



Technical paper n°2/2015

## **Pre-scoping document for the marine regions (1<sup>st</sup> part: Core document)**

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**May 2015**  
**Revised in October 2015**

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**Context:**

The Topic Centre has prepared this Technical paper in collaboration with the European Environment Agency (EEA) under its 2015 work programme as a contribution to the EEA's work on Nature legislation, implementation, reporting and assessments.

**Citation:**

Please cite this report as  
*Aronsson M., Bailly Maitre, J., Gavilan L-P., and D. Richard, 2015. Pre-scoping document for the marine regions, First part: Core document. ETC/BD report for the EEA.*

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ETC/BD Technical paper N°2/2015  
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# 1 Background

The Natura 2000 Biogeographical Process aims to exchange and analyse information on measures necessary to achieving favourable conservation status of species and habitats of Community interest, with special attention to the management and coherence of the Natura 2000 network. The Natura 2000 Seminars involve Member States, key user groups, NGOs and independent experts.

The draft Terms of Reference for the Natura 2000 Biogeographical Process dated 8.4.2011 identify a pre-scoping phase with the following preparatory work (page 3 and 4):

- *Background work to identify relevant criteria to focus further analysis and discussions (e.g. focus on species and habitats related to ecosystems that are of special importance or under particular threat for a biogeographical region, focus on the most threatened species and habitats or focus on species and habitats for which response to measures is likely, focus on habitats that provide important ecosystem services, including in relation to climate change mitigation and adaptation, not to select species and habitats present only in one Member State or where already at favourable conservation status).*
- **Identifying the species and habitat types considered to be priorities for discussion at a seminar, using existing data from the biogeographical region and the Article 17 reporting process, also having regard to the nature sub-target of the new EU biodiversity strategy.**
- *A consultation phase with Member States, Commission and stakeholders to agree which criteria to use and to decide on the species and habitat types or clusters of species or habitat types that will finally be selected. The expert group on Natura 2000 management being the most appropriate forum for this consultation.*

The present document is targeted to serve the discussion and planning of the first Natura 2000 Seminar for the Marine regions. It is part of the pre-scoping phase and follows largely the approach developed for the pilot seminars in the different EU biogeographic regions, however with adaptations specific to the marine context.

As opposed to terrestrial biogeographic regions, there are only a few habitats and species at stake in the marine environment, which occur in 23 out of 28 Member States (Belgium, Bulgaria, Croatia, Cyprus, Denmark, Germany, Estonia, Finland, France, Greece, Ireland, Italy, Latvia, Lithuania, Malta, the Netherlands, Poland, Portugal, Romania, Slovenia, Spain, Sweden and the United Kingdom). Therefore the need to select habitats and species of priority concern to target discussions among Member States is not as critical as in the case of terrestrial Biogeographical seminars. However, the results of the prioritisation exercise still provides a useful background information. In addition it is useful to get an insight on the main pressures which affect the marine species and habitats.

This document describes the methodology to rank the habitat types and species across all five EU marine regions, mainly based on the Article 17 data from the 2007-2012 reporting, thus covering EU27 species listed in the Annex II, IV and V and habitat types of Annex I of the Habitats Directive ([http://bd.eionet.europa.eu/activities/Reporting/Article\\_17/](http://bd.eionet.europa.eu/activities/Reporting/Article_17/)). It also presents the main pressures to marine species and habitats as reported by Member States under Art 17 of the Habitats Directive. Bird species are not covered in the ETC/BD analysis at this stage.

In a second stage (as part of the final pre-scoping document), pending on decision from the Marine Expert Group or as a follow up to the marine seminar, background information sheets may be prepared on selected habitats and species making use of Art 17 as well as Natura 2000 data.

## 2 General information

### 2.1 General information on the EU marine regions

The European Union has five main marine regions, each with its own characteristics. Working across marine regions makes it easier to discuss conservation of species and habitat types under similar natural conditions across a suite of countries, irrespective of political and administrative boundaries.

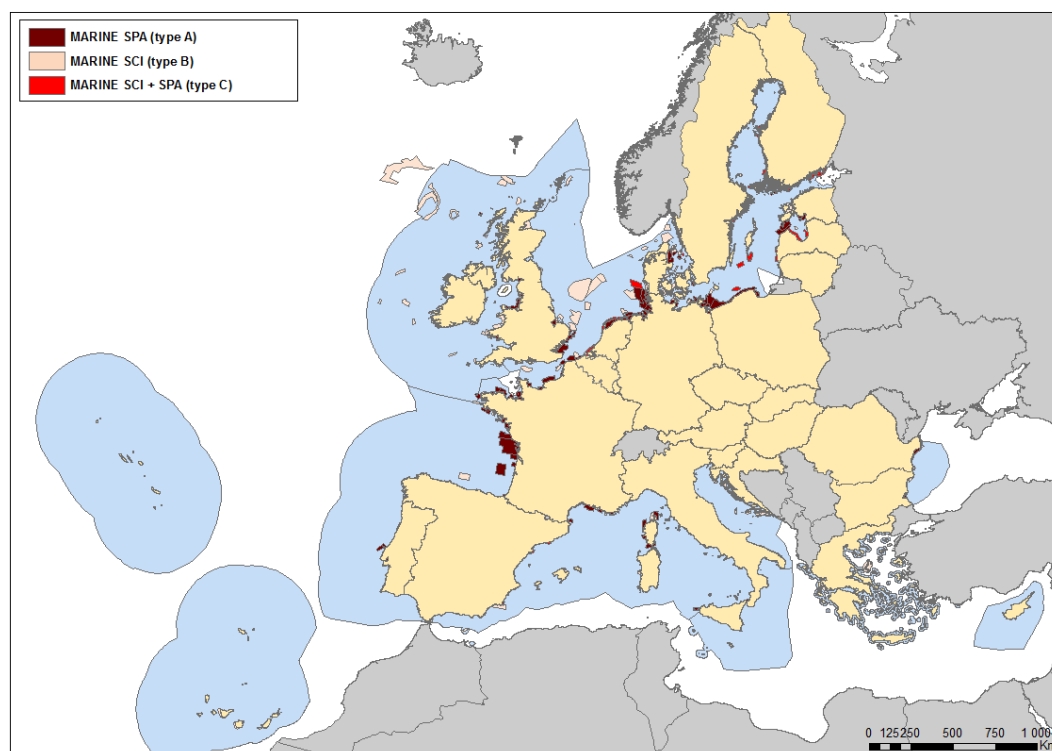
It should be noted that the nomenclature used here to qualify marine regions is different from the one used under the Marine Strategy Framework Directive, although there are equivalences in the areas at stake.

<b>Terminology used for Natura 2000</b>	<b>Equivalence under the MSFD</b>
Marine Atlantic	North-east Atlantic Ocean except Macaronesia
Marine Baltic	Baltic sea
Marine Black Sea	Black sea
Marine Macaronesia	A sub-region of the North-east Atlantic Ocean
Marine Mediterranean	Mediterranean sea

The Natura 2000 network across these five marine regions is represented in map 2.1 and statistics in table 2.1. It should be noted that the Hatton Bank, a large marine site in the Atlantic marine region is proposed as SCI by UK but has not been included in the Atlantic Union list due to dispute with the Kingdom of Denmark. Still, as a pSCI, this site is included in the below statistics and maps.

The information presented below is based on the Natura 2000 database from end 2013, except Table 2.1 which shows updated information from end 2014 database.

**Map 2.1. The Natura 2000 network across the five marine regions of the European Union as considered for Nature Directives implementation (End 2013 database)**



**Table 2.1. Natura 2000 sites per marine region**

Marine region	Area of Natura 2000 sites per Region (km <sup>2</sup> )2014
Marine Atlantic	194103.29*
Marine Baltic	46202.43
Marine Black Sea	4730.78
Marine Macaronesian	12615.2
Marine Mediterranean	60279.39

Source: Natura 2000 spatial data, end 2014. The area of the UK's site Hatton Bank is included.

### Marine Atlantic region

The Marine Atlantic Biogeographical region extends from the Kattergat, between Denmark and Sweden, in the North towards the Bay of Biscay and the Iberian Coast in the South. To the West, it also embraces the Celtic Seas.

The Member States which have national waters in this region are: Denmark, Sweden, Germany, the Netherlands, Belgium, the United Kingdom, Ireland, France, Spain and Portugal.

North Sea is a shallow and rather young ecosystem formed by the flooding of a landmass 20000 years ago. The seabeds are predominantly sandy, but muddy in deeper parts as well as in the southern coastal areas with extensive river influence.

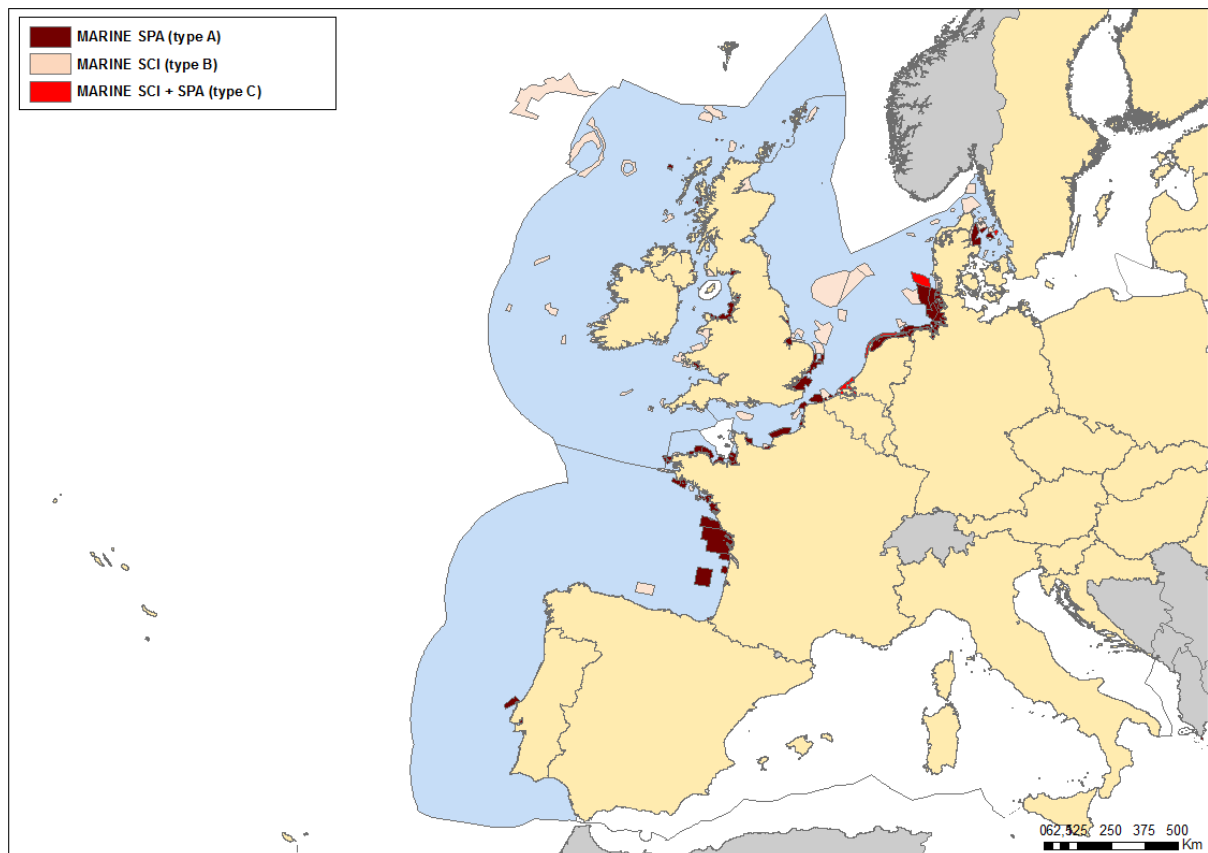
The strong coupling between benthic and pelagic communities in the shallow parts of the sea makes it extremely productive, being one of the import fishing grounds in the EU. Anthropogenic impacts have been significant for many years; most notable are the effects of fisheries and eutrophication.

**For further information on the Atlantic sea, please see:**

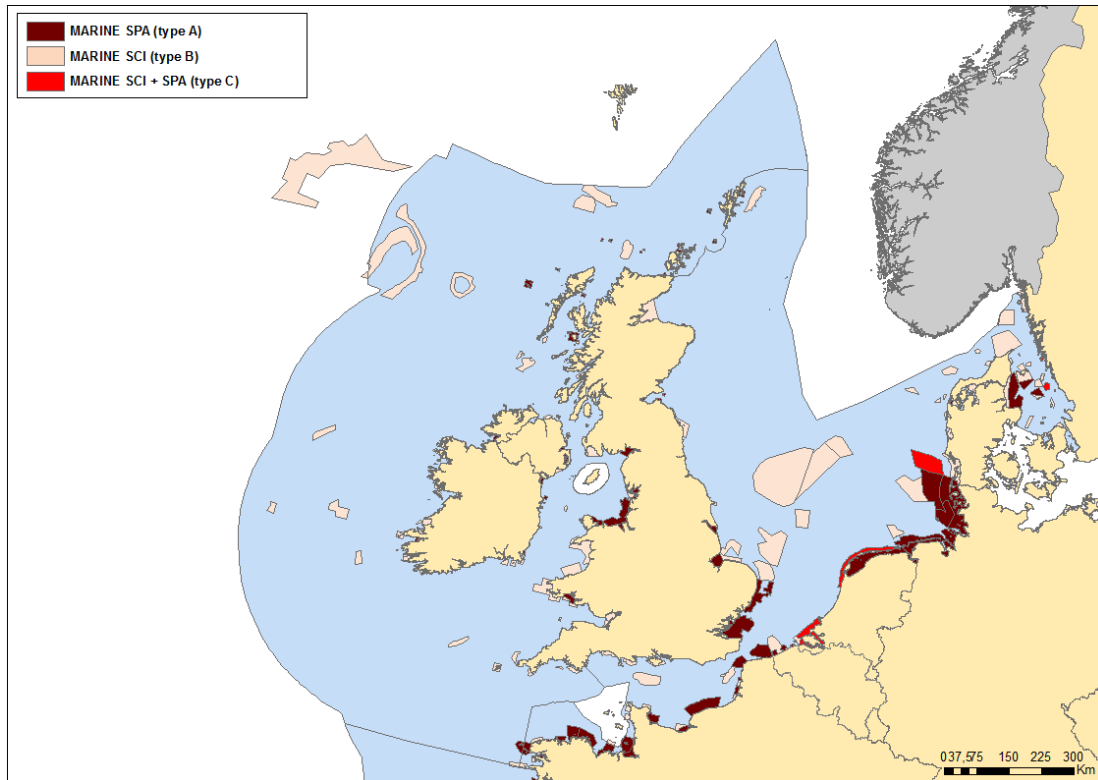
- EEA (2003) Europe's biodiversity – biogeographical regions and seas. Biogeographical regions in Europe. The North-East Atlantic ocean.

[http://www.eea.europa.eu/publications/report\\_2002\\_0524\\_154909](http://www.eea.europa.eu/publications/report_2002_0524_154909)

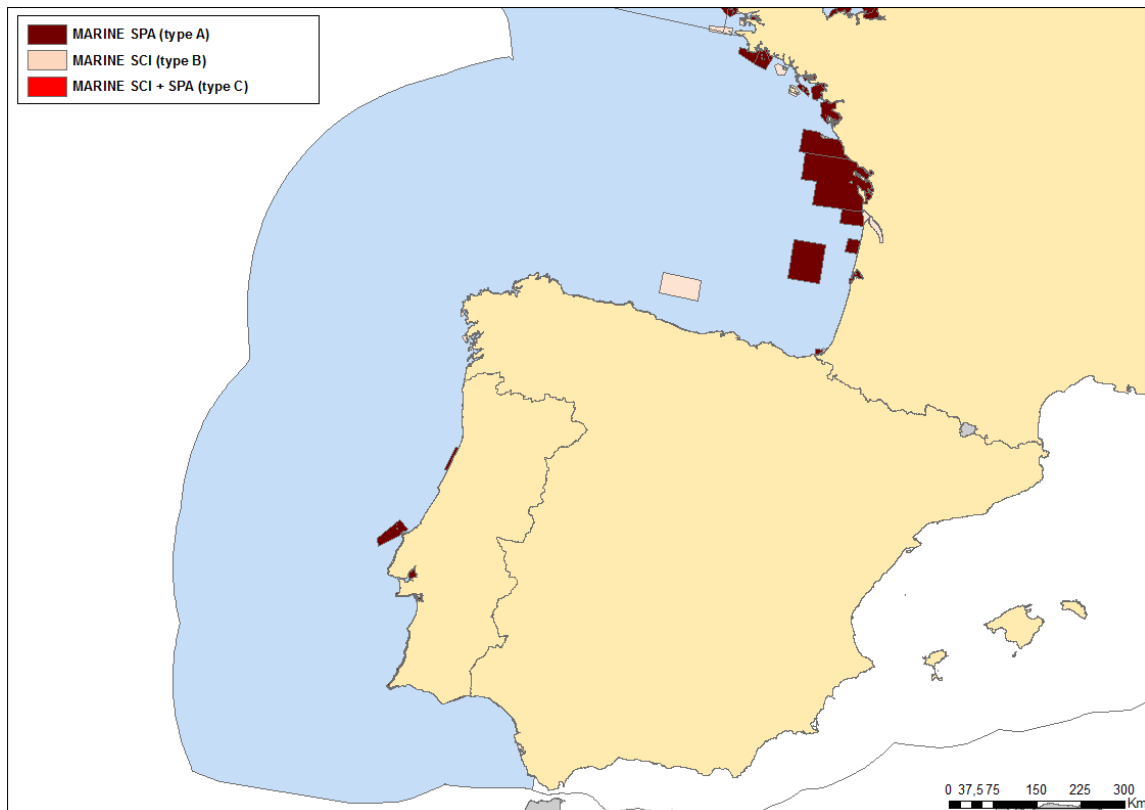
**Map 2.2. Natura 2000 sites across the marine Atlantic region (End 2013 Database)**



**Map 2.2.1 Detail of the Natura 2000 sites across the Kattergat, Skagerrak, North Sea, Celtic Seas and the English Channel (End 2013 database)**



**Map 2.2.2 Detail of the Natura 2000 sites across the Bay of Biscay and Iberian Coast (End 2013 database)**





## Marine Baltic region

The Baltic Sea is the largest brackish water system in the world. Its only connection to more open seas are the shallow sounds between Sweden and Denmark.

It is unique in that there are areas where freshwater, brackish water and marine species are all present. The marked vertical and horizontal salinity gradients (its salinity increases from east to west and from north to south) are reflected in different species communities and species numbers. The highest biodiversity is found in the south-west. Many of the marine species are at the limit of their distributions.

The main threats to biodiversity in the Baltic Sea are: eutrophication, fisheries, pollution and introduction of non-indigenous species.

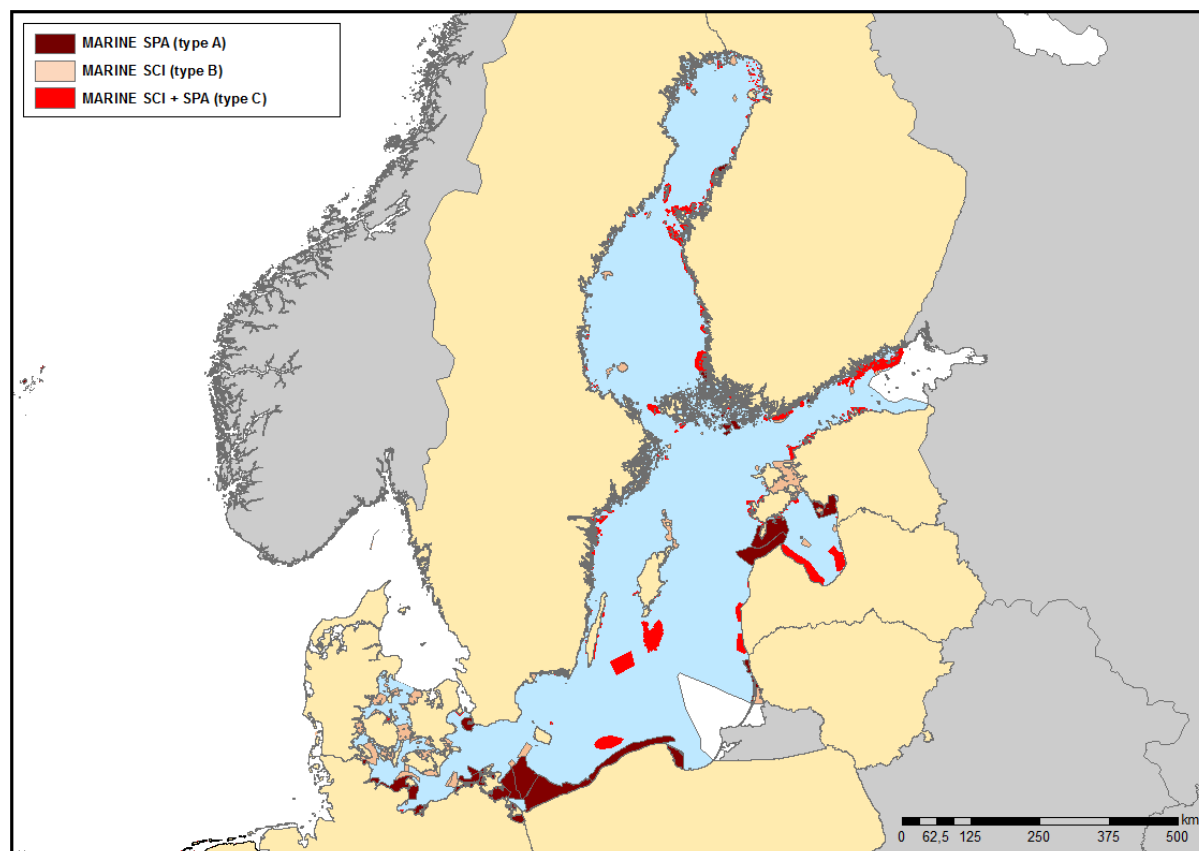
The Member States which have national waters in this region are: Sweden, Finland, Denmark, Germany, Poland, Estonia, Latvia and Lithuania.

### For further information on the Baltic sea, please see:

- EEA (2003) Europe's biodiversity – biogeographical regions and seas. Biogeographical regions in Europe. The Baltic sea.

[http://www.eea.europa.eu/publications/report\\_2002\\_0524\\_154909](http://www.eea.europa.eu/publications/report_2002_0524_154909)

### Map 2.3. Natura 2000 sites across the marine Baltic region (End 2013 database)



## Marine Black sea region

Nearly 87 % of the Black Sea is entirely anoxic and contains high levels of hydrogen sulphide as result of past geological events, its shape and its specific water balance.

The composition and structure of the marine communities is constantly changing with the decline of certain species and the expansion of others and deep pelagic and benthic organisms are largely absent.

Eutrophication and inappropriate fishing practices are become the main threats for the Black Sea biodiversity.

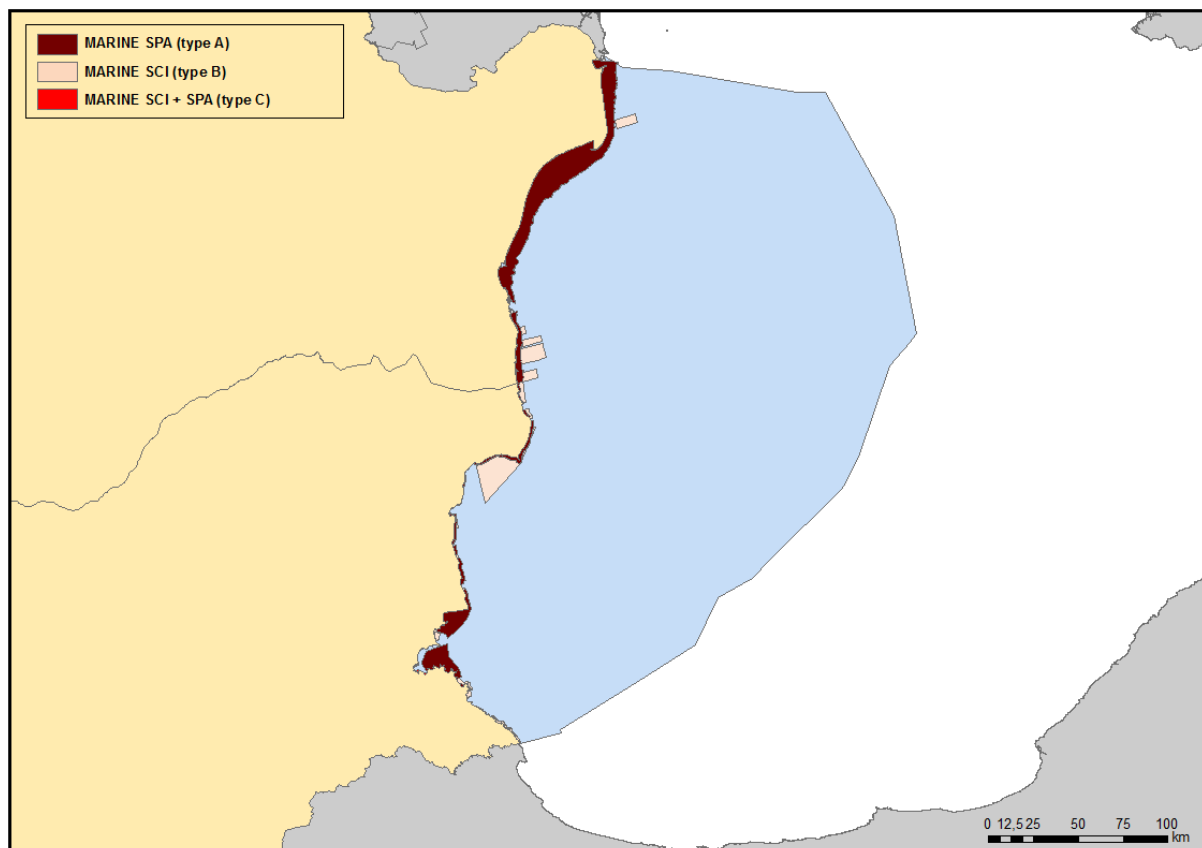
The Member States which have national waters in this region are: Romania and Bulgaria.

### For further information on the Black sea, please see:

- EEA (2003) Europe's biodiversity – biogeographical regions and seas. Biogeographical regions in Europe. The Black sea.

[http://www.eea.europa.eu/publications/report\\_2002\\_0524\\_154909](http://www.eea.europa.eu/publications/report_2002_0524_154909)

### Map 2.4. Natura 2000 sites across the marine Black Sea region (End 2013 database)



## Marine Macaronesian region

Section of the North-east Atlantic Region which encloses the archipelagos of Madeira, Azores (Portugal) and Canary Islands (Spain), with marked oceanic character.

The marine Macaronesian region is characterized by its geographic situation and their volcanic origin of their islands. The confluence of currents -the cold currents of - Azores and Canary, which bring cold water bodies from the West and North Atlantic and warmer subtropical and African currents and upwellings – along with the influence of the trade winds and the presence of deep abyssal plains at short distance of the coast made the marine Macaronesian Region a very singular one. These particularities allow the presence of permanent and migratory species and explain the phenomena of stable colonies of cetaceans.

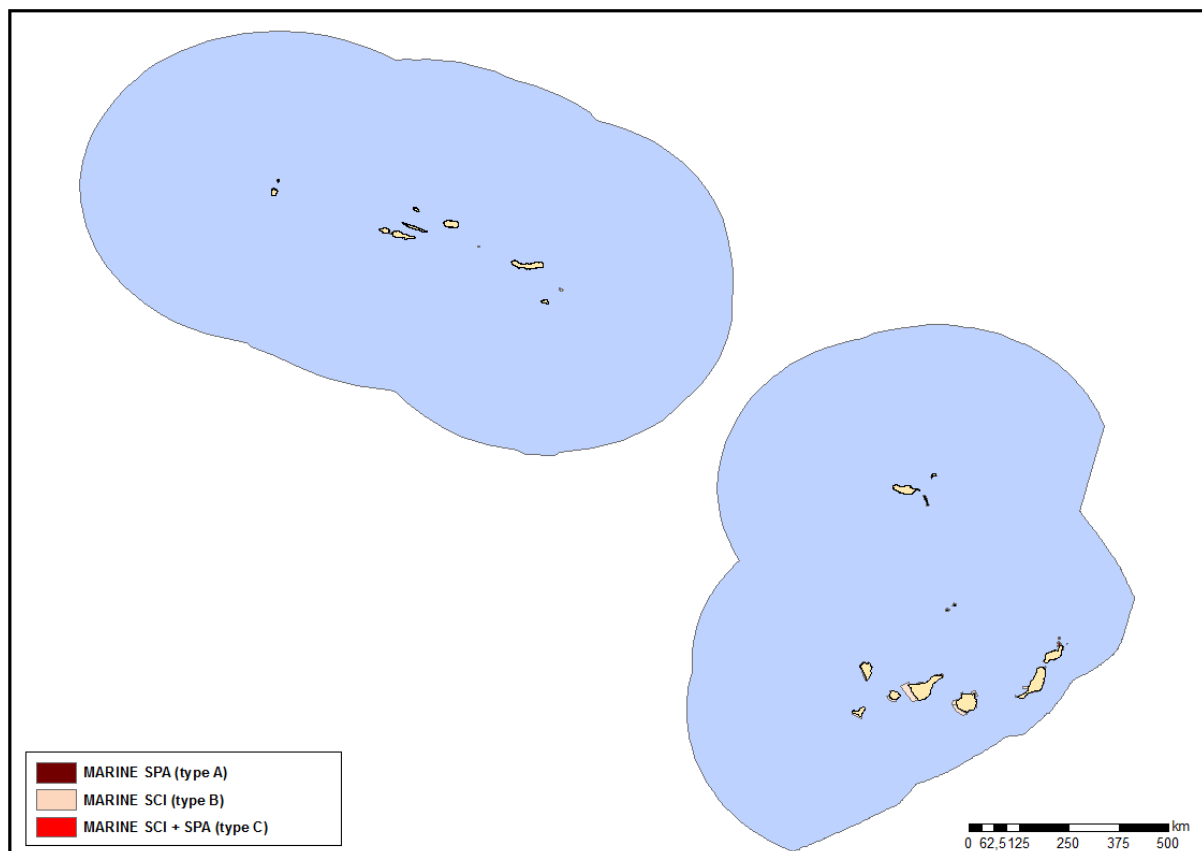
Among the most common pressures can be listed pollution, extraction of sediments and hydrocarbons and tourism.

For further information on the Macaronesian region, please see:

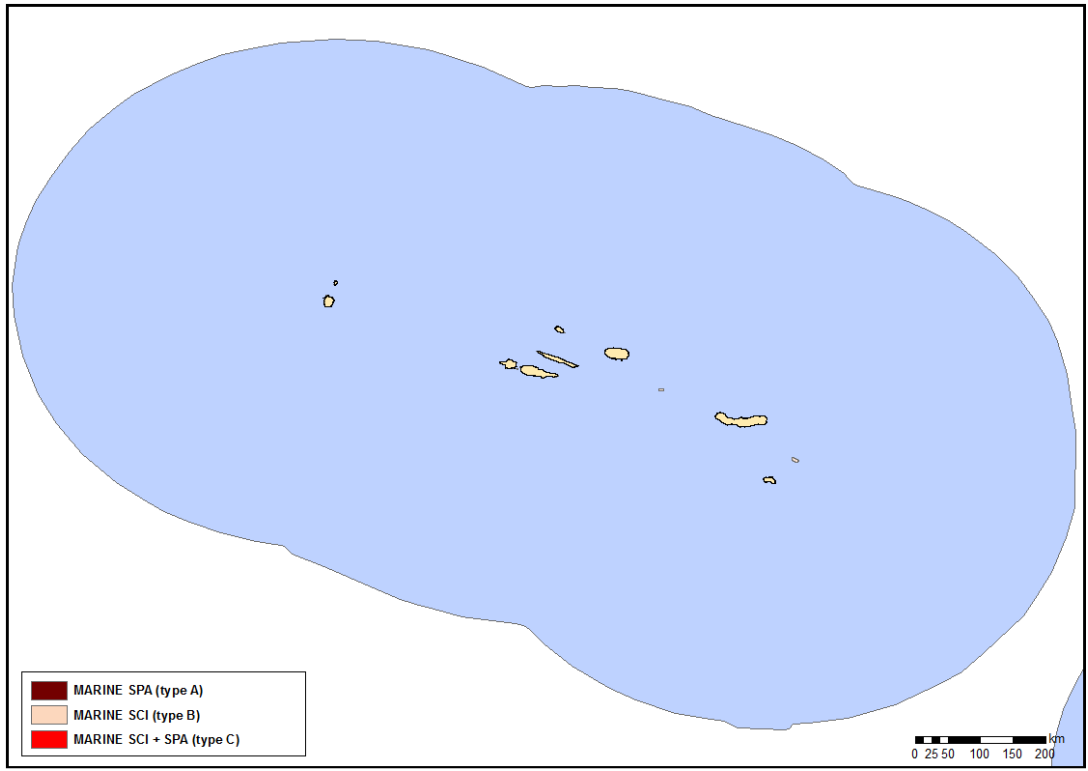
[http://www.magrama.gob.es/es/costas/temas/estrategias-marinas/em\\_canaria.aspx](http://www.magrama.gob.es/es/costas/temas/estrategias-marinas/em_canaria.aspx)

(in Spanish).

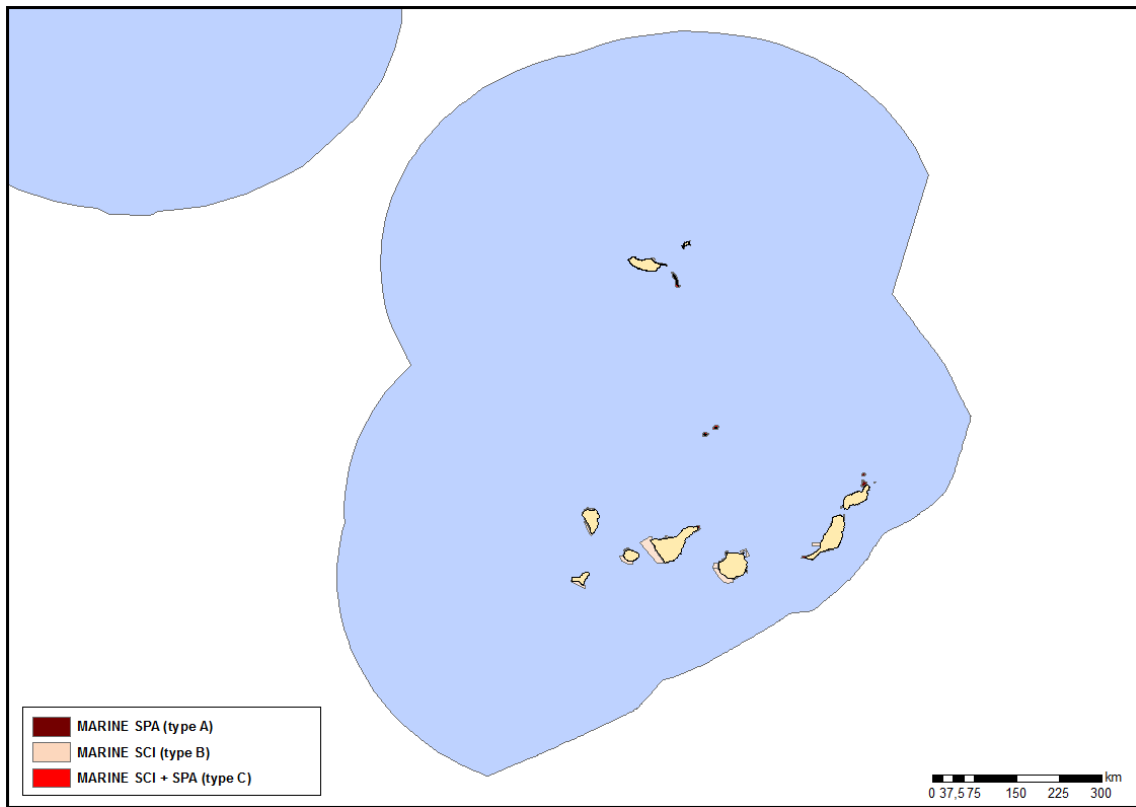
**Map 2.5. Natura 2000 sites across the marine Macaronesian region (End 2013 database)**



**Map 2.5.1. Detail of Natura 2000 sites across the marine Macaronesian region (the Azores) (End 2013 database)**



**Map 2.5.2. Detail of Natura 2000 sites across the marine Macaronesian region (Madeira and Canary Isles) (End 2013 database)**



## Marine Mediterranean Region

The Mediterranean Sea is rich in oxygen and poor in nutrients, its oligotrophy increases from west to east.

The fauna and flora is one of the richest of the world and there is a high rate of endemism. Compared with the Atlantic, the Mediterranean marine communities have many different species with generally smaller individuals (Mediterranean nanism).

Some main influences for the biodiversity are introduced alien species -which are increasing in the eastern basin- and overexploitation of several fish stocks.

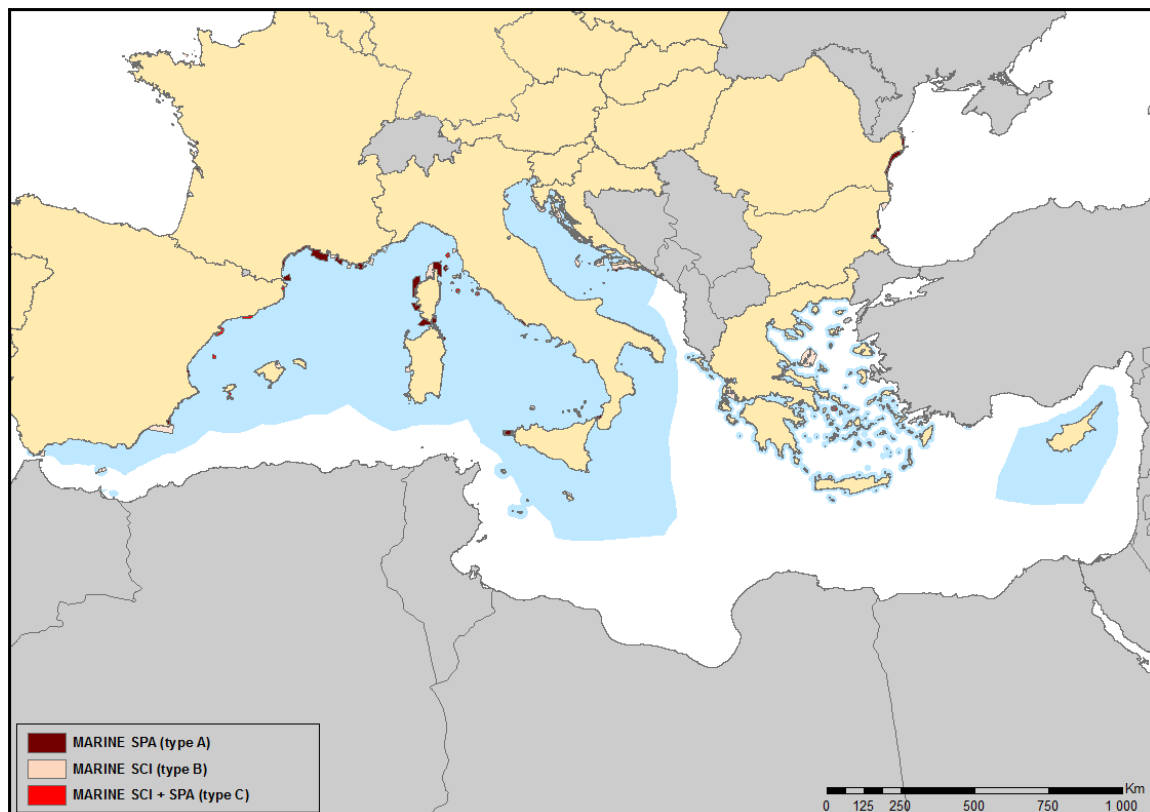
The Member States which contain national waters in this region are: Spain, France, Italy, Slovenia, Croatia, Greece, Malta and Cyprus.

### For further information on the Mediterranean sea, please see:

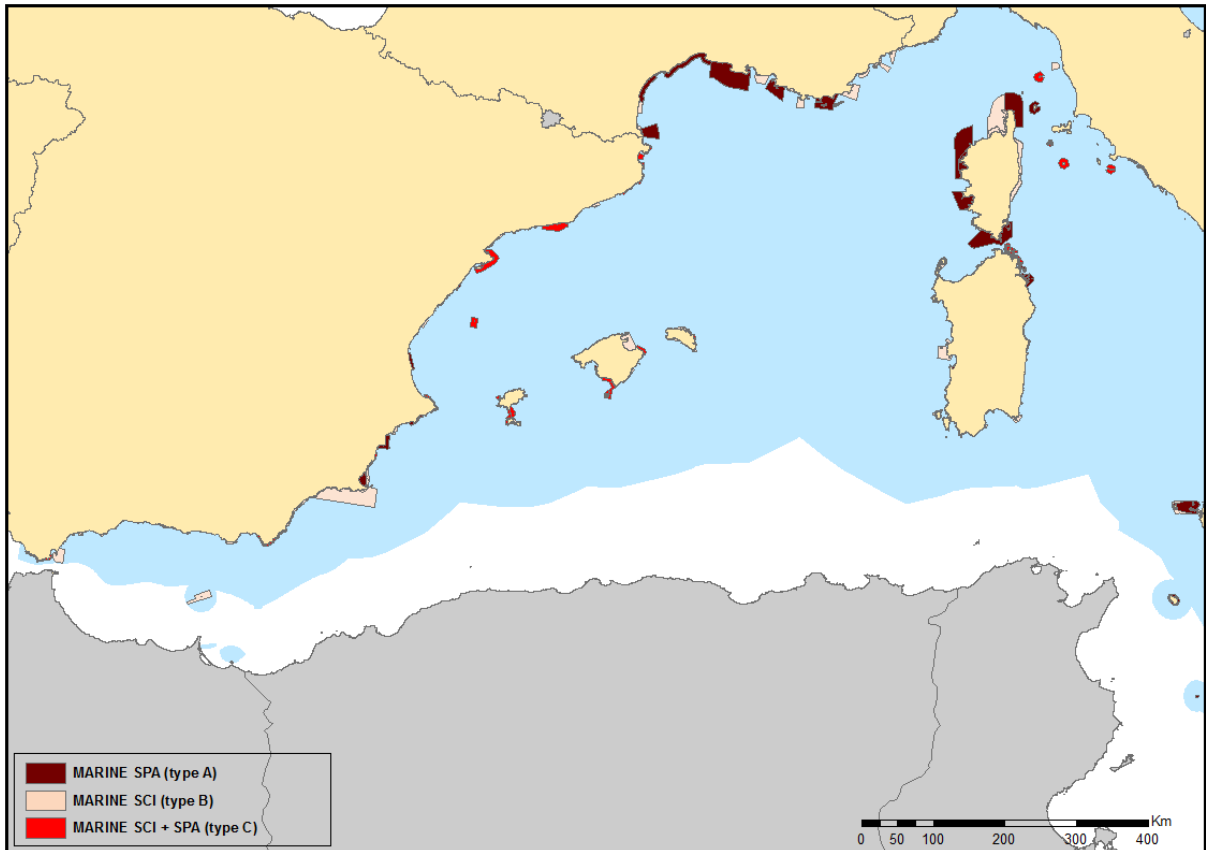
- EEA (2003) Europe's biodiversity – biogeographical regions and seas. Biogeographical regions in Europe. The Mediterranean sea.

[http://www.eea.europa.eu/publications/report\\_2002\\_0524\\_154909](http://www.eea.europa.eu/publications/report_2002_0524_154909)

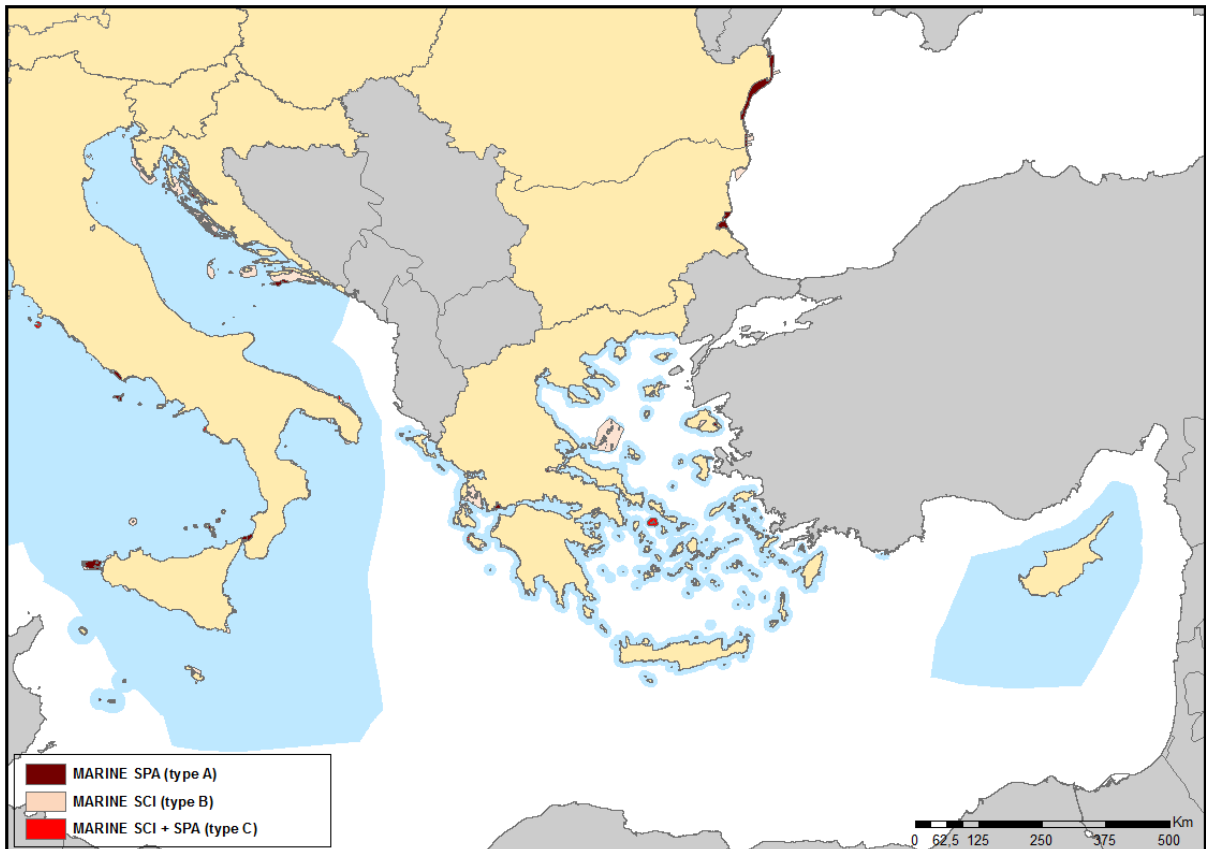
### Map 2.6. Natura 2000 sites across the marine Mediterranean region (End 2013 database).



**Map 2.6.1. Detail of Natura 2000 sites across the West marine Mediterranean region (Balearic, Ligurian and Tyrrhenian Seas) (End 2013 database)**



**Map 2.6.2. Detail of Natura 2000 sites across the East marine Mediterranean region (Adriatic, Ionian, Aegean Seas and Sea of Crete)(End 2013 database)**



General:

Natura 2000 Barometer provides figures for the global Natura 2000 sites (SPAs+ SCIs) which have been obtained by GIS analysis, using the electronic spatial boundaries provided by Member States for each of their sites. It is regularly updated in Natura 2000 Newsletter: [http://ec.europa.eu/environment/nature/info/pubs/natura2000nl\\_en.htm](http://ec.europa.eu/environment/nature/info/pubs/natura2000nl_en.htm)

## **2.2 General information on Annex I habitat coverage within the marine biogeographical regions (based on Article 17 reporting)**

Graphics below show the coverage of the 9 habitat-types reported as marine based on the results from the last Article 17 reporting cycle, using the 'Surface area' field.

In blue, the coverage (km<sup>2</sup>) of these habitats within the concerned marine region and in red, their coverage in marine Natura 2000 sites.

These habitat types are:

- 1110 Sandbanks which are slightly covered by sea water all the time
- 1120 \* *Posidonia* beds
- 1130 Estuaries
- 1140 Mudflats and sandflats not covered by seawater at low tide
- 1160 Large shallow inlets and bays
- 1170 Reefs
- 1180 Submarine structures made by leaking gases
- 1650 Boreal Baltic narrow inlets
- 8330 Submerged or partially submerged sea caves

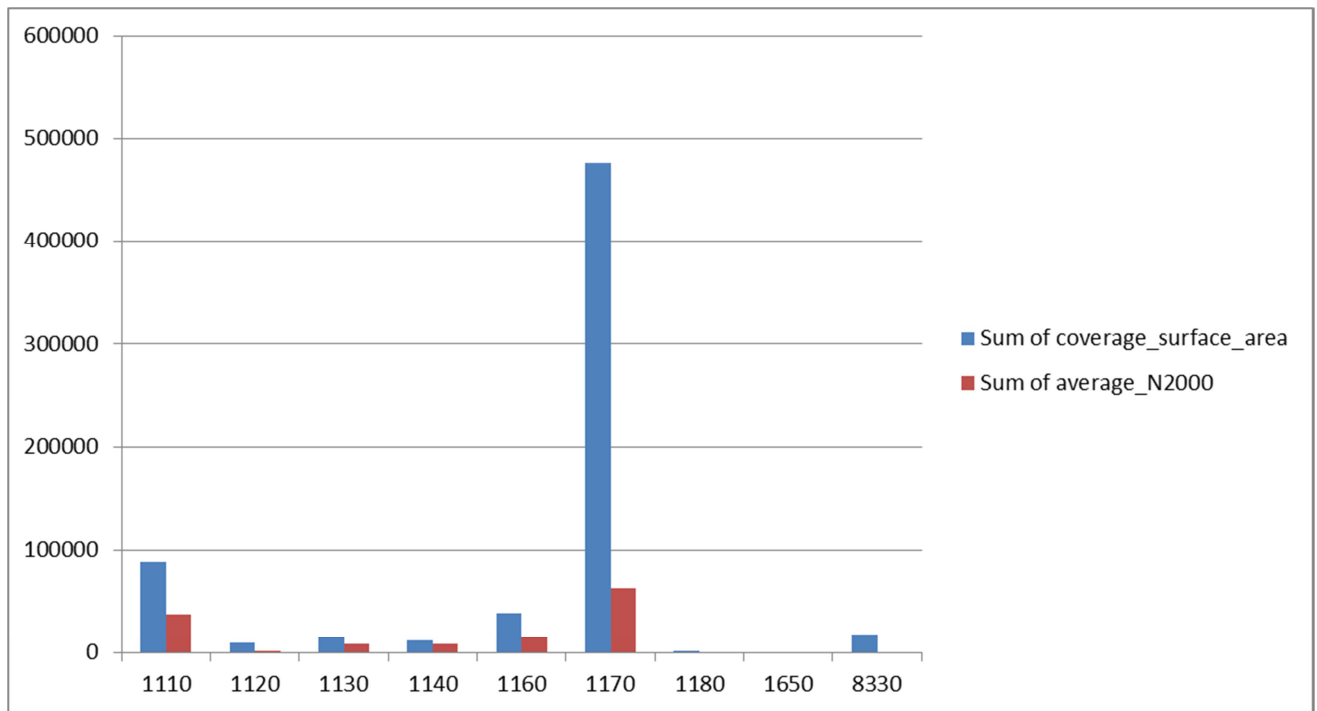
Data should be interpreted cautiously since the area of many marine features is still poorly known and in many cases, the reported data have been estimated with minimal or none sampling or in other cases, the data are simply absent or probably wrong. Assessments indicated as not used for statistics purposes have been excluded as well as those assessments without data. In the case of the habitats coverage in the Natura 2000 network, the geometry mean between the minimum and the maximum surface area was calculated.

The data reflect the current situation of knowledge in the marine environment, which is subject to improvement in short term due to the ongoing research projects. For example, the area of reefs could be expected larger in the marine Atlantic but smaller for the marine Macaronesian region.

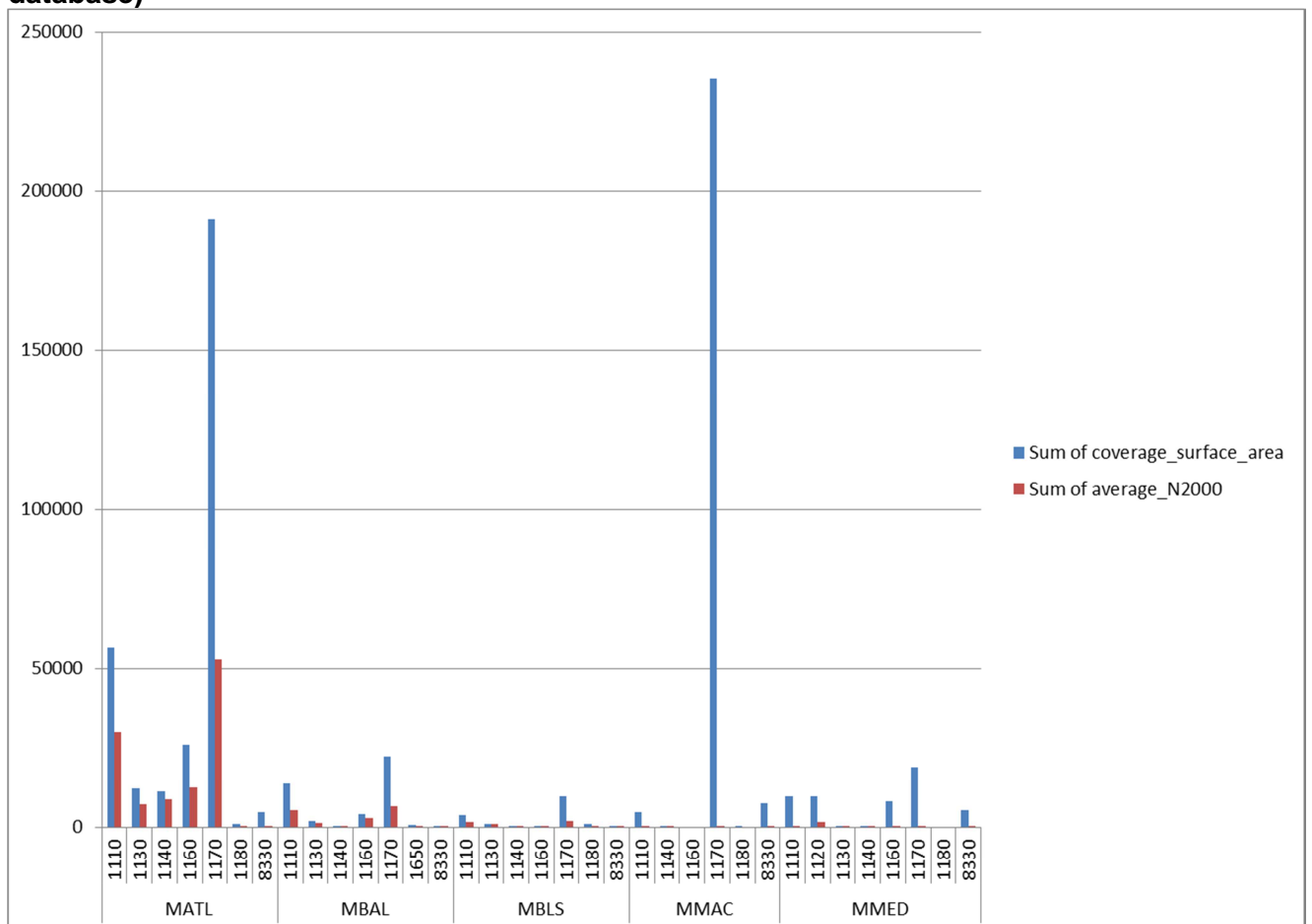
As shown in figures 2.1 and 2.2 the most extended habitat types are reefs followed by sandbanks slightly covered by sea water. Conversely, the boreal Baltic narrow inlets has the shortest coverage due to the localized occurrence.

Similar analysis for species has not been performed due to the difficulty of compiling data reported under different methodologies and units by the Member States when estimating population sizes.

**Figure 2.1 Area covered by each marine habitat (km<sup>2</sup>) in all marine regions (End 2013 database).**



**Figure 2.2 Area covered by each habitat (km<sup>2</sup>) in each marine region. (End 2013 database)**





## 3 The Article 17 (conservation status) reporting

### 3.1 Introduction

All Member States are required by the Habitats Directive to monitor habitat types and species of Community interest, i.e habitats listed in Annex I and species listed in Annexes II, IV and V of the Habitats Directive. Article 17 of the Directive requires that every 6 years Member States prepare reports to be sent to the European Commission on the implementation of the Directive. The Article 17 report for the period 2007-2012 is the second reporting period that includes assessments on the conservation status of the habitat types and species of Community interest. The Article 17 reports ([http://bd.eionet.europa.eu/activities/Reporting/Article\\_17/](http://bd.eionet.europa.eu/activities/Reporting/Article_17/)) covers habitat types and species across the whole territory (including marine) of the Member State concerned, not only within Natura 2000 sites.

The Article 17 reports prepared by the Member States have three sections; (i) general information about the implementation of the Habitats Directive, (ii) the assessments of conservation status of species and (iii) for habitats. Conservation status was assessed using a standard methodology to facilitate comparisons between Member States and to allow aggregation to give assessments for biogeographical and marine regions. Conservation status is assessed as being either 'favourable' (FV), 'unfavourable-inadequate' (U1) and 'unfavourable-bad' (U2), based on four parameters as defined in Article 1 of the Directive. In addition Member States have reported on trends within the 'unfavourable' categories, i.e 'improving' (+), 'deteriorating' (-), 'stable' (=) or 'unknown trend'.

The parameters to characterise conservation status of habitat types are 'range', 'area covered by the habitat type', 'structure and functions' and 'future prospects' and for species they are 'range', 'population', 'habitat of species' and 'future prospects'. Member States were encouraged to use expert opinions where there was insufficient data to inform judgements. However, where there was great uncertainty it was also possible to report the conservation status as 'unknown'. The assessments of the four parameters were combined following an agreed method to give an overall assessment of conservation status.

The conservation status of a given species (or habitat) is reported by a Member State in each marine region of the country where the species (or habitat) occurs. For instance, the conservation status of reefs (1170) is reported by France both in the Atlantic and in the Mediterranean marine regions. In addition, the conservation status of the same given species (or habitat) is assessed at EU level for the whole marine region considered. The methodology for EU level biogeographic and marine assessments can be found at [http://bd.eionet.europa.eu/activities/Reporting/Article\\_17/Documents/ART17%20public%20consultation%20guide.pdf](http://bd.eionet.europa.eu/activities/Reporting/Article_17/Documents/ART17%20public%20consultation%20guide.pdf).

The current reporting period covers the period of 2007-2012. As compared to the first reporting round there has been a significant improvement in the quality of data reported including a decrease in data reported as 'unknown'.

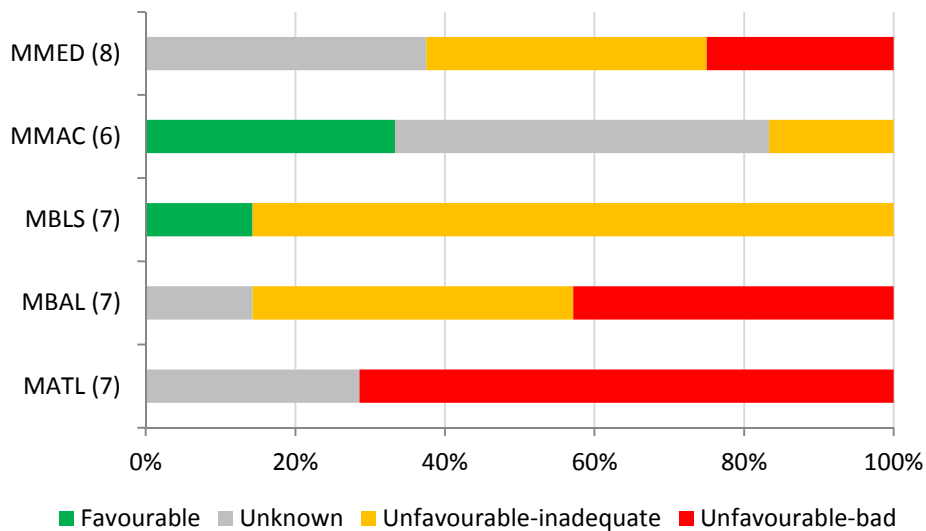
**However, the marine domain still suffers from lack of knowledge and of lack of harmonisation among Member States' reporting. Therefore, although providing a broad picture across the five EU marine regions considered under the Habitats Directive, the following analysis have to be tackled with caution when looking in more detailed results.**

### 3.2 Conservation status of habitat types and species per marine region

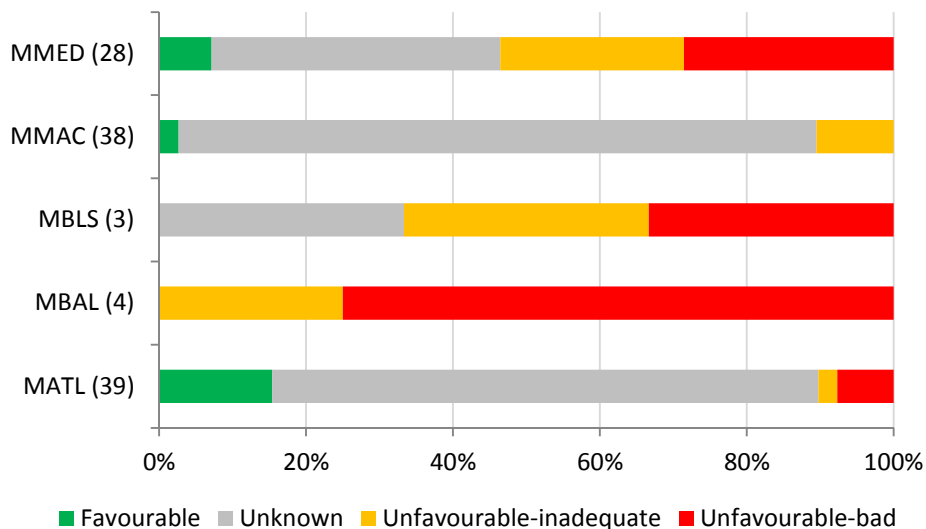
Figures 1 and 2 display respectively the percentages of overall assessments of habitat types and species in the different marine regions. The number in brackets shows the number of assessments in each group. The statistics are based on EU level assessments of conservation status.

9 marine habitats types have been taken into account (1110, 1120, 1130, 1140, 1160, 1170, 1180, 1650 and 8330), and for the figure 3.2 only species listed in the Annex II and IV were considered, i.e 47 species.

**Figure 3.1. Conservation status of habitat types in each marine region (number of assessments in brackets).**



**Figure 3.2. Conservation status of species in each marine region (number of assessments in brackets).**



## 4 Ranking habitats and species of priority concern across marine regions

In the following analysis, the data from the Member State level were used as the potential management measures deriving from this process would have to be taken at the national level.

All Annex I habitat types reported as marine and Annex II/Annex IV species reported as marine under Art 17 are used in the statistics. Annex V species were excluded following the approach of the Pilot Boreal, Atlantic, Alpine and Mediterranean processes. Species reported as 'Occasional' are excluded as well.

In addition, species and habitat types occurring only in one Member State were excluded from the marine calculations (following the same approach as in the Atlantic and Alpine seminar process), except from Black sea and Macaronesian regions, as they each only cover two Member States.

In total **9 Annex I habitat types and 44 Annex II/IV species** of the five Marine regions were covered in this analysis.

### 4.1 Criteria for prioritisation (Criteria A, B and C)

Given the need to focus on a limited number of issues in the seminar, the priority for discussions of habitat types and species was assessed and ranked. Identifying priorities should reflect on one side the conservation 'urgency/priority' (unfavourable conservation status and declining trends) and on the other side joint interest of all Member States involved in the seminar (the priority should be given to habitat types and species which occur in most of the countries in the region).

The following criteria based on the Article 17 reporting are proposed to be used for the first step to narrow down the selection of species and habitat types (criteria for prioritisation). There are three criteria A, B and C. This work was developed for the Pilot Seminar.

#### **Criterion A. Number of MS where species/habitat types are present**

The proposal is to give a higher weight to species and habitat types which occur in several Member States. Habitat types and species only occurring in one Member State of one of the Marine regions are less important to discuss in such a setting than the habitat types and species that are shared by many Member States in one of the Marine regions and with their main distribution there. As explained above, species and habitat types occurring in one Member State (for exception, see above) only were left out from the analysis.

If for example a species is only present in two Member State it scored only 2 points, but if it is present in eight Member States it scored 8 points. Criterion A has a multiplier effect as shown below under the paragraph 'Filtering the species and habitat types based on criteria A, B and C.

#### **Criterion B. Species and habitat types at unfavourable conservation status (U2 & U1 & XX)**

The terms of reference for the biogeographical seminars excludes from the discussion species and habitats already at favourable conservation status. This is why species and habitats with favourable conservation status were not taken into account under criterion B. Species and habitats were allocated a score based on their conservation status in each Member State in the following way:

The habitat/species scores

- 2 points for each Member State in which it has been assessed as Unfavourable-Bad (U2) and
- 1 point if Unfavourable-Inadequate (U1) or Unknown (XX).

and these scores summed up give the overall score.

For example the Estuaries 1130 in Marine Atlantic region was assessed as follows

$$B = 2(N^{\circ}U2) + N^{\circ}U1 + N^{\circ}XX = 5*2 + 3*1 + 2*1 = 14$$

- B = score for criterion B
- N°U2, N°U1, N°XX = number of Member States with the conclusion U2, U1, XX.

Member State	Article 17 evaluation	Score
BE	U2	2
DE	U2	2
DK	U2	2
ES	XX	1
FR	U1	1
IE	FV	-
NL	U1	1
PT	XX	1
SE	U1	1
UK	U2	2
Overall score		14

This criterion reflects the importance to agree on management for habitat types and species that are far from being at favourable conservation status compared to those ones which are close to favourable status. The higher is the number of Member States with unfavourable conclusions the higher the score. This method works with absolute numbers, it is not sensitive to the percentage of the habitat area or species population having an unfavourable status. For example if the conclusion in two out of eight Member States is U2 the species has 4 points (considering it is favourable in remaining 6 Member States). But the species scores 4 points also if the species occur only in two Member States and both have reported U2 conservation status.

On the other hand the score is dependent on the number of Member States where the habitat/or species occurs. The habitats/species present in several Member States have higher probability to get high scores.

### **Criterion C. Trend information**

As part of the 2007-2012 Article 17 reporting, Member States also provided information on the trend in Unfavourable conservation status (+ Improving trend, - Declining trend, = Stable, X Unknown trend). All species and habitat types that were reported as U1 or U2 having an overall negative trend in the Article 17 reports were taken into account.

C = Number of Member States where the trend in Unfavourable conservation status is declining

#### **4.2 Filtering the species and habitat types based on criteria A, B and C and use of the Priority Index**

After the scores were given to each habitat type and species according to the criteria A, B and C, the scores were then used to calculate a Priority Index for each species and habitat type. The Steering Committees for the terrestrial Biogeographic regions agreed to use the sum of scores for unfavourable conservation status and negative trend multiplied by the number of countries where habitat/species is present:  $A*(B+C)$ .

The other options for the algorithm are described in the draft pre-scoping document for the Boreal region by the ETC/BD:

<https://circabc.europa.eu/w/browse/b9886a98-1fe2-40f1-a759-053c62748d6c>

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## 5 Results of the ranking

Tables in Appendix 1, including the legend, show the results of habitats and species ranking (last column) applying the above described methodology in each five marine regions.

When combining all five marine regions together, i.e summing up the priority index the following results are obtained for habitats:

**Table 5.1 Overall ranking of habitats for all five marine regions**

N2K code	Description	Priority	I	Criterion A	Criterion B	Criterion C	Priority Index A*(B+C)
1170	Reefs	N	Y	30	30	5	1050
1110	Sandbanks which are slightly covered by sea water all the time	N	Y	27	28	9	999
1130	Estuaries	N	Y	24	30	4	816
1160	Large shallow inlets and bays	N	Y	22	26	5	682
1140	Mudflats and sandflats not covered by seawater at low tide	N	Y	22	24	5	638
8330	Submerged or partially submerged sea caves	N	Y	19	13	2	285
1180	Submarine structures made by leaking gases	N	Y	7	8		56
1120	Posidonia beds ( <i>Posidonion oceanicae</i> )	Y	Y	7	4		28
1650	Boreal Baltic narrow inlets	N	Y	2	3	2	10

It is not a surprise that habitats with higher rank are those present in each five marine regions and the two ones with lower score (Posidonia beds, Boreal Baltic narrow inlets) are those only present in one region. The scoring mainly allows to highlight the top five habitats which are of common concern across all EU marine regions.

Aggregated results for top 25 species in all five marine regions are shown in table 5.2. The Harbour porpoise ranks first partly because it is present in all five marine regions so the number of Member States which have a responsibility for its conservation is high. The conservation status of this species has been assessed as favourable in the Atlantic marine region mainly because it is favourable in three countries (DK, IE, UK) which host 75% of the Atlantic population. But in all other marine regions the conservation status is assessed as unfavourable (even bad in the Baltic and the Black sea regions).

**Table 5.2 Top 25 species ranking for all five marine regions together**

N2K code	Taxonomical group	Name	Priority	II	IV	V	Criterion A	Criterion B	Criterion C	Priority Index A*(B+C)
1351	Mammals	Phocoena phocoena - (harbour porpoise)		Y	Y		20	24	3	540
1349	Mammals	Tursiops truncatus - (bottlenose dolphin)		Y	Y		18	16	1	306
1350	Mammals	Delphinus delphis - (short-beaked common dolphin)			Y		16	17	2	304
1224	Reptiles	Caretta caretta - (Loggerhead sea turtle)	Y	Y	Y		15	16	2	270
1223	Reptiles	Dermochelys coriacea - (Leatherback sea turtle)			Y		13	16	1	221
1227	Reptiles	Chelonia mydas - (green sea turtle)	Y	Y	Y		13	16		208
1364	Mammals	Halichoerus grypus - (grey seal)		Y		Y	17	12		204
2030	Mammals	Grampus griseus - (Risso's dolphin)			Y		14	14		196
5031	Mammals	Physeter catodon - (sperm whale)			Y		13	13		169
2621	Mammals	Balaenoptera physalus - (fin whale)			Y		14	12		168
1365	Mammals	Phoca vitulina - (harbour seal)		Y		Y	14	11	1	168
2029	Mammals	Globicephala melas - (long-finned pilot whale)			Y		13	12		156
2034	Mammals	Stenella coeruleoalba - (striped dolphin)			Y		13	11	1	156
2618	Mammals	Balaenoptera acutorostrata - (common mink whale)			Y		14	11		154
1345	Mammals	Megaptera novaeangliae - (humpback whale)			Y		12	12		144
2035	Mammals	Ziphius cavirostris - (goose-beaked whale)			Y		12	12		144
2028	Mammals	Pseudorca crassidens - (false killer whale)			Y		11	11		121
2027	Mammals	Orcinus orca - (killer whale)			Y		12	10		120
1027	Molluscs	Lithophaga lithophaga - (date shells)			Y		10	8		80
2622	Mammals	Kogia breviceps - (pygmy sperm whale)			Y		8	8		64
2619	Mammals	Balaenoptera borealis - (sei whale)			Y		7	7		49
5033	Mammals	Hyperoodon ampullatus - (northern bottlenose whale)			Y		7	7		49
1366	Mammals	Monachus monachus - (Mediterranean monk seal)	Y	Y	Y		5	8	1	45
1938	Mammals	Phoca hispida botnica - (Baltic ringed seal)		Y		Y	5	8		40
1028	Molluscs	Pinna nobilis - (noble pen shell)			Y		7	4	1	35

## 6 Pressures to marine species and habitats

As part of their reporting under Article 17 Member States are asked to report important threats and pressures using an agreed hierarchical list which can be found on the Article 17 Reference Portal.

([http://bd.eionet.europa.eu/activities/Reporting/Article\\_17/reference\\_portal](http://bd.eionet.europa.eu/activities/Reporting/Article_17/reference_portal)).

Pressures are activities which are currently having an impact on the habitat and threats are activities expected to have an impact in the near future. Both, pressures and threats were ranked in three classes: 'high, medium and low' importance.

However, in the following analysis only **pressures classed as 'High'** have been considered and pressures classified into lower level than 2 have been converted into 'level 2' and counted only once in spite of being indicated several times at a lower level (see table below). Pressures reported for Annex V species have not been considered.

Moreover, features considered as "not valid for statistics" have been excluded. This means that all species or habitat for which no reports have been provided are excluded from the following analysis, e.g. species with a weak occurrence (occasional, ...). Features for which no pressure information has been reported have been excluded in the analysis. In the case of marine species assessments, 28% do not have any information on pressures.

Species code	Region	MS	Pressure code reported	Level 2 pressure code
1234	XX	ZZ	F02.02.01	F02
1234	XX	ZZ	F02.01.03	F02
1234	XX	ZZ	F02	F02
9999	WW	YY	F02.02	F02
9999	WW	YY	F03.02	F03

Total considered for the statistics
F02 (counted only once). Pressure from level 2 to lower levels are merged and counted only once at level 2
F02 counted once more
F02 and F03

Note : in the example here above, the pressure F02 is reported in 75% (3/4) of the assessments when the pressure F03 represents 25%.

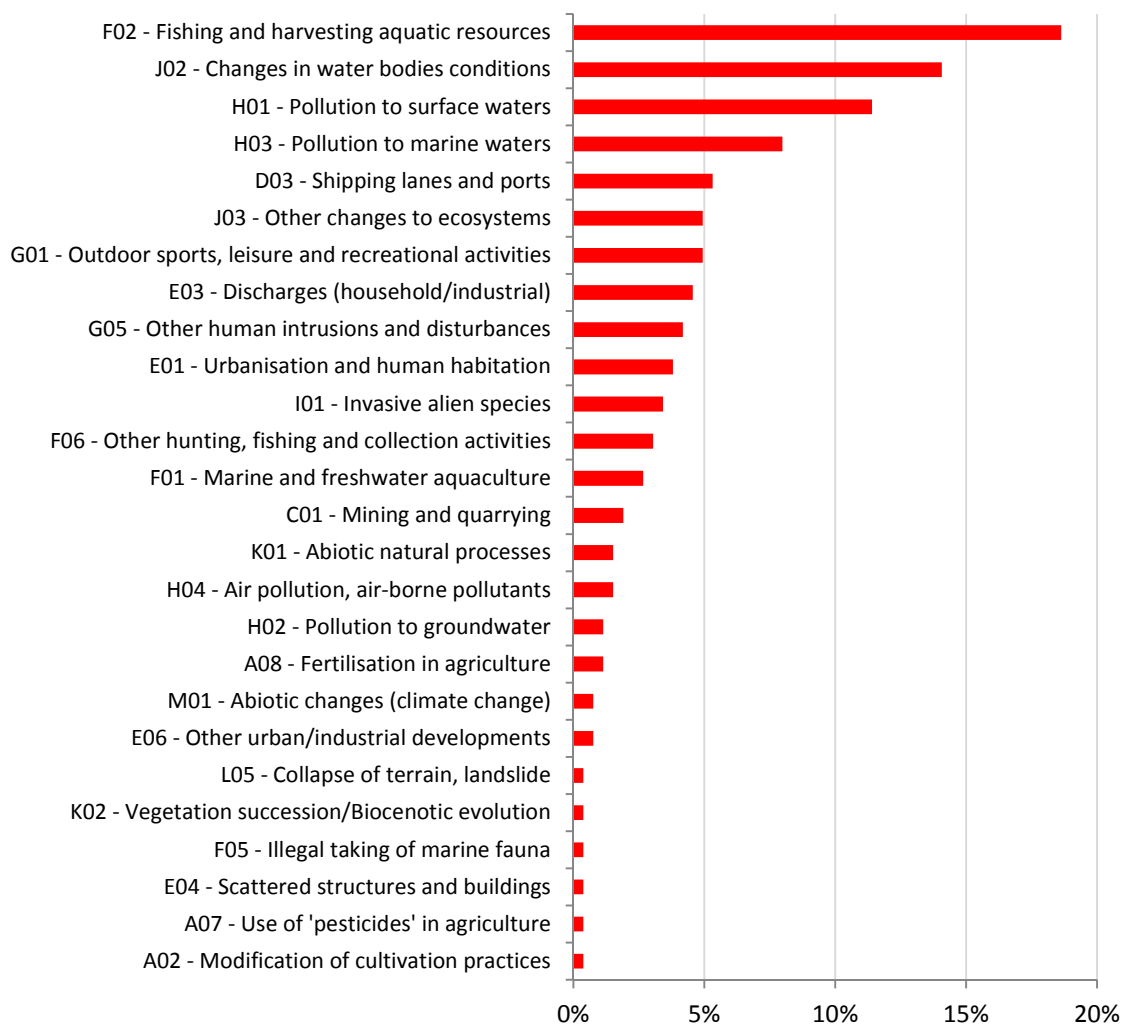
Results for pressures reported on habitats for all five marine regions are shown in figure 6.1 for habitats and 6.2 for species.

It should be noted that 11% of the habitat assessments and 40 % of the species assessments have no pressures reported.

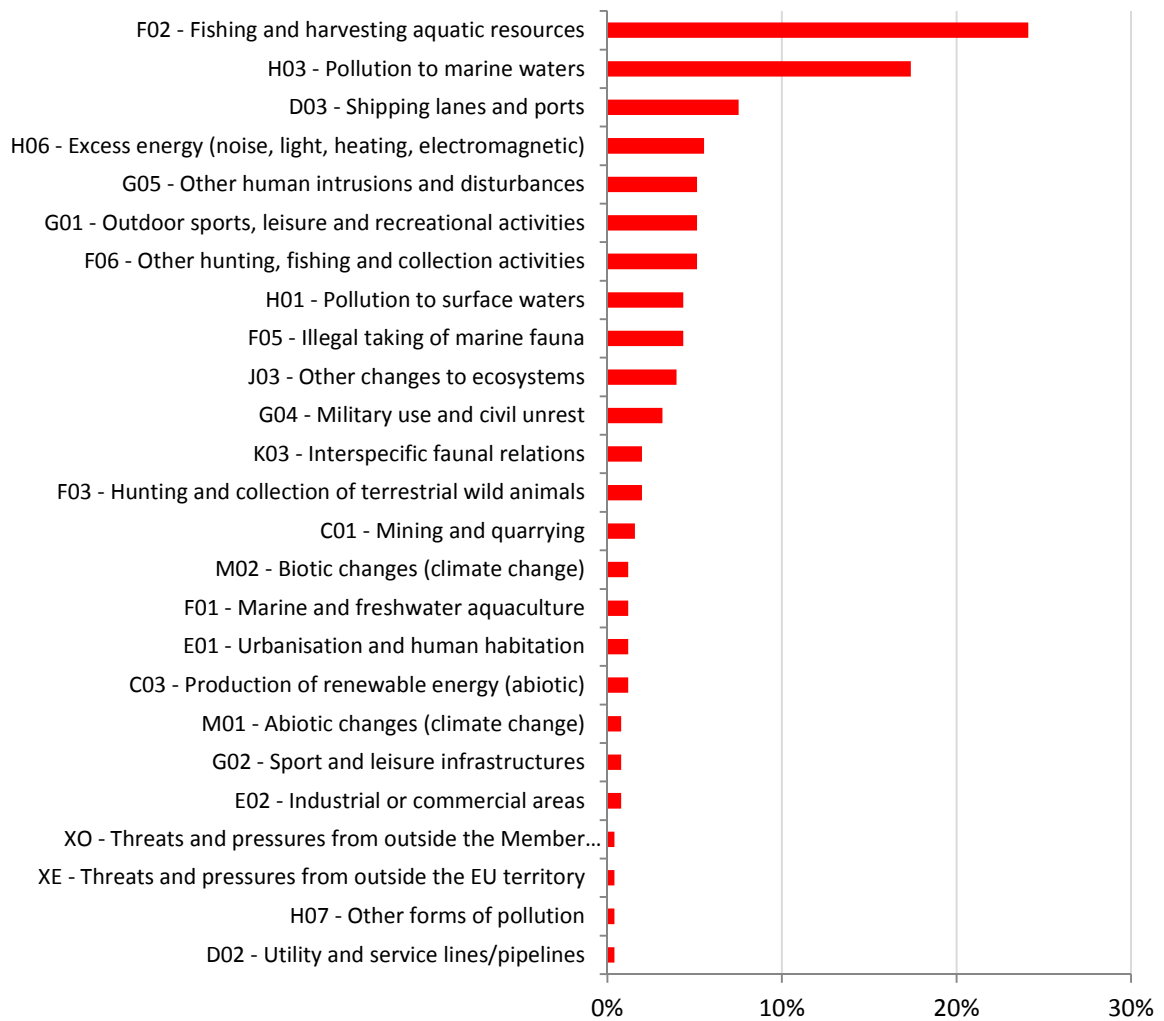
Details on pressures reported for each five marine regions are presented in Appendix II.



**Fig.6.1: Frequency (%) of pressures with 'high impact' reported for habitats**



**Fig.6.2: Frequency (%) of pressures with ‘high impact’ reported for species**



Note: 40% of marine species don't have any pressures reported (not only 'high impact' pressures)

## **7 Introduction to fact sheets on marine habitats and species**

Information fact sheets have been prepared for each of the marine habitat-types listed in Table 5.1 and species listed in Table 5.2. It includes the following information:

- General information on the conservation status of the habitat/ species as reported from Article 17 reporting
- A distribution map of the habitat/ species as well as spatial representation of the conservation status
- Conservation status of the habitat/ species per Member state and marine region
- Main pressures and conservation measures reported for this habitat/ species
- Number of Natura 2000 sites where the habitat/ species is reported

These fact sheets are provided in a separate document (see ETC Technical report n° 2/2015 'Pre-scoping document for the marine regions, 2<sup>nd</sup> part: Fact sheets on marine habitats and species')

## Appendix I

### Results of habitats and species ranking per marine region

Legend for the tables:

- Species/habitat types present in only one MS are excluded (except in Black sea and Macaronesian region, only include 2 MS).
- R = reptiles, I = invertebrate, M = mammal, H = habitats
- **I, II and IV** refer to Annexes of the Habitats Directive.
- **ATL CS** = Conservation status at the Atlantic region, red = unfavourable-bad, amber = unfavourable-inadequate, grey = unknown, green = favourable.
- **Positive trend**: positive trend for population & habitat for species or area of the habitat were used. 0 means that there was not any positive trend reported under the used parameters.
- **Criteria A** = number of MS where species/habitat type is present, **Criteria B** = species/habitat types at U2, U1 or unknown status and **Criteria C** = negative trend and **A(B+C)** = the agreed algorithm.
- Cells in yellow highlight the data that was decided to be used for ranking the habitat types and species.

## Atlantic marine region:

N2K code	Description	Taxonomical group	Priority	I	II	IV	V	ATL CS	Positive trends	Criterion A	Criterion B	Criterion C	Priority Index A*(B+C)
<b>Habitats</b>													
1130	Estuaries	Habitats		Y				U2	1	10	16	3	190
1170	Reefs	Habitats		Y				U2	0	10	15	2	170
1110	Sandbanks which are slightly covered by sea water all the time	Habitats		Y				U2+	3	10	13	3	160
1160	Large shallow inlets and bays	Habitats		Y				U2+	1	9	13	3	144
1140	Mudflats and sandflats not covered by seawater at low tide	Habitats		Y				U2+	2	10	11	1	120
8330	Submerged or partially submerged sea caves	Habitats		Y				XX	0	6	5	1	36
1180	Submarine structures made by leaking gases	Habitats		Y				XX	0	4	6	0	24
<b>Species</b>													
1351	Phocoena phocoena	Mammals			Y	Y		FV	1	10	9	1	100
1365	Phoca vitulina	Mammals			Y		Y	U2	2	9	6	1	63
1364	Halichoerus grypus	Mammals			Y		Y	FV	2	9	5	0	45
1350	Delphinus delphis	Mammals				Y		U1	0	6	6	1	42
1223	Dermochelys coriacea	Reptiles				Y		XX	0	6	7	0	42
2618	Balaenoptera acutorostrata	Mammals				Y		FV	0	8	5	0	40
2030	Grampus griseus	Mammals				Y		XX	0	6	6	0	36
2622	Kogia breviceps	Mammals				Y		XX	0	6	6	0	36
1345	Megaptera novaeangliae	Mammals				Y		XX	0	6	6	0	36
5031	Physeter catodon	Mammals				Y		XX	0	6	6	0	36
1224	Caretta caretta	Reptiles	Y		Y	Y		U2	0	5	6	0	30
1227	Chelonia mydas	Reptiles	Y		Y	Y		U2	0	5	6	0	30
2029	Globicephala melas	Mammals				Y		XX	0	6	5	0	30
2027	Orcinus orca	Mammals				Y		XX	0	6	5	0	30

N2K code	Description	Taxonomical group	Priority	I	II	IV	V	ATL CS	Positive trends	Criterion A	Criterion B	Criterion C	Priority Index A*(B+C)
2619	Balaenoptera borealis	Mammals				Y		XX	0	5	5	0	25
5033	Hyperoodon ampullatus	Mammals				Y		XX	0	5	5	0	25
2028	Pseudorca crassidens	Mammals				Y		XX	0	5	5	0	25
2035	Ziphius cavirostris	Mammals				Y		XX	0	5	5	0	25
2621	Balaenoptera physalus	Mammals				Y		XX	0	6	4	0	24
1348	Eubalaena glacialis	Mammals				Y		XX	0	4	5	0	20
2034	Stenella coeruleoalba	Mammals				Y		XX	0	5	4	0	20
2032	Lagenorhynchus albirostris	Mammals				Y		FV	0	6	3	0	18
1349	Tursiops truncatus	Mammals			Y	Y		XX	0	6	3	0	18
5020	Balaenoptera musculus	Mammals				Y		XX	0	4	4	0	16
2038	Mesoplodon bidens	Mammals				Y		XX	0	4	4	0	16
5029	Delphinapterus leucas	Mammals				Y		XX	0	3	3	0	9
1225	Eretmochelys imbricata	Reptiles				Y		XX	0	3	3	0	9
1226	Lepidochelys kempii	Reptiles				Y		XX	0	3	3	0	9
2625	Mesoplodon densirostris	Mammals				Y		XX	0	3	3	0	9
5034	Mesoplodon europaeus	Mammals				Y		XX	0	3	3	0	9
2037	Mesoplodon mirus	Mammals				Y		XX	0	3	3	0	9
2031	Lagenorhynchus acutus	Mammals				Y		FV	0	4	2	0	8
1027	Lithophaga lithophaga	Molluscs				Y		XX	0	2	2	0	4
2626	Monodon monoceros	Mammals				Y		XX	0	2	2	0	4

## Baltic marine region:

N2K code	Description	Taxonomical group	Priority	I	II	IV	V	MBAL CS	Positive trends	Criterion A	Criterion B	Criterion C	Priority Index A*(B+C)
<b>Habitats</b>													
1170	Reefs	Habitats		Y				U1	0	8	8	2	80
1130	Estuaries	Habitats		Y				U2	0	7	7	1	56
1160	Large shallow inlets and bays	Habitats		Y				U2	0	6	7	2	54
1110	Sandbanks which are slightly covered by sea water all the time	Habitats		Y				U1	1	6	6	3	54
1140	Mudflats and sandflats not covered by seawater at low tide	Habitats		Y				U1	0	4	4	2	24
1650	Boreal Baltic narrow inlets	Habitats		Y				U2	0	2	3	2	10
8330	Submerged or partially submerged sea caves	Habitats		Y				XX	0	2	2	1	6
<b>Species</b>													
1351	Phocoena phocoena	Mammals			Y	Y		U1	0	5	9	1	50
1364	Halichoerus grypus	Mammals			Y		Y	U1	4	7	6	0	42
1938	Phoca hispida botnica	Mammals			Y		Y	U2+	1	5	8	0	40
1365	Phoca vitulina	Mammals			Y		Y	U2+	2	4	4	0	16

## Black Sea marine region

N2K code	Description	Taxonomical group	Priority	I	II	IV	V	MBLS CS	Positive trends	Criterion A	Criterion B	Criterion C	Priority Index A*(B+C)
<b>Habitats</b>													
1110	Sandbanks which are slightly covered by sea water all the time	Habitats		Y				U1	0	2	2	2	8
1140	Mudflats and sandflats not covered by seawater at low tide	Habitats		Y				U1	0	2	2	1	6
1170	Reefs	Habitats		Y				U1	0	2	2	1	6
8330	Submerged or partially submerged sea caves	Habitats		Y				U1	0	2	2	0	4
1130	Estuaries	Habitats		Y				U1	0	2	1	0	2
1160	Large shallow inlets and bays	Habitats		Y				U1	0	2	1	0	2
1180	Submarine structures made by leaking gases	Habitats		Y				FV	0	1	0	0	0
<b>Species</b>													
1351	Phocoena phocoena	Mammals			Y	Y		U1	0	2	3	1	8
1350	Delphinus delphis	Mammals				Y		U1	0	2	2	1	6
1349	Tursiops truncatus	Mammals			Y	Y		XX	0	2	2	1	6



## Macaronesian marine region

N2K code	Description	Taxonomical group	Priority	I	II	IV	V	MMAC CS	Positive trends	Criterion A	Criterion B	Criterion C	Priority Index A*(B+C)
<b>Habitats</b>													
1110	Sandbanks which are slightly covered by sea water all the time	Habitats		Y				U1	1	2	2	0	4
1170	Reefs	Habitats		Y				FV	0	2	1	0	2
1140	Mudflats and sandflats not covered by seawater at low tide	Habitats		Y				XX	0	1	1	0	1
1180	Submarine structures made by leaking gases	Habitats		Y				XX	0	1	1	0	1
1160	Large shallow inlets and bays	Habitats		Y				FV	0	1	0	0	0
8330	Submerged or partially submerged sea caves	Habitats		Y				XX	0	2	0	0	0
<b>Species</b>													
1348	Eubalaena glacialis	Mammals				Y		XX	0	2	3	0	6
2618	Balaenoptera acutorostrata	Mammals				Y		XX	0	2	2	0	4
2619	Balaenoptera borealis	Mammals				Y		XX	0	2	2	0	4
2620	Balaenoptera edeni	Mammals				Y		XX	0	2	2	0	4
5020	Balaenoptera musculus	Mammals				Y		U1	0	2	2	0	4
2621	Balaenoptera physalus	Mammals				Y		XX	0	2	2	0	4
1224	Caretta caretta	Reptiles	Y		Y	Y		U1	0	2	2	0	4
1227	Chelonia mydas	Reptiles	Y		Y	Y		XX	0	2	2	0	4
1350	Delphinus delphis	Mammals				Y		XX	0	2	2	0	4
1223	Dermochelys coriacea	Reptiles				Y		XX	0	2	2	0	4
1225	Eretmochelys imbricata	Reptiles				Y		XX	0	2	2	0	4
2627	Globicephala macrorhynchus	Mammals				Y		XX	0	2	2	0	4
2029	Globicephala melas	Mammals				Y		XX	0	2	2	0	4
2030	Grampus griseus	Mammals				Y		XX	0	2	2	0	4
5033	Hyperoodon ampullatus	Mammals				Y		XX	0	2	2	0	4

N2K code	Description	Taxonomical group	Priority	I	II	IV	V	MMAC CS	Positive trends	Criterion A	Criterion B	Criterion C	Priority Index A*(B+C)
2622	<i>Kogia breviceps</i>	Mammals				Y		XX	0	2	2	0	4
1345	<i>Megaptera novaeangliae</i>	Mammals				Y		U1	0	2	2	0	4
2625	<i>Mesoplodon densirostris</i>	Mammals				Y		XX	0	2	2	0	4
5034	<i>Mesoplodon europaeus</i>	Mammals				Y		XX	0	2	2	0	4
2037	<i>Mesoplodon mirus</i>	Mammals				Y		XX	0	2	2	0	4
2027	<i>Orcinus orca</i>	Mammals				Y		XX	0	2	2	0	4
5031	<i>Physeter catodon</i>	Mammals				Y		XX	0	2	2	0	4
2028	<i>Pseudorca crassidens</i>	Mammals				Y		XX	0	2	2	0	4
2034	<i>Stenella coeruleoalba</i>	Mammals				Y		XX	0	2	2	0	4
2628	<i>Stenella frontalis</i>	Mammals				Y		XX	0	2	2	0	4
2033	<i>Steno bredanensis</i>	Mammals				Y		XX	0	2	2	0	4
1349	<i>Tursiops truncatus</i>	Mammals			Y	Y		FV	0	2	2	0	4
2035	<i>Ziphius cavirostris</i>	Mammals				Y		XX	0	2	2	0	4
1008	<i>Centrostephanus longispinus</i>	Other invertebrates				Y		XX	0	1	1	0	1
1364	<i>Halichoerus grypus</i>	Mammals			Y		Y	XX	0	1	1	0	1
2623	<i>Kogia simus</i>	Mammals				Y		XX	0	1	1	0	1
5023	<i>Lagenodelphis hosei</i>	Mammals				Y		XX	0	1	1	0	1
1226	<i>Lepidochelys kempii</i>	Reptiles				Y		XX	0	1	1	0	1
1027	<i>Lithophaga lithophaga</i>	Molluscs				Y		XX	0	1	1	0	1
2038	<i>Mesoplodon bidens</i>	Mammals				Y		XX	0	1	1	0	1
1366	<i>Monachus monachus</i>	Mammals	Y		Y	Y		U1	1	1	1	0	1
1365	<i>Phoca vitulina</i>	Mammals			Y		Y	XX	0	1	1	0	1
1351	<i>Phocoena phocoena</i>	Mammals			Y	Y		XX	0	1	1	0	1

## Mediterranean marine region

N2K code	Description	Taxonomical group	Priority	I	II	IV	V	MMED CS	Positive trends	Criterion A	Criterion B	Criterion C	Priority Index A*(B+C)
<b>Habitats</b>													
1110	Sandbanks which are slightly covered by sea water all the time	Habitats		Y				U1	1	7	5	1	42
1140	Mudflats and sandflats not covered by seawater at low tide	Habitats		Y				U1	0	5	6	1	35
1170	Reefs	Habitats		Y				XX	0	8	4	0	32
1130	Estuaries	Habitats		Y				U1	0	5	6	0	30
1120	Posidonia beds ( <i>Posidonion oceanicae</i> )	Habitats	Y	Y				U1	1	7	4	0	28
8330	Submerged or partially submerged sea caves	Habitats		Y				U1	0	7	4	0	28
1160	Large shallow inlets and bays	Habitats		Y				XX	0	4	5	0	20
1180	Submarine structures made by leaking gases	Habitats		Y				XX	0	1	1	0	1
<b>Species</b>													
1224	<i>Caretta caretta</i>	Reptiles	Y		Y	Y		U2	0	8	8	2	80
1349	<i>Tursiops truncatus</i>	Mammals			Y	Y		U1	0	8	9	0	72
1227	<i>Chelonia mydas</i>	Reptiles	Y		Y	Y		U1	1	6	8	0	48
1350	<i>Delphinus delphis</i>	Mammals				Y		U1	0	6	7	0	42
1223	<i>Dermochelys coriacea</i>	Reptiles				Y		U1	0	5	7	1	40
2621	<i>Balaenoptera physalus</i>	Mammals				Y		XX	0	6	6	0	36
2030	<i>Grampus griseus</i>	Mammals				Y		U1	0	6	6	0	36
2034	<i>Stenella coeruleoalba</i>	Mammals				Y		XX	0	6	5	1	36
1027	<i>Lithophaga lithophaga</i>	Molluscs				Y		U2+	1	7	5	0	35
1028	<i>Pinna nobilis</i>	Molluscs				Y		U1	0	7	4	1	35
1366	<i>Monachus monachus</i>	Mammals	Y		Y	Y		U1	0	4	7	1	32
2029	<i>Globicephala melas</i>	Mammals				Y		U1	0	5	5	0	25

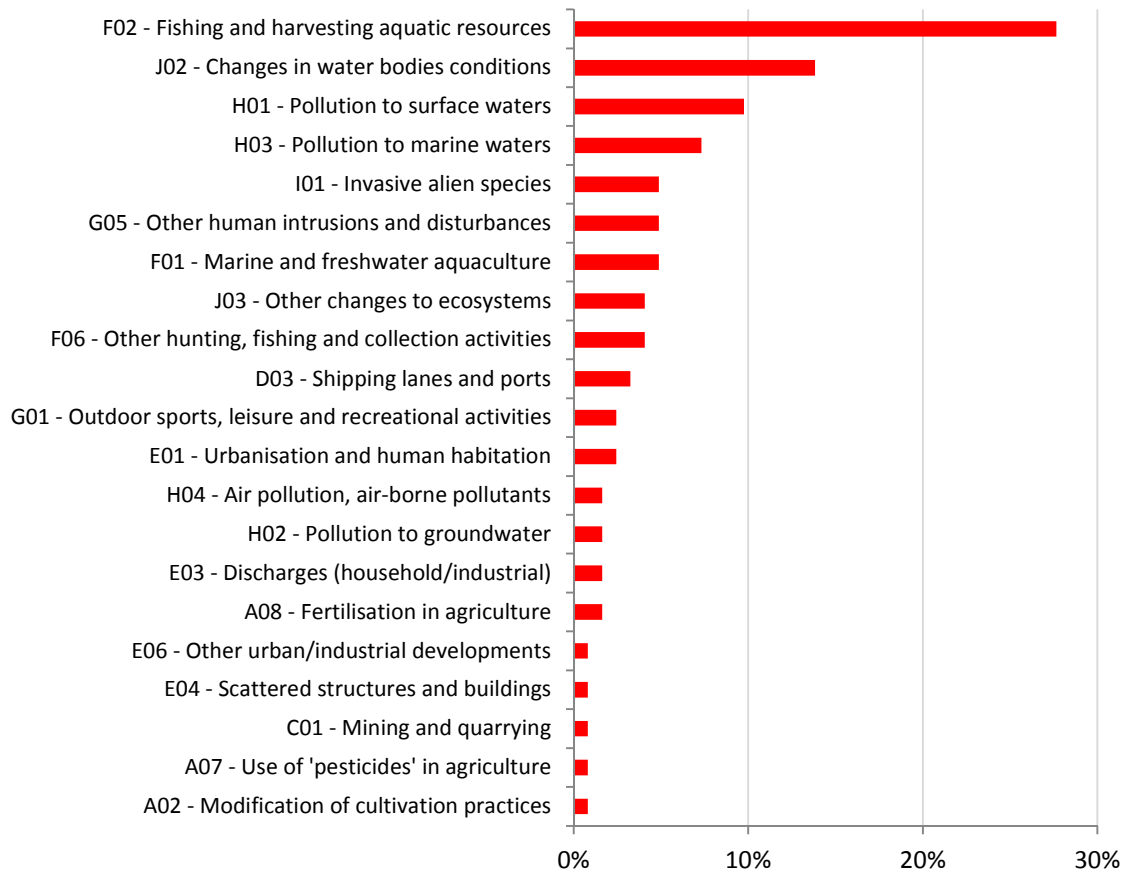
N2K code	Description	Taxonomical group	Priority	I	II	IV	V	MMED CS	Positive trends	Criterion A	Criterion B	Criterion C	Priority Index A*(B+C)
5031	Physeter catodon	Mammals				Y		U1	0	5	5	0	25
2035	Ziphius cavirostris	Mammals				Y		U1	0	5	5	0	25
1012	Patella ferruginea	Molluscs				Y		U2	0	4	5	0	20
2618	Balaenoptera acutorostrata	Mammals				Y		XX	0	4	4	0	16
1345	Megaptera novaeangliae	Mammals				Y		XX	0	4	4	0	16
2028	Pseudorca crassidens	Mammals				Y		XX	0	4	4	0	16
1008	Centrostephanus longispinus	Other invertebrates				Y		FV	0	6	2	0	12
2027	Orcinus orca	Mammals				Y		FV	0	4	3	0	12
1226	Lepidochelys kempii	Reptiles				Y		XX	0	2	2	0	4
1351	Phocoena phocoena	Mammals			Y	Y		U1	0	2	2	0	4
2033	Steno bredanensis	Mammals				Y		XX	0	2	2	0	4

## Appendix II

### 'High' pressures on habitats and species reported per marine region

Frequency (%) of pressures with 'high impact' reported for habitats and species in MATL

#### Habitats

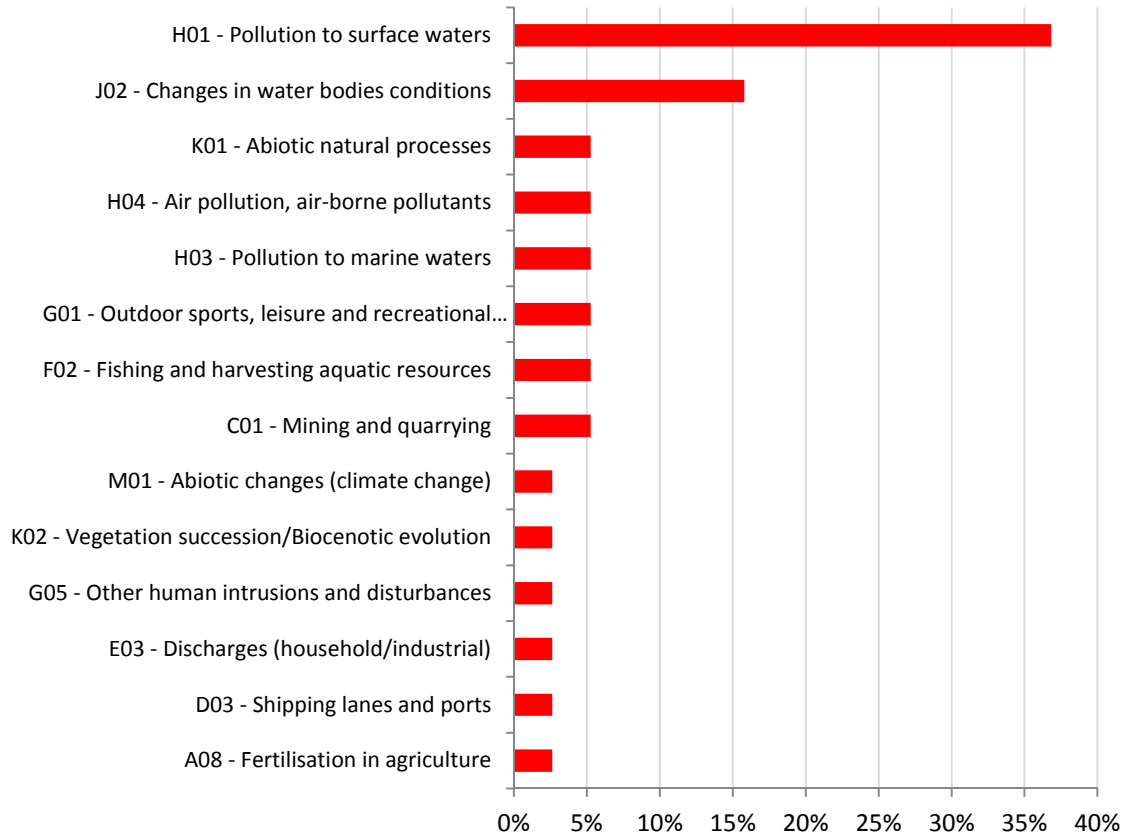


## Species

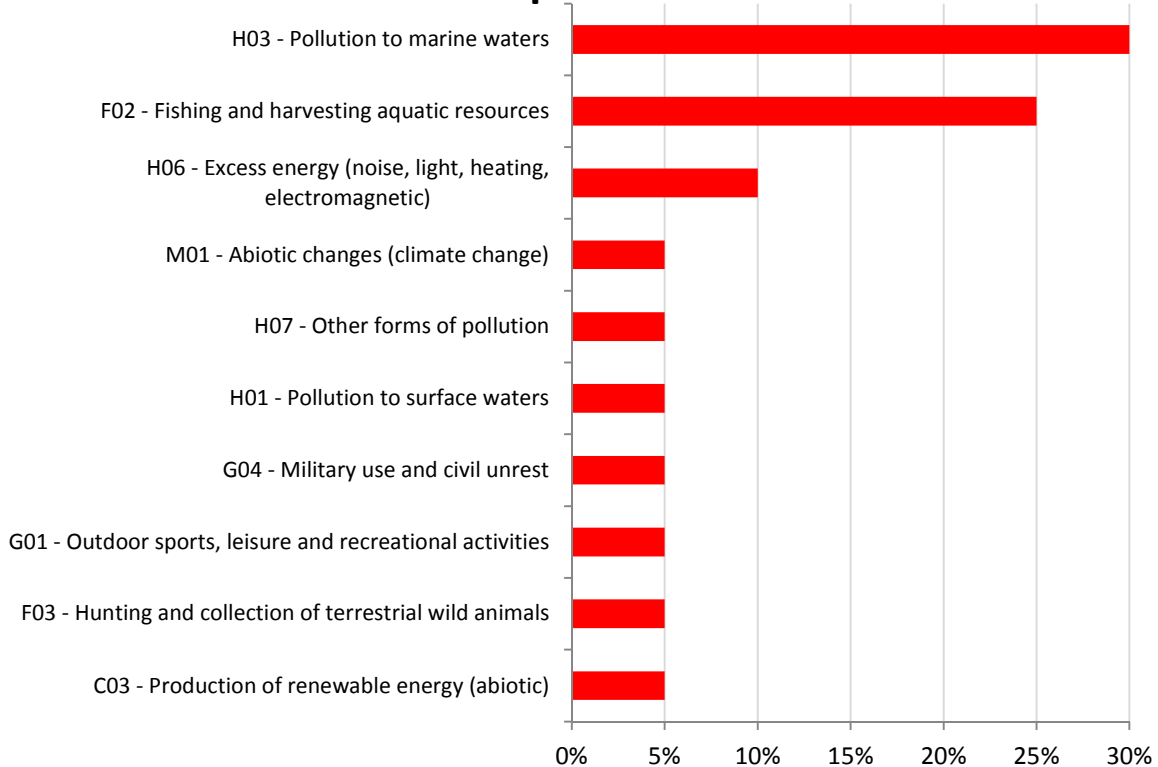


**Frequency (%) of pressures with ‘high impact’ reported for habitats and species in MBAL**

**Habitats**

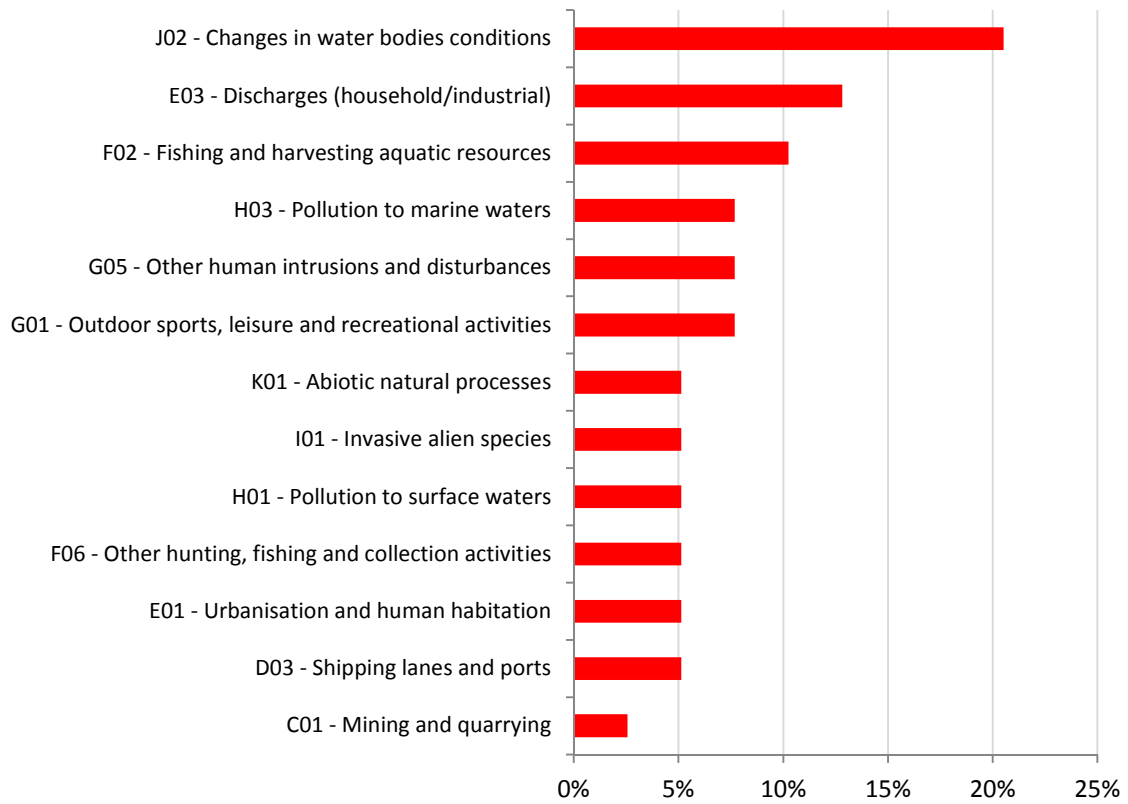


**Species**

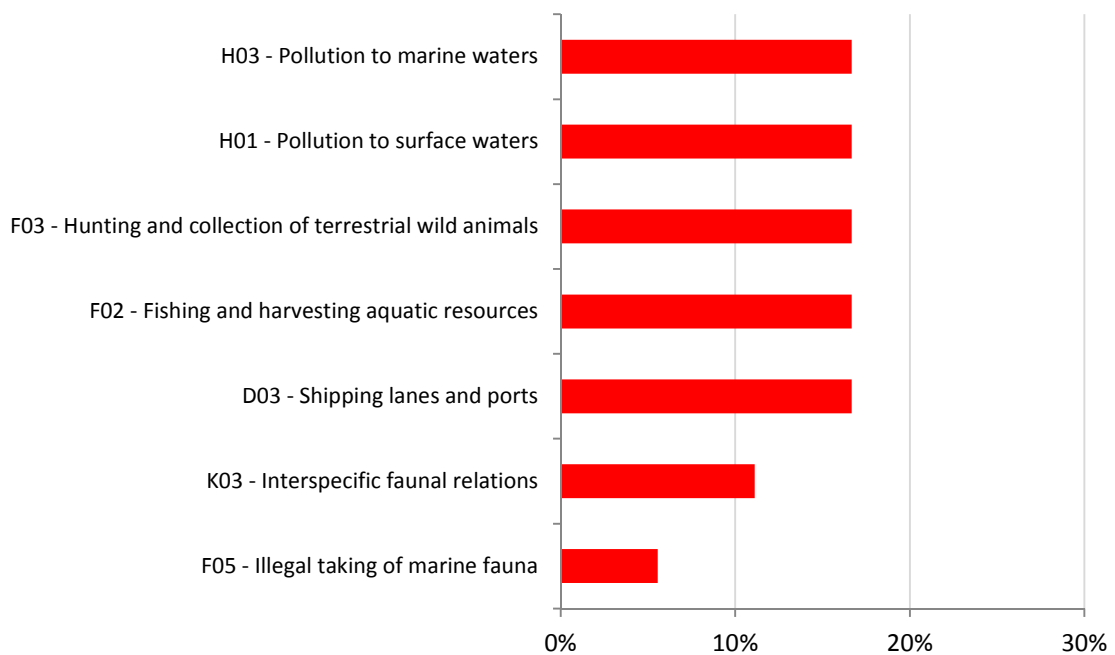


**Frequency (%) of pressures with 'high impact' reported for habitats and species in MBLS**

**Habitats**



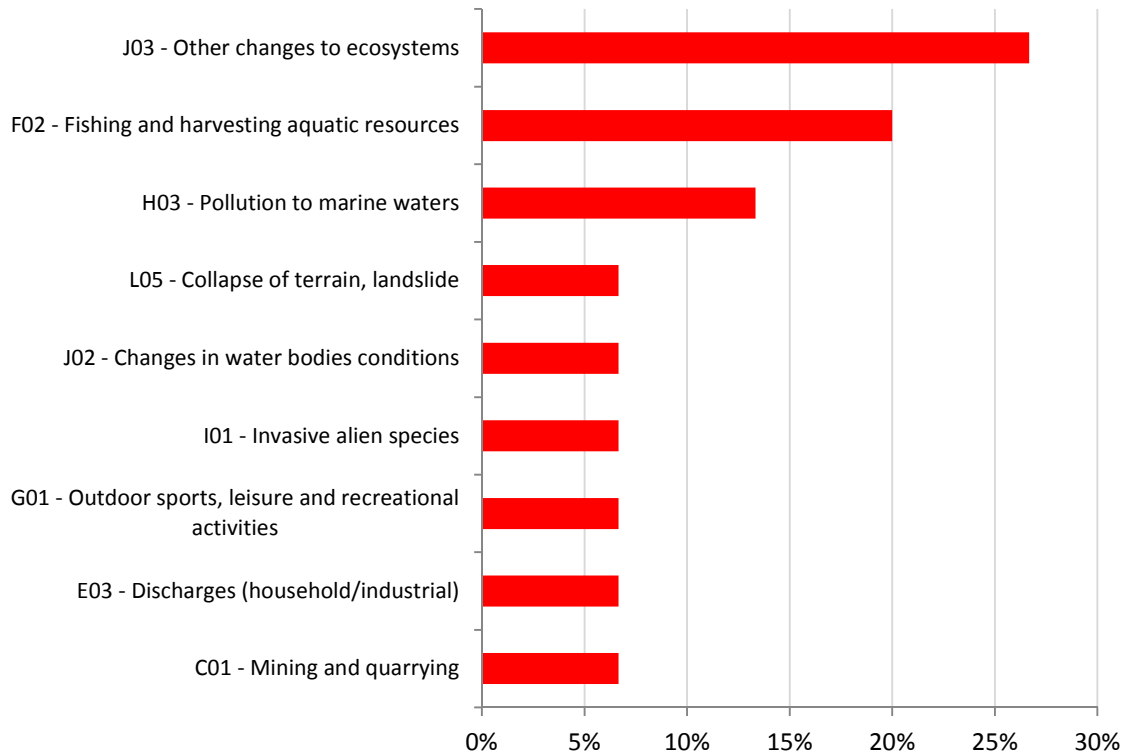
**Species**



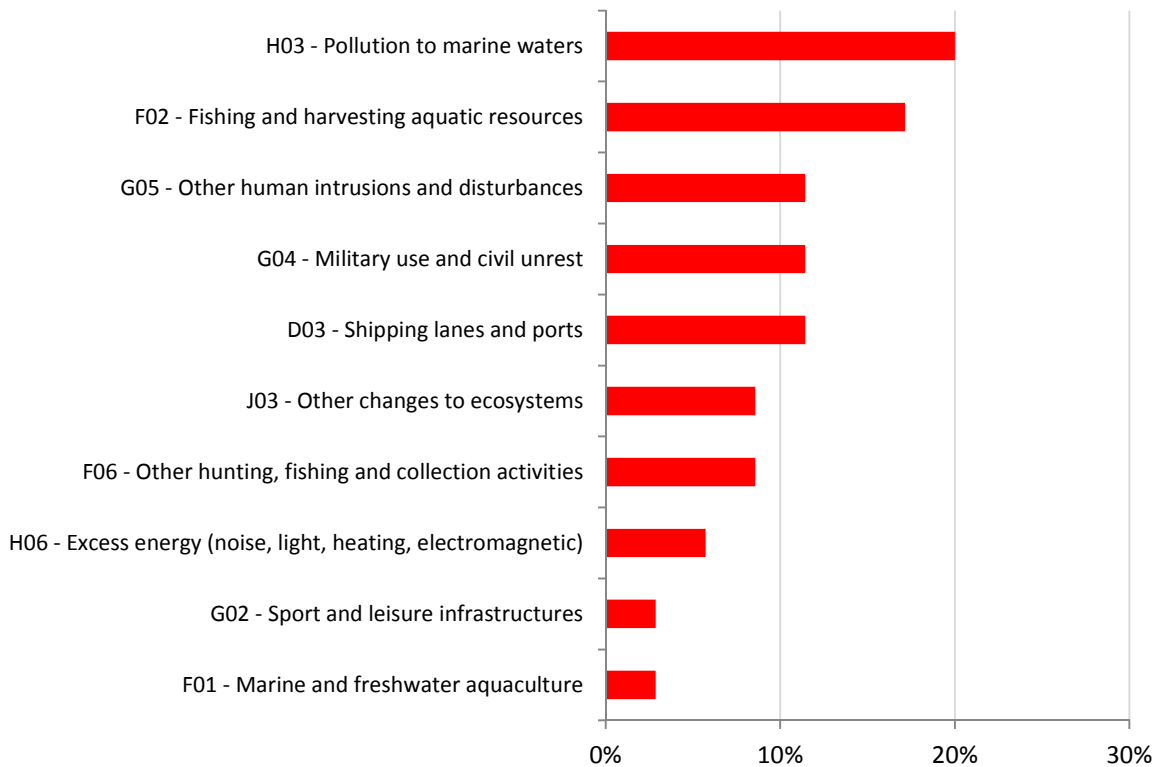


**Frequency (%) of pressures with 'high impact' reported for habitats and species in MMAC**

**Habitats**



**Species**



**Frequency (%) of pressures with ‘high impact’ reported for habitats and species in MMED**

**Habitats**



**Species**

