator Species	sectoral:fishing	A_REG_02_VME_NEAFC	no	NEAFC Recommendation 19 2014 Annex 5: VME Indicator Species	https://www.rac-spa.org/sites/default/files/annex/annex_2_en_20182.pdf	NE Atlantic NEAFC remit	
A_SH_REG_05_SPA MI_sp	area species	spec	SPA/RAC	IGO	List of endangered or threatened species (Annex 2); LIST OF SPECIES WHOSE EXPLOITATION IS REGULATED (Annex 3)	SPA/BD Protocol Annexes II-III (List of endangered or threatened species)	conservation	A_REG_04_SPAMI	no	Annex 2-3 SPA/BD Protocol	https://www.rac-spa.org/sites/default/files/annex/annex_3_en_2013.pdf	Mediterranean	
SH_INTL_09_CITES Appl_II_III	list species	spec	CITES	convention	species threatened with extinction	CITES Appendix I-III species lists	conservation	NA	yes	CITES Appl-III: (Appendix I: species threatened with extinction, Appendix II: species not necessarily threatened with extinction, but in which trade must be controlled in order to avoid utilization incompatible with their survival.)	https://cites.org/eng/disc/how.php	Global	
SH_INTL_10_RL_sp SH_INTL_12_FAO_ASFIS	list species	spec	IUCN	NGO	CL_INTL_04_RL_spC	IUCN Red List of Species	conservation	NA	yes	IUCN Red List Species	https://www.iucnredlist.org/	Global	
SH_REG_01_HELCOMRL	list species	spec	FAO	institution broader mandate	for fishery statistics purposes	FAO-ASFIS List of Species for Fishery Statistics Purposes	sectoral:fishing	NA	yes	ASFIS List of Species for Fishery Statistics Purposes	https://www.fao.org/fishery/en/collection/asfis/en	Global	
SH_REG_02_HELCOMCB	list species	spec	HELCOM	IGO	CL_INTL_04_RL_spC (IUCN Red List Criteria)	HELCOM Red List of Species	conservation	NA	yes	HELCOM Red List of Species	https://helcom.fi/baltic-sea-trends/biodiversity/red-list-of-baltic-species/	Follows CL_INTL_04_RL_spC criteria for inclusion	Baltic
SH_REG_02_HELCOMCB	monitoring species	spec	HELCOM	IGO	for MSFD monitoring	HELCOM Core Biodiversity Indicator species for monitoring MSFD targets	conservation	NA	yes	HELCOM Core Biodiversity Indicators	https://helcom.fi/baltic-sea-trends/biodiversity/biodiversity-core-indicators/		Baltic
SH_REG_03_BlackSeaPis	monitoring species	spec	Black Sea	IGO	CL_EU_08_MSFD_critDs	Black Sea Proposed Indicators species MSFD	conservation	NA	yes	Black Sea Proposed Indicators species MSFD	http://www.blacksea-commission.org/Downloads/ANEMONE/Deliverable2013.pdf	Interpretation of MSFD criteria	Black Sea
SH_REG_04_MedCominds	monitoring species	spec	SPA_RAC	IGO	CL_EU_08_MSFD_critDs	Mediterranean Common/Proposed Indicators species MSFD	conservation	NA	yes	Mediterranean Common/Proposed Indicators species MSFD	https://www.medqr.org/biodiversity-and-ecosystems	Interpretation of MSFD criteria	Mediterranean
SH_REG_05_OSPARlinds	monitoring species	spec	OSPAR	IGO	CL_EU_08_MSFD_critDs	OSPAR Common and Candidate Indicators species MSFD	conservation	NA	yes	OSPAR Common and Candidate Indicators species MSFD	https://www.ospar.org/work-areas/cross-cutting-issues/ospar-common-indicators	Interpretation of MSFD criteria	NE Atlantic and North Sea
SH_REG_07_BlackSeaProt	list species	spec	Black Sea Convention	IGO	Black Sea importance, species whose exploitation should be regulated	Black Sea Biodiversity and Landscape Conservation Protocol Annex II,IV	conservation	NA	no	Annex II,IV Black Sea Biodiversity and Landscape Conservation Protocol	http://www.blacksea-commission.org/convention-protocols/biodiversity.asp		Black Sea
SH_EU_06_nature st_sp	area species	spec	EU	IGO	"Member States shall put in place the restoration measures for the marine habitats of species listed in Annex III" (restoration)	Nature Restoration Law Annex III: marine species	restoration	NA	no	Annex III nature restoration law: marine species	https://environment.ec.europa.eu/system/files/2022-06/Annexes%20to%20the%20proposal%20for%20a%20Regulation%20on%20nature%20restoration.pdf		EU marine regions
A_SH_EU_02_HD_AnnII_IV_sp	area species	spec	EU	IGO	HD Art1(g)(i-iv) (endangered, vulnerable, rare and/or endemic)	Habitats Directive Annex II,IV: species lists	conservation	A_EU_02_SAC	yes	Annex II, IV Habitat Directive Report 42nd session GFCM Annex I: Mediterranean VME Indicator features, habitats and taxa	https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31992L0043&from=EN	Referred to by criteria CL_EU_08_MSFD_critDs, D1C4 and CL_EU_08_MSFD_critDs, D1C5	EU marine regions
A_SH_REG_03_VME_GFCM	area species/habitat	spec/hab	GFCM	IGO	definition VMEs (vulnerable marine ecosystems)	GFCM Mediterranean VME Indicator features, habitats and taxa	sectoral:fishing	A_REG_03_VME_GFCM	no	Mediterranean VME Indicator features, habitats and taxa	https://www.fao.org/3/ca4047en/ca4047en.pdf	Mediterranean	

Supplementary Material S2

Habitat compilation

List identifier	Habitat identifier	Source	Habitat Code	Priority	Source classification marine/EUNIS links	Level 1 name	Level 2 name	Ecosystem component	Habitat name	EUNIS Classification***	HELCOM Classification***	Barcelona Convention***	Notes
A_SH_EU_01_HD_Ann1_hb_1110	A_SH_EU_01_HD_Ann1_hb_1110	Annex 1 Habitats Directive	1110		EC 2007*, ETC-BD 2009	COASTAL AND HALOPHYTIC	Open Sea and tidal areas		Sandbanks which are slightly covered by sea water all the time	Relevant types within "A5.1 Sublittoral coarse sediment, A5.2 Sublittoral sand, A5.4 Sublittoral mixed sediments, A5.5 Sublittoral macrophyte-dominated sediment"	"Sublittoral gravel bottoms. Banks with or without macrophyte vegetation (2.4.2.3)", "Sublittoral sandy bottoms. Banks with or without macrophyte vegetation (2.5.2.4)"	very shallow waters (III. 2. 1.) with facies with Lenticulum mediterraneum (III. 2. 1. 1.)", "Biocenosis of well sorted fine sands (III. 2. 2.) with associations with Cymodocea nodosa on well sorted fine sands (III. 2. 2. 1.) and with Holophila stipulacea (III. 2. 2. 2), the latter considered determinant habitat in C. B.", "Biocenosis of coarse sands and fine gravels mixed by the waves (III. 3. 1.) with association with rhodolithes (III. 3. 1. 1), considered determinant habitat in the C. B.", "Biocenosis of coarse sands and fine gravels under the influence of bottom currents (also found in the Circallitoral) (III. 3. 2.). It is possible to find a facies and an association which are determinant habitats for C. B.: the maerl facies (= Association with Lithothamnion corallioides	
A_SH_EU_01_HD_Ann1_hb_1120	A_SH_EU_01_HD_Ann1_hb_1120	Annex 1 Habitats Directive	1120	*	EC 2007*, ETC-BD 2010	COASTAL AND HALOPHYTIC	Open Sea and tidal areas		Posidonía beds (Posidonion oceanicae)				
A_SH_EU_01_HD_Ann1_hb_1130	A_SH_EU_01_HD_Ann1_hb_1130	Annex 1 Habitats Directive	1130		EC 2007*	COASTAL AND HALOPHYTIC	Open Sea and tidal areas		Estuaries				
A_SH_EU_01_HD_Ann1_hb_1140	A_SH_EU_01_HD_Ann1_hb_1140	Annex 1 Habitats Directive	1140		EC 2007*	COASTAL AND HALOPHYTIC	Open Sea and tidal areas		Mudflats and sandflats not covered by seawater at low tide				
A_SH_EU_01_HD_Ann1_hb_1150	A_SH_EU_01_HD_Ann1_hb_1150	Annex 1 Habitats Directive	1150	*	EC 2007*	COASTAL AND HALOPHYTIC	Open Sea and tidal areas		Coastal lagoons				
A_SH_EU_01_HD_Ann1_hb_1160	A_SH_EU_01_HD_Ann1_hb_1160	Annex 1 Habitats Directive	1160		EC 2007*	COASTAL AND HALOPHYTIC	Open Sea and tidal areas		Large shallow inlets and bays				
A_SH_EU_01_HD_Ann1_hb_1170	A_SH_EU_01_HD_Ann1_hb_1170	Annex 1 Habitats Directive	1170		EC 2007*, ETC-BD 2010	COASTAL AND HALOPHYTIC	Open Sea and tidal areas		Reefs	Relevant types within "A1 Littoral rock and other hard substrata, A2.7 Littoral biogenic reefs, A3 Infralittoral rock and other hard substrata, A4 Circalittoral rock and other hard substrata, A5.6 Sublittoral biogenic reefs, A6.1 Deep-sea rock and artificial hard substrata, A6.6 Deep-sea bioherms, A6.7 Raised features of the deep-sea bed"	"Sublittoral soft rock reefs of the photic zone with little or no macrophyte vegetation (2.1.1.2.3)", "Hydrolittoral soft rock reefs with or without macrophyte vegetation (2.1.1.3.3)", "Sublittoral solid rock reefs of the photic zone with or without macrophyte vegetation (2.1.2.2.3)", "Hydrolittoral solid rock reefs with or without macrophyte vegetation (2.1.2.3.3)", "Sublittoral stony reefs of the photic zone with or without macrophyte vegetation (2.2.2.3)", "Stony reefs of the hydrolittoral zone with or without macrophyte vegetation (2.2.3.3)"	"Biocenosis of supralittoral rock (I.4.1.)", "Biocenosis of the upper medilittoral rock (II.4.1.)", "Biocenosis of the lower medilittoral rock (II.4.2.)", "Biocenosis of infralittoral algae (III.6.1.)", "Coralligenous (IV.3.1.)", "Biocenosis of shelf-edge rock (IV.3.3)", "Biocenosis of deep sea corals present in the Mediterranean bathyal (V.3.1.)"	
A_SH_EU_01_HD_Ann1_hb_1180	A_SH_EU_01_HD_Ann1_hb_1180	Annex 1 Habitats Directive	1180		EC 2007*, ETC-BD 2010	COASTAL AND HALOPHYTIC	Open Sea and tidal areas		Submarine structures made by leaking gases	Relevant types under A5.71 Seeps and vents in sublittoral sediments.	All subtypes under "Bubbling reefs (2.10)"		
A_SH_EU_01_HD_Ann1_hb_1610	A_SH_EU_01_HD_Ann1_hb_1610	Annex 1 Habitats Directive	1610		HELCOM**	COASTAL AND HALOPHYTIC	Boreal Baltic archipelago, coastal and landupheaval areas		Baltic esker islands with sandy, rocky and shingle beach vegetation and sublittoral vegetation				
A_SH_EU_01_HD_Ann1_hb_1620	A_SH_EU_01_HD_Ann1_hb_1620	Annex 1 Habitats Directive	1620		HELCOM**	COASTAL AND HALOPHYTIC	Boreal Baltic archipelago, coastal and landupheaval areas		Boreal Baltic islets and small islands				
A_SH_EU_01_HD_Ann1_hb_1650	A_SH_EU_01_HD_Ann1_hb_1650	Annex 1 Habitats Directive	1650		HELCOM**	COASTAL AND HALOPHYTIC	Boreal Baltic archipelago, coastal and landupheaval areas		Boreal Baltic narrow inlets				
A_SH_EU_01_HD_Ann1_hb_8330	A_SH_EU_01_HD_Ann1_hb_8330	Annex 1 Habitats Directive	8330		EC 2007*, ETC-BD 2010	ROCKY HABITATS AND CAVES	other rocky habitats		Submerged or partially submerged sea caves				
A_SH_REG_03_VME_GFCM_CM_ih1	A_SH_REG_03_VME_GFCM_CM_ih1	VME indicator habitats	ih1						Cold-water coral reefs				
A_SH_REG_03_VME_GFCM_CM_ih10	A_SH_REG_03_VME_GFCM_CM_ih10	VME indicator habitats	ih10						Soft-bottom sponge gardens				
A_SH_REG_03_VME_GFCM_CM_ih11	A_SH_REG_03_VME_GFCM_CM_ih11	VME indicator habitats	ih11						Tube-dwelling anemone patches				
A_SH_REG_03_VME_GFCM_CM_ih12	A_SH_REG_03_VME_GFCM_CM_ih12	VME indicator habitats	ih12						Crinoid fields				
A_SH_REG_03_VME_GFCM_CM_ih13	A_SH_REG_03_VME_GFCM_CM_ih13	VME indicator habitats	ih13						Oyster reefs and other giant bivalves				
A_SH_REG_03_VME_GFCM_CM_ih14	A_SH_REG_03_VME_GFCM_CM_ih14	VME indicator habitats	ih14						Seep and vent communities				
A_SH_REG_03_VME_GFCM_CM_ih15	A_SH_REG_03_VME_GFCM_CM_ih15	VME indicator habitats	ih15						Other dense emergent fauna				
A_SH_REG_03_VME_GFCM_CM_ih2	A_SH_REG_03_VME_GFCM_CM_ih2	VME indicator habitats	ih2						Coral gardens				
A_SH_REG_03_VME_GFCM_CM_ih3	A_SH_REG_03_VME_GFCM_CM_ih3	VME indicator habitats	ih3						Hard-bottom coral garden				
A_SH_REG_03_VME_GFCM_CM_ih4	A_SH_REG_03_VME_GFCM_CM_ih4	VME indicator habitats	ih4						Soft-bottom coral gardens				

A_SH_REG_03_VME_GFCM	A_SH_REG_03_VME_GFCM_ih5	Mediterrianean VME indicator habitats ih5		Sea pen fields		
A_SH_REG_03_VME_GFCM	A_SH_REG_03_VME_GFCM_ih6	Mediterrianean VME indicator habitats ih6		Deep-sea sponge aggregations		
A_SH_REG_03_VME_GFCM	A_SH_REG_03_VME_GFCM_ih7	Mediterrianean VME indicator habitats ih7		'Ostur' sponge aggregations		
A_SH_REG_03_VME_GFCM	A_SH_REG_03_VME_GFCM_ih8	Mediterrianean VME indicator habitats ih8		Hard-bottom sponge gardens		
A_SH_REG_03_VME_GFCM	A_SH_REG_03_VME_GFCM_ih9	Mediterrianean VME indicator habitats ih9		Glass sponge communities		
A_SH_REG_10_VME_ICES	A_SH_REG_10_VME_ICES_s_hst1	ICES hst1	VME Habitat subtypes	Lophelia pertusa/Madrepora oculata reef		
A_SH_REG_10_VME_ICES	A_SH_REG_10_VME_ICES_s_hst10	ICES hst10	VME Habitat subtypes	Soft-bottom coral garden: Cup-coral fields		
A_SH_REG_10_VME_ICES	A_SH_REG_10_VME_ICES_s_hst11	ICES hst11	VME Habitat subtypes	Soft-bottom coral garden: Cauliflower Coral Fields		
A_SH_REG_10_VME_ICES	A_SH_REG_10_VME_ICES_s_hst12	ICES hst12	VME Habitat subtypes	Soft-bottom sponge aggregations		
A_SH_REG_10_VME_ICES	A_SH_REG_10_VME_ICES_s_hst13	ICES hst13	VME Habitat subtypes	Hard-bottom sponge aggregations		
A_SH_REG_10_VME_ICES	A_SH_REG_10_VME_ICES_s_hst14	ICES hst14	VME Habitat subtypes	Soft-bottom anemone aggregations		
A_SH_REG_10_VME_ICES	A_SH_REG_10_VME_ICES_s_hst15	ICES hst15	VME Habitat subtypes	Hard-bottom anemone aggregations		
A_SH_REG_10_VME_ICES	A_SH_REG_10_VME_ICES_s_hst2	ICES hst2	VME Habitat subtypes	Solenosmilia variabilis reef		
A_SH_REG_10_VME_ICES	A_SH_REG_10_VME_ICES_s_hst3	ICES hst3	VME Habitat subtypes	Hard-bottom coral garden		
A_SH_REG_10_VME_ICES	A_SH_REG_10_VME_ICES_s_hst4	ICES hst4	VME Habitat subtypes	Hard-bottom coral garden: Hard-bottom gorgonian and black coral gardens		
A_SH_REG_10_VME_ICES	A_SH_REG_10_VME_ICES_s_hst5	ICES hst5	VME Habitat subtypes	Hard-bottom coral garden: Colonial scleractinians on rocky out-crops		
A_SH_REG_10_VME_ICES	A_SH_REG_10_VME_ICES_s_hst6	ICES hst6	VME Habitat subtypes	Hard-bottom coral garden: Non-reefal scleractinian aggregations		
A_SH_REG_10_VME_ICES	A_SH_REG_10_VME_ICES_s_hst7	ICES hst7	VME Habitat subtypes	Hard-bottom coral garden: Stylasterid corals on hard substrata		
A_SH_REG_10_VME_ICES	A_SH_REG_10_VME_ICES_s_hst8	ICES hst8	VME Habitat subtypes	Soft-bottom coral garden		
A_SH_REG_10_VME_ICES	A_SH_REG_10_VME_ICES_s_hst9	ICES hst9	VME Habitat subtypes	Soft-bottom coral garden: Soft-bottom gorgonian and black coral gardens		
A_SH_REG_10_VME_ICES	A_SH_REG_10_VME_ICES_s_hst1	ICES hst1	VME Habitat types	Cold-water coral reef		
A_SH_REG_10_VME_ICES	A_SH_REG_10_VME_ICES_s_hst2	ICES hst2	VME Habitat types	Coral garden		
A_SH_REG_10_VME_ICES	A_SH_REG_10_VME_ICES_s_hst3	ICES hst3	VME Habitat types	Deep-sea sponge aggregations		
A_SH_REG_10_VME_ICES	A_SH_REG_10_VME_ICES_s_hst4	ICES hst4	VME Habitat types	Sea-pen fields		
A_SH_REG_10_VME_ICES	A_SH_REG_10_VME_ICES_s_hst5	ICES hst5	VME Habitat types	Anemone aggregations		
A_SH_REG_10_VME_ICES	A_SH_REG_10_VME_ICES_s_hst6	ICES hst6	VME Habitat types	Mud and sand emergent fauna		
A_SH_REG_10_VME_ICES	A_SH_REG_10_VME_ICES_s_hst7	ICES hst7	VME Habitat types	Bryozoan patches		
A_SH_REG_10_VME_ICES	A_SH_REG_10_VME_ICES_s_hst8	ICES hst8	VME Habitat types	Hydrothermal vents/fields		
A_SH_REG_10_VME_ICES	A_SH_REG_10_VME_ICES_s_hst9	ICES hst9	VME Habitat types	Cold seeps		
SH_EU_04_MSFD_hb	SH_EU_04_MSFD_hb_1	MSFD COM DEC 2017/848 /EU Table 2	1	Benthic	Littoral rock and biogenic reef	MA1,MA2
SH_EU_04_MSFD_hb	SH_EU_04_MSFD_hb_2	MSFD COM DEC 2017/848 /EU Table 2	10	Benthic	Circalittoral mixed sediment	MC4
SH_EU_04_MSFD_hb	SH_EU_04_MSFD_hb_11	MSFD COM DEC 2017/848 /EU Table 2	11	Benthic	Circalittoral sand	MC5
SH_EU_04_MSFD_hb	SH_EU_04_MSFD_hb_12	MSFD COM DEC 2017/848 /EU Table 2	12	Benthic	Circalittoral mud	MC6
SH_EU_04_MSFD_hb	SH_EU_04_MSFD_hb_13	MSFD COM DEC 2017/848 /EU Table 2	13	Benthic	Offshore circalittoral rock and biogenic reef	MD1,MD2
SH_EU_04_MSFD_hb	SH_EU_04_MSFD_hb_14	MSFD COM DEC 2017/848 /EU Table 2	14	Benthic	Offshore circalittoral coarse sediment	MD3
SH_EU_04_MSFD_hb	SH_EU_04_MSFD_hb_15	MSFD COM DEC 2017/848 /EU Table 2	15	Benthic	Offshore circalittoral mixed sediment	MD4
SH_EU_04_MSFD_hb	SH_EU_04_MSFD_hb_16	MSFD COM DEC 2017/848 /EU Table 2	16	Benthic	Offshore circalittoral sand	MD5
SH_EU_04_MSFD_hb	SH_EU_04_MSFD_hb_17	MSFD COM DEC 2017/848 /EU Table 2	17	Benthic	Offshore circalittoral mud	MD6
SH_EU_04_MSFD_hb	SH_EU_04_MSFD_hb_18	MSFD COM DEC 2017/848 /EU Table 2	18	Benthic	Upper bathyal rock and biogenic reef	ME1,ME2
SH_EU_04_MSFD_hb	SH_EU_04_MSFD_hb_19	MSFD COM DEC 2017/848 /EU Table 2	19	Benthic	Upper bathyal sediment	ME3,ME4,ME5,ME6
SH_EU_04_MSFD_hb	SH_EU_04_MSFD_hb_2	MSFD COM DEC 2017/848 /EU Table 2	2	Benthic	Littoral sediment	MA3,MA4,MA5,MA6
SH_EU_04_MSFD_hb	SH_EU_04_MSFD_hb_20	MSFD COM DEC 2017/848 /EU Table 2	20	Benthic	Lower bathyal rock and biogenic reef	MF1,MF2

Where not specifically defined in the EUNIS classification, the boundary between the upper bathyal and lower bathya may be set as a specified depth limit.

SH_EU_04_MSFD_hb	SH_EU_04_MSFD_hb_21	2	21	Benthic	Lower bathyal sediment	MF3,MF4,MF5,MF6	
SH_EU_04_MSFD_hb	SH_EU_04_MSFD_hb_22	2	22	Benthic	Abyssal	MG1,MG2,MG3,MG4,MG5,MG6	
SH_EU_04_MSFD_hb	SH_EU_04_MSFD_hb_3	2	3	Benthic	Infralittoral rock and biogenic reef	MB1,MB2	
SH_EU_04_MSFD_hb	SH_EU_04_MSFD_hb_4	2	4	Benthic	Infralittoral coarse sediment	MB3	
SH_EU_04_MSFD_hb	SH_EU_04_MSFD_hb_5	2	5	Benthic	Infralittoral mixed sediment	MB4	
SH_EU_04_MSFD_hb	SH_EU_04_MSFD_hb_6	2	6	Benthic	Infralittoral sand	MB5	
SH_EU_04_MSFD_hb	SH_EU_04_MSFD_hb_7	2	7	Benthic	Infralittoral mud	MB6	
SH_EU_04_MSFD_hb	SH_EU_04_MSFD_hb_8	2	8	Benthic	Circlittoral rock and biogenic reef	MC1,MC2	
SH_EU_04_MSFD_hb	SH_EU_04_MSFD_hb_9	2	9	Benthic	Circlittoral coarse sediment	MC3	
SH_REG_06_OSPARRL	SH_REG_06_OSPARRL_h1	OSPAR	h1		https://www.ospa.r.org/site/assets/files/44271/carbonate_mounds.pdf	Carbonate Mounds	A6,75
SH_REG_06_OSPARRL	SH_REG_06_OSPARRL_h10	OSPAR	h10		https://www.ospa.r.org/site/assets/files/44271/lophelia_pertusa_reefs.pdf	Lophelia pertusa Reefs	A5.631 and A6.611
SH_REG_06_OSPARRL	SH_REG_06_OSPARRL_h11	OSPAR	h11		https://www.ospa.r.org/site/assets/files/44271/maerl_beds.pdf	Maerl Beds	A5.51
SH_REG_06_OSPARRL	SH_REG_06_OSPARRL_h12	OSPAR	h12		https://www.ospa.r.org/site/assets/files/44271/horse_mussel_beds.pdf	Modiolus modiolus beds	A5.621, A5.622, A5.623 and A5.624
SH_REG_06_OSPARRL	SH_REG_06_OSPARRL_h13	OSPAR	h13		https://www.ospa.r.org/site/assets/files/44271/oceanic_ridges_hydrothermal_vents.pdf	Oceanic Ridges with Hydrothermal Vents	A6.94
SH_REG_06_OSPARRL	SH_REG_06_OSPARRL_h14	OSPAR	h14		https://www.ospa.r.org/site/assets/files/44271/ostraea_edulis_beds.pdf	Ostrea edulis Beds	A5.435
SH_REG_06_OSPARRL	SH_REG_06_OSPARRL_h15	OSPAR	h15		https://www.ospa.r.org/site/assets/files/44271/sabellaria_spinulosa.pdf	Sabellaria spinulosa Reefs	A4.22 and A5.611
SH_REG_06_OSPARRL	SH_REG_06_OSPARRL_h16	OSPAR	h16		https://www.ospa.r.org/site/assets/files/44271/seamounts.pdf	Seamounts	A6.72
SH_REG_06_OSPARRL	SH_REG_06_OSPARRL_h17	OSPAR	h17		https://www.ospa.r.org/site/assets/files/44271/seapen_burrowing_mega_fauna.pdf	Sea-Pen & Burrowing Megafauna Communities	A5.361 and A5.362
SH_REG_06_OSPARRL	SH_REG_06_OSPARRL_h18	OSPAR	h18		https://www.ospa.r.org/site/assets/files/45177/seagrass_beds.pdf	Zostera Beds	A2.611, A5.533 and A5.545
SH_REG_06_OSPARRL	SH_REG_06_OSPARRL_h2	OSPAR	h2		https://www.ospa.r.org/site/assets/files/44271/coral_gardens.pdf	Coral Gardens	A6.1,A6.2,A6.3,A6.4,A6.5,A6.6,A6.7,A6.8,A6.9
SH_REG_06_OSPARRL	SH_REG_06_OSPARRL_h3	OSPAR	h3		https://www.ospa.r.org/site/assets/files/44271/cymodocea_meadows.pdf	Cymodocea Meadows	"A5.531, A5.5312, A5.53131 and A5.53132"
SH_REG_06_OSPARRL	SH_REG_06_OSPARRL_h4	OSPAR	h4		https://www.ospa.r.org/site/assets/files/44271/deep_sea_sponge_aggregations.pdf	Deep-Sea Sponge Aggregations	A6.62
SH_REG_06_OSPARRL	SH_REG_06_OSPARRL_h5	OSPAR	h5			Haploopsis habitat	
SH_REG_06_OSPARRL	SH_REG_06_OSPARRL_h6	OSPAR	h6		https://www.ospa.r.org/site/assets/files/44271/intertidal_mytilus_edulis_beds.pdf	Intertidal Mytilus edulis Beds on Mixed & Sandy Sediments	A2.7211 and A2.7212
SH_REG_06_OSPARRL	SH_REG_06_OSPARRL_h7	OSPAR	h7		https://www.ospa.r.org/site/assets/files/44271/intertidal_mudflats.pdf	Intertidal Mudflats	A2.3
SH_REG_06_OSPARRL	SH_REG_06_OSPARRL_h8	OSPAR	h8		https://www.ospa.r.org/documents?v=46871	Kelp Forest	Appendix I. Corresponding EUNIS habitats units
SH_REG_06_OSPARRL	SH_REG_06_OSPARRL_h9	OSPAR	h9		https://www.ospa.r.org/site/assets/files/44271/littoral_chalk_communities.pdf	Littoral Chalk Communities	"A1.126, A1.2143, A1.441, B3.114 and B3.115"
SH_EU_06_naturest_hb	SH_EU_06_naturest_hb_MAS22			EU nature rest	seagrass beds	atlantic	MAS22
SH_EU_06_naturest_hb	SH_EU_06_naturest_hb_MAG23			EU nature rest	seagrass beds	atlantic	MAG23
SH_EU_06_naturest_hb	SH_EU_06_naturest_hb_MBS22			EU nature rest	seagrass beds	atlantic	MBS22
SH_EU_06_naturest_hb	SH_EU_06_naturest_hb_MA332			EU nature rest	seagrass beds	baltic	MA332
SH_EU_06_naturest_hb	SH_EU_06_naturest_hb_MA432			EU nature rest	seagrass beds	baltic	MA432
SH_EU_06_naturest_hb	SH_EU_06_naturest_hb_MAS32			EU nature rest	seagrass beds	baltic	MAS32
SH_EU_06_naturest_hb	SH_EU_06_naturest_hb_MAG32			EU nature rest	seagrass beds	baltic	MAG32

SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	seagrass beds	baltic	M8332
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	seagrass beds	baltic	M8432
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	seagrass beds	baltic	M8532
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	seagrass beds	baltic	M8632
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	seagrass beds	blacksea	M8546
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	seagrass beds	blacksea	M8547
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	seagrass beds	blacksea	M8548
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	seagrass beds	mediterranean	M8252
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	seagrass beds	mediterranean	M82521
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	seagrass beds	mediterranean	M82522
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	seagrass beds	mediterranean	M82523
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	seagrass beds	mediterranean	M82524
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	seagrass beds	mediterranean	M85521
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	seagrass beds	mediterranean	M85534
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	seagrass beds	mediterranean	M85535
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	seagrass beds	mediterranean	M85541
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	seagrass beds	mediterranean	M85544
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	seagrass beds	mediterranean	M85545
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	macroalgal forests	atlantic	MA123
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	macroalgal forests	atlantic	MA125
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	macroalgal forests	atlantic	MB121
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	macroalgal forests	atlantic	MB123
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	macroalgal forests	atlantic	MB124
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	macroalgal forests	atlantic	MB321
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	macroalgal forests	atlantic	MB521
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	macroalgal forests	atlantic	MB621
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	macroalgal forests	baltic	MA131
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	macroalgal forests	baltic	MB131
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	macroalgal forests	baltic	MB232
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	macroalgal forests	baltic	MB333
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	macroalgal forests	baltic	MB433
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	macroalgal forests	blacksea	MB144
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	macroalgal forests	blacksea	MB149
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	macroalgal forests	blacksea	MB14A
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	macroalgal forests	mediterranean	MA1548
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	macroalgal forests	mediterranean	MB1512
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	macroalgal forests	mediterranean	MB1513
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	macroalgal forests	mediterranean	MB151F
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	macroalgal forests	mediterranean	MB151G
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	macroalgal forests	mediterranean	MB151H
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	macroalgal forests	mediterranean	MB151I
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	macroalgal forests	mediterranean	MB151K
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	macroalgal forests	mediterranean	MB151L
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	macroalgal forests	mediterranean	MB151M
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	macroalgal forests	mediterranean	MB151W
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	macroalgal forests	mediterranean	MB1524
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	macroalgal forests	mediterranean	MC1511
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	macroalgal forests	mediterranean	MC1512
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	macroalgal forests	mediterranean	MC1513
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	macroalgal forests	mediterranean	MC1514
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	macroalgal forests	mediterranean	MC1515
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	macroalgal forests	mediterranean	MC1518
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	macroalgal forests	mediterranean	MC3517
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	shellfish beds	atlantic	MA122
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	shellfish beds	atlantic	MA124
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	shellfish beds	atlantic	MA227
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	shellfish beds	atlantic	MB222
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	shellfish beds	atlantic	MC223
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	shellfish beds	baltic	MB231
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	shellfish beds	baltic	MC231
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	shellfish beds	baltic	MD231
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	shellfish beds	baltic	MD232
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	shellfish beds	baltic	MD431
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	shellfish beds	baltic	MD531
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	shellfish beds	baltic	MD631
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	shellfish beds	blacksea	MB141
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	shellfish beds	blacksea	MB143
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	shellfish beds	blacksea	MB148
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	shellfish beds	blacksea	MB242
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	shellfish beds	blacksea	MB243
SH_EU_06_naturr_hb est_hb	SH_EU_06_naturr_hb est_hb	shellfish beds	blacksea	MB642

SH_EU_06_naturr est_hb	SH_EU_06_naturest_hb _MC141	shellfish beds	blacksea	MC141
SH_EU_06_naturr est_hb	SH_EU_06_naturest_hb _MC241	shellfish beds	blacksea	MC241
SH_EU_06_naturr est_hb	SH_EU_06_naturest_hb _MC645	shellfish beds	blacksea	MC645
SH_EU_06_naturr est_hb	SH_EU_06_naturest_hb _MA1544,	shellfish beds	mediterranean	MA1544,
SH_EU_06_naturr est_hb	SH_EU_06_naturest_hb _MB1514,	shellfish beds	mediterranean	MB1514,
SH_EU_06_naturr est_hb	SH_EU_06_naturest_hb _MB322,	maeri beds	atlantic	MB322,
SH_EU_06_naturr est_hb	SH_EU_06_naturest_hb _MB421,	maeri beds	atlantic	MB421,
SH_EU_06_naturr est_hb	SH_EU_06_naturest_hb _MB622,	maeri beds	atlantic	MB622,
SH_EU_06_naturr est_hb	SH_EU_06_naturest_hb _MB3511,	maeri beds	mediterranean	MB3511,
SH_EU_06_naturr est_hb	SH_EU_06_naturest_hb _MB3521,	maeri beds	mediterranean	MB3521,
SH_EU_06_naturr est_hb	SH_EU_06_naturest_hb _MB3522,	maeri beds	mediterranean	MB3522,
SH_EU_06_naturr est_hb	SH_EU_06_naturest_hb _MC3521,	maeri beds	mediterranean	MC3521,
SH_EU_06_naturr est_hb	SH_EU_06_naturest_hb _MC3523,	maeri beds	mediterranean	MC3523,
SH_EU_06_naturr est_hb	SH_EU_06_naturest_hb _MC121	sponge, coral and coralligenous beds	atlantic	MC121
SH_EU_06_naturr est_hb	SH_EU_06_naturest_hb _MC124	sponge, coral and coralligenous beds	atlantic	MC124
SH_EU_06_naturr est_hb	SH_EU_06_naturest_hb _MC126	sponge, coral and coralligenous beds	atlantic	MC126
SH_EU_06_naturr est_hb	SH_EU_06_naturest_hb _MC222	sponge, coral and coralligenous beds	atlantic	MC222
SH_EU_06_naturr est_hb	SH_EU_06_naturest_hb _MD121	sponge, coral and coralligenous beds	atlantic	MD121
SH_EU_06_naturr est_hb	SH_EU_06_naturest_hb _MD221	sponge, coral and coralligenous beds	atlantic	MD221
SH_EU_06_naturr est_hb	SH_EU_06_naturest_hb _ME122	sponge, coral and coralligenous beds	atlantic	ME122
SH_EU_06_naturr est_hb	SH_EU_06_naturest_hb _ME123	sponge, coral and coralligenous beds	atlantic	ME123
SH_EU_06_naturr est_hb	SH_EU_06_naturest_hb _ME221	sponge, coral and coralligenous beds	atlantic	ME221
SH_EU_06_naturr est_hb	SH_EU_06_naturest_hb _ME322	sponge, coral and coralligenous beds	atlantic	ME322
SH_EU_06_naturr est_hb	SH_EU_06_naturest_hb _ME324	sponge, coral and coralligenous beds	atlantic	ME324
SH_EU_06_naturr est_hb	SH_EU_06_naturest_hb _ME422	sponge, coral and coralligenous beds	atlantic	ME422
SH_EU_06_naturr est_hb	SH_EU_06_naturest_hb _ME623	sponge, coral and coralligenous beds	atlantic	ME623
SH_EU_06_naturr est_hb	SH_EU_06_naturest_hb _ME624	sponge, coral and coralligenous beds	atlantic	ME624
SH_EU_06_naturr est_hb	SH_EU_06_naturest_hb _MF121	sponge, coral and coralligenous beds	atlantic	MF121
SH_EU_06_naturr est_hb	SH_EU_06_naturest_hb _MF221	sponge, coral and coralligenous beds	atlantic	MF221
SH_EU_06_naturr est_hb	SH_EU_06_naturest_hb _MF321	sponge, coral and coralligenous beds	atlantic	MF321
SH_EU_06_naturr est_hb	SH_EU_06_naturest_hb _MF622	sponge, coral and coralligenous beds	atlantic	MF622
SH_EU_06_naturr est_hb	SH_EU_06_naturest_hb _MF623,	sponge, coral and coralligenous beds	atlantic	MF623,
SH_EU_06_naturr est_hb	SH_EU_06_naturest_hb _MB138,	sponge, coral and coralligenous beds	baltic	MB138,
SH_EU_06_naturr est_hb	SH_EU_06_naturest_hb _MB43A,	sponge, coral and coralligenous beds	baltic	MB43A,
SH_EU_06_naturr est_hb	SH_EU_06_naturest_hb _MC133,	sponge, coral and coralligenous beds	baltic	MC133,
SH_EU_06_naturr est_hb	SH_EU_06_naturest_hb _MC136,	sponge, coral and coralligenous beds	baltic	MC136,
SH_EU_06_naturr est_hb	SH_EU_06_naturest_hb _MC433,	sponge, coral and coralligenous beds	baltic	MC433,
SH_EU_06_naturr est_hb	SH_EU_06_naturest_hb _MC436,	sponge, coral and coralligenous beds	baltic	MC436,
SH_EU_06_naturr est_hb	SH_EU_06_naturest_hb _MD24,	sponge, coral and coralligenous beds	blacksea	MD24,
SH_EU_06_naturr est_hb	SH_EU_06_naturest_hb _ME14,	sponge, coral and coralligenous beds	blacksea	ME14,
SH_EU_06_naturr est_hb	SH_EU_06_naturest_hb _ME24,	sponge, coral and coralligenous beds	blacksea	ME24,
SH_EU_06_naturr est_hb	SH_EU_06_naturest_hb _MF14,	sponge, coral and coralligenous beds	blacksea	MF14,

		sponge, coral and coralligenous beds		
SH_EU_06_natur SH_EU_06_naturest_hb est_hb	_MB151E,	mediterranean		MB151E,
SH_EU_06_natur SH_EU_06_naturest_hb est_hb	_MB151Q,	mediterranean		MB151Q,
SH_EU_06_natur SH_EU_06_naturest_hb est_hb	_MB151I,	mediterranean		MB151I,
SH_EU_06_natur SH_EU_06_naturest_hb est_hb	_MC1519,	mediterranean		MC1519,
SH_EU_06_natur SH_EU_06_naturest_hb est_hb	_MC151A,	mediterranean		MC151A,
SH_EU_06_natur SH_EU_06_naturest_hb est_hb	_MC151B,	mediterranean		MC151B,
SH_EU_06_natur SH_EU_06_naturest_hb est_hb	_MC151E,	mediterranean		MC151E,
SH_EU_06_natur SH_EU_06_naturest_hb est_hb	_MC151F,	mediterranean		MC151F,
SH_EU_06_natur SH_EU_06_naturest_hb est_hb	_MC151G,	mediterranean		MC151G,
SH_EU_06_natur SH_EU_06_naturest_hb est_hb	_MC1522	mediterranean		MC1522
SH_EU_06_natur SH_EU_06_naturest_hb est_hb	_MC1523	mediterranean		MC1523
SH_EU_06_natur SH_EU_06_naturest_hb est_hb	_MC251	mediterranean		MC251
SH_EU_06_natur SH_EU_06_naturest_hb est_hb	_MC6514	mediterranean		MC6514
SH_EU_06_natur SH_EU_06_naturest_hb est_hb	_MD151	mediterranean		MD151
SH_EU_06_natur SH_EU_06_naturest_hb est_hb	_MD25	mediterranean		MD25
SH_EU_06_natur SH_EU_06_naturest_hb est_hb	_MD6512	mediterranean		MD6512
SH_EU_06_natur SH_EU_06_naturest_hb est_hb	_ME1511	mediterranean		ME1511
SH_EU_06_natur SH_EU_06_naturest_hb est_hb	_ME1512	mediterranean		ME1512
SH_EU_06_natur SH_EU_06_naturest_hb est_hb	_ME1513	mediterranean		ME1513
SH_EU_06_natur SH_EU_06_naturest_hb est_hb	_ME6514	mediterranean		ME6514
SH_EU_06_natur SH_EU_06_naturest_hb est_hb	_MF1511	mediterranean		MF1511
SH_EU_06_natur SH_EU_06_naturest_hb est_hb	_MF1512	mediterranean		MF1512
SH_EU_06_natur SH_EU_06_naturest_hb est_hb	_MF1513	mediterranean		MF1513
SH_EU_06_natur SH_EU_06_naturest_hb est_hb	_MF6511	mediterranean		MF6511
SH_EU_06_natur SH_EU_06_naturest_hb est_hb	_MF6513	mediterranean		MF6513
SH_EU_06_natur SH_EU_06_naturest_hb est_hb	_MB128	vents and seeps atlantic		MB128
SH_EU_06_natur SH_EU_06_naturest_hb est_hb	_MB627	vents and seeps atlantic		MB627
SH_EU_06_natur SH_EU_06_naturest_hb est_hb	_MC127	vents and seeps atlantic		MC127
SH_EU_06_natur SH_EU_06_naturest_hb est_hb	_MC622	vents and seeps atlantic		MC622
SH_EU_06_natur SH_EU_06_naturest_hb est_hb	_MD122	vents and seeps atlantic		MD122
SH_EU_06_natur SH_EU_06_naturest_hb est_hb	_MD622	vents and seeps atlantic		MD622
SH_EU_06_natur SH_EU_06_naturest_hb est_hb	_MA32	soft sediments atlantic		MA32
SH_EU_06_natur SH_EU_06_naturest_hb est_hb	_MA42	soft sediments atlantic		MA42
SH_EU_06_natur SH_EU_06_naturest_hb est_hb	_MA52	soft sediments atlantic		MA52
SH_EU_06_natur SH_EU_06_naturest_hb est_hb	_MA62	soft sediments atlantic		MA62
SH_EU_06_natur SH_EU_06_naturest_hb est_hb	_MB32	soft sediments atlantic		MB32
SH_EU_06_natur SH_EU_06_naturest_hb est_hb	_MB42	soft sediments atlantic		MB42
SH_EU_06_natur SH_EU_06_naturest_hb est_hb	_MB52	soft sediments atlantic		MB52
SH_EU_06_natur SH_EU_06_naturest_hb est_hb	_MB62	soft sediments atlantic		MB62
SH_EU_06_natur SH_EU_06_naturest_hb est_hb	_MC32	soft sediments atlantic		MC32
SH_EU_06_natur SH_EU_06_naturest_hb est_hb	_MC42	soft sediments atlantic		MC42
SH_EU_06_natur SH_EU_06_naturest_hb est_hb	_MC52	soft sediments atlantic		MC52
SH_EU_06_natur SH_EU_06_naturest_hb est_hb	_MC62	soft sediments atlantic		MC62
SH_EU_06_natur SH_EU_06_naturest_hb est_hb	_MD32	soft sediments atlantic		MD32
SH_EU_06_natur SH_EU_06_naturest_hb est_hb	_MD42	soft sediments atlantic		MD42
SH_EU_06_natur SH_EU_06_naturest_hb est_hb	_MD52	soft sediments atlantic		MD52

[illegible]

Supplementary Material S3

For species compilation, the file is too large to be attached here (up to 7000 pages), so please contact inne.withouck@vliz.be to obtain online access/copy of the file

Supplementary Material S4

Background information on the compiled criteria lists

[illegible]

Supplementary Material S5

Criteria compilation

Criteria list name	criteria_listide ntifier	Criteria sublist name	Criterion no.	criterion_identifier	Criterion	Clarification terminology	Focus of criterion	Links with other criteria	Notes	Previous name criterion	Source DEVOTES	Contributor DEVOTES	Data requirements DEVOTES
Appendix III - Criteria and procedures for designation of SOx emission control areas (Regulation 14)	A_INTL_12_EC A		2.2.1	A_INTL_12_ECA_2.2.1	a clear delineation of the proposed area of application of controls on SOx emissions from ships, along with a reference chart on which the area is marked;								
Appendix III - Criteria and procedures for designation of SOx emission control areas (Regulation 14)	A_INTL_12_EC A		2.2.2	A_INTL_12_ECA_2.2.2	a description of the land and sea areas at risk from the impacts of ship SOx emissions;								
Appendix III - Criteria and procedures for designation of SOx emission control areas (Regulation 14)	A_INTL_12_EC A		2.2.3	A_INTL_12_ECA_2.2.3	an assessment that SOx emissions from ships operating in the proposed area of application of the SOx emission controls are contributing to air pollution from SOx, including SOx deposition, and their attendant adverse impacts on the land and sea areas under consideration. Such assessment shall include a description of the impacts of SOx emissions on terrestrial and aquatic ecosystems, areas of natural productivity, critical habitats, water quality, human health, and areas of cultural and scientific significance, if applicable. The sources of relevant data, including methodologies used, shall be identified;								
Appendix III - Criteria and procedures for designation of SOx emission control areas (Regulation 14)	A_INTL_12_EC A		2.2.4	A_INTL_12_ECA_2.2.4	relevant information pertaining to the meteorological conditions in the proposed area of application of the SOx emission controls and the land and sea areas at risk, in particular prevailing wind patterns, or to topographical, geological, oceanographic, morphological, or other conditions that may lead to an increased probability of higher localized air pollution or levels of acidification;								
Appendix III - Criteria and procedures for designation of SOx emission control areas (Regulation 14)	A_INTL_12_EC A		2.2.5	A_INTL_12_ECA_2.2.5	the nature of the ship traffic in the proposed SOx emission control area, including the patterns and density of such traffic; and								
Appendix III - Criteria and procedures for designation of SOx emission control areas (Regulation 14)	A_INTL_12_EC A		2.2.6	A_INTL_12_ECA_2.2.6	a description of the control measures taken by the proposing Contracting State or Contracting States addressing land-based sources of SOx emissions affecting the area at risk that are in place and operating concurrent with the consideration of measures to be adopted in relation to provisions of regulation 14 of Annex VI of the present Convention.								
Article 4.1 Birds Directive	ACL_EU_01_B D	4.1	a	ACL_EU_01_BD_4a	species in danger of extinction			BD Annex I Species + regularly occurring migratory species					
Article 4.1 Birds Directive	ACL_EU_01_B D	4.1	b	ACL_EU_01_BD_4b	species vulnerable to specific changes in their habitat			BD Annex I Species + regularly occurring migratory species					
Article 4.1 Birds Directive	ACL_EU_01_B D	4.1	c	ACL_EU_01_BD_4c	species considered rare because of small populations or restricted local distribution			BD Annex I Species + regularly occurring migratory species					
Article 4.1 Birds Directive	ACL_EU_01_B D	4.1	d	ACL_EU_01_BD_4d	other species requiring particular attention for reasons of the specific nature of the habitat			BD Annex I Species + regularly occurring migratory species					
HD Annex III: CRITERIA FOR SELECTING SITES ELIGIBLE FOR IDENTIFICATION AS SITES OF COMMUNITY IMPORTANCE AND DESIGNATION AS SPECIAL AREAS OF CONSERVATION	ACL_EU_02_H D_AnnIII	S1 A. Site assessment criteria for a given natural habitat type in Annex I	A.(a)	ACL_EU_02_HD_AnnIII_S1_A.a	Degree of representativity of the natural habitat type on the site		S1 = STAGE 1 : Assessment at national level of the relative importance of sites for each natural habitat type in Annex I and each species in Annex II (including priority natural habitat types and priority species)	HD Annex I Habitats					
HD Annex III: CRITERIA FOR SELECTING SITES ELIGIBLE FOR IDENTIFICATION AS SITES OF COMMUNITY IMPORTANCE AND DESIGNATION AS SPECIAL AREAS OF CONSERVATION	ACL_EU_02_H D_AnnIII	S1 A. Site assessment criteria for a given natural habitat type in Annex I	A.(b)	ACL_EU_02_HD_AnnIII_S1_A.b	Area of the site covered by the natural habitat type in relation to the total area covered by that natural habitat type within national territory		S1 = STAGE 1 : Assessment at national level of the relative importance of sites for each natural habitat type in Annex I and each species in Annex II (including priority natural habitat types and priority species)	HD Annex I Habitats					
HD Annex III: CRITERIA FOR SELECTING SITES ELIGIBLE FOR IDENTIFICATION AS SITES OF COMMUNITY IMPORTANCE AND DESIGNATION AS SPECIAL AREAS OF CONSERVATION	ACL_EU_02_H D_AnnIII	S1 A. Site assessment criteria for a given natural habitat type in Annex I	A.(c)	ACL_EU_02_HD_AnnIII_S1_A.c	Degree of conservation of the structure and functions of the natural habitat type concerned and restoration possibilities		S1 = STAGE 1 : Assessment at national level of the relative importance of sites for each natural habitat type in Annex I and each species in Annex II (including priority natural habitat types and priority species)	HD Annex I Habitats					
HD Annex III: CRITERIA FOR SELECTING SITES ELIGIBLE FOR IDENTIFICATION AS SITES OF COMMUNITY IMPORTANCE AND DESIGNATION AS SPECIAL AREAS OF CONSERVATION	ACL_EU_02_H D_AnnIII	S1 A. Site assessment criteria for a given natural habitat type in Annex I	A.(d)	ACL_EU_02_HD_AnnIII_S1_A.d	Global assessment of the value of the site for conservation of the natural habitat type concerned		S1 = STAGE 1 : Assessment at national level of the relative importance of sites for each natural habitat type in Annex I and each species in Annex II (including priority natural habitat types and priority species)	HD Annex I Habitats					

HD Annex III: CRITERIA FOR SELECTING SITES ELIGIBLE FOR IDENTIFICATION AS SITES OF COMMUNITY IMPORTANCE AND DESIGNATION AS SPECIAL AREAS OF CONSERVATION	ACL_EU_02_H D_AnnIII	S1 B. Site assessment criteria for a given species in Annex II	B.(a)	ACL_EU_02_HD_AnnIII_S1_B.a	Size and density of the population of the species present on the site in relation to the populations present within national territory	S1 = STAGE 1 : HD Annex II Assessment at national level of the relative importance of sites for each natural habitat type in Annex I and each species in Annex II (including priority natural habitat types and priority species)
HD Annex III: CRITERIA FOR SELECTING SITES ELIGIBLE FOR IDENTIFICATION AS SITES OF COMMUNITY IMPORTANCE AND DESIGNATION AS SPECIAL AREAS OF CONSERVATION	ACL_EU_02_H D_AnnIII	S1 B. Site assessment criteria for a given species in Annex II	B.(b)	ACL_EU_02_HD_AnnIII_S1_B.b	Degree of conservation of the features of the habitat which are important for the species concerned and restoration possibilities	S1 = STAGE 1 : HD Annex II Assessment at national level of the relative importance of sites for each natural habitat type in Annex I and each species in Annex II (including priority natural habitat types and priority species)
HD Annex III: CRITERIA FOR SELECTING SITES ELIGIBLE FOR IDENTIFICATION AS SITES OF COMMUNITY IMPORTANCE AND DESIGNATION AS SPECIAL AREAS OF CONSERVATION	ACL_EU_02_H D_AnnIII	S1 B. Site assessment criteria for a given species in Annex II	B.(c)	ACL_EU_02_HD_AnnIII_S1_B.c	Degree of isolation of the population present on the site in relation to the natural range of the species	S1 = STAGE 1 : HD Annex II Assessment at national level of the relative importance of sites for each natural habitat type in Annex I and each species in Annex II (including priority natural habitat types and priority species)
HD Annex III: CRITERIA FOR SELECTING SITES ELIGIBLE FOR IDENTIFICATION AS SITES OF COMMUNITY IMPORTANCE AND DESIGNATION AS SPECIAL AREAS OF CONSERVATION	ACL_EU_02_H D_AnnIII	S1 B. Site assessment criteria for a given species in Annex II	B.(d)	ACL_EU_02_HD_AnnIII_S1_B.d	Global assessment of the value of the site for conservation of the species concerned	S1 = STAGE 1 : HD Annex II Assessment at national level of the relative importance of sites for each natural habitat type in Annex I and each species in Annex II (including priority natural habitat types and priority species)
HD Annex III: CRITERIA FOR SELECTING SITES ELIGIBLE FOR IDENTIFICATION AS SITES OF COMMUNITY IMPORTANCE AND DESIGNATION AS SPECIAL AREAS OF CONSERVATION	ACL_EU_02_H D_AnnIII	S2	1.	ACL_EU_02_HD_AnnIII_S2_1.	All the sites identified by the Member States in Stage 1 which contain priority natural habitat types and/or species will be considered as sites of Community importance	S2 = STAGE 2: HD Sites Assessment of the Community importance of the sites included on the national lists
HD Annex III: CRITERIA FOR SELECTING SITES ELIGIBLE FOR IDENTIFICATION AS SITES OF COMMUNITY IMPORTANCE AND DESIGNATION AS SPECIAL AREAS OF CONSERVATION	ACL_EU_02_H D_AnnIII	S2	2.	ACL_EU_02_HD_AnnIII_S2_2.	The assessment of the Community importance of other sites on Member States' lists, i.e. their contribution to maintaining or re-establishing, at a favourable conservation status, a natural habitat in Annex I or a species in Annex II and/or to the coherence of Natura 2000 will take account of the following criteria: (a) relative value of the site at national level (biogeographical situation of the site in relation to migration routes of species in Annex II and whether it belongs to a continuous ecosystem situated on both sides of one or more internal Community frontiers (c) total area of the site (d) number of natural habitat types in Annex I and species in Annex II present on the site (e) global ecological value of the site for the biogeographical regions concerned and/or for the whole of the territory referred to in Article 2, as regards both the characteristic of unique aspect of its features and the way they are combined	S2 = STAGE 2: HD Sites Assessment of the Community importance of the sites included on the national lists
Hab. 97/2 rev. 4 18/11/97: Criteria for Assessing National Lists of pSCI at Biogeographical Level	ACL_EU_04_H D_addguid	P1	1	ACL_EU_04_HD_addguid_P1.1	Species or habitat types for which the whole of the proposed sites for a biogeographical region host more than 60% of the total population (or area) in the same region will be considered as a low priority for case by case scrutiny.	HD Sites
Hab. 97/2 rev. 4 18/11/97: Criteria for Assessing National Lists of pSCI at Biogeographical Level	ACL_EU_04_H D_addguid	P1	2	ACL_EU_04_HD_addguid_P1.2	Species or habitat types for which the whole of the proposed sites for a biogeographical region host less than 20% of the total population (or geographic distribution surface) in the same region will be a priority for further scrutiny.	
Hab. 97/2 rev. 4 18/11/97: Criteria for Assessing National Lists of pSCI at Biogeographical Level	ACL_EU_04_H D_addguid	P1	3	ACL_EU_04_HD_addguid_P1.3	Species and habitat types for which the whole of the proposed sites for a biogeographical region hosts between 20% and 60% of the total species population (or habitat area) in the same region will be submitted to an individual analysis.	
Hab. 97/2 rev. 4 18/11/97: Criteria for Assessing National Lists of pSCI at Biogeographical Level	ACL_EU_04_H D_addguid	P2	1	ACL_EU_04_HD_addguid_P2.1	pSCI qualifying at a national level for at least one priority habitat type or species	
Hab. 97/2 rev. 4 18/11/97: Criteria for Assessing National Lists of pSCI at Biogeographical Level	ACL_EU_04_H D_addguid	P2	2	ACL_EU_04_HD_addguid_P2.2	pSCI containing the only significant example of a non priority habitat type or species on a Member State's list.	
Hab. 97/2 rev. 4 18/11/97: Criteria for Assessing National Lists of pSCI at Biogeographical Level	ACL_EU_04_H D_addguid	P2	3	ACL_EU_04_HD_addguid_P2.3	pSCI having a high national value for at least one non-priority habitat type or species	
Hab. 97/2 rev. 4 18/11/97: Criteria for Assessing National Lists of pSCI at Biogeographical Level	ACL_EU_04_H D_addguid	P2	4	ACL_EU_04_HD_addguid_P2.4	pSCI containing a significant number of non-priority habitat types and/or species, even if their respective national values have not been considered as high under the high quality criterion	
Hab. 97/2 rev. 4 18/11/97: Criteria for Assessing National Lists of pSCI at Biogeographical Level	ACL_EU_04_H D_addguid	P2	5	ACL_EU_04_HD_addguid_P2.5	pSCI playing a relevant role to ensure the coherence (as well structural as functional) of the Natura 2000 Network	
Hab. 97/2 rev. 4 18/11/97: Criteria for Assessing National Lists of pSCI at Biogeographical Level	ACL_EU_04_H D_addguid	P2	6	ACL_EU_04_HD_addguid_P2.6	When a site, according to the five first criteria, is not considered as of community interest, it is necessary to check if its elimination do not jeopardize the evaluation as sufficiently represented for the habitat type or/and species existing on that site	
Fish stock recovery areas RA	ACL_EU_09_FS RA		1	ACL_EU_09_FSRA_1	clear evidence of heavy concentrations of fish below minimum conservation reference size	
Fish stock recovery areas RA	ACL_EU_09_FS RA		2	ACL_EU_09_FSRA_2	spawning grounds	
Fish stock recovery areas RA	ACL_EU_09_FS RA		3	ACL_EU_09_FSRA_3	areas which are deemed to be bio-geographically sensitive	

Quantification area to be restored (Article 11(2))	ACL_EU_10_RE_11_2 ST	ai	ACL_EU_10_REST_11_2_ai	for each habitat type: (i) the total habitat area and a map of its current distribution	Member states shall quantify the area that needs to be restored to reach the restoration targets set out in Articles 4 and 5 taking into account the condition of the habitat types referred to in Articles 4(1), 4(2), 5(1) and 5(2) and the quality and quantity of the habitats of the species referred to in Article 4(3) and Article 5(3) that are present on their territory.
Quantification area to be restored (Article 11(2))	ACL_EU_10_RE_11_2 ST	ail	ACL_EU_10_REST_11_2_ail	for each habitat type: (ii) the habitat area not in good condition;	Member states shall quantify the area that needs to be restored to reach the restoration targets set out in Articles 4 and 5 taking into account the condition of the habitat types referred to in Articles 4(1), 4(2), 5(1) and 5(2) and the quality and quantity of the habitats of the species referred to in Article 4(3) and Article 5(3) that are present on their territory.
Quantification area to be restored (Article 11(2))	ACL_EU_10_RE_11_2 ST	aiii	ACL_EU_10_REST_11_2_aiii	for each habitat type: (iii) the favourable reference area taking into account the documented losses over at least the last 70 years and the projected changes to environmental conditions due to climate change;	Member states shall quantify the area that needs to be restored to reach the restoration targets set out in Articles 4 and 5 taking into account the condition of the habitat types referred to in Articles 4(1), 4(2), 5(1) and 5(2) and the quality and quantity of the habitats of the species referred to in Article 4(3) and Article 5(3) that are present on their territory.
Quantification area to be restored (Article 11(2))	ACL_EU_10_RE_11_2 ST	aiv	ACL_EU_10_REST_11_2_aiv	for each habitat type: (iv) the areas most suitable for the re-establishment of habitat types in view of ongoing and projected changes to environmental conditions due to climate change;	Member states shall quantify the area that needs to be restored to reach the restoration targets set out in Articles 4 and 5 taking into account the condition of the habitat types referred to in Articles 4(1), 4(2), 5(1) and 5(2) and the quality and quantity of the habitats of the species referred to in Article 4(3) and Article 5(3) that are present on their territory.

Quantification area to be restored (Article 11(2))	ACL_EU_10_RE_11_2 ST	b	ACL_EU_10_REST_11_2_b	the sufficient quality and quantity of the habitats of the species required for achieving their favourable conservation status, taking into account the areas most suitable for re-establishment of those habitats, and the connectivity needed between habitats in order for the species populations to thrive, as well as ongoing and projected changes to environmental conditions due to climate change		Member states shall quantify the area that needs to be restored to reach the restoration targets set out in Articles 4 and 5 taking into account the condition of the habitat types referred to in Articles 4(1), 4(2), 5(1) and 5(2) and the quality and quantity of the habitats of the species referred to in Article 4(3) and Article 5(3) that are present on their territory.	
IBA	ACL_INTL_01_I BA	Global IBA Criteria A1: Globally threatened species	A1	ACL_INTL_01_IBA_A1	The site is known or thought regularly to hold significant numbers of a globally threatened species.		Globally threatened species
IBA	ACL_INTL_01_I BA	Global IBA Criteria A2: Restricted-range species	A2	ACL_INTL_01_IBA_A2	The site is known or thought to hold a significant population of at least two range-restricted species.		Restricted-range species
IBA	ACL_INTL_01_I BA	Global IBA Criteria A3: Biome-restricted species	A3	ACL_INTL_01_IBA_A3	The site is known or thought to hold a significant component of the group of species whose distributions are largely or wholly confined to one biome-realm		Biome-restricted species
IBA	ACL_INTL_01_I BA	Global IBA Criteria A4: Congregations	A4	ACL_INTL_01_IBA_A4	The site is known or thought to hold congregations of ≥1% of the global population of one or more species on a regular or predictable basis.		Congregations of species
IBA	ACL_INTL_01_I BA	Regional IBA Criteria B1: Species of conservation concern	B1a	ACL_INTL_01_IBA_B1a	The site regularly holds significant numbers of a Near Threatened species (NT).	Species of conservation concern	Thresholds applied: Non-passerines – 10 pairs/30 individuals; Passerines – 30 pairs/90 individuals Formerly part of global criterion A1
IBA	ACL_INTL_01_I BA	Regional IBA Criteria B1: Species of conservation concern	B1b	ACL_INTL_01_IBA_B1b	The site is one of the 'n' most important in a country for a species with an unfavourable conservation status in the region, and for which the site-protection approach is thought to be appropriate	Species of conservation concern	Thresholds applied: In Europe, n is defined according to the proportion of the species ? population that is found within the country, from 5 to 100 sites per country. Additionally, each site should hold more than 1% of the national population of the species. In the Middle East, n is 5, regardless of the size of the country and no population threshold per site was
IBA	ACL_INTL_01_I BA	Regional IBA Criteria B2: Species with most of their range restricted to a region	B2a	ACL_INTL_01_IBA_B2a	The site is one of the 'n' most important in a country for a species with a favourable conservation status in a region, but with its global range concentrated in that region, and for which the site-protection approach is thought to be appropriate.	Species of conservation concern	Thresholds applied: In Europe, n is defined according to the proportion of the species ? population that is found within the country, from 5 to 100 sites per country. Additionally, each site should hold more than 1% of the national population of the species. In the Middle East, n is 5, regardless of the size of the country and no population threshold per site was B2 (Europe/Middle East)
IBA	ACL_INTL_01_I BA	Regional IBA Criteria B3: Regionally important congregations	B3a	ACL_INTL_01_IBA_B3a	Regionally important congregations – biogeographical populations. The site is known or thought to hold, on a regular basis, >= 1% of a biogeographic or other distinct population of a congregatory waterbird, breeding seabird or other species.	Species of conservation concern	Thresholds applied: A4i (formerly global), B1i, B1ii, B1iii (Europe), B1i (biogeographic), B1ii (Middle East) were used, also numeric thresholds for different groups of species.
IBA	ACL_INTL_01_I BA	Regional IBA Criteria B3: Regionally important congregations	B3b	ACL_INTL_01_IBA_B3b	Regionally important congregations – multi-species aggregations. The site is known or thought to hold, on a regular basis, >= 20,000 waterbirds or >= 6,700 pairs of seabirds of one or more species.	Species of conservation concern	A4ii (formerly global)
IBA	ACL_INTL_01_I BA	Regional IBA Criteria B3: Regionally important congregations	B3c	ACL_INTL_01_IBA_B3c	Regionally important congregations – bottleneck sites. Site known or thought to exceed thresholds set for migratory species at bottleneck sites.	Species of conservation concern	Thresholds applied: 3000 raptors or cranes/5000 storks in Europe/Middle East A4iv (formerly global), B1iv (Europe), B1iv (Middle East)

IBA	ACL_INTL_01_1 BA	Subregional IBA Criteria C: Important Birds Areas of European Union Importance	C1	ACL_INTL_01_IBA_C1	The site regularly holds significant numbers of a globally threatened species, or other species of global conservation concern.	Species of global conservation concern	A1
IBA	ACL_INTL_01_1 BA	Subregional IBA Criteria C: Important Birds Areas of European Union Importance	C2	ACL_INTL_01_IBA_C2	The site is known to regularly hold at least 1% of a flyway population or of the EU population of a species threatened at the EU level.	Concentration of a species threatened at the European Union level (ACL_EU_01_BD), uses IUCN Red List Categories	Annex I and referred to in Article 4.1 of the EC Birds Directive (ACL_EU_01_BD), uses IUCN Red List Categories
IBA	ACL_INTL_01_1 BA	Subregional IBA Criteria C: Important Birds Areas of European Union Importance	C3	ACL_INTL_01_IBA_C3	The site is known to regularly hold at least 1% of a flyway population of a migratory species not considered threatened at the EU level.	Congregations of migratory species not threatened at the EU level	ACL_INTL_08_RSR_B6, Article 4.2 of the EC Birds Directive) (not listed on Annex I), uses IUCN Red List Categories
IBA	ACL_INTL_01_1 BA	Subregional IBA Criteria C: Important Birds Areas of European Union Importance	C4	ACL_INTL_01_IBA_C4	The site is known to regularly hold at least 20,000 migratory waterbirds and/or 10,000 pairs of migratory seabirds of one or more species.	Large congregations- multi-species aggregations	
IBA	ACL_INTL_01_1 BA	Subregional IBA Criteria C: Important Birds Areas of European Union Importance	C5	ACL_INTL_01_IBA_C5	The site is a 'bottleneck' site where at least 5,000 storks (Ciconiidae) and/or at least 3,000 raptors (Accipitriformes and Falconiformes) and/or 3,000 cranes (Gruidae) regularly pass on spring or autumn migration.	Large congregations – bottleneck sites	
IBA	ACL_INTL_01_1 BA	Subregional IBA Criteria C: Important Birds Areas of European Union Importance	C6	ACL_INTL_01_IBA_C6	The site is one of the five most important in the European region (NUTS region) in question for a species or subspecies considered threatened in the European Union.	Species threatened at the European Union level	listed in Annex I of the EC Birds Directive
EBSA criteria (Annex I)	ACL_INTL_02_EBSA			1 ACL_INTL_02_EBSA_1	Uniqueness or Rarity	unique, rare or endemic species, populations or communities or unique, rare or distinct, habitats or ecosystems or geomorphological or oceanographic features	
EBSA criteria (Annex I)	ACL_INTL_02_EBSA			2 ACL_INTL_02_EBSA_2	Special importance for life history stages of species	species	
EBSA criteria (Annex I)	ACL_INTL_02_EBSA			3 ACL_INTL_02_EBSA_3	Importance for threatened, endangered or declining species and/or habitats	species, habitats	
EBSA criteria (Annex I)	ACL_INTL_02_EBSA			4 ACL_INTL_02_EBSA_4	Vulnerability, Fragility, Sensitivity, or Slow recovery	sensitive habitats, biotopes or species	
EBSA criteria (Annex I)	ACL_INTL_02_EBSA			5 ACL_INTL_02_EBSA_5	Biological Productivity	species, populations or communities with higher natural biological productivity	
EBSA criteria (Annex I)	ACL_INTL_02_EBSA			6 ACL_INTL_02_EBSA_6	Biological Diversity	ecosystems, habitats, communities, species, genetic diversity	
EBSA criteria (Annex I)	ACL_INTL_02_EBSA			7 ACL_INTL_02_EBSA_7	Naturalness	areas	
Criteria WNNR Statutory Framework Art.4	ACL_INTL_03_BR			1 ACL_INTL_03_BR_1	It should encompass a mosaic of ecological systems representative of major biogeographic regions, including a gradation of human interventions	Conservation: contribute to the conservation of landscapes, ecosystems, species and genetic variation Development: Foster economic and human development which is socio-culturally and ecologically sustainable Logistic support: support for demonstration projects, environmental education and training, research and monitoring	
Criteria WNNR Statutory Framework Art.5	ACL_INTL_03_BR			2 ACL_INTL_03_BR_2	It should be of significance for biological diversity conservation		
Criteria WNNR Statutory Framework Art.6	ACL_INTL_03_BR			3 ACL_INTL_03_BR_3	It should provide an opportunity to explore and demonstrate approaches to sustainable development on a regional scale.		
Criteria WNNR Statutory Framework Art.7	ACL_INTL_03_BR			4 ACL_INTL_03_BR_4	It should have an appropriate size to serve the three functions of biosphere reserves, as set out in Article 3 (conservation, development, logistic support).		
Criteria WNNR Statutory Framework Art.8	ACL_INTL_03_BR			5 ACL_INTL_03_BR_5	It should include these functions, through appropriate zonation, recognizing:(a) a legally constituted core area or areas devoted to long-term protection, according to the conservation objectives of the biosphere reserve, and of sufficient size to meet these objectives;(b) a buffer zone or zones clearly identified and surrounding or contiguous to the core area or areas, where only activities compatible with the conservation objectives can take place;(c) an outer transition area where sustainable resource management practices are promoted and developed		
Criteria WNNR Statutory Framework Art.9	ACL_INTL_03_BR			6 ACL_INTL_03_BR_6	Organizational arrangements should be provided for the involvement and participation of a suitable range of inter alia public authorities, local communities and private interests in the design and carrying out the functions of a biosphere reserve		
Criteria WNNR Statutory Framework Art.10	ACL_INTL_03_BR			7 ACL_INTL_03_BR_7	In addition, provisions should be made for:(a) mechanisms to manage human use and activities in the buffer zone or zones;(b) a management policy or plan for the area as a biosphere reserve;(c) a designated authority or mechanism to implement this policy or plan;(d) programmes for research, monitoring, education and training		

IMO PSSAs	ACL_INTL_04_PSSA	Ecological criteria	4.4.1	ACL_INTL_04_PSSA_4.4.1	Uniqueness or rarity - An area or ecosystem is unique if it is "the only one of its kind". Habitats of rare, threatened, or endangered species that occur only in one area are an example. An area or ecosystem is rare if it only occurs in a few locations or has been seriously depleted across its range. An ecosystem may extend beyond country borders, assuming regional or international significance. Nurseries or certain feeding, breeding, or spawning areas may also be rare or unique	rarity
IMO PSSAs	ACL_INTL_04_PSSA	Ecological criteria	4.4.10	ACL_INTL_04_PSSA_4.4.10	Fragility - An area that is highly susceptible to degradation by natural events or by the activities of people. Biotic communities associated with coastal habitats may have a low tolerance to changes in environmental conditions, or they may exist close to the limits of their tolerance (e.g., water temperature, salinity, turbidity or depth). Such communities may suffer natural stresses such as storms or other natural conditions (e.g., circulation patterns) that concentrate harmful substances in water or sediments, low flushing rates, and/or oxygen depletion. Additional stress may be caused by human influences such as pollution and changes in salinity. Thus, an area already subject to stress from natural and/or human factors may be in need of special protection from further stress, including that arising from international shipping activities	Fragility
IMO PSSAs	ACL_INTL_04_PSSA	Ecological criteria	4.4.11	ACL_INTL_04_PSSA_4.4.11	Bio-geographic importance - An area that either contains rare biogeographic qualities or is representative of a biogeographic "type" or types, or contains unique or unusual biological, chemical, physical, or geological features.	Bio-geographic importance
IMO PSSAs	ACL_INTL_04_PSSA	Social, cultural and economic criteria	4.4.12	ACL_INTL_04_PSSA_4.4.12	Social or economic dependency - An area where the environmental quality and the use of living marine resources are of particular social or economic importance, including fishing, recreation, tourism, and the livelihoods of people who depend on access to the area.	Social or economic dependency
IMO PSSAs	ACL_INTL_04_PSSA	Social, cultural and economic criteria	4.4.13	ACL_INTL_04_PSSA_4.4.13	Human dependency - An area that is of particular importance for the support of traditional subsistence or food production activities or for the protection of the cultural resources of the local human populations.	Human dependency
IMO PSSAs	ACL_INTL_04_PSSA	Social, cultural and economic criteria	4.4.14	ACL_INTL_04_PSSA_4.4.14	Cultural heritage - An area that is of particular importance because of the presence of significant historical and archaeological sites.	Cultural heritage
IMO PSSAs	ACL_INTL_04_PSSA	Scientific and educational criteria	4.4.15	ACL_INTL_04_PSSA_4.4.15	Research - An area that has high scientific interest.	Research
IMO PSSAs	ACL_INTL_04_PSSA	Scientific and educational criteria	4.4.16	ACL_INTL_04_PSSA_4.4.16	Baseline for monitoring studies - An area that provides suitable baseline conditions with regard to biota or environmental characteristics, because it has not had substantial perturbations or has been in such a state for a long period of time such that it is considered to be in a natural or near-natural condition	Baseline for monitoring studies
IMO PSSAs	ACL_INTL_04_PSSA	Scientific and educational criteria	4.4.17	ACL_INTL_04_PSSA_4.4.17	Education - An area that offers an exceptional opportunity to demonstrate particular natural phenomena.	Education
IMO PSSAs	ACL_INTL_04_PSSA	Ecological criteria	4.4.2	ACL_INTL_04_PSSA_4.4.2	Critical habitat - A sea area that may be essential for the survival, function, or recovery of fish stocks or rare or endangered marine species, or for the support of large marine ecosystems.	habitat
IMO PSSAs	ACL_INTL_04_PSSA	Ecological criteria	4.4.3	ACL_INTL_04_PSSA_4.4.3	Dependency - An area where ecological processes are highly dependent on biotically structured systems (e.g. coral reefs, kelp forests, mangrove forests, seagrass beds). Such ecosystems often have high diversity, which is dependent on the structuring organisms. Dependency also embraces the migratory routes of fish, reptiles, birds, mammals, and invertebrates.	Dependency
IMO PSSAs	ACL_INTL_04_PSSA	Ecological criteria	4.4.4	ACL_INTL_04_PSSA_4.4.4	Representativeness - An area that is an outstanding and illustrative example of specific biodiversity, ecosystems, ecological or physiographic processes, or community or habitat types or other natural characteristics.	Representativeness
IMO PSSAs	ACL_INTL_04_PSSA	Ecological criteria	4.4.5	ACL_INTL_04_PSSA_4.4.5	Diversity - An area that may have an exceptional variety of species or genetic diversity or includes highly varied ecosystems, habitats, and communities.	Diversity
IMO PSSAs	ACL_INTL_04_PSSA	Ecological criteria	4.4.6	ACL_INTL_04_PSSA_4.4.6	Productivity - An area that has a particularly high rate of natural biological production. Such productivity is the net result of biological and physical processes which result in an increase in biomass in areas such as oceanic fronts, upwelling areas and some eynes.	Productivity
IMO PSSAs	ACL_INTL_04_PSSA	Ecological criteria	4.4.7	ACL_INTL_04_PSSA_4.4.7	Spawning or breeding grounds - An area that may be a critical spawning or breeding ground or nursery area for marine species which may spend the rest of their life-cycle elsewhere, or is recognized as migratory routes for fish, reptiles, birds, mammals, or invertebrates.	Spawning or breeding grounds
IMO PSSAs	ACL_INTL_04_PSSA	Ecological criteria	4.4.8	ACL_INTL_04_PSSA_4.4.8	Naturalness - An area that has experienced a relative lack of human-induced disturbance or degradation.	Naturalness
IMO PSSAs	ACL_INTL_04_PSSA	Ecological criteria	4.4.9	ACL_INTL_04_PSSA_4.4.9	Integrity - An area that is a biologically functional unit, an effective, self-sustaining ecological entity.	Integrity
IMMA	ACL_INTL_05_IMMA	Criterion A – Species or Population Vulnerability	A	ACL_INTL_05_IMMA_A	Areas containing habitat important for the survival and recovery of threatened and declining species.	Species or Population Vulnerability
IMMA	ACL_INTL_05_IMMA	Criterion B – Distribution and Abundance	B1	ACL_INTL_05_IMMA_B1	Small and Resident Populations: Areas supporting at least one resident population, containing an important proportion of that species or population, that are occupied consistently,	Small and Resident Populations
IMMA	ACL_INTL_05_IMMA	Criterion B – Distribution and Abundance	B2	ACL_INTL_05_IMMA_B2	Aggregations: Areas with underlying qualities that support important concentrations of a species or population.	areas, species, population
IMMA	ACL_INTL_05_IMMA	Criterion C – Key Life Cycle Activities	C1	ACL_INTL_05_IMMA_C1	Reproductive Areas: Areas that are important for a species or population to mate, give birth, and/or care for young until weaning.	Reproductive Areas
IMMA	ACL_INTL_05_IMMA	Criterion C – Key Life Cycle Activities	C2	ACL_INTL_05_IMMA_C2	Feeding Areas: Areas and conditions that provide an important nutritional base on which a species or population depends.	Feeding Areas
IMMA	ACL_INTL_05_IMMA	Criterion C – Key Life Cycle Activities	C3	ACL_INTL_05_IMMA_C3	Migration Routes: Areas used for important migration or other movements, often connecting distinct life-cycle areas or the different parts of the year-round range of a non-migratory population.	Migration Routes
IMMA	ACL_INTL_05_IMMA	Criterion D – Special Attributes	D1	ACL_INTL_05_IMMA_D1	Distinctiveness: Areas which sustain populations with important genetic, behavioural or ecologically distinctive characteristics.	distinctive populations characteristics
IMMA	ACL_INTL_05_IMMA	Criterion D – Special Attributes	D2	ACL_INTL_05_IMMA_D2	Diversity: Areas containing habitat that supports an important diversity of marine mammal species.	habitats
UNESCO	ACL_INTL_06_WH		i	ACL_INTL_06_WH_i	to represent a masterpiece of human creative genius	human creativity
UNESCO	ACL_INTL_06_WH		ii	ACL_INTL_06_WH_ii	to exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design	human values, cultural
UNESCO	ACL_INTL_06_WH		iii	ACL_INTL_06_WH_iii	to bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared	culture
UNESCO	ACL_INTL_06_WH		iv	ACL_INTL_06_WH_iv	to be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history	architecture, landscape
UNESCO	ACL_INTL_06_WH		ix	ACL_INTL_06_WH_ix	to be outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals.	ecological and biological processes
UNESCO	ACL_INTL_06_WH		v	ACL_INTL_06_WH_v	to be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change	culture
UNESCO	ACL_INTL_06_WH		vi	ACL_INTL_06_WH_vi	to be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance. (The Committee considers that this criterion should preferably be used in conjunction with other criteria)	tradition
UNESCO	ACL_INTL_06_WH		vii	ACL_INTL_06_WH_vii	to contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance	natural beauty, aesthetic importance
UNESCO	ACL_INTL_06_WH		viii	ACL_INTL_06_WH_viii	to be outstanding examples representing major stages of earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features	earth's history
UNESCO	ACL_INTL_06_WH		x	ACL_INTL_06_WH_x	to contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation	habitats
Ecological criteria LMEs	ACL_INTL_07_LME		1	ACL_INTL_07_LME_1	bathymetry	
Ecological criteria LMEs	ACL_INTL_07_LME		2	ACL_INTL_07_LME_2	hydrography	
Ecological criteria LMEs	ACL_INTL_07_LME		3	ACL_INTL_07_LME_3	productivity	
Ecological criteria LMEs	ACL_INTL_07_LME		4	ACL_INTL_07_LME_4	tropically-related populations	
The Ramsar Sites Criteria	ACL_INTL_08_RSR	A. Sites containing representative, rare or unique wetland types	A1	ACL_INTL_08_RSR_A1	A wetland should be considered internationally important if it contains a representative, rare, or unique example of a natural or near-natural wetland type found within the appropriate biogeographic region.	rare or unique wetland types

The Ramsar Sites Criteria	ACL_INTL_08_RSR	B: Sites of international importance for conserving biological diversity; Criteria based on species and ecological communities	B2	ACL_INTL_08_RSR_B2	A wetland should be considered internationally important if it supports vulnerable, endangered, or critically endangered species or threatened ecological communities		species and ecological communities	
The Ramsar Sites Criteria	ACL_INTL_08_RSR	B: Sites of international importance for conserving biological diversity; Criteria based on species and ecological communities	B3	ACL_INTL_08_RSR_B3	A wetland should be considered internationally important if it supports populations of plant and/or animal species important for maintaining the biological diversity of a particular biogeographic region		species and ecological communities	
The Ramsar Sites Criteria	ACL_INTL_08_RSR	B: Sites of international importance for conserving biological diversity; Criteria based on species and ecological communities	B4	ACL_INTL_08_RSR_B4	A wetland should be considered internationally important if it supports plant and/or animal species at a critical stage in their life cycles, or provides refuge during adverse conditions.		species and ecological communities	
The Ramsar Sites Criteria	ACL_INTL_08_RSR	B: Sites of international importance for conserving biological diversity; Specific criteria based on waterbirds	B5	ACL_INTL_08_RSR_B5	A wetland should be considered internationally important if it regularly supports 20,000 or more waterbirds	waterbirds	Should be included in 4.2 of Natura 2000 Standard Dataform if this criteria is met (links with criteria lists ACL_EU_01_B D & ACL_EU_02_H D_AnnIII)	
The Ramsar Sites Criteria	ACL_INTL_08_RSR	B: Sites of international importance for conserving biological diversity; Specific criteria based on waterbirds	B6	ACL_INTL_08_RSR_B6	A wetland should be considered internationally important if it regularly supports 1% of the individuals in a population of one species or subspecies of waterbird	waterbirds		
The Ramsar Sites Criteria	ACL_INTL_08_RSR	B: Sites of international importance for conserving biological diversity; Specific criteria based on fish	B7	ACL_INTL_08_RSR_B7	A wetland should be considered internationally important if it supports a significant proportion of indigenous fish subspecies, species or families, life-history stages, species interactions and/or populations that are representative of wetland benefits and/or values and thereby contributes to global biological diversity	fish		
The Ramsar Sites Criteria	ACL_INTL_08_RSR	B: Sites of international importance for conserving biological diversity; Specific criteria based on fish	B8	ACL_INTL_08_RSR_B8	A wetland should be considered internationally important if it is an important source of food for fishes, spawning ground, nursery and/or migration path on which fish stocks, either within the wetland or elsewhere, depend	fish		
The Ramsar Sites Criteria	ACL_INTL_08_RSR	B: Sites of international importance for conserving biological diversity; Specific criteria based on other taxa	B9	ACL_INTL_08_RSR_B9	A wetland should be considered internationally important if it regularly supports 1% of the individuals in a population of one species or subspecies of wetland-dependent nonavian animal species.	other taxa		
Key Biodiversity Area	ACL_INTL_09_KBA	A Threatened Biodiversity - A1 Threatened Species	A1	ACL_INTL_09_KBA_A1	Threatened species: Site regularly holds one or more of the following: a) ≥0.5% of the global population size AND ≥5 reproductive units of a CR or EN species b) ≥1% of the global population size AND ≥10 reproductive units of a VU species c) ≥0.1% of the global population size AND ≥5 reproductive units of a species assessed as CR or EN due only to population size reduction in the past or present d) ≥0.2% of the global population size AND ≥10 reproductive units of a species assessed as VU due only to population size reduction in the past or present e) Effectively the entire global population size of a CR or EN species.	Sites qualifying as KBAs under criterion A1 hold a significant proportion of the global population size of a species facing a high risk of extinction and so contribute to the global persistence of biodiversity at genetic and species levels	Threatened species	Proportion of the global population size can be observed from criterion KBA1-vi
Key Biodiversity Area	ACL_INTL_09_KBA	A Threatened Biodiversity - A2 Threatened ecosystem types	A2	ACL_INTL_09_KBA_A2	Threatened ecosystem types: Site holds one or more of the following: a) ≥5% of the global extent of a globally CR or EN ecosystem type b) ≥10% of the global extent of a globally VU ecosystem type	Sites qualifying as KBAs under criterion A2 hold a significant proportion of the global extent of an ecosystem type facing a high risk of collapse and so contribute to the global persistence of biodiversity at the ecosystem level	Threatened ecosystem types	

Key Biodiversity Area	ACL_INTL_09_KBA	B Geographically Restricted Biodiversity - B1 Individual geographically restricted species	ACL_INTL_09_KBA_B1	Individual geographically restricted species: Site regularly holds ≥110% of the global population size AND ≥110 reproductive units of a species.	Sites qualifying as KBAs under criterion B1 hold a significant proportion of the global population size of a geographically restricted species and so contribute significantly to the global persistence of biodiversity at the genetic and species level.	Individual geographically restricted species	Proportion of the global population size can be observed from criterion KBA- vi
Key Biodiversity Area	ACL_INTL_09_KBA	B Geographically Restricted Biodiversity - B2 Co-occurring geographically restricted species	ACL_INTL_09_KBA_B2	Co-occurring geographically restricted species: Site regularly holds ≥1% of the global population size of each of a number of restricted-range species in a taxonomic group, determined as either ≥2 species OR 0.02% of the global number of species in the taxonomic group, whichever is larger.	Sites qualifying as KBAs under criterion B2 hold a significant proportion of the global population size of multiple restricted-range species, and so contribute significantly to the global persistence of biodiversity at the genetic and species level.	Co-occurring geographically restricted species	Proportion of the global population size can be observed from criterion KBA- vi
Key Biodiversity Area	ACL_INTL_09_KBA	B Geographically Restricted Biodiversity - B3 Geographically restricted assemblages	ACL_INTL_09_KBA_B3	Geographically restricted assemblages: Site regularly holds one or more of the following: a) ≥0.5% of the global population size of each of a number of ecoregion-restricted species within a taxonomic group, determined as either ≥5 species OR 10% of the species restricted to the ecoregion, whichever is larger b) ≥5 reproductive units of ≥5 bioregion-restricted species OR 30% of the bioregion-restricted species known from the country, whichever is larger, within a taxonomic group c) Part of the globally most important 5% of occupied habitat for each of ≥5 species within a taxonomic group	Sites qualifying as KBAs under criterion B3 hold assemblages of species within a taxonomic group that are globally restricted and so contribute significantly to the global persistence of biodiversity at the genetic, species and ecosystem levels	Geographically restricted assemblages	Proportion of the global population size can be observed from criterion KBA- v
Key Biodiversity Area	ACL_INTL_09_KBA	B Geographically Restricted Biodiversity - B4 Geographically restricted ecosystem types	ACL_INTL_09_KBA_B4	Geographically restricted ecosystem types: Site holds ≥20% of the global extent of an ecosystem type	Sites qualifying as KBAs under criterion B4 hold a significant proportion of the global extent of a geographically restricted ecosystem type and so contribute significantly to the global persistence of biodiversity at the species and ecosystem level	Geographically restricted ecosystem types	
Key Biodiversity Area	ACL_INTL_09_KBA	C Ecological Integrity C	ACL_INTL_09_KBA_C	Ecological integrity: Site is one of ≥2 per ecoregion characterised by wholly intact ecological communities, comprising the composition and abundance of native species and their interactions.	Sites qualifying as KBAs under criterion C hold wholly intact ecological communities with supporting large-scale ecological processes and so contribute significantly to the global persistence of biodiversity at the ecosystem level	Ecological integrity	
Key Biodiversity Area	ACL_INTL_09_KBA	D Biological Processes - D1 Demographic aggregations	ACL_INTL_09_KBA_D1	Demographic aggregations: Site predictably holds one or more of the following: a) An aggregation representing ≥1% of the global population size of a species, over a season, and during one or more key stages of its life cycle b) A number of mature individuals that ranks the site among the largest 10 aggregations known for the species	Sites qualifying as KBAs under criterion D1 hold a significant proportion of the global population size of a species during one or more life history stages or processes, and so contribute significantly to the global persistence of biodiversity at the species level.	Demographic aggregations	Proportion of the global population size can be observed from criterion KBAi

Key Biodiversity Area	ACL_INTL_09_KBA	D Biological Processes - D2 Ecological refugia	D2	ACL_INTL_09_KBA_D2	Ecological refugia: Site supports ≥10% of the global population size of one or more species during periods of environmental stress, for which historical evidence shows that it has served as a refugium in the past and for which there is evidence to suggest it would continue to do so in the foreseeable future.	Sites qualifying as KBAs under criterion D2 hold a significant proportion of the global population size of a species during periods of environmental stress, and so contribute significantly to the global persistence of biodiversity at the species level	Ecological refugia	Proportion of the global population size can be observed from criterion KBAi
Key Biodiversity Area	ACL_INTL_09_KBA	D Biological Processes - D3 Recruitment sources	D3	ACL_INTL_09_KBA_D3	Recruitment sources: Site predictably produces propagules, larvae, or juveniles that maintain ≥10% of the global population size of a species.	Sites qualifying as KBAs under criterion D3 are where a significant proportion of the global population size of a species is produced, and so contribute significantly to the global persistence of biodiversity at the species level	Recruitment sources	Proportion of the global population size can be observed from criterion KBAi
Key Biodiversity Area	ACL_INTL_09_KBA	E Irreplaceability through quantitative analysis	E	ACL_INTL_09_KBA_E	Irreplaceability: Site has a level of Irreplaceability of ≥0.90 (on a 0–1 scale), measured by quantitative spatial analysis, and is characterised by the regular presence of species with ≥10 reproductive units known to occur (or ≥5 units for EN or CR species).	Sites qualifying as KBAs under criterion E have very high irreplaceability for the global persistence of biodiversity as identified through a complementarity-based quantitative analysis of irreplaceability.	Irreplaceability analysed using KBA_Ea-b	
VME Indicators	ACL_INTL_10_VME		42.i	ACL_INTL_10_VME_42.i	Uniqueness or rarity: an area or ecosystem that is unique or that contains rare species whose loss could not be compensated for by similar areas or ecosystems. These include: habitats that contain endemic species; habitats of rare, threatened or endangered species that occur only in discrete areas; or nurseries or discrete feeding, breeding, or spawning areas.		rarity	
VME Indicators	ACL_INTL_10_VME		42.ii	ACL_INTL_10_VME_42.ii	Functional significance of the habitat: discrete areas or habitats that are necessary for the survival, function, spawning/reproduction or recovery of fish stocks, particular life-history stages (e.g. nursery grounds or rearing areas), or of rare, threatened or endangered marine species		Functional significance of the habitat	
VME Indicators	ACL_INTL_10_VME		42.iii	ACL_INTL_10_VME_42.iii	Fragility: an ecosystem that is highly susceptible to degradation by anthropogenic activities.		Fragility	
VME Indicators	ACL_INTL_10_VME		42.iv	ACL_INTL_10_VME_42.iv	Life-history traits of component species that make recovery difficult: ecosystems that are characterized by populations or assemblages of species with one or more of the following characteristics: <ul style="list-style-type: none"> • slow growth rates; • late age of maturity; • low or unpredictable recruitment; or • long-lived. 		Life-history traits of component species that make recovery difficult	
VME Indicators	ACL_INTL_10_VME		42.v	ACL_INTL_10_VME_42.v	Structural complexity: an ecosystem that is characterized by complex physical structures created by significant concentrations of biotic and abiotic features. In these ecosystems, ecological processes are usually highly dependent on these structured systems. Further, such ecosystems often have high diversity, which is dependent on the structuring organisms.		Structural complexity	
Criteria for the designation of a special area (Annex I Guidelines for the designation of special areas under MARPOL 73/78)	ACL_INTL_11_5 A	oceanographic conditions	2.4.1	ACL_INTL_11_SA_2.4.1	The area possesses oceanographic conditions which may cause the concentration or retention of harmful substances in the waters or sediments of the area, including particular circulation patterns (e.g. convergence zones and gyres) or temperature and salinity stratification;			
Criteria for the designation of a special area (Annex I Guidelines for the designation of special areas under MARPOL 73/78)	ACL_INTL_11_5 A	oceanographic conditions	2.4.2	ACL_INTL_11_SA_2.4.2	The area possesses oceanographic conditions which may cause the concentration or retention of harmful substances in the waters or sediments of the area, including long residence time caused by low flushing rates;			
Criteria for the designation of a special area (Annex I Guidelines for the designation of special areas under MARPOL 73/78)	ACL_INTL_11_5 A	oceanographic conditions	2.4.3	ACL_INTL_11_SA_2.4.3	The area possesses oceanographic conditions which may cause the concentration or retention of harmful substances in the waters or sediments of the area, including extreme ice state			
Criteria for the designation of a special area (Annex I Guidelines for the designation of special areas under MARPOL 73/78)	ACL_INTL_11_5 A	oceanographic conditions	2.4.4	ACL_INTL_11_SA_2.4.4	The area possesses oceanographic conditions which may cause the concentration or retention of harmful substances in the waters or sediments of the area, including adverse wind conditions			
Criteria for the designation of a special area (Annex I Guidelines for the designation of special areas under MARPOL 73/78)	ACL_INTL_11_5 A	ecological conditions	2.5.1	ACL_INTL_11_SA_2.5.1	Conditions indicating that protection of the area from harmful substances is needed to preserve depleted, threatened or endangered marine species			
Criteria for the designation of a special area (Annex I Guidelines for the designation of special areas under MARPOL 73/78)	ACL_INTL_11_5 A	ecological conditions	2.5.2	ACL_INTL_11_SA_2.5.2	Conditions indicating that protection of the area from harmful substances is needed to preserve areas of high natural productivity (such as fronts, upwelling areas, gyres)			
Criteria for the designation of a special area (Annex I Guidelines for the designation of special areas under MARPOL 73/78)	ACL_INTL_11_5 A	ecological conditions	2.5.3	ACL_INTL_11_SA_2.5.3	Conditions indicating that protection of the area from harmful substances is needed to preserve spawning, breeding and nursery areas for important marine species and areas representing migratory routes for sea-birds and marine mammals			
Criteria for the designation of a special area (Annex I Guidelines for the designation of special areas under MARPOL 73/78)	ACL_INTL_11_5 A	ecological conditions	2.5.4	ACL_INTL_11_SA_2.5.4	Conditions indicating that protection of the area from harmful substances is needed to preserve rare or fragile ecosystems such as coral reefs, mangroves, seagrass beds and wetlands			
Criteria for the designation of a special area (Annex I Guidelines for the designation of special areas under MARPOL 73/78)	ACL_INTL_11_5 A	ecological conditions	2.5.5	ACL_INTL_11_SA_2.5.5	Conditions indicating that protection of the area from harmful substances is needed to preserve critical habitats for marine resources including fish stocks and/or areas of critical importance for the support of large marine ecosystems			
Criteria for the designation of a special area (Annex I Guidelines for the designation of special areas under MARPOL 73/78)	ACL_INTL_11_5 A	vessel traffic characteristics	2.6	ACL_INTL_11_SA_2.6	the sea area is used by ships to an extent that the discharge of harmful substances by ships when operating in accordance with the requirements of MARPOL 73/78 for areas other than Special Areas would be unacceptable in the light of the existing oceanographic and ecological conditions in the area			

UNCLOS identification of areas for protection	ACL_INTL_13_UNCLOS	a	ACL_INTL_13_UNCLOS_a	Uniqueness	https://www.cbd.int/doc/meetings/mar/eb/saws-2014-01/other/ebisa-ws-2014-01-azores-brochure-en.pdf
UNCLOS identification of areas for protection	ACL_INTL_13_UNCLOS	b	ACL_INTL_13_UNCLOS_b	Rarity	https://www.cbd.int/doc/meetings/mar/eb/saws-2014-01/other/ebisa-ws-2014-01-azores-brochure-en.pdf
UNCLOS identification of areas for protection	ACL_INTL_13_UNCLOS	c	ACL_INTL_13_UNCLOS_c	Special importance for life history stages of species	https://www.cbd.int/doc/meetings/mar/eb/saws-2014-01/other/ebisa-ws-2014-01-azores-brochure-en.pdf
UNCLOS identification of areas for protection	ACL_INTL_13_UNCLOS	d	ACL_INTL_13_UNCLOS_d	Special importance of the species found therein	https://www.cbd.int/doc/meetings/mar/eb/saws-2014-01/other/ebisa-ws-2014-01-azores-brochure-en.pdf
UNCLOS identification of areas for protection	ACL_INTL_13_UNCLOS	e	ACL_INTL_13_UNCLOS_e	The importance for threatened, endangered or declining species or habitats	https://www.cbd.int/doc/meetings/mar/eb/saws-2014-01/other/ebisa-ws-2014-01-azores-brochure-en.pdf
UNCLOS identification of areas for protection	ACL_INTL_13_UNCLOS	f	ACL_INTL_13_UNCLOS_f	Vulnerability, including to climate change and ocean acidification	https://www.cbd.int/doc/meetings/mar/eb/saws-2014-01/other/ebisa-ws-2014-01-azores-brochure-en.pdf
UNCLOS identification of areas for protection	ACL_INTL_13_UNCLOS	g	ACL_INTL_13_UNCLOS_g	Fragility	https://www.cbd.int/doc/meetings/mar/eb/saws-2014-01/other/ebisa-ws-2014-01-azores-brochure-en.pdf
UNCLOS identification of areas for protection	ACL_INTL_13_UNCLOS	h	ACL_INTL_13_UNCLOS_h	Sensitivity	https://www.cbd.int/doc/meetings/mar/eb/saws-2014-01/other/ebisa-ws-2014-01-azores-brochure-en.pdf
UNCLOS identification of areas for protection	ACL_INTL_13_UNCLOS	i	ACL_INTL_13_UNCLOS_i	Biological diversity and productivity	https://www.cbd.int/doc/meetings/mar/eb/saws-2014-01/other/ebisa-ws-2014-01-azores-brochure-en.pdf
UNCLOS identification of areas for protection	ACL_INTL_13_UNCLOS	j	ACL_INTL_13_UNCLOS_j	Representativeness	https://www.cbd.int/doc/meetings/mar/eb/saws-2014-01/other/ebisa-ws-2014-01-azores-brochure-en.pdf
UNCLOS identification of areas for protection	ACL_INTL_13_UNCLOS	k	ACL_INTL_13_UNCLOS_k	Dependency	
UNCLOS identification of areas for protection	ACL_INTL_13_UNCLOS	l	ACL_INTL_13_UNCLOS_l	Naturalness	https://www.cbd.int/doc/meetings/mar/eb/saws-2014-01/other/ebisa-ws-2014-01-azores-brochure-en.pdf
UNCLOS identification of areas for protection	ACL_INTL_13_UNCLOS	m	ACL_INTL_13_UNCLOS_m	Ecological connectivity	https://www.cbd.int/doc/meetings/mar/eb/saws-2014-01/other/ebisa-ws-2014-01-azores-brochure-en.pdf
UNCLOS identification of areas for protection	ACL_INTL_13_UNCLOS	n	ACL_INTL_13_UNCLOS_n	Important ecological processes occurring therein	https://www.cbd.int/doc/meetings/mar/eb/saws-2014-01/other/ebisa-ws-2014-01-azores-brochure-en.pdf
UNCLOS identification of areas for protection	ACL_INTL_13_UNCLOS	o	ACL_INTL_13_UNCLOS_o	Economic and social factors	
UNCLOS identification of areas for protection	ACL_INTL_13_UNCLOS	p	ACL_INTL_13_UNCLOS_p	Cultural factors	
UNCLOS identification of areas for protection	ACL_INTL_13_UNCLOS	q	ACL_INTL_13_UNCLOS_q	Cumulative and transboundary impacts	

UNCLOS identification of areas for protection	ACL_INTL_13_UNCLOS	r	ACL_INTL_13_UNCLOS_r	Slow recovery and resilience	https://www.cbd.int/doc/meetings/mar/feb-saws-2014-01/other/ebia-ws-2014-01-azores-brochure-en.pdf	
UNCLOS identification of areas for protection	ACL_INTL_13_UNCLOS	s	ACL_INTL_13_UNCLOS_s	Adequacy and viability	https://www.cbd.int/doc/meetings/mar/feb-saws-2014-01/other/ebia-ws-2014-01-azores-brochure-en.pdf	
UNCLOS identification of areas for protection	ACL_INTL_13_UNCLOS	t	ACL_INTL_13_UNCLOS_t	Replication	https://www.cbd.int/doc/meetings/mar/feb-saws-2014-01/other/ebia-ws-2014-01-azores-brochure-en.pdf	
UNCLOS identification of areas for protection	ACL_INTL_13_UNCLOS	u	ACL_INTL_13_UNCLOS_u	Sustainability of reproduction	https://www.cbd.int/doc/meetings/mar/feb-saws-2014-01/other/ebia-ws-2014-01-azores-brochure-en.pdf	
UNCLOS identification of areas for protection	ACL_INTL_13_UNCLOS	v	ACL_INTL_13_UNCLOS_v	Existence of conservation and management measures		
ACCOBAMS_CCH	ACL_REG_01_C CH	Criteria used to identify sites containing ACCOBAMS CCH	1.1	ACL_REG_01_CCH_1.1	Areas used by cetaceans for feeding, breeding, calving, nursing and social behaviour	areas
ACCOBAMS_CCH	ACL_REG_01_C CH	Criteria used to identify sites containing ACCOBAMS CCH	1.2	ACL_REG_01_CCH_1.2	Migration routes and corridors and related resting areas	areas
ACCOBAMS_CCH	ACL_REG_01_C CH	Criteria used to identify sites containing ACCOBAMS CCH	1.3	ACL_REG_01_CCH_1.3	Areas where there are seasonal concentrations of cetacean species	cetacean species
ACCOBAMS_CCH	ACL_REG_01_C CH	Criteria used to identify sites containing ACCOBAMS CCH	1.4	ACL_REG_01_CCH_1.4	Areas of importance to cetacean prey	areas
ACCOBAMS_CCH	ACL_REG_01_C CH	Criteria used to identify sites containing ACCOBAMS CCH	1.5	ACL_REG_01_CCH_1.5	Natural processes that support continued productivity of cetacean foraging species (upwellings, fronts, etc.)	species
ACCOBAMS_CCH	ACL_REG_01_C CH	Criteria used to identify sites containing ACCOBAMS CCH	1.6	ACL_REG_01_CCH_1.6	Topographic structures favourable for enhancing foraging opportunities for cetacean species (canyons, seamounts)	species
ACCOBAMS_CCH	ACL_REG_01_C CH	Significant interactions between cetaceans and human activities	2.1	ACL_REG_01_CCH_2.1	Conflicts between cetaceans and fishing activities have been reported (mainly depredation when cetaceans are stealing preys in the fishing gear)	human activities
ACCOBAMS_CCH	ACL_REG_01_C CH	Significant interactions between cetaceans and human activities	2.2	ACL_REG_01_CCH_2.2	Significant or frequent bycatch of cetaceans is reported	species
ACCOBAMS_CCH	ACL_REG_01_C CH	Significant interactions between cetaceans and human activities	2.3	ACL_REG_01_CCH_2.3	Intensive whale watching or other marine tourism activities occur (harassment)	human activities
ACCOBAMS_CCH	ACL_REG_01_C CH	Significant interactions between cetaceans and human activities	2.4	ACL_REG_01_CCH_2.4	Navigation presents a potential threat to cetaceans (in terms of ship strike)	species
ACCOBAMS_CCH	ACL_REG_01_C CH	Significant interactions between cetaceans and human activities	2.5	ACL_REG_01_CCH_2.5	Military exercises are known to routinely occur	human activities
ACCOBAMS_CCH	ACL_REG_01_C CH	Significant interactions between cetaceans and human activities	2.6	ACL_REG_01_CCH_2.6	Seismic activities are known to occur	seismic activities
SPAMI List	ACL_REG_04_5 PAMI		2a	ACL_REG_04_SPAMI_2a	The area contains unique or rare ecosystems, or rare or endemic species	ecosystems, or rare or endemic species
SPAMI List	ACL_REG_04_5 PAMI		2b	ACL_REG_04_SPAMI_2b	The area has highly representative ecological processes, or community or habitat types or other natural characteristics. Representativeness is the degree to which an area represents a habitat type, ecological process, biological community, physiographic feature or other natural characteristic	highly representative ecological processes, or community or habitat types or other natural characteristics
SPAMI List	ACL_REG_04_5 PAMI		2c	ACL_REG_04_SPAMI_2c	The area has a high diversity of species, communities, habitats or ecosystems.	species, communities, habitats or ecosystems
SPAMI List	ACL_REG_04_5 PAMI		2d	ACL_REG_04_SPAMI_2d	The area has a high degree of naturalness as a result of the lack or low level of human-induced disturbance and degradation	naturalness
SPAMI List	ACL_REG_04_5 PAMI		2e	ACL_REG_04_SPAMI_2e	Presence of habitats that are critical to endangered, threatened or endemic species	critical to endangered, threatened habitats or endemic species
SPAMI List	ACL_REG_04_5 PAMI		2f	ACL_REG_04_SPAMI_2f	The area has a high representative value with respect to the cultural heritage, due to the existence of environmentally sound traditional activities integrated with nature which support the well-being of local populations.	Cultural representative ness

SPAMI List	ACL_REG_04_5 PAMI	3	ACL_REG_04_SPAMI_3	an area having scientific, educational or aesthetic interest must, respectively, present a particular value for research in the field of natural sciences or for activities of environmental education or awareness or contain outstanding natural features, landscapes or seascapes	Value for research, awareness, activities or Natural features, landscapes or seascapes
SPAMI List	ACL_REG_04_5 PAMI	4a	ACL_REG_04_SPAMI_4a	the existence of threats likely to impair the ecological, biological, aesthetic or cultural value of the area	ecological,biological,aesthetic or cultural value threats
SPAMI List	ACL_REG_04_5 PAMI	4b	ACL_REG_04_SPAMI_4b	the involvement and active participation of the public in general, and particularly of local communities, in the process of planning and management of the area	communities
SPAMI List	ACL_REG_04_5 PAMI	4c	ACL_REG_04_SPAMI_4c	the existence of a body representing the public, professional, non-governmental sectors and the scientific community involved in the area	communities
SPAMI List	ACL_REG_04_5 PAMI	4d	ACL_REG_04_SPAMI_4d	the existence in the area of opportunities for sustainable development	sustainable development
SPAMI List	ACL_REG_04_5 PAMI	4e	ACL_REG_04_SPAMI_4e	the existence of an integrated coastal management plan within the meaning of Article 4 paragraph 3 (e) of the Convention	existence of an integrated coastal management plan
SPAMI List	ACL_REG_04_5 PAMI	Article 8 criterion 1	ACL_REG_04_SPAMI_Article 8 criterion 1	of importance for conserving the components of biological diversity in the Mediterranean	conservation
SPAMI List	ACL_REG_04_5 PAMI	Article 8 criterion 2	ACL_REG_04_SPAMI_Article 8 criterion 2	contain ecosystems specific to the Mediterranean area or the habitats of endangered species	ecosystems; endangered species
SPAMI List	ACL_REG_04_5 PAMI	Article 8 criterion 3	ACL_REG_04_SPAMI_Article 8 criterion 3	Are of special interest at the scientific, aesthetic, cultural or educational levels	scientifically, aesthetically, culturally or educationally interesting
HELCOM	ACL_REG_06_HELCOM_MPAs	#01	ACL_REG_06_HELCOM_MPAs_#01	Important feeding area for species!!	Area where a species regularly feed, either continuously or seasonally. feeding area for species!!
HELCOM	ACL_REG_06_HELCOM_MPAs	#02	ACL_REG_06_HELCOM_MPAs_#02	Important migration route and resting area for species	Area used by migratory species for migration, feeding or resting. migration route and resting area for species
HELCOM	ACL_REG_06_HELCOM_MPAs	#03	ACL_REG_06_HELCOM_MPAs_#03	Important reproduction area for species	Area regularly used for species reproduction or as juvenile nursery grounds. reproduction area for species
HELCOM	ACL_REG_06_HELCOM_MPAs	#04	ACL_REG_06_HELCOM_MPAs_#04	Threatened or declining habitats based on quantity	Area containing a declining habitat which is endangered, threatened or declining based on the extent of its geographical occurrence. Threatened or declining habitats based on quantity
HELCOM	ACL_REG_06_HELCOM_MPAs	#05	ACL_REG_06_HELCOM_MPAs_#05	Threatened or declining habitats based on quality	Area containing a declining habitat which is endangered, threatened or declining based on the quality of the habitat. Threatened or declining habitats based on quality
HELCOM	ACL_REG_06_HELCOM_MPAs	#06	ACL_REG_06_HELCOM_MPAs_#06	Threatened or declining species based on quantity	Area containing habitats for the survival and recovery of a species which is endangered, threatened or declining based the extent of its geographical occurrence. Threatened or declining species based on quantity
HELCOM	ACL_REG_06_HELCOM_MPAs	#07	ACL_REG_06_HELCOM_MPAs_#07	Threatened or declining species based on quality	Area containing habitats for the survival and recovery of a species which is endangered, threatened or declining based on the quality of the species. Threatened or declining species based on quality
HELCOM	ACL_REG_06_HELCOM_MPAs	#08	ACL_REG_06_HELCOM_MPAs_#08	Rarity of species or habitats!!	Area contains either (i) rare or endemic species, populations or communities, and/or (ii) rare or distinct habitats. Rarity of species or habitats!!
HELCOM	ACL_REG_06_HELCOM_MPAs	#09	ACL_REG_06_HELCOM_MPAs_#09	Sensitivity of species or habitats	Area that contain a relatively high proportion of sensitive biotopes, biotope complexes or species that are functionally fragile (highly susceptible to degradation or depletion by human activity or by natural events) or with slow recovery. Sensitivity of species or habitats

HELCOM	ACL_REG_06_HELCOM_MPAs	#10	ACL_REG_06_HELCOM_MPAs_#10 Area with high natural biodiversity	Area that contains comparatively higher diversity of ecosystems, habitats, communities, or species, or has higher genetic diversity.	ecosystems, habitats, communities, species, genetic diversity
HELCOM	ACL_REG_06_HELCOM_MPAs	#11	ACL_REG_06_HELCOM_MPAs_#11 Keystone species!!	Area that contains a species which is important for maintaining the resilience of the ecosystem.	Keystone species!!
HELCOM	ACL_REG_06_HELCOM_MPAs	#12	ACL_REG_06_HELCOM_MPAs_#12 Ecologically significant habitats	Area which 1) has comparatively higher natural biological productivity, or where 2) important ecological processes take place, such as connectivity between life-history stages and linkages between areas; trophic interactions, physical transport, physical oceanography, life history of species (dispersal of larvae/spores)	Ecologically significant habitats
HELCOM	ACL_REG_06_HELCOM_MPAs	#13	ACL_REG_06_HELCOM_MPAs_#13 Representative area		representative area
HELCOM	ACL_REG_06_HELCOM_MPAs	#14	ACL_REG_06_HELCOM_MPAs_#14 Because of geological values	Area contains rare, unique or representative geological or geomorphological structures or processes.	geological & geomorphological values
HELCOM	ACL_REG_06_HELCOM_MPAs	#15	ACL_REG_06_HELCOM_MPAs_#15 Because of biological values		biological values
HELCOM	ACL_REG_06_HELCOM_MPAs	#16	ACL_REG_06_HELCOM_MPAs_#16 Because of marine values		marine values
HELCOM	ACL_REG_06_HELCOM_MPAs	#17	ACL_REG_06_HELCOM_MPAs_#17 Because of terrestrial values		terrestrial values
HELCOM	ACL_REG_06_HELCOM_MPAs	#18	ACL_REG_06_HELCOM_MPAs_#18 To protect natural habitat types listed in Habitats Directive Annex I		Habitats Directive Annex I
HELCOM	ACL_REG_06_HELCOM_MPAs	#19	ACL_REG_06_HELCOM_MPAs_#19 To protect habitats of the species listed in Habitats Directive Annex II		Habitats Directive Annex I
HELCOM	ACL_REG_06_HELCOM_MPAs	#20	ACL_REG_06_HELCOM_MPAs_#20 To protect special protection areas classified by Member States under the Birds Directive		birds
OSPAR 2019-03 (Texel-Faial Criteria)	ACL_REG_08_OSPAR_MPAs	(a) Selection criteria for species	a1 ACL_REG_08_OSPAR_MPAs_a1 Global importance: Global importance of the OSPAR Area for a species. Importance on a global scale, of the OSPAR Area, for the species is when a high proportion of a species at any time of the life cycle occurs in the OSPAR Area	'High proportion' is considered to be more than 75%, when known	species Guidance: ACL_REG_08_OSPAR_MPAs_b1
OSPAR 2019-03 (Texel-Faial Criteria)	ACL_REG_08_OSPAR_MPAs	(a) Selection criteria for species	a2 ACL_REG_08_OSPAR_MPAs_a2 Regional importance: Importance within the OSPAR Area, of the regions for the species where a high proportion of the total population of a species within the OSPAR Area for any part of its life cycle is restricted to a small number of locations in the OSPAR Area	'High proportion' is considered to be 90% of the population in a small number of locations of 50 km x50 km grid squares. This is dependent on scientific judgement regarding natural abundance, range or extent and adequacy of recording. A different scale may be needed for different taxa.	species Guidance: ACL_REG_08_OSPAR_MPAs_b2

OSPAR 2019-03 (Texel-Faial Criteria)	ACL_REG_08_OSPAR_MPAs	(a) Selection criteria for species	a3	ACL_REG_08_OSPAR_MPAs_a3	Rarity: a species is rare if the total population size is small. In case of a species that is sessile or of restricted mobility at any time of its life cycle, a species is rare if it occurs in a limited number of locations in the OSPAR Area, and in relatively low numbers. In case of a highly mobile species, the total population size will determine rarity	'A limited number of locations' could be in a small number of 50 km x 50 km grid squares, but a different scale may be needed for different taxa. This is dependent on scientific judgement regarding natural abundance, range or extent and adequacy of recording. Species which are present in high abundance outside of the	species	Guidance: ACL_REG_08_OSPAR_MPAs_b3
OSPAR 2019-03 (Texel-Faial Criteria)	ACL_REG_08_OSPAR_MPAs	(a) Selection criteria for species	a4	ACL_REG_08_OSPAR_MPAs_a4	Sensitivity: A species is "very sensitive" when: a) it has a very low resistance (that is, very easily adversely affected by human activity); and/or b) it has a very low resilience (that is, after an adverse effect from human activity, recovery is likely to be achieved only over a very long period, or is likely not to be achieved at all). A species is "sensitive" when: a) it has low resistance (that is, it is easily adversely affected by human activity); and/or b) it has low resilience (that is, after an adverse effect from human activity, recovery is likely to be achieved only over a long period)	A "very long period" may be considered to be more than 25 years and "long period" in the range of 5 to 25 years. The time frame should be on an appropriate scale for that species. Sensitivity to human activities is measured by a. life history characteristics (including natural behaviour); b. dependence on other specific ecological	species	Guidance: ACL_REG_08_OSPAR_MPAs_b4-i
OSPAR 2019-03 (Texel-Faial Criteria)	ACL_REG_08_OSPAR_MPAs	(a) Selection criteria for species	a5	ACL_REG_08_OSPAR_MPAs_a5	Keystone species: a species which has a controlling influence on a community		species	Guidance: ACL_REG_08_OSPAR_MPAs_b5
OSPAR 2019-03 (Texel-Faial Criteria)	ACL_REG_08_OSPAR_MPAs	(a) Selection criteria for species	a6	ACL_REG_08_OSPAR_MPAs_a6	Decline: means an observed or indicated significant decline in numbers, extent or quality (quality refers to life history parameters). The decline may be historic, recent or current. 'Significant' need not be in a statistical sense	Decline categories are defined: Extirpated, Severely declined, Significantly declined and High probability of a significant decline in number, extent or quality in the future	species	Guidance: ACL_REG_08_OSPAR_MPAs_b6
OSPAR 2019-03 (Texel-Faial Criteria)	ACL_REG_08_OSPAR_MPAs	(c) Selection criteria for habitats	c1	ACL_REG_08_OSPAR_MPAs_c1	Global importance (importance of the OSPAR Area for the habitat in a global context): a high proportion of the habitat occurs in the OSPAR Area	'High proportion' is considered to be more than 75%, when known. This criterion may require knowledge of the distribution of habitats at a global scale	habitats	Guidance: ACL_REG_08_OSPAR_MPAs_d1
OSPAR 2019-03 (Texel-Faial Criteria)	ACL_REG_08_OSPAR_MPAs	(c) Selection criteria for habitats	c2	ACL_REG_08_OSPAR_MPAs_c2	Regional importance (importance of the subregions of the OSPAR Area for the habitat): a high proportion of the habitat occurs within a specific biogeographic region and/or region of national responsibility within the OSPAR Area.	'High proportion' is considered to be more than 75%, when known	habitats	Guidance: ACL_REG_08_OSPAR_MPAs_d2
OSPAR 2019-03 (Texel-Faial Criteria)	ACL_REG_08_OSPAR_MPAs	(c) Selection criteria for habitats	c3	ACL_REG_08_OSPAR_MPAs_c3	Rarity: a habitat is assessed as being rare if it is restricted to a limited number of locations or to small, few and scattered locations in the OSPAR area.	The 'limited number of locations' is set at 2% of the 50 km by 50 km UTM grid squares for each of the following three bathymetric zones: a. littoral (intertidal and splash zone) b. sublittoral (down to 200 m depth) c. bathyal / abyssal (below 200 m depth). The assessment is dependent on scientific judgement regarding natural	habitats	Guidance: ACL_REG_08_OSPAR_MPAs_d3

OSPAR 2019-03 (Texel-Faial Criteria)	ACL_REG_08_OSPAR_MPAs	(c) Selection criteria for habitats	c4	ACL_REG_08_OSPAR_MPAs_c4	Sensitivity: A habitat is "very sensitive" when: a. it has very low resistance (that is, it is very easily adversely affected by human activity); and/or b. it has very low resilience (that is, after an adverse effect from human activity, recovery is likely to be achieved only over a very long period, or is likely not to be achieved at all). A habitat is "sensitive" when: a. it has low resistance (that is, it is easily adversely affected by human activity); and/or b. it has low resilience (that is, after an adverse effect from human activity, recovery is likely to be achieved only over a long period).	A 'very long period' is considered to be more than 25 years and a 'long period' in the range of 5 to 25 years, dependent on the habitat. It is considered that the sensitivity of a habitat differs according to specific impacts of different human activities and, as such, should be applied at the end of the selection process with respect to the specific	habitats	Guidance: ACL_REG_08_OSPAR_MPAs_g4-II
OSPAR 2019-03 (Texel-Faial Criteria)	ACL_REG_08_OSPAR_MPAs	(c) Selection criteria for habitats	c5	ACL_REG_08_OSPAR_MPAs_c5	Ecological significance: the habitat is very important for the wider significance of the ecological processes, functions and species that it supports.	The ecological functions within the habitat support species and ecosystem processes over a much wider area. Example habitats could be: spawning, breeding, reproduction, or nursery areas for fish, mammals or birds, resting and feeding areas, areas with a high natural productivity or diversity, areas with a high proportion of	habitats	Guidance: ACL_REG_08_OSPAR_MPAs_d5
OSPAR 2019-03 (Texel-Faial Criteria)	ACL_REG_08_OSPAR_MPAs	(c) Selection criteria for habitats	c6	ACL_REG_08_OSPAR_MPAs_c6	Status of decline: Decline means a significant decline in extent or quality. The decline may be historic, recent or current. The decline can occur in the whole OSPAR maritime area or regionally.	Where the decline is "clear and present", and can be linked directly or indirectly to human activity, the habitat is also considered to be "currently threatened". Where there is a high probability of decline that is linked directly or indirectly to human activity and that will reduce the extent of the habitat by 15% or more or move it into	habitats	Guidance: ACL_REG_08_OSPAR_MPAs_d6
Ocean's criteria set for selection of essential fish habitats	ACL_REG_09_EFH		1	ACL_REG_09_EFH_1	Focus primarily on demersal species	Considering that: - the network of EFH will be established under GFCM competences; - currently EFH for small pelagic stocks have not yet been properly mapped and are possibly highly variable in time and space		
Ocean's criteria set for selection of essential fish habitats	ACL_REG_09_EFH		2	ACL_REG_09_EFH_2	Give priority to protection of nursery grounds	Juveniles are a target or secondary catch of the Mediterranean multi-species fisheries. Nevertheless, protection of spawners should not be ignored when necessary, as illustrated in the Gulf of Lion (Wurtz, 2012)		
Ocean's criteria set for selection of essential fish habitats	ACL_REG_09_EFH		3	ACL_REG_09_EFH_3	Cover - but not limited to - GFCM priority stocks	As identified in the GFCM Mid-Term strategy		
Ocean's criteria set for selection of essential fish habitats	ACL_REG_09_EFH		4	ACL_REG_09_EFH_4	Stock status	As reported by SAC 2017		
Ocean's criteria set for selection of essential fish habitats	ACL_REG_09_EFH		5	ACL_REG_09_EFH_5	Catch volumes and landing value	Importance of stocks on this behalf		

Ocean's criteria set for selection of essential fish habitats	ACL_REG_09_E FH		6	ACL_REG_09_EFH_6	Protection of sensitive species and habitats	Species caught as by-catch, particularly sharks, and sensitive habitats distribution evidence
Ocean's criteria set for selection of essential fish habitats	ACL_REG_09_E FH		7	ACL_REG_09_EFH_7	EFH overlapping	Prioritizing when nursery and/or spawning grounds of different species overlap
Ocean's criteria set for selection of essential fish habitats	ACL_REG_09_E FH		8	ACL_REG_09_EFH_8	Measures already established	Aiming to reduce the impact and fishing pressure of bottom trawling
Ocean's criteria set for selection of essential fish habitats	ACL_REG_09_E FH		9	ACL_REG_09_EFH_9	Precautionary principle	According to the FAO Code of Conduct for Responsible Fisheries
MSFD: D1 Criteria	CL_EU_05_MSFD	Scientific criteria e (ecological relevance)		CL_EU_05_MSFD_e	if species of species groups are closely associated to a particular broad habitat type they may be included within that habitat type for monitoring and assessment purposes; in such cases, the species shall not be included in the assessment of the species group.	ecological relevance set of species, species groups or habitats
MSFD: D1 Criteria	CL_EU_05_MSFD	Scientific criteria c (ecological relevance)		CL_EU_05_MSFD_c	present in sufficient numbers or extent in the assessment area to be able to construct a suitable indicator for assessment;	ecological relevance set of species, species groups or habitats
MSFD: D1 Criteria	CL_EU_05_MSFD	Scientific criteria b (ecological relevance)		CL_EU_05_MSFD_b	relevant for assessment of a key anthropogenic pressure to which the ecosystem component is exposed, being sensitive to the pressure and exposed to it (vulnerable) in the assessment area;	ecological relevance set of species, species groups or habitats
MSFD: D1 Criteria	CL_EU_05_MSFD	Scientific criteria a (ecological relevance)		CL_EU_05_MSFD_a	representative of the ecosystem component (species group or broad habitat type), and of ecosystem functioning (e.g. connectivity between habitats and populations, completeness and integrity of essential habitats), being relevant for assessment of state/impacts, such as having a key functional role within the component (e.g. high or specific biodiversity, productivity, trophic link, specific resource or service) or particular life history traits (age and size at breeding, longevity, migratory traits)	ecological relevance set of species, species groups or habitats
MSFD: D1 Criteria	CL_EU_05_MSFD	Scientific criteria d (ecological relevance)		CL_EU_05_MSFD_d	the set of species or habitats selected shall cover, as far as possible, the full range of ecological functions of the ecosystem component and the predominant pressures to which the component is subject	ecological relevance set of species, species groups or habitats
MSFD Annex III Table 1	CL_EU_06_MSFD_AnnIII	Biological features	B1	CL_EU_06_MSFD_AnnIII_B1	A description of the biological communities associated with the predominant seabed and water column habitats. This would include information on the phytoplankton and zooplankton communities, including the species and seasonal and geographical variability	biological communities associated with the predominant seabed and water column habitats
MSFD Annex III Table 1	CL_EU_06_MSFD_AnnIII	Biological features	B6	CL_EU_06_MSFD_AnnIII_B6	a description of the population dynamics, natural and actual range and status of other species occurring in the marine region or subregion which are the subject of Community legislation or international agreements	species included in international agreements
MSFD Annex III Table 1	CL_EU_06_MSFD_AnnIII	Biological features	B4	CL_EU_06_MSFD_AnnIII_B4	a description of the population dynamics, natural and actual range and status of species of marine mammals and reptiles occurring in the marine region or subregion	marine mammals
MSFD Annex III Table 1	CL_EU_06_MSFD_AnnIII	Biological features	B5	CL_EU_06_MSFD_AnnIII_B5	a description of the population dynamics, natural and actual range and status of species of seabirds occurring in the marine region or subregion.	seabirds
MSFD Annex III Table 1	CL_EU_06_MSFD_AnnIII	Biological features	B7	CL_EU_06_MSFD_AnnIII_B7	an inventory of the temporal occurrence, abundance and spatial distribution of nonindigenous, exotic species or, where relevant, genetically distinct forms of native species, which are present in the marine region or subregion	other
MSFD Annex III Table 1	CL_EU_06_MSFD_AnnIII	Biological features	B2	CL_EU_06_MSFD_AnnIII_B2	information on angiosperms, macro-algae and invertebrate bottom fauna, including species composition, biomass and annual/seasonal variability,	angiosperms, macro-algae and invertebrate bottom fauna
MSFD Annex III Table 1	CL_EU_06_MSFD_AnnIII	Biological features	B3	CL_EU_06_MSFD_AnnIII_B3	information on the structure of fish populations, including the abundance, distribution and age/size structure of the populations,	fish
MSFD Annex III Table 1	CL_EU_06_MSFD_AnnIII	Habitat types	H3	CL_EU_06_MSFD_AnnIII_H3	habitats in areas which by virtue of their characteristics, location or strategic importance merit a particular reference. This may include areas subject to intense or specific pressures or areas which merit a specific protection regime.	habitat types
MSFD Annex III Table 1	CL_EU_06_MSFD_AnnIII	Habitat types	H2	CL_EU_06_MSFD_AnnIII_H2	identification and mapping of special habitat types, especially those recognised or identified under Community legislation (the Habitats Directive and the Birds Directive) or international conventions as being of special scientific or biodiversity interest.	habitat types HD and BD
MSFD Annex III Table 1	CL_EU_06_MSFD_AnnIII	Habitat types	H1	CL_EU_06_MSFD_AnnIII_H1	The predominant seabed and water column habitat type(s) with a description of the characteristic physical and chemical features, such as depth, water temperature regime, currents and other water movements, salinity, structure and substrata composition of the seabed	habitat types
MSFD Annex III Table 1	CL_EU_06_MSFD_AnnIII	Other features	O2	CL_EU_06_MSFD_AnnIII_O2	a description of any other features or characteristics typical of or specific to the marine region or subregion.	
MSFD Annex III Table 1	CL_EU_06_MSFD_AnnIII	Other features	O1	CL_EU_06_MSFD_AnnIII_O1	A description of the situation with regard to chemicals, including chemicals giving rise to concern, sediment contamination, hotspots, health issues and contamination of biota (especially biota meant for human consumption), annual and seasonal temperature regime and ice cover, current velocity, upwelling, wave exposure, mixing characteristics, turbidity, residence time,.	other
MSFD Annex III Table 1	CL_EU_06_MSFD_AnnIII	Physical and chemical features	PC2	CL_EU_06_MSFD_AnnIII_PC2	annual and seasonal temperature regime and ice cover, current velocity, upwelling, wave exposure, mixing characteristics, turbidity, residence time,.	Physical and chemical features: oceanography
MSFD Annex III Table 1	CL_EU_06_MSFD_AnnIII	Physical and chemical features	PC5	CL_EU_06_MSFD_AnnIII_PC5	pH, pCO2 profiles or equivalent information used to measure marine acidification	Physical and chemical features: marine acidification
MSFD Annex III Table 1	CL_EU_06_MSFD_AnnIII	Physical and chemical features	PC4	CL_EU_06_MSFD_AnnIII_PC4	spatial and temporal distribution of nutrients (DIN, TN, DP, TP, TOC) and oxygen,	Physical and chemical features: nutrients and oxygen
MSFD Annex III Table 1	CL_EU_06_MSFD_AnnIII	Physical and chemical features	PC3	CL_EU_06_MSFD_AnnIII_PC3	spatial and temporal distribution of salinity	Physical and chemical features: salinity
MSFD Annex III Table 1	CL_EU_06_MSFD_AnnIII	Physical and chemical features	PC1	CL_EU_06_MSFD_AnnIII_PC1	Topography and bathymetry of the seabed	Physical and chemical features: seabed
Quality elements WFD	CL_EU_07_WFD_AnnV	Coastal waters - Biological Quality Elements: Macroalgae and angiosperms	C_BQL_01	CL_EU_07_WFD_AnnV_C_BQL_01	All disturbance-sensitive macroalgal and angiosperm taxa associated with undisturbed conditions are present.	macroalgae & angiosperms
Quality elements WFD	CL_EU_07_WFD_AnnV	Transitional waters - Biological Quality Elements: Angiosperms	T_BQL_03	CL_EU_07_WFD_AnnV_T_BQL_03	Angiosperms: The taxonomic composition corresponds totally or nearly totally to undisturbed conditions	angiosperm taxonomic composition

Quality elements WFD	CL_EU_07_WFD_AnnV	Transitional waters - Biological Quality Elements: Angiosperms	T_BQL_04	CL_EU_07_WFD_AnnV_T_BQL_04	Angiosperms: There are no detectable changes in angiosperm abundance due to anthropogenic activities	angiosperm abundance
Quality elements WFD	CL_EU_07_WFD_AnnV	Transitional & Coastal waters - Biological Quality Elements: Benthic invertebrate fauna	TC_BQL_05	CL_EU_07_WFD_AnnV_TC_BQL_05	Benthic invertebrate fauna: All the disturbance-sensitive taxa associated with undisturbed conditions are present.	benthic disturbance-sensitive taxa
Quality elements WFD	CL_EU_07_WFD_AnnV	Transitional & Coastal waters - Biological Quality Elements: Benthic invertebrate fauna	TC_BQL_04	CL_EU_07_WFD_AnnV_TC_BQL_04	Benthic invertebrate fauna: The level of diversity and abundance of invertebrate taxa is within the range normally associated with undisturbed conditions.	benthic invertebrate taxa
Quality elements WFD	CL_EU_07_WFD_AnnV	Transitional waters - Biological Quality Elements: Fish fauna	T_BQL_05	CL_EU_07_WFD_AnnV_T_BQL_05	Fish fauna: Species composition and abundance is consistent with undisturbed conditions	fish species composition and abundance
Quality elements WFD	CL_EU_07_WFD_AnnV	Transitional waters - Biological Quality Elements: Macroalgae	T_BQL_01	CL_EU_07_WFD_AnnV_T_BQL_01	Macroalgae: The composition of macroalgal taxa is consistent with undisturbed conditions	macroalgal taxa
Quality elements WFD	CL_EU_07_WFD_AnnV	Transitional waters - Biological Quality Elements: Macroalgae	T_BQL_02	CL_EU_07_WFD_AnnV_T_BQL_02	Macroalgae: There are no detectable changes in macroalgal cover due to anthropogenic activities	macroalgal cover
Quality elements WFD	CL_EU_07_WFD_AnnV	Transitional waters - Hydromorphological Quality Elements: Morphological conditions	T_HQL_02	CL_EU_07_WFD_AnnV_T_HQL_02	Morphological conditions: Depth variations, substrate conditions, and both the structure and condition of the intertidal zones correspond totally or nearly totally to undisturbed conditions	hydromorphological conditions
Quality elements WFD	CL_EU_07_WFD_AnnV	Transitional & Coastal waters - Physico-chemical Quality Elements: General conditions	TC_PCQL_02	CL_EU_07_WFD_AnnV_TC_PCQL_02	Nutrient concentrations remain within the range normally associated with undisturbed conditions	general conditions
Quality elements WFD	CL_EU_07_WFD_AnnV	Transitional & Coastal waters - Physico-chemical Quality Elements: General conditions	TC_PCQL_01	CL_EU_07_WFD_AnnV_TC_PCQL_01	Physico-chemical elements correspond totally or nearly totally to undisturbed conditions.	general conditions
Quality elements WFD	CL_EU_07_WFD_AnnV	Transitional & Coastal waters - Biological Quality Elements: Phytoplankton	TC_BQL_03	CL_EU_07_WFD_AnnV_TC_BQL_03	Phytoplankton: Planktonic blooms occur at a frequency and intensity which is consistent with the type specific physico-chemical conditions	planktonic blooms
Quality elements WFD	CL_EU_07_WFD_AnnV	Transitional & Coastal waters - Biological Quality Elements: Phytoplankton	TC_BQL_02	CL_EU_07_WFD_AnnV_TC_BQL_02	Phytoplankton: The average phytoplankton biomass is consistent with the type-specific physico-chemical conditions and is not such as to significantly alter the type-specific transparency	phytoplankton biomass
Quality elements WFD	CL_EU_07_WFD_AnnV	Transitional & Coastal waters - Biological Quality Elements: Phytoplankton	TC_BQL_01	CL_EU_07_WFD_AnnV_TC_BQL_01	Phytoplankton: The composition and abundance of the phytoplanktonic taxa are consistent with undisturbed conditions	phytoplankton taxa
Quality elements WFD	CL_EU_07_WFD_AnnV	Transitional & Coastal waters - Physico-chemical Quality Elements: Specific synthetic pollutants	TC_PCQL_04	CL_EU_07_WFD_AnnV_TC_PCQL_04	Pollutants: Concentrations close to zero and at least below the limits of detection of the most advanced analytical techniques in general use.	specific synthetic pollutants
Quality elements WFD	CL_EU_07_WFD_AnnV	Transitional & Coastal waters - Physico-chemical Quality Elements: Specific non-synthetic pollutants	TC_PCQL_05	CL_EU_07_WFD_AnnV_TC_PCQL_05	Pollutants: Concentrations remain within the range normally associated with undisturbed conditions (background levels = bgf).	specific non-synthetic pollutants
Quality elements WFD	CL_EU_07_WFD_AnnV	Transitional & Coastal waters - Physico-chemical Quality Elements: General conditions	TC_PCQL_03	CL_EU_07_WFD_AnnV_TC_PCQL_03	Temperature, oxygen balance and transparency do not show signs of anthropogenic disturbance and remain within the range normally associated with undisturbed conditions	general conditions
Quality elements WFD	CL_EU_07_WFD_AnnV	Coastal waters - Hydromorphological Quality elements: Morphological conditions	C_HQL_02	CL_EU_07_WFD_AnnV_C_HQL_02	The depth variation, structure and substrate of the coastal bed, and both the structure and condition of the inter-tidal zones correspond totally or nearly totally to the undisturbed conditions.	hydromorphological conditions
Quality elements WFD	CL_EU_07_WFD_AnnV	Coastal waters - Hydromorphological Quality Elements: Tidal regime	C_HQL_01	CL_EU_07_WFD_AnnV_C_HQL_01	The freshwater flow regime and the direction and speed of dominant currents correspond totally or nearly totally to undisturbed conditions.	tidal regime
Quality elements WFD	CL_EU_07_WFD_AnnV	Coastal waters - Biological Quality Elements: Macroalgae and angiosperms	C_BQL_02	CL_EU_07_WFD_AnnV_C_BQL_02	The levels of macroalgal cover and angiosperm abundance are consistent with undisturbed conditions	macroalgae & angiosperms
Quality elements WFD	CL_EU_07_WFD_AnnV	Transitional waters - Hydromorphological Quality Elements: Tidal regime	T_HQL_01	CL_EU_07_WFD_AnnV_T_HQL_01	Tidal regime: The freshwater flow regime corresponds totally or nearly totally to undisturbed conditions	tidal regime

Criteria descriptors MSFD	CL_EU_08_MSFD_critDs	Descriptor 2 Non-indigenous species introduced by human activities are at levels that do not adversely alter the ecosystems	D2C2	CL_EU_08_MSFD_critDs_D2C2	Abundance and spatial distribution of established non-indigenous species, particularly of invasive species, contributing significantly to adverse effects on particular species groups or broad habitat types (secondary)	non-indigenous species, particularly invasive species	units of measurement for the criteria: abundance (number of individuals, biomass in tonnes (t) or extent in square kilometres (km ²)) per nonindigenous species
Criteria descriptors MSFD	CL_EU_08_MSFD_critDs	Descriptor 5 Human-induced eutrophication is minimised, especially adverse effects thereof, such as losses in biodiversity, ecosystem degradation, harmful algae blooms and oxygen deficiency in bottom waters	D5C2	CL_EU_08_MSFD_critDs_D5C2	Chlorophyll a concentrations are not at levels that indicate adverse effects of nutrient enrichment (primary)	Chl a	Threshold values linked to CL_EU_07_WFD concentration D_AnnV_TC_Bs in Q1_01 micrograms per litre (µg/l),
Criteria descriptors MSFD	CL_EU_08_MSFD_critDs	Descriptor 5 Human-induced eutrophication is minimised, especially adverse effects thereof, such as losses in biodiversity, ecosystem degradation, harmful algae blooms and oxygen deficiency in bottom waters	D5C1	CL_EU_08_MSFD_critDs_D5C1	Nutrient concentrations are not at levels that indicate adverse eutrophication effects (primary)	nutrient concentrations	Threshold values linked to CL_EU_07_WFD concentration D_AnnV_TC_Ps in CQL_02 micromoles per litre (µmol/l)
Criteria descriptors MSFD	CL_EU_08_MSFD_critDs	Ecosystems, including food webs (relating to Descriptors 1 and 4)	D4C4	CL_EU_08_MSFD_critDs_D4C4	Productivity of the trophic guild is not adversely affected due to anthropogenic pressures (secondary)	trophic guild	
Criteria descriptors MSFD	CL_EU_08_MSFD_critDs	Descriptor 2 Non-indigenous species introduced by human activities are at levels that do not adversely alter the ecosystems	D2C3	CL_EU_08_MSFD_critDs_D2C3	Proportion of the species group or spatial extent of the broad habitat type which is adversely altered due to non-indigenous species, particularly invasive non-indigenous species.	affected species groups/habitat types by (invasive) non-indigenous species	units of measurement for the criteria: the proportion of the species group (ratio of indigenous species to non-indigenous species, as number of species and/or their abundance within the group) or the spatial extent of the broad habitat type (in square kilometres (km ²)) which is adversely altered
Criteria descriptors MSFD	CL_EU_08_MSFD_critDs	Descriptor 6 Seafloor integrity is at a level that ensures that the structure and functions of the ecosystems are safeguarded and benthic ecosystems, in particular, are not adversely affected	D6C2	CL_EU_08_MSFD_critDs_D6C2	Spatial extent and distribution of physical disturbance pressures on the seabed (primary)	natural seabed	
Criteria descriptors MSFD	CL_EU_08_MSFD_critDs	Descriptor 6 Seafloor integrity is at a level that ensures that the structure and functions of the ecosystems are safeguarded and benthic ecosystems, in particular, are not adversely affected	D6C1	CL_EU_08_MSFD_critDs_D6C1	Spatial extent and distribution of physical loss (permanent change) of the natural seabed (primary)	natural seabed	
Criteria descriptors MSFD	CL_EU_08_MSFD_critDs	Descriptor 6 Seafloor integrity is at a level that ensures that the structure and functions of the ecosystems are safeguarded and benthic ecosystems, in particular, are not adversely affected	D6C3	CL_EU_08_MSFD_critDs_D6C3	Spatial extent of each habitat type which is adversely affected, through change in its biotic and abiotic structure and its functions (e.g. through changes in species composition and their relative abundance, absence of particularly sensitive or fragile species or species providing a key function, size structure of species), by physical disturbance	seabed habitat types	

Criteria descriptors MSFD	CL_EU_08_MS_FD_critDs	Descriptor 5 Human-induced eutrophication is minimised, especially adverse effects thereof, such as losses in biodiversity, ecosystem degradation, harmful algae blooms and oxygen deficiency in bottom waters	D5C6	CL_EU_08_MSFD_critDs_D5C6	The abundance of opportunistic macroalgae is not at levels that indicate adverse effects of nutrient enrichment (secondary)	opportunistic macroalgae	Threshold values linked to CL_EU_07_WF_Qual_02	unit of measurement: Ecological Quality Ratio for macroalgal abundance or spatial cover. Extent of adverse effects in square kilometres (km ²) or as a proportion (percentage) of the assessment area (Where available, Member States shall use the units or ecological quality ratios provided for under Directive 2000/60/EC.)
Criteria descriptors MSFD	CL_EU_08_MS_FD_critDs	Descriptor 3 Populations of all commercially exploited fish and shellfish are within safe biological limits, exhibiting a population age and size distribution that is indicative of a healthy stock	D3C3	CL_EU_08_MSFD_critDs_D3C3	The age and size distribution of individuals in the populations of commercially-exploited species is indicative of a healthy population. This shall include a high proportion of old/large individuals and limited adverse effects of exploitation on genetic diversity (primary)			unit of measurement: under point 5(c): for (i), first indent: proportion (percentage) or numbers, for (i), second indent: length in centimetres (cm), and for (ii): length in centimetres (cm).
Criteria descriptors MSFD	CL_EU_08_MS_FD_critDs	Ecosystems, including food webs (relating to Descriptors 1 and 4)	D4C2	CL_EU_08_MSFD_critDs_D4C2	The balance of total abundance between the trophic guilds is not adversely affected due to anthropogenic pressures (primary)	trophic guild		units of measurement: total abundance (number of individuals or biomass in tonnes (t)) across all species within the trophic guild
Criteria descriptors MSFD	CL_EU_08_MS_FD_critDs	Descriptor 5 Human-induced eutrophication is minimised, especially adverse effects thereof, such as losses in biodiversity, ecosystem degradation, harmful algae blooms and oxygen deficiency in bottom waters	D5C5	CL_EU_08_MSFD_critDs_D5C5	The concentration of dissolved oxygen is not reduced, due to nutrient enrichment, to levels that indicate adverse effects on benthic habitats (including on associated biota and mobile species) or other eutrophication effects (primary)	dissolved oxygen	Threshold values linked to CL_EU_07_WF_D_AnnV_TC_P_CQL_03	unit of measurement: oxygen concentration in the bottom of the water column in milligrams per litre (mg/l),
Criteria descriptors MSFD	CL_EU_08_MS_FD_critDs	Pelagic habitats	D1C6	CL_EU_08_MSFD_critDs_D1C6	The condition of the habitat type, including its biotic and abiotic structure and its functions (e.g. its typical species composition and their relative abundance, absence of particularly sensitive or fragile species or species providing a key function, size structure of species), is not adversely affected due to anthropogenic pressures (primary)	pelagic habitats		units of measurement: extent of habitat adversely affected in square kilometres (km ²) and as a proportion (percentage) of the total extent of the habitat type
Criteria descriptors MSFD	CL_EU_08_MS_FD_critDs	Ecosystems, including food webs (relating to Descriptors 1 and 4)	D4C1	CL_EU_08_MSFD_critDs_D4C1	The diversity (species composition and their relative abundance) of the trophic guild is not adversely affected due to anthropogenic pressures (primary)	trophic guild		
Criteria descriptors MSFD	CL_EU_08_MS_FD_critDs	Benthic habitats	D6C5	CL_EU_08_MSFD_critDs_D6C5	The extent of adverse effects from anthropogenic pressures on the condition of the habitat type, including alteration to its biotic and abiotic structure and its functions (e.g. its typical species composition and their relative abundance, absence of particularly sensitive or fragile species or species providing a key function, size structure of species), does not exceed a specified proportion of the natural extent of the habitat type in the assessment area.	seabed habitats		
Criteria descriptors MSFD	CL_EU_08_MS_FD_critDs	Benthic habitats	D6C4	CL_EU_08_MSFD_critDs_D6C4	The extent of loss of the habitat type, resulting from anthropogenic pressures, does not exceed a specified proportion of the natural extent of the habitat type in the assessment area (primary)	seabed habitats		
Criteria descriptors MSFD	CL_EU_08_MS_FD_critDs	Descriptor 3 Populations of all commercially exploited fish and shellfish are within safe biological limits, exhibiting a population age and size distribution that is indicative of a healthy stock	D3C1	CL_EU_08_MSFD_critDs_D3C1	The Fishing mortality rate of populations of commercially-exploited species is at or below levels which can produce the maximum sustainable yield (MSY) (primary)			if relevant, species lists are specified in the document (unit of measurement: annualised fishing mortality rate)
Criteria descriptors MSFD	CL_EU_08_MS_FD_critDs	Species groups of birds, mammals, reptiles, fish and cephalopods (relating to Descriptor 1)	D1C5	CL_EU_08_MSFD_critDs_D1C5	The habitat for the species has the necessary extent and condition to support the different stages in the life history of the species	primary for species covered by Annexes II, IV or V to Directive 92/43/EEC and secondary for other species	A_SH_EU_02_HD_AnnII_IV_V (For mammals, reptiles and non-commercial fish, criterion equates to CL_EU_10_HD Art17_87)	
Criteria descriptors MSFD	CL_EU_08_MS_FD_critDs	Species groups of birds, mammals, reptiles, fish and cephalopods (relating to Descriptor 1)	D1C1	CL_EU_08_MSFD_critDs_D1C1	The mortality rate per species from incidental by-catch is below levels which threaten the species, such that its long-term viability is ensured (primary)			units of measurement for the criteria: abundance (number of individuals or biomass in tonnes (t)) per species.

Criteria descriptors MSFD	CL_EU_08_MS_FD_critDs	Descriptor 5 Human-induced eutrophication is minimised, especially adverse effects thereof, such as losses in biodiversity, ecosystem degradation, harmful algae blooms and oxygen deficiency in bottom waters	D5C3	CL_EU_08_MSFD_critDs_D5C3	The number, spatial extent and duration of harmful algal bloom events are not at levels that indicate adverse effects of nutrient enrichment (secondary)	harmful algal blooms	unit of measurement: bloom events as number of events, duration in days and spatial extent in square kilometres (km ²) per year,
Criteria descriptors MSFD	CL_EU_08_MS_FD_critDs	Descriptor 2 Non-indigenous species introduced by human activities are at levels that do not adversely alter the ecosystems	D2C1	CL_EU_08_MSFD_critDs_D2C1	The number of non-indigenous species which are newly introduced via human activity into the wild, per assessment period (6 years), measured from the reference year as reported for the initial assessment under Article 8(1) of Directive 2008/56/EC, is minimised and where possible reduced to zero (primary)	non-indigenous species, particularly invasive species	units of measurement for the criteria: the number of species per assessment area which have been newly introduced in the assessment period (6 years),
Criteria descriptors MSFD	CL_EU_08_MS_FD_critDs	Descriptor 5 Human-induced eutrophication is minimised, especially adverse effects thereof, such as losses in biodiversity, ecosystem degradation, harmful algae blooms and oxygen deficiency in bottom waters	D5C4	CL_EU_08_MSFD_critDs_D5C4	The photic limit (transparency) of the water column is not reduced, due to increases in suspended algae, to a level that indicates adverse effects of nutrient enrichment (secondary)	photic limit (transparency)	Threshold values linked to CL_EU_07_WFD Annex D, Annex TC, B QL_02
Criteria descriptors MSFD	CL_EU_08_MS_FD_critDs	Species groups of birds, mammals, reptiles, fish and cephalopods (relating to Descriptor 1)	D1C2	CL_EU_08_MSFD_critDs_D1C2	The population abundance of the species is not adversely affected due to anthropogenic pressures, such that its long-term viability is ensured (primary)		for birds, criterion equates to CL_EU_09_BD Art12_B2 and CL_EU_09_BD Art12_B4. For mammals, reptiles and non-commercial fish, criterion equates to CL_EU_10_HD Art17_B6 (CL_EU_08_MSFD_critDs_D3 C2 used for this criterion)
Criteria descriptors MSFD	CL_EU_08_MS_FD_critDs	Species groups of birds, mammals, reptiles, fish and cephalopods (relating to Descriptor 1)	D1C3	CL_EU_08_MSFD_critDs_D1C3	The population demographic characteristics (e.g. body size or age class structure, sex ratio, fecundity, and survival rates) of the species are indicative of a healthy population which is not adversely affected due to anthropogenic pressures.	primary for commercially exploited fish and cephalopods and secondary for other species	For mammals, reptiles and non-commercial fish, criterion equates to CL_EU_10_HD Art17_B6 (CL_EU_08_MSFD_critDs_D3 C3 used for this criterion)
Criteria descriptors MSFD	CL_EU_08_MS_FD_critDs	Ecosystems, including food webs (relating to Descriptors 1 and 4)	D4C3	CL_EU_08_MSFD_critDs_D4C3	The size distribution of individuals across the trophic guild is not adversely affected due to anthropogenic pressures (secondary)	trophic guild	
Criteria descriptors MSFD	CL_EU_08_MS_FD_critDs	Descriptor 3 Populations of all commercially exploited fish and shellfish are within safe biological limits, exhibiting a population age and size distribution that is indicative of a healthy stock	D3C2	CL_EU_08_MSFD_critDs_D3C2	The Spawning Stock Biomass of populations of commercially-exploited species are above biomass levels capable of producing maximum sustainable yield (primary)		unit of measurement: biomass in tonnes (t) or number of individuals per species, except where other indices are used under point 5(b),
Criteria descriptors MSFD	CL_EU_08_MS_FD_critDs	Descriptor 5 Human-induced eutrophication is minimised, especially adverse effects thereof, such as losses in biodiversity, ecosystem degradation, harmful algae blooms and oxygen deficiency in bottom waters	D5C8	CL_EU_08_MSFD_critDs_D5C8	The species composition and relative abundance of macrofaunal communities, achieve values that indicate that there is no adverse effect due to nutrient and organic enrichment (secondary)	macrofaunal benthic communities	Threshold values linked to CL_EU_07_WFD Annex D, Annex TC, B QL_04
							unit of measurement: Ecological Quality Ratio for species composition and relative abundance assessments. Extent of adverse effects in square kilometres (km ²) or as a proportion (percentage) of the assessment area (Where available, Member States shall use the units or ecological quality ratios provided for under ...)

Criteria descriptors MSFD	CL_EU_08_MSFD_critDs	Descriptor 5 Human-induced eutrophication is minimised, especially adverse effects thereof, such as losses in biodiversity, ecosystem degradation, harmful algae blooms and oxygen deficiency in bottom waters	D5C7	CL_EU_08_MSFD_critDs_D5C7	The species composition and relative abundance or depth distribution of macrophyte communities achieve values that indicate there is no adverse effect due to nutrient enrichment including via a decrease in water transparency (secondary)	macrophyte communities	Threshold values linked to CL_EU_07_WFD Annex C, B QL_02	unit of measurement: Ecological Quality Ratio for species composition and relative abundance assessments or for maximum depth of macrophyte growth. Extent of adverse effects in square kilometres (km ²) or as a proportion (percentage) of the assessment area (Where available, Member States shall use the units
Criteria descriptors MSFD	CL_EU_08_MSFD_critDs	Species groups of birds, mammals, reptiles, fish and cephalopods (relating to Descriptor 1)	D1C4	CL_EU_08_MSFD_critDs_D1C4	The species distributional range and, where relevant, pattern is in line with prevailing physiographic, geographic and climatic conditions.	primary for species covered by Annexes II, IV or V to Directive 92/43/EEC and secondary for other species	relevant species: A_SH_EU_02_HD_AnnII_IV_sp (for birds, criterion equates to CL_EU_09_BD Art12_B3 and CL_EU_09_BD Art12_B4. For mammals, reptiles and non-commercial fish, criterion equates to CL_EU_10_HD Art17_B5	
Criteria for reporting BD Art12	CL_EU_09_BD Art12		B4	CL_EU_09_BD Art12_B4	Breeding distribution map and size			
Criteria for reporting BD Art12	CL_EU_09_BD Art12		B5	CL_EU_09_BD Art12_B5	Breeding distribution trend			
Criteria for reporting BD Art12	CL_EU_09_BD Art12		B2	CL_EU_09_BD Art12_B2	Population size			
Criteria for reporting BD Art12	CL_EU_09_BD Art12		B3	CL_EU_09_BD Art12_B3	Population trend			
Criteria for reporting HD Art17	CL_EU_10_HD Art17		B7	CL_EU_10_HD Art17_B7	Habitat for the species			
Criteria for reporting HD Art17	CL_EU_10_HD Art17		B6	CL_EU_10_HD Art17_B6	Population			
Criteria for reporting HD Art17	CL_EU_10_HD Art17		B5	CL_EU_10_HD Art17_B5	Range			
DEVOTES indicators	CL_EU_11_DEV		101	CL_EU_11_DEV_101	Mortality of white-tailed eagles	Incidentally and non-incidentally killed white-tailed eagles	28	SYKE-LU 101
DEVOTES indicators	CL_EU_11_DEV		107	CL_EU_11_DEV_107	Body length distribution of Cladophora	Cladophora length	28	SYKE-LU 107
DEVOTES indicators	CL_EU_11_DEV		109	CL_EU_11_DEV_109	Areal extent of blue mussels	Blue mussel cover	28	SYKE-LU 109
DEVOTES indicators	CL_EU_11_DEV		110	CL_EU_11_DEV_110	Cumulative impacts on benthic habitats	Cumulative impacts on benthic habitats	28	SYKE-LU 110
DEVOTES indicators	CL_EU_11_DEV		114	CL_EU_11_DEV_114	Body length distribution of zooplankton	Mean zooplankton size	28	SYKE-LU 114
DEVOTES indicators	CL_EU_11_DEV		115	CL_EU_11_DEV_115	Biomass ratio zooplankton/phytoplankton	Zooplankton-phytoplankton biomass ratio	28	SYKE-LU 115
DEVOTES indicators	CL_EU_11_DEV		116	CL_EU_11_DEV_116	Phytoplankton diversity	Phytoplankton diversity	28 344	SYKE-LU 116
DEVOTES indicators	CL_EU_11_DEV		117	CL_EU_11_DEV_117	Seasonal succession of functional phytoplankton groups	Seasonal succession of functional phytoplankton group	28	SYKE-LU 117
DEVOTES indicators	CL_EU_11_DEV		118	CL_EU_11_DEV_118	BTA - Biological Traits Analysis	Biological Traits Analysis (BTA)	30 29 222 224 225 226 223 227 228	IMAR-HV 108
DEVOTES indicators	CL_EU_11_DEV		121	CL_EU_11_DEV_121	Abundance and distribution each of harbour and grey seals (M3)	M3 Abundance and distribution each of harbour and grey seals*	31 307	Cefas-SN 110; JRC-HT
DEVOTES indicators	CL_EU_11_DEV		122	CL_EU_11_DEV_122	Abundance and distribution of cetaceans (M4)	M4 Abundance and distribution of cetaceans*	31	Cefas-SN 111; JRC-HT
DEVOTES indicators	CL_EU_11_DEV		123	CL_EU_11_DEV_123	Grey seal pup production (M5)	M5 Grey seal pup production	31 307	Cefas - SN 112; JRC-HT
DEVOTES indicators	CL_EU_11_DEV		124	CL_EU_11_DEV_124	Marine mammals by-catch (M6)	M6 Mortality rate of seals and cetaceans due to bycatch	31 309 309	Cefas - SN 113

DEVOTES indicators	CL_EU_11_DEV	125 CL_EU_11_DEV_125	Species-specific trends in relative abundance of non-breeding and breeding marine birds (B1)	B1 Species-specific trends in relative abundance of non-breeding and breeding marine birds		31 279	Cefas-SN 114; JRC-HT	Time series of annual estimates of abundance of individual species
DEVOTES indicators	CL_EU_11_DEV	126 CL_EU_11_DEV_126	Breeding success of kittiwake (B2)	B2 Annual breeding success of kittiwake		31 229 230 231 232 280	Cefas-SN 115; JRC-HT	No of chicks fledged per pair at colonies of black-legged kittiwake (Rissa tridactyla).
DEVOTES indicators	CL_EU_11_DEV	127 CL_EU_11_DEV_127	Breeding success/failure of marine bird species (B3)	B3 Breeding success/failure of marine bird species		31 232 282	Cefas-SN 116; JRC-HT	Annual mean breeding success of marine bird species at colonies.
DEVOTES indicators	CL_EU_11_DEV	128 CL_EU_11_DEV_128	Presence of (non-native/invasive) predators on island seabird colonies (B4)	B4 Non-native/invasive mammal presence on island seabird colonies		31 284 284	Cefas - SN 117	Observations of presence/absence of non-native or invasive mammal species
DEVOTES indicators	CL_EU_11_DEV	129 CL_EU_11_DEV_129	By-catch of marine birds (B5)	B5 Mortality of marine birds from fishing (bycatch) and aquaculture, Abundance index of by-caught birds	MARMONI indicator	31 233	Cefas - SN 118	Number of birds caught of each species accidentally caught by commercial fishing gear (http://www.sea.ee/marmoni/marmoni_public/docs/L47.pdf)
DEVOTES indicators	CL_EU_11_DEV	130 CL_EU_11_DEV_130	Distributional pattern of breeding and non-breeding marine birds (B6)	B6 Distributional pattern of breeding and non-breeding marine birds		31 279	Cefas - SN 119	Distributional pattern of species of marine birds that aggregate in inshore areas, or at onshore breeding or roosting sites
DEVOTES indicators	CL_EU_11_DEV	131 CL_EU_11_DEV_131	Abundance of selected fish species and cephalopods (FC1)	FC1 Population abundance/biomass of a suite of selected species		31 235 294 294	Cefas - SN 120a	Size of catchable proportion of fish populations by survey (weight or numbers)
DEVOTES indicators	CL_EU_11_DEV	133 CL_EU_11_DEV_133	Body length of demersal fish and elasmobranchs (FC3)	FC3 Mean maximum length of demersal fish and elasmobranchs		31	Cefas - SN 122, JRC-HT	Size based indicator to measure the life history composition of the fish community
DEVOTES indicators	CL_EU_11_DEV	134 CL_EU_11_DEV_134	By-catch ratio of Chondrichthyes (FC4)	FC4 By-catch rates of Chondrichthyes		31 237 238	Cefas - SN 123	Quantities of by-catch of Chondrichthyes in commercial fisheries.
DEVOTES indicators	CL_EU_11_DEV	136 CL_EU_11_DEV_136	Typical species composition (BH1)	BH1 Typical species composition		31 285 208	Cefas - SN 124, JRC-HT	Species lists and distribution.
DEVOTES indicators	CL_EU_11_DEV	138 CL_EU_11_DEV_138	Physical damage of predominant and special habitats (BH3)	BH3 Physical damage of predominant and special habitats		31 286	Cefas - SN 126, JRC-HT	Distribution and sensitivity of habitats components (selection of habitats based on pre-defined criteria); Distribution and intensity of human activities and pressures causing physical damage (EIAs and VMS data, Data Collection Framework); Exposure matrices combining pressure intensity and habitat sensitivity.
DEVOTES indicators	CL_EU_11_DEV	139 CL_EU_11_DEV_139	Areal habitat loss (BH4)	BH4 Area of habitat loss		31 289 289 289	Cefas - SN 127, JRC-HT	Activity data sources such as EIAs and VMS
DEVOTES indicators	CL_EU_11_DEV	14 CL_EU_11_DEV_14	By-catch of marine mammals and waterbirds in fishing gears	Drowned marine mammals and waterbirds in fishing gears			SYKE-LU 14	Number of drowned birds and mammals
DEVOTES indicators	CL_EU_11_DEV	140 CL_EU_11_DEV_140	Size-frequency distribution of bivalve or other sensitive/indicator species (BH5)	BH5 Size-frequency distribution of bivalve or other sensitive/indicator species		31 285 292 292 292	Cefas - SN 128	Number of individuals per size class
DEVOTES indicators	CL_EU_11_DEV	141 CL_EU_11_DEV_141	MCI - Microplankton Community Index (PH1/FW5)	PH1/FW5 Microplankton Community Index (MCI)		31 244 245 246 247 248 150 338	Cefas - SN 129, JRC-HT	Plankton abundance or biomass (per taxa).
DEVOTES indicators	CL_EU_11_DEV	142 CL_EU_11_DEV_142	Plankton biomass and/or abundance (PH2)	PH2 Plankton biomass and/or abundance		31 248 312	Cefas - CL 130a, JRC-HT	Phytoplankton and zooplankton abundance and/or biomass as appropriate.

DEVOTES indicators	CL_EU_11_DEV	144 CL_EU_11_DEV_144	Reproductive success of marine birds in relation to food availability (FW1)	FW1 Reproductive success of marine birds in relation to food availability	31 232 282 230 282 298 298 341	Cefas - CL 132, JRC-HT	Annual mean breeding success of marine bird species at colonies (no. chicks fledged per pair). Depending in species and area, the parameter may be derived from data hatching success (i.e. number of eggs hatched per pair). Hatching/fledging success is monitored for a selection of species sensitive to changes in pressures.
DEVOTES indicators	CL_EU_11_DEV	145 CL_EU_11_DEV_145	Production of phytoplankton (FW2)	FW2 Production of phytoplankton	31	Cefas - CL 133, JRC-HT	Phytoplankton Biomass (carbon from biovolume, particulate organic carbon, or chlorophyll concentration)
DEVOTES indicators	CL_EU_11_DEV	149 CL_EU_11_DEV_149	Biomass and abundance of functional groups (FW7)	FW7 Biomass and abundance of functional groups	31 34	Cefas - CL 137a, JRC-HT	Fish species composition and abundance (number or weight) per haul/survey. Biomass of fish can be calculated from abundance data using existing scientific survey data. Biomass of invertebrates can be estimated from abundance data and length-weight distributions of species. Species will need to be
DEVOTES indicators	CL_EU_11_DEV	15 CL_EU_11_DEV_15	Abundance of selected (coastal) fish species	Abundance of key species of coastal fish	270	SYKE-LU 15	Species abundance
DEVOTES indicators	CL_EU_11_DEV	150 CL_EU_11_DEV_150	Changes in the distribution of biomass and species over trophic levels or body size (BT5) (FW8)	FW8 Changes in the distribution of biomass and species over trophic levels or body size (BT5)	31 302 306 306	Cefas - CL 138, JRC-HT	Mean trophic levels of species will need to be estimated on a regional/sub-regional scale. Catchable proportion of fish=invertebrate populations by survey (weight or numbers).
DEVOTES indicators	CL_EU_11_DEV	151 CL_EU_11_DEV_151	Pathways management measures (NIS1)	NIS1 Pathways management measures	31	Cefas - CL 155	no information in tech spec
DEVOTES indicators	CL_EU_11_DEV	152 CL_EU_11_DEV_152	Energy flows and transfer efficiencies among trophic levels or functional groups	energy flows and transfer efficiencies among trophic levels or functional groups	34 35 36	Cefas - AR 139	Ecopath model / production at trophic level or functional group
DEVOTES indicators	CL_EU_11_DEV	153 CL_EU_11_DEV_153	Strength of conventional bottom-up effect in marine size spectrum	strength of conventional bottom-up effect in marine size spectrum	34 37 334 335	Cefas - AR 140	size spectrum
DEVOTES indicators	CL_EU_11_DEV	154 CL_EU_11_DEV_154	Strength of top-down cascade in marine size spectrum	strength of top-down cascade in marine size spectrum	34 37 334 335	Cefas - AR 141	size spectrum
DEVOTES indicators	CL_EU_11_DEV	155 CL_EU_11_DEV_155	Strength of bottom-up cascade in marine size spectrum	strength of bottom-up cascade in marine size spectrum	34 37	Cefas - AR 142	size spectrum
DEVOTES indicators	CL_EU_11_DEV	156 CL_EU_11_DEV_156	Pareto exponent of the distribution of species richness over body sizes	Pareto exponent of the distribution of species richness over body sizes	34 38 39 40	Cefas - AR 143	body sizes of extant species (larger than some threshold, e.g. 1g)
DEVOTES indicators	CL_EU_11_DEV	157 CL_EU_11_DEV_157	Competition avoidance among species	competition avoidance among species	34 41 39	Cefas-AR 144	Diet data
DEVOTES indicators	CL_EU_11_DEV	158 CL_EU_11_DEV_158	Body length distribution of fish in the community	Mean length of fish in the community	33 42	Cefas - CL 145	length of fishes
DEVOTES indicators	CL_EU_11_DEV	159 CL_EU_11_DEV_159	Biomass ratio of predatory fish	Proportion of predatory fish	33 42	Cefas - CL 146	biomass of fish
DEVOTES indicators	CL_EU_11_DEV	160 CL_EU_11_DEV_160	Life span of fish	Mean life span	33 42	Cefas-CL 147	biomass of fish plus estimate of longevity

DEVOTES indicators	CL_EU_11_DEV	161 CL_EU_11_DEV_161	Distributional range of selected fish species	Distributional range of fish (sensitive species)	44 43	Cefas - CL 148	Proportion of sampled ICES rectangles (for shelf seas) or depth bands (for shelf edge) in which the species occurs.
DEVOTES indicators	CL_EU_11_DEV	162 CL_EU_11_DEV_162	Distributional pattern of fish (sensitive species)	Distributional pattern of fish (sensitive species)	44	Cefas - CL 149	Catchable proportion of fish+invertebrate populations by survey (weight or numbers)
DEVOTES indicators	CL_EU_11_DEV	163 CL_EU_11_DEV_163	Population abundance of a suite of selected species	Population abundance of a suite of selected species	44 43	Cefas - CL 150	log abundance estimates standardised to a defined area appropriate to the survey for a suite of sensitive species
DEVOTES indicators	CL_EU_11_DEV	164 CL_EU_11_DEV_164	Population biomass of a suite of selected species	Population biomass of a suite of selected species	44 43	Cefas - CL 151	log biomass estimates (directly weighed or from LW relationships) standardised to a defined area appropriate to the survey for a suite of sensitive species
DEVOTES indicators	CL_EU_11_DEV	165 CL_EU_11_DEV_165	Abundance ratio of mature individuals of selected fish species	Proportion of mature fish in the population	44 43	Cefas - CL 152	Proportion of individual fish above length at first maturity for a suite of sensitive species
DEVOTES indicators	CL_EU_11_DEV	166 CL_EU_11_DEV_166	Species diversity (Hills index) for fish and invertebrates	Hills N1 indicator of species diversity	44 43	Cefas - CL 153	species composition, abundance or biomass data
DEVOTES indicators	CL_EU_11_DEV	171 CL_EU_11_DEV_171	WFD SHWAP - Schleswig-Holstein Wadden Sea Assessment of Phytobenthos	Schleswig-Holstein Wadden Sea Assessment of Phytobenthos (SHWAP)	46 49	MarLim-KF 35	
DEVOTES indicators	CL_EU_11_DEV	172 CL_EU_11_DEV_172	WFD BALCOSS - Macrophyte index	Assessment system for macroalgae and angiosperms in the outer coastal waters of the Baltic (BALCOSS)	46 50	MarLim-KF 39	
DEVOTES indicators	CL_EU_11_DEV	173 CL_EU_11_DEV_173	WFD ELBO - German Macrophyte index	Assessment system for angiosperms and charophytes in the inner coastal waters of the Baltic (ELBO)	46 51	MarLim-KF 40	species-specific depth limits, species-specific cover data, species composition
DEVOTES indicators	CL_EU_11_DEV	175 CL_EU_11_DEV_175	MarBIT - Marine Biotic Index Tool	Marine Biotic Index Tool (MarBIT)	46 53 54	MarLim-KF 55	species composition, abundance data, autecological species information (sensitive/tolerant classification)
DEVOTES indicators	CL_EU_11_DEV	176 CL_EU_11_DEV_176	Areal extent of intertidal opportunistic green algae	Areal extent of intertidal opportunistic green algae	46 55 49	MarLim-KF 72	Areal extent data
DEVOTES indicators	CL_EU_11_DEV	177 CL_EU_11_DEV_177	WFD German Ecological phytoplankton assessment with Chl a and Phaeocystis blooms	Ecological phytoplankton assessment with Chl a and Phaeocystis blooms	56	MarLim-KF 108	chl a measurement, species composition, cell counts
DEVOTES indicators	CL_EU_11_DEV	178 CL_EU_11_DEV_178	WFD German Ecological phytoplankton assessment with Chl a and biovolume	Ecological phytoplankton assessment with Chl a and biovolume	57	MarLim-KF 109	chl a measurement, s, biovolume measurement, species composition, cell counts
DEVOTES indicators	CL_EU_11_DEV	181 CL_EU_11_DEV_181	Depth limit of spermatophytes	Depth limit of spermatophytes	46 51	MarLim-KF 112	spermatophyte cover (%) per water depth
DEVOTES indicators	CL_EU_11_DEV	182 CL_EU_11_DEV_182	Depth limit of charophytes	Depth limit of charophytes	46 51	MarLim-KF 113	charophyte cover (%) per water depth
DEVOTES indicators	CL_EU_11_DEV	183 CL_EU_11_DEV_183	Depth limit of attached perennial macroalgae	Depth limit of attached perennial macroalgae	46	MarLim-KF 114	Perennial macroalgae (substrate specific) cover (%) per water depth
DEVOTES indicators	CL_EU_11_DEV	184 CL_EU_11_DEV_184	Depth limit of Fucus spp.	Depth limit of Fucus spp.	46 50	MarLim-KF 115	Fucus (substrate specific) cover (%) per water depth
DEVOTES indicators	CL_EU_11_DEV	185 CL_EU_11_DEV_185	Biomass ratio of opportunistic macroalgae	Biomass proportion of opportunistic macroalgae	46 50	MarLim-KF 116	species specific biomass data, species composition and autecological species information

DEVOTES indicators	CL_EU_11_DEV	186 CL_EU_11_DEV_186	Macrophyte species reduction (reduced species list)	Macrophyte species reduction (reduced species list)	50 46	MarLim-KF 117	species composition
DEVOTES indicators	CL_EU_11_DEV	187 CL_EU_11_DEV_187	TSI - Taxonomic Spread Index	Taxonomic Spread Index (TSI)	53 46	MarLim-KF 118	species composition and taxonomical species information
DEVOTES indicators	CL_EU_11_DEV	188 CL_EU_11_DEV_188	HPI - Helgoland Phytobenthic Index	Helgoland Phytobenthic Index (HPI)	46 59	MarLim-KF 119	species-specific depth limits, species composition, cover data
DEVOTES indicators	CL_EU_11_DEV	189 CL_EU_11_DEV_189	Species diversity and landscape quality index	Species diversity and landscape quality	60	MarLim-KF 121	percentage of population sizes (number of territories or breeding pairs) of 10 different seabird species
DEVOTES indicators	CL_EU_11_DEV	190 CL_EU_11_DEV_190	Endangered species index	Endangered species	60	MarLim-KF 122	The underlying data are the assessments of species in Red List categories. The final index is a single figure representing the degree of endangerment for all assessed species.
DEVOTES indicators	CL_EU_11_DEV	191 CL_EU_11_DEV_191	Conservation status of habitats and species	Conservation status of Habitats Directive habitats and species	60	MarLim-KF 123	
DEVOTES indicators	CL_EU_11_DEV	192 CL_EU_11_DEV_192	Number of species of Black List of Invasive Alien Species	Black List of Invasive Alien Species	60	MarLim-KF 124	
DEVOTES indicators	CL_EU_11_DEV	193 CL_EU_11_DEV_193	Ratio of area of protected area/total area	Total size of protected areas	60	MarLim-KF 125	
DEVOTES indicators	CL_EU_11_DEV	194 CL_EU_11_DEV_194	Ratio of surface water bodies in good ecological status	Ecological status of surface waters		MarLim-KF 126	
DEVOTES indicators	CL_EU_11_DEV	195 CL_EU_11_DEV_195	Index for sustainable marine fisheries	Sustainable marine fisheries	60	MarLim-KF 127	
DEVOTES indicators	CL_EU_11_DEV	196 CL_EU_11_DEV_196	AETV - Estuary Typology Procedure	Estuary Typology Procedure (AETV)	46	MarLim-KF 128	species composition, abundance data, autecological species information
DEVOTES indicators	CL_EU_11_DEV	198 CL_EU_11_DEV_198	Distributional range of cephalopods	[cephalopods] Distributional range	61 78	AZTI-JGR 133	
DEVOTES indicators	CL_EU_11_DEV	199 CL_EU_11_DEV_199	Distributional range of demersal elasmobranchs	[demersal elasmobranchs] Distributional range	61 63 79	AZTI-JGR 110	
DEVOTES indicators	CL_EU_11_DEV	200 CL_EU_11_DEV_200	Distributional range of pelagic fish	[pelagic fish] Distributional range	61	AZTI-JGR 111	
DEVOTES indicators	CL_EU_11_DEV	201 CL_EU_11_DEV_201	Distributional range of phytoplankton	[phytoplankton] Distributional range	61 63	AZTI-JGR 112	
DEVOTES indicators	CL_EU_11_DEV	202 CL_EU_11_DEV_202	Distributional range of sea-turtles	[sea-turtles] Distributional range	61 62 63 78 79	AZTI-JGR 113	
DEVOTES indicators	CL_EU_11_DEV	203 CL_EU_11_DEV_203	Distributional range of zooplankton	[zooplankton] Distributional range	61 63	AZTI-JGR 114	
DEVOTES indicators	CL_EU_11_DEV	204 CL_EU_11_DEV_204	Distributional range of selected demersal fish	[demersal fishes] Distributional range	62 63 79	AZTI-JGR 115	
DEVOTES indicators	CL_EU_11_DEV	205 CL_EU_11_DEV_205	Distributional range of selected benthic invertebrate species	[benthic invertebrates] Distributional range	63	AZTI-JGR 119	
DEVOTES indicators	CL_EU_11_DEV	206 CL_EU_11_DEV_206	Distributional range of whales	[whales] Distributional range	79 62 63 61	AZTI-JGR 125	
DEVOTES indicators	CL_EU_11_DEV	207 CL_EU_11_DEV_207	Distributional range of birds	[birds] Distributional range	61 62 79 63	AZTI-JGR 129	distribution and number of breeding colonies
DEVOTES indicators	CL_EU_11_DEV	208 CL_EU_11_DEV_208	Distributional pattern within the distributional range of sea-turtles	[sea-turtles] Distributional pattern within the distributional range	62 78 79	AZTI-JGR 140	
DEVOTES indicators	CL_EU_11_DEV	209 CL_EU_11_DEV_209	Distributional pattern within the distributional range of demersal fish	[demersal fish] distributional pattern within the distributional range	63 78 79	AZTI-JGR 141	
DEVOTES indicators	CL_EU_11_DEV	21 CL_EU_11_DEV_21	Population structure of long-lived macrozoobenthic species	Population structure of long-lived macrozoobenthic species	270	SYKE-LU 21	size measurements of selected bivalve species
DEVOTES indicators	CL_EU_11_DEV	210 CL_EU_11_DEV_210	Distributional pattern within the distributional range of demersal elasmobranchs	[demersal elasmobranchs] distributional pattern within the distributional range	63 78 79	AZTI-JGR 148	

DEVOTES indicators	CL_EU_11_DEV	211 CL_EU_11_DEV_211	Distributional pattern within the distributional range of phytoplankton	[phytoplankton] distributional pattern within the distributional range	63	AZTI-JGR 143	
DEVOTES indicators	CL_EU_11_DEV	212 CL_EU_11_DEV_212	Distributional pattern within the distributional range of zooplankton	[zooplankton] distributional pattern within the distributional range	63	AZTI-JGR 144	
DEVOTES indicators	CL_EU_11_DEV	213 CL_EU_11_DEV_213	Distributional pattern within the distributional range of birds	[birds] distributional pattern within the distributional range	61	AZTI-JGR 145	
DEVOTES indicators	CL_EU_11_DEV	214 CL_EU_11_DEV_214	Distributional pattern within the distributional range of cephalopods	[cephalopods] distributional pattern within the distributional range	78	AZTI-JGR 149	
DEVOTES indicators	CL_EU_11_DEV	215 CL_EU_11_DEV_215	Abundance of cephalopods	[cephalopods] population abundance and/or biomass	61	AZTI-JGR 154a	
DEVOTES indicators	CL_EU_11_DEV	219 CL_EU_11_DEV_219	Ratio of fish species in good ecological status	[Demersal fishes] percent of species in good ecological status	62	AZTI-JGR 158	
DEVOTES indicators	CL_EU_11_DEV	22 CL_EU_11_DEV_22	Trends in arrival of new non-indigenous species	Trends in arrival of new non-indigenous species	270	SYKE-LU 22	number of new arrivals of non-indigenous species
DEVOTES indicators	CL_EU_11_DEV	220 CL_EU_11_DEV_220	Abundance of demersal fish - representation for georeferenced data (GIS)	[Demersal fish] representation for georeferenced data (GIS)	63	AZTI-JGR 159	
DEVOTES indicators	CL_EU_11_DEV	221 CL_EU_11_DEV_221	Abundance of demersal elasmobranchs - representation for georeferenced data (GIS)	[Demersal elasmobranchs] representation for georeferenced data (GIS)	63	AZTI-JGR 160	
DEVOTES indicators	CL_EU_11_DEV	223 CL_EU_11_DEV_223	Abundance of toxic phytoplankton taxa	[phytoplankton] abundance of toxic taxa	63	AZTI-JGR 162	count of species from toxic taxa
DEVOTES indicators	CL_EU_11_DEV	227 CL_EU_11_DEV_227	Biomass of zooplankton	[zooplankton] biomass (dry weight)	63	AZTI-JGR 166	dry weight
DEVOTES indicators	CL_EU_11_DEV	229 CL_EU_11_DEV_229	Abundance of whales	[whales] density based on sightings	63	AZTI-JGR 168	density based on sightings
DEVOTES indicators	CL_EU_11_DEV	23 CL_EU_11_DEV_23	State of benthic communities	State of the soft-bottom macrofauna community	28	SYKE-LU 23	Species abundances, ind/m2
DEVOTES indicators	CL_EU_11_DEV	230 CL_EU_11_DEV_230	Breeding population size of birds	[birds] breeding population size	61	AZTI-JGR 169	
DEVOTES indicators	CL_EU_11_DEV	231 CL_EU_11_DEV_231	Abundance of bird colonies	census of bird colonies	61	AZTI-JGR 170	Counts of bird colonies
DEVOTES indicators	CL_EU_11_DEV	232 CL_EU_11_DEV_232	Abundance of demersal fish	[demersal fish] mean abundance	78	AZTI-JGR 171	
DEVOTES indicators	CL_EU_11_DEV	234 CL_EU_11_DEV_234	Biomass of demersal fish	[demersal fish] mean biomass	78	AZTI-JGR 173	
DEVOTES indicators	CL_EU_11_DEV	236 CL_EU_11_DEV_236	Body length distribution of fish	[fish] Population demographic characteristic	79	AZTI-JGR 175a	length-frequency distribution
DEVOTES indicators	CL_EU_11_DEV	239 CL_EU_11_DEV_239	Body length distribution of sea-turtles (longest shell)	[sea-turtles] demographic characteristics , longest shell, fecundity rate, mortality rate, genetic structure	62	AZTI-JGR 178a	
DEVOTES indicators	CL_EU_11_DEV	241 CL_EU_11_DEV_241	Abundance rank of phytoplankton species	[Phytoplankton] rank of the abundance of each taxon		AZTI-JGR 180	
DEVOTES indicators	CL_EU_11_DEV	242 CL_EU_11_DEV_242	Presence rank of phytoplankton	[Phytoplankton] rank of the percentage of sites at which the presence or absence of each taxon	63	AZTI-JGR 181	
DEVOTES indicators	CL_EU_11_DEV	244 CL_EU_11_DEV_244	Abundance rank of zooplankton species	[Zooplankton] rank of the abundance of each taxon	63	AZTI-JGR 183	
DEVOTES indicators	CL_EU_11_DEV	245 CL_EU_11_DEV_245	Presence rank of zooplankton taxa	[Zooplankton] rank of the percentage of sites at which the presence or absence of each taxon	63	AZTI-JGR 184	

DEVOTES indicators	CL_EU_11_DEV	247 CL_EU_11_DEV_247	Demographic characteristics of mammals	[Mammals] demographic characteristics	64	AZTI-JGR 186	Multimetric index with: size at first maturity, fecundity rate, survival rate, new born survival rate, juvenile survival rate, birth rate, population growth rate, birth interval and stomach contents based on stranding, bycatch and survey data
DEVOTES indicators	CL_EU_11_DEV	248 CL_EU_11_DEV_248	Productivity of seabirds (annual breeding success)	[seabirds] Breeding success (annual productivity)	61	AZTI-JGR 187	
DEVOTES indicators	CL_EU_11_DEV	249 CL_EU_11_DEV_249	Breeding failures (widespread colony abandonment of birds)	[seabirds] Survival rate Widespread colony abandonment (breeding failures)	61	AZTI-JGR 188	
DEVOTES indicators	CL_EU_11_DEV	250 CL_EU_11_DEV_250	Survival rate of birds	[seabirds] Survival rate	61	AZTI-JGR 189	
DEVOTES indicators	CL_EU_11_DEV	251 CL_EU_11_DEV_251	Number of introduced predating birds	[seabirds] Introduced predators	61	AZTI-JGR 190	
DEVOTES indicators	CL_EU_11_DEV	252 CL_EU_11_DEV_252	By-catch of seabirds	[seabirds] Bycatch	61	AZTI-JGR 191	
DEVOTES indicators	CL_EU_11_DEV	253 CL_EU_11_DEV_253	Light pollution for sea birds	[seabirds] Light pollution	61	AZTI-JGR 192	
DEVOTES indicators	CL_EU_11_DEV	255 CL_EU_11_DEV_255	Distributional range of selected species	distributional range of characteristic species	78	AZTI-JGR 194	
DEVOTES indicators	CL_EU_11_DEV	256 CL_EU_11_DEV_256	Body length distribution of pelagic invertebrates	95th percentile of the body length distribution	78	AZTI-JGR 195	Mobile invertebrates: crustaceans and cephalopods
DEVOTES indicators	CL_EU_11_DEV	260 CL_EU_11_DEV_260	Depth distribution of selected habitats	[habitat] maximum and minimum depth	61 63 78	AZTI-JGR 200	
DEVOTES indicators	CL_EU_11_DEV	261 CL_EU_11_DEV_261	Depth distribution of circalittoral and bathial soft bottom habitats	[Circalittoral and bathial soft bottom habitats] 25th and 75th percentile depth	62 79	AZTI-JGR 201	Depth distribution (25th and 75th percentile depth).
DEVOTES indicators	CL_EU_11_DEV	262 CL_EU_11_DEV_262	Distributional range of circalittoral and bathial soft bottom habitats	[Circalittoral and bathial soft bottom habitats] maximum and minimum latitude	62 79	AZTI-JGR 202	
DEVOTES indicators	CL_EU_11_DEV	264 CL_EU_11_DEV_264	Number of lagoons	number of lagoons	62 79	AZTI-JGR 204	
DEVOTES indicators	CL_EU_11_DEV	265 CL_EU_11_DEV_265	Depth distribution of Posidonia oceanica meadows	upper and lower limits of Posidonia oceanica meadows	62 79	AZTI-JGR 205	
DEVOTES indicators	CL_EU_11_DEV	266 CL_EU_11_DEV_266	Number of rocky habitat polygons	number of rocky habitat polygons	62 79	AZTI-JGR 206	[Sublittoral rocky bottom habitats]
DEVOTES indicators	CL_EU_11_DEV	267 CL_EU_11_DEV_267	Areal extent of rocky habitats	rocky habitat polygon boundary	62 79	AZTI-JGR 207	[Sublittoral rocky bottom habitats]
DEVOTES indicators	CL_EU_11_DEV	269 CL_EU_11_DEV_269	Distributional range of selected habitats	[Habitat] maximum and minimum latitude	63	AZTI-JGR 211	
DEVOTES indicators	CL_EU_11_DEV	271 CL_EU_11_DEV_271	Ratio of area of infralittoral soft bottom habitats	area occupied	62	AZTI-JGR 222	
DEVOTES indicators	CL_EU_11_DEV	272 CL_EU_11_DEV_272	Index of shape complexity	index of shape complexity	62	AZTI-JGR 223	[Infralittoral soft bottom habitats]
DEVOTES indicators	CL_EU_11_DEV	273 CL_EU_11_DEV_273	Perimeters (mean) of rocky habitats	mean of the perimeters of all polygons of rocky habitat	62	AZTI-JGR 224	[Infralittoral soft bottom habitats]
DEVOTES indicators	CL_EU_11_DEV	274 CL_EU_11_DEV_274	Number of patches or polygons of rocky habitats (0-50 m depth)	number of patches or polygons of rocky habitats (0-50 m depth)	62	AZTI-JGR 225	[Infralittoral soft bottom habitats]
DEVOTES indicators	CL_EU_11_DEV	275 CL_EU_11_DEV_275	Ratio perimeters/areal extent of rocky habitats	patch boundary density (ratio of "sum of the perimeters of all polygons of rocky habitat" to "area occupied")	62	AZTI-JGR 226	[Infralittoral soft bottom habitats]
DEVOTES indicators	CL_EU_11_DEV	276 CL_EU_11_DEV_276	Patch size standard deviation	patch size standard deviation	62	AZTI-JGR 227	[Infralittoral soft bottom habitats]
DEVOTES indicators	CL_EU_11_DEV	277 CL_EU_11_DEV_277	Perimeters (sum) of rocky habitats	sum of the perimeters of all polygons of rocky habitat	62	AZTI-JGR 228	[Infralittoral soft bottom habitats]
DEVOTES indicators	CL_EU_11_DEV	278 CL_EU_11_DEV_278	Distribution changes of established biocenosis	modification in the distribution of naturally established biocenosis	62	AZTI-JGR 229	
DEVOTES indicators	CL_EU_11_DEV	279 CL_EU_11_DEV_279	Ratio of area of selected habitats	area occupied by each habitat	61 63 78 62	AZTI-JGR 230	
DEVOTES indicators	CL_EU_11_DEV	28 CL_EU_11_DEV_28	Abundance or biomass of key species in the coastal waters	Abundance or biomass of key species in the coastal waters	26	SYKE-LU 28	

DEVOTES indicators	CL_EU_11_DEV	281 CL_EU_11_DEV_281	Ratio of area with selected habitat in a bathymetric stratum	percent of bathymetric strata occupied by habitat	62 63 78 79	AZTI-JGR 232	
DEVOTES indicators	CL_EU_11_DEV	282 CL_EU_11_DEV_282	Areal extent of selected rocky habitats	Area of the different categories of rocky habitats	62	AZTI-JGR 233	
DEVOTES indicators	CL_EU_11_DEV	283 CL_EU_11_DEV_283	Areal extent of infralittoral rocky biogenic habitats	infralittoral rocky biogenic habitat area	62	AZTI-JGR 234	
DEVOTES indicators	CL_EU_11_DEV	284 CL_EU_11_DEV_284	Areal extent of infralittoral rocky habitats	infralittoral rocky habitat area	62	AZTI-JGR 235	
DEVOTES indicators	CL_EU_11_DEV	285 CL_EU_11_DEV_285	Areal extent of habitat at risk of environmental degradation	area of habitat at risk of environmental degradation	62	AZTI-JGR 236	
DEVOTES indicators	CL_EU_11_DEV	286 CL_EU_11_DEV_286	Ratio of area of lagoons	area occupied by lagoons	62	AZTI-JGR 237	
DEVOTES indicators	CL_EU_11_DEV	288 CL_EU_11_DEV_288	Areal extent of dead Posidonia oceanica meadows	Surface of dead meadows (Posidonia oceanica)	62	AZTI-JGR 239	
DEVOTES indicators	CL_EU_11_DEV	289 CL_EU_11_DEV_289	Frequency of occurrence of habitats per square (in those cases without spatial continuity in cartography)	[Habitat] frequency of occurrence per square (in those cases without spatial continuity in cartography)	63	AZTI-JGR 241	
DEVOTES indicators	CL_EU_11_DEV	290 CL_EU_11_DEV_290	Areal extent (volume) of pelagic habitats	volume	63	AZTI-JGR 250	
DEVOTES indicators	CL_EU_11_DEV	291 CL_EU_11_DEV_291	Species diversity (Shannon index)	Shannon diversity index	61 79 63 78 345 206	AZTI-JGR 251	
DEVOTES indicators	CL_EU_11_DEV	293 CL_EU_11_DEV_293	Species diversity (Shannon index) of selected habitats	species diversity (Shannon)	62 345 206	AZTI-JGR 253	
DEVOTES indicators	CL_EU_11_DEV	296 CL_EU_11_DEV_296	Number of biocenosis/facies	number of biocenosis/facies	62	AZTI-JGR 256	[Infralittoral rocky bottom habitats]
DEVOTES indicators	CL_EU_11_DEV	300 CL_EU_11_DEV_300	CYMOX index for lagoons	[Lagoons] composition and abundance of macroalgae and angiosperm (richness, diversity, percentage of opportunistic species, percentage of sensitive species, CYMOX index)	62 331	AZTI-JGR 262, JRC-HT	
DEVOTES indicators	CL_EU_11_DEV	301 CL_EU_11_DEV_301	Abundance and composition of riparian vegetation	[Lagoons] composition and abundance of riparian vegetation	62	AZTI-JGR 263	
DEVOTES indicators	CL_EU_11_DEV	302 CL_EU_11_DEV_302	Abundance, composition and age structure of fishes in lagoons	[Lagoons] composition, abundance and age structure of fishes	62	AZTI-JGR 264	
DEVOTES indicators	CL_EU_11_DEV	304 CL_EU_11_DEV_304	Density of Pinna nobilis	[Pinna nobilis] density, age-frequency distribution and population demographics	62	AZTI-JGR 266a	
DEVOTES indicators	CL_EU_11_DEV	305 CL_EU_11_DEV_305	Flowering index of seagrass	[Seagrass] flowering index	62 330	AZTI-JGR 267	
DEVOTES indicators	CL_EU_11_DEV	308 CL_EU_11_DEV_308	Spatio-temporal variation of structural descriptors of Posidonia oceanica seagrass	spatio-temporal variation of structural descriptors of Posidonia oceanica seagrass	62	AZTI-JGR 270	
DEVOTES indicators	CL_EU_11_DEV	313 CL_EU_11_DEV_313	Abundance and composition of functional groups in selected habitats	composition and abundance of functional groups	62 61 63 78	AZTI-JGR 281, AZTI-JGR 277, JRC-HT	Species composition and abundance data, species-specific functional group definition
DEVOTES indicators	CL_EU_11_DEV	314 CL_EU_11_DEV_314	Abundance of keystone species or associated species	density of keystone species or associated species	62	AZTI-JGR 282	[Infralittoral soft bottom habitats]
DEVOTES indicators	CL_EU_11_DEV	318 CL_EU_11_DEV_318	Hydrological condition of infralittoral rocky bottom habitats	climate, geomorphology, hydrographic features [Infralittoral rocky bottom habitats]	62	AZTI-JGR 290	
DEVOTES indicators	CL_EU_11_DEV	322 CL_EU_11_DEV_322	Biomass of functional groups	relative biomass of functional groups	79	AZTI-JGR 294	Samples from Circalittoral and depth habitats (maerl, coralline, soft bottom and circalittoral rocky habitats)
DEVOTES indicators	CL_EU_11_DEV	325 CL_EU_11_DEV_325	Species richness of birds (in the Important Bird Areas network)	Biodiversity of birds in the Important Bird Areas network	61	AZTI-JGR 297	

DEVOTES indicators	CL_EU_11_DEV	329 CL_EU_11_DEV_329	Biomass or functional groups of demersal biota (fishes and invertebrates)	Biomass or functional groups of demersal biota (fishes and invertebrates)	82 83 80 81	AZTI-JGR 307
DEVOTES indicators	CL_EU_11_DEV	33 CL_EU_11_DEV_33	Growth rate of mammals	Growth rate of marine mammal populations	342	SYKE-LU 33
DEVOTES indicators	CL_EU_11_DEV	331 CL_EU_11_DEV_331	Abundance of planktonic copepods	Abundance of planktonic copepods	80	AZTI-JGR 309
DEVOTES indicators	CL_EU_11_DEV	334 CL_EU_11_DEV_334	Ratio of area of biogenic/vulnerable habitat	Percentage of area occupied by biogenic/vulnerable habitat	86 85 276 87	AZTI-JGR 318
DEVOTES indicators	CL_EU_11_DEV	335 CL_EU_11_DEV_335	Areal extent of biogenic/vulnerable habitats	Area occupied by biogenic/vulnerable habitat	87 276 85 86 277	AZTI-JGR 319
DEVOTES indicators	CL_EU_11_DEV	337 CL_EU_11_DEV_337	Areal extent of selected habitats	Area occupied by habitat	87 276 85 86	AZTI-JGR 321
DEVOTES indicators	CL_EU_11_DEV	338 CL_EU_11_DEV_338	Biomass (per unit of surface) of structuring/engineering species (per habitat)	biomass or abundance (per unit of surface) of structuring/engineering species (per habitat)	86 85 276 87	AZTI-JGR 322b
DEVOTES indicators	CL_EU_11_DEV	339 CL_EU_11_DEV_339	Ratio of area potentially affected by changes in the sedimentation rate	percentage of area potentially affected by changes in the sedimentation rate	86 85 87	AZTI-JGR 323
DEVOTES indicators	CL_EU_11_DEV	340 CL_EU_11_DEV_340	Ratio of area potentially affected by selective extraction of substrate	percentage of area potentially affected by selective extraction of substrate	86 85 87	AZTI-JGR 324
DEVOTES indicators	CL_EU_11_DEV	341 CL_EU_11_DEV_341	Ratio of area potentially affected by discharge of materials	percentage of area potentially affected by discharge of materials	86 85 87	AZTI-JGR 325
DEVOTES indicators	CL_EU_11_DEV	342 CL_EU_11_DEV_342	Ratio of area potentially affected by changes in the seafloor topography	percentage of area potentially affected by changes in the seafloor topography	86 85 87	AZTI-JGR 326
DEVOTES indicators	CL_EU_11_DEV	343 CL_EU_11_DEV_343	Ratio of area affected by each type of fishing gear	percentage of area affected by each type of fishing gear	87 276 85 86	AZTI-JGR 327
DEVOTES indicators	CL_EU_11_DEV	345 CL_EU_11_DEV_345	Species diversity of benthic communities	diversity of benthic communities	87 277 276 85 86	AZTI-JGR 329
DEVOTES indicators	CL_EU_11_DEV	349 CL_EU_11_DEV_349	Areal extent of altered Posidonia oceanica meadows	surface of areas with some degree of alteration in the Posidonia oceanica meadows	276	AZTI-JGR 365
DEVOTES indicators	CL_EU_11_DEV	35 CL_EU_11_DEV_35	Depth limit of macrophytes	Depth distribution of coastal macrophytes	26	SYKE-LU 35
DEVOTES indicators	CL_EU_11_DEV	352 CL_EU_11_DEV_352	Ratio of area affected by aquaculture	percentage of area affected by aquaculture	277	AZTI-JGR 375
DEVOTES indicators	CL_EU_11_DEV	353 CL_EU_11_DEV_353	Ratio of area affected by cables and pipelines	percentage of area affected by cables and pipelines	277	AZTI-JGR 376
DEVOTES indicators	CL_EU_11_DEV	354 CL_EU_11_DEV_354	Ratio of area affected by human highly modified coast	percentage of area affected by human highly modified coast	277	AZTI-JGR 377
DEVOTES indicators	CL_EU_11_DEV	355 CL_EU_11_DEV_355	Ratio of area affected by harbor dredging activities	percentage of area affected by harbor dredging activities	277	AZTI-JGR 378
DEVOTES indicators	CL_EU_11_DEV	356 CL_EU_11_DEV_356	Ratio of area affected by anchorage	percentage of area affected by anchorage	277	AZTI-JGR 379
DEVOTES indicators	CL_EU_11_DEV	357 CL_EU_11_DEV_357	Ratio of area affected by dredging disposal	percentage of area affected by dredging disposal	277	AZTI-JGR 380
DEVOTES indicators	CL_EU_11_DEV	358 CL_EU_11_DEV_358	Ratio of area affected by port infrastructure	percentage of area affected by port infrastructure	277	AZTI-JGR 381
DEVOTES indicators	CL_EU_11_DEV	359 CL_EU_11_DEV_359	Ratio of area affected by artificial beaches or beach nourishment	percentage of area affected by artificial beaches or beach nourishment	277	AZTI-JGR 382
DEVOTES indicators	CL_EU_11_DEV	360 CL_EU_11_DEV_360	Distributional range and pattern of harbour porpoise	The occurrence of porpoise in its distributional range	65	AU-DKU/JHA 108

DEVOTES indicators	CL_EU_11_DEV	361 CL_EU_11_DEV_361	Number of protected areas with occurrences of common seal	The number of protected areas with occurrences of common seal	65	AU-DKJ/JHA 109	The number of breeding sites; the areal extent of suitable breeding sites (in protected areas of the North sea and the Baltic sea)
DEVOTES indicators	CL_EU_11_DEV	362 CL_EU_11_DEV_362	Distributional range of selected bird species	Area of distributional range of divers, common scoter, elder and long-tailed duck	65	AU-DKJ/JHA 110	
DEVOTES indicators	CL_EU_11_DEV	363 CL_EU_11_DEV_363	Areal extent of macroalgae	The extent of coverage and depth distribution of macroalgae (macroalgal area)	65	AU-DKJ/JHA 111	For the stoneriffs in kattagat, the Danish Straits and coasts of Bornholm)
DEVOTES indicators	CL_EU_11_DEV	364 CL_EU_11_DEV_364	Abundance of populations of selected marine mammals	Counts of the size of porpoise and common seal populations	65	AU-DKJ/JHA 112	
DEVOTES indicators	CL_EU_11_DEV	366 CL_EU_11_DEV_366	Abundance of selected whale species	Minke whale summer abundance	66	AU-DKJ/JHA 114	Minke whale summer abundance
DEVOTES indicators	CL_EU_11_DEV	367 CL_EU_11_DEV_367	Abundance of white-beaked dolphin (in summer)	White-beaked dolphin summer abundance	66	AU-DKJ/JHA 115	
DEVOTES indicators	CL_EU_11_DEV	368 CL_EU_11_DEV_368	Blubber thickness of stranded seals	Thickness of the blubber layer on stranded animals	65	AU-DKJ/JHA 116	
DEVOTES indicators	CL_EU_11_DEV	369 CL_EU_11_DEV_369	Abundance of seal pups	Counts of seal pups	65	AU-DKJ/JHA 117	
DEVOTES indicators	CL_EU_11_DEV	370 CL_EU_11_DEV_370	Abundance of selected bird populations (winter)	Counts of the winter populations of divers, common scoter, elder and long-tailed duck	65	AU-DKJ/JHA 118	
DEVOTES indicators	CL_EU_11_DEV	371 CL_EU_11_DEV_371	Abundance of Fulmar (in winter)	Fulmar winter abundance (encounter rate)	66	AU-DKJ/JHA 119	
DEVOTES indicators	CL_EU_11_DEV	372 CL_EU_11_DEV_372	Abundance of kittiwake (in winter)	Kittiwake winter abundance (encounter rate)	66	AU-DKJ/JHA 120	
DEVOTES indicators	CL_EU_11_DEV	373 CL_EU_11_DEV_373	Abundance of guillemot (in winter)	Guillemot winter abundance (encounter rate)	66	AU-DKJ/JHA 121	
DEVOTES indicators	CL_EU_11_DEV	377 CL_EU_11_DEV_377	Biomass of benthic invertebrates	Invertebrate biomass	66	AU-DKJ/JHA 125	
DEVOTES indicators	CL_EU_11_DEV	378 CL_EU_11_DEV_378	Biomass of selected fish species (SSB - spawning stock biomass)	SSB (spawning stock biomass) of selected fish species	66	AU-DKJ/JHA 126	Fish species include cod, sole, herring, plaice, haddock, saithe, sandeel, norway pout, sprat, south estaren NS, depending on area
DEVOTES indicators	CL_EU_11_DEV	380 CL_EU_11_DEV_380	Log number of long lived fish	Log number of long lived fish	66	AU-DKJ/JHA 128	
DEVOTES indicators	CL_EU_11_DEV	382 CL_EU_11_DEV_382	Evenness of fish	Species evenness (fish)	66	AU-DKJ/JHA 130	
DEVOTES indicators	CL_EU_11_DEV	383 CL_EU_11_DEV_383	Size spectra slope (fish)	Size spectra slope (fish)	66	AU-DKJ/JHA 131	
DEVOTES indicators	CL_EU_11_DEV	384 CL_EU_11_DEV_384	Size spectra hight (fish)	Size spectra hight (fish)	66	AU-DKJ/JHA 132	
DEVOTES indicators	CL_EU_11_DEV	386 CL_EU_11_DEV_386	State of selected habitats	Quality of sandeel habitats	65	AU-DKJ/JHA 134	
DEVOTES indicators	CL_EU_11_DEV	389 CL_EU_11_DEV_389	Distributional range of horse mussel banks	The occurrence of horse mussel banks	65	AU-DKJ/JHA 137	Method non-specified. Relevant for Kattegat and the Danish Straits. Study of possible occurrences of horse mussels in connection with bottom trawling studies of the North Sea.
DEVOTES indicators	CL_EU_11_DEV	390 CL_EU_11_DEV_390	Distributional range of Haploops communities	The occurrence of tang flea communities (Haploops)	65	AU-DKJ/JHA 138	
DEVOTES indicators	CL_EU_11_DEV	391 CL_EU_11_DEV_391	Deposition of fine-grained sediments in sandeel areas from construction works in the marine environment	Deposition of fine-grained sediments in sandeel areas from construction works in the marine environment.	65	AU-DKJ/JHA 139	
DEVOTES indicators	CL_EU_11_DEV	392 CL_EU_11_DEV_392	Impacts of anthropogenic physical disturbance on the sea pen community	Monitoring of human-induced physical disturbance in selected areas with the sea pen community.	65	AU-DKJ/JHA 140	

DEVOTES indicators	CL_EU_11_DEV	393 CL_EU_11_DEV_393	Depth limit of eelgrass	Eelgrass depth limit		66 67	AU-DKU/JHA 23	eelgrass cover (%) with information on water depth and position
DEVOTES indicators	CL_EU_11_DEV	394 CL_EU_11_DEV_394	Depth limit of <i>Ruppia</i> spp.	<i>Ruppia</i> sp. depth limit		66	AU-DKU/JHA 141	cover (%) with information on water depth and position
DEVOTES indicators	CL_EU_11_DEV	396 CL_EU_11_DEV_396	Perimeter of wetlands	Wetlands perimeter		66	AU-DKU/JHA 143	
DEVOTES indicators	CL_EU_11_DEV	398 CL_EU_11_DEV_398	Depth limit of macroalgae	Macroalgae max depth limit / Depth distribution of selected perennial macroalgae	MARMONI Indicator	90 66	AU-DKU/JHA 144/LU-SYKE	Relevant in Little Belt and possibly in other areas where lack of hard substrate is not a limiting factor (http://www.ses.ee/marmonti/marmonti_public/L19.pdf)
DEVOTES indicators	CL_EU_11_DEV	40 CL_EU_11_DEV_40	Abundance or biomass of key functional groups in the coastal waters	Abundance or biomass of key functional groups in the coastal waters		26	SYKE-LU 40	
DEVOTES indicators	CL_EU_11_DEV	400 CL_EU_11_DEV_400	Areal extent of oxygen depletion	Oxygen depletion coverage		66	AU-DKU/JHA 145	
DEVOTES indicators	CL_EU_11_DEV	401 CL_EU_11_DEV_401	Chemical and physical variables from existing monitoring programmes	Chemical and physical variables from existing monitoring programmes		65	AU-DKU/JHA 146	
DEVOTES indicators	CL_EU_11_DEV	405 CL_EU_11_DEV_405	Abundance of bacterioplankton	Total bacterioplankton abundance			MHI-AG 108	Cell counts of plankton species and/or groups
DEVOTES indicators	CL_EU_11_DEV	406 CL_EU_11_DEV_406	Biomass ratio of selected phytoplankton taxa groups	Phytoplankton taxonomic group ratio			MHI-AG 109	Phytoplankton species biomass of the main taxonomic groups - Diatoms, Dinoflagellates, Coccolithophores
DEVOTES indicators	CL_EU_11_DEV	407 CL_EU_11_DEV_407	Phytoplankton size structure	Phytoplankton size structure			MHI-AG 110	biomass of pico-, nano-, micro-phytoplankton size fraction
DEVOTES indicators	CL_EU_11_DEV	409 CL_EU_11_DEV_409	Production of phytoplankton	Phytoplankton primary production			MHI-OK 112	photosynthetic rate of phytoplankton within water column
DEVOTES indicators	CL_EU_11_DEV	41 CL_EU_11_DEV_41	Trophic level of coastal fish communities	Trophic level of coastal fish communities		26	SYKE-LU 41, JRC-HT	I (LU) would imagine the indicator uses the Swedish experimental fishing data.
DEVOTES indicators	CL_EU_11_DEV	410 CL_EU_11_DEV_410	Species diversity of phytoplankton	Phytoplankton Diversity Index			MHI-OK 113	Phytoplankton species composition, their abundance/biomass
DEVOTES indicators	CL_EU_11_DEV	411 CL_EU_11_DEV_411	Bloom frequency of selected phytoplankton species and taxa groups	Phytoplankton bloom frequency/dominating sp.			MHI-OK 114	Phytoplankton species abundance/biomass measured with high (at least biweekly) temporal resolution
DEVOTES indicators	CL_EU_11_DEV	412 CL_EU_11_DEV_412	Biomass ratio of selected zooplankton taxa groups	Zooplankton taxonomic group ratio			MHI-AG 115b	Zooplankton Abundance/biomass of the main taxonomic groups - Copepoda, Cladocera, Jellyfish, Others.
DEVOTES indicators	CL_EU_11_DEV	413 CL_EU_11_DEV_413	Biomass ratio of fodder/non-fodder zooplankton	Zooplankton fodder/non-fodder ratio			MHI-AG 116b	species composition, biomass data
DEVOTES indicators	CL_EU_11_DEV	415 CL_EU_11_DEV_415	Abundance of non-indigenous zooplankton species	Non-indigenous zooplankton species			MHI-AG 118	zooplankton species composition and abundance data
DEVOTES indicators	CL_EU_11_DEV	418 CL_EU_11_DEV_418	Depth distribution of selected macrozoobenthos species	Bathymetric distribution of the key macrozoobenthos sp.		72	MHI-OK 121	Spatial distribution of abundance/biomass of the key macrozoobenthos species
DEVOTES indicators	CL_EU_11_DEV	419 CL_EU_11_DEV_419	Index for functional groups of benthic invertebrates	Index of functional abundance of macrozoobenthos sp.		72	MHI-OK 122	wet biomass (g m ⁻²), abundance (ind. m ⁻²), functional groups
DEVOTES indicators	CL_EU_11_DEV	421 CL_EU_11_DEV_421	Body length distribution of bivalves	Bivalves size-frequency distribution		74	MHI-OK 124	Mytilus galloprovincialis number of individuals per size (class)
DEVOTES indicators	CL_EU_11_DEV	424 CL_EU_11_DEV_424	Depth distribution of <i>Phyllophora</i> sp.	Bathymetric distribution of vulnerable benthic flora species		72	MHI-OK 127	Spatial distribution of <i>Phyllophora</i> sp.

DEVOTES indicators	CL_EU_11_DEV	425 CL_EU_11_DEV_425	Depth distribution of <i>Cystoseira</i> sp.	Bathymetric distribution of vulnerable benthic flora species	72	MHI-OK 128	Spatial distribution of <i>Cystoseira</i> sp.
DEVOTES indicators	CL_EU_11_DEV	426 CL_EU_11_DEV_426	Benthic flora Cheney's ratio index	Benthic flora Cheney's ratio index	73	MHI-OK 129	Phytobenthos species - abundance/biomass composition
DEVOTES indicators	CL_EU_11_DEV	429 CL_EU_11_DEV_429	Biomass of macrophytes	Total phytobenthos biomass	72	MHI-OK 132	
DEVOTES indicators	CL_EU_11_DEV	43 CL_EU_11_DEV_43	Distribution and condition of habitat forming species	Distribution and condition of habitat forming species	24	SYKE-LU 43	
DEVOTES indicators	CL_EU_11_DEV	430 CL_EU_11_DEV_430	Abundance ratio of opportunistic green macroalgae	Opportunistic Green Macroalgal Abundance	72	MHI-OK 70	Phytobenthos species - abundance/biomass composition
DEVOTES indicators	CL_EU_11_DEV	431 CL_EU_11_DEV_431	Abundance of commercial fish (Catch per unit effort)	Commercial fish population abundance	76	MHI-OK 133	Species abundance
DEVOTES indicators	CL_EU_11_DEV	432 CL_EU_11_DEV_432	Age class structure of commercial fish	Commercial fish age class structure	76	MHI-OK 134, JRC-HT	length/weight of individuals
DEVOTES indicators	CL_EU_11_DEV	434 CL_EU_11_DEV_434	Abundance of selected mammal species	Size of marine mammals population	77	MHI-OK 136	counts
DEVOTES indicators	CL_EU_11_DEV	435 CL_EU_11_DEV_435	By-catch ratio of cetaceans	Cetacean by-catch rate	77	MHI-OK 137	Number of individuals in fishing gear (by fishing gear type and cetacean species, and where possible by gender and maturity)
DEVOTES indicators	CL_EU_11_DEV	437 CL_EU_11_DEV_437	Ratio of non-indigenous to indigenous species in plankton	Plankton ratio NIS/IS		MHI-AG 139	
DEVOTES indicators	CL_EU_11_DEV	441 CL_EU_11_DEV_441	Areal extent of hypoxic zones	Hypoxic zone area		MHI-OK 143	Hypoxic zone area extent in the NW shelf
DEVOTES indicators	CL_EU_11_DEV	442 CL_EU_11_DEV_442	Macroalgae-diversity indices	Macroalgae-diversity indices	345 206 346	HCMR-NP 108a, JRC-HT	Species composition and abundance
DEVOTES indicators	CL_EU_11_DEV	443 CL_EU_11_DEV_443	Zoobenthos-diversity indices	Zoobenthos-diversity indices	345 206 346	HCMR-NP 109a, JRC-HT, LU-SYKE	Species number, Pielou's Evenness "J", Shannon diversity "H", ZSI index
DEVOTES indicators	CL_EU_11_DEV	444 CL_EU_11_DEV_444	Fish-diversity index (Shannon)	Fishes-diversity indices	345 206	HCMR-NP 110a	Shannon-Weaver - "H"
DEVOTES indicators	CL_EU_11_DEV	446 CL_EU_11_DEV_446	Areal extent of marine angiosperms	Extent and distribution of marine angiosperms.		HCMR-NP 112	
DEVOTES indicators	CL_EU_11_DEV	449 CL_EU_11_DEV_449	Abundance of perennial seaweeds	Abundance of perennial seaweeds, Abundance of shade-adapted, slow growing calcareous species, Abundance of opportunistic macroalgae, Ecological Evaluation Index (EEI), PREI index (Posidonia), BENTIX index		HCMR- NP 115a	
DEVOTES indicators	CL_EU_11_DEV	450 CL_EU_11_DEV_450	Abundance of seaturtle spawning population	Size of the seal Monachus monachus population in Greek waters and number of colonies, Population size of <i>Caretta caretta</i> spawning.		HCMR- NP 116	
DEVOTES indicators	CL_EU_11_DEV	451 CL_EU_11_DEV_451	Survival rate of <i>Posidonia oceanica</i>	Survival rate of <i>Posidonia oceanica</i> .		HCMR- NP 117	
DEVOTES indicators	CL_EU_11_DEV	453 CL_EU_11_DEV_453	Biomass ratio of demersal fish (at higher trophic levels in the total catch)	Proportion of biomass at higher trophic levels in the total catch of demersal fish.		HCMR-NP 119	
DEVOTES indicators	CL_EU_11_DEV	454 CL_EU_11_DEV_454	Trends in populations of large pelagic fish	Trends in populations of large pelagic fish.		HCMR- NP 120	
DEVOTES indicators	CL_EU_11_DEV	455 CL_EU_11_DEV_455	Presence of particularly sensitive and/or tolerant species	Presence of particularly sensitive and/or tolerant species.		HCMR- NP 121	
DEVOTES indicators	CL_EU_11_DEV	457 CL_EU_11_DEV_457	BFI - Biomass Fractionation Index	Proportion of biomass or number of individuals in the macrobenthos above some specified length/size	347	HCMR-NP 123, JRC-HT	Biomass
DEVOTES indicators	CL_EU_11_DEV	466 CL_EU_11_DEV_466	By-catch of marine mammals and birds	By-catch of marine mammals and birds	94	KUCORPI-MBAZ 9	abundance
DEVOTES indicators	CL_EU_11_DEV	468 CL_EU_11_DEV_468	Community Trophic Index	Community Trophic Index	94	KUCORPI-MBAZ 11	abundance of species
DEVOTES indicators	CL_EU_11_DEV	469 CL_EU_11_DEV_469	Trend in arrival of new non-indigenous species	Trend in the arrival of new non-indigenous species	94	KUCORPI-MBAZ 12	number of non-indigenous species

DEVOTES indicators	CL_EU_11_DEV	47 CL_EU_11_DEV_47	Ratio of non-mature sea trouts	Proportion of non-mature sea trouts in the sea trout catch	24	SYKE-LU 47	
DEVOTES indicators	CL_EU_11_DEV	471 CL_EU_11_DEV_471	Fish community size index	Fish community size index	94	KUCORPI-MBAZ 14	size of species
DEVOTES indicators	CL_EU_11_DEV	472 CL_EU_11_DEV_472	Fish community abundance index	Fish community abundance index	94	KUCORPI-MBAZ 15	abundance per species
DEVOTES indicators	CL_EU_11_DEV	476 CL_EU_11_DEV_476	Areal extent of human affected area	Human affected area of bottom habitats	94	KUCORPI-MBAZ 19	quality of habitats
DEVOTES indicators	CL_EU_11_DEV	48 CL_EU_11_DEV_48	Population structure of grey seals	Population structure of grey seals	24	SYKE-LU 48	
DEVOTES indicators	CL_EU_11_DEV	481 CL_EU_11_DEV_481	Areal extent of intertidal rock	Area of intertidal rock	98	UHULL-KM 138	Habitat area
DEVOTES indicators	CL_EU_11_DEV	482 CL_EU_11_DEV_482	Areal extent of subtidal rock	Area of subtidal rock	98	UHULL-KM 139	Habitat area
DEVOTES indicators	CL_EU_11_DEV	483 CL_EU_11_DEV_483	Areal extent of littoral chalk habitat	Area of littoral chalk habitat	99	UHULL-KM 140	Habitat area
DEVOTES indicators	CL_EU_11_DEV	484 CL_EU_11_DEV_484	Areal extent of intertidal sea caves	Area of intertidal sea caves	100	UHULL-KM 141	Habitat area
DEVOTES indicators	CL_EU_11_DEV	487 CL_EU_11_DEV_487	Species diversity in selected habitats (sponge, anthozoan community)	Subtidal species composition & abundance (sponge, anthozoan community) (condition of the typical species/comm unities)	103	UHULL-KM 144	Abundance of taxa and/or % cover of taxon groups or diversity indices
DEVOTES indicators	CL_EU_11_DEV	488 CL_EU_11_DEV_488	Morphological diversity of sponges	Sponge morphological diversity (Condition of the typical species/comm unities)	104	UHULL-KM 145	Morphological richness and diversity measures
DEVOTES indicators	CL_EU_11_DEV	489 CL_EU_11_DEV_489	Abundance and composition of intertidal macroalgae	Intertidal species composition and abundance (condition of typical species/comm unities)	105	UHULL-KM 146	Abundance as % cover or biomass ? - Please specify
DEVOTES indicators	CL_EU_11_DEV	49 CL_EU_11_DEV_49	Production ratio current/potential reproduction of sea trout	Ratio between current and potential reproduction of sea trout	24	SYKE-LU 49	
DEVOTES indicators	CL_EU_11_DEV	490 CL_EU_11_DEV_490	Epifaunal indicator species (Condition of typical species/communities)	Epifaunal indicator species (Condition of typical species/comm unities)	106	UHULL-KM 147	Abundance / unit area for e.g. erect indicator taxa
DEVOTES indicators	CL_EU_11_DEV	491 CL_EU_11_DEV_491	Boulder turning index (condition of typical species/communities)	Boulder turning index(Condition of typical species/comm unities)	107	UHULL-KM 148	Percentage cover of key species
DEVOTES indicators	CL_EU_11_DEV	492 CL_EU_11_DEV_492	MarClim - Intertidal community indicator (Condition of typical species/communities)	Intertidal community indicator- MarClim (Condition of typical species/comm unities)	108	UHULL-KM 149	species composition and abundance
DEVOTES indicators	CL_EU_11_DEV	493 CL_EU_11_DEV_493	Depth limit of kelp (density dependent)	Kelp depth and kelp park depth (Condition of typical species/comm unities)	109	UHULL-KM 150	Max depth bcd at which a specific density of kelp occurs
DEVOTES indicators	CL_EU_11_DEV	50 CL_EU_11_DEV_50	By-catch of seals	Number of bycaught seals	24	SYKE-LU 50	
DEVOTES indicators	CL_EU_11_DEV	502 CL_EU_11_DEV_502	Areal extent of subtidal biogenic structures (type, abundance, biomass and areal extent of relevant biogenic substrata)	Area of subtidal biogenic structures (type, abundance, biomass and areal extent of relevant biogenic substrata)	117	UHULL-KM 159	Area of biogenic feature / number of units of occurrence
DEVOTES indicators	CL_EU_11_DEV	503 CL_EU_11_DEV_503	Density of biogenic reef forming species (type, abundance, biomass and areal extent of relevant biogenic substratum)	Density of biogenic reef forming species (type, abundance, biomass and areal extent of relevant biogenic substratum)	119	UHULL-KM 160	Number of species
DEVOTES indicators	CL_EU_11_DEV	505 CL_EU_11_DEV_505	Distributional pattern of selected habitats (applies to rock, biogenic reef and sediment habitats)	Distributional pattern of habitat (applies to rock, biogenic reef and sediment habitats)	121	UHULL-KM 162	
DEVOTES indicators	CL_EU_11_DEV	506 CL_EU_11_DEV_506	Areal extent of sediment habitat	Area of sediment habitat	122	UHULL-KM 163	Spatial extent of habitat
DEVOTES indicators	CL_EU_11_DEV	51 CL_EU_11_DEV_51	Areal extent and distribution of Eunis habitats	Area and distribution of Eunis habitats	24	SYKE-LU 51	

DEVOTES indicators	CL_EU_11_DEV	510 CL_EU_11_DEV_510	Biomass ratio of opportunistic macroalgae/total	Opportunistic macroalgae	126	UHLULL-KM 167	Ecological Quality Ratio based on identification and collection (e.g. for biomass) of opportunistic, nuisance weed
DEVOTES indicators	CL_EU_11_DEV	511 CL_EU_11_DEV_511	WFD British Saltmarsh classification tool	WFD saltmarsh classification tool	127	UHLULL-KM 168	
DEVOTES indicators	CL_EU_11_DEV	512 CL_EU_11_DEV_512	Redox potential discontinuity	Sediment profile imaging (Benthic Habitat Quality)	128	UHLULL-KM 169	Assessment of biogenic features and redox potential discontinuity.
DEVOTES indicators	CL_EU_11_DEV	521 CL_EU_11_DEV_521	Depth of sediment redox potential discontinuity	Depth of sediment redox potential discontinuity	137 140	UHLULL-KM 178	visual description/estimation/measurement of depth
DEVOTES indicators	CL_EU_11_DEV	522 CL_EU_11_DEV_522	Biomass of benthic invertebrate species in sediment habitats	Biomass of species in sediment habitats	138	UHLULL-KM 179	Biomass of species and/or total sample biomass
DEVOTES indicators	CL_EU_11_DEV	524 CL_EU_11_DEV_524	Bathymetry	Topography/bathymetry	138	UHLULL-KM 181	Depth/elevation/shore profile/bedforms
DEVOTES indicators	CL_EU_11_DEV	525 CL_EU_11_DEV_525	Ratio of area inhabited by selected benthic invertebrate species to total area of their particular substrata	%area with benthic invertebrates known to be associated with particular substrata	140	UHLULL-KM 182	% area occupied by key/typical species
DEVOTES indicators	CL_EU_11_DEV	527 CL_EU_11_DEV_527	Areal extent of hypoxia (spatial and temporal)	Extent of area with spatial and temporal hypoxia	140	UHLULL-KM 184	spatial extent and presence/absence of hypoxia
DEVOTES indicators	CL_EU_11_DEV	528 CL_EU_11_DEV_528	Concentration ratio oxygen/hydrogen sulphide	Ratio of oxygen/hydrogen sulphide	140	UHLULL-KM 185	O2/H2S concentration
DEVOTES indicators	CL_EU_11_DEV	529 CL_EU_11_DEV_529	Presence of benthic communities associated with low oxygen	Presence of benthic communities associated with low oxygen	140	UHLULL-KM 186	species/community data
DEVOTES indicators	CL_EU_11_DEV	53 CL_EU_11_DEV_53	Trends in the arrival of new invasive species	Appearance of new invasive species	24	SYKE-LU 53	Monitoring of new invasive species.
DEVOTES indicators	CL_EU_11_DEV	530 CL_EU_11_DEV_530	Accumulation of contaminants in sediment	Accumulation of contaminants in sediment	140	UHLULL-KM 187	specific contaminant content of sediment
DEVOTES indicators	CL_EU_11_DEV	531 CL_EU_11_DEV_531	Accumulation of contaminants in biota	Accumulation of contaminants in biota	140	UHLULL-KM 188	specific contaminant content of tissue
DEVOTES indicators	CL_EU_11_DEV	532 CL_EU_11_DEV_532	Biomass/size spectrum of benthic invertebrates	Biomass /size spectrum	140	UHLULL-KM 189	length and biomass of individual organisms
DEVOTES indicators	CL_EU_11_DEV	534 CL_EU_11_DEV_534	Marine Biological Valuation Methodology	Marine Biological Valuation Methodology	147	IMAR-HV 108	All available biological and ecological information for a study area
DEVOTES indicators	CL_EU_11_DEV	538 CL_EU_11_DEV_538	Abundance ratio of opportunistic/sensitive species	Opportunistic-sensitive species proportion		IMAR-HV 112a	species abundance/biomass patterns in space/time
DEVOTES indicators	CL_EU_11_DEV	54 CL_EU_11_DEV_54	Trends in the abundance of settled invasive species	Change in the abundance of settled invasive species	24	SYKE-LU 54	
DEVOTES indicators	CL_EU_11_DEV	541 CL_EU_11_DEV_541	Depth distribution of Donacilla cornea	Depth distribution	155	IO-BAS 2	depth distribution - abundance
DEVOTES indicators	CL_EU_11_DEV	543 CL_EU_11_DEV_543	Biomass of Donacilla cornea	average biomass	155	IO-BAS 4	
DEVOTES indicators	CL_EU_11_DEV	544 CL_EU_11_DEV_544	Body length distribution of Donacilla cornea	average body size	155	IO-BAS 5	body size
DEVOTES indicators	CL_EU_11_DEV	547 CL_EU_11_DEV_547	Depth distribution of Cystoseira barbata	depth distribution	156	IO-BAS 10	depth presence (abundance)
DEVOTES indicators	CL_EU_11_DEV	548 CL_EU_11_DEV_548	Depth distribution of Cystoseira crinita	depth distribution	156	IO-BAS 11	depth presence (abundance)
DEVOTES indicators	CL_EU_11_DEV	55 CL_EU_11_DEV_55	Trends in the distributional range of invasive species	Change in distribution of invasive species	24	SYKE-LU 55	
DEVOTES indicators	CL_EU_11_DEV	550 CL_EU_11_DEV_550	Biomass of Cystoseira barbata	Biomass	156	IO-BAS 13	dry biomass
DEVOTES indicators	CL_EU_11_DEV	557 CL_EU_11_DEV_557	Depth distribution of Phyllophora crispa	depth distribution	156	IO-BAS 20	depth presence (abundance)
DEVOTES indicators	CL_EU_11_DEV	559 CL_EU_11_DEV_559	Biomass of Phyllophora crispa	biomass	156	IO-BAS 22	dry biomass
DEVOTES indicators	CL_EU_11_DEV	56 CL_EU_11_DEV_56	Abundance of selected land predators (raccoon dogs and minks)	Abundance of raccoon dogs and minks in the archipelago	24	SYKE-LU 56	
DEVOTES indicators	CL_EU_11_DEV	566 CL_EU_11_DEV_566	Biomass of Mytilus galloprovincialis	biomass	155	IO-BAS 29	wet biomass
DEVOTES indicators	CL_EU_11_DEV	567 CL_EU_11_DEV_567	Body length distribution of Mytilus galloprovincialis	body size	155	IO-BAS 30	population size structure
DEVOTES indicators	CL_EU_11_DEV	568 CL_EU_11_DEV_568	Biomass of Mytilaster lineatus	biomass	155	IO-BAS 31	wet biomass
DEVOTES indicators	CL_EU_11_DEV	569 CL_EU_11_DEV_569	Body length distribution of Mytilaster lineatus	body size	155	IO-BAS 32	population size structure
DEVOTES indicators	CL_EU_11_DEV	57 CL_EU_11_DEV_57	Ratio between invasive and indigenous species in selected well-known groups	Ratio between invasive and indigenous species in selected well-known groups (fish, shrimps and mussels)	24	SYKE-LU 57	
DEVOTES indicators	CL_EU_11_DEV	570 CL_EU_11_DEV_570	Depth distribution of seagrass	Depth distribution of seagrass	156	IO-BAS 33	Depth distribution of seagrass

DEVOTES indicators	CL_EU_11_DEV	571 CL_EU_11_DEV_571	Areal extent of seagrass	surface coverage	156	IO-BAS 34	surfe covered by seagrass
DEVOTES indicators	CL_EU_11_DEV	572 CL_EU_11_DEV_572	Biomass of seagrass	seagrass dry biomass	156	IO-BAS 35	seagrass dry biomass
DEVOTES indicators	CL_EU_11_DEV	573 CL_EU_11_DEV_573	Abundance of seagrass	seagrass abundance	156	IO-BAS 36	seagrass abundance
DEVOTES indicators	CL_EU_11_DEV	574 CL_EU_11_DEV_574	Depth distribution of Donax trunculus	depth distribution	155	IO-BAS 37	depth distribution
DEVOTES indicators	CL_EU_11_DEV	576 CL_EU_11_DEV_576	Biomass of Donax trunculus	wet biomass	155	IO-BAS 39	
DEVOTES indicators	CL_EU_11_DEV	580 CL_EU_11_DEV_580	Biomass of Chamelea gallina	wet biomass	155	IO-BAS 43	wet biomass
DEVOTES indicators	CL_EU_11_DEV	581 CL_EU_11_DEV_581	Body length distribution of Chamelea gallina	Body size	155	IO-BAS 44	Chamelea gallina population size structure
DEVOTES indicators	CL_EU_11_DEV	583 CL_EU_11_DEV_583	Biomass of Upogebia pusilla	wet biomass	155	IO-BAS 46	wet biomass
DEVOTES indicators	CL_EU_11_DEV	584 CL_EU_11_DEV_584	Body length distribution of Upogebia pusilla	body size	155	IO-BAS 47	population size
DEVOTES indicators	CL_EU_11_DEV	59 CL_EU_11_DEV_59	Reproduction capacity of white tailed eagle	Reproduction capacity of white tailed eagle	24	SYKE-LU 59	
DEVOTES indicators	CL_EU_11_DEV	591 CL_EU_11_DEV_591	Body length of Mytilus galloprovincialis	body size	155	IO-BAS 54	population size structure
DEVOTES indicators	CL_EU_11_DEV	593 CL_EU_11_DEV_593	Abundance ratio of cumulative proportions of size classes >80mm of Mytilus galloprovincialis	cumulative proportion of size classess >80mm	155	IO-BAS 56	population size structure
DEVOTES indicators	CL_EU_11_DEV	597 CL_EU_11_DEV_597	Depth distribution of typical zoobenthic communities	Depth distribution of typical zoobenthic communities	155	IO-BAS 60	Depth distribution
DEVOTES indicators	CL_EU_11_DEV	604 CL_EU_11_DEV_604	Depth distribution of Modiola phaseolina	depth distribution	155	IO-BAS 67	depth distribution
DEVOTES indicators	CL_EU_11_DEV	608 CL_EU_11_DEV_608	Biomass of phytoplankton (spring: coastal)	wet biomass spring: coastal	320	IO-BAS 71	wet biomass in spring
DEVOTES indicators	CL_EU_11_DEV	609 CL_EU_11_DEV_609	Biomass of phytoplankton (spring: shelf)	wet biomass spring:shelf	320	IO-BAS 72	species composition biomass
DEVOTES indicators	CL_EU_11_DEV	61 CL_EU_11_DEV_61	Number of pups of grey seals	Number of pups of grey seals	24	SYKE-LU 61	
DEVOTES indicators	CL_EU_11_DEV	610 CL_EU_11_DEV_610	Biomass of phytoplankton (spring:open sea)	wet biomass spring:open sea	320	IO-BAS 73	species composition biomass
DEVOTES indicators	CL_EU_11_DEV	611 CL_EU_11_DEV_611	Biomass of phytoplankton (summer: coastal)	wet biomass summer: coastal	320	IO-BAS 74	species composition biomass
DEVOTES indicators	CL_EU_11_DEV	612 CL_EU_11_DEV_612	Biomass of phytoplankton (summer: shelf)	wet biomass summer:shelf	320	IO-BAS 75	species composition biomass
DEVOTES indicators	CL_EU_11_DEV	613 CL_EU_11_DEV_613	Biomass of phytoplankton (summer:open sea)	wet biomass summer:open sea	320	IO-BAS 76	species composition biomass
DEVOTES indicators	CL_EU_11_DEV	615 CL_EU_11_DEV_615	Evenness (Sheldon) of phytoplankton	Index of evenness Sheldon	159 314	IO-BAS 78	abundance, species composition data
DEVOTES indicators	CL_EU_11_DEV	616 CL_EU_11_DEV_616	IBI - Integrated Biological Index	Integrated Biological Index (IBI)	159 314	IO-BAS 79, JRC-HT	abundance, biomass and species composition
DEVOTES indicators	CL_EU_11_DEV	617 CL_EU_11_DEV_617	Abundance ratio of selected dinoflagellates (C-strategy species)	abundance of dinoflagellate (C-strategy species) as a % of the Total dinoflagellates abundance [DE%]	159 322	IO-BAS 80	taxonomic structure, abundance
DEVOTES indicators	CL_EU_11_DEV	619 CL_EU_11_DEV_619	Biomass ratio of diatoms/dinoflagellates	biomass ratio diatoms:dinoflagellates in spring	320	IO-BAS 82	taxonomic structure, biomass
DEVOTES indicators	CL_EU_11_DEV	620 CL_EU_11_DEV_620	Biomass ratio of Copepods/mesozooplankton	Proportion of Copepods to mesozooplankton biomass	318	IO-BAS 83	Copepoda biomass
DEVOTES indicators	CL_EU_11_DEV	628 CL_EU_11_DEV_628	Areas of reproduction of mammals and reptiles	Areas of reproduction of Monachus monachus and Caretta caretta		HCMR-NP 2	
DEVOTES indicators	CL_EU_11_DEV	629 CL_EU_11_DEV_629	Presence of Posidonia oceanica meadows	Presence of Posidonia oceanica meadows		HCMR-NP 3	distribution of P. oceanica across the Mediterranean
DEVOTES indicators	CL_EU_11_DEV	630 CL_EU_11_DEV_630	Spatial distribution of non-indigenous species	Spatial distribution of NIS	162	HCMR-NP 4	Abundance data, species composition data
DEVOTES indicators	CL_EU_11_DEV	631 CL_EU_11_DEV_631	Trends in arrival of new non-indigenous species per pathway	Trends in arrival of new non-indigenous species per pathway	162	HCMR-NP 5	number of new arrivals of non-indigenous species vs pathway
DEVOTES indicators	CL_EU_11_DEV	632 CL_EU_11_DEV_632	Ratio of non-indigenous/native species	Ratio of NIS/native species		HCMR-NP 6	ratio for main taxonomic groups (mollusca, crustacea, macroalgae, polychaets) at MSFD level
DEVOTES indicators	CL_EU_11_DEV	634 CL_EU_11_DEV_634	Abundance of coral colonies alive	Coral species cover	254	KAUST-SC 108	Live coral %
DEVOTES indicators	CL_EU_11_DEV	636 CL_EU_11_DEV_636	Species richness of corals	Coral community diversity	268 254	KAUST-SC 110	number of coral species
DEVOTES indicators	CL_EU_11_DEV	637 CL_EU_11_DEV_637	Body length distribution of herbivorous fish (Demographic skewness)	Herbivorous fish size frequency (Demographic skewness)	163	KAUST-SC 111	length of fishes
DEVOTES indicators	CL_EU_11_DEV	638 CL_EU_11_DEV_638	Abundance ratio of bleached coral colonies	Coral bleaching	164 269 165	KAUST-SC 112	number of bleached and healthy colonies pertransect

DEVOTES indicators	CL_EU_11_DEV	646 CL_EU_11_DEV_646	POSWARE (system for coastal water classification by using <i>P. oceanica</i> as quality element according to WFD)	POSWARE	348	JRC-HT 28	depth (m), density (number of shoots/m2), rhizome production (mg/year), rhizome elongation (mm/year), leaf production (number of leaves/year)
DEVOTES indicators	CL_EU_11_DEV	648 CL_EU_11_DEV_648	CymoSkew (quantitative expression of photosynthetic leaf length (PLL) asymmetry)	CymoSkew	177	JRC-HT 30	leaf length (mm)
DEVOTES indicators	CL_EU_11_DEV	649 CL_EU_11_DEV_649	WFD Valencian Region Method using <i>Posidonia oceanica</i>	Valencian Region Method to implement the WFD using <i>Posidonia oceanica</i>	178	JRC-HT 31	shoot density (number of shoots/m2), shoot foliar surface (cm2/shoot), % dead-matte cover, % meadow cover, herbivore pressure (% leaves with herbivore marks per shoot), rhizome baring/burial, necrosis (% leaves with necrosis marks per shoot), % plagiotropic rhizomes, epiphyte biomass (dry weight)
DEVOTES indicators	CL_EU_11_DEV	65 CL_EU_11_DEV_65	Abundance of selected (predator) fish species	Abundance of predator fish species in the coastal waters	24	SYKE-LU 65	
DEVOTES indicators	CL_EU_11_DEV	650 CL_EU_11_DEV_650	EPI - Estonian Phytobenthos Index	Estonian Phytobenthos Index	179 349	JRC-HT 32	Species composition with depth, biomass data (dry biomass, g/m2)
DEVOTES indicators	CL_EU_11_DEV	651 CL_EU_11_DEV_651	Assessment of macrovegetation in coastal and transitional waters	Assessment of Biological Quality Elements in coastal and transitional waters - macrovegetation	180	JRC-HT 33	
DEVOTES indicators	CL_EU_11_DEV	652 CL_EU_11_DEV_652	WFD Polish Assessment system for coastal and transitional waters using macrophytes	Assessment system for coastal and transitional waters using macrophytes	181	JRC-HT 34	species-specific dry weight (g/m2); taxonomical identification to species/genus level and classification of taxa into negative / positive taxa; % vegetation coverage; substrate cover
DEVOTES indicators	CL_EU_11_DEV	653 CL_EU_11_DEV_653	WFD Romanian Assessment system for coastal waters using macrophytes	Assessment system for coastal waters using macroalgae	182	JRC-HT 36	taxonomical id of taxa presence/absence of species; number of individuals per m2; wet biomass weighted from a surface of 20cm * 20cm
DEVOTES indicators	CL_EU_11_DEV	655 CL_EU_11_DEV_655	WFD Dutch Eelgrass Index	WFD-metrics for natural watertypes	186 185	JRC-HT 38	% coverage area eelgrass species
DEVOTES indicators	CL_EU_11_DEV	658 CL_EU_11_DEV_658	BEQI - Benthic Ecosystem Quality Index	Benthic Ecosystem Quality Index (BEQI)	193 167	JRC-HT 43	
DEVOTES indicators	CL_EU_11_DEV	66 CL_EU_11_DEV_66	Biomass ratio of cyanobacteria	Proportion of cyanobacteria in the phytoplankton total biomass	24	SYKE-LU 66	
DEVOTES indicators	CL_EU_11_DEV	660 CL_EU_11_DEV_660	BBI - Brackish water benthic index	Brackish water benthic index (BBI)	195	JRC-HT 46	
DEVOTES indicators	CL_EU_11_DEV	661 CL_EU_11_DEV_661	ZKI - Estonian Multimetric macrozoobenthos community index	Macrozoobenthos community index (ZKI)	196	JRC-HT 47	Species composition, species number and biomass (dry weight) data (http://www.s-ea.ee/marmoni/marmoni_public/docs/L22.pdf)
DEVOTES indicators	CL_EU_11_DEV	663 CL_EU_11_DEV_663	WFD Lithuanian Assessment system for transitional and coastal waters using macrozoobenthos	Assessment system for transitional and coastal waters using macrozoobenthos	198	JRC-HT 49	abundance (individuals counts per area), species taxonomical identification (or lowest reliable taxon level possible)

DEVOTES indicators	CL_EU_11_DEV	667 CL_EU_11_DEV_667	BAT - Benthic Assessment Tool	Benthic Assessment Tool (BAT)	202 167 255	JRC-HT 59	species taxonomical identification (or lowest reliable taxon, level possible), abundance (individuals count per area), classification of species into 5 ecological groups (EG)
DEVOTES indicators	CL_EU_11_DEV	669 CL_EU_11_DEV_669	ITI - Trophic index	Trophic index (ITI)	204 205 167	JRC-HT 63	species composition, trophic group classification of taxa
DEVOTES indicators	CL_EU_11_DEV	67 CL_EU_11_DEV_67	Abundance ratio of diatoms/dinoflagellates	Diatom to dinoflagellate ratio	24	SYKE-LU 67	
DEVOTES indicators	CL_EU_11_DEV	671 CL_EU_11_DEV_671	NQI - Norwegian Quality Index	Norwegian Quality Index (NQI)	189 167	JRC-HT 64	AMBI - relative proportion (abundance) of sensitive/tolerance taxa (5 EG); SNA diversity index - N number of individuals, S number of species
DEVOTES indicators	CL_EU_11_DEV	672 CL_EU_11_DEV_672	MAB Macroalgal Bloom Assessment (Opportunistic macroalgae)	Macroalgal Bloom Assessment (Opportunistic macroalgae) (MAB)	207 167	JRC-HT 65	% cover, biomass data, species composition
DEVOTES indicators	CL_EU_11_DEV	673 CL_EU_11_DEV_673	RSL - Macroalgae Rocky Shore Reduced Species List	Macroalgae Rocky Shore Reduced Species List (RSL)	209 208 167	JRC-HT 66	five parameters: Normalised number of macroalgal taxa (normalised to shore diversity); Proportion of Chlorophyta taxa; Proportion of Rhodophyta taxa; Proportion of opportunistic taxa; Ecological status group ratio
DEVOTES indicators	CL_EU_11_DEV	674 CL_EU_11_DEV_674	Depth limit of Fucus vesiculosus	Fucus index	210	JRC-HT 67	Lower limit (depth) of growing zone of Fucus vesiculosus
DEVOTES indicators	CL_EU_11_DEV	675 CL_EU_11_DEV_675	Depth limit of Furcellaria lumbricalis	Assessment system for transitional and coastal waters using macroalgae (maximum depth limit of Furcellaria lumbricalis)	198	JRC-HT 69	Maximum depth limit of Furcellaria lumbricalis
DEVOTES indicators	CL_EU_11_DEV	676 CL_EU_11_DEV_676	RSL - Rocky Intertidal Macroalgae - Reduced Species List (RSL)	Rocky Intertidal Macroalgae - Reduced Species List (RSL)	171 212 167	JRC-HT 71	Number of green species Number of brown species Number of red species Number of opportunists Number of species in Ecological Status Group 1 Number of species in Ecological Status Group 2 Shore Description
DEVOTES indicators	CL_EU_11_DEV	679 CL_EU_11_DEV_679	MarMAT - Marine Macroalgae Assessment Tool	Marine Macroalgae Assessment Tool (MarMAT)	218 167	JRC-HT 77	species composition and cover data
DEVOTES indicators	CL_EU_11_DEV	681 CL_EU_11_DEV_681	Quality index of subtidal macroalgae of French Channel and Atlantic coast	Quality index of subtidal macroalgae of French Channel and Atlantic coast	221	JRC-HT 82	species specific depth distributions, species composition, cover data
DEVOTES indicators	CL_EU_11_DEV	682 CL_EU_11_DEV_682	WFD Estonian Assessment of ecological status of coastal waters using phytoplankton indicators	Assessment of ecological status of coastal waters using phytoplankton indicators	327 350	JRC-HT 83	
DEVOTES indicators	CL_EU_11_DEV	683 CL_EU_11_DEV_683	WFD Polish Phytoplankton classification methods	Monitoring and classification methods of biological quality elements for the assessment of ecological status of transitional and coastal marine water bodies	327 350	JRC-HT 84	chl a measurement, species composition, cell counts, biovolume of species/taxa groups

DEVOTES indicators	CL_EU_11_DEV	684 CL_EU_11_DEV_684	WFD Italian Assessment System for Coastal Waters Based on BQE "Phytoplankton"	Assessment System for Coastal Waters Based on BQE "Phytoplankton"	327	JRC-HT 85	Chlorophyll-a concentration as: mg/m3 (by fluorimetry method) and n. of cells/l (individual counts per volume; species/species groups taxonomical identification)
DEVOTES indicators	CL_EU_11_DEV	685 CL_EU_11_DEV_685	WFD Slovenian Methodology for assessment of ecological status of coastal waters using phytoplankton	Methodology for assessment of ecological status of coastal waters using phytoplankton	327	JRC-HT 86	quantification of biomass: Fluorometric determination of chlorophyll-a concentration
DEVOTES indicators	CL_EU_11_DEV	686 CL_EU_11_DEV_686	Phytoplankton Toolkit	Phytoplankton Toolkit	327 350	JRC-HT 87	taxonomical identification: Level: Family, Genus, Other, Species/species groups; Determination of abundance: Individual counts, Abundance is related to: Volume, Unit of the record of abundance: cells per ml; Quantification of biomass: Chlorophyll-a concentration
DEVOTES indicators	CL_EU_11_DEV	687 CL_EU_11_DEV_687	WFD Lithuanian Assessment system for transitional and coastal waters for phytoplankton	Assessment system for transitional and coastal waters using phytoplankton indicators	327	JRC-HT 88	biomass through chlorophyll-a concentration; Total phosphorus (TP); TN concentration
DEVOTES indicators	CL_EU_11_DEV	688 CL_EU_11_DEV_688	WFD Danish Assessment system for coastal waters using chlorophyll-a as indicator of phytoplankton biomass	Assessment system for coastal waters using chlorophyll-a as indicator of phytoplankton biomass	327	JRC-HT 89	list of biological metrics: Summer (May-September) mean Chl-a concentration or 90th percentile of Chl-a concentration in samples collected from March through September
DEVOTES indicators	CL_EU_11_DEV	691 CL_EU_11_DEV_691	WFD Dutch phytoplankton index	WFD-metrics for natural watertypes	327	JRC-HT 92	
DEVOTES indicators	CL_EU_11_DEV	693 CL_EU_11_DEV_693	Elevated Phytoplankton (Single Taxa) Counts Tool	The Elevated Phytoplankton (Single Taxa) Counts Tool	323 324 325	JRC-HT 94	taxonomical identification of species/species groups; individual counts/volume (Cells/L)
DEVOTES indicators	CL_EU_11_DEV	694 CL_EU_11_DEV_694	WFD Spanish Phytoplankton Tool for North East Atlantic Coastal Waters	Spanish Phytoplankton Tool for North East Atlantic Coastal Waters	327	JRC-HT 95	
DEVOTES indicators	CL_EU_11_DEV	695 CL_EU_11_DEV_695	WFD Romanian Assessment system for coastal and transitional water's using phytoplankton	Assessment system for coastal and transitional waters using phytoplankton	327	JRC-HT 96	
DEVOTES indicators	CL_EU_11_DEV	696 CL_EU_11_DEV_696	Assessment system for coastal and transitional waters: Phytoplankton	Assessment system for coastal and transitional waters: Phytoplankton	327	JRC-HT 97	
DEVOTES indicators	CL_EU_11_DEV	697 CL_EU_11_DEV_697	WFD Comunidad Valenciana Phytoplankton Multimetric Index	Comunidad Valenciana Phytoplankton Multimetric Index	327	JRC-HT 98	
DEVOTES indicators	CL_EU_11_DEV	699 CL_EU_11_DEV_699	WFD Latvian Assessment method for phytoplankton status based on chlorophyll a concentrations in coastal and transitional water	Assessment method for phytoplankton status based on chlorophyll a concentration in coastal and transitional water	328 327	JRC-HT 100	Median of all chlorophyll-a concentrations
DEVOTES indicators	CL_EU_11_DEV	70 CL_EU_11_DEV_70	Removal catches of cyprinid fish	Removal catches of cyprinid fish	24	SYKE-LU 70	
DEVOTES indicators	CL_EU_11_DEV	700 CL_EU_11_DEV_700	WFD Latvian Assessment method for phytoplankton status based on phytoplankton biomass in coastal and transitional waters	Assessment method for phytoplankton status based on phytoplankton biomass in coastal and transitional waters	328 327	JRC-HT 101	Median of all phytoplankton biomass values
DEVOTES indicators	CL_EU_11_DEV	702 CL_EU_11_DEV_702	Water quality based on chlorophyll-a and bloom frequency	Water quality based on chlorophyll-a and bloom frequency		JRC-HT 103	

DEVOTES indicators	CL_EU_11_DEV	703 CL_EU_11_DEV_703	WFD Phytoplankton Quality in French Coastal Waters	Phytoplankton Quality in French Coastal Waters		327	JRC-HT 104	
DEVOTES indicators	CL_EU_11_DEV	704 CL_EU_11_DEV_704	Biomass of phytoplankton	Phytoplankton Biomass		327	JRC-HT 105	
DEVOTES indicators	CL_EU_11_DEV	71 CL_EU_11_DEV_71	Population structure of hardbottom plant and invertebrate animals	Population structure of hardbottom plant and invertebrate animals		24	SYKE-LU 71	
DEVOTES indicators	CL_EU_11_DEV	712 CL_EU_11_DEV_712	Rate of new introduction of NIS (per defined period) (NIS2)	NIS2 Rate of new introduction of NIS (per defined period)	NIS: non-indigenous species	31 311 311	Cefas - CL 156, JRC-HT	Species-parameter: list of NIS newly introduced into the assessment area during the assessment period.
DEVOTES indicators	CL_EU_11_DEV	714 CL_EU_11_DEV_714	Abundance of cyprinids	Abundance of cyprinids in archipelago areas	MARMONI indicator	24 28	SYKE-LU 90 SYKE-LU 105	Abundance data of fish in archipelago areas (more info: http://www.s-ea.ee/marmoni/marmoni_pulk/docs/L6.pdf)
DEVOTES indicators	CL_EU_11_DEV	716 CL_EU_11_DEV_716	Abundance of waterbirds in the breeding season	Abundance of waterbirds in the breeding season	MARMONI indicator	26 24	SYKE-LU 99 SYKE-LU 120 SYKE-LU 13 SYKE-LU 45 SYKE-LU 119	Abundance of species (http://www.s-ea.ee/marmoni/marmoni_pulk/docs/L37.pdf)
DEVOTES indicators	CL_EU_11_DEV	717 CL_EU_11_DEV_717	Abundance of waterbirds in the wintering season	Abundance of waterbirds in the wintering season	MARMONI indicator	26 24 270	SYKE-LU 27 SYKE-LU 44	http://www.s-ea.ee/marmoni/marmoni_pulk/docs/L34.pdf
DEVOTES indicators	CL_EU_11_DEV	721 CL_EU_11_DEV_721	BPL - Biopollution Level index	Biopollution Level index (BPL)		24 94 351 352	SYKE-LU 58, KUCORPI-MBAZ 13	distribution, abundance, impact of species on communities, habitats, ecosystem functioning
DEVOTES indicators	CL_EU_11_DEV	722 CL_EU_11_DEV_722	Distributional range of marine mammals	Distribution of marine mammals		26 24	SYKE-LU 95 SYKE-LU 24 SYKE-LU 25 SYKE-LU 42	Observations of marine mammals
DEVOTES indicators	CL_EU_11_DEV	724 CL_EU_11_DEV_724	Nutritional status of marine mammals	Nutritional status of marine mammals			SYKE-LU 1 SYKE-LU 4 SYKE-LU 3 SYKE-LU 2	- Sternum blubber thickness of grey seals aged 1-20 during the season of pregnancy - blubber thickness of harbour porpoises - Sternum blubber thickness of harbour seals aged 1-20 during the season of pregnancy - Sternum blubber thickness of ringed seals aged 1-20 during the season of pregnancy
DEVOTES indicators	CL_EU_11_DEV	726 CL_EU_11_DEV_726	Population growth rate, abundance and distribution of marine mammals	Population growth rate, abundance and distribution of marine mammals		270 24	SYKE-LU 300 SYKE-LU 10 SYKE-LU 11 SYKE-LU 12	Monitoring of grey seal abundance during the moulting period (DEN, EST, FIN, SWE). Monitoring of harbour seal abundance during the moulting period (DEN, SWE). Monitoring of ringed seal abundance during the breeding period (EST, FIN, SWE). Harbour porpoise surveys (DEN, GER, SWE). Project data and scientific results.
DEVOTES indicators	CL_EU_11_DEV	727 CL_EU_11_DEV_727	Post-smolt mortality of salmon in the Gulf of Bothnia	Post-smolt mortality of salmon in the Gulf of Bothnia		24	SYKE-LU 72 SYKE-LU 73 SYKE-LU 74	Salmon population modelling results.

DEVOTES Indicators	CL_EU_11_DEV	728 CL_EU_11_DEV_728	Pregnancy rates of marine mammals	Pregnancy rates of marine mammals		26 343	SYKE-LU 5, SYKE-LU 8, SYKE-LU 7, SYKE-LU 6, SYKE-LU 32, SYKE-LU 122, SYKE-LU 121, JRC-HT	Pregnancy rate of grey seals aged 4-20 Pregnancy rate of harbour porpoises, all mature females Pregnancy rate of harbour seals aged 4-20 Pregnancy rate of ringed seals aged 4-20 Pregnancy rate is measured as the presence or absence of an embryo or foetus during the pregnancy period in
DEVOTES Indicators	CL_EU_11_DEV	729 CL_EU_11_DEV_729	Productivity of white-tailed eagle	White-tailed eagle productivity		26	SYKE-LU 30 SYKE-LU 118	Number of nestlings in white eagle nests
DEVOTES Indicators	CL_EU_11_DEV	731 CL_EU_11_DEV_731	Abundance ratio of oiled seabirds	Proportion of oiled seabirds	MARMONI indicator	28 94	SYKE-LU 100 KUCORP-ea-ea/marmo ni/marmoni_p ulk/docs/L45. pdf)	abundance (http://www.s
DEVOTES Indicators	CL_EU_11_DEV	732 CL_EU_11_DEV_732	Biomass ratio of opportunistic/perennial macroalgae	Ratio of opportunistic and perennial macroalgae		24 28	SYKE-LU 52 SYKE-LU 106	Biomass of perennial and opportunistic macroalgae
DEVOTES Indicators	CL_EU_11_DEV	733 CL_EU_11_DEV_733	Reproduction of birds	Reproduction of birds		24	SYKE-LU 63 SYKE-LU 62 SYKE-LU 64	Observations of eggs laid, fledglings, etc.
DEVOTES Indicators	CL_EU_11_DEV	734 CL_EU_11_DEV_734	Abundance of sea trout spawners and parr	Abundance of sea trout spawners and parr		270	SYKE-LU 18 SYKE-LU 103	Sea trout parr densities (central); number of spawning rivers, fishing mortality, number of spawners (supporting)
DEVOTES Indicators	CL_EU_11_DEV	735 CL_EU_11_DEV_735	Body length distribution of selected (coastal) fish species	Size structure of coastal key fish species		26	SYKE-LU 34 SYKE-LU 36	i (LU) assume the Swedish coastal experimental fishing data will be used.
DEVOTES Indicators	CL_EU_11_DEV	736 CL_EU_11_DEV_736	Abundance of salmon spawners and smolt	Abundance of salmon spawners and smolt		270	SYKE-LU 19 SYKE-LU 102	Salmon smolt production (central); number of spawning rivers of wild salmon, post-smolt survival, fishing mortality, number of spawners (supporting)
DEVOTES Indicators	CL_EU_11_DEV	738 CL_EU_11_DEV_738	WFD German Eelgrass index (intertidal)	Assessment tool for intertidal eelgrass in coastal and transitional waters		46 48 49 173	MarLim-KF 27 JRC-HT 27	Areal extent (km2), cover data, species composition
DEVOTES Indicators	CL_EU_11_DEV	739 CL_EU_11_DEV_739	AMBI - AZTI Marine Biotic Index	AZTI Marine Biotic Index (AMBI)		155 275 326	IO-BAS 7 IO-BAS 41 IO-BAS 49 IO-BAS 52 IO-BAS 58 IO-BAS 62 IO-BAS 65 IO-BAS 69 JRC-HT 108	species abundance, taxonomic identification to lowest possible taxon, classification of taxa into 5 ecological groups (EG)
DEVOTES Indicators	CL_EU_11_DEV	740 CL_EU_11_DEV_740	BOPA - Benthic Opportunistic Annelida Amphipoda Index	Benthic Opportunistic Annelida Amphipoda Index (BOPA)		62 276 201	AZTI-JGR 283 JRC-HT 58	total number of individuals collected in the samples, the frequency of opportunistic polychaetes, and the frequency of amphipods (except the genus Jassa)
DEVOTES Indicators	CL_EU_11_DEV	742 CL_EU_11_DEV_742	CARLIT-BENTHOS - Cartography of littoral and upper-sublittoral rocky-shore communities	Cartography of littoral and upper-sublittoral rocky-shore communities (CARLIT-BENTHOS)		213 214 167 62 276	JRC-HT 75 AZTI-JGR 255 AZTI-JGR 370	meters of coastline covered by a specifically categorized community; abundance classes (Infralittoral rocky bottom habitats)

DEVOTES Indicators	CL_EU_11_DEV	743 CL_EU_11_DEV_743	DKI - Danish Quality Index	Danish Quality Index (DKI)	Benthic ecological status assessment ["The Danish method is a multimetric approach which takes into account the proportion of sensitive/tolerant species, measured by the AMBI; a diversity component, Shannon–Wiener index (Shannon and Weaver, 1963); and a factor to compensate for low densities and species richness"]	187 188 189 167 66 91	JRC-HT 41 AU-DKJ/JHA 41	
DEVOTES Indicators	CL_EU_11_DEV	745 CL_EU_11_DEV_745	M-AMBI - Multivariate AZTI Marine Biotic Index	Multivariate AZTI Marine Biotic Index (M-AMBI)		85 275 156 155 190 191 192 167 255 46 52	AZTI-JGR 331 IMAR-HV 113 IO-BAS 50 IO-BAS 53 IO-BAS 59 IO-BAS 63 IO-BAS 66 IO-BAS 70 JRC-HT 50 MarLim-KF 50	Requires: richness, diversity and AMBI values calculated on macrobenthic communities.
DEVOTES Indicators	CL_EU_11_DEV	746 CL_EU_11_DEV_746	POMI - Posidonia oceanica Multivariate Index	Posidonia oceanica Multivariate Index (POMI)		276 176 175 62	AZTI-JGR 366 JRC-HT 29 AZTI-JGR 268	shoot density (number of shoots/m2), shoot area cover (%), Plagiotropic rhizomes, Shoot Foliar Surface, Leaf Necrosis, N content in rhizome, P content in rhizomes, Sucrose in rhizomes, δ15N ratio in rhizomes, δ34S ratio in rhizomes, Epiphyte N content, [Cu] in rhizomes, [Pb] in rhizomes, [Zn] in rhizomes
DEVOTES Indicators	CL_EU_11_DEV	747 CL_EU_11_DEV_747	Biomass of cephalopods	[Cephalopods] population abundance and/or biomass		61	AZTI-JGR 154b	
DEVOTES Indicators	CL_EU_11_DEV	748 CL_EU_11_DEV_748	Biomass of demersal elasmobranchs	[Demersal elasmobranchs] population abundance and/or biomass		61	AZTI-JGR 157b	
DEVOTES Indicators	CL_EU_11_DEV	749 CL_EU_11_DEV_749	Biomass of selected zooplankton species and taxa groups	Abundance/biomass of main zooplanktonic groups		83	AZTI-JGR 316b	
DEVOTES Indicators	CL_EU_11_DEV	75 CL_EU_11_DEV_75	Areal extent of anoxic bottoms	Extent and abundance of anoxic bottoms		24	SYKE-LU 75	
DEVOTES Indicators	CL_EU_11_DEV	750 CL_EU_11_DEV_750	Age-frequency distribution of fish	[fish] Population demographic characteristic		79	AZTI-JGR 175b	length-frequency distribution, age-frequency distribution, fecundity rate, sex ratio, survival/mortality rate
DEVOTES Indicators	CL_EU_11_DEV	751 CL_EU_11_DEV_751	Fecundity rate of fish	[fish] Population demographic characteristic		79	AZTI-JGR 175c	length-frequency distribution, age-frequency distribution, fecundity rate, sex ratio, survival/mortality rate
DEVOTES Indicators	CL_EU_11_DEV	752 CL_EU_11_DEV_752	Sex ratio of fish	[fish] Population demographic characteristic		79	AZTI-JGR 175d	length-frequency distribution, age-frequency distribution, fecundity rate, sex ratio, survival/mortality rate
DEVOTES Indicators	CL_EU_11_DEV	753 CL_EU_11_DEV_753	Survival rate of fish	[fish] Population demographic characteristic		79	AZTI-JGR 175e	survival rate
DEVOTES Indicators	CL_EU_11_DEV	757 CL_EU_11_DEV_757	Fecundity rate of sea turtles	[sea-turtles] demographic characteristics, longest shell, fecundity rate, mortality rate, genetic structure		62	AZTI-JGR 178b	

DEVOTES indicators	CL_EU_11_DEV	758 CL_EU_11_DEV_758	Mortality rate of seaturtles	[sea-turtles] demographic characteristics , longest shell, fecundity rate, mortality rate, genetic structure	62	AZTI-JGR 178c	
DEVOTES indicators	CL_EU_11_DEV	761 CL_EU_11_DEV_761	Age-frequency distribution of Pinna nobilis	[Pinna nobilis] density, age-frequency distribution and population demographics	62	AZTI-JGR 266b	
DEVOTES indicators	CL_EU_11_DEV	765 CL_EU_11_DEV_765	Biomass of selected fish species	FC1 Population abundance/biomass of a suite of selected species	31 235 294 294	Cefas - SN 120	Size of catchable proportion of fish population by survey (weight or numbers)
DEVOTES indicators	CL_EU_11_DEV	766 CL_EU_11_DEV_766	Biomass, species composition and spatial distribution of zooplankton (FW6)	FW6 Biomass, species composition and spatial distribution of zooplankton	31 251 248 28	Cefas - CL 136b, JRC-HT	Biomass (e.g. µg C/m2) is calculated using abundance of zooplankton and their individual weight or mean length. If length measurements are to be used, a species and/or size specific conversion factor will need to be applied. Zooplankton community structure can be defined in terms of its species composition (diversity - H').
DEVOTES indicators	CL_EU_11_DEV	77 CL_EU_11_DEV_77	Population structure and size distribution of invertebrate animals	Population structure and size distribution of invertebrate animals	24	SYKE-LU 77	
DEVOTES indicators	CL_EU_11_DEV	770 CL_EU_11_DEV_770	Biomass ratio of opportunistic/sensitive species	Opportunistic-sensitive species proportion		IMAR-HV 112b	species abundance/biomass patterns in space/time
DEVOTES indicators	CL_EU_11_DEV	772 CL_EU_11_DEV_772	Biomass of selected benthic invertebrate species	Population size of key benthos fauna species	72	MHI-OK 120b	Abundance and biomass of the main macrozoobenthos sp.
DEVOTES indicators	CL_EU_11_DEV	773 CL_EU_11_DEV_773	Abundance ratio of selected zooplankton taxa groups	Zooplankton taxonomic group ratio		MHI-AG 115a	Zooplankton Abundance/biomass of the main taxonomic groups - Copepoda, Cladocera, Jellyfish, Others.
DEVOTES indicators	CL_EU_11_DEV	774 CL_EU_11_DEV_774	Species diversity (Simpson) of benthic invertebrates	Zoobenthos Shannon/Simpson Diversity Index	73	MHI-OK 123a	Abundance and biomass of the main macrozoobenthos species
DEVOTES indicators	CL_EU_11_DEV	776 CL_EU_11_DEV_776	Blubber thickness of seals	Health of seals (blubber thickness, parasites)	26 24	SYKE-LU 31 SYKE-LU 60	
DEVOTES indicators	CL_EU_11_DEV	78 CL_EU_11_DEV_78	Number of endangered marine species and populations	Number of endangered marine species and populations	24	SYKE-LU 78	
DEVOTES indicators	CL_EU_11_DEV	780 CL_EU_11_DEV_780	PREI - Posidonia oceanica Rapid Easy Index	PREI index (Posidonia)	353	HCMR-NP 114b, JRC-HT	
DEVOTES indicators	CL_EU_11_DEV	785 CL_EU_11_DEV_785	Abundance of benthic invertebrates	Macroalgae-abundance, Zoobenthos-abundance, Fishes-abundance.		HCMR-NP 111b	number of individuals
DEVOTES indicators	CL_EU_11_DEV	786 CL_EU_11_DEV_786	Abundance of fish	Macroalgae-abundance, Zoobenthos-abundance, Fishes-abundance.		HCMR-NP 111c	
DEVOTES indicators	CL_EU_11_DEV	788 CL_EU_11_DEV_788	Species diversity (Margalef index) of plankton	PH3 Plankton biodiversity indices	31 313	Cefas - CL 131b	
DEVOTES indicators	CL_EU_11_DEV	79 CL_EU_11_DEV_79	Bag size of hunted species	Bag size of hunted species	24	SYKE-LU 79	
DEVOTES indicators	CL_EU_11_DEV	791 CL_EU_11_DEV_791	Species dominance (Breger-Parker) of plankton	PH3 Plankton biodiversity indices	31 313	Cefas - CL 131f	
DEVOTES indicators	CL_EU_11_DEV	792 CL_EU_11_DEV_792	Evenness of sandeelbanks	Sandeelebank richness and evenness	66	AU-DKI/JHA 135b	
DEVOTES indicators	CL_EU_11_DEV	796 CL_EU_11_DEV_796	Areal extent of maerl-type biogenic sediments	Mapping of the Maerl-type biogenic sediments		HCMR-NP 118b	
DEVOTES indicators	CL_EU_11_DEV	80 CL_EU_11_DEV_80	Number of species mentioned in birds directive and habitat directive that are on the suitable protection level	Number of species mentioned in birds directive and habitat directive that are on the suitable protection level	24	SYKE-LU 80	

DEVOTES indicators	CL_EU_11_DEV	801 CL_EU_11_DEV_801	WFD German Saltmarsh index	Assessment for saltmarshes and reed beds in coastal and transitional waters	46 172 327	MarLim-KF 26 JRC-HT 26	extent of saltmarsh area within the water body (% cover), zonation of saltmarsh (% specific saltmarsh zone within the saltmarsh area)
DEVOTES indicators	CL_EU_11_DEV	802 CL_EU_11_DEV_802	WFD German Eastern Baltic Phytoplankton index	Multimetric ecological phytoplankton assessment	58 327	JRC-HT 107 MarLim-KF 110	chl a measurement s, species composition, cell counts, biovolume of species/taxa groups
DEVOTES indicators	CL_EU_11_DEV	804 CL_EU_11_DEV_804	Zooplankton species population size	Zooplankton species population size		MHI-AG 117a, JRC-HT	Species composition, Abundance/biomass of zooplankton species
DEVOTES indicators	CL_EU_11_DEV	805 CL_EU_11_DEV_805	Abundance of bioengineering species	density of structure-forming species Abundance of bioengineer species	61 140	AZTI-JGR 279 UHULL-KM 183	Abundance and cover data
DEVOTES indicators	CL_EU_11_DEV	807 CL_EU_11_DEV_807	Catch per unit effort (CPUE) of selected fish species	[Tuna] catch per unit effort (CPUE) [Yellowfin-tuna] catch per unit effort (CPUE) [Bluefin-tuna] catch per unit effort (CPUE)	84 80	AZTI-JGR 317 AZTI-JGR 306 AZTI-JGR 305	
DEVOTES indicators	CL_EU_11_DEV	808 CL_EU_11_DEV_808	CFR - Multimetric CFR index (Quality of Rocky Bottoms)	CFR index (Quality of Rocky Bottoms) Quality of Rocky Bottoms (CFR)	85 167 215 354	AZTI-JGR 332 JRC-HT 74	% cover; species composition
DEVOTES indicators	CL_EU_11_DEV	809 CL_EU_11_DEV_809	Concentration of Chl a	Chl a concentration 90th percentile and median chlorophyll Chlorophyll-a (µg/L, 90%ile)	63 66 323 325 324	AZTI-JGR 163 AU-DKU/JHA 147 JRC-HT 93 JRC-HT 106	Chlorophyll-a concentration (hot methanol extraction technique)
DEVOTES indicators	CL_EU_11_DEV	81 CL_EU_11_DEV_81	Proportion of trap nets from which it is possible to release seals alive	Proportion of trap nets from which it is possible to release seals alive	24	SYKE-LU 81	
DEVOTES indicators	CL_EU_11_DEV	810 CL_EU_11_DEV_810	Concentration of nutrients	Inorganic nutrients concentration nutrient concentration	66	MHI-OK 141 AU-DKU/JHA 149	MHI-OK 141: DIN, DIP, Si concentrations within the water column AU-DKU/JHA 149: annual mean of TN, TP, winter mean of DIN, DIP
DEVOTES indicators	CL_EU_11_DEV	811 CL_EU_11_DEV_811	Concentration of oxygen at the bottom	Near bottom O2 concentration Concentration of dissolved oxygen in the bottom water	153	MHI-OK 142 IMAR-HV 111	Oxygen concentrations
DEVOTES indicators	CL_EU_11_DEV	812 CL_EU_11_DEV_812	Conservation status of fish	FCS Conservation status of elasmobranch and demersal bony fish species (IUCN) Conservation Status of Fish (CSFa, Piet et al., 2007)	79 62 63 78 332 355	Cefas - SN 130 AZTI-JGR 295	
DEVOTES indicators	CL_EU_11_DEV	814 CL_EU_11_DEV_814	Eveness (Pielou) of selected biological components	Zoobenthos-diversity indices Fishes-diversity indices Macroalgae-diversity indices. PH3 Plankton biodiversity indices	31 313	HCMR- NP 109c HCMR- NP 110c HCMR- NP 108c Cefas - CL 131c	Abundance and species composition data
DEVOTES indicators	CL_EU_11_DEV	815 CL_EU_11_DEV_815	Genetic population structure of selected biological components	[Mammals] population genetic structure based stable isotope profiles and genetic markers [seaturtles] genetic structure [sea-turtles] demographic characteristics , longest shell, fecundity rate, mortality rate, genetic structure [Seagrass] population genetic structure	64 78 62 333	AZTI-JGR 185 AZTI-JGR 197 AZTI-JGR 178d AZTI-JGR 269	

DEVOTES indicators	CL_EU_11_DEV	816 CL_EU_11_DEV_816	Index of phytocoenoses ecological activity (S/Wph)	Index of phytocoenoses ecological activity (S/Wph)	156 316 356	IO-BAS 18 IO-BAS 28	biomass data, species composition
DEVOTES indicators	CL_EU_11_DEV	817 CL_EU_11_DEV_817	MEDOCC	MEDOCC [Lagoons] composition and abundance of benthic invertebrates (diversity, percentage of sensitive species, percentage of opportunistic species, MEDOCC index)	276 62 220 167 259 357	AZTI-JGR 284 JRC-HT 57 AZTI-JGR 261	Relative abundance of sensitive/tolerant species
DEVOTES indicators	CL_EU_11_DEV	818 CL_EU_11_DEV_818	Secchi depth	Secchi depth Water transparency water column transparency	66 156	AU-DKU/JHA 148 MHI-OK 140 IO-BAS 19 IO-BAS 23	AU-DKU/JHA: summer mean values
DEVOTES indicators	CL_EU_11_DEV	819 CL_EU_11_DEV_819	Abundance of macroalgae (total cover)	Total macroalgal cover (at specific depths) Macroalgae-abundance, Zoobenthos-abundance, Fishes-abundance. Algal cover Total macroalgal cover	66 65 219 67 167 91 92 93	AU-DKU/JHA 78 HCMR- NP 111a KAUST-SC 113 JRC-HT 78	total macroalgal cover (%), water depth, position, cover of hard substratum, macroalgal community (cover of individual species)
DEVOTES indicators	CL_EU_11_DEV	82 CL_EU_11_DEV_82	Proportion on non-mature sea trout, sander, and whitefish in the commercial and recreational catch along the coast	Proportion on non-mature sea trout, sander, and whitefish in the commercial and recreational catch along the coast	24	SYKE-LU 82	Commercial and recreational catch data
DEVOTES indicators	CL_EU_11_DEV	820 CL_EU_11_DEV_820	Abundance of demersal elasmobranchs	[Demersal elasmobranchs] population abundance and/or biomass [demersal elasmobranchs] mean abundance	61 78	AZTI-JGR 157a AZTI-JGR 172	mean abundances
DEVOTES indicators	CL_EU_11_DEV	821 CL_EU_11_DEV_821	Areal extent of selected macroalgae species	Areal extent of vulnerable benthic flora species	72 156	MHI-OK 126 IO-BAS 12 IO-BAS 21 MHI-OK 125	
DEVOTES indicators	CL_EU_11_DEV	822 CL_EU_11_DEV_822	Species diversity (Shannon index) of benthic invertebrates	Index of Sannon-Weaver, Shannon-Wiener diversity index (H'), H' index (Shannon Index), Zoobenthos-diversity indices	275 155 206 167 345	MHI-OK 123a, IO-BAS 6, IO-BAS 40, IO-BAS 48, IO-BAS 51, IO-BAS 57, IO-BAS 61, IO-BAS 64, IO-BAS 68, JRC-HT 42, HCMR-NP 7b, HCMR-NP 109d	abundance and species composition data
DEVOTES indicators	CL_EU_11_DEV	823 CL_EU_11_DEV_823	Surface area/biomass ratio of selected macroalgae species	Index of population surface Benthic flora morphofunctional Index	156 317 75	IO-BAS 15 IO-BAS 25 MHI-OK 131	surface area, biomass, species composition
DEVOTES indicators	CL_EU_11_DEV	825 CL_EU_11_DEV_825	Species richness of fish	Species richness (fish) Fish population diversity Fishes-diversity indices	66 268 254	AU-DKU/JHA 129 KAUST-SC 16 HCMR- NP 110b	Number of fish species
DEVOTES indicators	CL_EU_11_DEV	826 CL_EU_11_DEV_826	Species richness of macroalgae	Macroalgae species richness Macroalgae-diversity indices	66	AU-DKU/JHA 123 HCMR- NP 108b	species number
DEVOTES indicators	CL_EU_11_DEV	827 CL_EU_11_DEV_827	Species richness of plankton	Species richness Zoobenthos species richness [Lagoons] composition, abundance and biomass of phytoplankton species (diversity indices, evenness, etc.)	28 66 62	SYKE-LU 113 AU-DKU/JHA 124 AZTI-JGR 265a	SYKE-LU: Zooplankton count data. Ratio between the number of species observed in the area and number of species registered in the area. 1 = no change, <1 -> decrease, >1 -> invasions
DEVOTES indicators	CL_EU_11_DEV	828 CL_EU_11_DEV_828	Species diversity (Shannon index) of plankton	[Lagoons] composition, abundance and biomass of phytoplankton species (diversity indices, evenness, etc.) PH3 Plankton biodiversity indices	62 31 313 345 206	AZTI-JGR 265b Cefas - CL 131a	Species composition and abundance data
DEVOTES indicators	CL_EU_11_DEV	829 CL_EU_11_DEV_829	Species diversity (Shannon index) of macroalgae	Macroalgae-diversity indices. Benthic flora Shannon Diversity Index	73 345 206	HCMR- NP 108d MHI-OK 130	Phytoplankton species - abundance/biomass composition

DEVOTES indicators	CL_EU_11_DEV	83 CL_EU_11_DEV_83	Distribution and abundance of flounder and sea-spawning whitefish fry in shallow sand-bottom habitats	Distribution and abundance of flounder and sea-spawning whitefish fry in shallow sand-bottom habitats	24	SYKE-LU 83	
DEVOTES indicators	CL_EU_11_DEV	830 CL_EU_11_DEV_830	Species diversity (Shannon index) of fish	Community Diversity Index (Shannon index) Fishes-diversity indices Index of biodiversity Sannon - Weaver	94 315 345 206	KUCORP- MBAZ 10 HCMR- NP 110d IO-BAS 1	abundance of species, species composition IO-BAS: Abundance of fish species of non-commercial importance
DEVOTES indicators	CL_EU_11_DEV	831 CL_EU_11_DEV_831	Mortality rate of fish	[fish] Population demographic characteristic F (fishery mortality) of selected fish species	79 66	AZTI-JGR 175f AU-DKJ/HHA 127	mortality rate AU-DKJ/HHA: selected fish species: cod, sole, herring, plaice, haddock, saithe depending on area
DEVOTES indicators	CL_EU_11_DEV	832 CL_EU_11_DEV_832	MTI - Marine Trophic Index	FW-4 Changes in average trophic level of marine predators (e.g. Marine Trophic Index) Marine Trophic Index (MTI)	31 33 151 306 306 306 306 306 306 151 152 278	Cefas - CL 135 IMAR-HV 110	Data from the commercial landings of exploited species (i.e., algae, invertebrates, fish, marine mammals) (Pauly et al., 1998); can also be calculated from any measure of biomass or abundance derived from routine fishery-independent surveys, for different spatial and temporal scales; Also, the index could be applied to any
DEVOTES indicators	CL_EU_11_DEV	833 CL_EU_11_DEV_833	Impacts of anthropogenic removal of target species	Impact/vulnerability of habitats to removal of target species (biological pressure) (Condition of typical species and communities) Impact/vulnerability of habitat to 'removal of target species' (Biological pressure) (Condition of typical species and communities)	113 132	UHLUL-KM 154 UHLUL-KM 173	Level of exposure of habitat to pressure 'removal of target species'
DEVOTES indicators	CL_EU_11_DEV	834 CL_EU_11_DEV_834	Impacts of anthropogenic removal of non-target species	Impact/vulnerability of habitat to 'removal of non-target species' (Biological pressure) (Condition of typical species and communities) Impact/vulnerability of habitats to removal of non-target species (biological pressure) (condition of typical species/communities)	133 114	UHLUL-KM 174 UHLUL-KM 155	Level of exposure of habitat to pressure 'removal of non-target species' Level of exposure to pressure 'removal of non-target species'
DEVOTES indicators	CL_EU_11_DEV	835 CL_EU_11_DEV_835	Impacts of anthropogenic sediment penetration and/or disturbance below the seabed surface	Impact /vulnerability of habitat to 'penetration and/or disturbance of the substratum below the surface of the seabed' (physical pressure) (Extent of seabed significantly affected by human activities for different substratum types) Impact/vulnerability of habitat to penetration and/or disturbance	115 110 134 129	UHLUL-KM 156 UHLUL-KM 151 UHLUL-KM 175 UHLUL-KM 170	Level of exposure to pressure 'penetration and /or disturbance to the substratum below the surface of the seabed' Level of exposure of habitat to pressure 'penetration and/or disturbance of the substratum below the surface of the seabed' Level of exposure of habitat to pressure 'penetration

DEVOTES indicators	CL_EU_11_DEV	836 CL_EU_11_DEV_836	Impacts of anthropogenic shallow abrasion/penetration damage to seabed surface	Impact/vulnerability of habitat to 'surface abrasion: damage to seabed surface features (physical pressure) (Extent of seabed significantly affected by human activities for the different substratum types. Impact/vulnerability of habitat to 'surface abrasion: damage to seabed surface	117 136 131 111 116 135 112 130	UHULL-KM 158 UHULL-KM 177 UHULL-KM 172 UHULL-KM 152 UHULL-KM 157 UHULL-KM 176 UHULL-KM 153 UHULL-KM 171	Level of exposure to pressure 'surface abrasion: damage to seabed surface features' Level of exposure to pressure 'surface abrasion: damage to seabed surface features' Level of exposure of
DEVOTES indicators	CL_EU_11_DEV	837 CL_EU_11_DEV_837	IQI - Infaunal Quality Index	Infaunal quality index Infaunal Quality Index IQI	125 194 167 255	UHULL-KM 166 JRC-HT 44	species composition and abundance, AZTI Marine Biotic Index (AMBI) taxonomical id & classification of taxa
DEVOTES indicators	CL_EU_11_DEV	84 CL_EU_11_DEV_84	State of typical species and communities in various habitats	State of typical species and communities in various habitats	24	SYKE-LU 84	State assessments of selected species and communities
DEVOTES indicators	CL_EU_11_DEV	840 CL_EU_11_DEV_840	Abundance of populations of selected bird species (winter)	Abundance of wintering populations of seabirds: common merganser (Mergus merganser) Abundance of wintering populations of seabirds: great crested grebe (Podiceps cristatus) Abundance of wintering populations of seabirds: long-tailed duck (Clangula hyemalis) Abundance of wintering populations of seabirds: common	94	KUCORPI-MBAZ 3 KUCORPI-MBAZ 4 KUCORPI-MBAZ 1 KUCORPI-MBAZ 6 KUCORPI-MBAZ 5 KUCORPI-MBAZ 7 KUCORPI-MBAZ 2	abundance of species
DEVOTES indicators	CL_EU_11_DEV	841 CL_EU_11_DEV_841	Abundance ratio of selected phytoplankton taxa groups	Abundance of phytoplankton , diatoms, dinoflagellates ; and ratio diatoms/dinoflagellates.	80	AZTI-JGR 308a	species composition and abundance (cell counts)
DEVOTES indicators	CL_EU_11_DEV	842 CL_EU_11_DEV_842	Abundance of harbour porpoise	Harbour porpoise summer abundance Abundance of harbour porpoises	66 26	AU-DKI/JHA 113 SYKE-LU 26	
DEVOTES indicators	CL_EU_11_DEV	843 CL_EU_11_DEV_843	WFD British Seagrass index	Intertidal Seagrass Seagrass WFD seagrass tool	171 168 170 124	JRC-HT 25 JRC-HT 24 UHULL-KM 165	Ireland: seagrass species composition (no. taxa), bed area cover (%), shoot density (%) UK: seagrass species composition (no. taxa), bed area cover (m2), shoot density (%)
DEVOTES indicators	CL_EU_11_DEV	844 CL_EU_11_DEV_844	WFD Finnish Assessment system for coastal waters for phytoplankton	Assessment system for coastal waters using phytoplankton total biomass (mg/l) Assessment system for coastal waters using phytoplankton chlorophyll-a	350	JRC-HT 99 JRC-HT 90	total biomass (mg/l), chl-a concentration s

DEVOTES indicators	CL_EU_11_DEV	845 CL_EU_11_DEV_845	Species richness of selected habitats	Composition and abundance of typical species on biogenic reef (condition of the typical species and communities) species richness per habitat Sandeelbank richness and evenness number of key species per class or type of habitat	101 61 79 63 78 62 66	UHULL-KM 142 AZTI-JGR 252 AZTI-JGR 254 AU-DKU/JHA 135a AZTI-JGR 257	abundance, species composition data of different benthic species and communities
DEVOTES indicators	CL_EU_11_DEV	846 CL_EU_11_DEV_846	Species richness of benthic invertebrates	Zoobenthos-diversity indices richness of benthic communities	277 87 276 85 86	HCMR- NP 109b AZTI-JGR 330	Species number
DEVOTES indicators	CL_EU_11_DEV	847 CL_EU_11_DEV_847	Species diversity (Menhinick) of plankton	Ph3 Plankton biodiversity indices Index of biodiversity Menhinick	31 313 159 314	Cefas - CL 131d IO-BAS 77	species composition, abundance
DEVOTES indicators	CL_EU_11_DEV	848 CL_EU_11_DEV_848	Abundance (per unit of surface) of structuring/engineering species (per habitat)	biomass or abundance (per unit of surface) of structuring/engineering species (per habitat)	86 85 276 87	AZTI-JGR 322a	
DEVOTES indicators	CL_EU_11_DEV	849 CL_EU_11_DEV_849	Substrate condition	hydrographic features, trophic characteristics, sediment characteristics Substratum composition/sediment character sediment characteristics (grain size, porosity, organic content, Eh, pollutants) [Infralittoral soft bottom habitats]	138	AZTI-JGR 293 UHULL-KM 180 AZTI-JGR 291	U-HULL-KM: Sediment grain size and proportion in bulk sediment classes (sand/silt/gravel) AZTI-JGR: grain size, porosity, organic content, Eh, pollutants
DEVOTES indicators	CL_EU_11_DEV	85 CL_EU_11_DEV_85	Number of endangered habitats and related species	Number of endangered habitats and related species	24	SYKE-LU 85	
DEVOTES indicators	CL_EU_11_DEV	850 CL_EU_11_DEV_850	Abundance ratio of fodder/non-fodder zooplankton	Zooplankton fodder/non-fodder ratio		MHI-AG 116a	species composition, abundance
DEVOTES indicators	CL_EU_11_DEV	851 CL_EU_11_DEV_851	Abundance of selected zooplankton species and taxa groups	[zooplankton] abundance of taxa and characteristic species Abundance/biomass of main zooplanktonic groups	63 83	AZTI-JGR 165 AZTI-JGR 316a	species composition and abundance data
DEVOTES indicators	CL_EU_11_DEV	852 CL_EU_11_DEV_852	Abundance of functional groups of fish	Abundance of key functional groups of coastal fish Trophic composition of fish populations	166	SYKE-LU 17 KAUST-SC 114	SYKE: Species abundances KAUST: species composition and numbers/counts per functional group
DEVOTES indicators	CL_EU_11_DEV	853 CL_EU_11_DEV_853	Abundance of phytoplankton	[Phytoplankton] population abundance and/or biomass and abundance	61 63	AZTI-JGR 156a AZTI-JGR 164a	statistical descriptors (box-plot) of the biomass and abundance of taxa (global, segmented by season, segmented by space).
DEVOTES indicators	CL_EU_11_DEV	854 CL_EU_11_DEV_854	Abundance of seals	Abundance of seals Abundance and long-term development of seal species (grey seal, ringed seal) Size, characteristics and distribution of the population of monk seals in marine subareas	26 24	SYKE-LU 29 SYKE-LU 46 HCMR-NP 1	
DEVOTES indicators	CL_EU_11_DEV	855 CL_EU_11_DEV_855	Abundance of selected benthic invertebrate species	Population size of key benthos fauna species abundance average abundance	72 155	MHI-OK 120a IO-BAS 45 IO-BAS 42 IO-BAS 3 IO-BAS 38	abundance

DEVOTES indicators	CL_EU_11_DEV	856 CL_EU_11_DEV_856	Abundance of selected phytoplankton species and taxa groups	[phytoplankton] abundance of taxa and characteristic species Abundance of phytoplankton , diatoms, dinoflagellates ; and ratio diatoms/dinoflagellates.	63 80	AZTI-JGR 161 AZTI-JGR 308a	species composition and abundance data
DEVOTES indicators	CL_EU_11_DEV	857 CL_EU_11_DEV_857	Abundance of zooplankton	[Zooplankton] population abundance and/or biomass [zooplankton] biomass and abundance Zooplankton mean size and total abundance Zooplankton mean size and total abundance	61 63 94 24	AZTI-JGR 155a AZTI-JGR 167a KUCORP: MBAZ 18a SYKE-LU 20 SYKE-LU 68	AZTI: statistical descriptors (box-plot) of the biomass and abundance of functional groups (global, segmented by season, segmented by space). KUCORP: mean biomass and total abundance of species SYKE Zooplankton monitoring data
DEVOTES indicators	CL_EU_11_DEV	858 CL_EU_11_DEV_858	Areal extent of eelgrass	Eelgrass coverage Areal extent of intertidal eelgrass	66 46 48 49	AU-DKU/JHA 142 MarLim-KF 111	Areal extent data of eelgrass
DEVOTES indicators	CL_EU_11_DEV	859 CL_EU_11_DEV_859	Areal extent of Posidonia oceanica meadows	Area occupied by Posidonia oceanica meadows; Mapping of the Posidonia oceanica meadows	62	AZTI-JGR 238, HCMR-NP 118a	
DEVOTES indicators	CL_EU_11_DEV	86 CL_EU_11_DEV_86	Areal extent of protected sea areas	Area of protected sea areas	24	SYKE-LU 86	
DEVOTES indicators	CL_EU_11_DEV	860 CL_EU_11_DEV_860	Abundance of shade-adapted, slow growing calcareous species	Abundance of perennial seaweeds, Abundance of shade-adapted, slow growing calcareous species, Abundance of opportunistic macroalgae, Ecological Evaluation Index (EEI), PREI index (Posidonia), BENTIX index		HCMR- NP 115b	
DEVOTES indicators	CL_EU_11_DEV	861 CL_EU_11_DEV_861	Abundance of opportunistic macroalgae	Abundance of perennial seaweeds, Abundance of shade-adapted, slow growing calcareous species, Abundance of opportunistic macroalgae, Ecological Evaluation Index (EEI), PREI index (Posidonia), BENTIX index		HCMR- NP 115c	
DEVOTES indicators	CL_EU_11_DEV	863 CL_EU_11_DEV_863	EEI - Ecological Evaluation Index	Ecological evaluation index (EEI), Ecological evaluation index (EEIc), Ecological Evaluation Index (EEI)	183 273 271 155 358	IO-BAS 26, IO-BAS 17, IO-BAS 27, HCMR NP 114a	JRC-HT: % coverage area Ecological State Group I, II species IO-BAS: macroalgae community taxonomic structure (biomass)
DEVOTES indicators	CL_EU_11_DEV	865 CL_EU_11_DEV_865	BENTIX	BENTIX index, BENTIX, BENTIX index	199 167 257 359 360 361 362	HCMR-NP 7a, JRC-HT 51, HCMR-NP 114c	species taxonomical identification (or lowest reliable taxon, level possible), abundance (individuals count per area)
DEVOTES indicators	CL_EU_11_DEV	866 CL_EU_11_DEV_866	Biomass of engineering species	biomass of engineering species	85 86	AZTI-JGR 328 AZTI-JGR 383	
DEVOTES indicators	CL_EU_11_DEV	867 CL_EU_11_DEV_867	Dietary functional group biomass	Dietary functional group biomass	44 34	Cefas - CL 154	Biomass of pelagic planktivores, pelagic piscivores, demersal benthivores, demersal planktivores and omnivores.
DEVOTES indicators	CL_EU_11_DEV	868 CL_EU_11_DEV_868	Biomass of mesozooplankton	Mesozooplankton wet biomass	318	IO-BAS 84 IO-BAS 85 IO-BAS 86	wet biomass
DEVOTES indicators	CL_EU_11_DEV	869 CL_EU_11_DEV_869	Biomass of Mnemiopsis leidyi	wet biomass Biomass of Mnemiopsis leidyi	319 318 71 266 267	IO-BAS 87 MHI-OK 119	wet biomass
DEVOTES indicators	CL_EU_11_DEV	87 CL_EU_11_DEV_87	Ballast water treatment indicator	Ballast water treatment indicator	24	SYKE-LU 87	

DEVOTES indicators	CL_EU_11_DEV	870 CL_EU_11_DEV_870	Biomass of structuring species	biomass of structure-forming species biomass of structure-forming or bioconstructor species biomass of structuring species	61 79 63 78 62	AZTI-JGR 278 AZTI-JGR 286 AZTI-JGR 280	
DEVOTES indicators	CL_EU_11_DEV	871 CL_EU_11_DEV_871	Biomass ratio of ESG IA species	% of ESG IA species from the total biomass	156 271	IO-BAS 14 IO-BAS 24	macroalgae community taxonomic structure (biomass)
DEVOTES indicators	CL_EU_11_DEV	872 CL_EU_11_DEV_872	Biomass ratio of non-indigenous/native species	Ratio non-indigenous/native species biomass	321	IO-BAS 88 IO-BAS 89	proportion of biomass
DEVOTES indicators	CL_EU_11_DEV	873 CL_EU_11_DEV_873	LFI - Large Fish indicator	Large fish individuals from fishery-based data sources; FC2 OSPAR EcoQO for proportion of large fish (LFI); Large fish indicator (LFI); Large Fish indicator (LFI); Proportion of large fish in the community; Abundance index of large (TL>250 mm) perch (Perca fluviatilis) in monitoring catches	28 236 32 236 150 82 83 80 81 66 148 150 26	SYKE-LU 104, Cefas-SN 121, AZTI-JGR 304, AU-DIU/JHA 133, IMAR-HV 109, SYKE-LU 16, SYKE-LU 37, JRC-HT	Fishery-dependent data, i.e. catch samples from commercial fishery; trawl survey data. Estimates of biomass by size group and a size limit for each ecosystem is required
DEVOTES indicators	CL_EU_11_DEV	874 CL_EU_11_DEV_874	Body length distribution of demersal fishes, elasmobranchs and invertebrates	[Demersal fishes and elasmobranchs] trends based upon 95th percentile of the fish length distribution [Demersal fishes, elasmobranchs and invertebrates] 95th percentile of the fish length distribution	63 62	AZTI-JGR 177 AZTI-JGR 179	
DEVOTES indicators	CL_EU_11_DEV	875 CL_EU_11_DEV_875	Body length distribution of selected (long-living) benthic invertebrate species	Size distribution of long-living macrozoobenthic animals Size distribution of benthic long-living species	24 28	SYKE-LU 69 SYKE-LU 108	
DEVOTES indicators	CL_EU_11_DEV	876 CL_EU_11_DEV_876	BQI - Benthic Quality Index	Benthic Quality index (BQI)	46 329 197 167 327 94	MarLim-KF 129 SYKE-LU 38 SYKE-LU 39 JRC-HT 48 KUCORPI-MBAZ 20	taxonomic identification at species level, species count, species sensitivity classification
DEVOTES indicators	CL_EU_11_DEV	877 CL_EU_11_DEV_877	CIMPAL - Cumulative IMPacts of invasive Alien species	CIMPAL - Cumulative IMPacts of invasive Alien species	336 337	JRC-HT	- georeferenced species distribution data (abundance or presence-absence); - georeferenced habitat distribution data; - magnitude of all ecological impacts of a species in the ecosystem (be it on species, populations, community or habitat).
DEVOTES indicators	CL_EU_11_DEV	878 CL_EU_11_DEV_878	Fish distributional pattern (FC8)	FC8 Distributional pattern within range of a suite of selected species		JRC-HT	
DEVOTES indicators	CL_EU_11_DEV	879 CL_EU_11_DEV_879	MMI - Multi-metric index (BH2)	BH2 Multi-metric index (MMI)		JRC-HT	
DEVOTES indicators	CL_EU_11_DEV	88 CL_EU_11_DEV_88	Number of hunted seals (grey seal, ringed seal)	Number of hunted seals (grey seal, ringed seal)	24	SYKE-LU 88	
DEVOTES indicators	CL_EU_11_DEV	880 CL_EU_11_DEV_880	Common Size composition in fish communities (FW3)	FW3 Common Size composition in fish communities (TV4)	339	JRC-HT	number of fish in a sample (N) body mass of each fish in a sample (M) length of each fish in a sample (L)

DEVOTES Indicators	CL_EU_11_DEV	881 CL_EU_11_DEV_881	Changes in average trophic level of marine predators (FW4)	FW4 Changes in average trophic level of marine predators (Marine Trophic Index)	340	JRC-HT	species mean trophic level (TL) species biomass (only high trophic level species > 3.25)
DEVOTES Indicators	CL_EU_11_DEV	882 CL_EU_11_DEV_882	Conservation status of elasmobranch and demersal bony-fish species (IUCN) (FC5)	FC5 Conservation status of elasmobranch and demersal bony-fish species (IUCN)		JRC-HT	
DEVOTES Indicators	CL_EU_11_DEV	883 CL_EU_11_DEV_883	Proportion of mature fish (FC6)	FC6 Proportion of mature fish		JRC-HT	
DEVOTES Indicators	CL_EU_11_DEV	884 CL_EU_11_DEV_884	Distributional range (FC7)	FC7 Distributional range			
DEVOTES Indicators	CL_EU_11_DEV	885 CL_EU_11_DEV_885	Ecological Network Analysis indicator (FW9)	FW9 Ecological Network Analysis indicator		JRC-HT	The model will need information on the biomass of different trophic groups (e.g. production for phytoplankton) and dietary data that can be obtained from, e.g. stable isotopes, stomach contents, etc. Minimum requirements are biomass of dominant compartments and the local primary production. Other variables for
DEVOTES Indicators	CL_EU_11_DEV	886 CL_EU_11_DEV_886	Multimetric BENTIX	Multimetric BENTIX	363 362 360 255	JRC-HT	BENTIX Index, Shannon diversity index, Species richness. (Search also respective catalogue entries for further details on BENTIX and Shannon diversity indices).
DEVOTES Indicators	CL_EU_11_DEV	887 CL_EU_11_DEV_887	Accumulated cover of perennial macroalgae	Accumulated cover of perennial macroalgae	MARMONI indicator	LU-SYKE	Macroalgae coverage % (http://www.s-ea.ee/marmoni/marmoni_p ulk/docs/L9.pdf)
DEVOTES Indicators	CL_EU_11_DEV	888 CL_EU_11_DEV_888	Accumulated cover of submerged vascular plants	Accumulated cover of submerged vascular plants	MARMONI indicator	LU-SYKE	submerged vascular plant cover (http://www.s-ea.ee/marmoni/marmoni_p ulk/docs/L10.pdf)
DEVOTES Indicators	CL_EU_11_DEV	889 CL_EU_11_DEV_889	Beach wrack Macrovegetation Index (BMI)	Beach wrack Macrovegetation Index (BMI)	MARMONI indicator	LU-SYKE	Sampled transects parallel to shore line (http://www.s-ea.ee/marmoni/marmoni_p ulk/docs/L11.pdf)
DEVOTES Indicators	CL_EU_11_DEV	89 CL_EU_11_DEV_89	Reproductive health of seals (grey seal, ringed seal)	Reproductive health of seals (grey seal, ringed seal)	24	SYKE-LU 89, JRC-HT	
DEVOTES Indicators	CL_EU_11_DEV	890 CL_EU_11_DEV_890	Indicator of macroalgal community structure (MCS)	Indicator of macroalgal community structure (MCS)	MARMONI indicator	LU-SYKE	coverage data of different functional and structural groups of macroalgae (http://www.s-ea.ee/marmoni/marmoni_p ulk/docs/L12.pdf)
DEVOTES Indicators	CL_EU_11_DEV	891 CL_EU_11_DEV_891	Habitat diversity index	Habitat diversity index	MARMONI indicator		Habitat data on GIS format (http://www.s-ea.ee/marmoni/marmoni_p ulk/docs/L13.pdf)
DEVOTES Indicators	CL_EU_11_DEV	892 CL_EU_11_DEV_892	Seafloor exploitation index	Seafloor exploitation index	MARMONI indicator	LU-SYKE	Georeferenced data on direct anthropogenic disturbances on seabed (http://www.s-ea.ee/marmoni/marmoni_p ulk/docs/L14.pdf)
DEVOTES Indicators	CL_EU_11_DEV	893 CL_EU_11_DEV_893	Spectral variability index	Spectral variability index	MARMONI indicator	LU-SYKE	Georeferenced remotely sensed imagery of a sea area (http://www.s-ea.ee/marmoni/marmoni_p ulk/docs/L15.pdf)

DEVOTES indicators	CL_EU_11_DEV	894 CL_EU_11_DEV_894	Condition of soft sediment habitats – the aRPD approach	Condition of soft sediment habitats – the aRPD approach	MARMONI indicator	LU-SYKE	RPD depth data (http://www.s-ea.ee/marmoni_pulk/docs/L16.pdf)
DEVOTES indicators	CL_EU_11_DEV	895 CL_EU_11_DEV_895	Population structure of <i>Macoma balthica</i>	Population structure of <i>Macoma balthica</i>	MARMONI indicator	LU-SYKE	size distribution of <i>M. balthica</i> (http://www.s-ea.ee/marmoni_pulk/docs/L17.pdf)
DEVOTES indicators	CL_EU_11_DEV	896 CL_EU_11_DEV_896	<i>Cladophora glomerata</i> growth rate	<i>Cladophora glomerata</i> growth rate	MARMONI indicator	LU-SYKE	Growth rate of <i>C. glomerata</i> (http://www.s-ea.ee/marmoni_pulk/docs/L18.pdf)
DEVOTES indicators	CL_EU_11_DEV	897 CL_EU_11_DEV_897	Community heterogeneity (CH)	Community heterogeneity (CH)	MARMONI indicator	LU-SYKE	Heterogeneity of communities (http://www.s-ea.ee/marmoni_pulk/docs/L20.pdf)
DEVOTES indicators	CL_EU_11_DEV	898 CL_EU_11_DEV_898	Number of functional traits (NFT)	Number of functional traits (NFT)	MARMONI indicator	LU-SYKE	number of functions (biological traits) in the system (http://www.s-ea.ee/marmoni_pulk/docs/L21.pdf)
DEVOTES indicators	CL_EU_11_DEV	899 CL_EU_11_DEV_899	Areal extent of reed belts	Reed belt extent – the NDVI approach via high resolution satellite images	MARMONI indicator	LU-SYKE	Extent of reed beds (http://www.s-ea.ee/marmoni_pulk/docs/L23.pdf)
DEVOTES indicators	CL_EU_11_DEV	900 CL_EU_11_DEV_900	Age/sex ratio of waterbird species (ARI/SRI)	Age/sex ratio of waterbird species (ARI/SRI)	MARMONI indicator	LU-SYKE	http://www.s-ea.ee/marmoni_pulk/docs/L44.pdf
DEVOTES indicators	CL_EU_11_DEV	901 CL_EU_11_DEV_901	Proportion of oiled waterbirds	Proportion of oiled waterbirds	MARMONI indicator	LU-SYKE	http://www.s-ea.ee/marmoni_pulk/docs/L45.pdf
DEVOTES indicators	CL_EU_11_DEV	902 CL_EU_11_DEV_902	Abundance index of beached birds	Abundance index of beached birds	MARMONI indicator (http://www.s-ea.ee/marmoni_pulk/docs/L46.pdf)	LU-SYKE	http://www.s-ea.ee/marmoni_pulk/docs/L46.pdf
DEVOTES indicators	CL_EU_11_DEV	903 CL_EU_11_DEV_903	Indicator on condition of waterbirds	Indicator on condition of waterbirds	MARMONI indicator (http://www.s-ea.ee/marmoni_pulk/docs/L48.pdf)	LU-SYKE	http://www.s-ea.ee/marmoni_pulk/docs/L48.pdf
DEVOTES indicators	CL_EU_11_DEV	904 CL_EU_11_DEV_904	Feeding pressure on waterbird food sources	Feeding pressure on waterbird food sources	MARMONI indicator (http://www.s-ea.ee/marmoni_pulk/docs/L49.pdf)	LU-SYKE	http://www.s-ea.ee/marmoni_pulk/docs/L49.pdf
DEVOTES indicators	CL_EU_11_DEV	905 CL_EU_11_DEV_905	Abundance and distribution of juvenile flounder	Abundance and distribution of juvenile flounder	MARMONI indicator (http://www.s-ea.ee/marmoni_pulk/docs/L1.p)	LU-SYKE	http://www.s-ea.ee/marmoni_pulk/docs/L1.p
DEVOTES indicators	CL_EU_11_DEV	906 CL_EU_11_DEV_906	Long term abundance and distribution of demersal fish in relation to benthic communities (fourhorn sculpin <i>Myoxocephalus quadricornis</i> and eelpout <i>Zoarces viviparus</i> example)	Long term abundance and distribution of demersal fish in relation to benthic communities (fourhorn sculpin <i>Myoxocephalus quadricornis</i> and eelpout <i>Zoarces viviparus</i> example)	MARMONI indicator (http://www.s-ea.ee/marmoni_pulk/docs/L2.p)	LU-SYKE	http://www.s-ea.ee/marmoni_pulk/docs/L2.p
DEVOTES indicators	CL_EU_11_DEV	907 CL_EU_11_DEV_907	Abundance and impact of non-native fish species (round goby example)	Abundance and impact of non-native fish species (round goby example)	MARMONI indicator (http://www.s-ea.ee/marmoni_pulk/docs/L3.p)	LU-SYKE	http://www.s-ea.ee/marmoni_pulk/docs/L3.p
DEVOTES indicators	CL_EU_11_DEV	908 CL_EU_11_DEV_908	The length at sexual maturation of female pikeperch (<i>Sander lucioperca</i>) in monitoring catches	The length at sexual maturation of female pikeperch (<i>Sander lucioperca</i>) in monitoring catches	MARMONI indicator (http://www.s-ea.ee/marmoni_pulk/docs/L5.p)	LU-SYKE	http://www.s-ea.ee/marmoni_pulk/docs/L5.p
DEVOTES indicators	CL_EU_11_DEV	909 CL_EU_11_DEV_909	Trophic diversity index of juvenile fish	Trophic diversity index of juvenile fish	MARMONI indicator (http://www.s-ea.ee/marmoni_pulk/docs/L7.p)	LU-SYKE	http://www.s-ea.ee/marmoni_pulk/docs/L7.p
DEVOTES indicators	CL_EU_11_DEV	91 CL_EU_11_DEV_91	Number of dredging permits and the amount dredged related to them	Number of dredging permits and the amount dredged related to them		24	SYKE-LU 91
DEVOTES indicators	CL_EU_11_DEV	910 CL_EU_11_DEV_910	Habitat-related functional diversity of juvenile fish	Habitat-related functional diversity of juvenile fish	MARMONI indicator (http://www.s-ea.ee/marmoni_pulk/docs/L8.p)		http://www.s-ea.ee/marmoni_pulk/docs/L8.p

DEVOTES indicators	CL_EU_11_DEV	911 CL_EU_11_DEV_911	Phytoplankton species assemblage clusters based on environmental factors	Phytoplankton species assemblage clusters based on environmental factors	MARMONI indicator (http://www.s-ea.ee/marmoni/project.php)		phytoplankton biomass (http://www.s-ea.ee/marmoni/docs/L24.pdf)
DEVOTES indicators	CL_EU_11_DEV	912 CL_EU_11_DEV_912	Cyanobacterial surface accumulations - the CSA-index	Cyanobacteria l surface accumulations - the CSA-index	MARMONI indicator (http://www.s-ea.ee/marmoni/project.php)		http://www.s-ea.ee/marmoni/docs/L26.pdf
DEVOTES indicators	CL_EU_11_DEV	913 CL_EU_11_DEV_913	Phytoplankton trait- and dendrogram based functional diversity index (FD)	Phytoplankton trait- and dendrogram based functional diversity index (FD)	MARMONI indicator (http://www.s-ea.ee/marmoni/project.php)		microscopy results of phytoplankton (http://www.s-ea.ee/marmoni/docs/L28.pdf)
DEVOTES indicators	CL_EU_11_DEV	914 CL_EU_11_DEV_914	Spring bloom intensity index	Spring bloom intensity index	MARMONI indicator (http://www.s-ea.ee/marmoni/project.php)	LU-SYKE	http://www.s-ea.ee/marmoni/docs/L29.pdf
DEVOTES indicators	CL_EU_11_DEV	915 CL_EU_11_DEV_915	Copepod biomass	Copepod biomass	MARMONI indicator (http://www.s-ea.ee/marmoni/project.php)	LU-SYKE	http://www.s-ea.ee/marmoni/docs/L30.pdf
DEVOTES indicators	CL_EU_11_DEV	916 CL_EU_11_DEV_916	Zooplankton diversity	Zooplankton diversity	MARMONI indicator (http://www.s-ea.ee/marmoni/project.php)		http://www.s-ea.ee/marmoni/docs/L31.pdf
DEVOTES indicators	CL_EU_11_DEV	918 CL_EU_11_DEV_918	Biomass of microphagous mesozooplankton	Microphagous mesozooplankton biomass	MARMONI indicator (http://www.s-ea.ee/marmoni/project.php)	LU-SYKE	http://www.s-ea.ee/marmoni/docs/L32.pdf
DEVOTES indicators	CL_EU_11_DEV	92 CL_EU_11_DEV_92	Cumulative effect of human activities	Cumulative effect of human activities		24	SYKE-LU 92
DEVOTES indicators	CL_EU_11_DEV	920 CL_EU_11_DEV_920	Habitat distributional range (ComInd1)	Habitat distributional range (Common Indicator 1)	MedComInd (https://www.medqsr.org/integrated-monitoring-and-assessment-programme-mediterranean-sea-and-coast)	JRC-HT	
DEVOTES indicators	CL_EU_11_DEV	921 CL_EU_11_DEV_921	Condition of the habitat's typical species and communities (ComInd2)	Condition of the habitat's typical species and communities (Common Indicator 2)	MedComInd (https://www.medqsr.org/integrated-monitoring-and-assessment-programme-mediterranean-sea-and-coast)	JRC-HT	
DEVOTES indicators	CL_EU_11_DEV	922 CL_EU_11_DEV_922	Species distributional range (ComInd3)	Species distributional range (related to marine mammals, seabirds, marine reptiles) (Common Indicator 3)	MedComInd (https://www.medqsr.org/integrated-monitoring-and-assessment-programme-mediterranean-sea-and-coast)	JRC-HT	
DEVOTES indicators	CL_EU_11_DEV	923 CL_EU_11_DEV_923	Population abundance of selected species (ComInd4)	Population abundance of selected species (related to marine mammals, seabirds, marine reptiles) (Common Indicator 4)	MedComInd (https://www.medqsr.org/integrated-monitoring-and-assessment-programme-mediterranean-sea-and-coast)	JRC-HT	
DEVOTES indicators	CL_EU_11_DEV	924 CL_EU_11_DEV_924	Population demographic characteristics (ComInd5)	Population demographic characteristics (e.g. body size or age class structure, sex ratio, fecundity rates, survival/mortality rates related to marine mammals, seabirds, marine reptiles) (Common Indicator 5)	MedComInd (https://www.medqsr.org/integrated-monitoring-and-assessment-programme-mediterranean-sea-and-coast)	JRC-HT	
DEVOTES indicators	CL_EU_11_DEV	925 CL_EU_11_DEV_925	Trends in abundance, temporal occurrence, and spatial distribution of NIS, particularly IAS, notably in risk areas (ComInd6)	Trends in abundance, temporal occurrence, and spatial distribution of non-indigenous species, particularly invasive, non-indigenous species, notably in risk areas (Common Indicator 6)	MedComInd (https://www.medqsr.org/integrated-monitoring-and-assessment-programme-mediterranean-sea-and-coast)	JRC-HT	

DEVOTES indicators	CL_EU_11_DEV	926 CL_EU_11_DEV_926	Bycatch of vulnerable and non-target species (Comind12)	Bycatch of vulnerable and non-target species (Common Indicator 12)	MedComMind (https://www.medqsr.org/integrated-monitoring-and-assessment-programme-mediterranean-sea-and-coast)	JRC-HT
DEVOTES indicators	CL_EU_11_DEV	927 CL_EU_11_DEV_927	Location and extent of the habitats impacted directly by hydrographic alterations (Comind15)	Location and extent of the habitats impacted directly by hydrographic alterations (Common Indicator 15)	MedComMind (https://www.medqsr.org/integrated-monitoring-and-assessment-programme-mediterranean-sea-and-coast)	JRC-HT
DEVOTES indicators	CL_EU_11_DEV	928 CL_EU_11_DEV_928	Length of coastline subject to physical disturbance due to the influence of man-made structures (Comind16)	Length of coastline subject to physical disturbance due to the influence of man-made structures (Common Indicator 16)	MedComMind (https://www.medqsr.org/integrated-monitoring-and-assessment-programme-mediterranean-sea-and-coast)	JRC-HT
DEVOTES indicators	CL_EU_11_DEV	929 CL_EU_11_DEV_929	Spawning stock Biomass (Comind7)	Spawning stock Biomass (Common Indicator 7)	MedComMind (https://www.medqsr.org/integrated-monitoring-and-assessment-programme-mediterranean-sea-and-coast)	JRC-HT
DEVOTES indicators	CL_EU_11_DEV	93 CL_EU_11_DEV_93	Index describing recovery of underwater deposition sites	Index describing recovery of underwater deposition sites	24	SYKE-LU 93
DEVOTES indicators	CL_EU_11_DEV	930 CL_EU_11_DEV_930	Total landings (Comind8)	Total landings (Common Indicator 8)	MedComMind (https://www.medqsr.org/integrated-monitoring-and-assessment-programme-mediterranean-sea-and-coast)	JRC-HT
DEVOTES indicators	CL_EU_11_DEV	931 CL_EU_11_DEV_931	Fishing Mortality (Comind9)	Fishing Mortality (Common Indicator 9)	MedComMind (https://www.medqsr.org/integrated-monitoring-and-assessment-programme-mediterranean-sea-and-coast)	JRC-HT
DEVOTES indicators	CL_EU_11_DEV	932 CL_EU_11_DEV_932	Fishing Effort (Comind10)	Fishing Effort (Common Indicator 10)	MedComMind (https://www.medqsr.org/integrated-monitoring-and-assessment-programme-mediterranean-sea-and-coast)	JRC-HT
DEVOTES indicators	CL_EU_11_DEV	933 CL_EU_11_DEV_933	CPUE - Catch per unit of effort (Comind11)	Catch per unit of effort (CPUE) (Common Indicator 11)	MedComMind (https://www.medqsr.org/integrated-monitoring-and-assessment-programme-mediterranean-sea-and-coast)	JRC-HT
DEVOTES indicators	CL_EU_11_DEV	934 CL_EU_11_DEV_934	Concentration of key nutrients in water column (Comind13)	Concentration of key nutrients in water column (Common Indicator 13)	MedComMind (https://www.medqsr.org/integrated-monitoring-and-assessment-programme-mediterranean-sea-and-coast)	JRC-HT
DEVOTES indicators	CL_EU_11_DEV	935 CL_EU_11_DEV_935	Chlorophyll-a concentration in water column (Comind14)	Chlorophyll-a concentration in water column (Common Indicator 14)	MedComMind (https://www.medqsr.org/integrated-monitoring-and-assessment-programme-mediterranean-sea-and-coast)	364 JRC-HT

DEVOTES indicators	CL_EU_11_DEV	936 CL_EU_11_DEV_936	MFCI - Marine Fish Community Index	Marine Fish Community Index (MFCI)	365	JRC-HR	Total number of species; Number of rare or uncommon species/total number of species; Pelagic/demersal ratio (in number of species) (for intermediate and deep soft-bottoms); Total Abundance (ln(n + 1)) (or simply Total Abundance for rocky subtidal); Number of species that make up 90% of abundance excluding gregarious species.
DEVOTES indicators	CL_EU_11_DEV	937 CL_EU_11_DEV_937	Oceanic fronts	Oceanic fronts	366 368	JRC-HT	Use of thermal and colour fronts using Earth Observation (EO) data to develop frequent front maps. Front locations are composited to calculate the mean frontal gradient (Fmean), the probability of detecting a front (Pfront), and the evidence for a feature in proximity (Fprox). These weighting factors are recombined as the composite front map.
DEVOTES indicators	CL_EU_11_DEV	938 CL_EU_11_DEV_938	Glophymed - Global phytoplankton Mediterranean	Glophymed - Global phytoplankton Mediterranean	369	JRC-HT	The Biomass metric requires data on 90th percentile of Chl a (for a five-year period), both in the water body and in a reference site. The Composition metric requires data on: Total Eukariotic cells, Cyanobacteria, Picocyanobacteria, Prymnesiophyceae, Diatom, Cryptophyceae. The Bloom metric
DEVOTES indicators	CL_EU_11_DEV	939 CL_EU_11_DEV_939	TL - Trophic Level-based indicators	TL - Trophic Level-based indicators	370	JRC-HT	-TL (trophic level) of species i; -Total landings (for TL of the landings) or Total biomass (for TL of surveyed or modelled ecosystems); -Landings or Biomass of species i.
DEVOTES indicators	CL_EU_11_DEV	94 CL_EU_11_DEV_94	Index for the sea-floor geological stability (physical integrity)	Index for the sea-floor geological stability (physical integrity)	24	SYKE-LU 94	
DEVOTES indicators	CL_EU_11_DEV	940 CL_EU_11_DEV_940	ESCA - Ecological Status of Coralligenous Assemblages	ESCA - Ecological Status of Coralligenous Assemblages	371 372	JRC-HT	presence/absence and abundance of sensitive taxa/groups assemblage taxonomic composition

DEVOTES indicators	CL_EU_11_DEV	941 CL_EU_11_DEV_941	COARSE - Coralligenous Assessment by ReefScape Estimate Index	Coralligenous Assessment by ReefScape Estimate Index (COARSE)	373 374	JRC-HT	Biotic cover (%), conspicuous species richness, three dimensional structure of coralligenous reefs (e.g. thickness and consistency of calcareous layer, erect calcified organisms, maximum height), necrosis status, traits (e.g. species sensitivity). See details in Sources: Gatti et al. 2015.
DEVOTES indicators	CL_EU_11_DEV	942 CL_EU_11_DEV_942	CAI - Coralligenous Assemblage Index	Coralligenous Assemblage Index (CAI)	375	JRC-HT	Bryozoa percent cover, sludge percent cover, builder species percent cover; (and depth as supporting parameter, not entering the index).
DEVOTES indicators	CL_EU_11_DEV	96 CL_EU_11_DEV_96	By-catch of marine mammals, sea-birds and non-target fish	By-catch of marine mammals, sea-birds and non-target fish	28	SYKE-LU 96	
DEVOTES indicators	CL_EU_11_DEV	97 CL_EU_11_DEV_97	Impacts of anthropogenic under-water noise on marine mammals	Impacts of anthropogenic under-water noise on marine mammals	28	SYKE-LU 97	Monitoring and modelling of underwater noise; abundance surveys of marine mammals; mammal habitat modelling.
DEVOTES indicators	CL_EU_11_DEV	98 CL_EU_11_DEV_98	Fatty-acid composition of seals as measure of food composition	Fatty-acid composition of seals as measure of food composition	28	SYKE-LU 98	
EBV	CL_INTL_02_EBV_V	1 CL_INTL_02_EBV_1	able to capture critical states and dimensions of biodiversity	A central question to GEO BON is: what is the magnitude and direction of biodiversity change for the essential dimensions of biodiversity? But what are the "essential dimensions of biodiversity"? A useful approach is to use the different levels of biological organization: genes, species, populations, and ecosystems, as well as	biodiversity		
EBV	CL_INTL_02_EBV_V	2 CL_INTL_02_EBV_2	biological	https://geo-bon.org/downloads/essential-biodiversity-Variable-Strategy-v2.pdf	biological values		
EBV	CL_INTL_02_EBV_V	3 CL_INTL_02_EBV_3	a state variable (in general)	https://geo-bon.org/downloads/essential-biodiversity-Variable-Strategy-v2.pdf	state variable		
EBV	CL_INTL_02_EBV_V	4 CL_INTL_02_EBV_4	ecosystem agnostic (to the degree possible)	https://geo-bon.org/downloads/essential-biodiversity-Variable-Strategy-v2.pdf	ecosystem		
EBV	CL_INTL_02_EBV_V	5 CL_INTL_02_EBV_5	technically feasible, economically viable and sustainable in time	https://blogs.odi.ac.uk/interpolicy/files/2018/05/2018_Zurich_v2.pdf https://geo-bon.org/downloads/essential-biodiversity-Variable-Strategy-v2.pdf	economic value		

	CL_INTL_02_EB_V			6	CL_INTL_02_EBV_6	sensitive to change	https://blogs.ncl.ac.uk/mari-ongelleyer/files/2018/05/2018_Zurich_v2.pdf https://geoheritage.govman.ac.uk/documents/Essential_Biodiversity_Variables_Strategy_v2.pdf	sensitivity
EBV	CL_INTL_02_EB_V	Genetic composition	A1		CL_INTL_02_EBV_A1	Intraspecific genetic diversity: The variation in DNA sequences among individuals of the same species.	Intraspecific genetic diversity [§]	
EBV	CL_INTL_02_EB_V	Genetic composition	A2		CL_INTL_02_EBV_A2	Genetic differentiation: Divergence in genetic composition (identity and frequencies of alleles) among multiple populations.	Genetic differentiation [§]	
EBV	CL_INTL_02_EB_V	Genetic composition	A3		CL_INTL_02_EBV_A3	Effective population size: The number of individuals in an idealized population that will exhibit the same amount of genetic diversity loss as the population under consideration.	Effective population size [§]	
EBV	CL_INTL_02_EB_V	Genetic composition	A4		CL_INTL_02_EBV_A4	Inbreeding: Mating between related individuals.	Inbreeding	
EBV	CL_INTL_02_EB_V	Species populations	B1		CL_INTL_02_EBV_B1	Species distributions: The species occurrence probability over contiguous spatial and temporal units addressing the global extent of a species group.	Species distributions [§]	
EBV	CL_INTL_02_EB_V	Species populations	B2		CL_INTL_02_EBV_B2	Species abundances: Predicted count of individuals over contiguous spatial and temporal units addressing the global extent of a species group.	Species abundances [§]	
EBV	CL_INTL_02_EB_V	Species traits	C1		CL_INTL_02_EBV_C1	Morphology: The variation in physical attributes of organisms of the same species.	Morphology	
EBV	CL_INTL_02_EB_V	Species traits	C2		CL_INTL_02_EBV_C2	Physiology: Chemical or physical functions promoting organism fitness and responses to environment.	Physiology	
EBV	CL_INTL_02_EB_V	Species traits	C3		CL_INTL_02_EBV_C3	Phenology: Presence, absence, abundance or duration of seasonal activities of organisms.	Phenology	
EBV	CL_INTL_02_EB_V	Species traits	C4		CL_INTL_02_EBV_C4	Movement: Behaviors related to the spatial mobility of organisms such as dispersal and migration routes.	Movement	
EBV	CL_INTL_02_EB_V	Species traits	C5		CL_INTL_02_EBV_C5	Reproduction: Sexual or asexual production of new individual organisms ('offspring') from parents. Examples: Age at maturity, number of offspring, lifetime reproductive output.	Reproduction	
EBV	CL_INTL_02_EB_V	Community composition	D1		CL_INTL_02_EBV_D1	Community abundance: The abundance of organisms in ecological assemblages.	Community abundance [§]	
EBV	CL_INTL_02_EB_V	Community composition	D2		CL_INTL_02_EBV_D2	Taxonomic/phylogenetic diversity: The diversity of species identities, and/or phylogenetic positions, of organisms in ecological assemblages.	Taxonomic/phylogenetic diversity	
EBV	CL_INTL_02_EB_V	Community composition	D3		CL_INTL_02_EBV_D3	Trait diversity: The diversity of functional traits of organisms in ecological assemblages.	Trait diversity [§]	
EBV	CL_INTL_02_EB_V	Community composition	D4		CL_INTL_02_EBV_D4	Interaction diversity: The diversity and structure of multi-trophic interactions between organisms in ecological assemblages.	Interaction diversity [§]	
EBV	CL_INTL_02_EB_V	Ecosystem functioning	E1		CL_INTL_02_EBV_E1	Primary productivity: The rate at which energy is transformed into organic matter primarily through photosynthesis.	Primary productivity [§]	
EBV	CL_INTL_02_EB_V	Ecosystem functioning	E2		CL_INTL_02_EBV_E2	Ecosystem phenology: Duration and magnitude of cyclic processes observed at the ecosystem level, such as in vegetation activity, phytoplankton blooms, etc.	Ecosystem phenology [§]	
EBV	CL_INTL_02_EB_V	Ecosystem functioning	E3		CL_INTL_02_EBV_E3	Ecosystem disturbances: Abrupt deviances in the functioning of the ecosystem from its regular dynamics.	Ecosystem disturbances [§]	
EBV	CL_INTL_02_EB_V	Ecosystem structure	F1		CL_INTL_02_EBV_F1	Live cover fraction: The horizontal (or projected) fraction of area covered by living organisms, such as vegetation, macroalgae or live hard coral.	Live cover fraction [§]	
EBV	CL_INTL_02_EB_V	Ecosystem structure	F2		CL_INTL_02_EBV_F2	Ecosystem distribution: The horizontal distribution of discrete ecosystem units.	Ecosystem distribution [§]	
EBV	CL_INTL_02_EB_V	Ecosystem structure	F3		CL_INTL_02_EBV_F3	Ecosystem vertical profile: The vertical distribution of biomass in ecosystems, above and below the land surface.	Ecosystem Vertical Profile [§]	
Essential Ocean Variable	CL_INTL_03_EOV	Biochemistry	BC1		CL_INTL_03_EOV_BC1	Oxygen		
Essential Ocean Variable	CL_INTL_03_EOV	Biochemistry	BC2		CL_INTL_03_EOV_BC2	Nutrients		
Essential Ocean Variable	CL_INTL_03_EOV	Biochemistry	BC3		CL_INTL_03_EOV_BC3	Inorganic carbon		
Essential Ocean Variable	CL_INTL_03_EOV	Biochemistry	BC4		CL_INTL_03_EOV_BC4	Transient tracers		
Essential Ocean Variable	CL_INTL_03_EOV	Biochemistry	BC5		CL_INTL_03_EOV_BC5	Particulate matter		
Essential Ocean Variable	CL_INTL_03_EOV	Biochemistry	BC6		CL_INTL_03_EOV_BC6	Nitrous oxide		
Essential Ocean Variable	CL_INTL_03_EOV	Biochemistry	BC7		CL_INTL_03_EOV_BC7	Stable carbon isotopes		
Essential Ocean Variable	CL_INTL_03_EOV	Biochemistry	BC8		CL_INTL_03_EOV_BC8	Dissolved organic carbon		
Essential Ocean Variable	CL_INTL_03_EOV	Biology and Ecosystems	BE1		CL_INTL_03_EOV_BE1	Phytoplankton biomass and diversity		
Essential Ocean Variable	CL_INTL_03_EOV	Biology and Ecosystems	BE10		CL_INTL_03_EOV_BE10	Invertebrate abundance and distribution (*emerging)		
Essential Ocean Variable	CL_INTL_03_EOV	Biology and Ecosystems	BE2		CL_INTL_03_EOV_BE2	Zooplankton biomass and diversity		
Essential Ocean Variable	CL_INTL_03_EOV	Biology and Ecosystems	BE3		CL_INTL_03_EOV_BE3	Fish abundance and distribution		
Essential Ocean Variable	CL_INTL_03_EOV	Biology and Ecosystems	BE4		CL_INTL_03_EOV_BE4	Marine turtles, birds, mammals abundance and distribution		
Essential Ocean Variable	CL_INTL_03_EOV	Biology and Ecosystems	BE5		CL_INTL_03_EOV_BE5	Hard coral cover and composition		
Essential Ocean Variable	CL_INTL_03_EOV	Biology and Ecosystems	BE6		CL_INTL_03_EOV_BE6	Seagrass cover and composition		
Essential Ocean Variable	CL_INTL_03_EOV	Biology and Ecosystems	BE7		CL_INTL_03_EOV_BE7	Macroalgal canopy cover and composition		
Essential Ocean Variable	CL_INTL_03_EOV	Biology and Ecosystems	BE8		CL_INTL_03_EOV_BE8	Mangrove cover and composition		
Essential Ocean Variable	CL_INTL_03_EOV	Biology and Ecosystems	BE9		CL_INTL_03_EOV_BE9	Microbe biomass and diversity (*emerging)		
Essential Ocean Variable	CL_INTL_03_EOV	Cross-disciplinary (including human impact): Biochemistry	CD1		CL_INTL_03_EOV_CD1	Ocean colour		
Essential Ocean Variable	CL_INTL_03_EOV	Cross-disciplinary (including human impact): Biochemistry	CD2		CL_INTL_03_EOV_CD2	Marine debris (*emerging)		
Essential Ocean Variable	CL_INTL_03_EOV	Cross-disciplinary (including human impact): Biology and Ecosystems	CD3		CL_INTL_03_EOV_CD3	Ocean sound		
Essential Ocean Variable	CL_INTL_03_EOV	Physics	P1		CL_INTL_03_EOV_P1	Sea state		
Essential Ocean Variable	CL_INTL_03_EOV	Physics	P10		CL_INTL_03_EOV_P10	Subsurface salinity		
Essential Ocean Variable	CL_INTL_03_EOV	Physics	P11		CL_INTL_03_EOV_P11	Ocean surface heat flux		
Essential Ocean Variable	CL_INTL_03_EOV	Physics	P2		CL_INTL_03_EOV_P2	Ocean surface stress		
Essential Ocean Variable	CL_INTL_03_EOV	Physics	P3		CL_INTL_03_EOV_P3	Sea ice		
Essential Ocean Variable	CL_INTL_03_EOV	Physics	P4		CL_INTL_03_EOV_P4	Sea surface height		
Essential Ocean Variable	CL_INTL_03_EOV	Physics	P5		CL_INTL_03_EOV_P5	Sea surface temperature		
Essential Ocean Variable	CL_INTL_03_EOV	Physics	P6		CL_INTL_03_EOV_P6	Subsurface temperature		
Essential Ocean Variable	CL_INTL_03_EOV	Physics	P7		CL_INTL_03_EOV_P7	Surface currents		
Essential Ocean Variable	CL_INTL_03_EOV	Physics	P8		CL_INTL_03_EOV_P8	Subsurface currents		
Essential Ocean Variable	CL_INTL_03_EOV	Physics	P9		CL_INTL_03_EOV_P9	Sea surface salinity		

The IUCN Red List of Threatened Species	CL_INTL_04_RL_spC V. The criteria for critically endangered, endangered and vulnerable - Critically endangered: reduction in population size	CR.A1	CL_INTL_04_RL_spC_CR.A1	Reduction in population size based on: An observed, estimated, inferred or suspected population size reduction of ≥90% over the last 10 years or three generations, whichever is the longer, where the causes of the reduction are clearly reversible AND understood AND ceased, based on (and specifying) any of the following: (a) direct observation, (b) an index of abundance appropriate to the taxon, (c) a decline in area of occupancy, extent of occurrence and/or quality of habitat, (d) actual or potential levels of exploitation, (e) the effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites.	A taxon is Critically Endangered when the best available evidence indicates that it meets any of the following criteria (A to E), and it is therefore considered to be facing an extremely high risk of extinction in the wild	Population size
The IUCN Red List of Threatened Species	CL_INTL_04_RL_spC V. The criteria for critically endangered, endangered and vulnerable - Critically endangered: reduction in population size	CR.A2	CL_INTL_04_RL_spC_CR.A2	Reduction in population size based on: An observed, estimated, inferred or suspected population size reduction of ≥80% over the last 10 years or three generations, whichever is the longer, where the reduction or its causes may not have ceased OR may not be understood OR may not be reversible, based on (and specifying) any of (a) to (e) under A1.	A taxon is Critically Endangered when the best available evidence indicates that it meets any of the following criteria (A to E), and it is therefore considered to be facing an extremely high risk of extinction in the wild	Population size
The IUCN Red List of Threatened Species	CL_INTL_04_RL_spC V. The criteria for critically endangered, endangered and vulnerable - Critically endangered: reduction in population size	CR.A3	CL_INTL_04_RL_spC_CR.A3	Reduction in population size based on: A population size reduction of ≥80%, projected or suspected to be met within the next 10 years or three generations, whichever is the longer (up to a maximum of 100 years), based on (and specifying) any of (b) to (e) under A1.	A taxon is Critically Endangered when the best available evidence indicates that it meets any of the following criteria (A to E), and it is therefore considered to be facing an extremely high risk of extinction in the wild	Population size
The IUCN Red List of Threatened Species	CL_INTL_04_RL_spC V. The criteria for critically endangered, endangered and vulnerable - Critically endangered: reduction in population size	CR.A4	CL_INTL_04_RL_spC_CR.A4	Reduction in population size based on: An observed, estimated, inferred, projected or suspected population size reduction of ≥80% over any 10 year or three generation period, whichever is longer (up to a maximum of 100 years in the future), where the time period must include both the past and the future, and where the reduction or its causes may not have ceased OR may not be understood OR may not be reversible, based on (and specifying) any of (a) to (e) under A1.	A taxon is Critically Endangered when the best available evidence indicates that it meets any of the following criteria (A to E), and it is therefore considered to be facing an extremely high risk of extinction in the wild	Population size
The IUCN Red List of Threatened Species	CL_INTL_04_RL_spC V. The criteria for critically endangered, endangered and vulnerable - Critically endangered: geographic range	CR.B1	CL_INTL_04_RL_spC_CR.B1	Geographic range in the form of: Extent of occurrence estimated to be less than 100 km ² , and estimates indicating at least two of a-c: a) Severely fragmented or known to exist at only a single location. b) Continuing decline, observed, inferred or projected, in any of the following: (i) extent of occurrence, (ii) area of occupancy, (iii) area, extent and/or quality of habitat, (iv) number of locations or subpopulations, (v) number of mature individuals. c) Extreme fluctuations in any of the following: (i) extent of occurrence, (ii) area of occupancy, (iii) number of locations or subpopulations, (iv) number of mature individuals.	A taxon is Critically Endangered when the best available evidence indicates that it meets any of the following criteria (A to E), and it is therefore considered to be facing an extremely high risk of extinction in the wild	areas
The IUCN Red List of Threatened Species	CL_INTL_04_RL_spC V. The criteria for critically endangered, endangered and vulnerable - Critically endangered: geographic range	CR.B2	CL_INTL_04_RL_spC_CR.B2	Area of occupancy estimated to be less than 10 km ² , and estimate indicating at least two of a-c: a) Severely fragmented or known to exist at only a single location. b) Continuing decline, observed, inferred or projected, in any of the following: (i) extent of occurrence, (ii) area of occupancy, (iii) area, extent and/or quality of habitat, (iv) number of locations or subpopulations, (v) number of mature individuals. c) Extreme fluctuations in any of the following: (i) extent of occurrence, (ii) area of occupancy, (iii) number of locations or subpopulations, (iv) number of mature individuals	A taxon is Critically Endangered when the best available evidence indicates that it meets any of the following criteria (A to E), and it is therefore considered to be facing an extremely high risk of extinction in the wild	areas
The IUCN Red List of Threatened Species	CL_INTL_04_RL_spC V. The criteria for critically endangered, endangered and vulnerable - Critically endangered: population size	CR.C1	CL_INTL_04_RL_spC_CR.C	Population size estimated to number fewer than 250 mature individuals and either 1. An estimated continuing decline of at least 25% within three years or one generation, whichever is longer, (up to a maximum of 100 years in the future) OR A continuing decline, observed, projected, or inferred, in numbers of mature individuals AND at least one of the following (a-b): a) Population structure in the form of one of the following: (i) no subpopulation estimated to contain more than 50 mature individuals, OR (ii) at least 90% of mature individuals in one subpopulation. b) Extreme fluctuations in number of mature individuals.	A taxon is Critically Endangered when the best available evidence indicates that it meets any of the following criteria (A to E), and it is therefore considered to be facing an extremely high risk of extinction in the wild	Population size

The IUCN Red List of Threatened Species	CL_INTL_04_RL_spC	V. The criteria for critically endangered, endangered and vulnerable - Critically endangered: population size	CR.D	CL_INTL_04_RL_spC_CR.D	Population size estimated to number fewer than 50 mature individuals.	A taxon is Critically Endangered when the best available evidence indicates that it meets any of the following criteria (A to E), and it is therefore considered to be facing an extremely high risk of extinction in the wild	Population size
The IUCN Red List of Threatened Species	CL_INTL_04_RL_spC	V. The criteria for critically endangered, endangered and vulnerable - Critically endangered: probability of extinction	CR.E	CL_INTL_04_RL_spC_CR.E	Quantitative analysis showing the probability of extinction in the wild is at least 50% within 10 years or three generations, whichever is the longer (up to a maximum of 100 years).	A taxon is Critically Endangered when the best available evidence indicates that it meets any of the following criteria (A to E), and it is therefore considered to be facing an extremely high risk of extinction in the wild	Population size
The IUCN Red List of Threatened Species	CL_INTL_04_RL_spC	V. The criteria for critically endangered, endangered and vulnerable - Endangered: reduction in population size	EN.A1	CL_INTL_04_RL_spC_EN.A1	Reduction in population size based on: An observed, estimated, inferred or suspected population size reduction of ≥70% over the last 10 years or three generations, whichever is the longer, where the causes of the reduction are clearly reversible AND understood AND ceased, based on (and specifying) any of the following: (a) direct observation, (b) an index of abundance appropriate to the taxon, (c) a decline in area of occupancy, extent of occurrence and/or quality of habitat, (d) actual or potential levels of exploitation, (e) the effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites.	A taxon is Endangered when the best available evidence indicates that it meets any of the following criteria (A to E), and it is therefore considered to be facing a very high risk of extinction in the wild.	Population size
The IUCN Red List of Threatened Species	CL_INTL_04_RL_spC	V. The criteria for critically endangered, endangered and vulnerable - Endangered: reduction in population size	EN.A2	CL_INTL_04_RL_spC_EN.A2	Reduction in population size based on: An observed, estimated, inferred or suspected population size reduction of ≥50% over the last 10 years or three generations, whichever is the longer, where the reduction or its causes may not have ceased OR may not be understood OR may not be reversible, based on (and specifying) any of (a) to (e) under A1.	A taxon is Endangered when the best available evidence indicates that it meets any of the following criteria (A to E), and it is therefore considered to be facing a very high risk of extinction in the wild.	Population size
The IUCN Red List of Threatened Species	CL_INTL_04_RL_spC	V. The criteria for critically endangered, endangered and vulnerable - Endangered: reduction in population size	EN.A3	CL_INTL_04_RL_spC_EN.A3	Reduction in population size based on: A population size reduction of ≥50%, projected or suspected to be met within the next 10 years or three generations, whichever is the longer (up to a maximum of 100 years), based on (and specifying) any of (b) to (e) under A1.	A taxon is Endangered when the best available evidence indicates that it meets any of the following criteria (A to E), and it is therefore considered to be facing a very high risk of extinction in the wild.	Population size
The IUCN Red List of Threatened Species	CL_INTL_04_RL_spC	V. The criteria for critically endangered, endangered and vulnerable - Endangered: reduction in population size	EN.A4	CL_INTL_04_RL_spC_EN.A4	Reduction in population size based on: An observed, estimated, inferred, projected or suspected population size reduction of ≥50% over any 10 year or three generation period, whichever is longer (up to a maximum of 100 years in the future), where the time period must include both the past and the future, AND where the reduction or its causes may not have ceased OR may not be understood OR may not be reversible, based on (and specifying) any of (a) to (e) under A1.	A taxon is Endangered when the best available evidence indicates that it meets any of the following criteria (A to E), and it is therefore considered to be facing a very high risk of extinction in the wild.	Population size
The IUCN Red List of Threatened Species	CL_INTL_04_RL_spC	V. The criteria for critically endangered, endangered and vulnerable - Endangered: geographic range	EN.B1	CL_INTL_04_RL_spC_EN.B1	Extent of occurrence estimated to be less than 5,000 km ² , and estimates indicating at least two of a-c: a) Severely fragmented or known to exist at no more than five locations b) Continuing decline, observed, inferred or projected, in any of the following: (i) extent of occurrence, (ii) area of occupancy, (iii) area, extent and/or quality of habitat, (iv) number of locations or subpopulations, (v) number of mature individuals.c) Extreme fluctuations in any of the following: (i) extent of occurrence, (ii) area of occupancy, (iii) number of locations or subpopulations, (iv) number of mature individuals.	A taxon is Endangered when the best available evidence indicates that it meets any of the following criteria (A to E), and it is therefore considered to be facing a very high risk of extinction in the wild	areas

The IUCN Red List of Threatened Species	CL_INTL_04_RL_spC	V. The criteria for critically endangered, endangered and vulnerable - Endangered: geographic range	EN.B2	CL_INTL_04_RL_spC_EN.B2	Area of occupancy estimated to be less than 500 km2, and estimates indicating at least two of a-c: a) Severely fragmented or known to exist at no more than five locations. B) Continuing decline, observed, inferred or projected, in any of the following: (i) extent of occurrence, (ii) area of occupancy, (iii) area, extent and/or quality of habitat, (iv) number of locations or subpopulations, (v) number of mature individuals. c) Extreme fluctuations in any of the following: (i) extent of occurrence, (ii) area of occupancy, (iii) number of locations or subpopulations (iv) number of mature individuals	A taxon is Endangered when the best available evidence indicates that it meets any of the following criteria (A to E), and it is therefore considered to be facing a very high risk of extinction in the wild	areas
The IUCN Red List of Threatened Species	CL_INTL_04_RL_spC	V. The criteria for critically endangered, endangered and vulnerable - Endangered: population size	EN.C	CL_INTL_04_RL_spC_EN.C	Population size estimated to number fewer than 2,500 mature individuals and either: 1. An estimated continuing decline of at least 20% within five years or two generations, whichever is longer, (up to a maximum of 100 years in the future) OR 2. A continuing decline, observed, projected, or inferred, in numbers of mature individuals AND at least one of the following (a-b): a) Population structure in the form of one of the following: (i) no subpopulation estimated to contain more than 250 mature individuals, OR (ii) at least 95% of mature individuals in one subpopulation b) Extreme fluctuations in number of mature individuals.	A taxon is Endangered when the best available evidence indicates that it meets any of the following criteria (A to E), and it is therefore considered to be facing a very high risk of extinction in the wild	Population size
The IUCN Red List of Threatened Species	CL_INTL_04_RL_spC	V. The criteria for critically endangered, endangered and vulnerable - Endangered: population size	EN.D	CL_INTL_04_RL_spC_EN.D	Population size estimated to number fewer than 250 mature individuals	A taxon is Endangered when the best available evidence indicates that it meets any of the following criteria (A to E), and it is therefore considered to be facing a very high risk of extinction in the wild	Population size
The IUCN Red List of Threatened Species	CL_INTL_04_RL_spC	V. The criteria for critically endangered, endangered and vulnerable - Endangered: probability of extinction	EN.E	CL_INTL_04_RL_spC_EN.E	Quantitative analysis showing the probability of extinction in the wild is at least 20% within 20 years or five generations, whichever is the longer (up to a maximum of 100 years).	A taxon is Endangered when the best available evidence indicates that it meets any of the following criteria (A to E), and it is therefore considered to be facing a very high risk of extinction in the wild	Population size
The IUCN Red List of Threatened Species	CL_INTL_04_RL_spC	V. The criteria for critically endangered, endangered and vulnerable - Vulnerable: reduction in population size	VU.A1	CL_INTL_04_RL_spC_VU.A1	Reduction in population size based on: An observed, estimated, inferred or suspected population size reduction of ≥50% over the last 10 years or three generations, whichever is the longer, where the causes of the reduction are clearly reversible AND understood AND ceased, based on (and specifying) any of the following: (a) direct observation, (b) an index of abundance appropriate to the taxon, (c) a decline in area of occupancy, extent of occurrence and/or quality of habitat (d) actual or potential levels of exploitation (e) the effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites.	A taxon is Vulnerable when the best available evidence indicates that it meets any of the following criteria (A to E), and it is therefore considered to be facing a high risk of extinction in the wild	Population size
The IUCN Red List of Threatened Species	CL_INTL_04_RL_spC	V. The criteria for critically endangered, endangered and vulnerable - Vulnerable: reduction in population size	VU.A2	CL_INTL_04_RL_spC_VU.A2	Reduction in population size based on: An observed, estimated, inferred or suspected population size reduction of ≥30% over the last 10 years or three generations, whichever is the longer, where the reduction or its causes may not have ceased OR may not be understood OR may not be reversible, based on (and specifying) any of (a) to (e) under A1.	A taxon is Vulnerable when the best available evidence indicates that it meets any of the following criteria (A to E), and it is therefore considered to be facing a high risk of extinction in the wild	Population size
The IUCN Red List of Threatened Species	CL_INTL_04_RL_spC	V. The criteria for critically endangered, endangered and vulnerable - Vulnerable: reduction in population size	VU.A3	CL_INTL_04_RL_spC_VU.A3	Reduction in population size based on: A population size reduction of ≥30% projected or suspected to be met within the next 10 years or three generations, whichever is the longer (up to a maximum of 100 years), based on (and specifying) any of (b) to (e) under A1.	A taxon is Vulnerable when the best available evidence indicates that it meets any of the following criteria (A to E), and it is therefore considered to be facing a high risk of extinction in the wild	Population size
The IUCN Red List of Threatened Species	CL_INTL_04_RL_spC	V. The criteria for critically endangered, endangered and vulnerable - Vulnerable: reduction in population size	VU.A4	CL_INTL_04_RL_spC_VU.A4	Reduction in population size based on: An observed, estimated, inferred, projected or suspected population size reduction of ≥30% over any 10 year or three generation period, whichever is longer (up to a maximum of 100 years in the future), where the time period must include both the past and the future, AND where the reduction or its causes may not have ceased OR may not be understood OR may not be reversible, based on (and specifying) any of (a) to (e) under A1.	A taxon is Vulnerable when the best available evidence indicates that it meets any of the following criteria (A to E), and it is therefore considered to be facing a high risk of extinction in the wild	Population size

The IUCN Red List of Threatened Species	CL_INTL_04_RL_spC	V. The criteria for critically endangered, endangered and vulnerable - Vulnerable: geographic range	VU.B1	CL_INTL_04_RL_spC_VU.B1	Extent of occurrence estimated to be less than 20,000 km2, and estimates indicating at least two of a-c: a) Severely fragmented or known to exist at no more than 10 locations b)Continuing decline, observed, inferred or projected, in any of the following: (i) extent of occurrence, (ii) area of occupancy, (iii) area, extent and/or quality of habitat, (iv) number of locations or subpopulations, (v) number of mature individuals. c) Extreme fluctuations in any of the following: (i) extent of occurrence, (ii) area of occupancy, (iii) number of locations or subpopulations, (iv) number of mature individuals.	A taxon is Vulnerable when the best available evidence indicates that it meets any of the following criteria (A to E), and it is therefore considered to be facing a high risk of extinction in the wild	areas
The IUCN Red List of Threatened Species	CL_INTL_04_RL_spC	V. The criteria for critically endangered, endangered and vulnerable - Vulnerable: geographic range	VU.B2	CL_INTL_04_RL_spC_VU.B2	Area of occupancy estimated to be less than 2,000 km2, and estimates indicating at least two of a-c: a)Severely fragmented or known to exist at no more than 10 locations b)Continuing decline, observed, inferred or projected, in any of the following: (i) extent of occurrence, (ii) area of occupancy, (iii) area, extent and/or quality of habitat, (iv) number of locations or subpopulations, (v) number of mature individuals. c)Extreme fluctuations in any of the following: (i) extent of occurrence, (ii) area of occupancy, (iii) number of locations or subpopulations, (iv) number of mature individuals.	A taxon is Vulnerable when the best available evidence indicates that it meets any of the following criteria (A to E), and it is therefore considered to be facing a high risk of extinction in the wild	areas
The IUCN Red List of Threatened Species	CL_INTL_04_RL_spC	V. The criteria for critically endangered, endangered and vulnerable - Vulnerable: population size	VU.C	CL_INTL_04_RL_spC_VU.C	Population size estimated to number fewer than 10,000 mature individuals and either: 1. An estimated continuing decline of at least 10% within 10 years or three generations, whichever is longer, (up to a maximum of 100 years in the future) OR 2. A continuing decline, observed, projected, or inferred, in numbers of mature individuals AND at least one of the following (a-b): a)Population structure in the form of one of the following: (i) no subpopulation estimated to contain more than 1,000 mature individuals, OR (ii) all mature individuals in one subpopulation. b)Extreme fluctuations in number of mature individuals.	A taxon is Vulnerable when the best available evidence indicates that it meets any of the following criteria (A to E), and it is therefore considered to be facing a high risk of extinction in the wild	Population size
The IUCN Red List of Threatened Species	CL_INTL_04_RL_spC	V. The criteria for critically endangered, endangered and vulnerable - Vulnerable: population size	VU.D	CL_INTL_04_RL_spC_VU.D	Population very small or restricted in the form of either of the following: 1. Population size estimated to number fewer than 1,000 mature individuals. 2. Population with a very restricted area of occupancy (typically less than 20 km2) or number of locations (typically five or fewer) such that it is prone to the effects of human activities or stochastic events within a very short time period in an uncertain future, and is thus capable of becoming Critically Endangered or even Extinct in a very short time period.	A taxon is Vulnerable when the best available evidence indicates that it meets any of the following criteria (A to E), and it is therefore considered to be facing a high risk of extinction in the wild	Population size
The IUCN Red List of Threatened Species	CL_INTL_04_RL_spC	V. The criteria for critically endangered, endangered and vulnerable - Vulnerable: probability of extinction	VU.E	CL_INTL_04_RL_spC_VU.E	Quantitative analysis showing the probability of extinction in the wild is at least 10% within 100 years.	A taxon is Vulnerable when the best available evidence indicates that it meets any of the following criteria (A to E), and it is therefore considered to be facing a high risk of extinction in the wild	Population size
The IUCN Red List of Ecosystems	CL_INTL_05_RL_ecosC	Reduction in geographic distribution	A	CL_INTL_05_RL_ecosC_A	Reduction in geographic distribution		geographic distribution
The IUCN Red List of Ecosystems	CL_INTL_05_RL_ecosC	Restricted geographic distribution	B	CL_INTL_05_RL_ecosC_B	Restricted geographic distribution		geographic distribution
The IUCN Red List of Ecosystems	CL_INTL_05_RL_ecosC	Environmental degradation	C	CL_INTL_05_RL_ecosC_C	Environmental degradation		degradation
The IUCN Red List of Ecosystems	CL_INTL_05_RL_ecosC	Disruption of biotic processes or interactions	D	CL_INTL_05_RL_ecosC_D	Disruption of biotic processes or interactions		biotic processes
The IUCN Red List of Ecosystems	CL_INTL_05_RL_ecosC	Quantitative analysis that estimates the probability of ecosystem collapse	E	CL_INTL_05_RL_ecosC_E	Quantitative analysis that estimates the probability of ecosystem collapse		ecosystems
Ecosystem attributes to evaluate recovery	CL_INTL_18_SE_R	Attribute 1. Absence of threats	A1a	CL_INTL_18_SER_A1a	Absence of threats: Over-utilization		
Ecosystem attributes to evaluate recovery	CL_INTL_18_SE_R	Attribute 1. Absence of threats	A1b	CL_INTL_18_SER_A1b	Absence of threats: Invasive species		
Ecosystem attributes to evaluate recovery	CL_INTL_18_SE_R	Attribute 1. Absence of threats	A1c	CL_INTL_18_SER_A1c	Absence of threats: Contamination		
Ecosystem attributes to evaluate recovery	CL_INTL_18_SE_R	Attribute 2. Physical conditions	A2a	CL_INTL_18_SER_A2a	Physical conditions: Substrate physical		
Ecosystem attributes to evaluate recovery	CL_INTL_18_SE_R	Attribute 2. Physical conditions	A2b	CL_INTL_18_SER_A2b	Physical conditions: Substrate chemical		
Ecosystem attributes to evaluate recovery	CL_INTL_18_SE_R	Attribute 2. Physical conditions	A2c	CL_INTL_18_SER_A2c	Physical conditions: Water chemo-physical		
Ecosystem attributes to evaluate recovery	CL_INTL_18_SE_R	Attribute 3. Species composition	A3a	CL_INTL_18_SER_A3a	Species composition: Desirable plants		
Ecosystem attributes to evaluate recovery	CL_INTL_18_SE_R	Attribute 3. Species composition	A3b	CL_INTL_18_SER_A3b	Species composition: Desirable animals		
Ecosystem attributes to evaluate recovery	CL_INTL_18_SE_R	Attribute 3. Species composition	A3c	CL_INTL_18_SER_A3c	Species composition: No undesirable species		
Ecosystem attributes to evaluate recovery	CL_INTL_18_SE_R	Attribute 4: Structural diversity	A4a	CL_INTL_18_SER_A4a	Structural diversity: All vegetation strata		
Ecosystem attributes to evaluate recovery	CL_INTL_18_SE_R	Attribute 4: Structural diversity	A4b	CL_INTL_18_SER_A4b	Structural diversity: All trophic levels		

Ecosystem attributes to evaluate recovery	CL_INTL_18_SE Attribute 4: Structural diversity	A4c	CL_INTL_18_SER_A4c	Structural diversity: Spatial mosaic		
Ecosystem attributes to evaluate recovery	CL_INTL_18_SE Attribute 5: Ecosystem functionality	A5a	CL_INTL_18_SER_A5a	Ecosystem functionality: Productivity, cycling etc.		
Ecosystem attributes to evaluate recovery	CL_INTL_18_SE Attribute 5: Ecosystem functionality	A5b	CL_INTL_18_SER_A5b	Ecosystem functionality: Habitat & plant-animal interactions		
Ecosystem attributes to evaluate recovery	CL_INTL_18_SE Attribute 5: Ecosystem functionality	A5c	CL_INTL_18_SER_A5c	Ecosystem functionality: Resilience, recruitment etc		
Ecosystem attributes to evaluate recovery	CL_INTL_18_SE Attribute 6: External exchanges	A6a	CL_INTL_18_SER_A6a	External exchanges: Landscape flows		
Ecosystem attributes to evaluate recovery	CL_INTL_18_SE Attribute 6: External exchanges	A6b	CL_INTL_18_SER_A6b	External exchanges: Gene flows		
Ecosystem attributes to evaluate recovery	CL_INTL_18_SE Attribute 6: External exchanges	A6c	CL_INTL_18_SER_A6c	External exchanges: Habitat links		
OSPAR Biodiversity Common Indicators	CL_REG_01_OS PAR_Cibio	B1	CL_REG_01_OSPAR_Cibio_B1	Marine bird abundance	birds	II, III, IV (Common in OSPAR Region)
OSPAR Biodiversity Common Indicators	CL_REG_01_OS PAR_Cibio	B3	CL_REG_01_OSPAR_Cibio_B3	Marine Bird Breeding Success / Failure	birds	II, III, IV (Common in OSPAR Region)
OSPAR Biodiversity Common Indicators	CL_REG_01_OS PAR_Cibio	BH1	CL_REG_01_OSPAR_Cibio_BH1	Typical species composition	species	IV (Common in OSPAR Region)
OSPAR Biodiversity Common Indicators	CL_REG_01_OS PAR_Cibio	BH2	CL_REG_01_OSPAR_Cibio_BH2	Condition of Benthic Habitat Communities	communities	II, III, IV (Common in OSPAR Region)
OSPAR Biodiversity Common Indicators	CL_REG_01_OS PAR_Cibio	BH3	CL_REG_01_OSPAR_Cibio_BH3	Extent of Physical Damage to Predominant and Special Habitats	habitats	II, III, IV (Common in OSPAR Region)
OSPAR Biodiversity Common Indicators	CL_REG_01_OS PAR_Cibio	FC1	CL_REG_01_OSPAR_Cibio_FC1	Recovery in the population abundance of sensitive fish species	species	II, III (Common in OSPAR Region)
OSPAR Biodiversity Common Indicators	CL_REG_01_OS PAR_Cibio	FC2	CL_REG_01_OSPAR_Cibio_FC2	Proportion of large fish (Large Fish Index)	species	II, III (Common in OSPAR Region)
OSPAR Biodiversity Common Indicators	CL_REG_01_OS PAR_Cibio	FW3	CL_REG_01_OSPAR_Cibio_FW3	Size composition in fish communities	fish communities	II, III, IV (Common in OSPAR Region)
OSPAR Biodiversity Common Indicators	CL_REG_01_OS PAR_Cibio	FW4	CL_REG_01_OSPAR_Cibio_FW4	Change in average trophic level of marine predators in the Bay of Biscay	species	IV (Common in OSPAR Region)
OSPAR Biodiversity Common Indicators	CL_REG_01_OS PAR_Cibio	M3	CL_REG_01_OSPAR_Cibio_M3	Seal Abundance and Distribution	species	II (Common in OSPAR Region)
OSPAR Biodiversity Common Indicators	CL_REG_01_OS PAR_Cibio	M4	CL_REG_01_OSPAR_Cibio_M4	Abundance and Distribution of marine mammals	species	II, III, IV (Common in OSPAR Region)
OSPAR Biodiversity Common Indicators	CL_REG_01_OS PAR_Cibio	M5	CL_REG_01_OSPAR_Cibio_M5	Grey seal pup production	species	II, III (Common in OSPAR Region)
OSPAR Biodiversity Common Indicators	CL_REG_01_OS PAR_Cibio	M6	CL_REG_01_OSPAR_Cibio_M6	Marine mammal bycatch	species	II (Common in OSPAR Region)
OSPAR Biodiversity Common Indicators	CL_REG_01_OS PAR_Cibio	NIS	CL_REG_01_OSPAR_Cibio_NIS	Trends in New Records of Non-Indigenous Species (NIS) Introduced by Human Activities	species	II, III, IV (Common in OSPAR Region)
OSPAR Biodiversity Common Indicators	CL_REG_01_OS PAR_Cibio	PH1/FW5	CL_REG_01_OSPAR_Cibio_PH1 /FW5	Changes in plankton functional types (life form) index Ratio	species	II, III, IV (Common in OSPAR Region)
OSPAR Biodiversity Common Indicators	CL_REG_01_OS PAR_Cibio	PH2	CL_REG_01_OSPAR_Cibio_PH2	Plankton biomass and/or abundance	species	II, III, IV (Common in OSPAR Region)
OSPAR Biodiversity Common Indicators	CL_REG_01_OS PAR_Cibio	PH3	CL_REG_01_OSPAR_Cibio_PH3	Changes in biodiversity index(s)	biodiversity	III (Common in OSPAR Region)
Black Sea species list criteria	CL_REG_09_BlackSeaMPAs	1	CL_REG_09_BlackSeaMPAs_01	Fish stocks are sufficient for commercial exploitation and are above biological safety limits		
Black Sea species list criteria	CL_REG_09_BlackSeaMPAs	2	CL_REG_09_BlackSeaMPAs_02	Local stocks are to be regulated nationally but reported regionally		
Black Sea species list criteria	CL_REG_09_BlackSeaMPAs	3	CL_REG_09_BlackSeaMPAs_03	Shared stocks and migratory stocks are regulated by Parties concerned but reported regionally		
Black Sea species list criteria	CL_REG_09_BlackSeaMPAs	4	CL_REG_09_BlackSeaMPAs_04	Highly migratory stocks are regulated by the special Black Sea body on fisheries		
Black Sea species list criteria	CL_REG_09_BlackSeaMPAs	5	CL_REG_09_BlackSeaMPAs_05	Species that fall under category extinct, critically endangered, critical, vulnerable or rare are automatically assigned zero quota by the Party of concern (Ref.: CITES requirements)		
Black Sea species list criteria	CL_REG_09_BlackSeaMPAs	6	CL_REG_09_BlackSeaMPAs_06	Species that fall under category endangered, vulnerable and rare are allowed for exploitation on scientifically based information for the status of their populations and after fishing quota common for the Black Sea and the flowed rivers, has been negotiated and agreed by the Parties. In case if one of the Parties disagrees the common quota, the fishing is prohibited for all Parties of concern		