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Atlas of the European Seas and Oceans

Marine jurisdictions, sea uses and governance

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INTRODUCTION

A quarter of a century on from the adoption of the United Nations Convention on the Law of the Sea (Montego Bay, 1982), the new territoriality that coastal States have displayed through the expansion of their maritime jurisdictions, has reached a point of consolidation. The formalisation of the new boundaries and boundaries is, in many cases, a subject of controversy between States; however, progress is being made in the international community in the transition to a process for the management, planning and, in short, the government of these areas.

Europe –and in particular the European Union, which already includes a group of twenty-seven countries- gives onto two oceans and four seas, with jurisdictional waters that stretch from sub-tropical latitudes to areas approaching the North Pole. There is a political dimension to the projection of national sovereignty over seas and oceans that is not confined purely to territorial issues- reordering the symbols on the political map- as it also has an effect on how a State's territory is governed, hence maritime affairs are being included more and more on the political agenda.

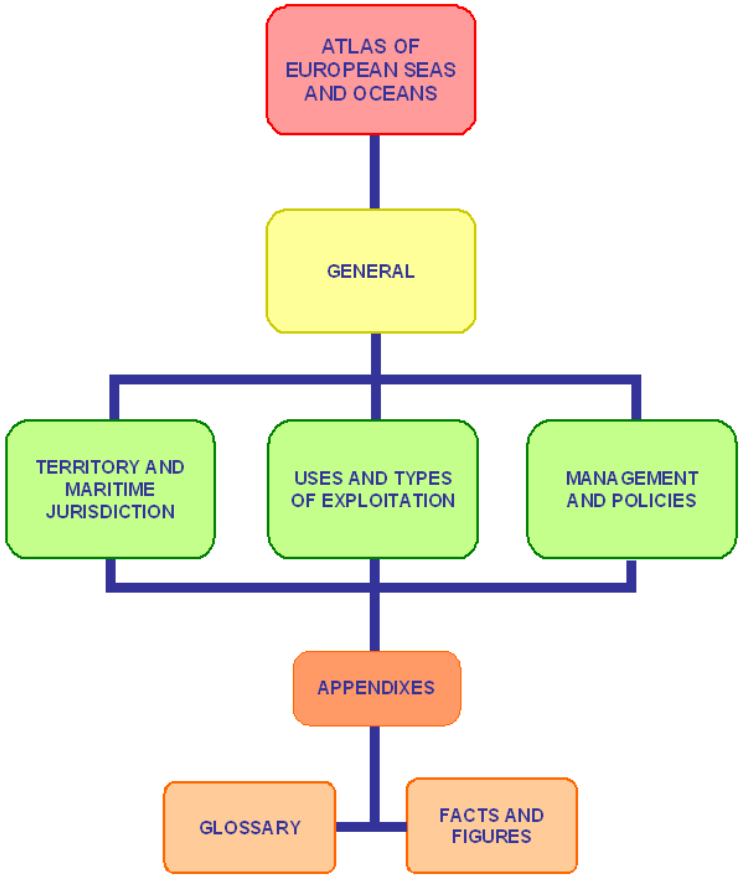
An atlas of maritime Europe is therefore warranted by the need to reflect this circumstance, and its main purpose is to record this new geography in maps and graphs.

Since a considerable part of Europe comes under the umbrella of a single political institution, numerous maritime aspects of the EU economy have been specifically addressed (the best illustration of this is the Common Fisheries Policy). Likewise, the trend is for general policies (the environment, international relations, and so forth) to have an integrated vision of maritime affairs, and this is how the Green Paper entitled "Towards a future Maritime Policy for the Union: A European vision for the oceans and seas" (June, 2006) came into being. An initiative of this nature requires far-reaching and detailed knowledge of the full implications of the EU's maritime facet and, especially, of the political, socio-economic and cultural issues involved (the Green Paper itself alludes to a European "maritime identity"); as might be expected when dealing with an uninhabited part of the planet which was, until relatively recent times, still not considered by Geography to be part of the ecumene , this knowledge is not as advanced as our knowledge of the oceans themselves.

The purpose of the Atlas of the European Seas and Oceans is to contribute to this knowledge. The atlas format is justified, above all, by the need to heighten awareness of the territorial changes triggered by the aforementioned United Nations Convention on the Law of the Sea. Having existed for 25 years, this is now outdated and needs to be revised, such are the rate and extent of the advances that have taken place in the marine world. Apart from territory-related issues, the *Atlas* also includes a summary of all the main marine uses and activities from a European perspective. This is also the aim of Part Three, which is devoted to policies which, despite having their limitations, nonetheless allow the implications and significance of ocean government for European institutions to be appreciated.

Availability and heterogeneity of information are still significant obstacles to gaining an overall vision of Europe and even of the European Union. Progress in developing a maritime policy will doubtless lead to notable improvements in information sources on maritime sectors, which is essential if this to be achieved. Although new technologies now make it easier to access up-to-

date information, we have nonetheless included a number of appendices to provide further details about some of the topics that are summarised on the maps. Similarly, the Atlas is structured in such a way as to provide explanatory texts with tables and graphs to further help with the reading and understanding of small-scale and, therefore, over-concise maps. A glossary concludes the explanations with a view to making subject matter that is increasingly becoming their concern as a whole more accessible to the social sciences, whose contributions are essential for attaining a European perspective of the seas and oceans.



ACRONYMS

CAP: Common Agricultural Policy.
CFP: Common Fisheries Policy.
EEZ: Exclusive Economic Zone.
EPZ: Ecological-Protected Zone.
FAO: Food and Agriculture Organization.
FOD: French Overseas Department.
FRONTEX: European Agency for the Management of Operational Cooperation at the External Boundaries of the Member States of the European Union.
FZ: Fishing Zone.
GFCM: General Fisheries Commission for the Mediterranean.
GOOS: Global Ocean Observing System.
GRT: Gross Registered Tonnes.
ICES: International Council for the Exploration of the Sea.
IMO: International Maritime Organization.
LME: Large Marine Ecosystems.
MAB: Man and Biosphere.
NUTS: Nomenclature of Territorial Units for Statistics of European Union.
OCT: Countries and Overseas Territories.
OSPAR: Convention for the Protection of the Marine Environment of the North-East Atlantic.
OTEC: Ocean Termal Energy Conversion.
TAC: Total Allowable Catch.
TEU: Twenty-foot Equivalent Unit.
TS: Territorial Sea.
UNCED: United Nations Conference on Environment and Development.
UNCLOS: United Nations Convention on the Law of the sea.
WFD: Water Framework Directive.

I. GENERAL

Europe’s maritime facet has to be understood within the context of a series of political, historical and legal factors. The general features of each of these are set out in the first six maps, which also show the bases on which the process of territorialising maritime areas is being built.

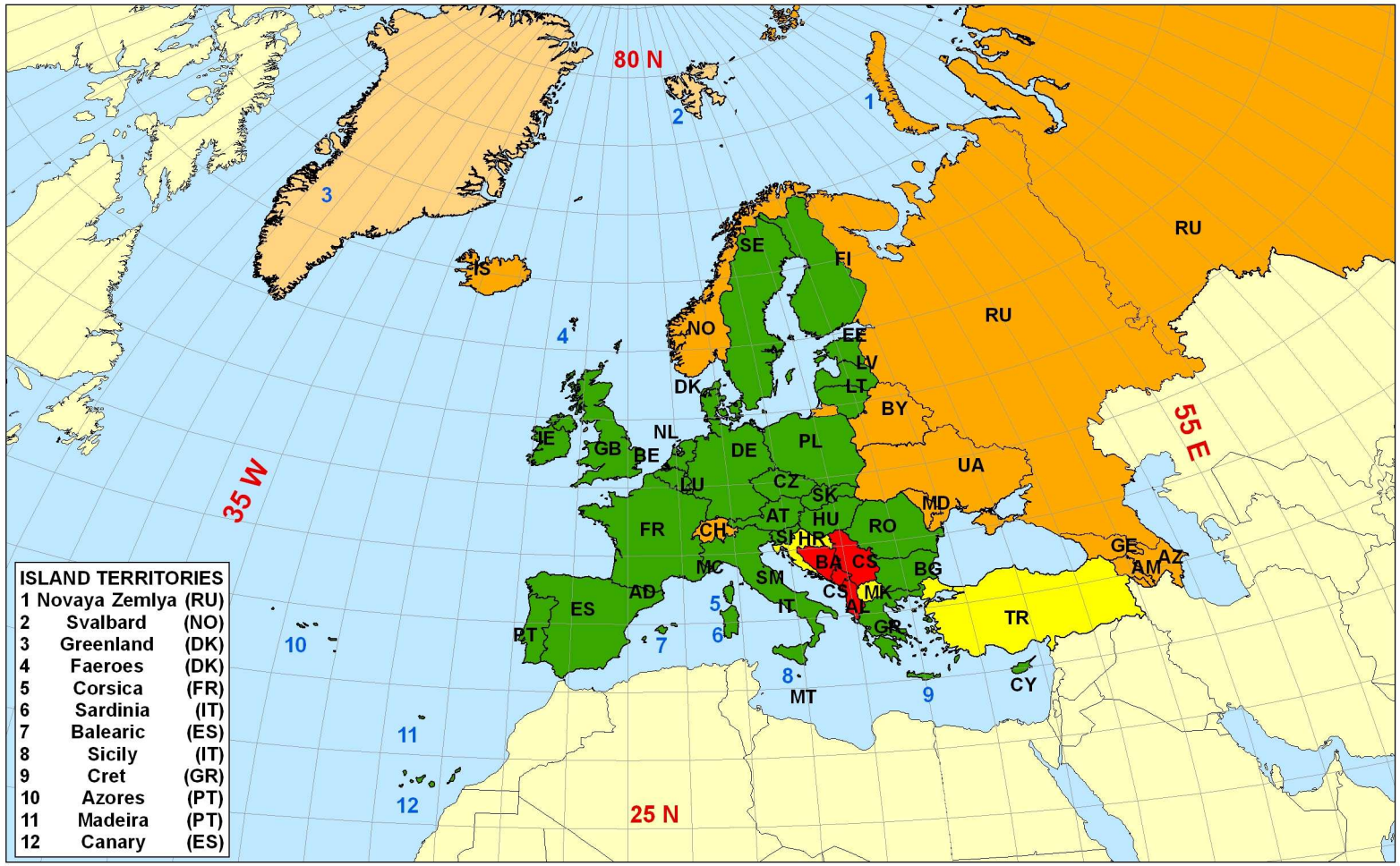
1. POLITICAL EUROPE

The notion of a “maritime Europe” requires a new vision of European territory to be had, based, nonetheless, on the political map of Europe. The latter is understood to be the geographical area that comprises States conventionally identified with the historical and cultural idea of one part of Eurasia.

The first step towards a definition and understanding of the maritime aspect of this political domain is the definition of its boundaries. There is no exact, single and unarguable definition of which States, nations and territories might be considered to belong to this cultural and ideological construct in the wider sense.

For our purpose, we shall take political Europe to be the western part of Eurasia, including the ocean archipelagos of Spain and Portugal, but excluding Greenland (a territory which, despite coming under Danish sovereignty, is part of the American continent). The islands of the north Atlantic, such as Iceland and the Svalbard Islands (Norway), are also included. The northern and western confines are the most interesting, as they are able to project over maritime areas, whereas the eastern boundary, which is more diffuse from a cultural and political point-of-view, has no outlet to the oceans.

EUROPE AND EUROPEAN UNION	
State	**State**
Europe Union	(HR) Croatia
(DE) Germany	(TR) Turkey
(AT) Austria	**Potentail candidates**
(BE) Belgium	(AL) Albania
(BG) Bulgaria	(BA) Bosnia and Herzegovina
(CY) Cyprus	(CS) Montenegro
(DK) Denmark	(CS) Serbia
(SK) Slovakia	**Other European countries**
(SI) Slovenia	(AD) Andorra
(ES) Spain	(AM) Armenia
(EE) Estonia	(AZ) Azerbaijan
(FI) Finland	(BY) Belarus
(FR) France	(VA) Vatican City
(GR) Greece	(RU) Russia
(NL) The Netherlands	(GE) Georgia
(HU) Hungary	(IS) Iceland
(IE) Ireland	(LI) Liechtenstein
(IT) Italy	(MD) Moldova
(LV) Latvia	(MC) Monaco
(LT) Lithuania	(NO) Norway
(LU) Luxembourg	(SM) San Marino
(MT) Malta	(CH) Switzerland
(PL) Poland	(UA) Ukraine
(PT) Portugal	**Ocean archipelagos**
(GB) United Kingdom	Azores Islands (PT)
(CZ) Czech Republic	Canary Islands (ES)
(RO) Romania	(FO) Feroe Islands (DK)
(SE) Sweden	Madeira Islands (PT)
Candidates	(SJ) Svalbard Islands (NO)
(MK) Former Yugoslav Republic of Macedonia	


80 N
25 N
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SK
MD
AT
HU
RO
FR
CH
SI
HR
BA
CS
GE
AM
AZ
MC
SM
BG
AD
ES
IT
MK
AL
GR
TR
PT
MT
CY
IS
ISLAND TERRITORIES
1 Novaya Zemlya (RU)
2 Svalbard (NO)
3 Greenland (DK)
4 Faeroes (DK)
5 Corsica (FR)
6 Sardinia (IT)
7 Balearic (ES)
8 Sicily (IT)
9 Cret (GR)
10 Azores (PT)
11 Madeira (PT)
12 Canary (ES)
EU members countries
EU candidates countries
Potential EU candidate countries
Others european countries
Overseas territories

2. MARITIME JURISDICTIONS

The United Nations Convention on the Law of the Sea (UNCLOS) was adopted in 1982 and has been in force since 1994. It lays down a number of jurisdictional concepts* which are the basis for the way coastal States project their sovereignty over maritime areas, and which also define the legal regime of other areas which are outside national jurisdiction (the high seas and the Area).

Some of these jurisdictional areas, such as the territorial sea, are steeped in historical tradition in sea law, and with time have been extended from the three nautical miles set at the beginning of the 18th century to the 12 nautical miles stipulated in 1982; others such as the exclusive economic zone and the continental shelf were codified at the first and second UNCLOS, respectively. The high seas and the Area are defined by exclusion: these are, respectively, the waters, and the seabed and marine subsoil which are not subject to State jurisdiction.

Whereas inland waters and the territorial sea are part of a coastal State's territory (although the territorial sea is subject to right of passage), in the exclusive economic zone and the continental shelf the State only exercises its sovereignty over the natural resources, both living and non-living (minerals), and the waters are open to navigation to all effects.

States composed exclusively of one or more archipelagos (in Europe, the United Kingdom and Malta) can establish archipelagic waters over which their rights of territorial sovereignty can be extended.

The high seas are still subject to a regime of free access (*mare liberum*) for all States, whether coastal or landlocked. The seabed and the subsoil outside national jurisdiction, however, which in the Convention are referred to as the *Area*, were declared to be the national heritage of mankind in a United Nations Resolution (1970).

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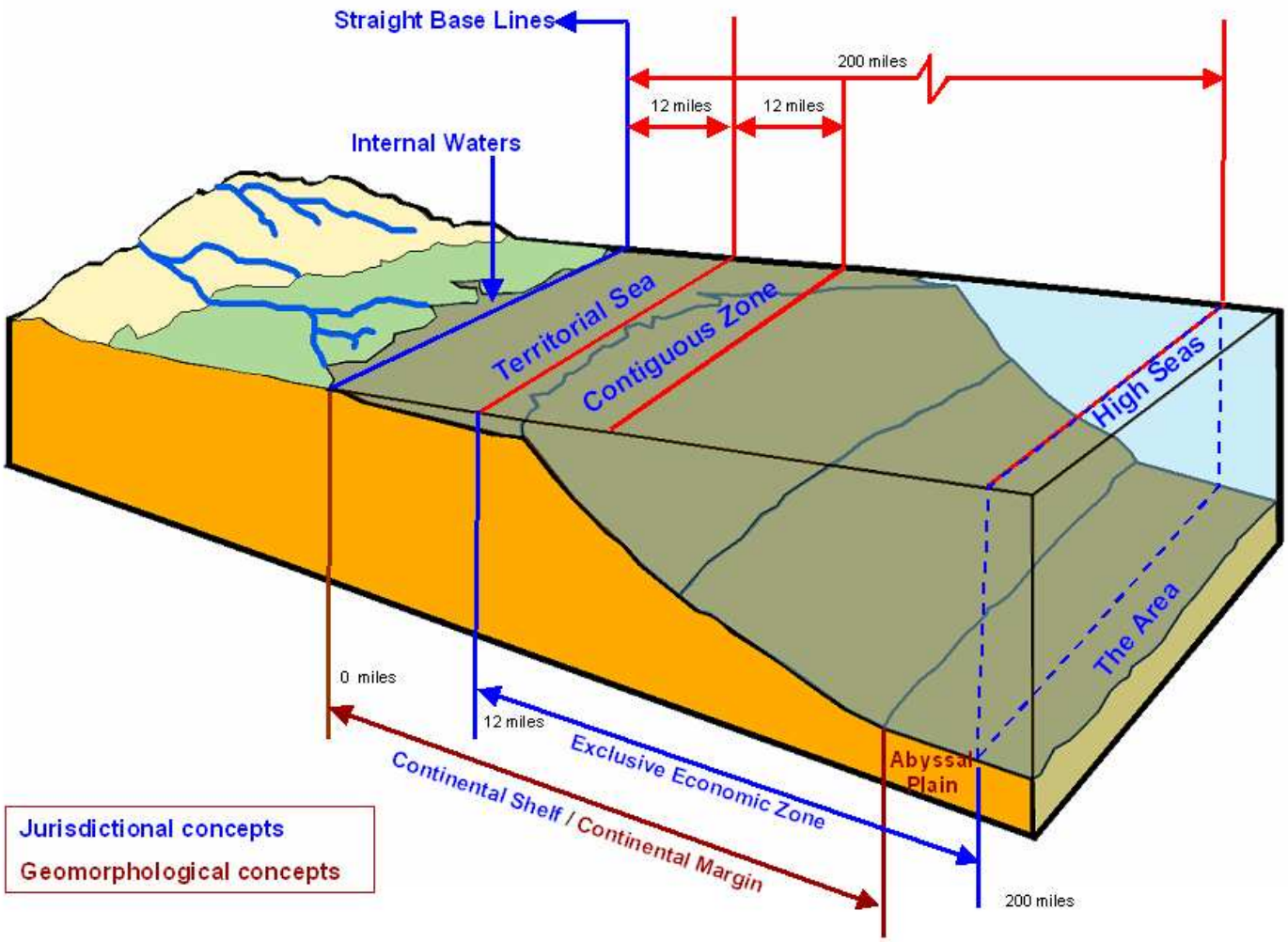
* See Glossary


Straight Base Lines
200 miles
12 miles
12 miles
Internal Waters
Territorial Sea
Contiguous Zone
High Seas
The Area
0 miles
12 miles
Exclusive Economic Zone
Continental Shelf / Continental Margin
Abyssal Plain
200 miles
Jurisdictional concepts
Geomorphological concepts

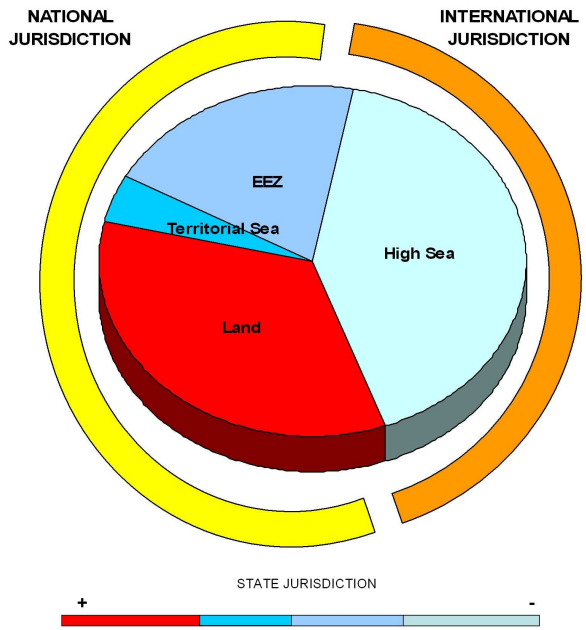
3. AREAS OF THE WORLD UNDER NATIONAL JURISDICTION

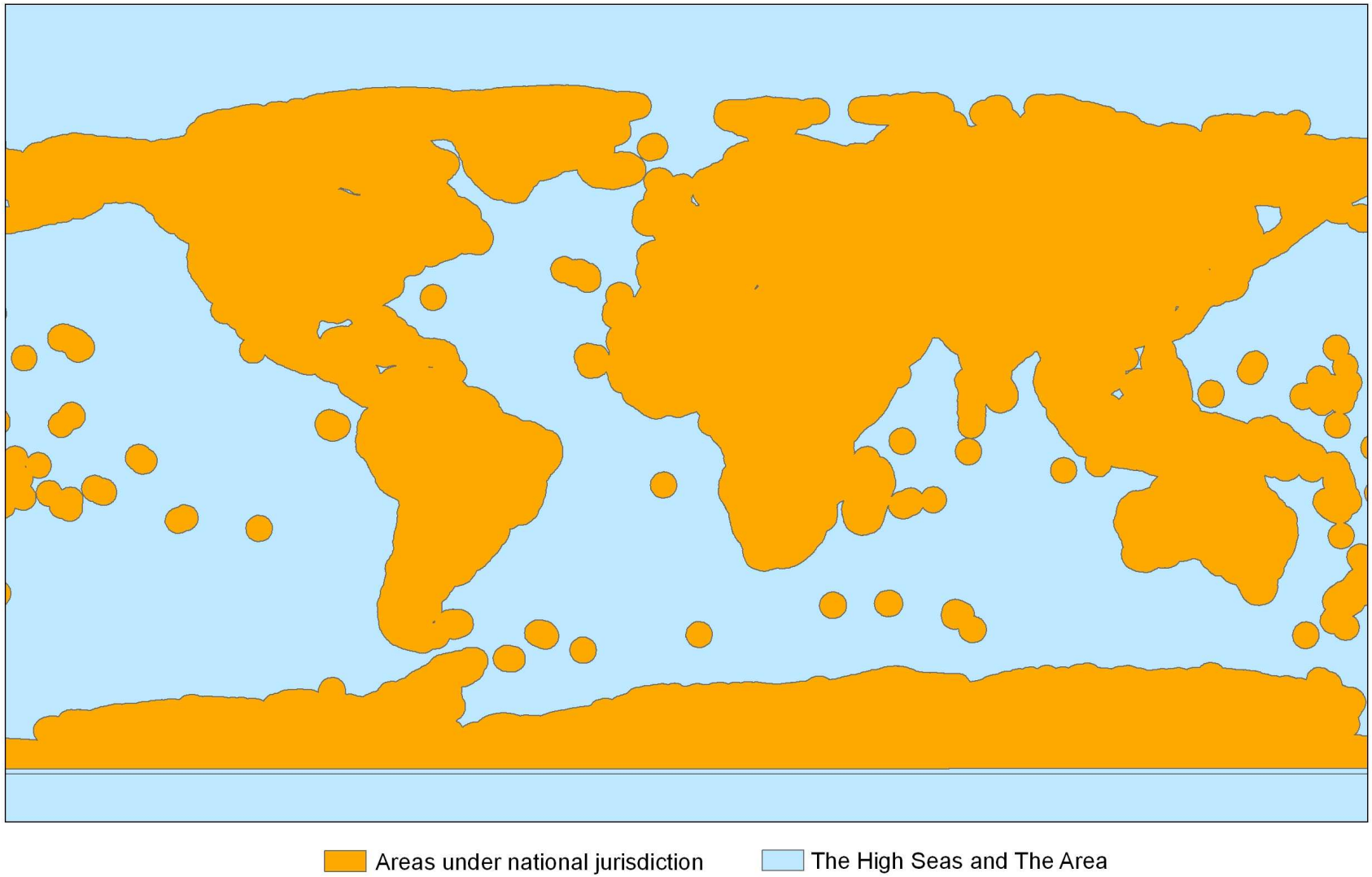
The extension of jurisdictions that ensued from the third United Nations Conference on the Law of the Sea left a clear division in the world's oceans between areas under States' national jurisdictions, and the remainder of the oceans, which were either free and open (the high seas) or part of the common heritage of mankind (the Area, as it is known). The declaration of exclusive economic zones was responsible for 36% of marine waters (some 129 million square kilometres, or almost 38 million square nautical miles) coming under the sovereignty of coastal States; when the area of seabed that comes under the jurisdictional concept of the continental shelf is included, this figure rises to 40.6%.

On a worldwide scale, territory has been redistributed all round the planet due to land and sea jurisdictions. The map of the world has been redrawn with symbols detailing the areas of the globe under State sovereignty. Notwithstanding, a significant part of the Earth remains under the international regime, especially the high seas and the Area. These regions therefore need to be governed by the norms and institutions of International Law. Despite the great complexity it entails, this is necessary to both protect them from environmental decline and to keep them safe from the expansionism triggered by the third UNCLOS.

GLOBAL SIZE OF SEAS AND OCEANS UNDER JURISDICTION

Domains	Surface area in sq. km.	Percentage of the oceans
High Seas	231.3	64.2%
Area	215	59.4%
EEZ	129	35.8%
EEZ + surface as far as outer boundary of continental margin	146	40.6%




Areas under national jurisdiction
The High Seas and The Area

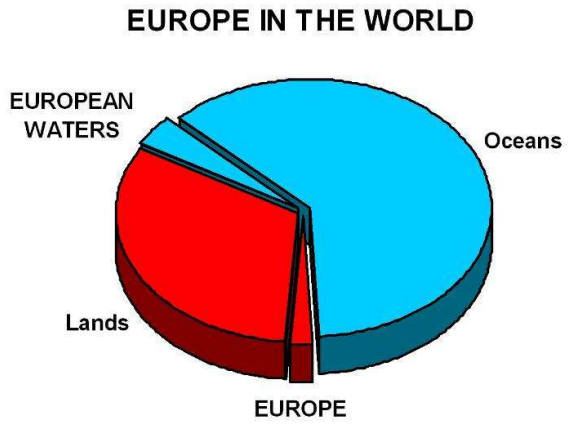
4. EUROPE IN THE GLOBAL OCEAN

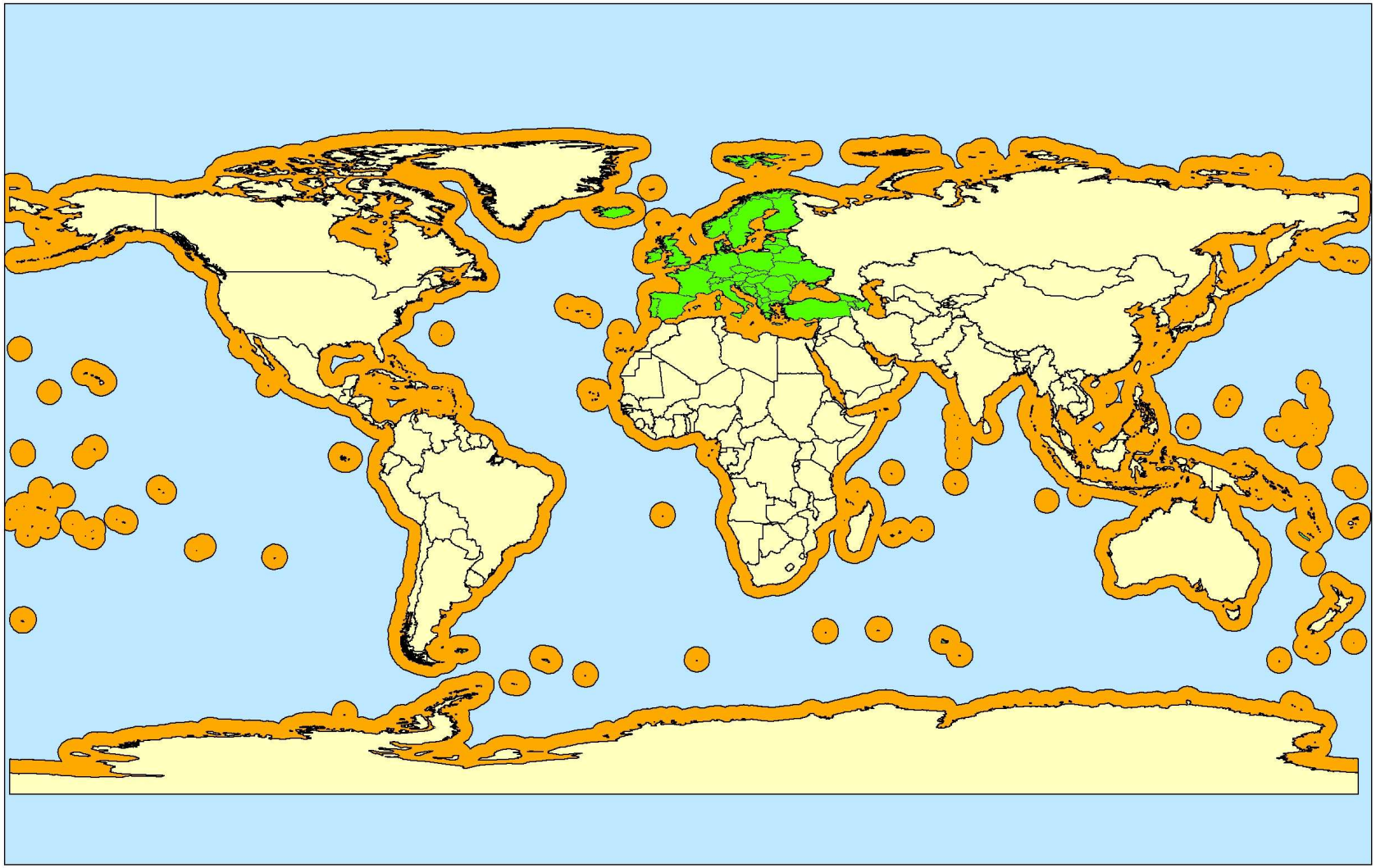
The relative position of Europe regarding the oceans and continental masses accounts for its close relationship with the Atlantic. The frozen waters to the North that have blocked the route to the Pole throughout history and the closed and semi-closed seas on its southern flank have led to the maritime geography of Europe being completely Atlantic-oriented. Its link with the global ocean did not become operable and established until the building of the world's two great ocean-linking canals was completed at the beginning of the 20th century: the Suez, joining the Indian and Atlantic Oceans through the Straits of Gibraltar, and the Panama Canal, by way of which Europe played out the last stage of its imperial history.

Europe's window on the seas corresponds to a broad extent with the waters that comprise FAO areas 27 (the eastern Atlantic) and 37 (the Mediterranean Sea and the Black Sea). The former has a surface area of almost 17 million square kilometres (9,180,000 square nautical miles) and the latter some three million square kilometres (1,620,000 sq.n.ml.) , which means that the sea waters around Europe equate to approximately 5.3% of the oceans' total surface area. Europe, in the strict sense (not including overseas territories), is far behind Africa and America, which are surrounded by 18.72% and 36.96% of the world's waters according to FAO divisions.

At barely 25%, the territorial size and importance of maritime Europe in the Atlantic Ocean is similarly small compared to Africa and America. Together with Canada and the United States on the western edge of the Atlantic, the territories that give onto the most northerly waters of the Atlantic and Arctic oceans are comprised of fourteen States, including the European part of the Russian Federation. Despite having a surface area of only 22 million square kilometres (11,880,000 sq.n.ml.) (6% of the world's sea waters), these States lead the world in maritime industry and trade.

OCEANS SURFACE	
OCEANS	**SURFACE (KM2)**
Pacific	165,760,000
Atlantic	82,439,700
Indian	73,426,500
Austral	34,998,670
Arctic	14,089,600
Total	370,714,470




Europe
Claimed or hypothetical Exclusive Economic Zone (EEZ)

5. HISTORY AND TRADITION: THE SHAPING OF MARITIME EUROPE

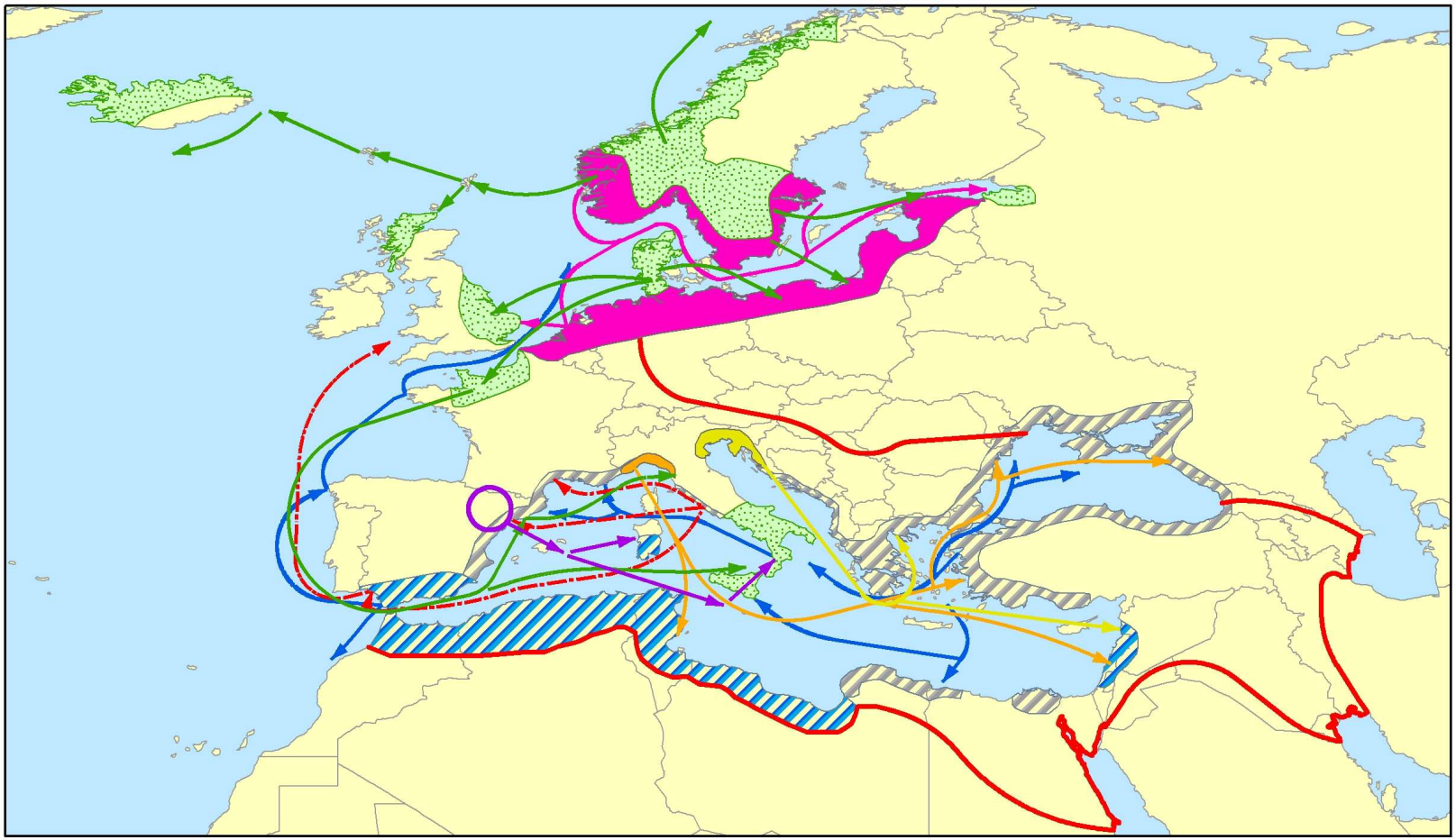
The special shape of the European continent, like a huge protrusion or promontory that juts out into the ocean, and its greatly varied coastline, geology and climate have been well-suited to a history of encounters and confrontations with the sea.

Since ancient times, for Europe the sea, especially the Mediterranean, has been an area that is both a source of resources, a place around which to travel, and the scene of conflicts and disputes resulting from incipient naval power. This gave rise to both the Greek thalassocracy and the disputes for naval domination between the Romans and the Carthaginians, with the establishment of a *Mare Nostrum* which would for centuries be the economic artery of the Roman Empire. After the fall of Rome, the Mediterranean was split into three political units (Byzantium, the Islamic world and Christian western Europe), each of which was to have control over the maritime areas, the sea routes and the support bases in its own area of influence.

Compared to this southern, warmer sea, the nordic seas were less hospitable and their coasts were less productive from an agricultural point-of-view. From the 9th century onwards especially, they began to discharge people towards other European coasts. The result of this was that invasions by Norsemen, Vikings and Danes would repeatedly ravage the coasts of the United Kingdom, France and Italy, giving rise to a new European political geography and the huge movement of trade back and forth through both the Baltic and the North Sea, and also the Mediterranean and the Black Sea.

The Middle Age, which began during the time of the dark ages, when the Carolingian Empire and other small kingdoms were subject to invasion from Scandinavia and the Middle East (Islam), would on occasion have little contact with the sea, seen as it was as a place from which threats and danger emanated, although there would always be a certain amount of coastal shipping, both in the northern and southern seas. From the 11th and 12th centuries on, processes such as the Crusades led to sea routes once more being opened up to Europeans and as a result, new thalassocracies were constituted, such as the German Hansa (in the Baltic and the North Sea) and those of certain Italian Republics (Genoa and Venice).

By the 15th century, the Iberian powers (Spain and Portugal) were to venture away from their “mother sea” (the Mediterranean) and set off on a great overseas adventure in other oceans around the world. Said adventure was to open up the way for further expansion and, in the long term, was to provide maritime Europe with its true personality and power.


Antiquity
Greek territories
Phoenician territories
Roman *limes* (course)
Ancient sea routes
Roman sea routes
Middle Age
Norman and Viking areas
Areas under Hanseatic influence
Venice
Genoa
Catalan-Aragonese expansion
Norman and Viking routes
Hanseatic routes
Venetian routes
Genoan routes

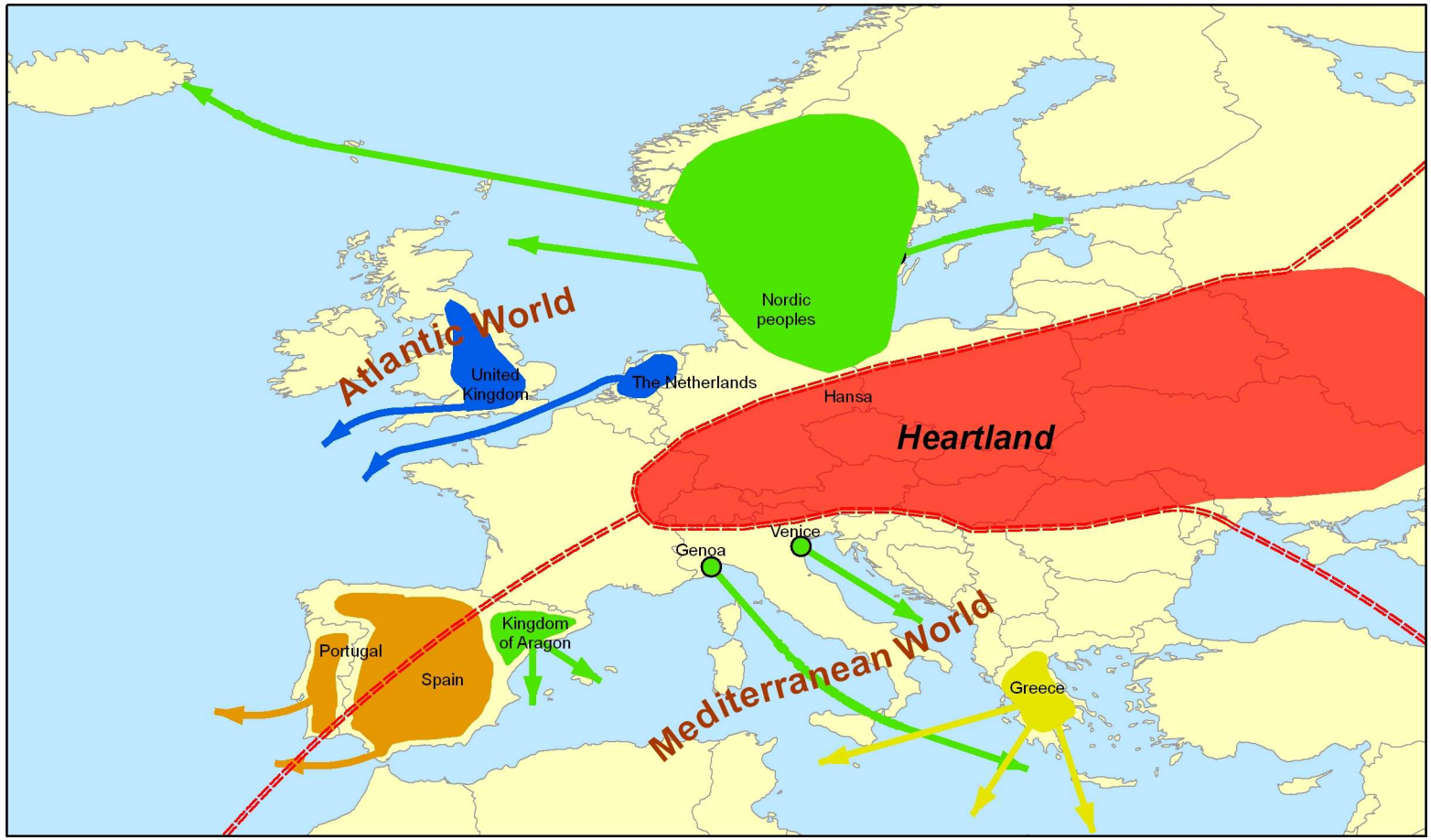
6. HISTORY AND TRADITION: EUROPEAN MARITIME POWER

In Modern Times, the Mediterranean was turned into an unstable and dangerous place by Ottoman expansion. It was at this time that European powers, especially those on the Atlantic, made the leap towards maritime expansion with the creation of extensive overseas empires, resulting in the establishment of maritime jurisdictions and mechanisms for keeping these under control (fleets, support bases).

During the following centuries, mercantilism and colonialism were to set European nations on a race for the domination of the world's seas. Imperialism, which even left its mark on the toponomy of the seas that were explored, was to be a geo-political period of distinct western dominance, the highpoint of European global presence and the time when the theories of naval power were put into practice.

The arms and naval races that were to take place in the 19th century would culminate in the parcelling out of imperial areas of maritime influence, and significant military conflicts in the 20th century (two world wars and a number of cold war-related conflicts).

Nevertheless, this colonial-imperialist period is not the only time when attempts have been made to advance European maritime power. The Athenian, Nordic, Hanseatic and Italian thalassocracies had already considered geo-political/geo-economic domination, albeit restricted to the control of certain regional seas (the Aegean, the Baltic, and the Mediterranean, respectively). From the Age of Discovery on, Spain and Portugal had more ambitious intentions, more global, as it were. Eighteenth and 19th century imperialism (the British and Dutch empires, basically) was one of the last attempts to make geo-political domination of the world's seas a reality through the use of technical, economic and military means


Atlantic World
Nordic peoples
United Kingdom
The Netherlands
Hansa
Heartland
Venice
Genoa
Kingdom of Aragon
Portugal
Spain
Mediterranean World
Greece
Maritime powers
(Heartland)
Antiquity
Middle Age
Age of Discovery
Contemporary

II. TERRITORY AND MARITIME JURISDICTIONS

The political and territorial integration of the seas and oceans has been slow in coming due to the very nature of the environment and the intrinsic difficulty that its domination and occupation entail. This is reflected in the greater complexity of the territorial structure of the seas and the way the rights of State sovereignty have been set down in law. The way maritime Europe is presented geographically is the end result of its peculiar territorial morphology -Europe as a great Eurasian peninsula- all its geographical attributes and features, and its relative location with regard to the general layout of land and sea masses. Insularity, inland seas and the way the continents extend underwater account for the territorial features of maritime Europe and also for the political conflicts that result from the necessary repositioning of its limits and boundaries

7. MARITIME EUROPE

The generalisation of maritime jurisdictions by coastal States is a new way of expressing territoriality that includes emerged land, marine waters (including the airspace that overlies them) and their corresponding seabed and subsoil. The map symbols representing European territory have therefore been modified by the inclusion of maritime areas whose boundaries are no longer governed by the physiognomy of the land.

European boundaries are no longer defined by separation between land masses. The seas and oceans which surround the emerged lands provide a spatial continuity not only for a compact territory to be established that stretches from sub-tropical latitudes to the Arctic circle, but that even allows the jurisdictional waters of Greenland (territory of the State of Denmark) to form part of a *continuum* that includes Iceland, the Faeroe Islands (Denmark) and the United Kingdom, which raises questions about the discretionary divisions that exist between continents.

Due to their location and the continuity of the waters, most of the islands fall within the ocean mass (the Svalbard Islands, the Faeroe Islands and Jan Mayen in the north; the Balearics, Sicily, Malta and Cyprus and the Greek islands in the south), with the exception of the three great ocean archipelagos of Spain and Portugal: the Azores, Madeira and the Canary Islands, with the last two located in a single mass of water.

The debate about Europe's political boundaries resulting from the enlargement of the European Union has little bearing on maritime area. With the accession of Bulgary and Romania the European Union can now only extend inwards, towards the interior of the continent and the Caspian Sea, as a result of which the only apparent remaining possible outlet to the seas from European territories is via the Russian arctic.

EEZ SURFACE AREA, ARCHIPELAGOS AND LARGE ISLANDS

Archipelagos / Islands	EEZ Surface Area (Sq km)
Azores	938,000
Canary	248,084
Iceland	794,523
Madeira	426,000
Svalbard	263,094
United Kingdom	686,836
Ireland	456,618
Total	3,813,155
Rest of Europe	7,229,520


Claimed or hypothetical European EEZ
EEZ Greenland

8. EUROPEAN WATERS

"European waters" can be considered to be the jurisdictional waters established by the various States and territories that comprise the continent of Europe, with a distinction being made between those that belong to the European Union and all remaining States. This criterion is not conclusive for indeterminate situations, however, such as the French *Départements* of the Caribbean, Guiana and Reunion Island, which are considered to be European Union territory to all effects. However, despite the fact that they belong to Denmark, Greenland's waters can be excluded from European waters, as Greenland is made up of emerged lands that are part of the American continent and the territory also has an autonomous administration. Apart from this, unlike the French *Départements*, Greenland does not belong to the European Union.

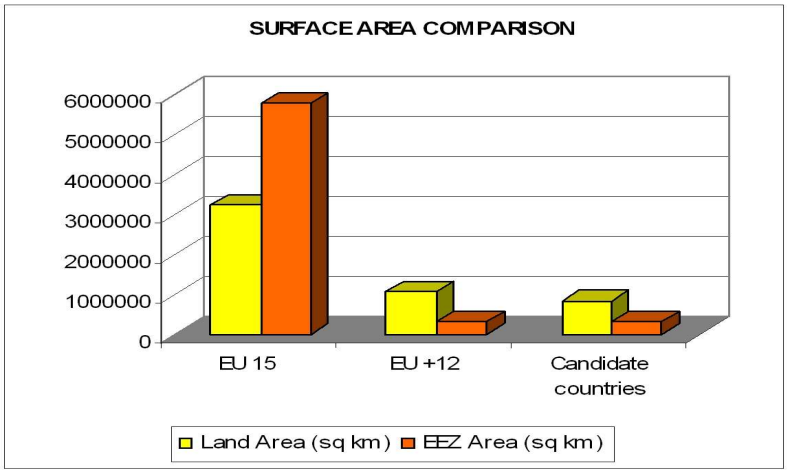
The map of European waters should likewise include the waters that lay off the Russian Federation coast as far as the conventional limit of the Urals, and also the waters of the Svalbard Islands, which, despite coming under Norwegian sovereignty, are governed by an international treaty (see map 22. The Svalbard Islands).

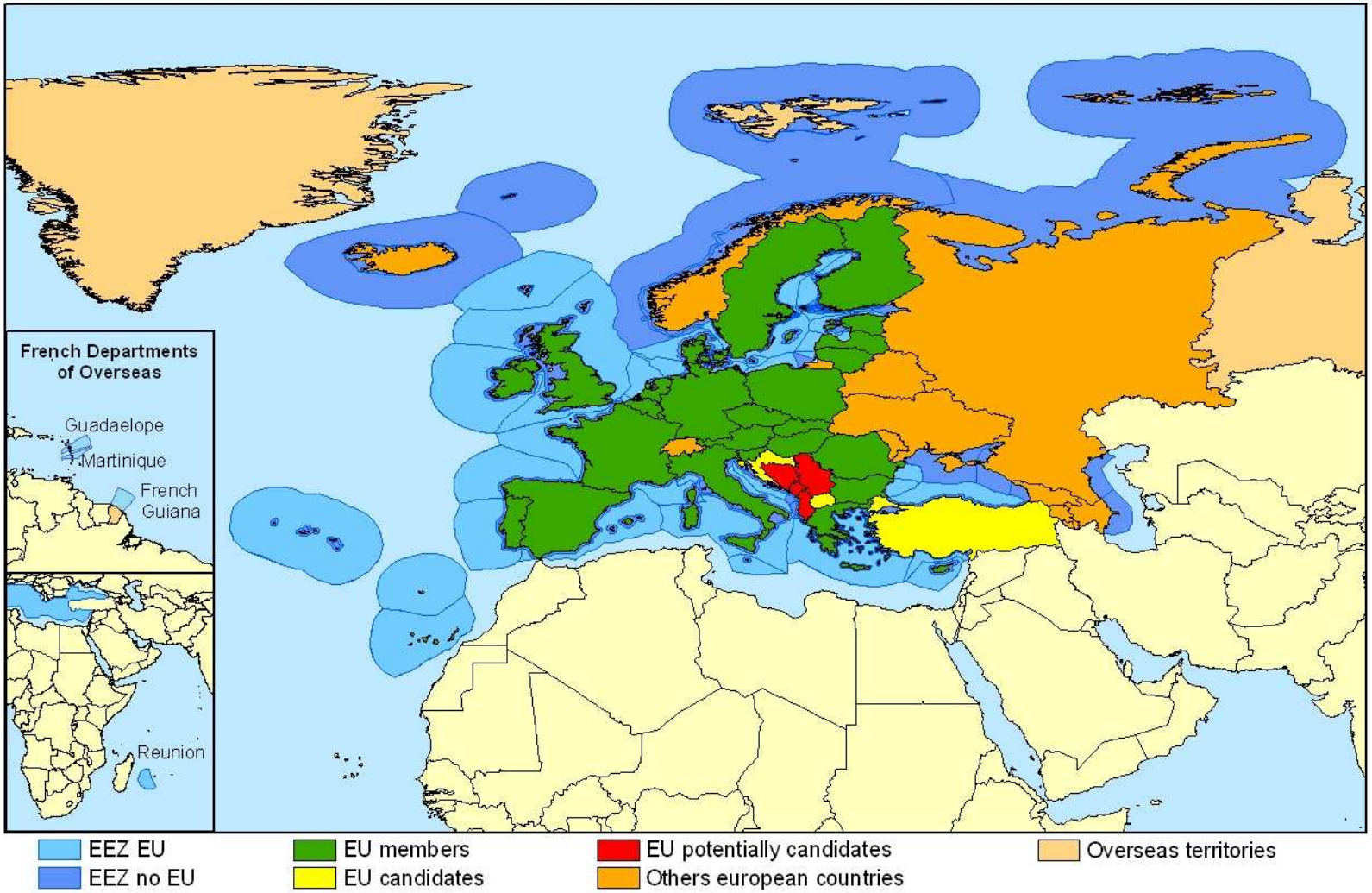
The semi-enclosed Black Sea is one of the areas where Europe and Asia converge, and also the site of one of the most acutely-indeterminate cases of whether a country forms part of Europe or not: Turkey.

Surface	sq km
Europe	5,259,416
EEZ	7,044,342
Continental shelf	1,923,935
Territorial sea	1,152,126

SHARE OF EUROPEAN WATERS		
Oceans / Seas	**Surface Area (sq km)**	**Surface area under EU State jurisdiction (%)**
Atlantic	82,439,700	5
North sea	569,800	n/a
Baltic	422,170	93
Mediterranean	2,509,000	58
Black sea	413,400	14

*not available.

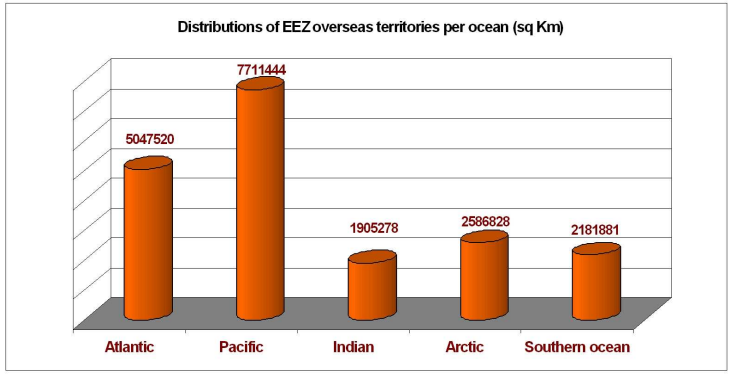


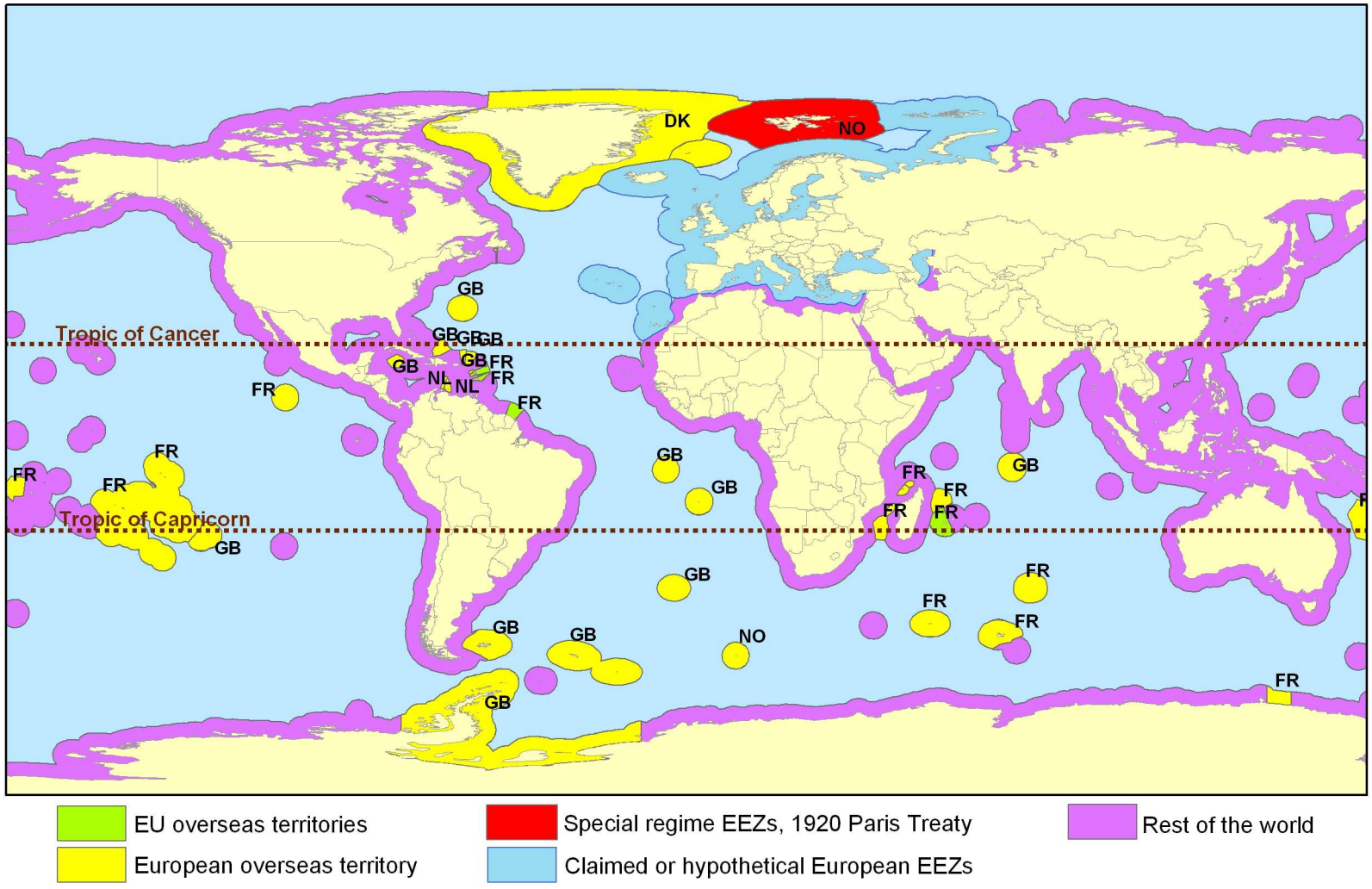

French Departments of Overseas
Guadaelope
Martinique
French Guiana
Reunion
EEZ EU
EEZ no EU
EU members
EU candidates
EU potentially candidates
Others european countries
Overseas territories

9. EUROPEAN WATERS BEYOND EUROPE

Some European countries, both members and non-members of the European Union, which possessed old colonial empires, have part of their territory, particularly islands, outside Europe. This feature, the fact that these territories are islands for the most part, generates extensive exclusive economic zones and fishing areas, that triple the size of the continent's and nearby islands' EEZ, whilst simultaneously it projects European presence and geo-political influence throughout all the oceans of the world.

European Union overseas territories are composed of the so-called OCT, the overseas countries and territories, and the French Overseas Departments (DOM). Despite they fact that they are regarded as OCT, some of these territories, including British and French territories in the Antarctic, are subject to claims from other countries or are affected by the Antarctic Treaty (1959). The OCTs are not EU territory, unlike the DOMs, which are made up of French Guiana, Martinique, Guadalupe and Reunion Island. There are twenty overseas countries and territories and they belong to the United Kingdom, France, The Netherlands and Denmark. If Norway, which has had sovereignty of the Svalbard Islands since the 1920 Treaty of Paris, is included, the land surface area of these territories is over 2.3 million sq. km. (880,000 sq.ml.), whilst their jurisdictional waters, total almost 19 million (7,336,000 sq.ml.). This peculiar feature of some European States and its importance due to the great expanse of the jurisdictional waters involved, projects Europe into the high latitudes in both the north and the south, and through the meridians to the continent's antipodes, allowing tropical, southern and northern Europes to be spoken of, or, even, a "Europe in the Pacific", where the waters that come under European jurisdiction exceed those that surround the continent itself. The strategic value of these *extra-European* waters could take on new dimensions as new marine resources are explored and exploited or climate change affects their relative location, as might be the case with the melting of the Arctic Ocean and the consequent opening up of new sea routes.




DK
NO
GB
Tropic of Cancer
GB
GB
GB
GB
GB
FR
NL
NL
FR
FR
FR
FR
FR
Tropic of Capricorn
GB
GB
GB
FR
FR
FR
FR
GB
GB
FR
FR
FR
GB
GB
NO
FR
GB
EU overseas territories
European overseas territory
Special regime EEZs, 1920 Paris Treaty
Claimed or hypothetical European EEZs
Rest of the world

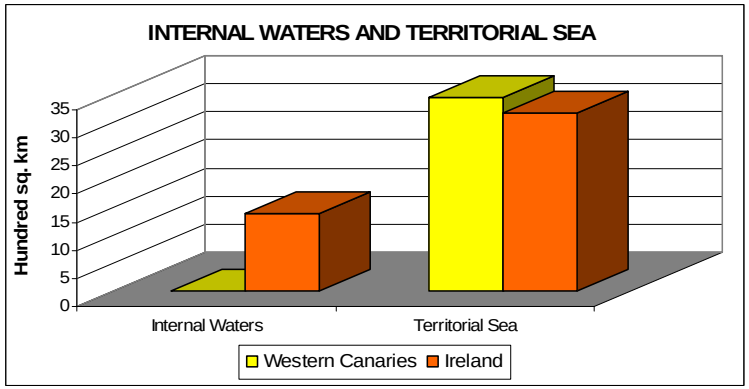
10. STRAIGHT BASE LINES, INTERNAL WATERS AND TERRITORIAL SEA

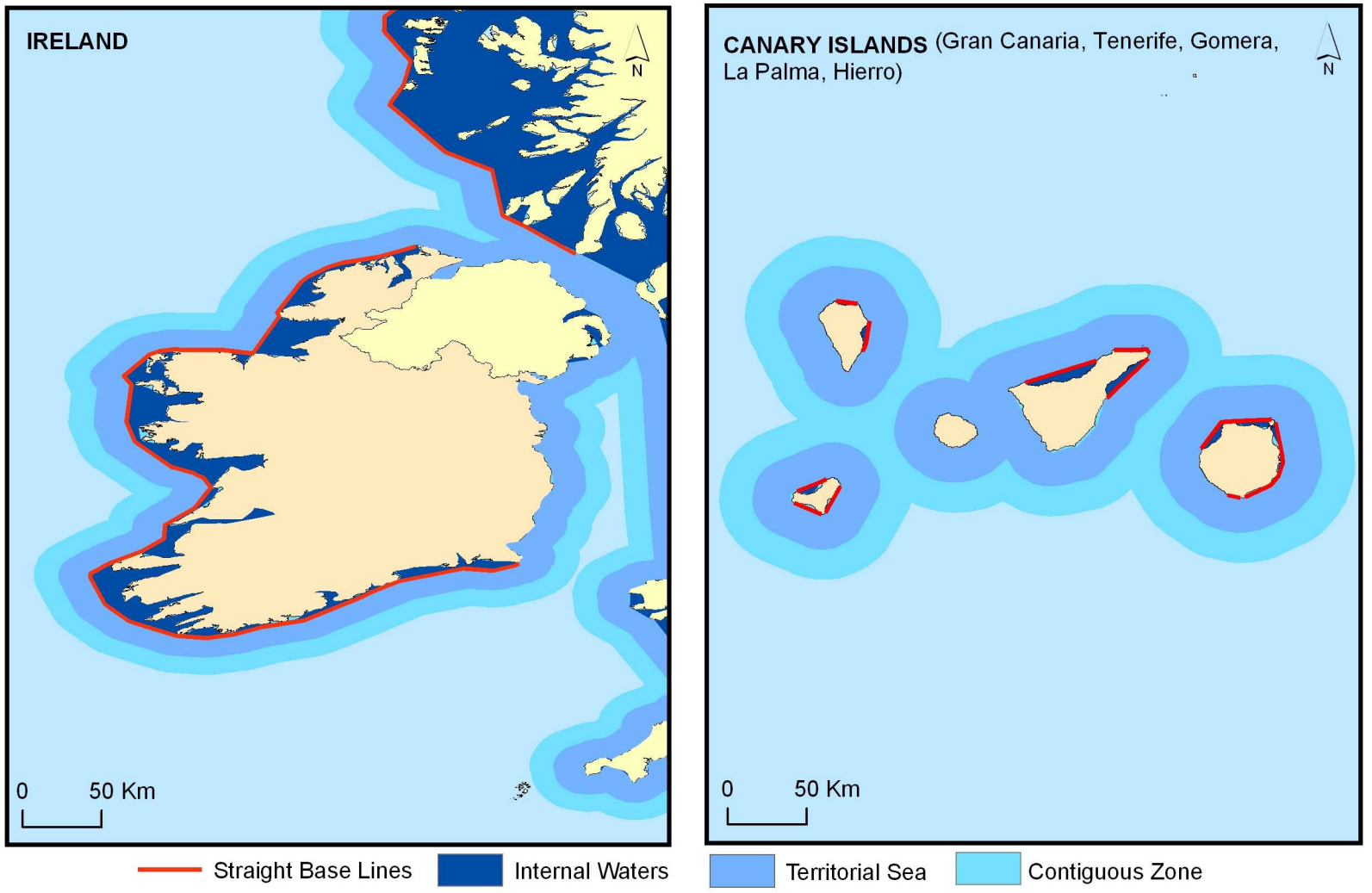
Straight base lines, internal waters and territorial sea are jurisdictional concepts that are closely linked. Straight base lines are plotted to define the point from which the width of the territorial sea is measured and, at the same time, they also generate internal waters (see 2. Maritime Jurisdictions). Jurisdictionally-speaking, a coastal State exercises full sovereignty over these waters, although in the territorial sea there is right of passage (for commercial traffic only). They are, therefore, just another piece of State territory, no different from any other.

The coast's relative location and morphological features determine the width of these waters: where there is an indented coastline with deep recesses (fjords, bays, inlets and coves), as is the case of Ireland and Norway (the country that established the use of straight base lines in 1935), the tracing of straight base lines is conducive to the generation of abundant inland waters. Even small islands are also territories that afford substantial territorial gains around their entire perimeters through the generation of territorial seas, and so most States opt for the maximum width established by the United Nations Convention on the Law of the Sea (twelve nautical miles). Only Greece and Turkey in Europe have an established width of 6 miles, due to their territorial dispute (see 19. Islands and Maritime Jurisdictions and 20. Maritime Boundaries and Territorial Conflicts).

The close links between inland waters (and, to a lesser extent, the territorial sea) and coastal areas, and the increasing pressure being put on these waters by the uses they are put to and by the exploitation of natural resources, are having an effect on the way competences are shared between the different tiers of State administration. In Spain, regional governments in coastal areas have recognised rights over certain activities that are undertaken in the inland waters, or may share these rights with the State's central administration. The expansion of coastal management into nearby waters and the need to implement spatial planning of the coastal environment are yet another argument that compounds this trend.

Surface Territorial sea (Sq km)	
EU 15	960,222
EU 29	1,152,126
Other European countries	250,525
Total	2,362,873



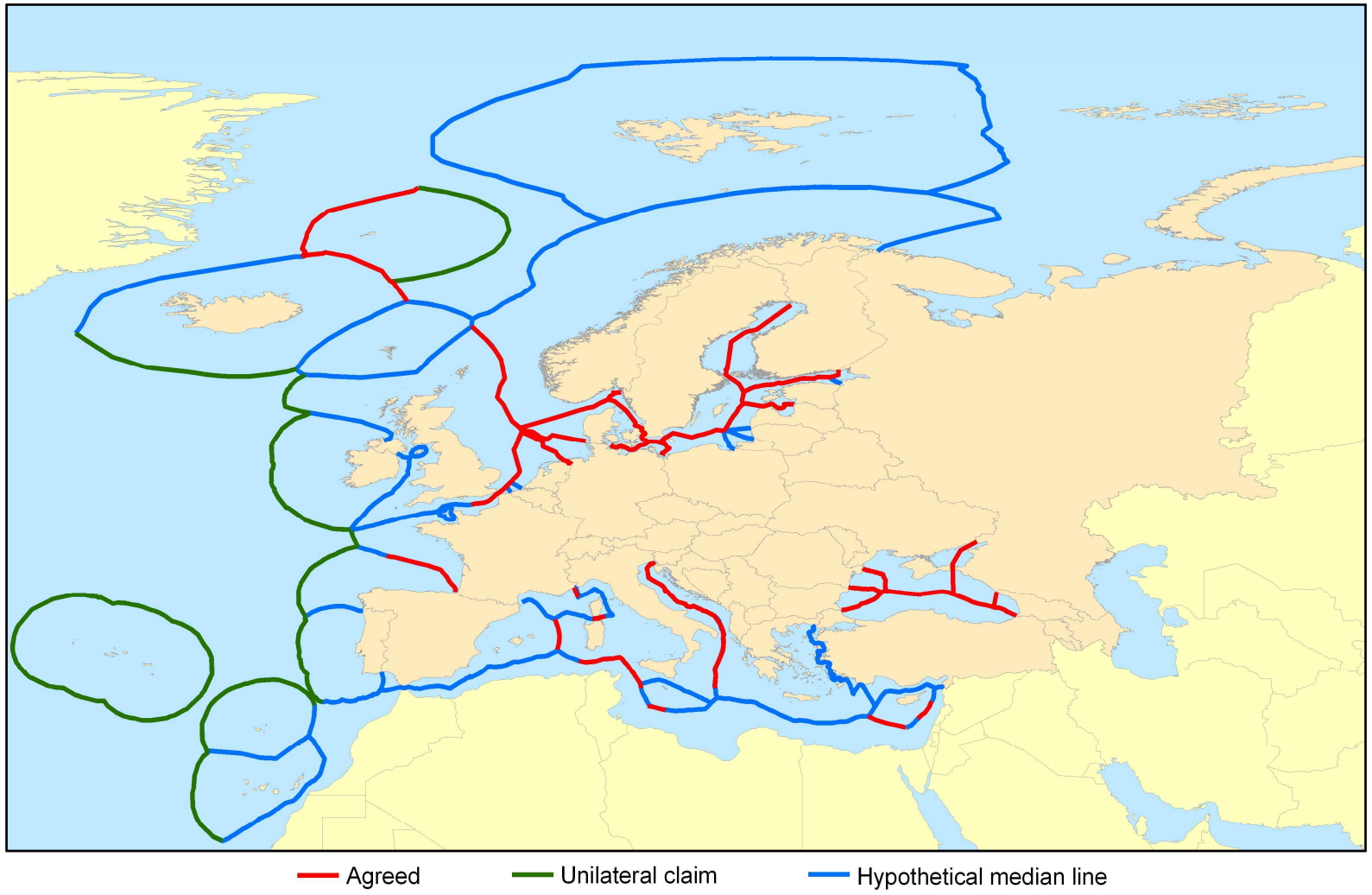

IRELAND
N
0
50 Km
CANARY ISLANDS (Gran Canaria, Tenerife, Gomera, La Palma, Hierro)
N
0
50 Km
Straight Base Lines
Internal Waters
Territorial Sea
Contiguous Zone

11. MARITIME BOUNDARIES

The creation of the various maritime jurisdictions envisaged in the United Nations Convention on the Law of the Seas has given rise to a complex boundary system for coastal States, basically for defining the limits of the territorial sea, the exclusive economic zone and the continental shelf. Geographical features such as location and relative position may require an agreement to be sought with opposing and/or adjacent States on said boundaries when these overlap. Such circumstances generally lead to the creation of two types of border: i) between sea waters/seabeds under national sovereignty; ii) between sea waters/seabeds under national sovereignty and the high seas/Area.

The map of European maritime boundaries (whether the limits of the Exclusive Economic Zone or of the continental shelf) bears witness to the existence of this variety: agreed boundaries, unilateral limits (generally between sea waters/seabeds under national sovereignty and the high seas/Area), and hypothetical limits (awaiting unilateral demarcation or by bilateral/multilateral agreement). Boundaries established thus far through agreement or by International Court of Justice rulings for the most part refer to the seabeds (one example of the former is Spain-France, and of the latter, those in the North Sea between Norway, Sweden, the United Kingdom, The Netherlands, Germany, Belgium and Denmark). Theoretically, these boundaries do not necessarily have to coincide with those of the exclusive economic zone. This only adds to the complex profusion of boundaries which result from inter-relationships between almost fifty States, giving rise to over two hundred cases of overlapping jurisdictional rights over respective adjacent waters (see Appendix 2).

BORDER AGREEMENTS BETWEEN EUROPEAN STATES	
Italy	Spain, Albania, France, Greece, Croatia, Slovenia, Serbia and Montenegro
Turkey	Italy, Bulgaria , Georgia
Spain	France, Portugal, Italy
Greece	Italy, Cyprus, Turkey
France	Belgium, Italy, Monaco, Spain, United Kingdom
Monaco	France
Albania	Italy
Bulgaria	Turkey
Georgia	Turkey
Belgium	France, The Netherlands, United Kingdom
Bosnia-Herzegovina	Croatia
Croatia	Italy, Bosnia-Herzegovina
Denmark	Germany, The Netherlands, Iceland, Norway, Sweden, United Kingdom
Estonia	Finland, Sweden, Latvia
Finland	Estonia, Sweden, Russia
Germany	Denmark, The Netherlands, Poland, Sweden, United Kingdom
Iceland	Denmark, Norway
Ireland	United Kingdom
Latvia	Estonia, Sweden
Lithuania	Russia
The Netherlands	Belgium, Denmark, Germany, United Kingdom
Norway	Denmark, Iceland, Sweden, Russia, United Kingdom
Poland	Germany, Russia, Sweden
Portugal	Spain
Russia	Finland, Lithuania, Norway, Poland, Sweden, Turkey
Serbia	Italy
Slovenia	Italy
Sweden	Denmark, Estonia, Latvia, Finland, Germany, Norway, Poland, Russia
Ukraine	Turkey
United Kingdom	Belgium, Denmark, France, Germany, Ireland, The Netherlands, Norway
Cyprus	Greece, Turkey, Egypt, United Kingdom


Agreed
Unilateral claim
Hypothetical median line

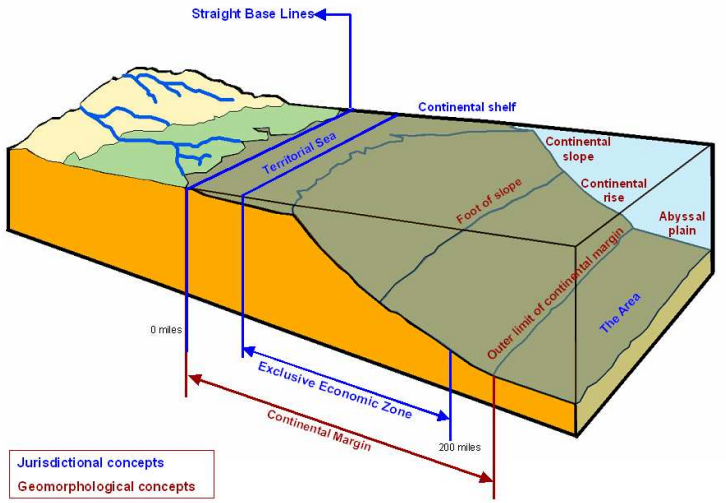
12. DEFINING THE LIMITS OF THE CONTINENTAL SHELF

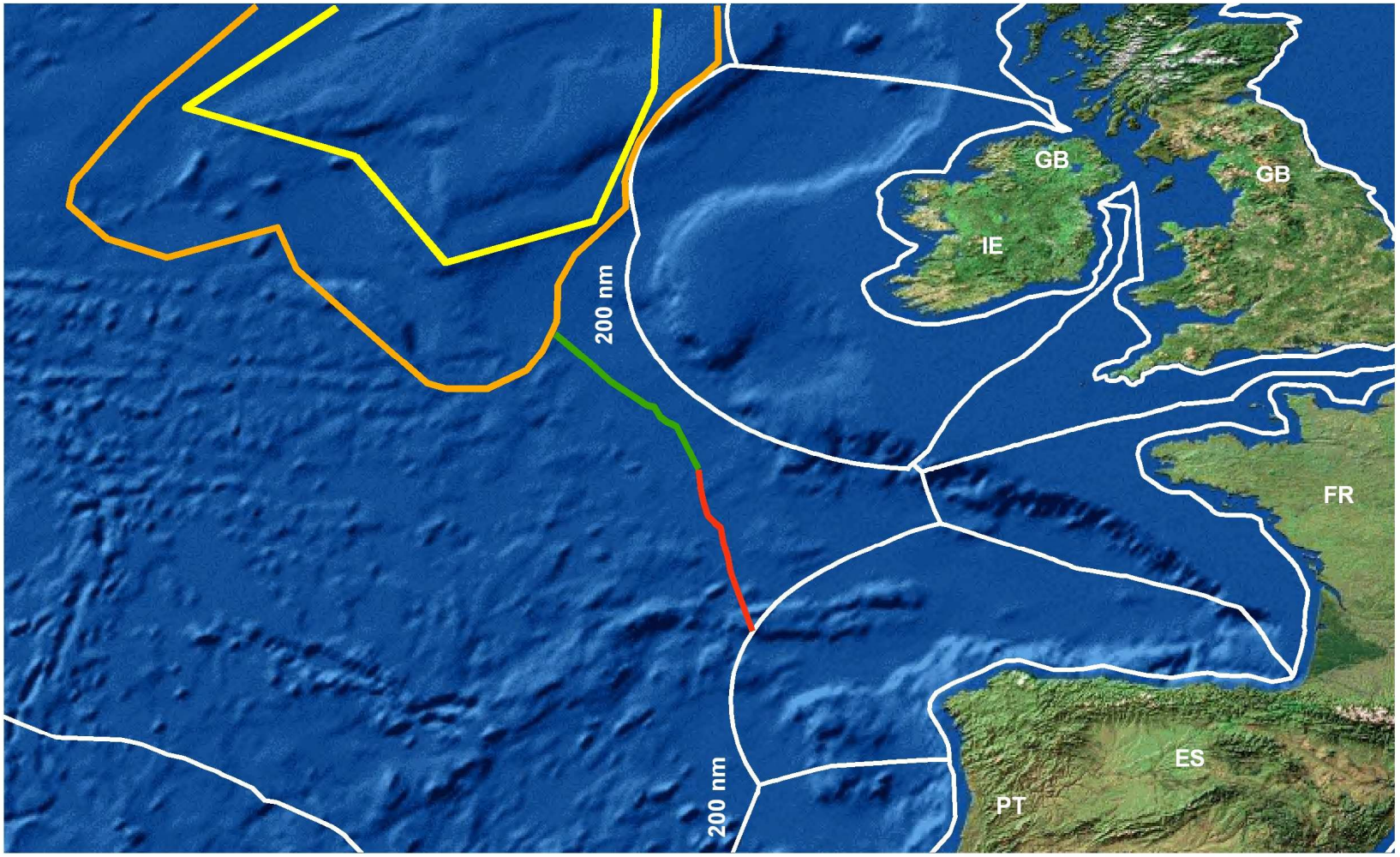
When the continental margin (shelf plus slope and rise) is extensive, the coastal State can extend its rights of sovereignty beyond the two hundred miles of the exclusive economic zone up to the edge of the ocean crust, albeit only with regard to the seabed and the marine subsoil.

This feature is found in the Atlantic Ocean in the area that stretches from the south of Iceland, the west of Ireland (the Celtic Sea), and down to the north-eastern tip of the Iberian Peninsula (the Bay of Biscay). The United Nations Convention on the Law of the Sea sets out a variety of formulae for defining the boundary of the outer edge of the continental margin and the procedure for it to be recognised by the United Nations Commission on the Limits of the Continental Shelf.

Ireland unilaterally (2005), and then jointly with the United Kingdom, France and Spain (2006), presented proposals to the corresponding United Nations organisation relating to the demarcation procedure included in Art. 76 of the Convention. The Irish boundary in the north west affects Iceland and Denmark (because of the Faeroe Islands) as third countries. In the south-eastern sector (the Porcupine abyssal plain), Ireland makes substantial territorial gains (39,495 sq. km.; 11,500 sq.n.ml) by extending its sovereignty beyond the 200 miles of the exclusive economic zone.

The joint proposal establishes a limit accepted by all four interested parties, although at the present time no dividing line or distribution has been established between the four States whose rights of sovereignty converge on the boundaries of the Bay of Biscay and the Celtic Sea.





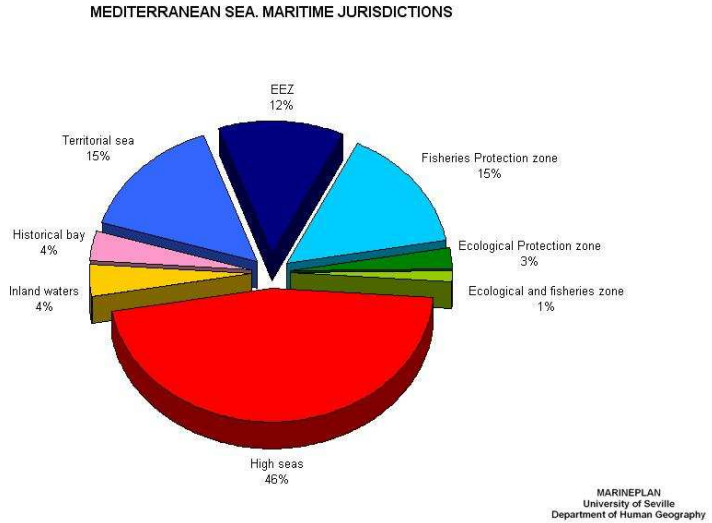
Limits of continental margin Ireland Common (ES; FR; IE y GB) **Claimed by** Iceland Faroe Islands

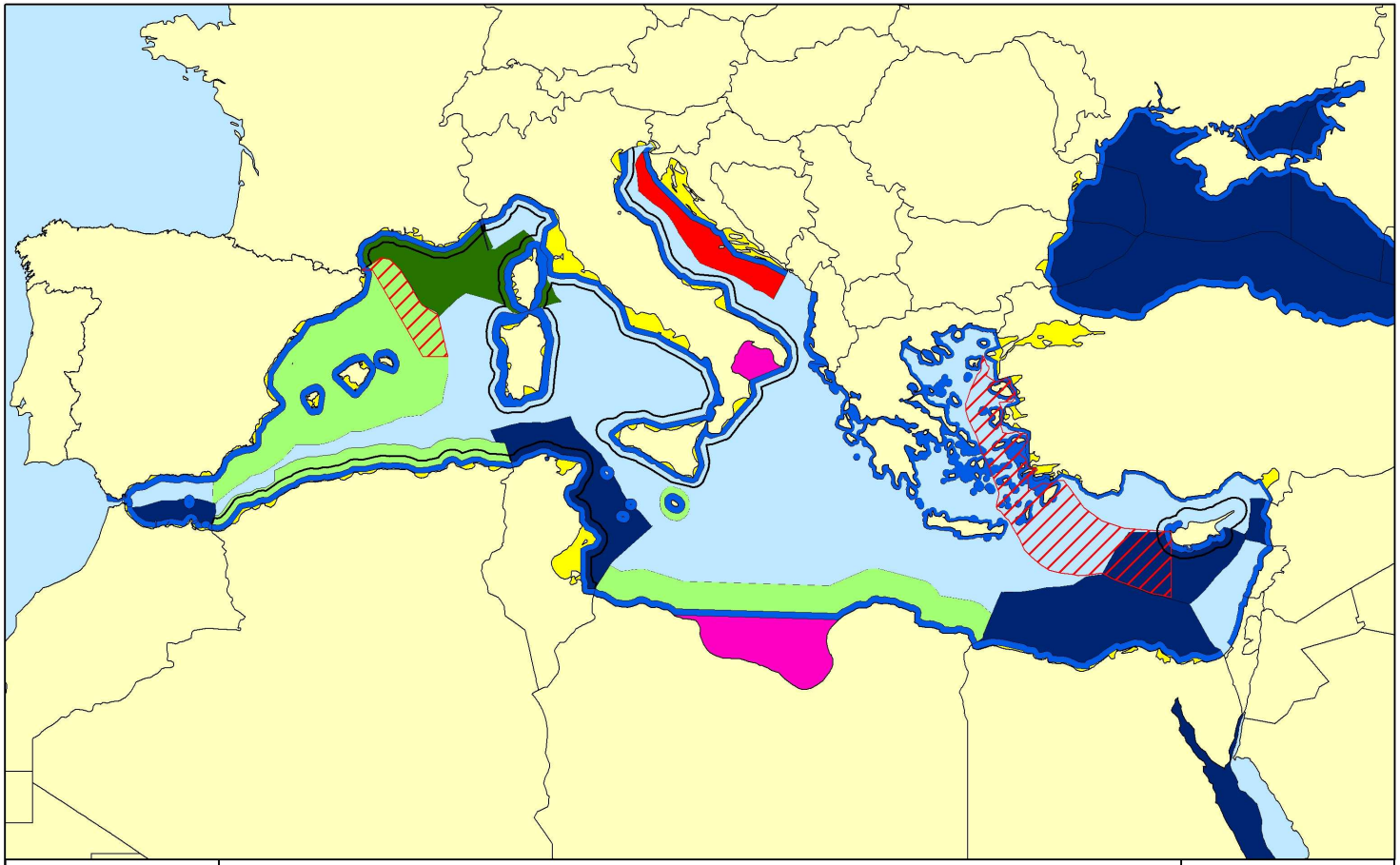
13. JURISDICTIONS IN THE MEDITERRANEAN SEA

The Mediterranean Sea covers about 2.5 million square kilometres (730,994 sq.n.ml.) and is the largest of the enclosed or semi-enclosed seas on which Europe boundaries. Twenty-one States give onto the Mediterranean, with 13 on the European side (seven of which are EU members) and the remainder on continental Africa's side or in Asia Minor.

The morphological features of the basin, which does not exceed 400 nautical miles in width at any point, mean that coastal States cannot extend their exclusive economic zone to it maximum width (200 nautical miles). This, together with the sea's relatively poor biological quality and, therefore, limited interest from the point-of-view of the fishing industry, means that national jurisdictions had not been established outside the territorial sea until only recent times, after the expansion process of States' jurisdiction had begun (1970s). Territorial disputes such as that between Greece and Turkey (see 20. Maritime Boundaries and Territorial Conflicts) also account for this anomaly.

The growing relative importance of fishing and reactions in the face of the environmental decline of the sea's waters have led to the generalisation of protection initiatives with the declaration of exclusive economic zones in some cases, and fisheries areas or ecologically-protected areas in others, as well as the creation of a whale and dolphin sanctuary in the waters of Italy, France and Monaco. Apart from this diverse range of jurisdictional concepts, there are also two *historical bays* to contend with: the Gulf of Tarento (Italy) and the Gulf of Sidra (Libya). The result is that the waters of the high seas that used to predominate (an anomaly almost only found in this basin) are in obvious retreat.

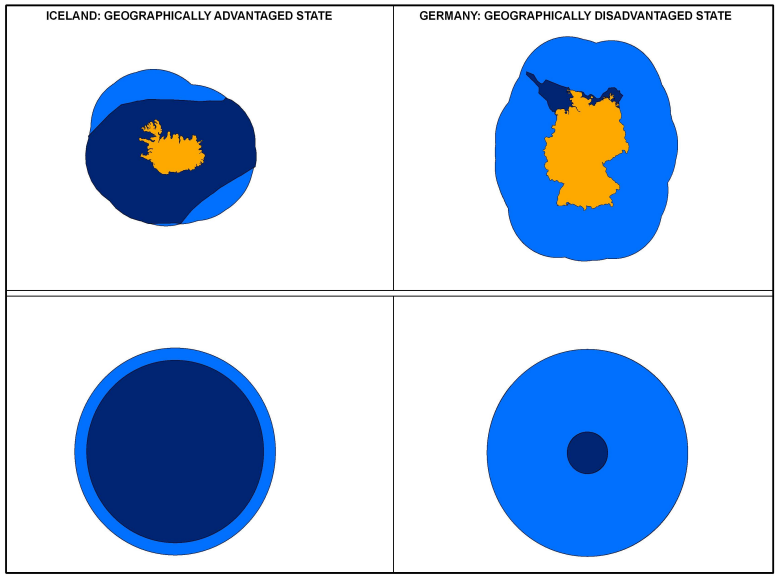



REGIONAL-JURISDICTIONAL STRUCTURE OF THE MARITIME SPACE
JURISDICTIONS IN THE MEDITERRANEAN SEA
Inland waters
Historical bay
Territorial sea
Archaeological Contiguos Zone
Exclusive economic zone
Ecological protection zone
Fisheries Zone
Ecological and Fisheries protection zone
High seas
Areas under dispute
MARINEPLAN
University of Seville
Department of Human Geography
Source: UN Law of the Sea

14. GEOGRAPHICALLY DISADVANTAGED STATES

The concept of the geographical disadvantage arose during the negotiating process at the third UNCLOS (Art. 70), and for a time became a banner under which all those States that proclaimed that their geographical location prevented them from gaining sufficient territorial advantage from the expansion of jurisdiction grouped themselves.

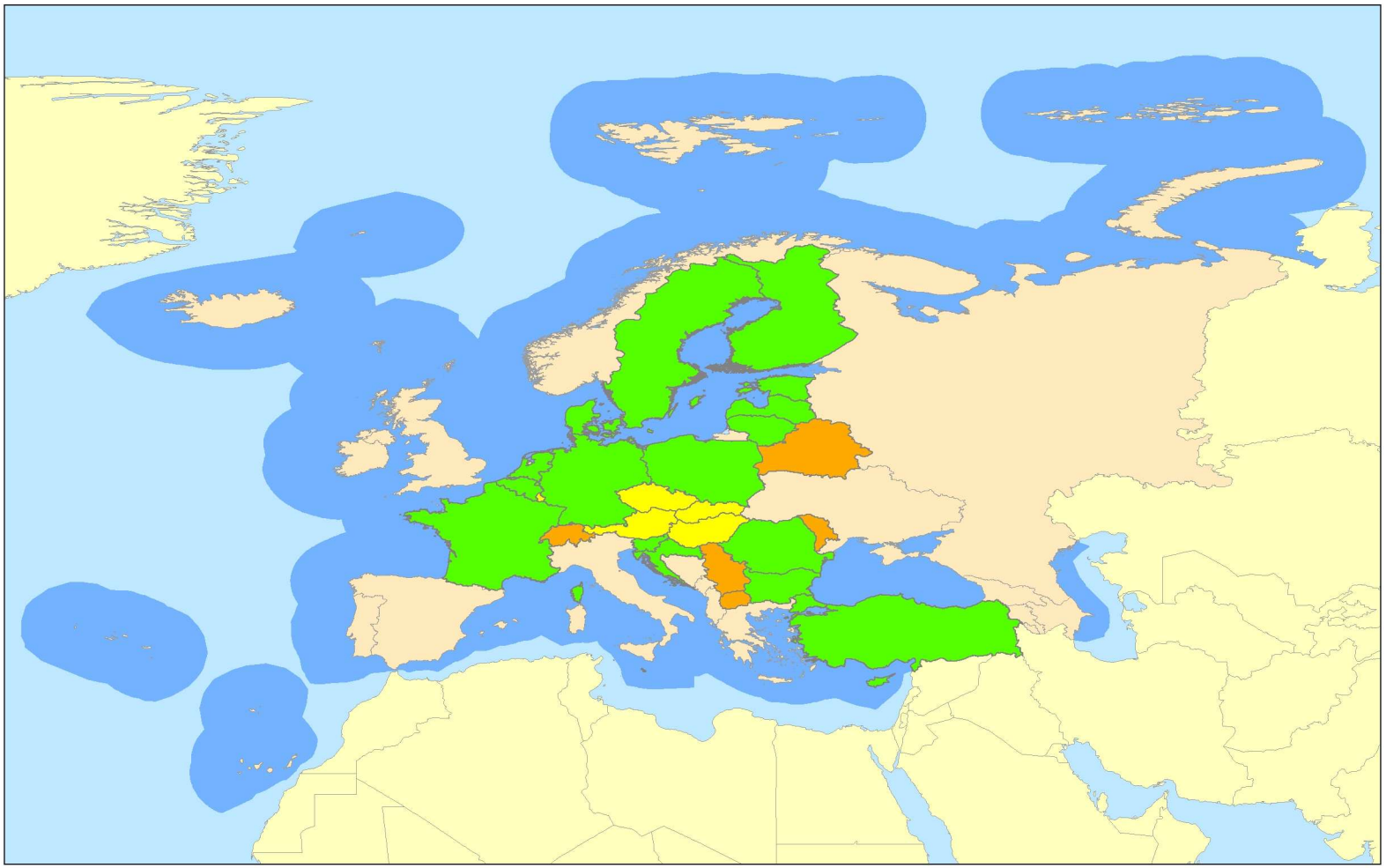
Geographical disadvantage relating to the establishment of the EEZ is determined by the following procedure: the State in question is regarded as though it were an island in the middle of the ocean. The theoretical EEZ surface area that would thus be generated is then calculated and compared to the country's real EEZ. Given that the surface area of all EEZs totals 47% of the theoretical surface area, disadvantaged States are deemed to be those whose real EEZ surface area is less than 47% of their theoretical EEZ surface area.



ICELAND	LAND SURFACE = 102.962 sq. km REAL EEZ SURFACE = 755.895 sq. km THEORETICAL EEZ SURFACE = 960.245 sq. km REAL/THEORETICAL = 78,72 % 47% THEORETICAL SURFACE = 451.315 sq. km INDICATOR = 167,49 %

EEZ SURFACE
REAL THEORETICAL

GERMANY	LAND SURFACE = 357.251 sq. km REAL EEZ SURFACE = 57.026 sq. km THEORETICAL EEZ SURFACE = 1.398.193 sq. km REAL/THEORETICAL = 4,08 % 47% THEORETICAL SURFACE = 657.151 sq. km INDICATOR = 8,68 %


Desadvantaged States
Land-locked EU countries
Land-locked non-EU countries

15. THE BOUNDARIES OF EUROPE

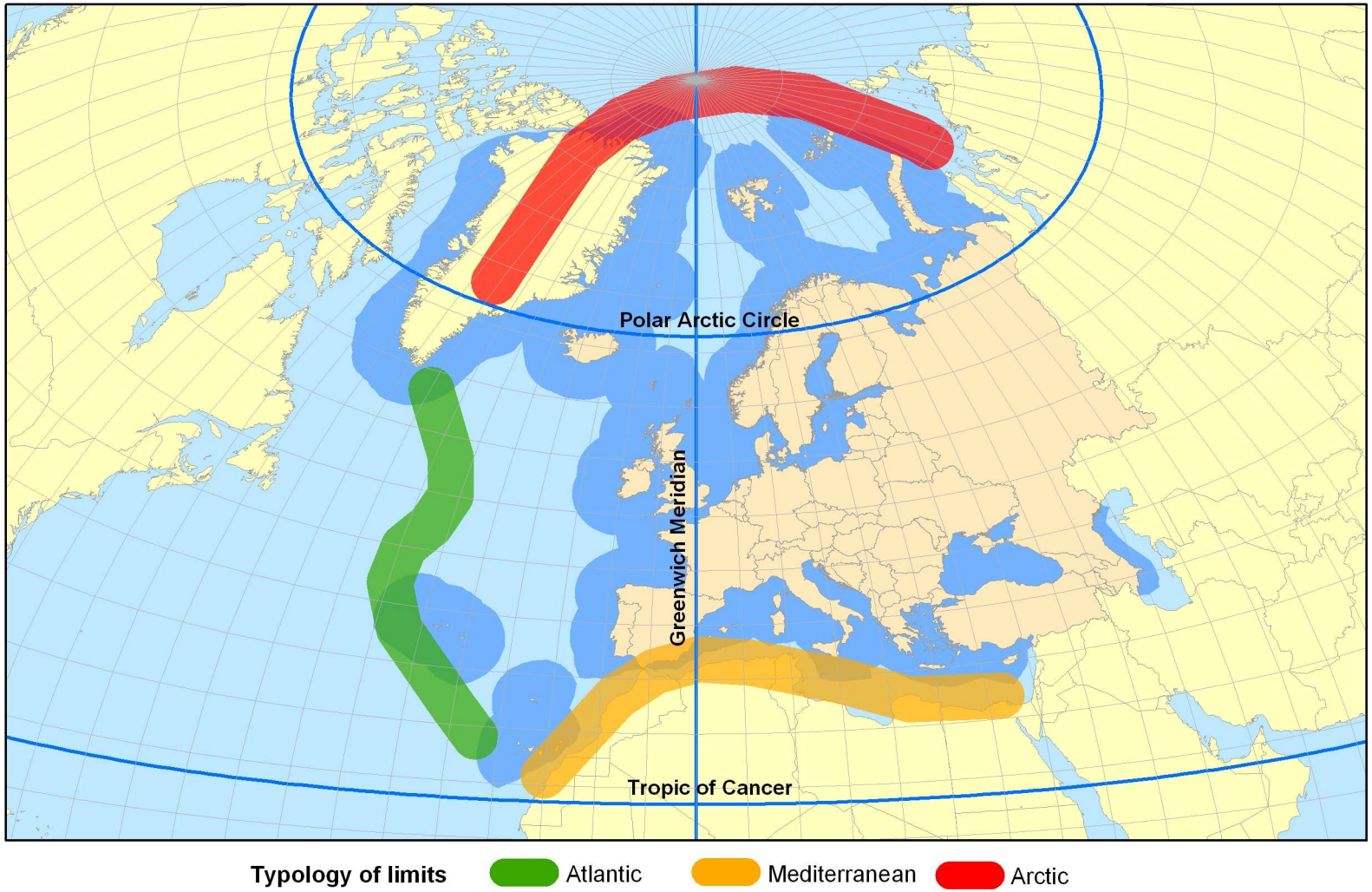
The boundaries of Europe are all maritime except on the eastern flank. Whilst the land boundary, the Urals mountain chain, is an unchanging and unchangeable marker that defines the transition from Europe to Asia, the remaining European confines, from the Arctic to the sub-tropical waters of the southern Canaries, are subject to the more diffuse nature of specific maritime limits, and it should also be borne in mind that the process of maritime expansion has still not come to an absolute and conclusive end.

The geographical reach of European waters allows a typology of boundaries to be established that defines three large areas: the EuroArctic limit, the EuroAtlantic limit and the EuroMediterranean limit. Each of these possesses the corresponding hydrographic features of the mass of water in question, but they also possess the geo-political features that correspond to each of the marine regions that comprise the confines of Europe, and are also subject to changes due to global warming and the resulting retreat of the ice sheet.

The *EuroArctic* boundary is that which is most acutely linked with the process of jurisdictional enlargement. The configuration of a new area in the region of the North Pole provides new opportunities in terms of access to new routes and resources as a result of global warming and the retreat of the permafrost, a phenomenon that creates a new geo-strategic framework in the Arctic and, consequently, in northern Europe.

The *EuroAtlantic and EuroMediterranean* boundaries have greater continuity with the situation prior to maritime jurisdictional expansion. Both the Atlantic and the Mediterranean have historically been areas of European expansion and political and economic activity. Jurisdictional expansion towards the south weakens the geographical barriers that separate the developed and the developing worlds, the most striking evidence of which can be seen in the maritime migratory flows (see 21. Maritime Boundaries and Migratory Flows).

EUROPE'S BOUNDARIES
Northernmost latitude of Svalbard Island waters (80º N)
Southernmost latitude of Canary Island waters (25º N)
Westernmost longitude of Azores Island waters (35º W)
Easternmost longitude of Ural mountains (55º E)


Polar Arctic Circle
Greenwich Meridian
Tropic of Cancer
Typology of limits
Atlantic
Mediterranean
Arctic

16. EUROPE IN THE ARCTIC

The Artic Ocean is the smallest of the five oceans (3.7% of all marine waters), with five coastal States giving onto it: the Russian Federation, Canada, Norway (see Map 22. The Svalbard Islands), Denmark and the United States. European presence in these waters derives from the Russian coasts, the Norwegian coasts and the coasts of the Danish territory of Greenland, which is located in the continent of America. Although Europe forms part of the region, the European Union does not, as Greenland comes under an autonomous regime and does not belong to the Union. Due to its extreme climate, the Arctic has few inhabitants, only about 0.06% of the world population, but it also has the peculiar feature that it is a territory inhabited by a supranational collective, the Laps, or Sami, who have their own institutions and political organisation.

Polar projection allows the geographical features of the Arctic Ocean to be seen. It is a kind of semi-enclosed sea that can be accessed through the Bering Strait, the Barents Sea and Greenland, and whose waters have close links with the emerged lands that surround them. Equally illustrative is the role that the enlargement of maritime jurisdictions has in the advances made by the *ecumene* in northern latitudes, with the retreat of free and open waters (the high seas) and the resulting reinforcement of the presence of nation States. The replacement of international action by national action might be one of the consequences of this process, but it also gives momentum to the opposite effect: the need for regional co-operation between the States that are present in these waters –there is, at present, an Arctic Council, which leads to the greater responsibility of their administrations in managing and protecting ecosystems. This circumstance is particularly relevant due to the far-reaching consequences of environmental change that are being acutely felt in the polar regions, with major territorial consequences, such as the fact that conditions for navigation change in a relatively short period of time and new courses become practicable for international traffic –a connection between Europe and the Far East- and access to energy resources, which all point to this ocean having a marked strategic value in the future.

TERRITORIES AND COUNTRIES WITH A PRESENCE IN THE POLAR CIRCLE

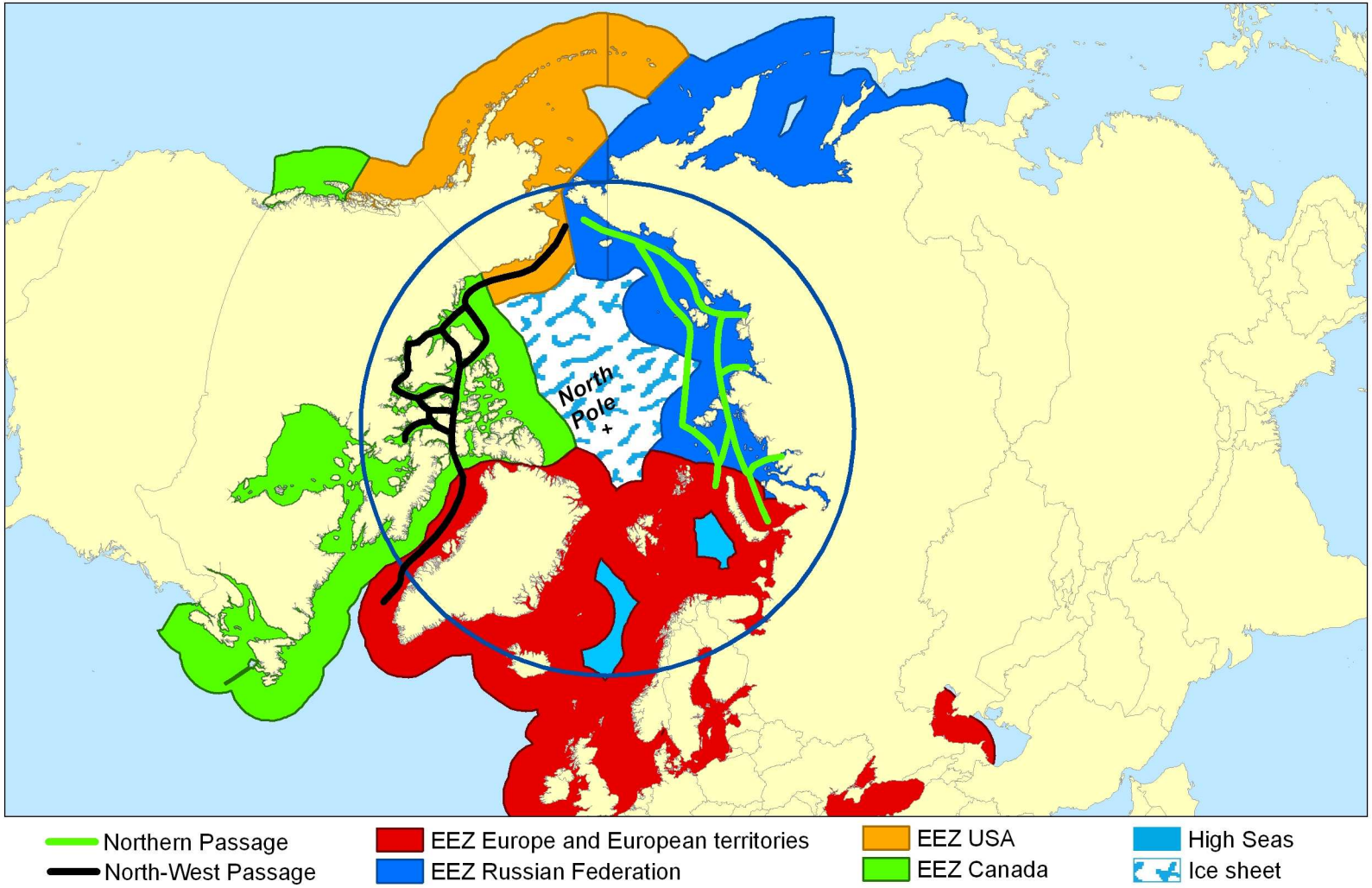
Norway (Svalbard islands)

Russian Federation (Novaya Zemlya, Severnaya Zemlya, New Siberian Islands), Wrangel Island

USA (Alaska)

Canada

Denmark (Greenland)


North Pole
Northern Passage
North-West Passage
EEZ Europe and European territories
EEZ Russian Federation
EEZ USA
EEZ Canada
High Seas
Ice sheet

17. MARINE REGIONS AND INSULARITY

Europe's regional seas, individualised marine areas differentiated by certain physical, cultural or economic features, have traditionally been identified on the basis of their control (appropriation), use and exploitation by coastal societies. We are dealing for the most part with semi-enclosed (the Baltic, the Mediterranean, the Black Sea, and so forth) or enclosed seas (the Caspian), that is, seas that are surrounded by two or more States which, according to the United Nations Convention on the Law of the Sea, should establish appropriate mechanisms for coordinating and cooperating in the management of their waters and preserving them from pollution and other threats.

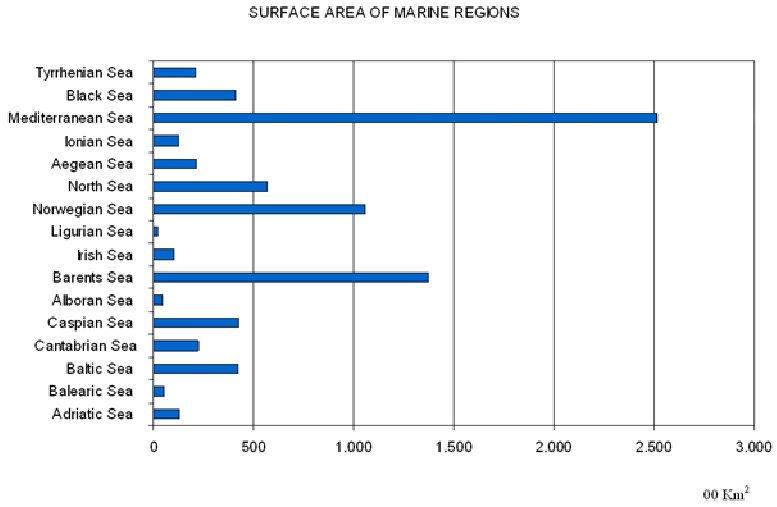
Insularity is a significant aspect of European maritime geography. Islands and archipelagos are either lone States (island States such as Iceland, Ireland and Cyprus, or archipelagic States like the United Kingdom and Malta), or have associations with other States on an equal basis with any other region or territory (the Canary Islands, the Azores, etc.).

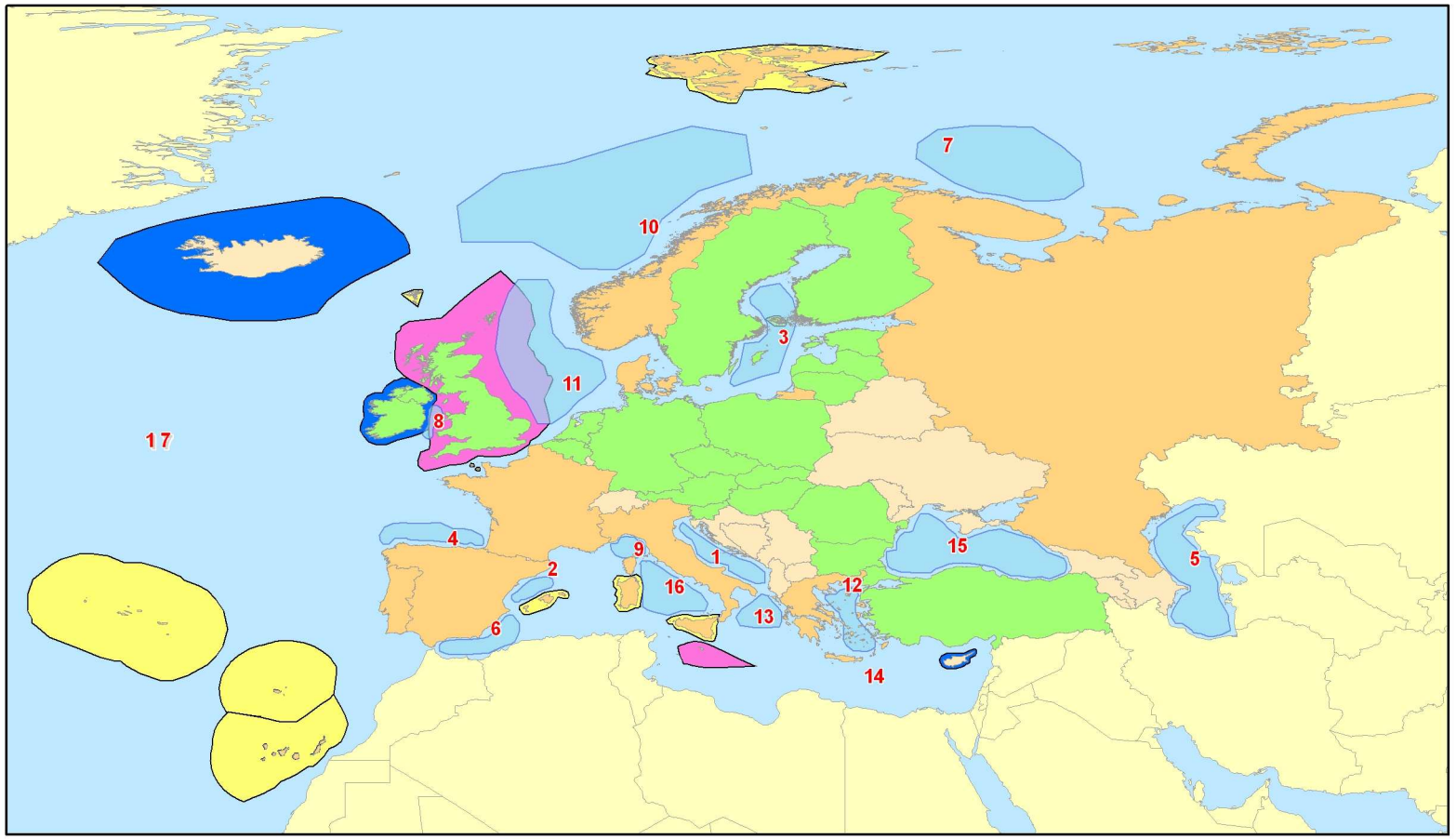
In some cases, islands and archipelagos that belong to States are autonomous but in others (the Shetlands, the Orkneys, the Greek islands in the Aegean, etc.), they do not. Amongst the islands and archipelagos that enjoy political and administrative autonomy there are thirteen islands and archipelagos that have a degree of self-government due to their isolation, remoteness or the difficulties that communication with continental areas entails, in other words, due to their being peripheral areas

EUROPEAN ISLANDS AND ARCHIPELAGOS. TYPOLOGY

Types	Examples
Archipelagic States	**The United Kingdom** (main island plus part of Ireland, the Orkney islands, the Shetlands and the Western Isles); **Malta** (the Maltese Islands, Comino and Gozo)
Island-States	**Ireland; Iceland; Cyprus**
Islands and archipelagos belonging to States	With political or administrative autonomy: **The Faeroe Islands** and **Greenland** (DK); **the Aland Islands** (FIN); **Sicily** and **Sardinia** (IT); **the Svalbard Islands** (NOR)*; **the Azores** and **the Madeira Islands** (PT); **the Balearics** and **the Canary Islands** (ESP); **Guernsey** and **Jersey** (the Channel Islands) and **the Isle of Man** (GB)**

*Not included in the Norwegian constitution.
**Linked to the United Kingdom but not part of the EU.





EU States
Mixed States
Archipelagic States

Island-State
Autonomous islands

Marine Regions

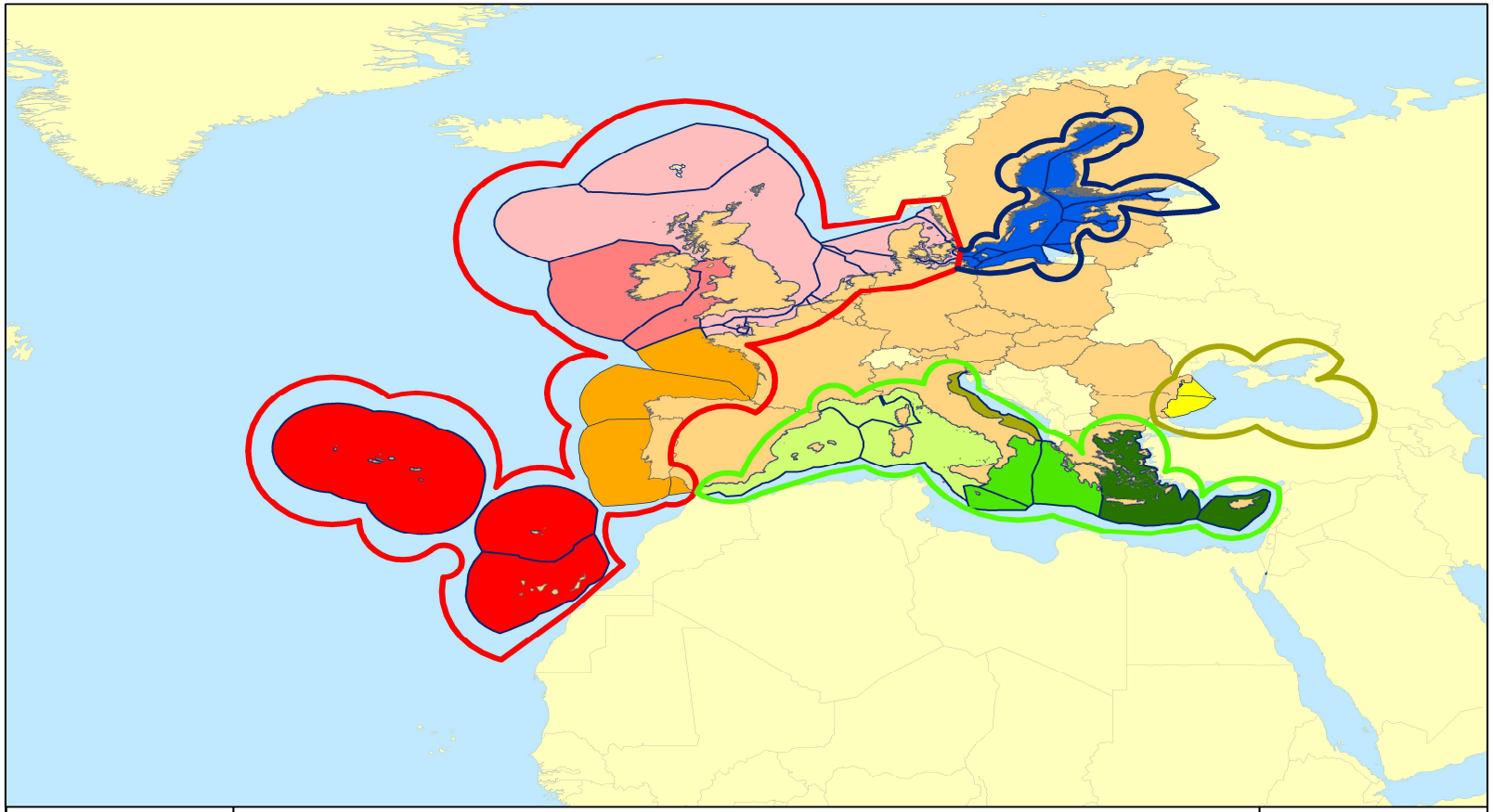
1 Adriatic Sea
2 Balearic Sea
3 Baltic Sea
4 Cantabrian Sea
5 Caspian Sea
6 Alboran Sea
7 Barents Sea
8 Irish Sea
9 Ligurian Sea
10 Norwegian Sea
11 North Sea
12 Aegean Sea
13 Ionian Sea
14 Mediterranean Sea
15 Black Sea
16 Tyrrhenian Sea
17 Atlantic Ocean

18. EU MARINE REGIONS AND SUB-REGIONS

The Green Paper on the European Union's maritime policy (2006) alludes to an "EU marine area" and in the proposed Directive on marine strategy (2005) the expression "European marine waters" is used, comprising jurisdictional waters belonging to all the States, that is, inland waters, the territorial sea, the exclusive economic zone and fisheries and ecologically protected areas wherever these exist, including the seabeds and their subsoil.

The waters are split into three large regions that are, in turn, divided into eight sub regions. Both the regions and the sub-regions are supranational geographical areas. Member States may also establish "subdivisions" in any of the three identified regions as long as they are compatible with the sub-regions. Such subdivisions might correspond to areas under national jurisdiction or parts of these. This would give rise to marine regions on a sub-national scale that might come within the scope of a number of maritime management plans in the Green Paper, with the creation of a hierarchy with administrative units that are as yet undefined.

MARINE REGIONS. DIRECTIVE ON MARINE STRATEGY [SEC (2005) 1290]		
Name	**Sub-Region**	**Country**
Baltic Sea		Germany, Poland, Sweden, Finland, Estonia, Latvia, Lithuania
Mediterranean Sea	Western Mediterranean; Adratic Sea; Ionian Sea; Aegean-Levantine Sea	Spain, France, Italy, Slovenia, Greece, Malta, Cyprus
North East Atlantic ocean	Greater North Sea; Celtic sea; Bay of Biscay and Iberian Coast; Atlantic Ocean	Belgium, Denmark, France, Germany, The Netherlands, Sweden, United Kingdom, Ireland, Portugal, Spain



MARINE TERRITORIAL DIVISIONS

Marine Regions.Marine Strategy Framework Directive

Marine Regions (MSFD)

- Baltic Sea
- Atlantic NE Ocean
- Mediterranean Sea
- Black Sea

- Greater North Sea
- Celtic Sea
- Baltic Sea

Marine Subregions (MSFD)

- Aegean Levantine Sea
- Ionian Sea
- Adriatic Sea
- Black Sea

- Western Mediterranean Sea
- Bay of Biscay and Iberian Coast
- Atlantic Ocean

- EU member states

MARINEPLAN
University of Seville
Department of Human Geography

Source: Atlas of the European Seas and Oceans

19. ISLANDS AND MARITIME JURISDICTIONS

The Convention on the Law of the Sea defines islands as natural extensions of land surrounded by water which are above water level at high tide. The territorial sea, the limits of the exclusive economic zone and the continental shelf around them are to be defined in accordance with the general Convention stipulations, except for rocks and islets where there is no human life or economic activity, and these are to possess neither EEZ nor continental shelf.

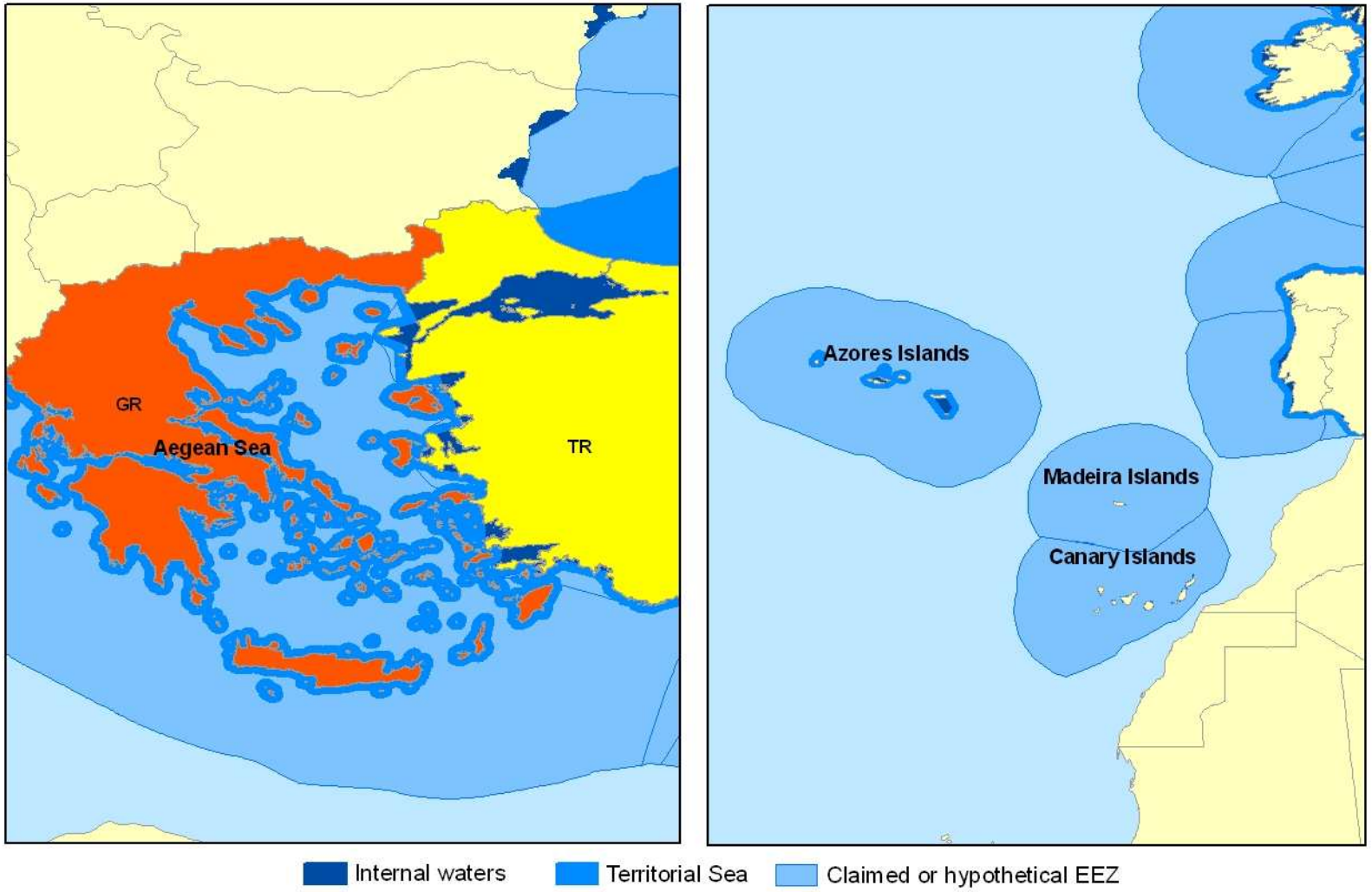
From the jurisdictional point-of-view, islands and archipelagos are territories that allow extensive areas of sovereignty and economic control over the sea and its resources to be established, sometimes projecting a State's territorial and maritime capacity towards distant areas of the ocean, such as the case of the Portuguese archipelagos or the Canaries, and at other times being an obstacle to the full implementation of a neighbour State's jurisdictions, as is the case in the Aegean.

In the case the Greek islands in the Aegean and especially with regard to those that are nearest the Turkish coast, grave problems of jurisdiction and security arise. Each island can generate territorial sea, an exclusive economic zone and a continental shelf. This means that most of the Aegean's seabed would be in the hands of Greece and that the equidistant line separating Greece and Turkey would be located excessively close to the Turkish coast, which would be detrimental to the security of Turkish territory. Turkey took the decision to plot another middle line ignoring the location of the Greek islands. To date, there is neither a clearly defined boundary nor agreement between the two countries.

The existence of the archipelagos linked to Portugal and Spain leads to the generation of some extensive jurisdictional areas in the Atlantic. Between them, the Madeira Islands and the Azores generate an EEZ of 1,364,000 sq. km. (almost 400,000 sq.n.ml.), which equates to 81% of Portugal's entire EEZ. As for the Canary Islands, their location off the Moroccan-Western Sahara coast not only results in legal disputes from a jurisdictional and sovereignty point-of-view, but also from the purely economic perspective (fishing resources and the exploitation of hydrocarbon deposits).

SURFACE AREA OF SOME EU COUNTRIES' ISLAND TERRITORIES

Country	Total Surface Area (sq km)	Island Surface Area (sq km)
Spain	504,790	12,420
France	632,836	15,709
Greece	131,957	19,765
Italy	301,301	73,836
Portugal	91,906	3,866


GR
Aegean Sea
TR
Azores Islands
Madeira Islands
Canary Islands
Internal waters
Territorial Sea
Claimed or hypothetical EEZ

20. MARITIME BOUNDARIES AND TERRITORIAL CONFLICTS

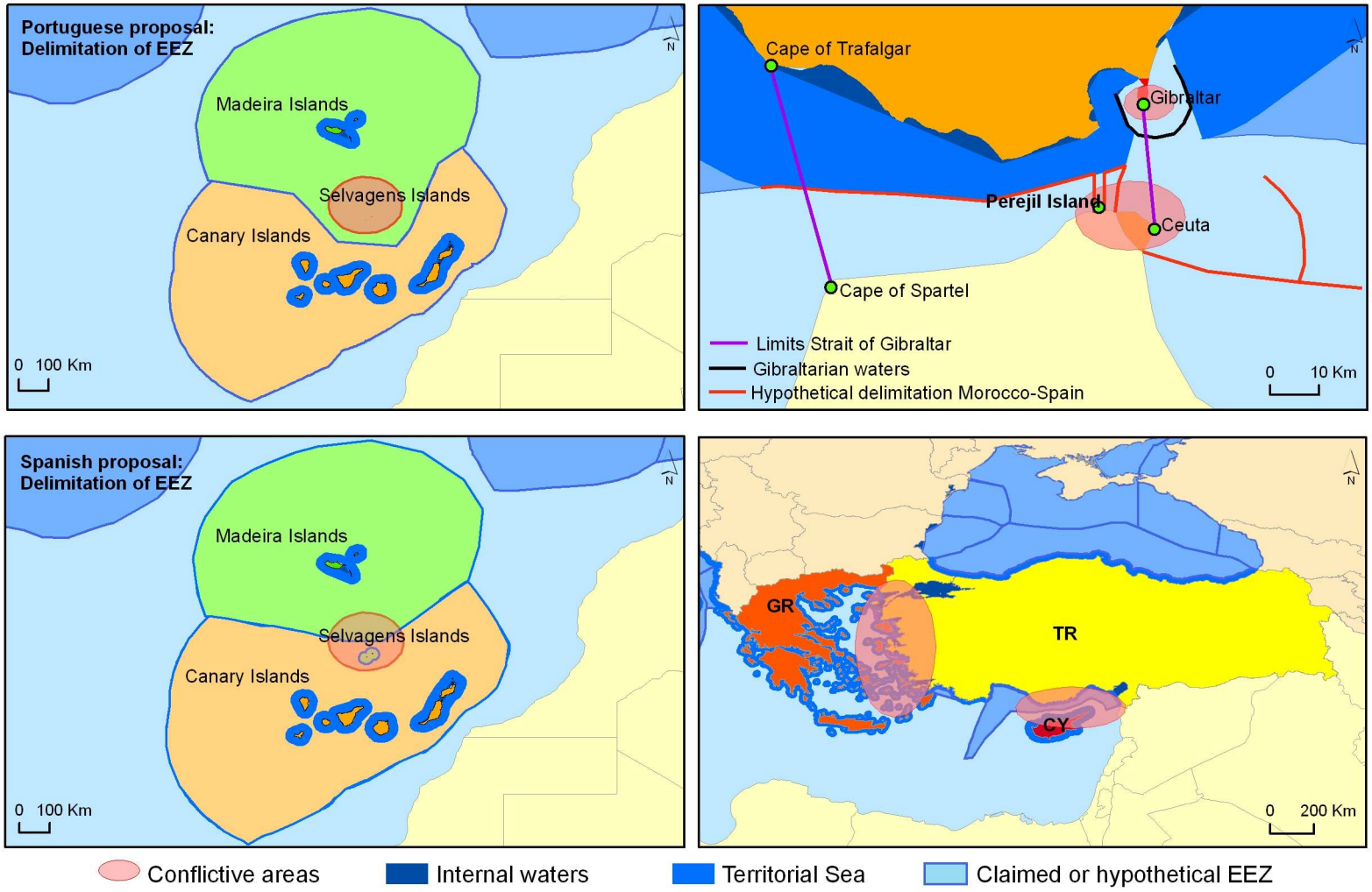
The plotting of boundaries in the seas and oceans often gives rise to large-scale conflicts between adjoining or neighbouring countries. Some legal disputes have continued over long periods of time and are issues inherited from the near or distant past. Others, however, have ensued from the implementation of the new law of the sea (UNCLOS, 1982).

The Straits of Gibraltar are a case-in-point due to their significance and strategic importance. In an area that is considered in legal terms to be an international strait, a range of sovereignties and enclaves can be found side-by-side, such as the Spanish sovereign enclaves on or near the Moroccan coast (Ceuta and Parsley Island, respectively), generating marine jurisdictions very close to Morocco which the latter takes as a threat to its territorial security and integrity, and the British colony of Gibraltar, an enclave over which ample legal and diplomatic controversy between the United Kingdom and Spain has raged almost from the moment the Treaty of Utrecht was signed (1713)[*] and around which the United Kingdom has claimed a three-mile stretch of territorial sea. This jurisdiction also applies in the Bay of Algeciras, although Spain has refrained from sealing the bay with a straight base line.

The legal dispute in the Aegean (see 19. Islands and Maritime Jurisdictions) is as old as the rivalry between Turkey and Greece itself. In this area, the equidistant line has been plotted so close to the (Turkish) coastline that it places most of the sea's jurisdictional waters in the hands of a neighbouring State (Greece). When the proximity of an island-State like Cyprus, which, clearly, also generates its own territorial sea, economic zone and continental shelf around it, is taken into account, it can be seen that Turkish jurisdictional waters are unduly small, consequently giving rise to economic and geo-political problems.

Of all the territorial conflicts arising out of the implementation of the law of the sea, that concerning the Selvagens (sometimes referred to the *Savage*) Islands, which belong to Portugal and are located to the north of the Canary Islands, can be cited. According to UNCLOS, rocks that are not fit to support human inhabitation or their own economic life cannot possess either an EEZ or a continental shelf. Portugal claims that the islands are capable of doing so, although Spain does not recognise this since doing so would result in significant territorial gains and losses.

[*] On the basis of Art. 10 of the Treaty, Spain claims that only the property (*sic*) of the town of Gibraltar and its port were ceded, and no sovereignty was surrendered for any jurisdictional area at all.

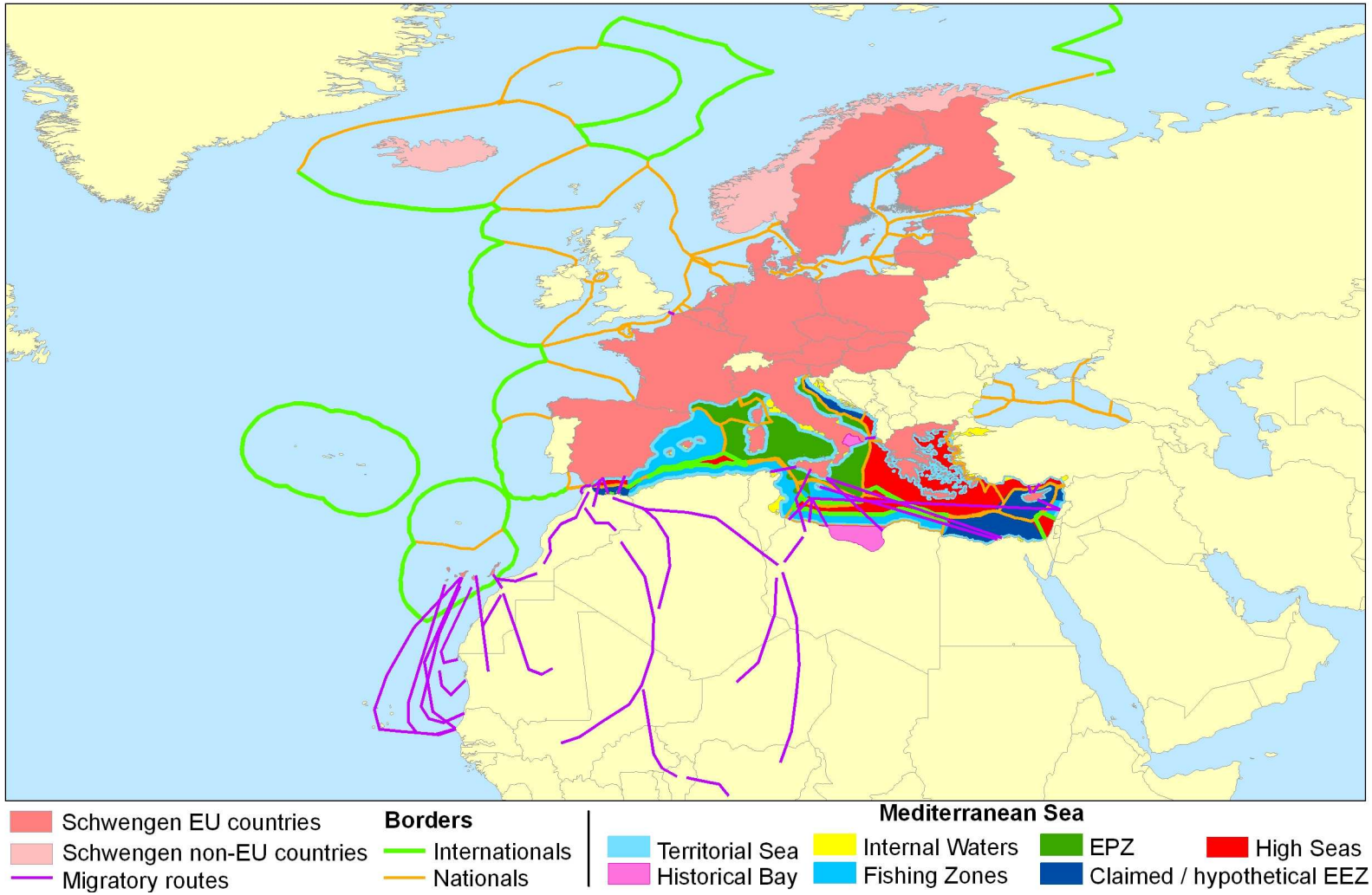

Portuguese proposal:
Delimitation of EEZ
Madeira Islands
Selvagens Islands
Canary Islands
0 100 Km
Cape of Trafalgar
Gibraltar
Perejil Island
Ceuta
Cape of Spartel
Limits Strait of Gibraltar
Gibraltarian waters
Hypothetical delimitation Morocco-Spain
0 10 Km
Spanish proposal:
Delimitation of EEZ
Madeira Islands
Selvagens Islands
Canary Islands
0 100 Km
GR
TR
CY
0 200 Km
Conflictive areas
Internal waters
Territorial Sea
Claimed or hypothetical EEZ

21. MARITIME BOUNDARIES AND MIGRATORY FLOWS

The concept of the maritime boundary which was laid down in the United Nations Convention on the Law of the Sea (1982) was originally markedly economic in nature. Two decades on, maritime boundary are beginning to be perceived as a security issue. During this period of time, and especially in this new century, the boundary issue would seem to have become associated with irregular migratory movements across the seas, generally in small craft. Although universal, in its present incarnation the most publicised precedent was the so-called *boat people* during the Vietnam War. Now a political phenomenon, it has turned into a typical and fundamentally economic migratory movement which has far-reaching effects for security policies. The response within the European Union has been to create an agency called FRONTEX (2005), whose operations (2006) were initially aimed at the surveillance and control of migratory movements from western Africa to the Canary Islands.

Massive arrivals of hand-built boats holding in some cases over a hundred and fifty people put the effectiveness of the maritime border system in doubt. Although jurisdictional areas have grown significantly, with exclusive economic zones being extended to 200 nautical miles and the continental shelf to 350, these limits have, in essence, an economic purpose, whereby a phenomenon that is basically humanitarian in nature gives rise to serious control difficulties in the areas where it exists: along the Mediterranean coast from Gibraltar to Greece, where there are numerous islands and distances are relatively short, where control measures have been more effective but there are great numbers of highly dispersed landing points; or on the new Atlantic routes over large tracts of sea (journeys of 1,000 nautical miles) that require large-scale air and sea control resources. In both cases, the Mediterranean and the Canaries, we are dealing with Europe's southern frontier, which is of great length, stretching from Cyprus to the island of Hierro (Canary Islands) and which is, at the same time, the flank that boundaries on the developing world, the degree of separation from which in terms of income is inversely proportional to physical distance from Europe.

LANDING POINTS FOR CRAFT	
Mediterranean	Sicilian Islands (Italy)
Strait of Gibraltar	Greek islands (Greece)
Malta	Greece (Islands in the Aegean Sea)
Cyprus	Coast of Andalusia (Spain)
Island of Lampedusa (Italy)	**Atlantic**
Island of Pantelleria (Italy)	Canary Islands (Spain)
Island of Linosa (Italy)	Strait of Gibraltar

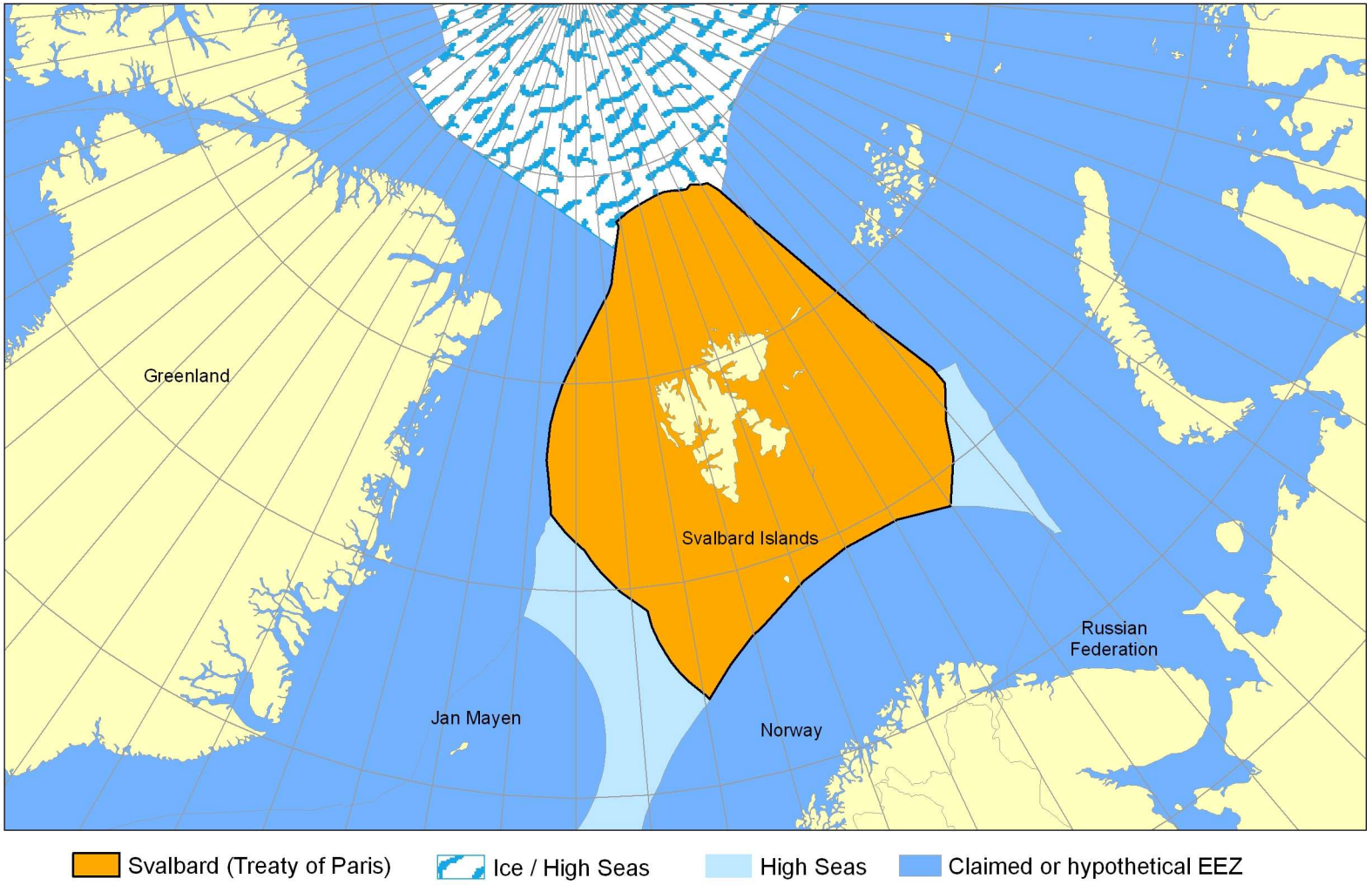

Schwengen EU countries
Schwengen non-EU countries
Migratory routes
Borders
Internationals
Nationals
Mediterranean Sea
Territorial Sea
Historical Bay
Internal Waters
Fishing Zones
EPZ
Claimed / hypothetical EEZ
High Seas

22. THE SVALBARD ISLANDS

The Svalbard islands –an archipelago also known as Spitzberg and made up of nine main islands- is a curious example of how a territorial conflict has updated itself over time: originally, the legal dispute concerned whale hunting rights (the United Kingdom, The Netherlands, Denmark and Norway), but then moved on at the beginning of the 20th century to focus on coal and, later, on the expectation of finding hydrocarbons. Neither must the islands' geo-strategic and military value, particularly for Russia, be forgotten, even though military use is strictly ruled out.

With the passing of time and the evolution of the law of the sea, the archipelago's 62,000 sq. km. (18,000 sq.n.ml.) of surface area have been considerably increased by Norway's unilateral creation of a Fisheries Protection Zone (not recognised by Russia), with disputed waters being extended to 155,000 sq. km. (45,000 sq.n.ml.). Norway, whose sovereignty over the archipelago was recognised in the 1920 Paris Treaty (going on to become part of the country's territory in 1925), applies continental shelf legislation to the waters there, except for those waters that are regulated by the Treaty (four thousand nautical miles of territorial sea). As there are less than four hundred miles between the islands and the continent and the continental shelf is very wide, the islands' fisheries protection zone, the exclusive economic zone generated by continental territory and the continental shelf, form an unbroken whole, even though in the Treaty three of the area's angles border on the waters of the high seas.
Although only nine States signed the Treaty in 1920, by the end of the 20th century forty-one States were party to it (including Spain). States that are signatories to the Treaty are acknowledged to have the same rights as Norwegian citizens as far as engaging in industry, fishing, hunting and other maritime and commercial activities are concerned. The exploitation of mines is, in fact, undertaken jointly by Norway and Russia, and the stable settlements there are made up of Norwegian and Russian communities and a small group of Poles.

STATES PARTY TO THE SVALBARD TREATY			
Afghanistan	Denmark	India	Russia
Albania	Dominican Republic	Italy	Saudi Arabia
Argentina	Estonia	Japan	Spain
Australia	Egypt	Monaco	Sweden
Austria	Finland	The Netherlands	Switzerland
Belgium	France	New Zealand	South Africa
Bulgaria	Germany	Norway	United Kingdom
Canada	Greece	Poland	USA
Chile	Hungary	Portugal	Venezuela
China	Iceland	Romania	


Greenland
Svalbard Islands
Jan Mayen
Norway
Russian Federation
Svalbard (Treaty of Paris)
Ice / High Seas
High Seas
Claimed or hypothetical EEZ

23. COASTAL ZONES

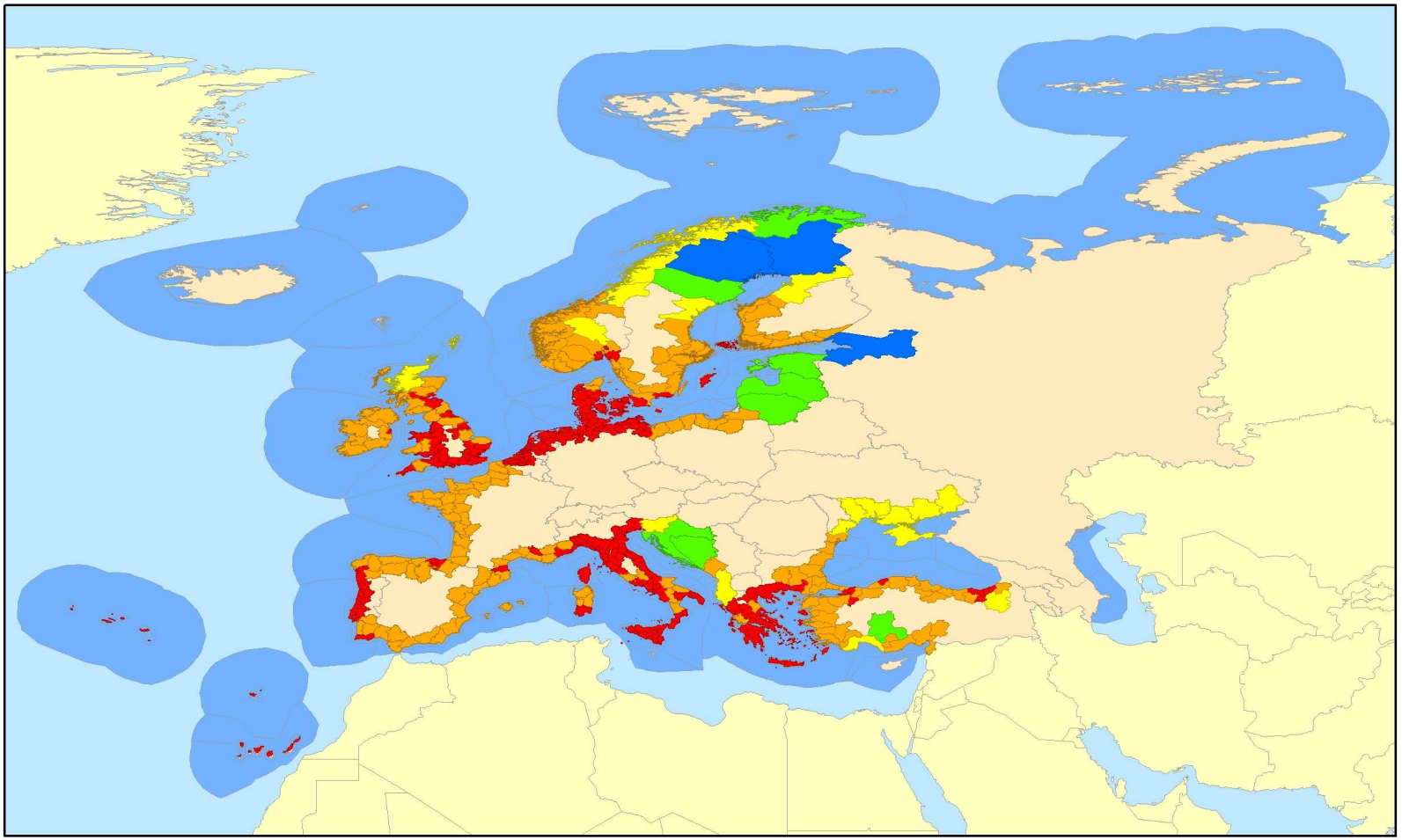
Europe's shores stretch for some 217,000 km.[*] through the six seas and oceans that surround the continent. Nevertheless, coastal areas are more zonal than linear in concept, inasmuch as from an ecological point-of-view they act as an interface where the hydrosphere, the lithosphere and the atmosphere all converge. There is no exact demarcation of this area as the interrelationships between the sea and the land are diffuse and variable. However, the continental shelf (as far as the continental break) could be established as the marine limit and the slopes of the basins that drain directly into coastal waters as the limits on land.

One indicator of the importance that the coastal zone has in Europe is that the 10 km strip that skirts the coastlines of European regional seas has a surface area[*] of 878,740 sq. km. (527,200 sq.ml.) and a great variety of biological features. Whereas in the North Sea and the Baltic Sea, 20-25% of this strip is made up of flat, semi-natural or natural lands, 30% of the Atlantic coast is given over to forests, and rural countryside makes up 20% of the Baltic coastal zone and 10% of the Mediterranean. But the most notable changes can be seen in the increase of densely-populated urban areas: the densest urban areas can be found in the North Sea, where the most highly industrialised areas are concentrated, although urban areas are also beginning to predominate in some parts of the Mediterranean due to sharply increased tourist activity and the growth of the second home.

In general terms, coastal zones have a strategic importance for most of Europe's coastal States: as well as being the focus for a large share of the population (see 25. Settlements in Coastal Zones) they are an essential source of food and raw materials, they connect with the most extensive transport system and carry out a vital function as recreation and leisure areas, and these functions will be boosted even further by the restructuring of the majority of the traditional maritime sectors.

	EUROPEAN REGIONAL SEAS				
	Baltic Sea	**North Sea**	**Atlantic Ocean**	**Mediterranean Sea**	**Black Sea**
Coastal States	Sweden, Finland, Estonia, Lithuania, Latvia, Poland, Germany, Denmark	United Kingdom, Norway, Denmark, Germany, The Netherlands, Belgium, Sweden	Ireland, United Kingdom, France, Spain, Portugal	Spain, France, Italy, Slovenia, Malta, Croatia, Bosnia-Herzegovina, Serbia and Montenegro, Albania, Greece, Cyprus, Turkey	Bulgaria, Romania, Turkey
Coastline (km)	75,298	35,696	46,306	51,471	8,603
Surface area (sq km) of the strip 0–100 km	226,220	127,581	194,197	265,999	64,743

[*] EEA Report No. 6, 2006, p. 20


Surface area (sq km) of coastal provinces (NUTS 3)
< 5000
5000 <20000
20000 < 40000
40000 < 65000
65000 < 100000

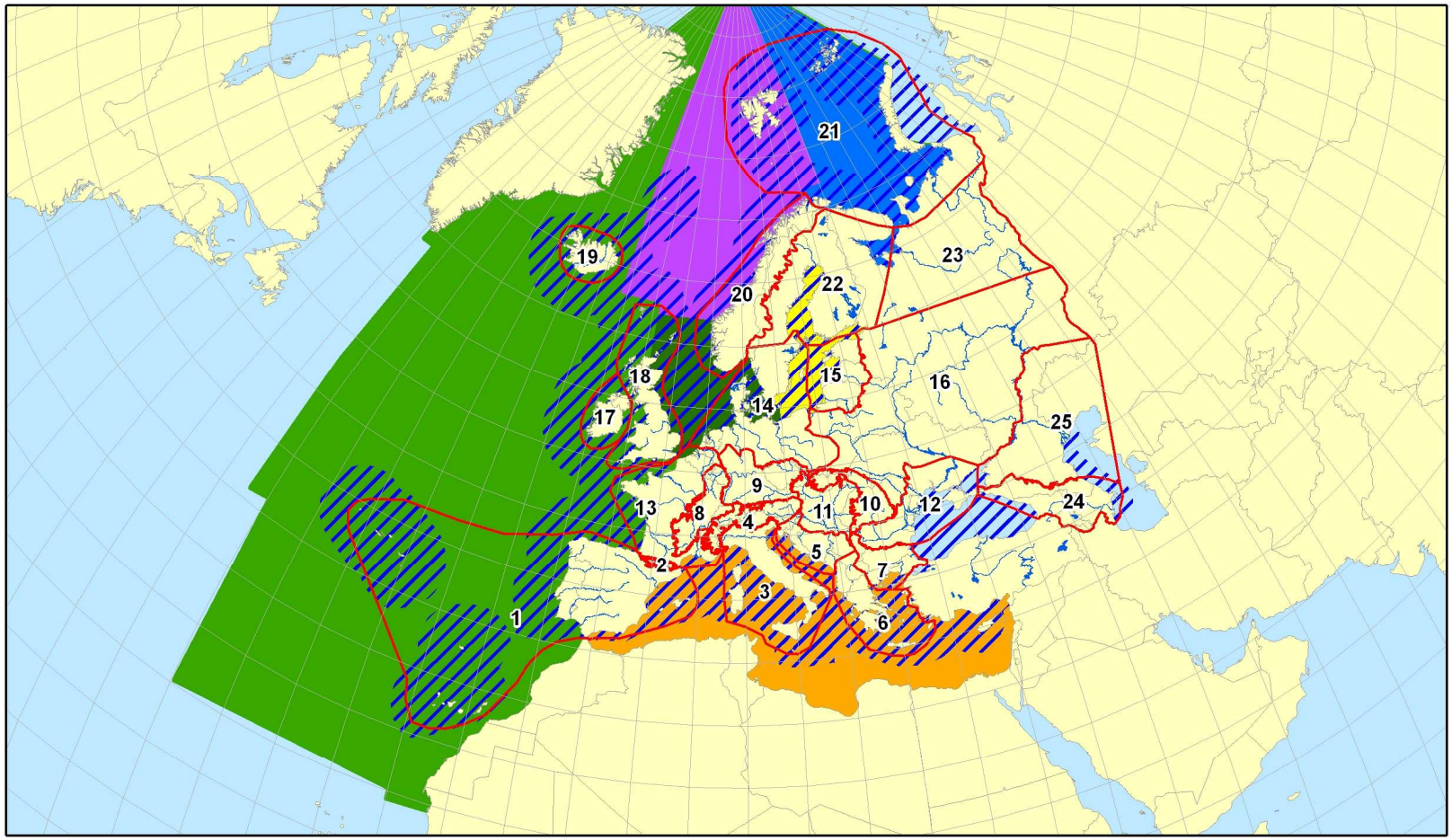
24. THE HYDROGRAPHIC NETWORK AND COASTAL WATERS

Even though they were already part of the wide range of marine ecology concepts, “coastal” waters were only defined in very recent times when the Water Framework Directive (WFD), which had been adopted by the European Parliament and Council in 2000, came into effect. The name had generally been used in a vague way to denote the waters near the coastline and, more accurately, waters overlying the continental shelf. In coastal management practice, it is an area that has been used in determinations relating to the issue of the quality of bathing water and, in more recent times, the planning of more intensive usages of coastal areas.

There was a significant change when coastal-marine management recognised the importance that continental waters have in the make-up and quality of marine waters, and, as a result, in aspects such as productivity and the state of the environment. The greater scope of this vision results in the need to manage the land-sea interface in a more integrated way. The first step towards this is the definition of these waters and their linking to the hydrographic network. The idea of fresh water or continental waters connecting with marine waters is now commonplace at specialised forums as is its geographical representation, but the lack of connection between the administrative organisations and bodies that govern both systems is a major obstacle yet to be overcome.

WFD ECOREGIONS

1. Ibero-Macaronesian region
2. Pyrenees
3. Italy, Corsica and Malta
4. Alps
5. Dinaric western Balkan
6. Hellenic western Balkan
7. Eastern Balkan
8. Western highlands
9. Central highlands
10. The Carpathians
11. Hungarian lowlands
12. Pontic province
13. Western plains
14. Central plains
15. Baltic province
16. Eastern plains
17. Ireland and Northem Ireland
18. Great Britain
19. Iceland
20. Borealic uplands
21. Tundra
22. Fenno-Scandian shield
23. Taiga
24. The Caucasus
25. Caspic depression

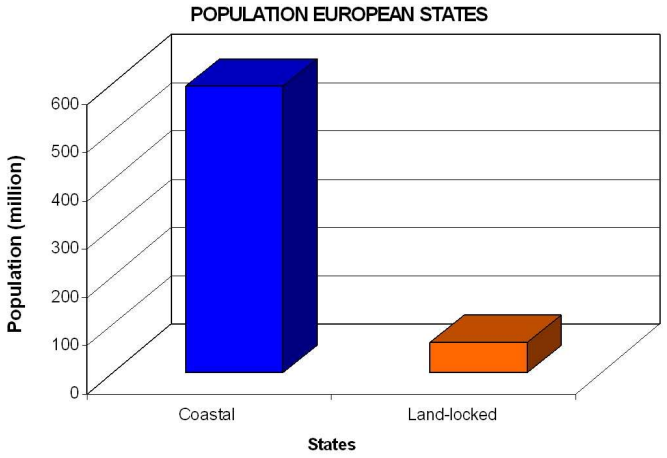

21
19
23
20
22
18
15
16
14
17
25
9
13
8
11
10
12
24
4
5
2
7
3
6
1
Ecoregions of Transitional and Coastal Waters
Claimed or Hypothetical EEZ
Hydrological network
WFD ecoregions
Baltic Sea
Norwegian Sea
Atlantic Sea
Mediterranean Sea
North Sea
Barents Sea

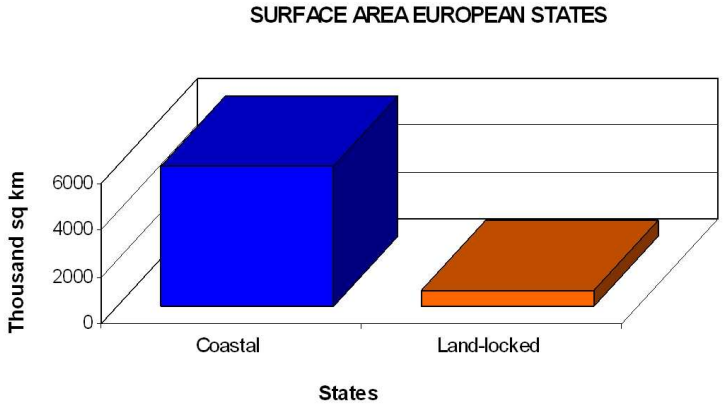
25. SETTLEMENTS IN COASTAL ZONES

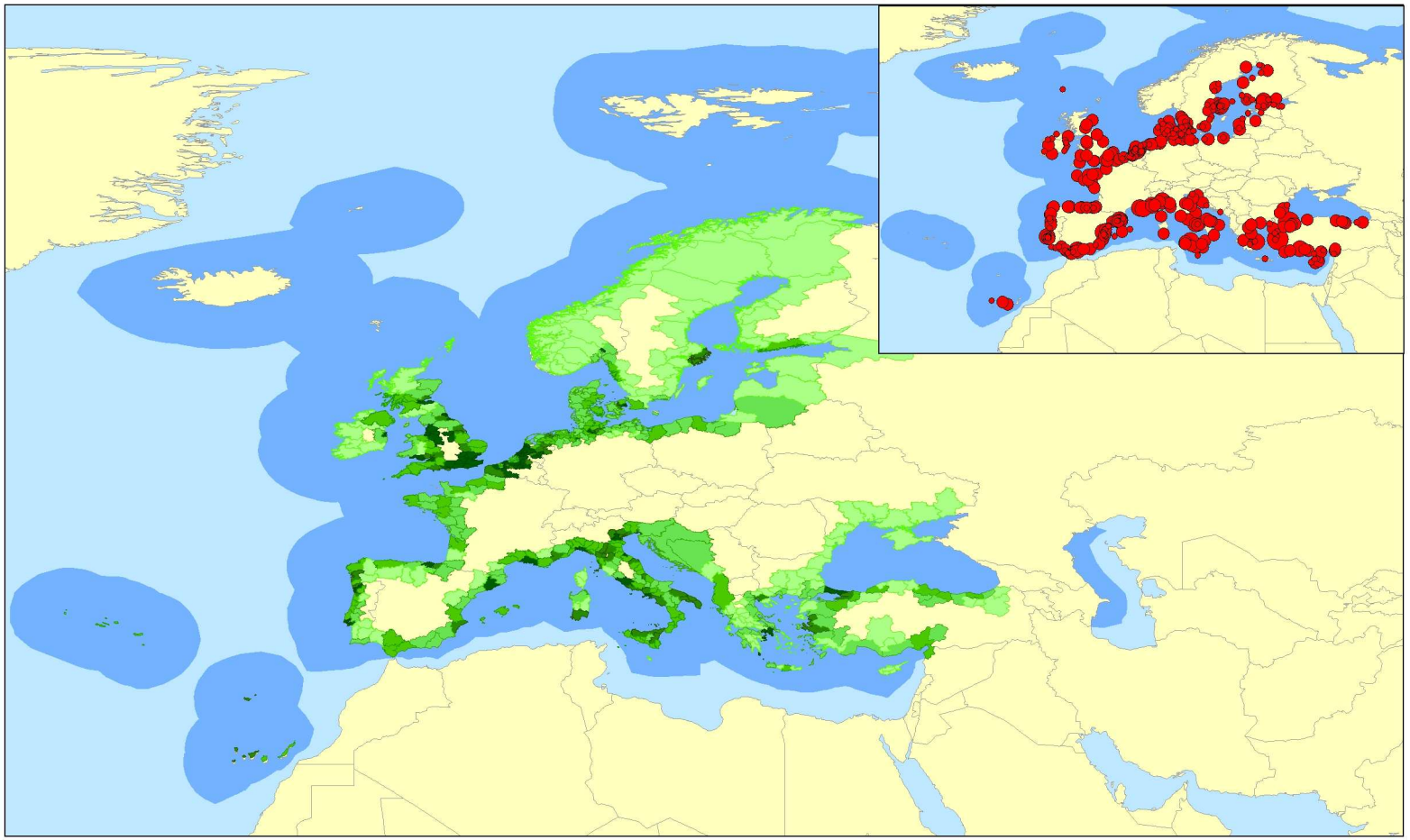
The morphological features of the European continent, like a huge peninsular tacked onto Eurasia, explain why its population and settlement structure is markedly coastal in character, apart from the universal tendency for population to concentrate along the seashores. As a result, almost half the population of the European Union live within 50 km. (30 miles) of the sea, and most of the large cities are on the coast.

Some indicators of the percentage of the population settled in coastal municipalities (in some cases, over 50%, as in Sweden, Ireland and Denmark, for example), and the ratio between built-up land and distance to the sea (as much as 20% under 5 km (3 ml.) from the coastline), bear witness to the predominance of a pattern of population concentration and settlements in a relatively narrow strip of land. However, after the enlargement of 2004, there is a shift in the European Union towards continental Europe with a greater number of non-coastal States, which now total 20% of all member-States.

The populating of coastal areas is basically linked to three types of settlement: *urban and industrial*, in some cases associated with large maritime industrial complexes; although these generally predominate in northern countries, they can also be found in southern Europe (the Bay of Cadiz, the Bay of Algeciras); the areas of *intensive tourism* that are characteristic of the Mediterranean Sea (see 40. Tourism and Coastal Zones); and *rural and fishing* areas where both activities might be combined in a part-time fishing and agricultural model. Although not in great numbers, these might also be found in industrialised countries, and in high latitudes they are sometimes associated with remote and isolated areas**.**






Population
< 50000
50000 < 500000
500000 < 2000000
2000000 < 9000000
Population density (inhab./sq km)
< 50
50 < 100
100 < 200
200 < 350
350 <6000

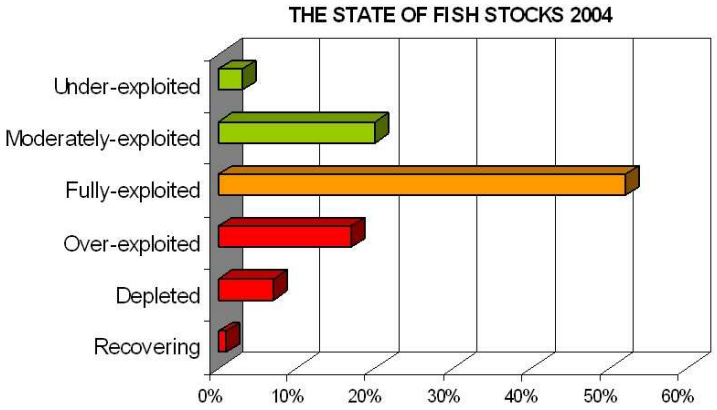
III. USES AND TYPES OF EXPLOITATION

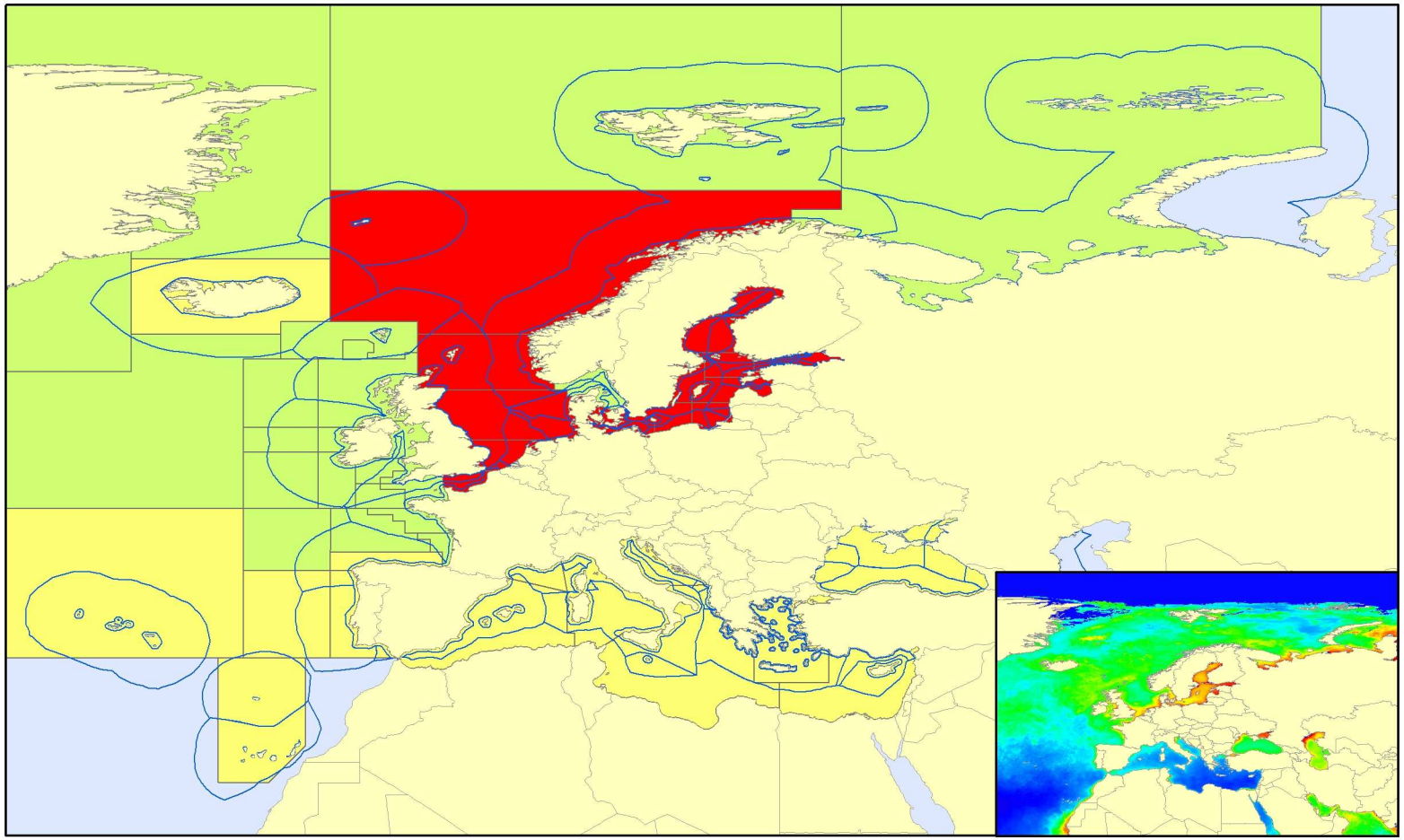
The occupation and exploitation of the seas and oceans has always been closely linked to Man's expansion around the Earth. The current scenario is characterised firstly by the intensification of some of the more traditional uses, such as fishing and transport, to such an extent that the former might be on the point of collapse and the latter finds itself in a state of traffic congestion; and secondly, by the appearance of new opportunities provided by scientific and technological development. Both these dynamics are present in maritime Europe and its projections throughout the oceans at a time in history when traditional activities have been radically transformed by industrialisation and new resources are emerging: thanks to *blue biotechnology*, legal rules and regulations instituted only a few years ago no longer appear to be abreast of the times.

26. MARINE PRODUCTIVITY

The north Atlantic has some very favourable oceanographic features for providing a high level of marine productivity, particularly the very broad continental shelf, which make this region one of leading areas of fishing interest in the world. Although fishing can be traced back to ancient times, the alarm-bells only recently started ringing for fish stocks, despite proof that certain species were already scarce in Europe in the mid-14th century.

The dramatic reduction in the marine biomass between 1900 and 1990 is, nevertheless, a phenomenon that has occurred hand-in-hand with the development of industrial fishing, which has grown at a greater rate than other industries. The intensity of fisheries activity, especially from the nineteen fifties onwards, and the progressive over-fishing of a variety of species, is simplifying the food-chain, with a fall of between 0.05 to 0.10 food levels every decade. In the north Atlantic the biomass fell by two-thirds during the second half of the 20th century, and in the central-eastern Atlantic, to which the overcapacity of European and Asian fishing fleets is being exported, it has dropped to under a quarter.
Compared to the Atlantic Ocean, the remaining European seas only have secondary interest for fishing; the Mediterranean and the Black Sea are not hugely productive, and their special characteristics as highly confined oceans with water renewal rates of 80 and 140 years respectively result in high levels of pollution, despite which the nutrient content has risen due to the increase in population. However, the general decline in fisheries resources together with a greater demand for fish has increased the relative importance of these fishing areas.





Fishing Quotas (metric tonnes)

70000 < 500000 | 500000 < 1000000 | 1000000 <

Marine Productivity (2004)

Hihg : 243

Low : 0

27. ENDANGERED SPECIES

The majority of European fisheries resources are overfished. Studies show that there is a connection between the loss of biodiversity and the collapse of the fisheries that could take place in the next fifty years unless strict measures are adopted.

In Europe there are instances of species that have managed to recover after being placed under management plans. One example of this is the herring, the fishery for which had to be closed down in the second half of the nineteen seventies. The fishing effort to which the majority of species with commercial value are subjected and the decline of ecosystems is leading to a number of fisheries being subjected to recovery plans, and the partial suspension of their fishing in order to prevent them from disappearing altogether has not been rejected.

The species under the greatest threat in the North Sea, west of Scotland and in the Kattegat, is the cod, and it is feared there might be a repeat of the grave crisis that occurred in Newfoundland at the beginning of the nineteen nineties. Apart from cod, the European Commission has determined recovery plans for other species such as the northern hake and also the anchovy, which is basically fished in the Bay of Biscay. The anchovy and the cod are two of the species for which it would be necessary to decree a partial suspension of fishing.

In the Mediterranean Sea, the position of the tuna is a cause for concern. The oldest fishing grounds have been exhausted, particularly the waters off the eastern coast of Spain and the Balearic Islands, where catches have fallen by 15% in ten years.

Of the cetaceans, the monk seal is the species under the greatest threat in the Mediterranean, and is even one of the ten most threatened in the world. In general terms, a number of marine mammal species (including dolphins) are being taken as by-catches, which can result in high mortality rates. A moratorium on whale hunting has been in effect since 1986, but as it not binding, whale hunting persists, on occasion justified as part of fishing community tradition, the so-called *Grind* in the Faeroe Islands.

34% OF SEA BIRDS THAT MIGRATE BETWEEN AFRICA AND EURASIA ARE CONSIDERED TO BE IN A STATE OF CONSERVATION THAT GIVES RISE TO CONCERN BECAUSE OF THE FALL IN THEIR STOCKS OR THEIR SMALL SIZE

OVERFISHED AND THREATENED SPECIES IN EUROPEAN WATERS

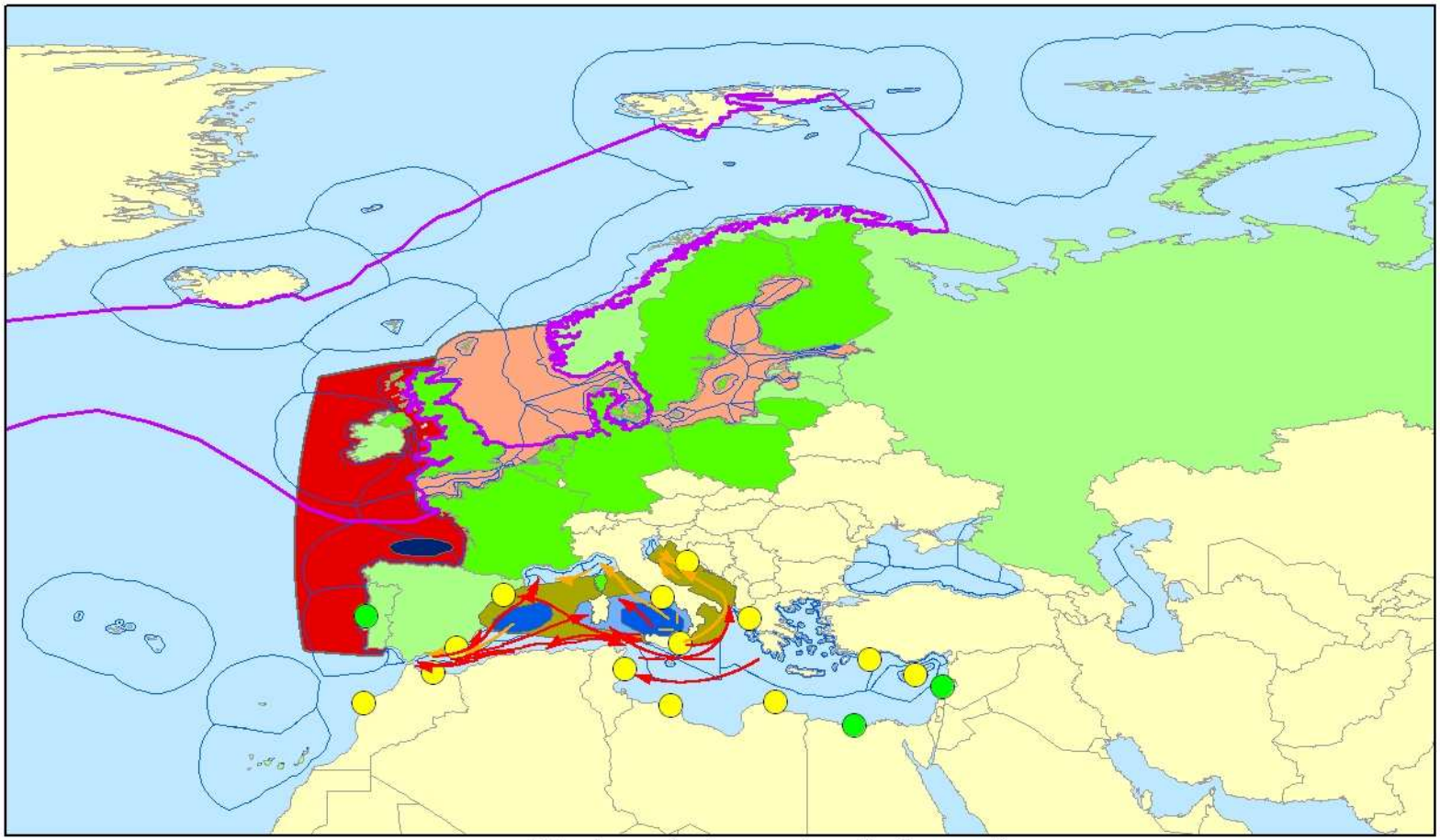
Anchovy (*Engraulis encrasicolus*)

Cod (*Gadus morhua*)

Shark

Monk seal (*Lophius sp*.)

Blue whiting (*Micromesistius poutassou*)


Tuna
Presence of roe and larvae
Breeding
Currently
Planned
Movement
Adults
Jueveniles
Rate of Reproduction
Medium
Maximum
Agreements on the Conservation of Small Cetaceans
Border States
Signatore States
Agreements zones
Area covered
Distribution of dolphin (Lage norhynchus albirostris)
Presence of anchovy in Atlantic

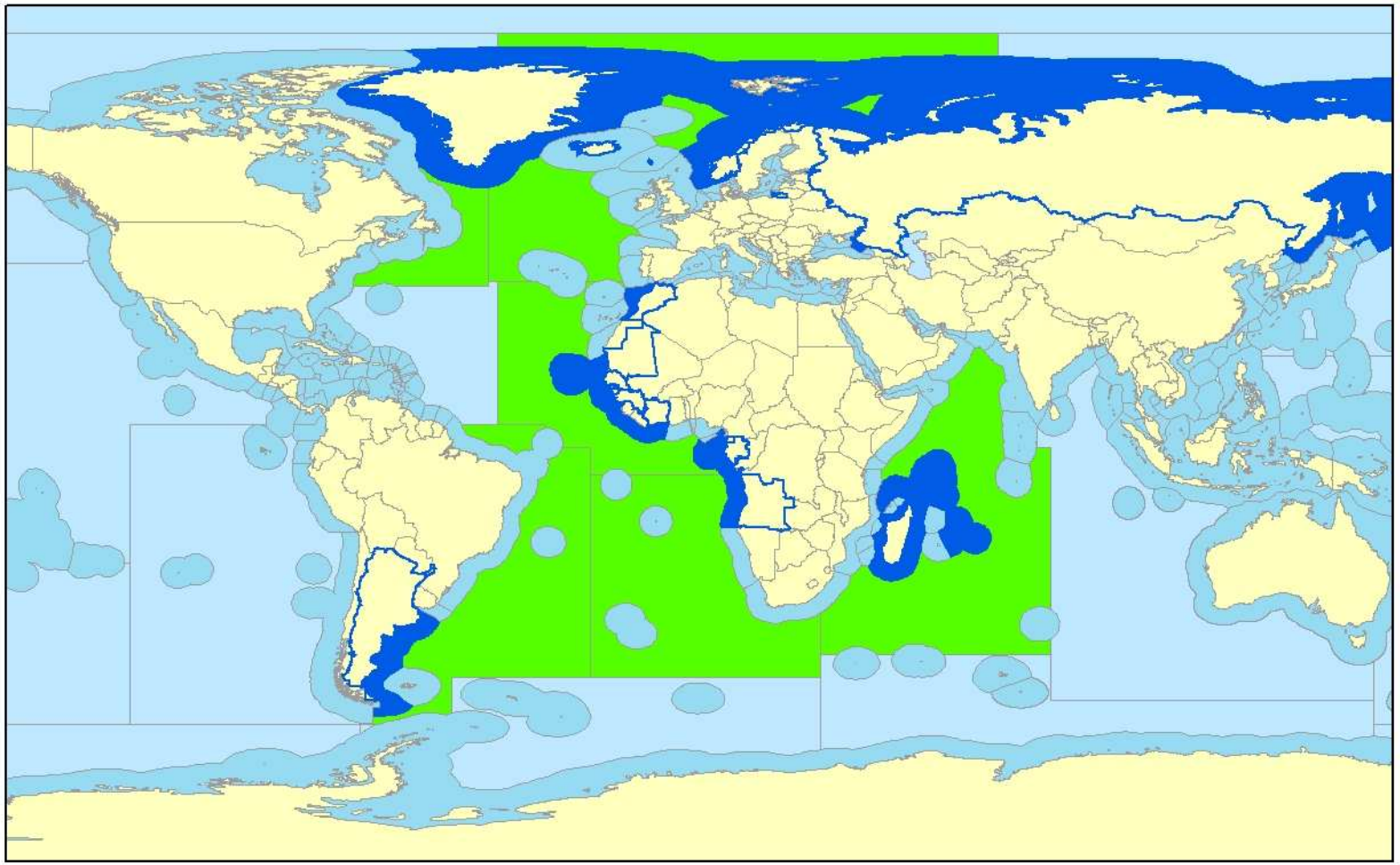
28. THE EUROPEAN FISHING AREA

Fishing in European countries is not limited to nearby waters –the north-eastern Atlantic- which are amongst the most productive in the world. European fleets also fish along the coasts of Africa and South America, as well as in other oceans, such as the Indian and the Arctic. Whilst this used to be the norm in the past, in the present time it can only be done as a result of complex diplomatic efforts.

One of the main features of the industrial fishing pioneered by European countries has been its global scale. Fishers from various Atlantic regions (Basques, Galicians and Bretons) systematically explored and exploited valuable fishing grounds, such as Newfoundland and the Canary-Saharan bank. Nevertheless, the exhaustion of resources due to the excessive fishing effort, the creation of exclusive economic zones by developing countries, and the emergence of new fishing powers in Asia, were the prelude to the withdrawal of the high sea and deep sea fishing fleets (in the case of Spain) and a fall in the world ranking by volume of catches of countries such as Norway and Denmark, which were superceded by emerging fishing countries (China, Indonesia and Thailand).

Following the example set by the Common Agricultural Policy (CAP), the then European Economic Community created the Common Fisheries Policy (CFP) with the intention of establishing the so-called *Blue-Europe* -waters freely accessible by any of the member-States- although this aim has not been entirely successfully achieved. However, by signing agreements with third countries with provisions for economic compensation, the Community institutions have managed to gain access for member-States' fleets to both new fishing grounds and to the grounds that used to be part of the high seas frequented by European fleets. Agreements of this type made with third countries, generally developing countries, have been criticised as a way of *exporting the fishing effort* now that the Union's own resources have been considerably depleted.

EUROPEAN UNION BILATERAL AGREEMENTS (2006)	
Angola	Madagascar
Cape Verde	Morocco
Comoros	Mauritius
Ivory Coast	Mauritania
Republic of Gabon	Mozambique
Gambia	Santo Tome and Principe
Greenland	Senegal
Republic of Guinea	Seychelles
Guinea-Bissau	Faeroe Islands
Equatorial Guinea	Iceland
Kiribati	Norway


Third country fishing zones
FAO fishing zones

29. FISHERIES PRODUCTION

With regard to European fisheries production (1990-2004), the volume of catches has been high in non-EU countries such as Norway and Iceland, and also in member countries such as Denmark, Spain, France, and the United Kingdom. Together, these last four countries account for about 60% of European Union fisheries production.

In some cases, the volume of catches is the result of the greater productivity of the Atlantic's waters compared to the Mediterranean's, although in others, total amounts are substantially greater when catches taken in third countries' waters are added to those taken in European waters (see 28. The European Fishing Area).

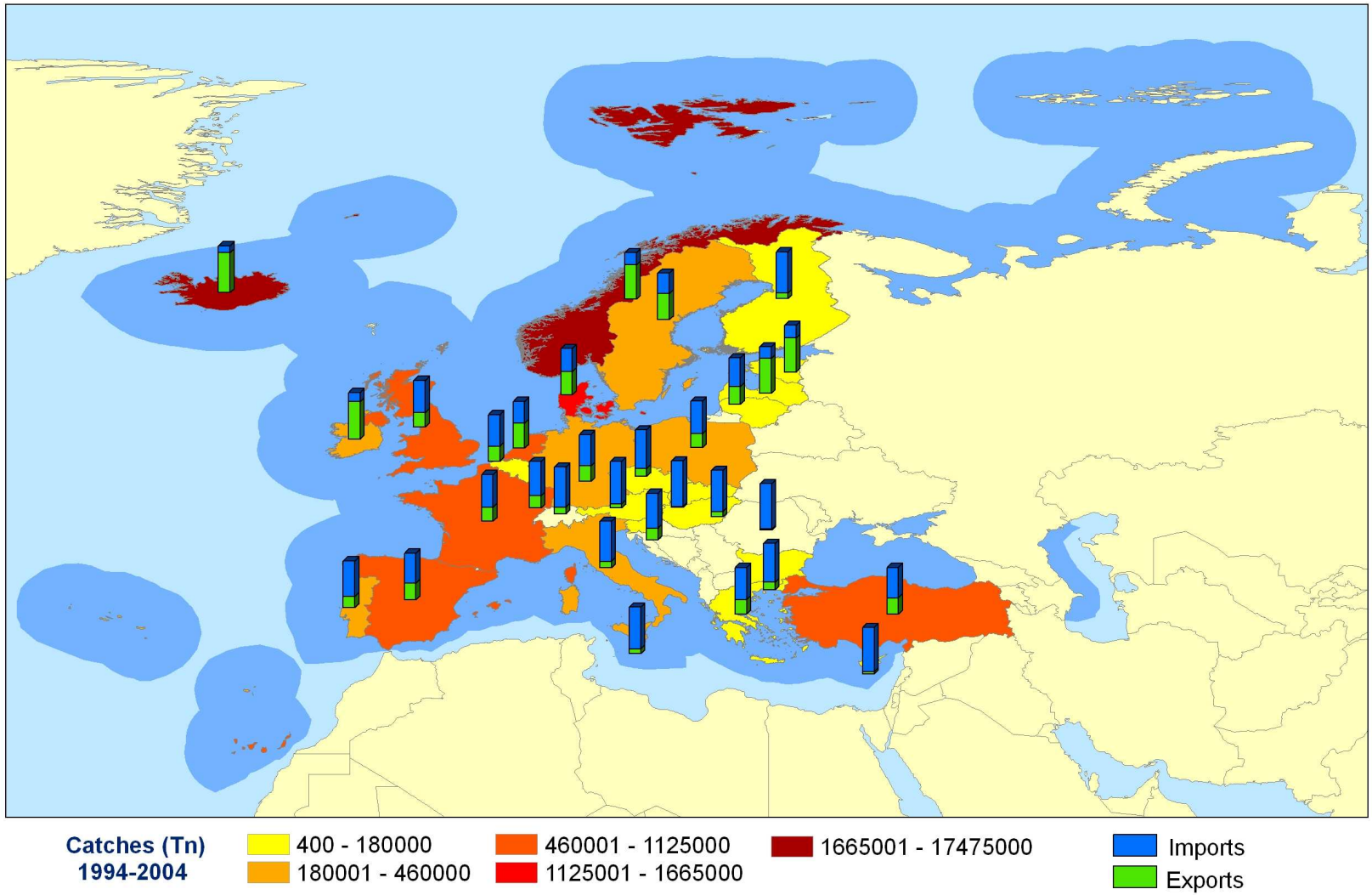
As in other areas of the EU economy, there is also a "two-speed" Blue Europe, with one group of countries having an acceptable level of catches, and a larger number of countries which, for whatever reason (the low productivity of their own waters, small fishing fleet, or the small area the fleet operates in, etc.), play a more minor role in European fishing, at least in terms of quantity.

With regard to the export of fish products, it is precisely the countries with the largest volume of catches that stand out. This is the case of Norway, Iceland and Denmark, where the fish trade is based on the sale abroad of prepared products (fish meal, for example) and the import of raw materials for their processing industries. By contrast, imports clearly predominate in other countries, including not only countries with large catches (Spain, France and the United Kingdom) and high *per capita* consumption, but also others where, as far as can be determined, catches are very small (Cyprus is the most extreme case in this respect.

PER CAPITA CONSUMPTION OF FISH PRODUCTS IN A SELECTION OF EUROPEAN COUNTRIES (2001)

Country	Consumption (kg/per capita/year)
Portugal	56.5
Spain	40.5
France	29.9
Italy	24.6
The Netherlands	23.8
Denmark	23.2
United Kingdom	21.1
Average EU	22.7
Turkey	7.4
Romania	3.1
Bulgaria	2.8
Iceland	91.3
Norway	52.2

Vid. European Communities (2006): All the information on the CFP. Basic information on the common fisheries policy. 2006 edition, Luxemburg, Office for Official Publications of the European Communities

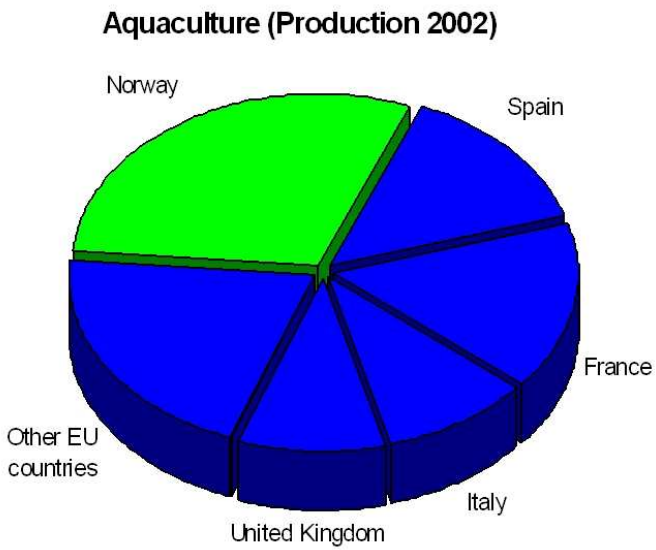

Catches (Tn)
1994-2004
400 - 180000
180001 - 460000
460001 - 1125000
1125001 - 1665000
1665001 - 17475000
Imports
Exports

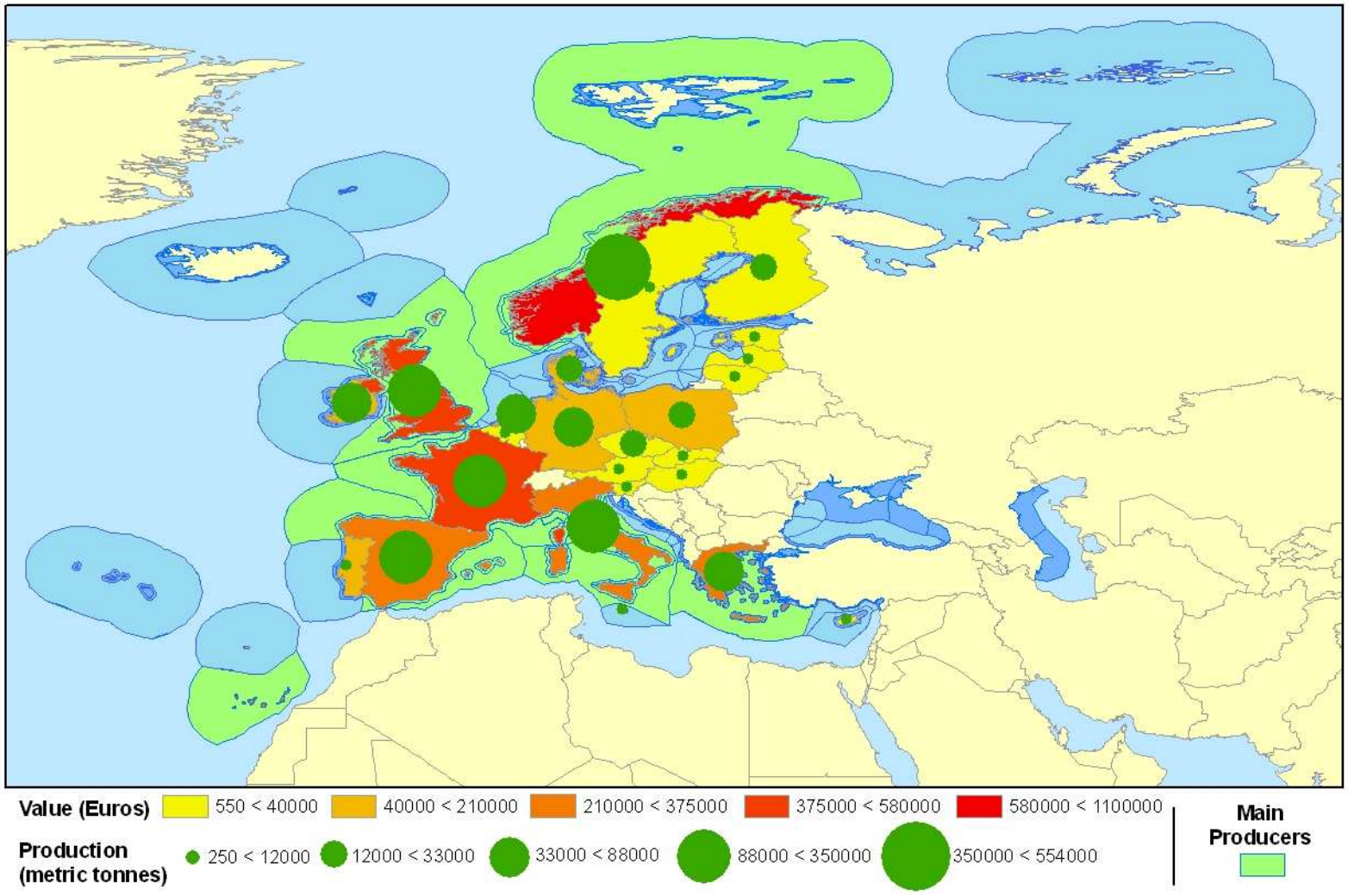
30. AQUACULTURE

In the European Union, aquaculture is regarded as one of the maritime sectors with the greatest potential for growth together with marine biotechnology, renewable energies and underwater telecommunications. In general terms, there has been a dynamic worldwide annual growth of sea farming of around 10% since the mid-nineteen eighties, whereas traditional fishing has barely grown by 1.5%. This means that in approximately twenty years' time aquaculture will supply almost half the fish consumed in the world. At the present time, the EU sea farming sector is responsible for 19% of all high market value fisheries production. While this dynamism is promising for the increasing demand for fish products, it is also a threat to the marine environment, including fish stocks, due to the impact of the farming methods and the pressure that is put on traditionally caught fish, a considerable number of which are used as food for farmed fish.

For Europe as a whole, including continental waters, aquaculture production is similarly growing in importance, with Norway at the head with a third of production in the European Economic Area. The employment that is being generated (over 60,000 full-time equivalent jobs in the EU with an annual growth rate of 3%) bears witness to the rate of expansion.

Aquaculture is an activity that is geographically concentrated in a limited number of areas where the natural conditions are favourable. Technical demands also limit its ability to become a valid alternative to the crisis in traditional fisheries. The range of businesses in aquaculture includes both a high number of small- and medium-size companies and large international groups. Production ranges from traditional, consolidated products (mussels, oysters, trout and carp) to the breeding of new species based on advanced technologies (sea bass, gilthead bream and turbot), with further species of seafood, shellfish and sea fish still in the experimental stage**.**




Value (Euros)
550 < 40000
40000 < 210000
210000 < 375000
375000 < 580000
580000 < 1100000
Production (metric tonnes)
250 < 12000
12000 < 33000
33000 < 88000
88000 < 350000
350000 < 554000
Main Producers

31. FISHERIES-DEPENDENT AREAS

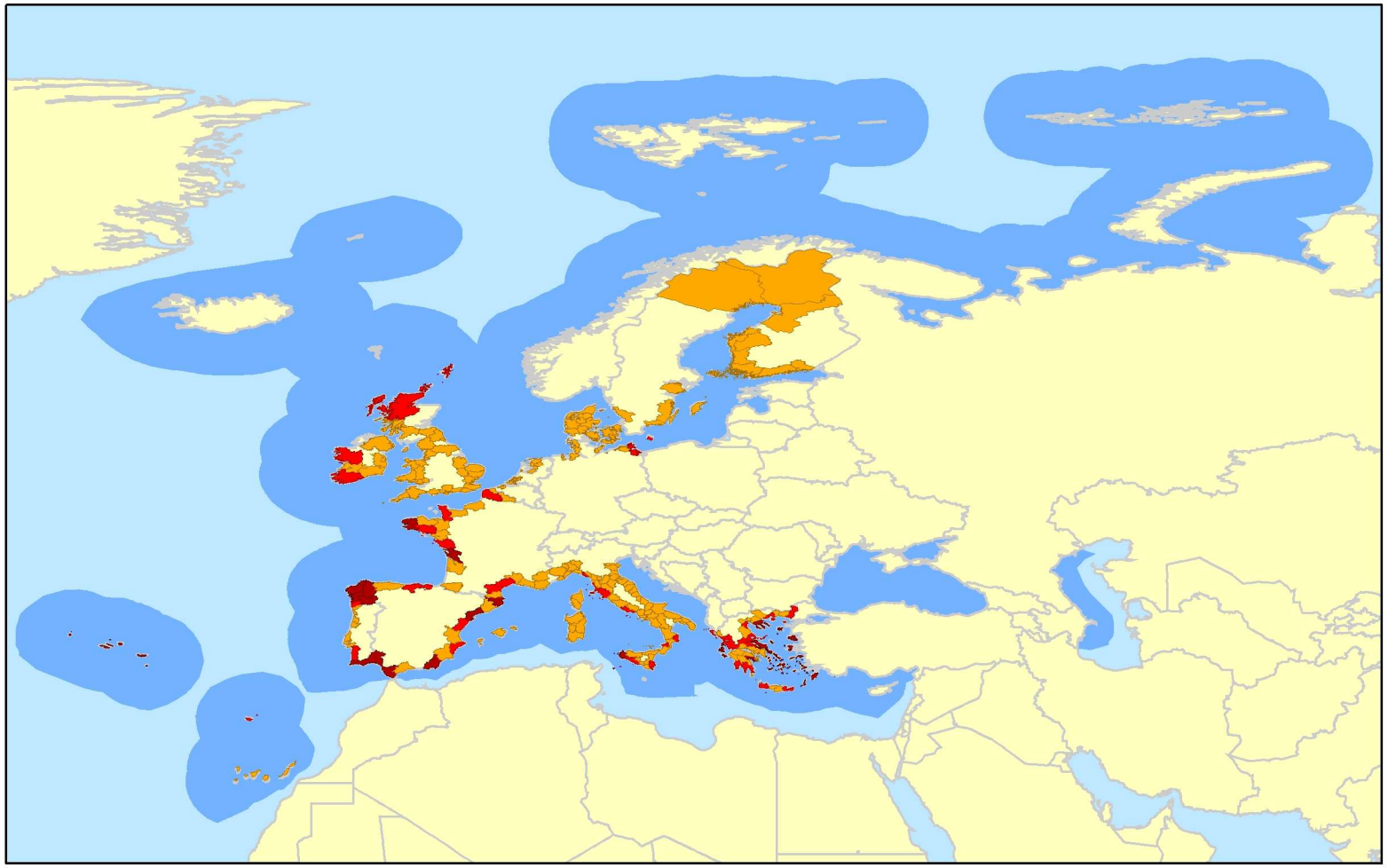
The issue of regions or areas dependent on fishing is closely linked to the fisheries conversion process that is taking place in Europe as a result of the crisis in fish resources which is forcing a reduction in the fishing effort and, in short, in numbers of vessels and crew members. There is, therefore, a marked social side to the European fisheries policy, as it has an effect on employment and the breaking up of collectives which, in many cases, have deep roots in a given area and close ties with a specific activity; in short, they have their own life systems and cultural norms which the biological crisis and the modernisation of the fisheries sector itself –fishers, ancillary industries, and processing industries- have driven to the very brink of survival.

The European Union has identified some 100 areas of varied size which are dependent on fishing. At the beginning of the present century, the total number of people employed in fisheries was estimated to be over half a million, 22% of whom were women – with particularly high numbers in the processing industry- and gross profits were put at around 20,000 million euros.

The most fisheries-dependent areas in Europe are, at the same time, usually those that provide the least opportunity for employment in alternative sectors and where the primary sector has a greater relative importance in economic activity as a whole. The geographical pattern of fisheries dependence therefore tends to match that of economic development: a northern Europe, where there are sometimes heavily dependent remote and isolated communities set against the backdrop of a nation with only a residual primary sector, compared to a southern Europe where fishing, in combination with other activities (tourism, agriculture), still provides a high number of jobs, set against a (regional/national) backdrop of scant economic diversity and low income.

CLASSIFICATION OF FISHERIES-DEPENDENT REGIONS (NUTS-2) ACCORDING TO IMPORTANCE OF FISHERIES EMPLOYMENT (2002-2004)

Employment in fisheries sector (% of total employment)	Number of people employed in the fisheries sector			
	>10000	7500-10000	5000-7500	2500-5000
>2.0%	Galicia (Spain)	Algarve (Portugal)	NE Scotland (United Kingdom)	Sterea Ellada, Voreio Aigaio, Notio Aigaio (Greece)
1.0-2.0%	Bretagne (France) Latvia	Poitou-Charent	Pomorskie (Poland),Estonia,Lower Normandy (France)	Highlands and Islands; East Riding, North Lincoln (United Kingdom),Border, Midlands, West (Ireland),Cantabria (Spain),Bremen (Germany),Peloponnisos, An. Maked., Thraki (Greece)
0.5-1.0%	Denmark, Andalusia (Spain),Sicily (Italy)		Puglia (Italy),Basque Country (Spain),Kentriki Makedonia (Greece)	Zach. Pormorskie (Poland),Canary Islands, Murcia (Spain),Lang-Roussillon (France),Sardinia, Calabria (Italy)


Degree of dependence according to employment
Low
Medium
High

32. PORTS AND SEA ROUTES: EUROPE IN THE GLOBAL SYSTEM

General cargo sea transport is now dominated by the container and economic globalisation has led to the creation of a worldwide network of traffic flows in which ports form a hierarchy of nodes with a first rank of large distribution ports (*hubs*) from which traffic is redistributed on a regional basis (*feeders*). The tendency throughout the world has been towards traffic being progressively concentrated in an increasingly smaller number of booming ports in a process that raises doubts about the viability of this type of growth.

In Europe, five ports assume the role of distributors in the worldwide network: Algeciras (Spain), Gioia Tauro (Italy), Rotterdam (The Netherlands), Bremerhaven (Germany) and Felixstowe (United Kingdom). Geography and the huge operators of "worldwide" shipping lines –who set up their own terminals- are the factors that determine the direction of regional flows in the context of economic globalisation: flows of raw materials between the places where they are extracted to more economically active areas –which have included, in recent decades, the two demographic giants of China and India- and manufacturers, whose production centres have been subject to an intense delocalization process.

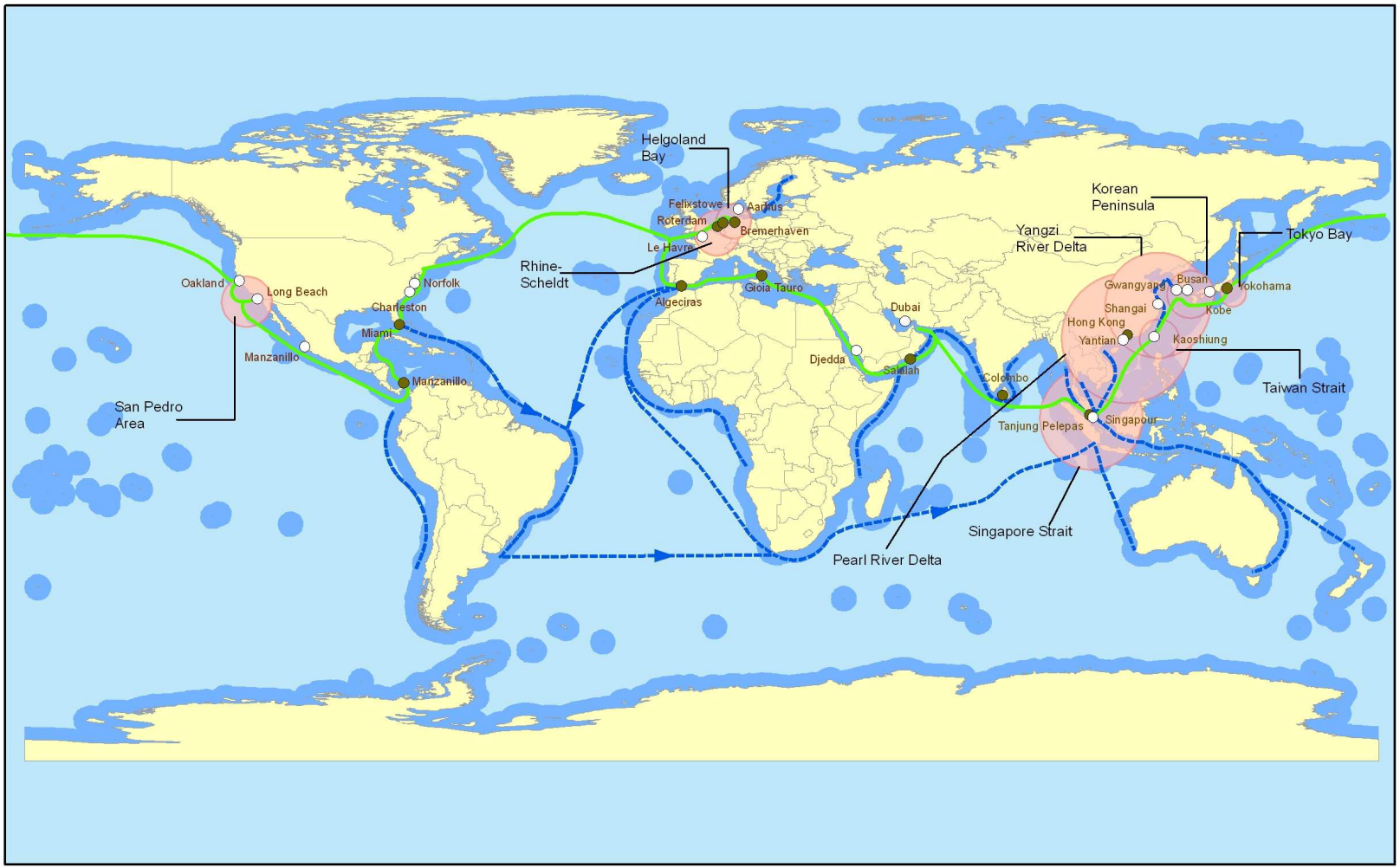
While world-system ports in the north of Europe obey economic logic, as they serve the hinterlands of the great European industrial centres, the two Mediterranean ports (Algeciras and Gioia Tauro) are located in not very economically developed peripheral areas, and these ports and terminals have no geographical links with economically-active surrounding areas proportionate to the amount of traffic that they record: they are basically regional distribution centres in an intermodal transport system serving the south of Europe.

MAIN CONTAINER TRANSPORT OPERATING COMPANIES (2006)

Company	TEU[a] Capacity	Market Share %	Number of vessels
A.P. Moller-Maersk group	1665272	18.2	549
Mediterranean Shipping Company S.A.	865890	8.6	299
CMA CGM	507954	5.6	256
Hapag-Lloyd	412344	4.5	140
Evergreen Marine Corporation	477911	5.2	153
China Shipping Container Lines	346493	3.8	111
American President Lines	331437	3.6	99
Hanjin-Senator	328794	3.6	145
COSCO	322326	3.5	118
NYK Line	302213	3.3	105

European companies

a. Twenty-foot equivalent containers


Helgoland Bay
Felixstowe
Aarhus
Roterdam
Bremerhaven
Le Havre
Rhine-Scheldt
Algeciras
Gioia Tauro
Oakland
Long Beach
Norfolk
Charleston
Miami
Manzanillo
Manzanillo
San Pedro Area
Dubai
Djedda
Salalah
Colombo
Tanjung Pelepas
Singapour
Pearl River Delta
Singapore Strait
Korean Peninsula
Yangzi River Delta
Tokyo Bay
Gwangyang
Busan
Yokohama
Shangai
Kobe
Hong Kong
Yantian
Kaoshiung
Taiwan Strait
Principal ports served
Transhipment hubs
Containers handlings
Shipping lanes
North-South lanes
East-West lanes

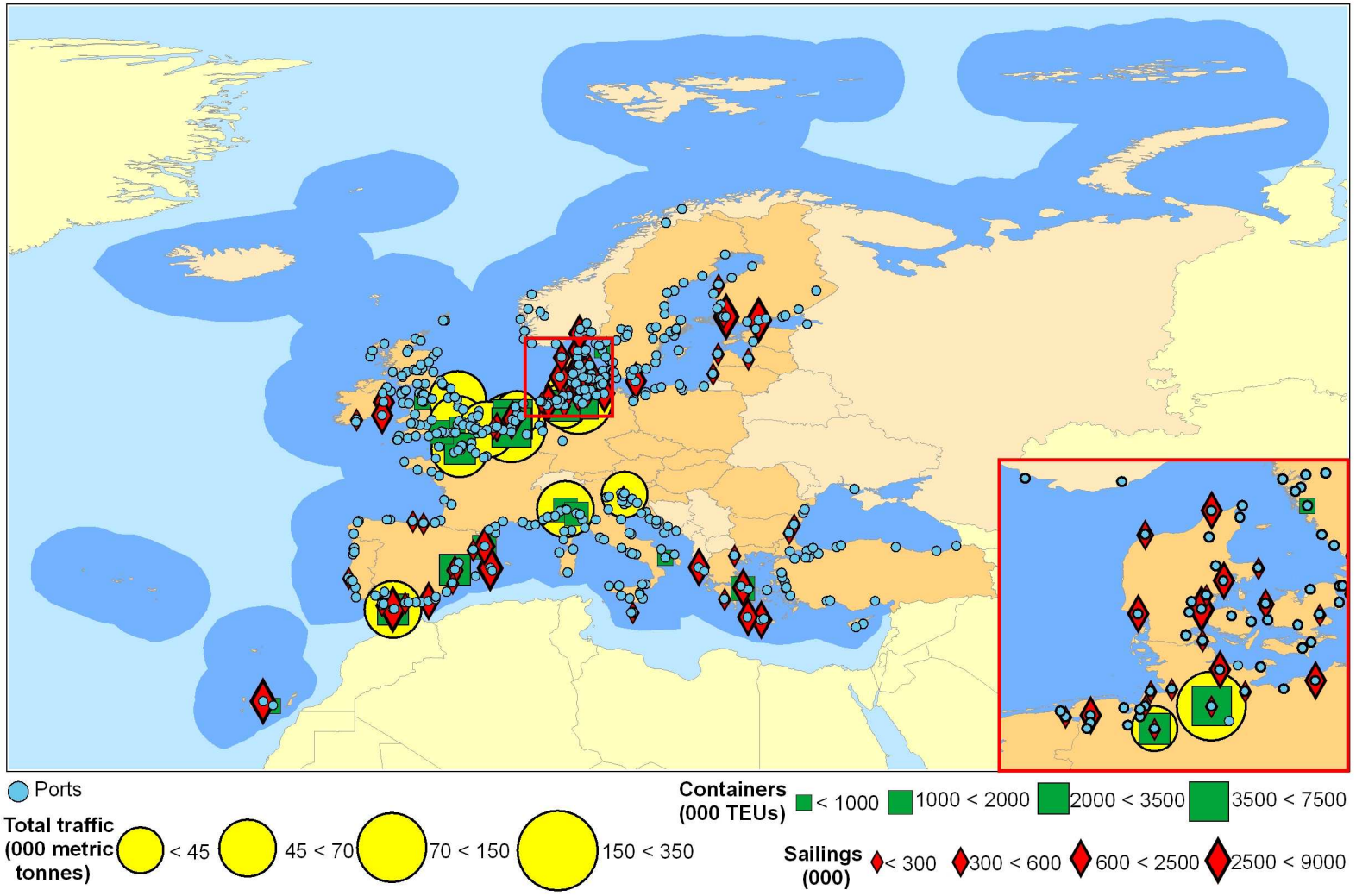
33. THE PORT SYSTEM

Europe has a large network of about 1,200 ports ranging from small local area facilities to mega-complexes (Antwerp 33,250 acres; Rotterdam 26,000 acres) that serve vast areas on a continental scale. The volume of cargo that passes through European ports is around 3,500 million metric tonnes and 350 million passengers per year. Ninety percent of external and 40% of internal trade is carried by sea. If measured by metric tonne-kilometre, sea transport is practically on a par with road transport.

The geography of Europe (the European Union has 68,000 km/41,000 miles of coastline; a continent surrounded by four seas and two oceans; island States; large maritime areas and huge estuaries that provide access to the continent), and an export-based economy, are the reasons for the size of a port system which sees three European ports amongst the ten largest in the world (Rotterdam, Antwerp and Hamburg), making the North Sea one of the focuses of world trade. Eleven of Europe's fifteen largest ports are located in the area; the remaining four in the ranking are Marseille, Genoa, Trieste and Algeciras in the Mediterranean.

Various perspectives exist depending on the type of cargo and the chosen political-administrative unit. There is a greater balance between northern and southern Europe for container traffic: seven Mediteranean ports, including three in Spain (Algeciras, Valencia and Barcelona), are in the top fifteen, but the United Kingdom comes first by State and total volume of all traffic (bulk liquids, bulk solids and general cargo), which means countries on the Atlantic coast predominate.

RANKING OF EUROPEAN PORTS			
Total volume of traffic	**Container traffic**	**Passenger traffic**	**Total for all traffic/all ports**
Rotterdam	Rotterdam	Messina-Milazzo	United Kingdom
Antwerp	Hamburg	Piraeus	The Netherlands
Marseille	Antwerp	Naples	Italy
Hamburg	Bremerhaven	Olbia-Golfo Aranci	France
Bergen	Gioia Tauro	Piombino	Spain
Le Havre	Felixstowe	Genoa	Germany
Grimsby & Immingham	Valencia	Oslo	Belgium
London	Le Havre	Civitavecchia	Norway
Tees & Hartlepool	Algeciras	Livorno	Sweden
Amsterdam	Genoa	Marseilles	Greece
Genoa	Southampton	Palermo	Finland
Dunkirk	Barcelone	Ancona	Denmark
Trieste	London	Bari	Portugal
Algeciras	Marseille	Brindisi	Ireland
Forth	La Spezia	Venice	Poland

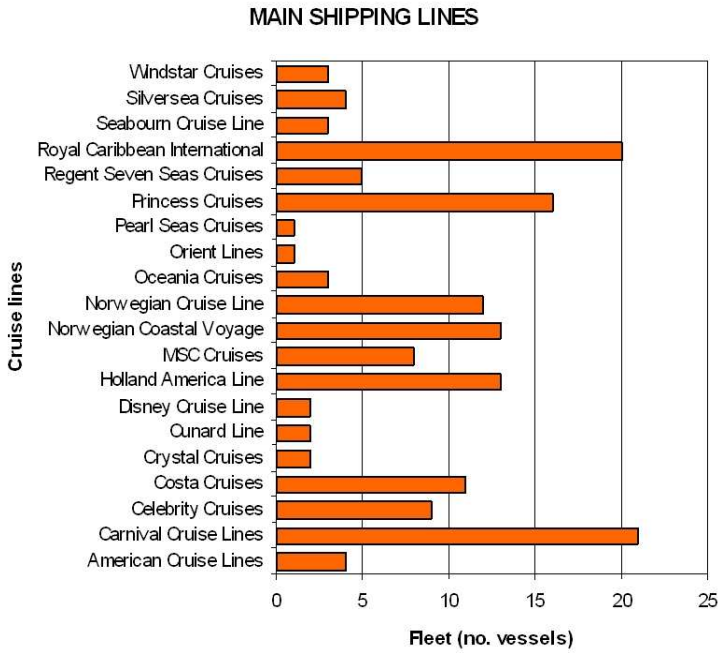

Ports
Total traffic (000 metric tonnes)
< 45
45 < 70
70 < 150
150 < 350
Containers (000 TEUs)
< 1000
1000 < 2000
2000 < 3500
3500 < 7500
Sailings (000)
< 300
300 < 600
600 < 2500
2500 < 9000

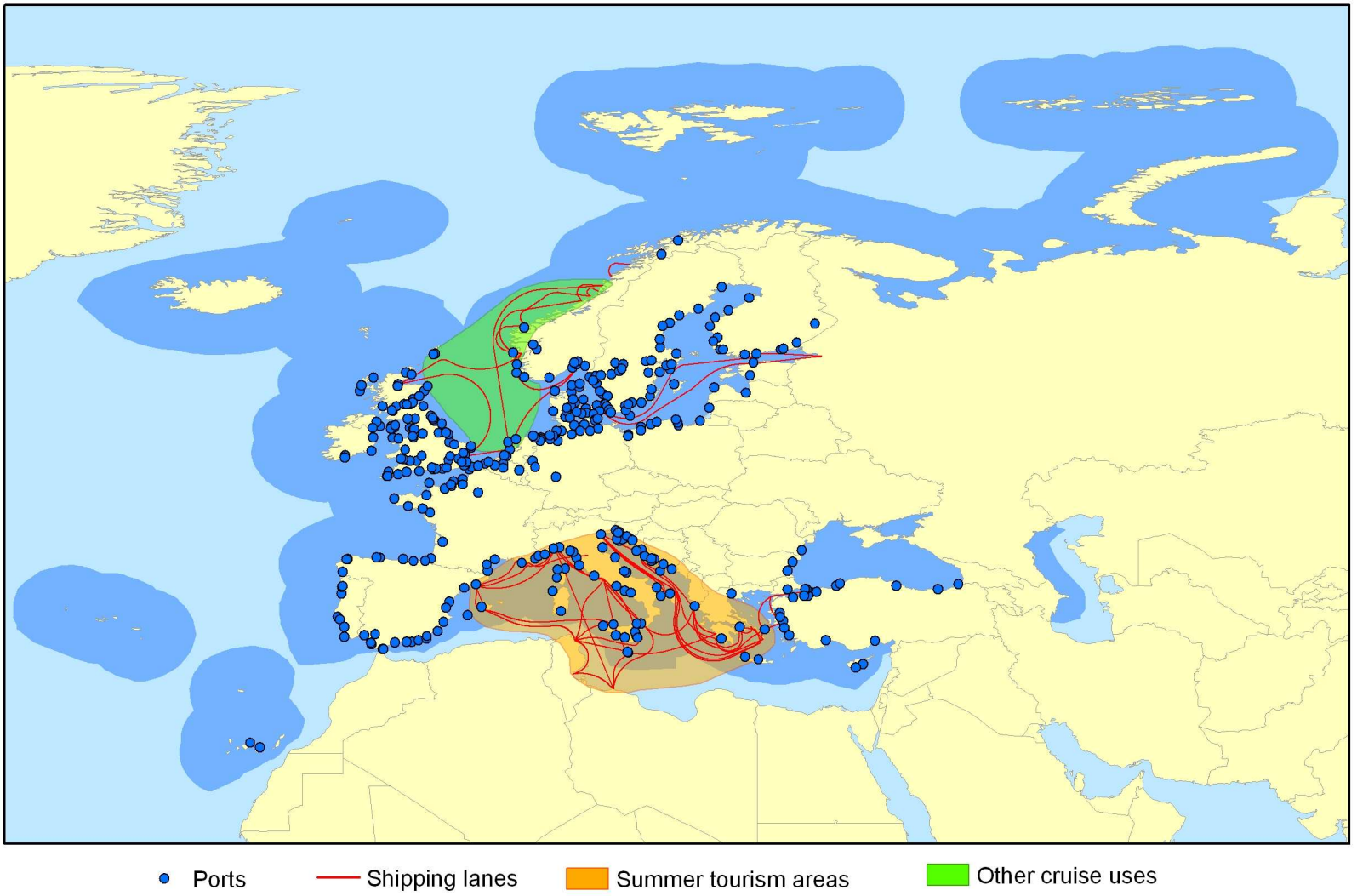
34. CRUISE LINES: SHIPPING LANES AND PORTS

A romantic image and a feeling of exclusiveness have been cultivated of cruises since they originated at the beginning of the 20th century and they have now become an object of mass consumption as a tourist product. This explains an annual growth rate of over 10% in Europe since the start of the new millennium, and the continent has almost a 20% share of world business in the cruise industry. Cruises move over 8.5 million passengers through European ports. Two point eight million Europeans take a cruise for their holiday, with two million of these doing so in continental waters. Short- and medium-term forecasts are very optimistic and up to four million Europeans may do this type of tourism in the coming decade. Cruises contribute to the dynamism of coastal areas and associated sectors, such as ship building, as almost all vessels of this type are built in European ship yards. At the same time, they also provide a similar amount of employment in port terminals –at the main ports of call there are usually specialised facilities for vessels of this type- and tourist services in general.

Europe is one of the most highly sought-after destinations, especially the Mediterranean Sea, where the history, culture and climate all have great appeal.

Apart from southern Europe, cruises also take in the coasts of the Atlantic arc as far as northern Norway, a traditional destination during the summer solstice, the North Sea and the Baltic. Most large European cities, as well as some in North Africa, can be accessed from the ports of call, as a result of which ports such as Cadiz, Civitavecchia, Haifa, Alexandria, Le Havre, Piraeus, Southampton, Livorno and Zeebrugge are all included on these vessels' shipping lanes.




Ports
Shipping lanes
Summer tourism areas
Other cruise uses

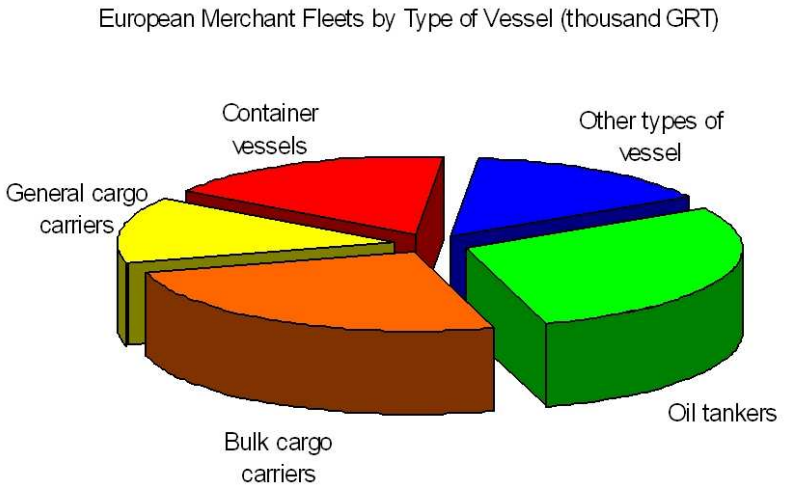
35. THE FLEET AND FLAGGING OUT

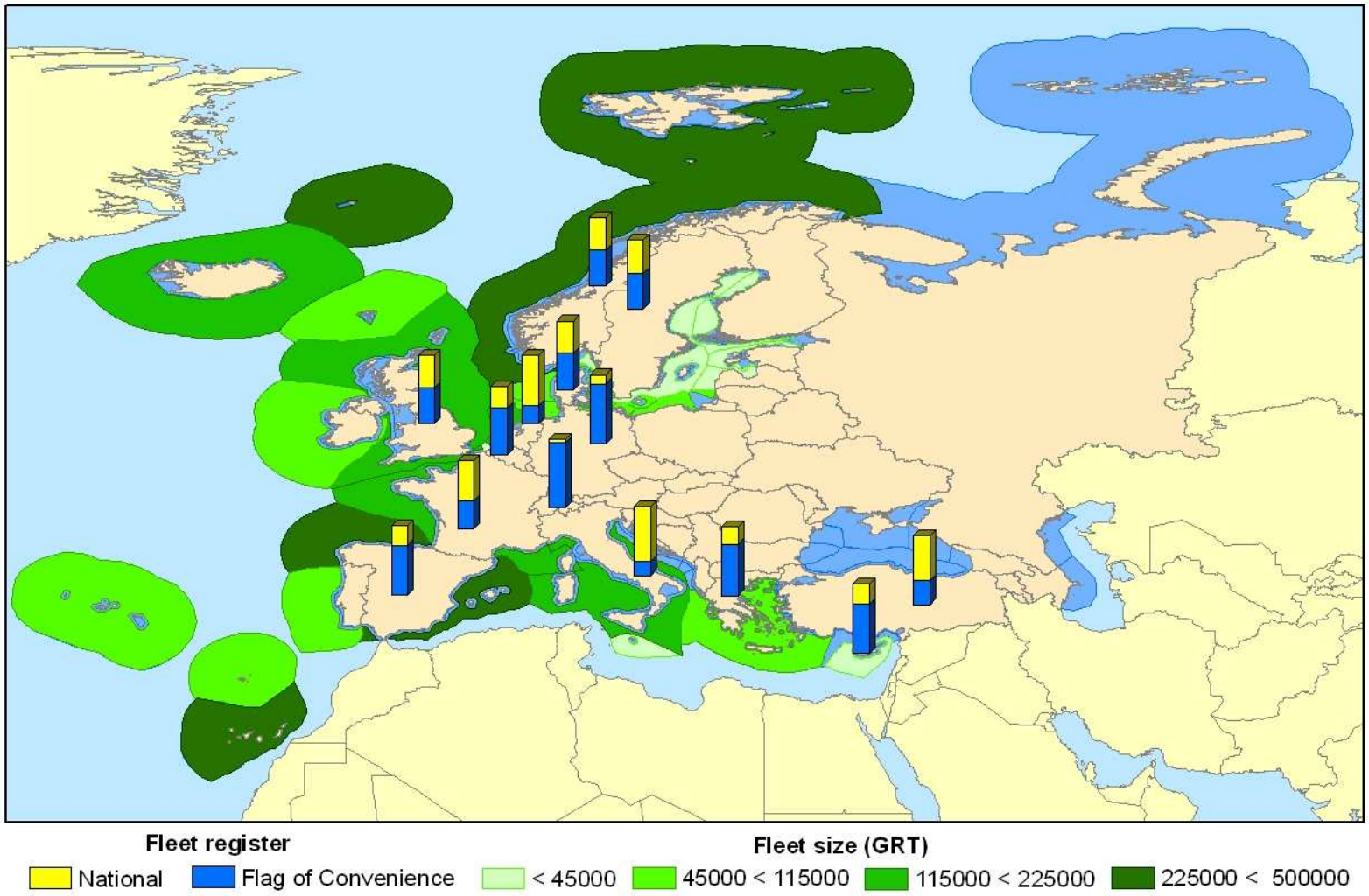
The world merchant fleet, 70% of which is made up of oil tankers and bulk cargo vessels, has a dead weight of 850 million metric tonnes. Over 45% of this is shared amongst the 16 European countries in the world top 35 (including Turkey, but excluding the Russian Federation) with Greece, Norway, Germany, the United Kingdom and Denmark being the European leaders. Despite this, a major part of these fleets are registered under flags of other nationalities, known as "open registers" or "flags of convenience".

In such an internationalised sector as sea transport, this is an old practice, but one which, in recent years, has become compounded by economic globalisation. The result has been a sharp decline in the so-called domestic fleets, which now fly the flag not only of countries such as Panama, Liberia, and the Bahamas, but also Malta, Cyprus and Luxemburg, which are European Union member-countries. With Gibraltar, these last three comprise the European open register group. Greek, Norwegian, German and British nationals can be found at the top of the list of effective owners of fleets registered in some of these places.

To counteract the effects of registering in open registers, the so-called "international registers" have been created. There are eight of these at the current time, five of which are European or are territories that have links with European States, such as the Isle of Man, and the French and Dutch West Indies. In cases such as these, there is usually a high registration rate for nationals, or nationals who have privileged relationships with the registering territory (over 30%) or it is practically made up of nationals in its entirety.

With its new maritime policy, the European Union hopes to improve the maritime security issues and work regime associated with these registers, as the laws of the registering State apply. These are the issues which are the real *raison d'être* for this system, which is in effect because of the need to be competitive on a global scale.




Fleet register
National
Flag of Convenience
Fleet size (GRT)
< 45000
45000 < 115000
115000 < 225000
225000 < 500000

36. UNDERSEA COMMUNICATIONS CABLES

The expansion of British trade in the mid 19th century led to an acute demand for communication with the various international markets; at the current time, the information society and the demand for broadband internet have had a similar effect on communication by cable and by underwater cable for intercontinental communications. Transoceanic communications have existed since 1866 and today all the continents except Antarctica are connected by underwater cables. The first cable was laid between the United Kingdom and France in 1851, and only transmitted telegraphically; in 1956 the first cable was laid for telephone communication, with 36 lines. In the 1960s, radio frequency signals were transmitted and in the 1980s optic fibre cables began to be manufactured that allowed digital signals to be conveyed for telephone, internet and private data use.

Underwater optic fibre cables are a vital part of the global economy, the backbone of information infrastructure, with networks that are continually being expanded. Global financing, and also military communication, mean that underwater cables are one of the types of infrastructure with the greatest strategic value. From the introduction of optic fibre until the beginning of the twenty-first century, the share of information (voice and data) flowing through underwater devices has increased by 80%. The number of underwater cables that are laid is increasing in pace with demand, particularly for data on the internet. This demand cannot be met by satellite communications, as a result of which the underwater cable system is becoming an integral part of daily communication.

As it connects the two great world economies, the greatest explosion of broadband and optic fibre can be found in the transatlantic area. The English Channel, the westernmost part of industrialised Europe, is the connection point for a large number of cables, and this is even more acute due to the United Kingdom's insularity and the fact that it has one of the most developed economies.

EACH OPTIC FIBRE PAIR IN A CABLE HAS THE CAPACITY TO TRANSPORT DIGITISED INFORMATION (INCLUDING IMAGES) EQUIVALENT TO 150,000,000 SIMULTANEOUS TELEPHONE CALL

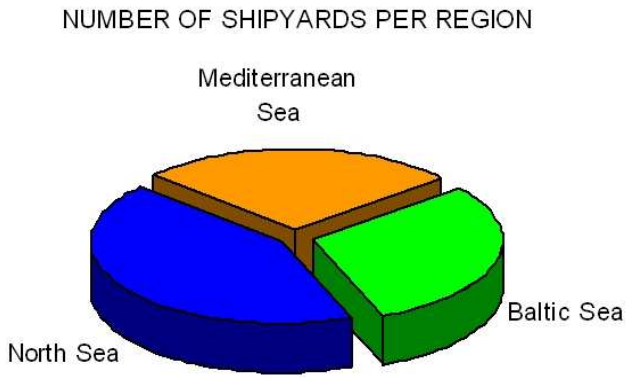
OVER 95% OF INTERNATIONAL VOICE AND DATA TRAFFIC TRAVELS VIA UNDERSEA CABLES, WHEREAS SATELLITE COMMUNICATION REPRESENTS LESS THAN 5%

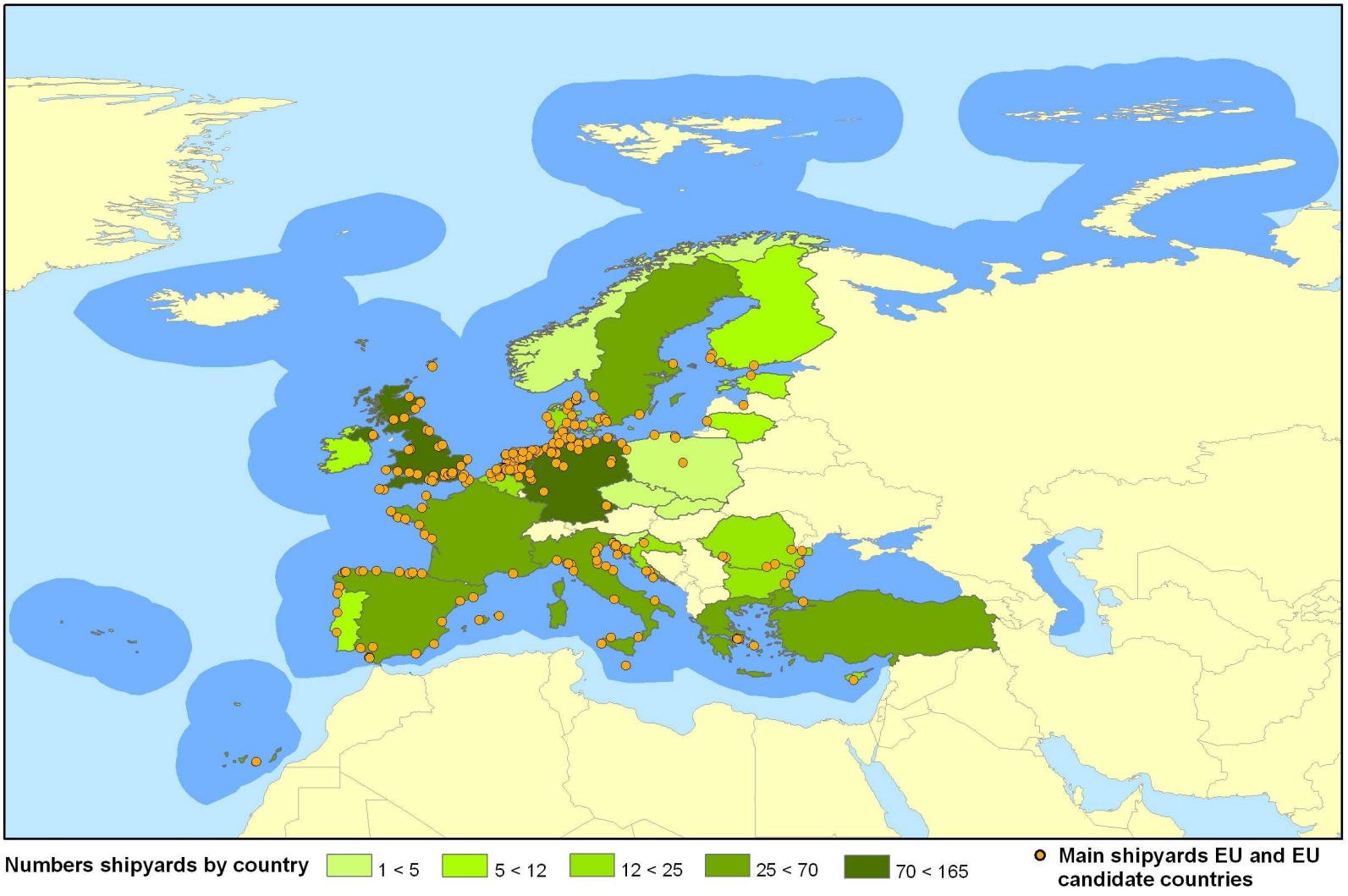
Undersea communication cables — Existing — Planned

37. THE SHIP BUILDING INDUSTRY

In relative terms, the ship building industry, along with all the other sectors that combine to make up the sum total of sea transport (ports, shipping lines, logistics, classifying and insurance companies) represents over 30% of economic value world wide. Despite this, the industry went through a deep crisis at the beginning of the nineteen seventies (coinciding with the oil crisis) which led to a dramatic reconversion of the sector in countries such as Belgium, Sweden, the United Kingdom, The Netherlands, Spain, Finland, Greece, France and Germany. New EU States that had benefited from delocalization processes, such as Poland and Croatia, also had to readjust their shipyards. It is a fact that the ship building industry (including repair) has traditionally operated in a highly globalised environment, and at the beginning of the 21st century it once more faced an onslaught from the most savage competition, especially Asian yards: below cost price production, the absence of any rules of conduct regarding dumping, state interventionism and acute imbalances between international markets.

The European ship building industry is made up of a conglomerate of over 9,000 companies that, apart from the ship yards proper, comprises a wide range of industries including offshore technologies, and provides over 350,000 jobs with a turnover of more than 34,000 million euros, and 10% investment in R&D&i. Although the European ship yards' share of the total volume of contracts for building new ships is probably no more than 10% of the world total, it is highly specialised in complex vessels requiring a high degree of innovation. This puts them in a dominant position in segments such as cruise liners, defence, and vessels for the transport of special materials, where knowledge, technological advances and a complex network of equipment and service suppliers are fundamental.




Numbers shipyards by country
1 < 5
5 < 12
12 < 25
25 < 70
70 < 165
Main shipyards EU and EU candidate countries

38. HYDROCARBONS AND DISTRIBUTION NETWORKS. REFINERIES AND OIL PIPELINES

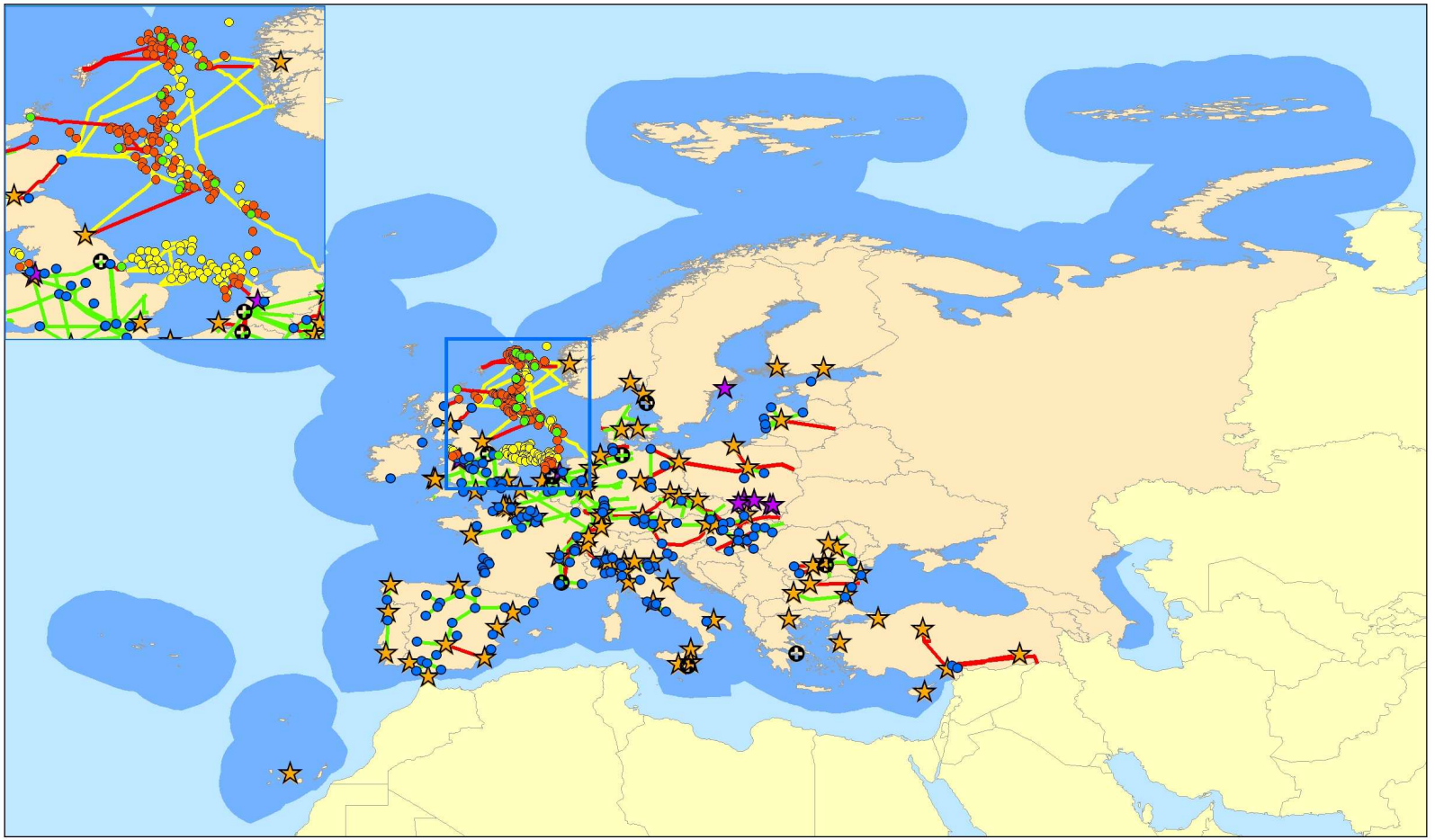
The exploration and exploitation of hydrocarbons is of great economic and geo-political interest given the degree of dependence that Europe has on oil consumption. With consumption continually outstripping production, Europe's energy dependency is a reality that imposes a certain vulnerability on its economy. To palliate this, in the nineteen sixties, some European countries began to look at the possibility of extracting crude oil from the seabeds. The North Sea soon became a paradigm for marine areas in this field. Thanks to these offshore activities, the countries in the region (Norway, the United Kingdom, Denmark, The Netherlands and Germany) are, jointly, one of the three leading oil producing powers behind Saudi Arabia and the United States[1], with a combined production of marine crude of almost 6 million barrels per day in 2003.

The geographical manifestations of this important usage (which includes oil production, transport and refining) are evident: the installations devoted to the extraction of the resource –oil rigs–, and the conduits –oil pipelines– and the infrastructure on the coast –terminals where the oil is discharged and refineries. The former can be found for the main part in the North Sea, whereas there are large numbers of high capacity refineries (over 30,000 barrels per day), sited mainly near ports (in order to save on costs), and pipeline terminals in countries such as Spain, France, the United Kingdom, Italy and Norway. There is a denser network of pipelines in western Europe, with those in Spain, the south of the United Kingdom and Germany standing out, very probably due to their high degree of industrialisation, although there is also an important array of conduits of this type around the Baltic and the Black Sea, in this case connecting with pipelines from the Middle East East.

MAIN OIL PRODUCING COUNTRIES AND AREAS	
AREA OR COUNTRY	**PRODUCTION LEVEL (THOUSANDS OF BARRELS PER DAY)**
Saudi Arabia	9,817
USA	7,454
North Sea region*	5,900
Iran	3,852
Mexico	3,789
China	3,396

*This region comprises Norway, the United Kingdom, Denmark, The Netherlands and Germany. The data for this region is for 2005, whereas for all remaining countries the figures are for 2004.

Vide. Oil and Gas Journal; *BP Statistical Review of World Energy* (June 2004), available at: http://www.bp.com/statisticalreview2004; http://www.eia.doe.gov/emeu/cabs/northsea.html#licen


Refineries
<30,000 Barrels/day
>30,000 Barrels/day
Operating refineries
Oil depot
Pipelines
Refined oil
Oil pipeline
Gas pipeline
Offshore terminals
Oil
Gas

39. GAS DISTRIBUTION

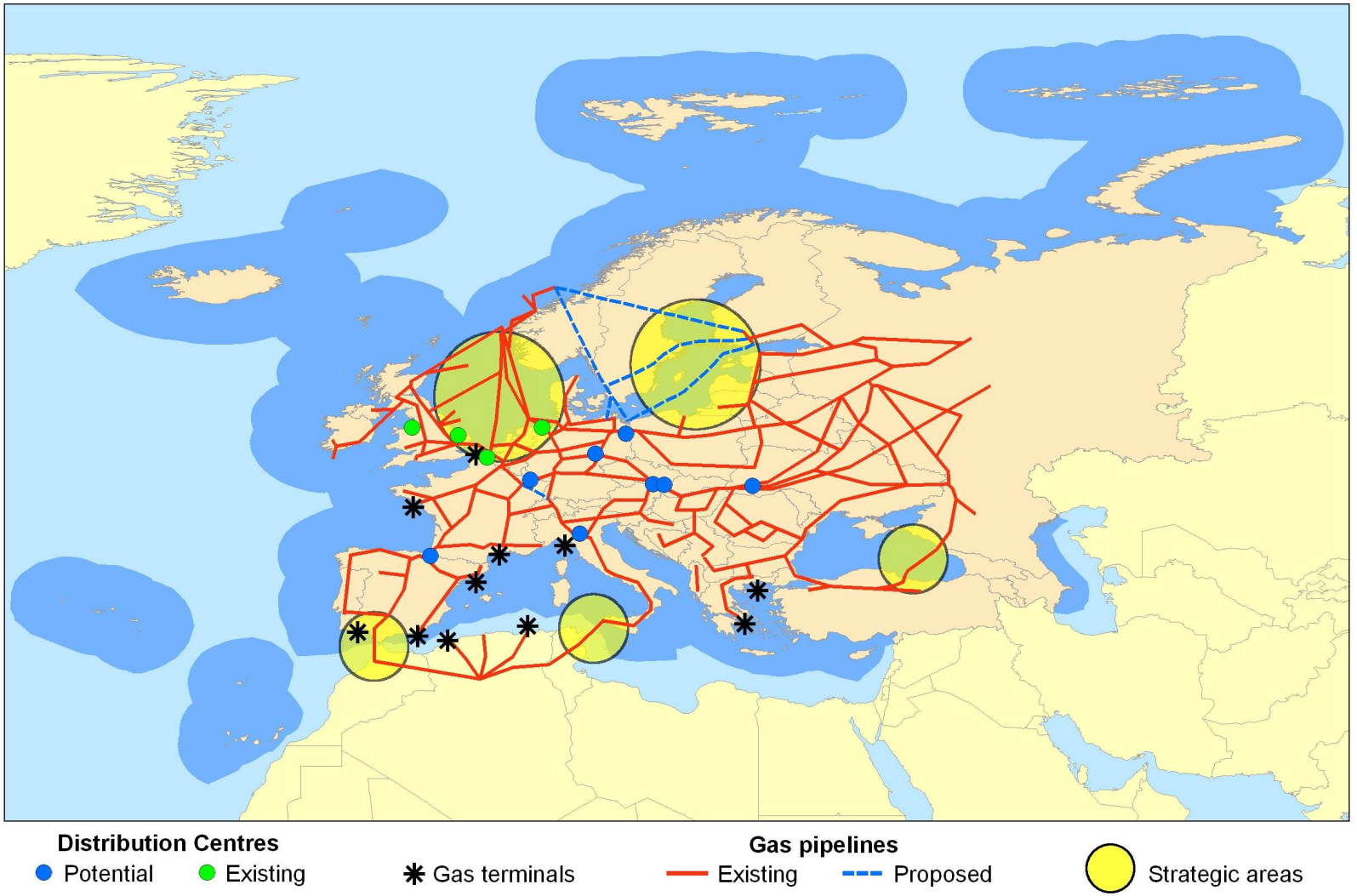
Europe is one of the main natural gas consuming areas in the world. Germany, the United Kingdom, Italy, France and The Netherlands are the main users of the product and together make up 75% of the total gas demand for the region. This high demand – to which Spain's requirements can be added– is due to the high concentrations of economic activities (above all, industry) and urban population in said countries, which lead to high supply requirements for domestic use and energy production. The North Sea countries and also Italy produce significant amounts of gas, but the situation is more of a problem in France and Spain due to the high dependency rate (95 - 100% of the gas that is consumed is imported).

Apart from native producers (the United Kingdom, Norway, The Netherlands), the chief supply centres for Europe are: Russia, countries on the Caspian Sea (Turkmenistan, Kazakhstan, Azerbaidzhan), the North African countries (Algeria basically, but also Libya and Egypt) and the Persian Gulf area, with conduits (*gas pipelines*) being one of the basic means of transport. Of all these suppliers, Europe has shown most interest in the Maghreb, whose gas is cheaper due to its geographical proximity and low extraction costs, and this requires maintaining good neighbourly relations and cooperation in the Euro-Mediterranean context.

As for the other suppliers, the economic value of supplies to Europe has resulted in the Black Sea-Caspian Sea, North Sea-Baltic Sea and Mediterranean regions becoming areas of vital strategic importance, either because they have extraction centres along their shores, or because they act as transit areas for this energy product. In this regard, it is interesting to draw attention to the relative position of Turkey. Along with its relatively low gas consumption, which would allow excess gas to be conveyed to Europe via Greece or Bulgaria, Turkey could also act as a kind of "bridge" between the gas producing areas (Central Asia, the Transcaucasian States and the Persian Gulf) and Europe.

RELATIVE GROWTH OF LIQUID NATURAL GAS
(% of total gas supplies)

	1990	1995	2000	2005
USA	0.5	0.1	1	3
EU	6	6	7	10


Distribution Centres
Potential
Existing
Gas terminals
Gas pipelines
Existing
Proposed
Strategic areas

40. TOURISM AND COASTAL ZONES

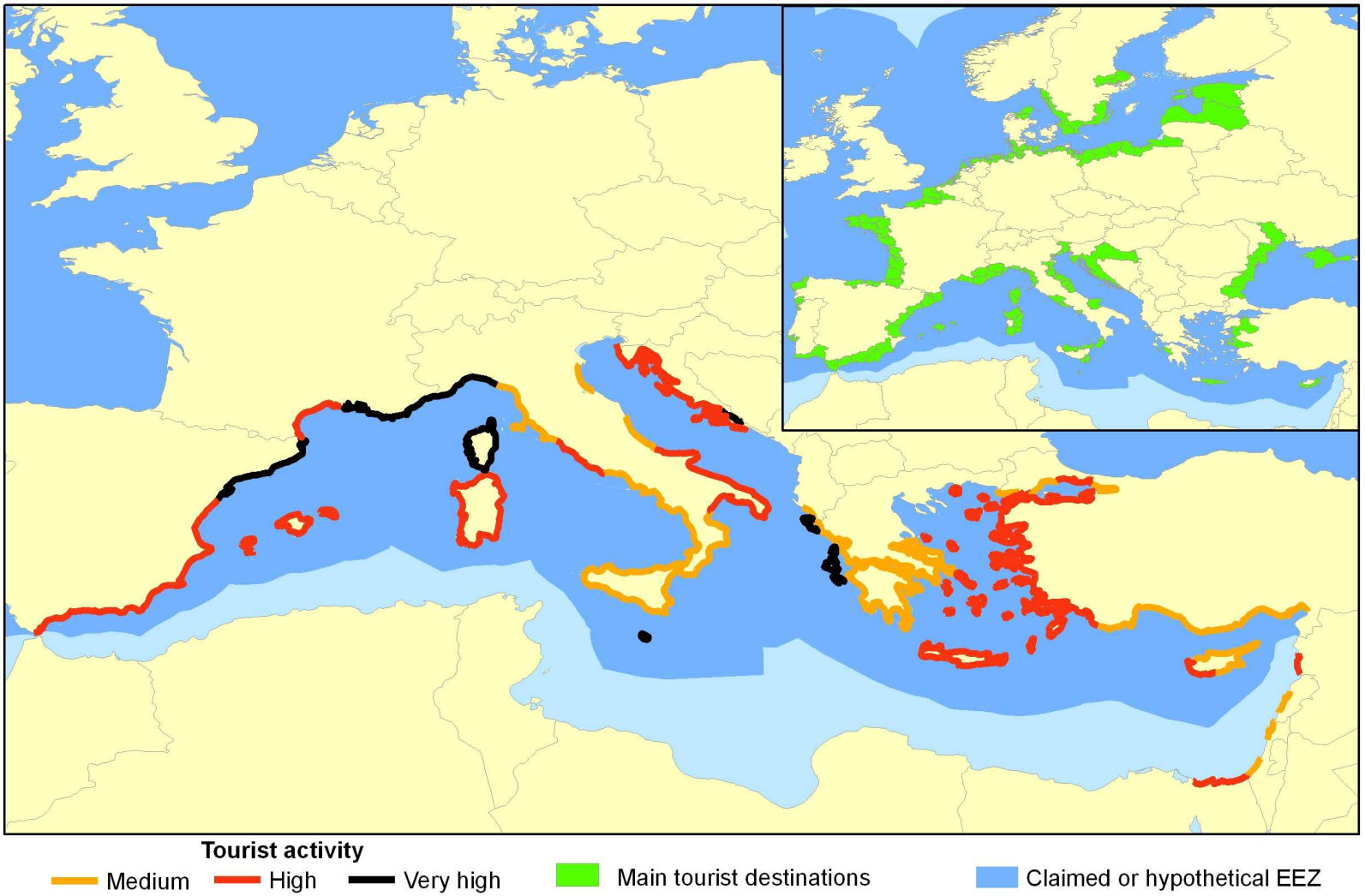
Tourist and leisure activities are two of the most important marine uses in European coastal-marine areas (tourism for water- and sun-seekers, game fishing, bathing, yacht and dinghy sailing). Tourist development of European shores can basically be found in certain coastal regions of the Baltic (Mecklenburg), the Atlantic (Bretagne) and, above all, the Mediterranean, which bases its great appeal on a number of physical and natural attributes (a mild climate, varied coastal landscapes and the presence of the sea, which is of paramount importance). In the region the most intensive tourist activity can be found in coastal sectors of Spain (the Andalusian, Valencian, Balearic and Catalonian coasts), France (the Côte d'Azur, Corsica), Italy (Liguria, Sardinia), Greece (Crete, areas of the Ionic coast) and Malta, not forgetting the Dalmatian coast and Turkey's Aegean Sea coast. There are large amounts of tourist accommodation in all of these areas (over 90,000 beds in each).

For decades the tourism that flocks to European coastal-marine areas (especially the Mediterranean) has been shaping an unsustainable tourism and land model which is a huge consumer of resources and land and has effects on the environment which are often irreversible. An analysis of figures for built-up land along the coastal strip reveals that precisely some of the above-mentioned regions are the coastal sectors where the greatest amount of construction is taking place: the Costa del Sol, the Valencian coasts, and some parts of the Catalonian coast (Spain), the Côte d'Azur (France), and some parts of the Ligurian coast (Italy). In short, some of the greatest embodiments of current tourist development found on the land and landscape are landmark marinas, golf courses, and tourist complexes on the first and second rows of the beach.

THE HOSPITALITY SECTOR REPRESENTS OVER 4% OF EMPLOYMENT AND 6% OF SERVICES IN THE EU25

DIVERSIFICATION OF THE TOURISM INDUSTRY MAY HELP TO PALLIATE SOME OF THE IMPACTS ON COASTAL AREAS BY REDUCING THE IMPORTANCE OF SUN AND BEACH TOURISM. THE PROMOTION OF HERITAGE AND CULTURE-RELATED ACTIVITIES CREATES ALTERNATIVES FOR A NUMBER OF COASTAL LOCALITIES THAT, MOREOVER, MIGHT BE ABLE TO ABSORB COLLECTIVES THAT ARE IN CRISIS (FISHERMEN) AND REDUCE SEASONALITY

THERE ARE SOME 3,000 MARINAS ALONG THE EUROPEAN UNION'S COASTS WITH A CAPACITY FOR 1,000,000 MOORINGS


Tourist activity
Medium
High
Very high
Main tourist destinations
Claimed or hypothetical EEZ

41. ENERGY FROM THE OCEANS

Energy resources from oil and gas deposits are already being exploited to the full in marine basins. The fact that they are non-renewable and cause environmental problems makes renewable energies from marine sources one of the most promising alternatives for combating the energy crisis.

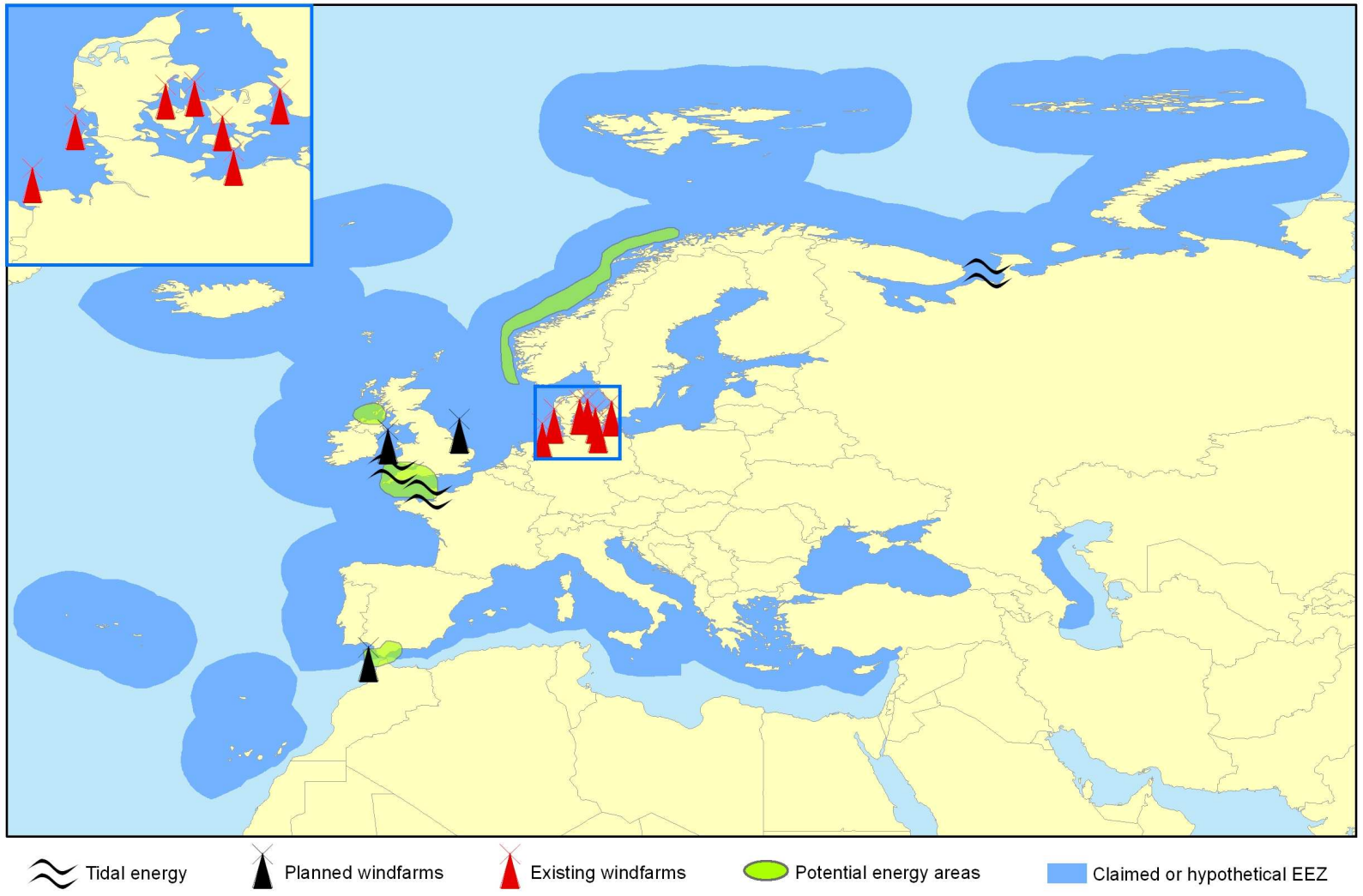
A range of possibilities (wind, wave, tidal, OTEC and blue energy) can be found either on the coast or in offshore waters. They are at different stages of development, with tidal and wind energy being the types with generating facilities currently in operation: La Rance (France), the Severn estuary (United Kingdom) and wind turbines in shallow North Sea waters.

Whereas wind energy has high potential, with forecasts in the order of 70,000 MW for 2020, the remaining types of marine renewable energies either have natural limitations (tidal power stations need a tidal range of over five metres to be profitable, which drastically limits the number of areas where optimum conditions are found), or are still at the experimental stage in projects where R&D funding is vital. In the EU, the renewable energy research scenario is dominated by small- and medium-size companies for which the building of prototypes is high-risk due to the nature of the waters in which they must operate.

Apart from the question of efficiently obtaining energy from these sources (for wave energy, a large enough swell is required to ensure a regular supply), ocean energy faces the problem of the energy-harnessing devices which have to be huge in size, and involves occupying large swathes of coast. This circumstance not only means they are a shipping hazard but also generates impacts as they interfere with water circulation and sediment transport.

MARINE ENERGY SOURCES	
OTEC	40000 x 10^6 Mw
Blue energy	1400 x 10^6 Mw
Marine bioconversion	10 x 10^6 Mw
Sea currents	5 x 10^6 Mw
Tidal	3 x 10^6 Mw
Wave	2,5 x 10^6 Mw
Ocean winds	20 x 10^6 Mw

Source: Constans, J., 1979

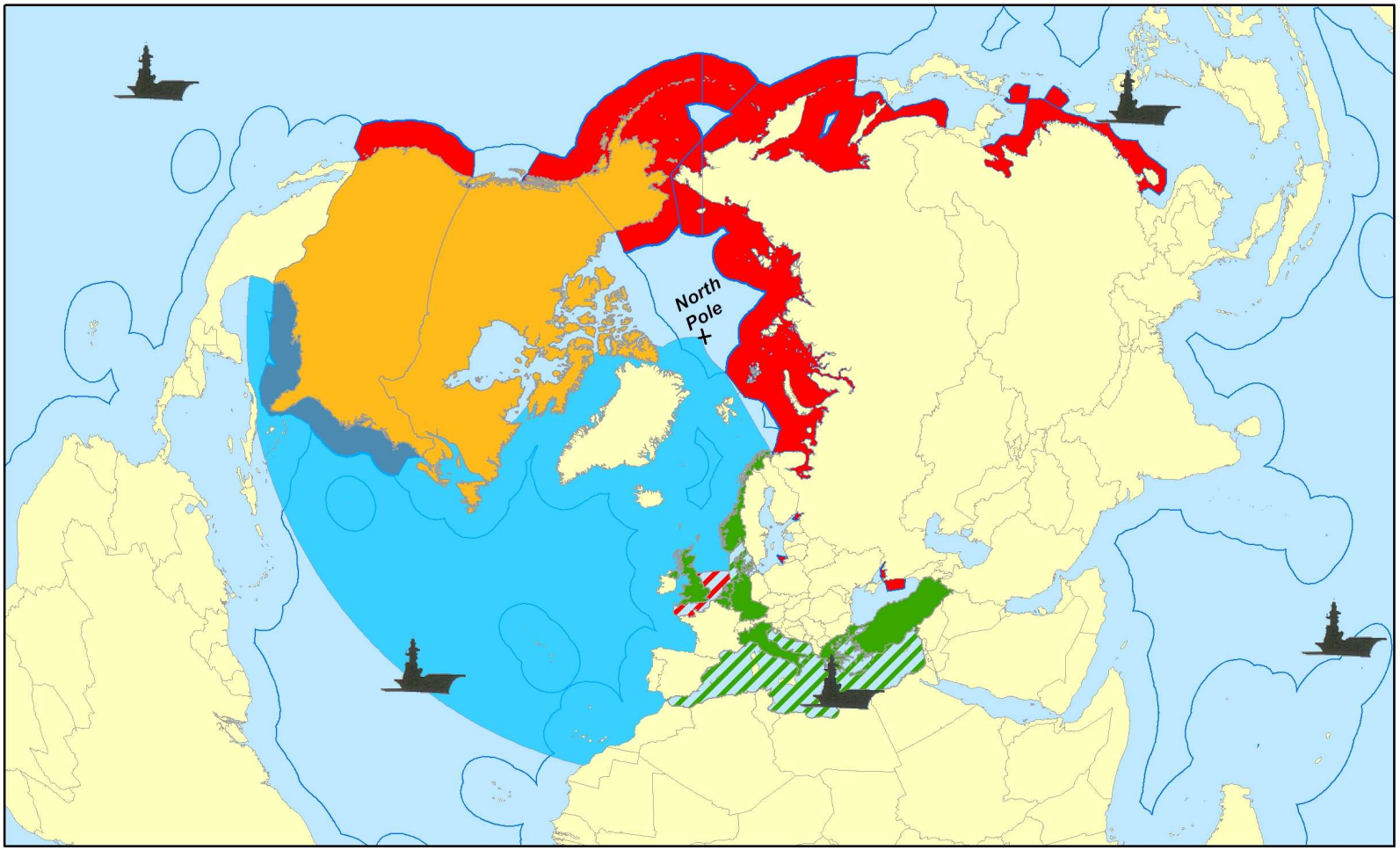

Tidal energy
Planned windfarms
Existing windfarms
Potential energy areas
Claimed or hypothetical EEZ

42. THE STRATEGIC AREA

The seas have always been an area of indubitable military and strategic value, both for Europe and other great powers. Historically, this use has been upheld by the “right to go to war” and by the rules of naval engagement, and has even pervaded modern international law of the sea and some of the issues it regulates (the passage of vessels, international straits, jurisdictions, etc.). States’ increasing jurisdictional expansion has raised the possibility of projecting military power towards more distant lands (something which in the case of Europe is greatly augmented by the existence of overseas territories), but has also resulted in an increase in security responsibilities for more widespread areas. The importance of providing protection to the shipping lanes around the European continent and those that link Europe and the other continents (America, especially) is a crucial factor that explains the resurgence of means (fleets), platforms (theories of naval power) and serious attempts to interfere with the “strategic ocean order”.

More and more, Europe must address a plan for a security strategy for its territories both on land and at sea. The size of its jurisdictional waters, comparable to that of other great powers (the USA, China, Russia), determines to a great extent how complex the challenge at hand is. The creation of a common defence policy and of a “Eurofleet” are as yet only projects at the design stage. For the moment, Europe will continue to rely on its other security support, NATO, which will provide it with the patrolling and protection of its Atlantic and Mediterranean waters and safeguard its main economic uses (trade, fisheries, and the exploitation of hydrocarbons). In other regards, the fact that the majority of western European countries belong to the Atlantic Alliance guarantees a negotiated resolution to any conflicts resulting from the application of the law of the sea. European jurisdictional enlargement brings the waters of the Arctic and the northern Atlantic off North America closer. It is important that forums and common security organisations exist to diffuse potential conflicts over the control of areas and resources in these regions.

A SELECTION OF NATO BASES IN EUROPE	
Dhekelia (Cyprus)	Athens (Greece)
Rota (Spain)	Naples (Italy)
Toulon (France)	La Spezia (Italy)
Gibraltar (United Kingdom)	Lisbon (Portugal)
Portsmouth (United Kingdom)	Stockholm (Sweden)

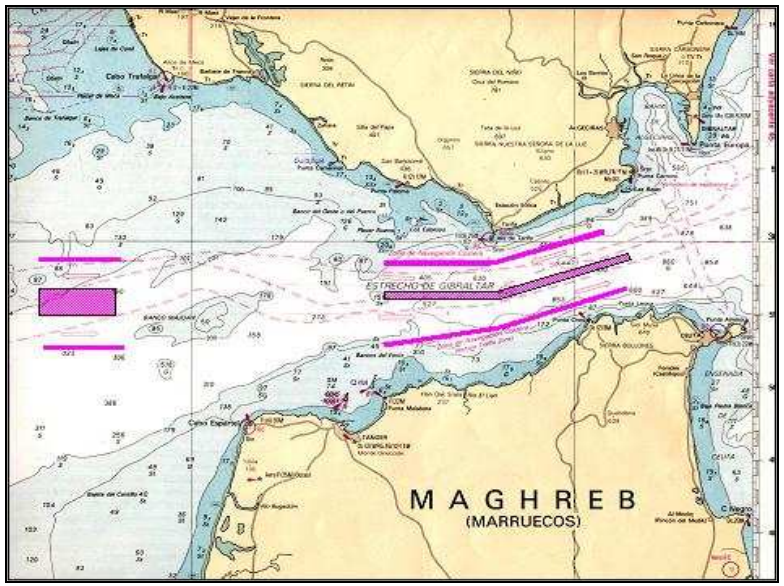

North Pole
European Allied Command
Atlantic Allied Command
English Channel Allied Command
US-Canada regional defence area
EEZ limits
EEZ US, Russian Federation and China
US fleets

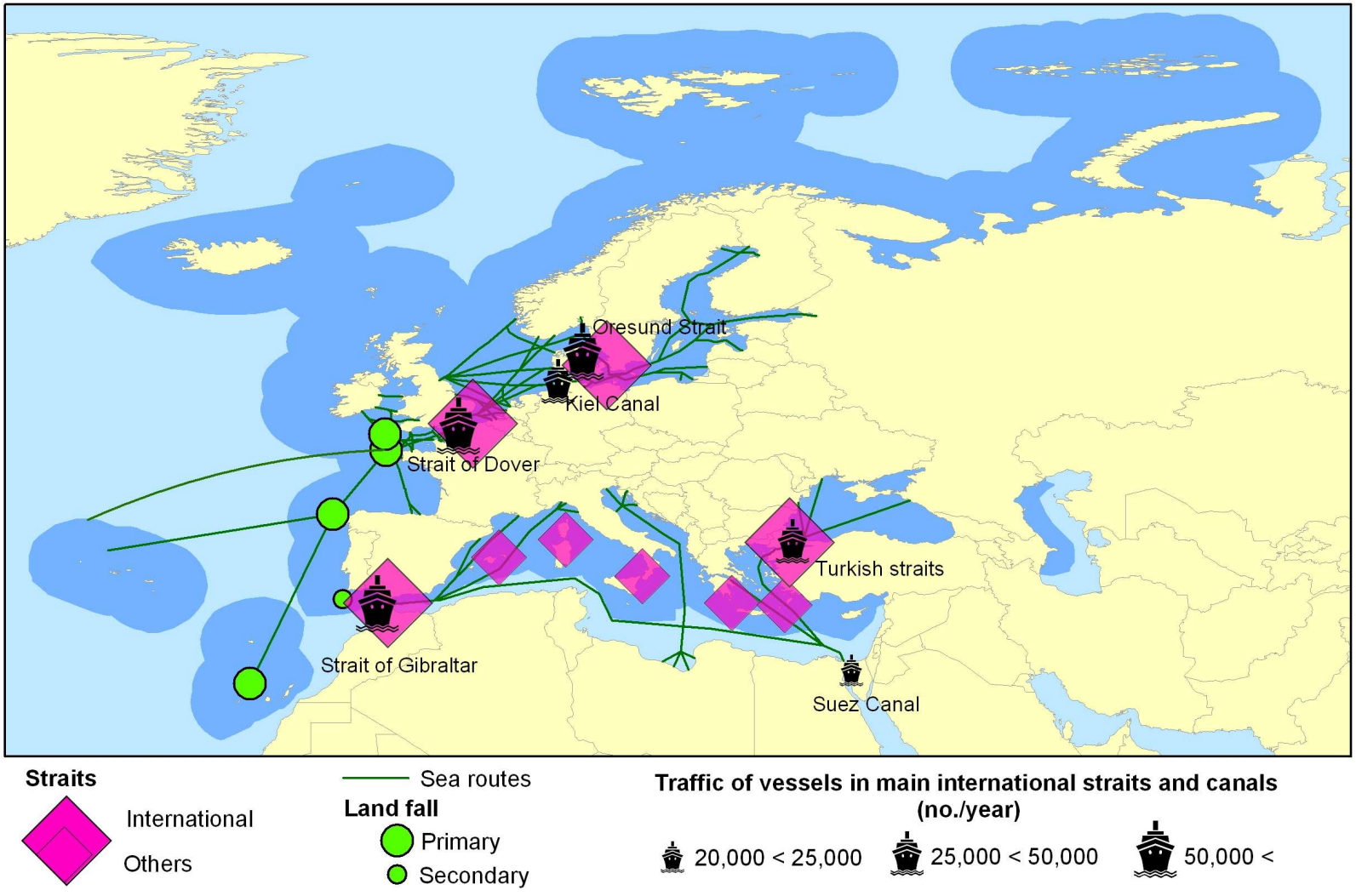
43. INTERNATIONAL STRAITS AND SEA ROUTES

Two international straits with global strategic importance can be found in Europe: Gibraltar and Dover (also called the Pas de Calais and the English Channel). The former is the gateway to the Mediterranean (where, according to Greek mythology, the Pillars of Hercules stood), which gave rise to the axis that, via the Suez Canal, forms a global route that with the construction of the Panama Canal came to be called the "economic equator". The Straits of Gibraltar, along with the Turkish straits (the Bosphorus and the Dardanelles), control access to the Black Sea, which is home to part of the Russian Federation's navy. The Straits of Dover are a bottleneck for one of the most intensive economic flows in the world, the gateway to a port and harbour system that serves the economic heartland of Europe.

Apart from Gibraltar and Dover, the straits of El Sund, Menorca, Messina, Bonifacio, Cythera and the Carpathians are also international routes, but their relative locations and the fact that alternative routes can be used considerably reduce their strategic importance.

Points where widely spread shipping lanes converge to gain entry into large ports and harbours or to join a different shipping route give rise to the so-called arrival or holding points. There, as in the straits, there are concentrations of large volumes of sea traffic (in the Straits of Gibraltar, some 100,000 vessels a year) with a high risk of accidents as there are large numbers of vessels, many of which are transporting pollutants and/or toxic products (crude oil and its derivatives, nuclear waste). The growth of global trade and consequently of sea traffic, has ended up turning the straits and holding areas into environmentally vulnerable areas (Gibraltar, Dover, Cape Finisterre and the island of Ouesant), which not only requires a strict control of the transport system, but also the management and regulation of shipping with the implementation of traffic separation schemes in the straits and control towers.




Oresund Strait
Kiel Canal
Strait of Dover
Turkish straits
Strait of Gibraltar
Suez Canal
Straits
International
Others
Sea routes
Land fall
Primary
Secondary
Traffic of vessels in main international straits and canals (no./year)
20,000 < 25,000
25,000 < 50,000
50,000 <

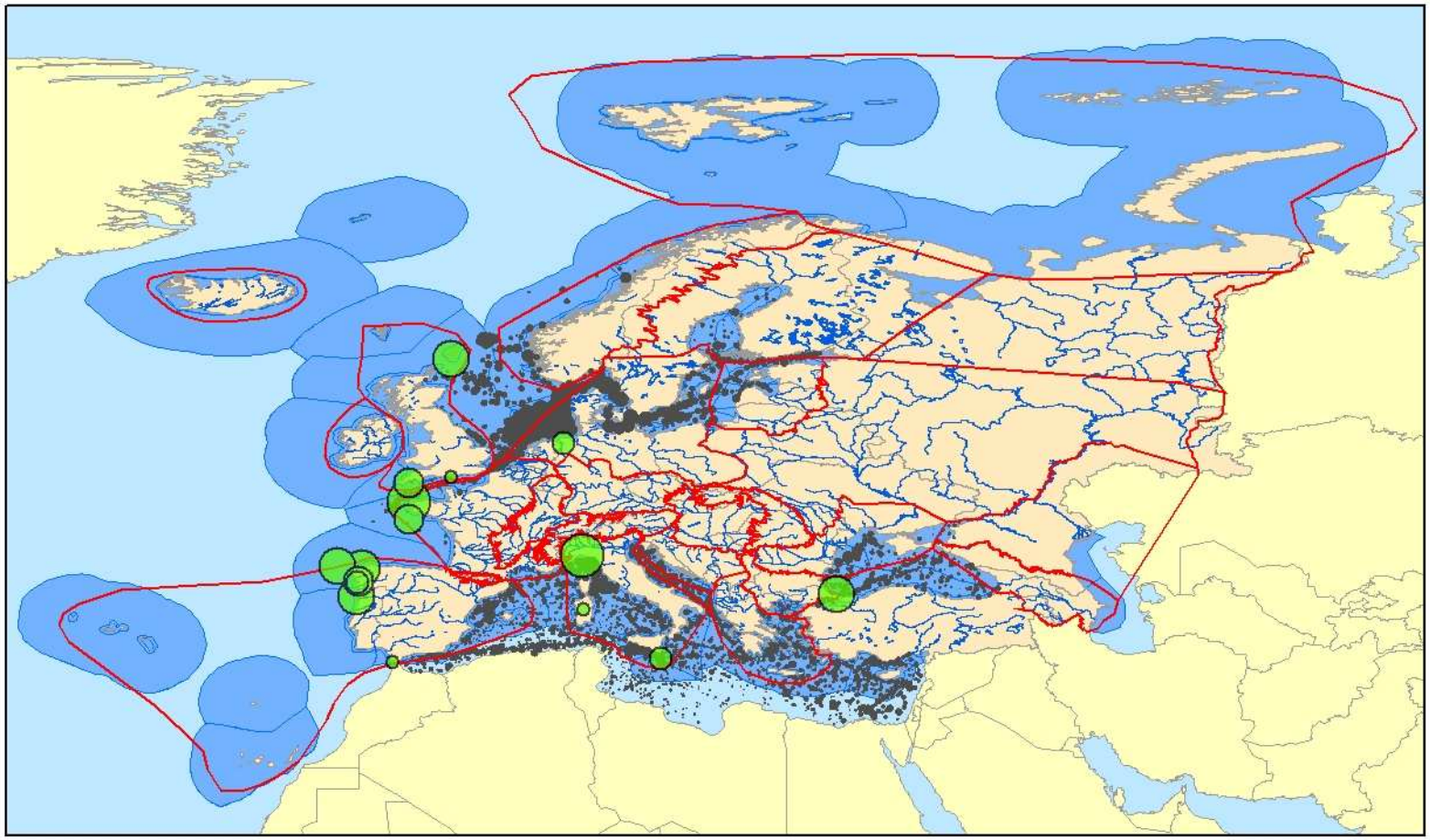
44. WASTE DUMPING AND MARINE POLLUTION

Ninety per cent of pollution in the seas originates on land and, consequently, the policies and measures to combat it have to be put in place on *terra firma* and applied to the activities that cause it. Eutrophication, one of the gravest problems that affects the quality of the marine environment, is caused by agriculture and urban waste. One of the most evident results of excessive amounts of nitrogen and phosphorus is the growth of micro algae which, in turn, leads to a greater demand for oxygen and hinders the development of other living creatures. Intensive agriculture with a high input of fertiliser and pesticides can be found in all marine regions and is the cause of the Black Sea's environmental decline. Other dangerous substances, such as PCBs and DDT, even though they are no longer produced in the European Union, can still be detected. Even in the waters of the Arctic pollutants can be found that were not produced in the region, and in higher concentrations still than in the countries where they were manufactured.

The most usual type of spillage found in the seas is oil from the sea traffic. Although awareness of this problem is heightened when large scale accidents take place –the *Prestige* (2002), and the *Erika* (1999) are two of the most recent, and the *Torre Canyon* (1967) and the *Amoco Cadiz* (1978), two of the most important in the past- the most usual spillages (under 10 tonnes), together with medium size spillages (between 10 and 700 tonnes), are those that cause oil slicks in over 60% of affected areas. Bearing in mind the high growth in sea transport (the transport of oil products grew by 100% in the Baltic in the nineteen-nineties, and a 50% growth in general traffic is anticipated for 2015), the problem of spillages is far from being solved, although the number of huge catastrophes might be greatly reduced with the new international legislation (IMO) and as a result of the EU banning the use of single-hulled tankers and increasing the number of checks by *ad hoc* organisations.

MAIN MARITIME ACCIDENTS IN EUROPEAN WATERS

Name of the vessel	Year	Place	M Tn spill
Amoco Cádiz	1978	West of Brittany (France)	233.565
Haven	1991	Mediterranean, Port of Genoa	144.000
Torre Canyon	1967	Celtic Sea, Lizard Point	129.857
Irene´s Serenade	1980	Ionian Islands (Ionian Sea)	124.490
Independenza	1979	Entrance to Bosphorus (Black Sea)	98.255
Urquiola	1976	Corunna Bay	95.714
Braer	1993	Scotland (United Kingdom)	85.034
Prestige	2002	Off coast of Galicia	74.490


Detected oil spill (2000-2004)
WDF
River basin
Maritime accidents (metric tonnes spill)
3500 < 10000
10000 < 20000
20000 < 30000
30000 < 144000
144000 < 220000

45. THE OCEANS AND RADIOACTIVE WASTE

The seabed has been the final resting place for radioactive waste since the nineteen-forties. Waste dumped on the seabed at great depths (over 4,000 metres/13,000 ft) has included not only radioactive products, but also items linked with the use of nuclear energy, especially scrapped vessels. This high-risk practice was defended by the long-held conception that the oceans' capacity for absorbing all and any type of waste was almost unlimited. The term *dumping* alludes to the fact that the waste is *jetsam* dropped overboard, and does not include waste from land sources.

At the end of the nineteen-seventies, a number of European countries including the United Kingdom, Switzerland, The Netherlands, Belgium, Germany, France and Italy used marine basins to eliminate their radioactive waste. One trench located outside national jurisdictions, about seven hundred kilometres (420 miles) to the west of the northern coast of the Iberian Peninsula, may well be home to some 5,500 drums of radioactive waste dropped from British vessels.

The 1972 London Convention (known as the London Dumping Convention at the time) was conceived to regulate the practice; pressure from environmental groups and the build-up of scientific evidence (together with the acceptance that the impact of said substances was still unknown), gave way to a period when dumping was questioned, with the prohibitionist position coming to the fore with the moratorium adopted by the Convention in 1983, first for a period of two years but later extended for an indefinite period in 1985. In 1993, the Convention was amended to include a permanent ban on the dumping of radioactive and industrial waste and incineration at sea.

At the beginning of the nineteen-nineties, other institutions such as the Inter-ministerial Conference for the protection of the North Sea (1990) and OSPAR (Convention for the Protection of the Marine Environment of the North-East Atlantic, 1992) banned the dumping of radioactive waste. Despite leaving its options to continue dumping open, the Russian Federation has not continued the practice since a treatment plant was built in Murmansk with international aid.

RADIOACTIVE DUMPING. TIMELINE.

1972 London Convention

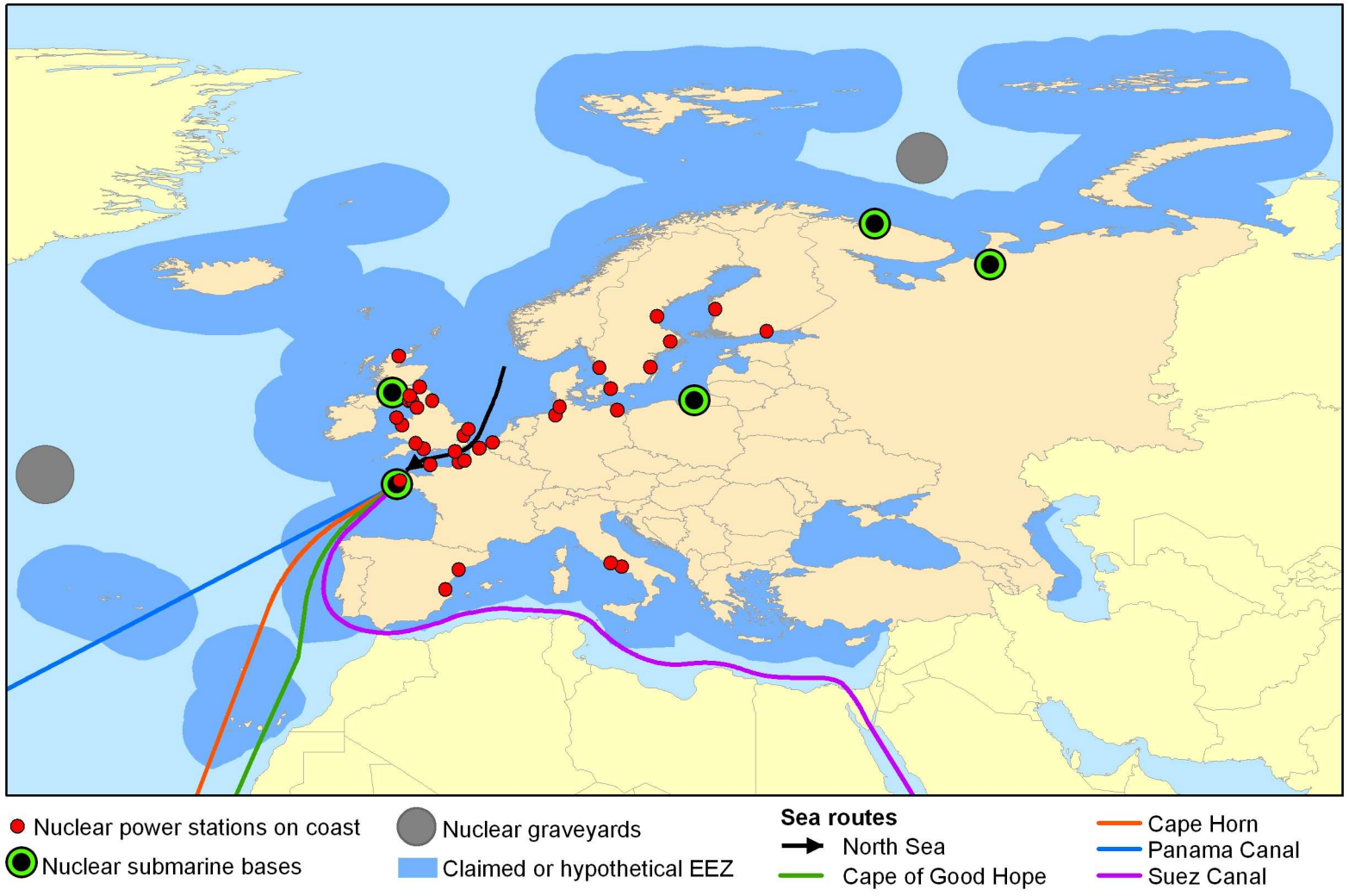
1983 First moratorium

1985 Indefinite moratorium

1989 OSPAR bans industrial waste dumping in the NE Atlantic

1990 Banning of radioactive waste dumping in the North Sea

1993 The London Convention puts a final ban on the dumping of radioactive and industrial waste and incineration at sea.


Nuclear power stations on coast
Nuclear submarine bases
Nuclear graveyards
Claimed or hypothetical EEZ
Sea routes
North Sea
Cape of Good Hope
Cape Horn
Panama Canal
Suez Canal

IV. MANAGEMENT AND POLICIES/INTRODUCTION

The various uses and activities are governed by their own legislation and regulatory procedures, some of which have a long tradition. With its rich historical maritime past Europe has not only played an important part in the formulation of international legislation to address the wide range of issues for regulating sectors of activity, and protecting and conserving the marine environment; it is also making great advances in the creation of instruments to integrate different sectors, and in the formulation of a common policy for the seas and oceans compatible with the existence of the European Union itself, the political body that governs the largest expanse of sea and ocean in all the world.

46. EUROPEAN MARITIME PROFILES AND ORIENTATION

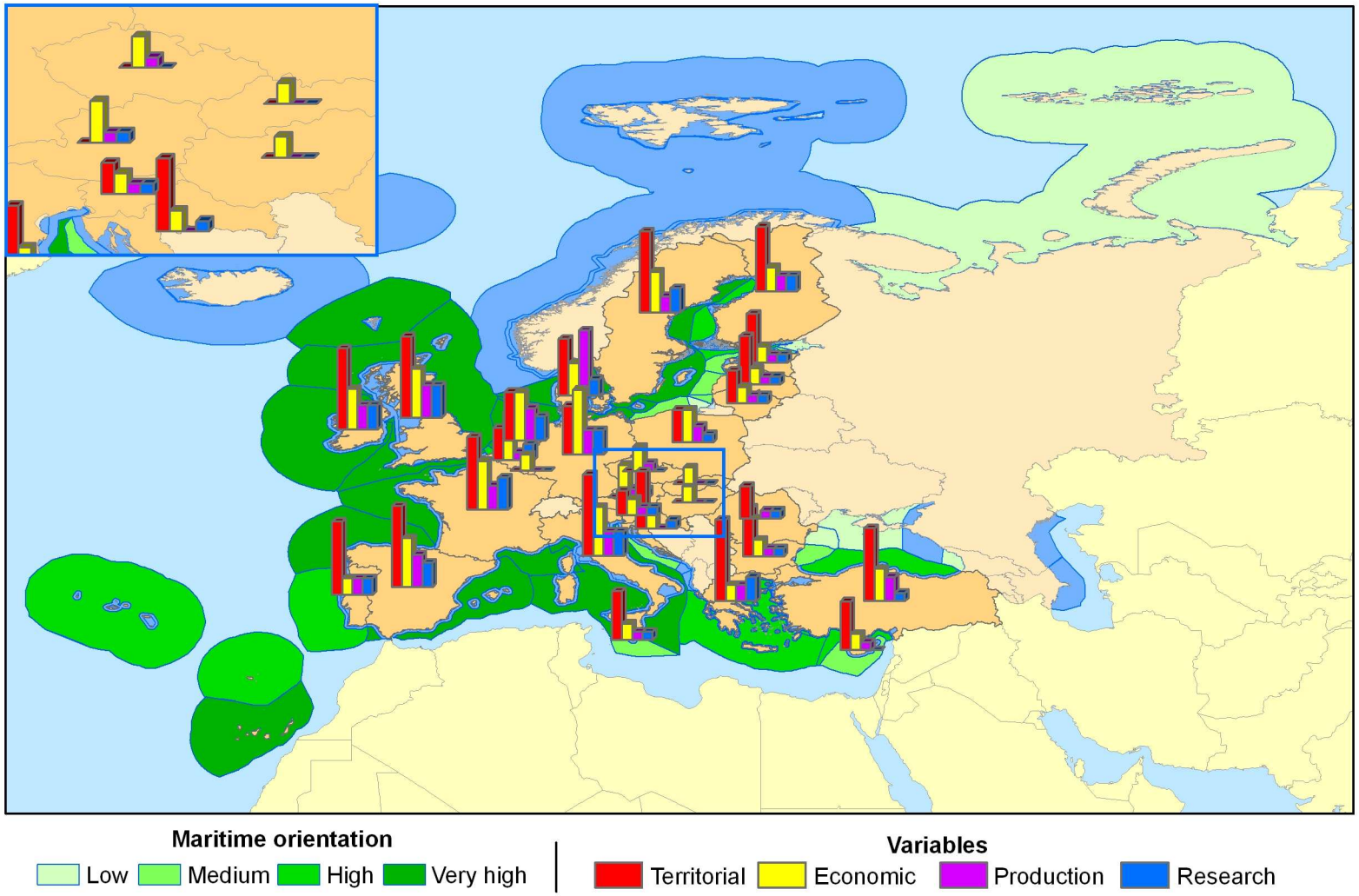
A nation's maritime 'vocation' –or lack of it- has been considered a factor in progress or modernity. It was in the 19th century when navalist theories were formulated which were to bear influence throughout the following century and that the British Empire became the paradigm of a naval power in the sense of economic trade and the military being interwoven: a maritime power is a commercial power sustained by naval strength. The indicators of maritime vocation are the volume of economic transactions together with the number and tonnage of merchant vessels and battleships that a country can deploy in all the oceans around the world.

Globalisation, advances in knowledge and technology have changed the concept of the seas: now only the war fleets of the old maritime powers fly their national flags and international leadership is exercised by rights of sovereignty over marine areas which are rich in energy, biological, and biogenetic resources, along with the technology and the knowledge to exploit them. A considerable potential is located outside national jurisdiction but can be accessed by whoever has the appropriate knowledge and the technical equipment, possibly trans-national corporations in the energy or biotechnological sectors.

And so the maritime profile of European countries has been transformed and the way to evaluate it must include new variables: maritime territory over which they can project their national sovereignty, their potential for marine research, the resources which they can access and exploit stand alongside the traditional indicator of trade (imports/exports) as the new criteria that define a country's maritime profile and the degree to which it is ocean-orientated. Europe governs the largest maritime area in the world, with great strategic potential, but this is not enough without scientific and technological innovation and the ability to compete on a global scale. As such, new maritime powers have emerged in Europe that coexist not only with other States but also with *trans-oceanic* companies that control matters ranging from underwater communications to worldwide distribution networks for raw materials and manufactured goods.

	GDP (billion dollars)	Exports (billion f.o.b)	Imports (billion f.o.b)	Total fisheries production
Denmark	167.2	64.16	54.47	1,552,059
Ireland	116.2	98.31	57.54	417,244

	EARNINGS	WORKFORCE
A.P. Moller-Maersk International Shipping Corporation	128,000 million dollars	110,000 (2005)


Maritime orientation
Low
Medium
High
Very high
Variables
Territorial
Economic
Production
Research

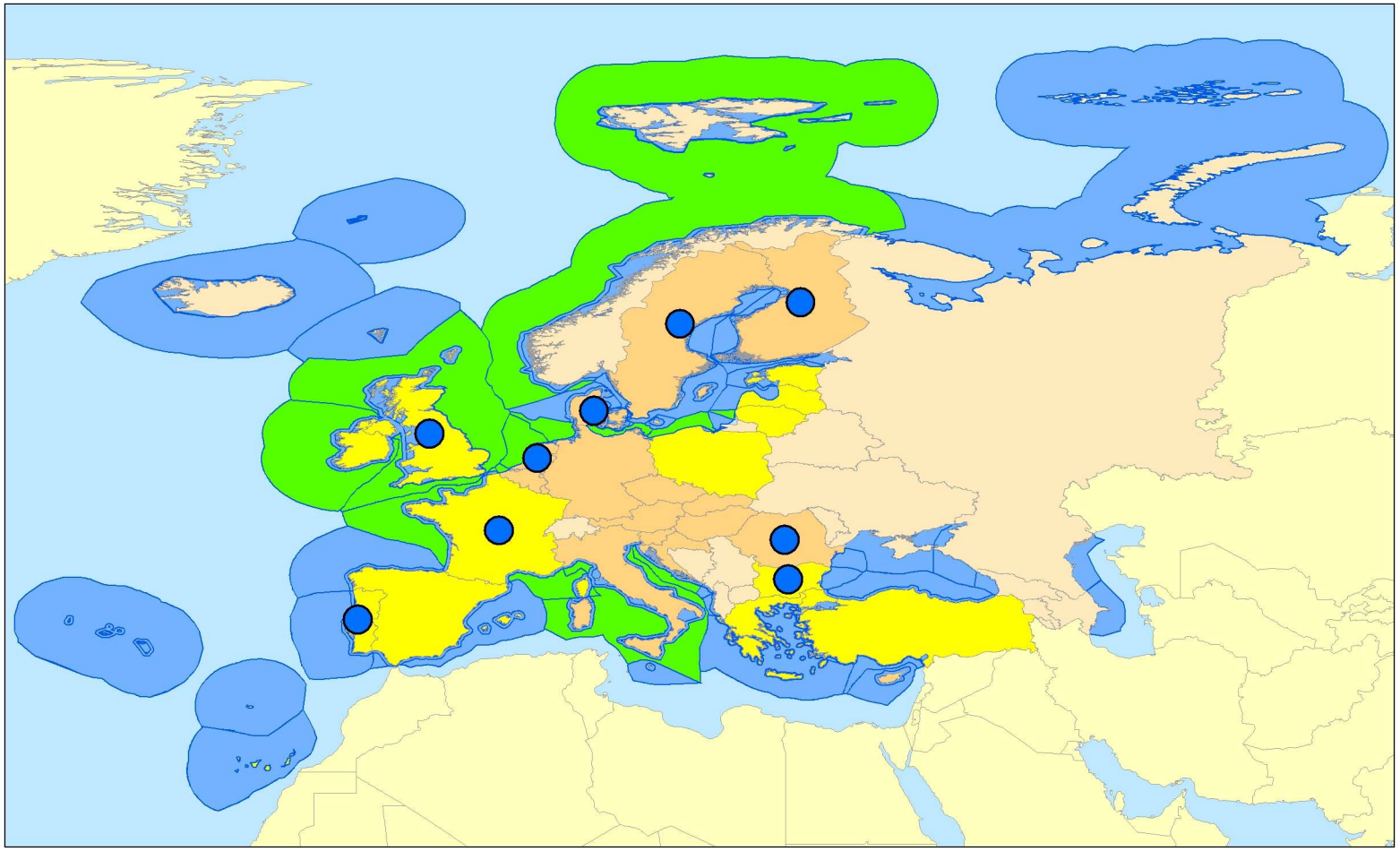
47. THE REGULATORY FRAMEWORK

For decades, the intervention of some European countries in coastal-marine areas under their jurisdiction has been based on three fundamental pillars: legislation (laws on coastal management or for defining and managing marine areas), the institutional aspect (the creation of *ad hoc* departments or bodies, or mechanisms for interdepartmental coordination) and nationwide programmes or strategies (where the broad guidelines of marine policy for each country are laid down).

Although some relatively old initiatives exist (the 1940 Greek *Shore and Offshore Law*; the United Kingdom's 1949 *Coast Protection Act*), it was only after the UNCLOS that various States took the decision to promote the creation of coastal-marine management instruments more in keeping with new legislation, with marine areas now being of a greater size, and with the principles in the field of marine environmental protection that were being discussed in a variety of global and regional forums. The result of all this was legislation such as the French law on the management, protection and recognition of the value of the coast (1986), Shores Acts (1988) and the Italian Law for the Protection of the Seas (1982). Somewhat later, in the nineteen-nineties, a range of coastal management programmes and laws aimed at the more integrated management of the marine environment with special emphasis on environmental problems appeared (the Belgian marine environment Law, the Lithuanian Law on marine environmental protection, the Polish marine areas and maritime administration law). From 2000, there have been new legislative instruments –some already a reality (the application of the *Federal Spatial Planning Law* to the German economic zone), others still only at the project stage (the United Kingdom's *Marine Bill*)– and, above all, the formulation of national programmes and strategies, of which we can highlight those of Sweden, the United Kingdom, and Portugal, which aim to follow the lead set by pioneer schemes in the USA, Canada and Australia.

REGULATORY FRAMEWORK OF COASTAL-MARINE AREAS IN A NUMBER OF EUROPEAN STATES

Country	Coastal management legislation and strategies	Legislation on marine areas	National marine strategies or programmes
Germany		■	
Belgium		■	
Bulgaria	■		■
Croatia		■	
Spain	■		
Estonia	■		
Finland			■
France	■		■
Greece	■		
The Netherlands			■
Ireland	■	■	
Italy		■	
Latvia	■		
Lithuania	■	■	
Norway		■	
Poland	■	■	
Portugal	■		■
United Kingdom	■	■	■
Romania			■
Sweden			■
Turkey	■		


Shores Acts
Legislation on marine areas
National marine strategies or programmes

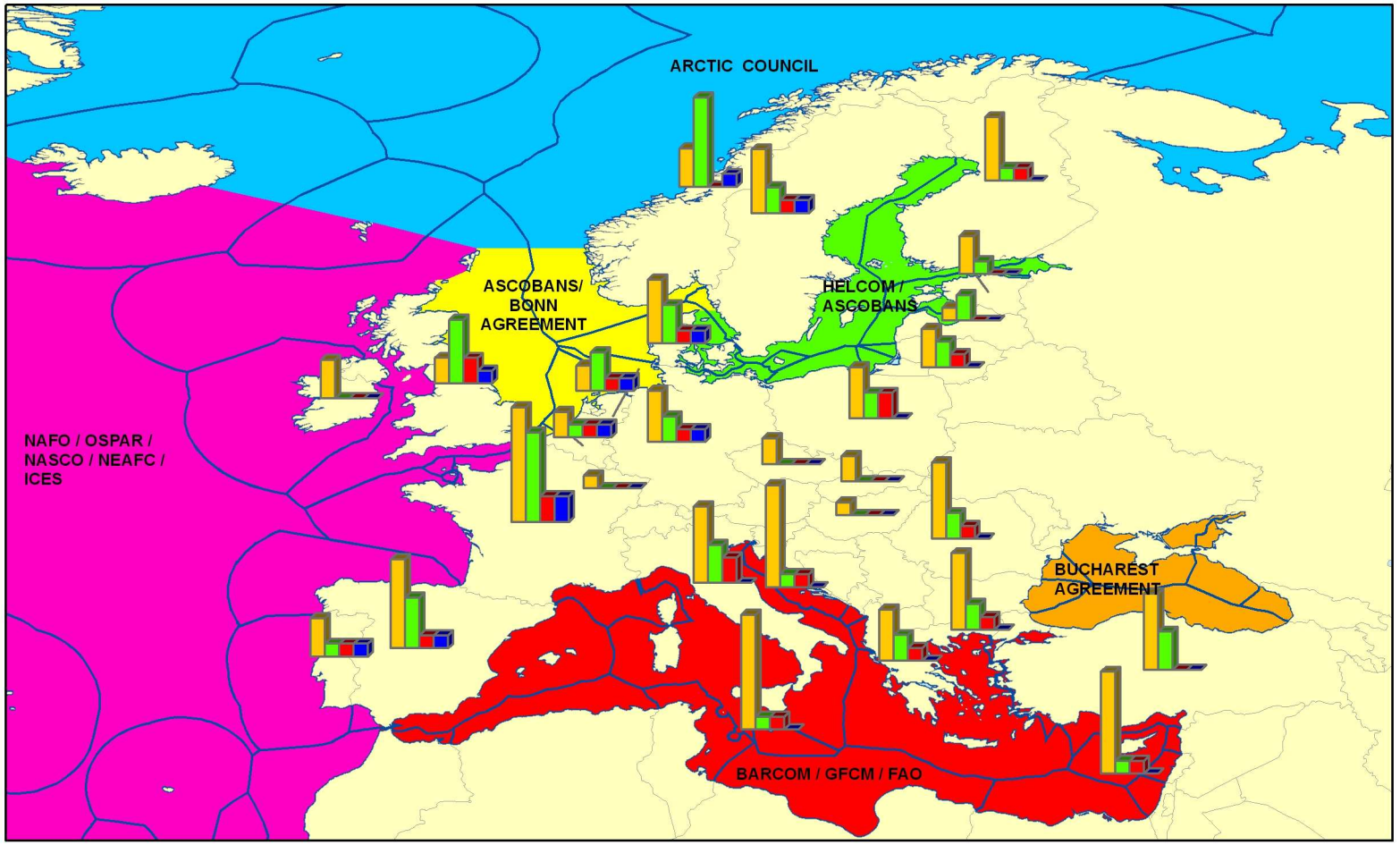
48. INTERNATIONAL CONVENTIONS

A new “ocean agenda” has developed in recent times, both in Europe and other parts of the world. This is composed of wide-ranging legal and political initiatives. Some, like the Law of the Sea itself, are worldwide in their scope, whilst others have a more limited reach, both in geographical terms (regional agreements and conventions) and with regard to their subject matter (sectoral agreements of various types: fisheries, the environment, etc.). Along with important international initiatives such as the UNCLOS, the Programme for Regional Seas and instruments created by the United Nations Conference on the Environment and Development in 1992 (Agenda 21, above all), there are also other international treaties and agreements in existence relating to pollution, the conservation of species and sensitive ecosystems, fisheries management, peace and security at sea, international shipping and criminal activities (regulations and conventions on *international criminal law* to combat illegal drug trafficking, piracy, sabotage, etc.). All these legal instruments have created a global reference framework for national ocean policies and mechanisms for regional cooperation, as well as a new strategic and political world order which affects the governance of the seas.

INTERNATIONAL CONVENTIONS WHICH EUROPEAN COUNTRIES ARE PARTY TO

Convention	Topic	Geographical Area
Arctic Council	Environmental protection	Arctic
OSPAR		NE Atlantic
HELCOM		Baltic
Bucharest Convention		Black Sea
BARCOM		Mediterranean
CGPM/FAO	Fisheries management	Mediterranean
IBSFC		Baltic
NEAFC		NE Atlantic
ASCOBANS	Conservation of species	Baltic and North Seas
NASCO	Salmon conservation	North Atlantic
Convention on the protection of the environment through criminal law	Conservation	Area under auspices of Council of Europe
Bonn Convention	Fight against pollution	North Sea
ICES	Marine research	North Atlantic

OSPAR: Convention for the Protection of the Marine Environment of the North-East Atlantic.
ICES: International Council for the Exploration of the Sea.
HELCOM: Helsinki Commission for the Protection of Marine Environment.
BARCOM: Barcelona Convention.
GFCM : General Fisheries Commission for the Mediterranean.
IBSFC: International Baltic Sea Fishery Commission.
NEAFC: The North East Atlantic Fisheries Commission.
NASCO: North Atlantic Salmon Commission Organization.
ASCOBANS: Agreement on the Conservation of Small Cetaceans of the Baltic and North Seas.
Bonn Agreement: Agreement for cooperation in dealing with pollution of the North Sea by oil and other harmful substances.

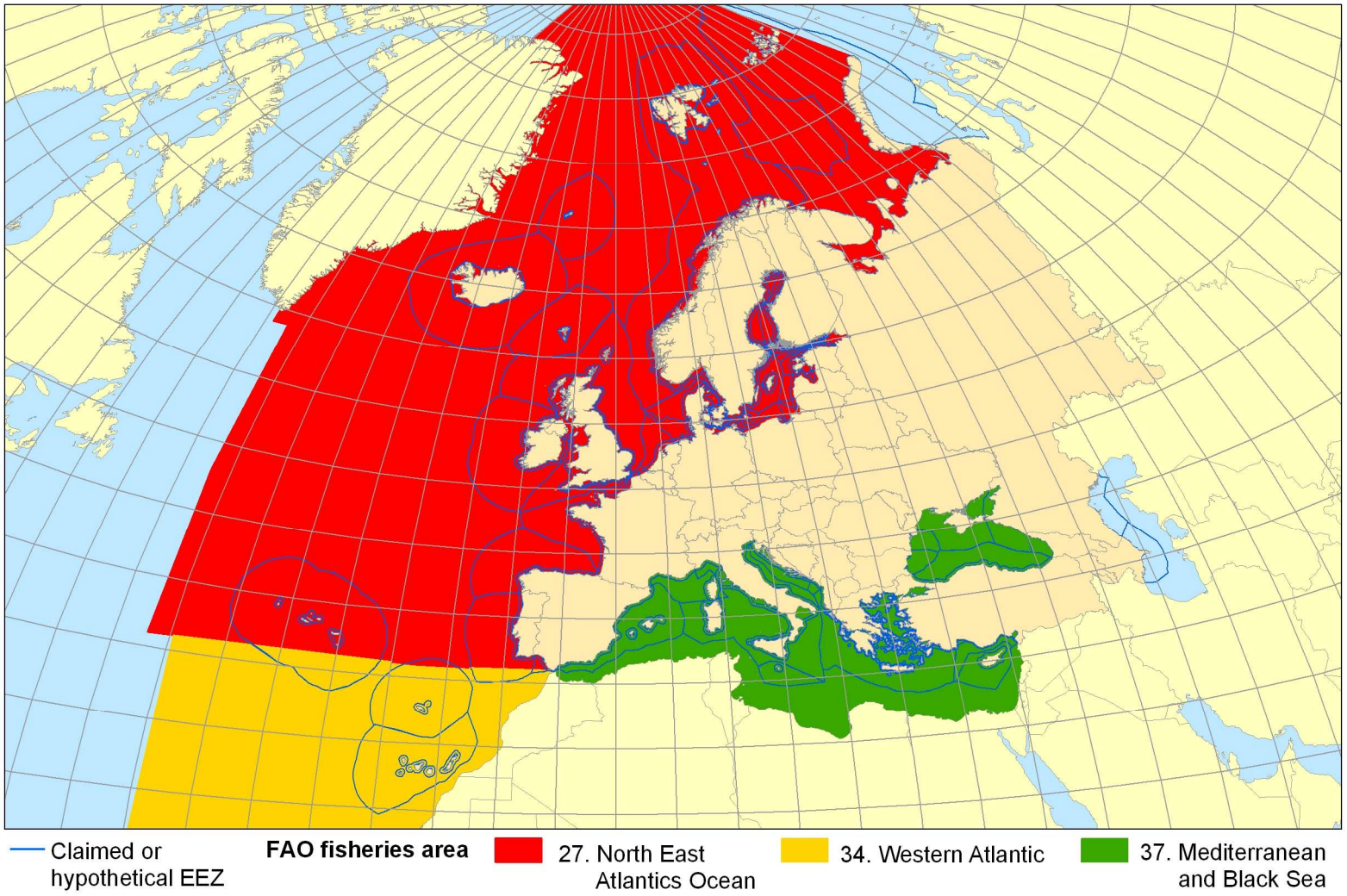

ARCTIC COUNCIL
ASCOBANS/
BONN
AGREEMENT
HELCOM /
ASCOBANS
NAFO / OSPAR /
NASCO / NEAFC /
ICES
BUCHAREST
AGREEMENT
BARCOM / GFCM / FAO
TYPE OF AGREEMENT
Regional (Conservation)
Fisheries
Other living resources
Regional (Pollution)

49. FISHERIES MANAGEMENT. FAO AREAS

For statistical purposes, the United Nations Food and Agriculture Organisation (FAO) splits marine waters into 22 areas. European waters are included in three of these areas: 27 (north eastern Atlantic), 34 (central-eastern Atlantic) and 37 (the Mediterranean and Black Seas). The divisions do not have a biological basis, and neither do they conform to the patterns of political divisions, which means that, despite the regularity of the gridmap, there are major differences in size between them. There has, however, been an attempt to adapt them to the way the continental masses are distributed. As such, a large part of the waters that lie off Europe go to make up area 27, whilst the Canary Islands and Madeira are included in area 34. Meanwhile, the Mediterranean and Black Seas comprise a single area (37), unlike the Baltic Sea, which is included alongside the waters of the Atlantic. Neither do FAO divisions take into account the legal regime of the waters they are composed of and include both areas under national jurisdiction and the high seas.

The statistics that FAO periodically draws up are based on information supplied by the respective national administrations. For each fisheries area, data can be obtained on per-country and per-species production, with historical records that now cover a significant period of industrial fishing, which is of great value for management. The north eastern Atlantic ranks third by volume of catches although by surface area it drops to tenth place amongst the 22 world divisions.

FAO YEARBOOK. FISHERIES STATISTICS (CATCHES) TYPE OF INFORMATION
Catches worldwide
Catches by groups of main fisheries areas
Catches by main producers
Catches by groups of species
Catches by main species
Catches by country or area – All fisheries areas
Catches by country or area – Continental waters
Catches by low income food deficit country or area
Algae and other aquatic plants
Algae and other aquatic plant production by countries or areas – All fisheries areas
OTHER FAO STATISTICS
Production of catches by region
Global aquaculture production
Global statistics on basic fisheries sector products and trade
World fishing fleets
Total no. of fishers
Declared world consumption of fish and fisheries products


Claimed or hypothetical EEZ
FAO fisheries area
27. North East Atlantics Ocean
34. Western Atlantic
37. Mediterranean and Black Sea

50. EU REGIONAL FISHERIES ADVISORY COUNCILS

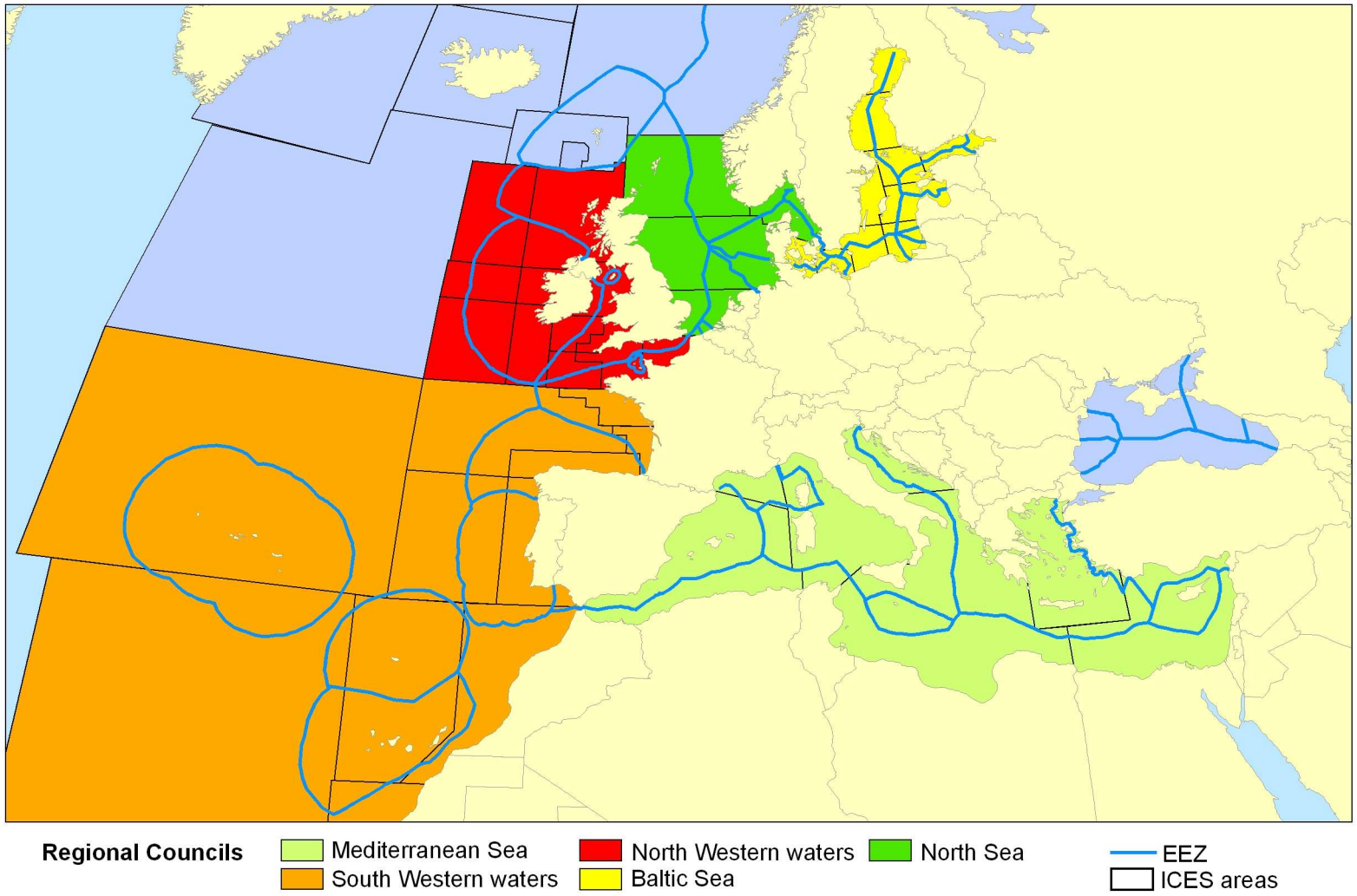
The so-called Regional Advisory Councils were created in 2004 after the reform of the Common Fisheries Policy (2002) with the aim of encouraging and reinforcing participation in CPF decisions, not only by fisheries sector representatives, but also by other interested groups, such as consumers and environmental organisations. The criteria for the creation of these institutions require them to correspond to biologically-based management units and their number to be limited in order that advice and recommendations given to the Commission are effective and their working viable. The Councils are supranational and representatives from the European Commission and regional and national member State authorities with waters that come under the scope of the Council can participate in them as observers. Scientists sit on the Councils as experts.

Five of the seven Councils created correspond to geographical areas: the Baltic Sea, the Mediterranean Sea, the North Sea, North-western waters and South-western waters. The remaining two were created for a specific type of resource and for a type of fleet, although they do have a geographical location, and are called Pelagic Stocks and High Seas/Distant Water Fishing Fleet. The first includes all areas except the Baltic and Mediterranean seas, and the second, non-EU waters.

For each of the five geographical regions, the exact definition of the waters included in each of the Councils corresponds to the ICES (International Council for the Exploration of the Sea), CECAF (Fishery Committee for the Eastern Central Atlantic) and GFCM (General Fisheries Commission for the Mediterranean). The only region where the waters are almost entirely under the jurisdiction of member States but includes no high seas is the Baltic Sea. The other regions are composed of the jurisdictional waters of member States, third countries and the high seas, especially in the North-western and South-western waters Councils.

REGIONAL FISHERIES ADVISORY COUNCILS

Council name	CIEM areas, CECAF and GFCM divisions	Countries
Baltic Sea	IIIb, IIIc and IIId	Germany, Poland, Latvia, Lithuania, Estonia, Sweden, Finland
Mediterranean Sea	Maritime waters of Mediterranean Sea east of meridian 5º36´,	Spain, France, Italy, Cyprus, Malta, Greece, Slovenia
North Sea	IV, IIIa	United Kingdom, Norway, France, Belgium, The Netherlands, Denmark, Sweden, Germany
North-western waters	V (except Va and in Vb Community waters only), VI,VII	France, United Kingdom, Ireland
South-western waters	VIII, IX and X (waters of the Azores), and CECAF division 34.1.1, 34.1.2 y 34.2.0 (waters of the Madeiras and the Canary Islands)	France, Spain, Portugal
Pelagic stocks	All areas (excepting the Baltic and Mediterranean Seas)	
High Seas/Distant Water fishing fleet	All non-EU waters	


Regional Councils
Mediterranean Sea
South Western waters
North Western waters
Baltic Sea
North Sea
EEZ
ICES areas

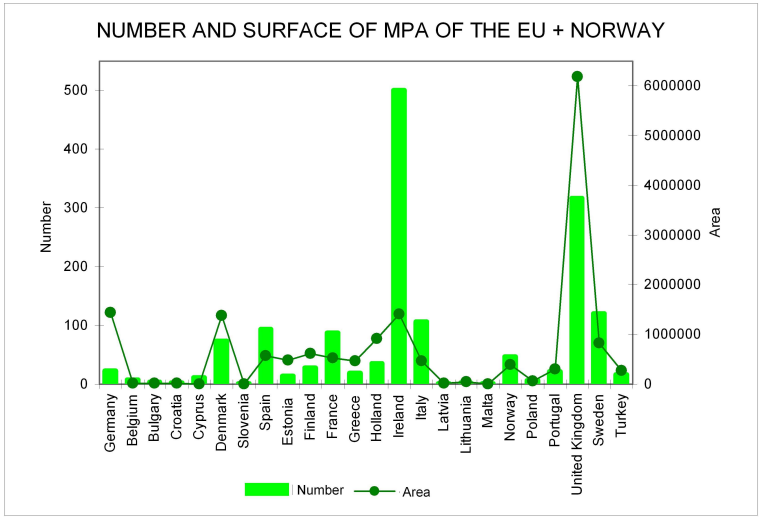
51. ENVIRONMENTAL MANAGEMENT. MARINE PROTECTED AREAS.

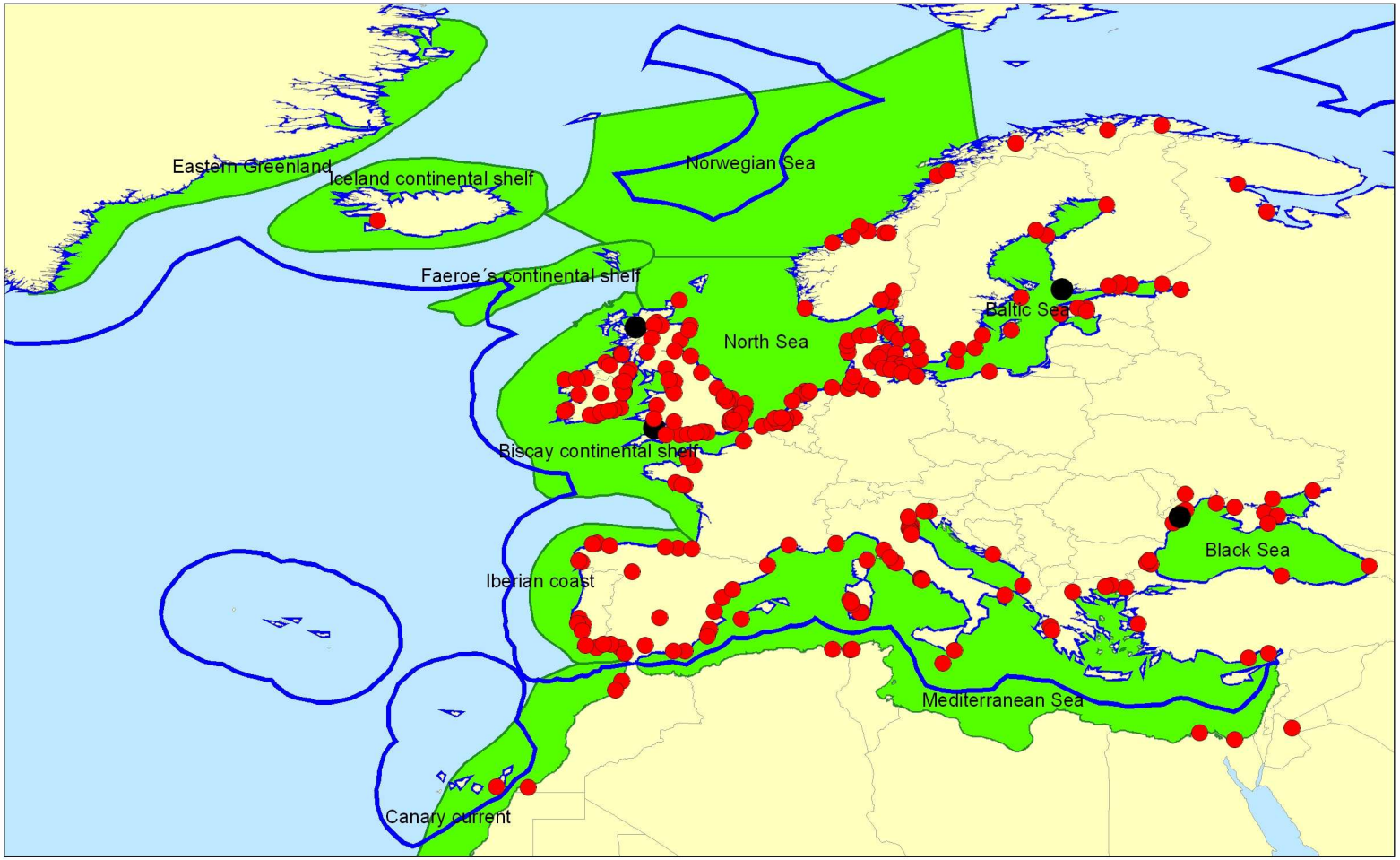
The protection of marine areas is generalised throughout European countries, although in many cases this means small surface areas of both land and sea. The designation criteria and the degree of protection given to habitats and marine fauna vary from one country to another although, in general terms, they correspond to the criteria recognised by scientific institutions and international organisations.

Many of Europe's marine protected areas are linked to initiatives that are governed by international agreements, such as the Convention for the Protection of the World Cultural and Natural Heritage, the Man and the Biosphere programme (MAB), the Ramsar Convention on Wetlands, Biogenetic Reserves, and Directives of the EU itself. The Directives on birds and the Directive on habitats and species are the most important EU instruments for nature protection. Bird protection includes the creation of special protection areas and, within the Habitat Directive, a specially-protected network of areas called "Natura 2000" has been created. It is the Commission's criterion that both directives be applied to the jurisdictional waters of member States as a whole, including the Exclusive Economic Zone.

In sectoral terms, the most important protection provision, called Particularly Sensitive Sea Areas, was created by the International Maritime Organisation (IMO). Tankers are not allowed to sail through these areas unless they are double hulled. Three of the eleven areas that exist worldwide are in Europe: the Wadden Sea (2002), Western Europe (2003) from the Shetland Islands to the south of Portugal, and the Canary Islands (2004).

Despite the fact that the concept of large marine ecosystems (LMEs) does not correspond to any particular legal protection stipulation, it might constitute the basis for future conservation measures that respond to the scale of management problems already affecting huge expanses of the oceans.



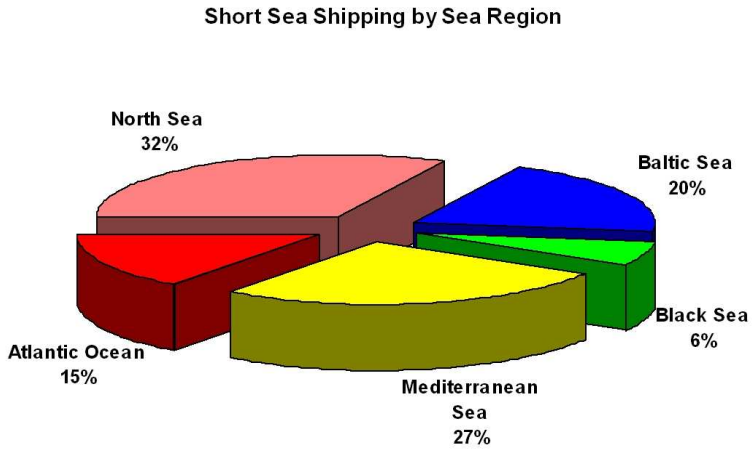

Eastern Greenland
Iceland continental shelf
Norwegian Sea
Faeroe´s continental shelf
Baltic Sea
North Sea
Biscay continental shelf
Black Sea
Iberian coast
Mediterranean Sea
Canary current
Large Marine Ecosystems
Claimed / hypothetical EEZ
UNESCO-MAB reserve
Wetland of international importance (Ramsar)

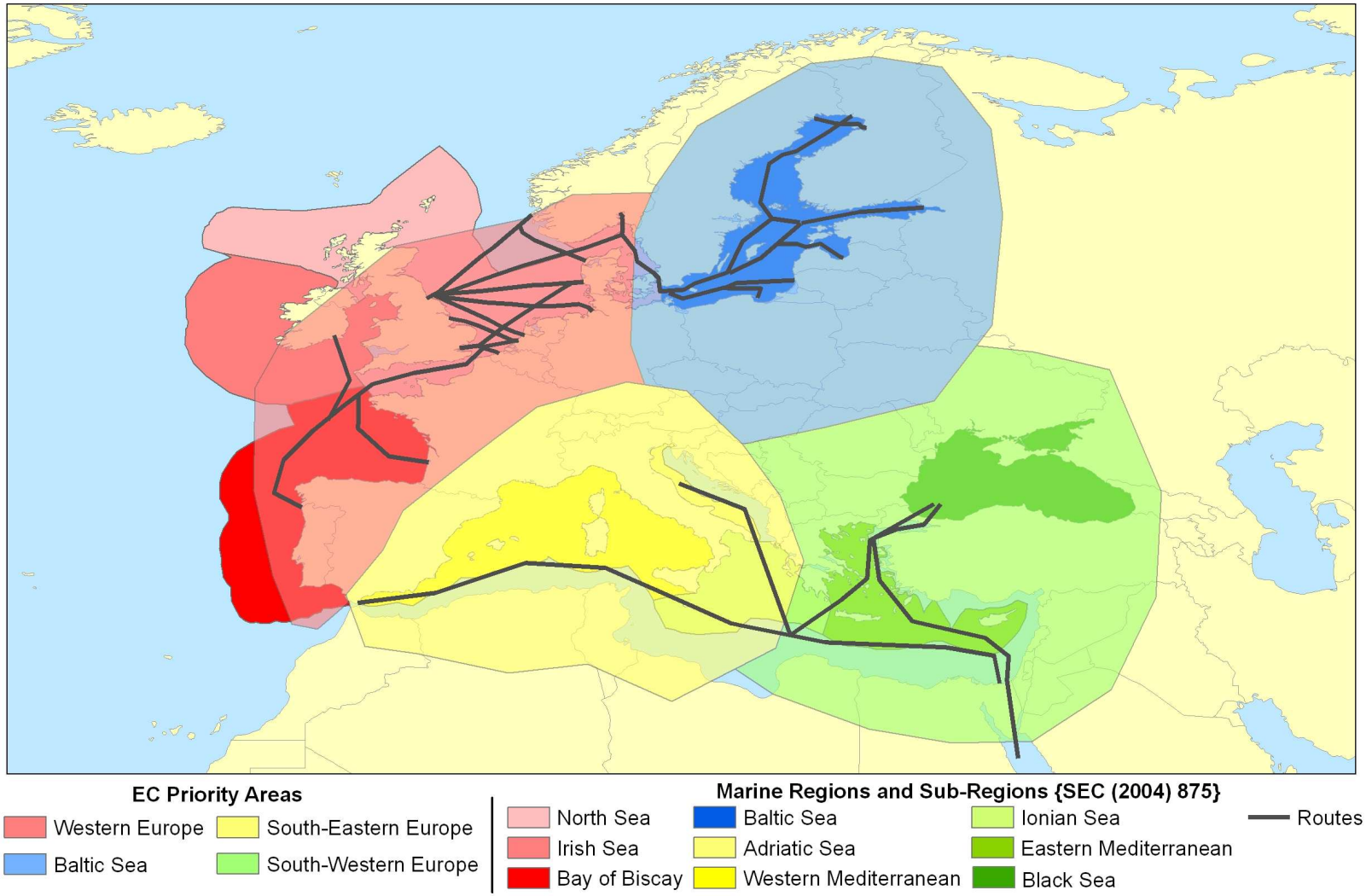
52. TRANSPORT POLICY: SHORT SEA SHIPPING AND MOTORWAYS OF THE SEA

Although the concept of *cabotage traffic* has long been part of traditional maritime language, in recent years it has taken on a new meaning: apart from being a type of non ocean-going sea transport, it is understood to be a link in the intermodal chain of transport, basically aimed at capturing part of the land freight market in order to relieve the congested road transport system. A secondary effect of cabotage, or *short sea shipping* as it is so expressively referred to, is a reduction in both pollution and fuel consumption by economies of scale.

The notion of *motorways of the sea* first appeared in the European Union's transport policy (White Paper on Transport Policy, 2001). They are considered to be part of the trans-European transport network (TEN-T) and are conceived as links in the door-to-door logistics chain, offering efficient, regular and solvent high-frequency services that can compete with the road. Ports connected to motorways of the sea must have good connections with their area of influence on land, have fast administrative procedures and a high level of services. In the EU, motorways of the sea must help reduce congestion on European highways and improve connections with remote regions and island States. The concept of cabotage is broader than that of motorways of the sea, as it includes connections with third countries in the vicinity, domestic connections and connections between the continental mainland and islands.

The European Commission has identified four priority areas where motorways of the sea are to be developed: i) the Baltic Sea, to connect the States on this sea with central and western European member States, including a North Sea-Baltic Sea connection; ii) western Europe from Portugal and Spain via the Arctic arc to the North and Irish Seas; iii) south-eastern Europe, connecting the Adriatic Sea with the Ionic Sea and the eastern Mediterranean (including Cyprus); iv) south-western Europe (the western Mediterranean) connecting Spain, France and Italy and also taking in Malta and making a connection with the south-eastern European seaway, which provides a connection with the Black Sea.

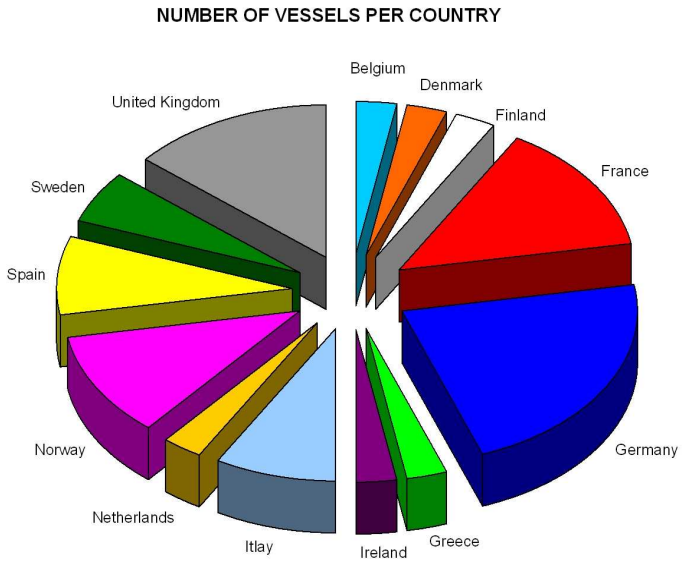



EC Priority Areas
Western Europe
South-Eastern Europe
Baltic Sea
South-Western Europe
Marine Regions and Sub-Regions {SEC (2004) 875}
North Sea
Baltic Sea
Ionian Sea
Routes
Irish Sea
Adriatic Sea
Eastern Mediterranean
Bay of Biscay
Western Mediterranean
Black Sea

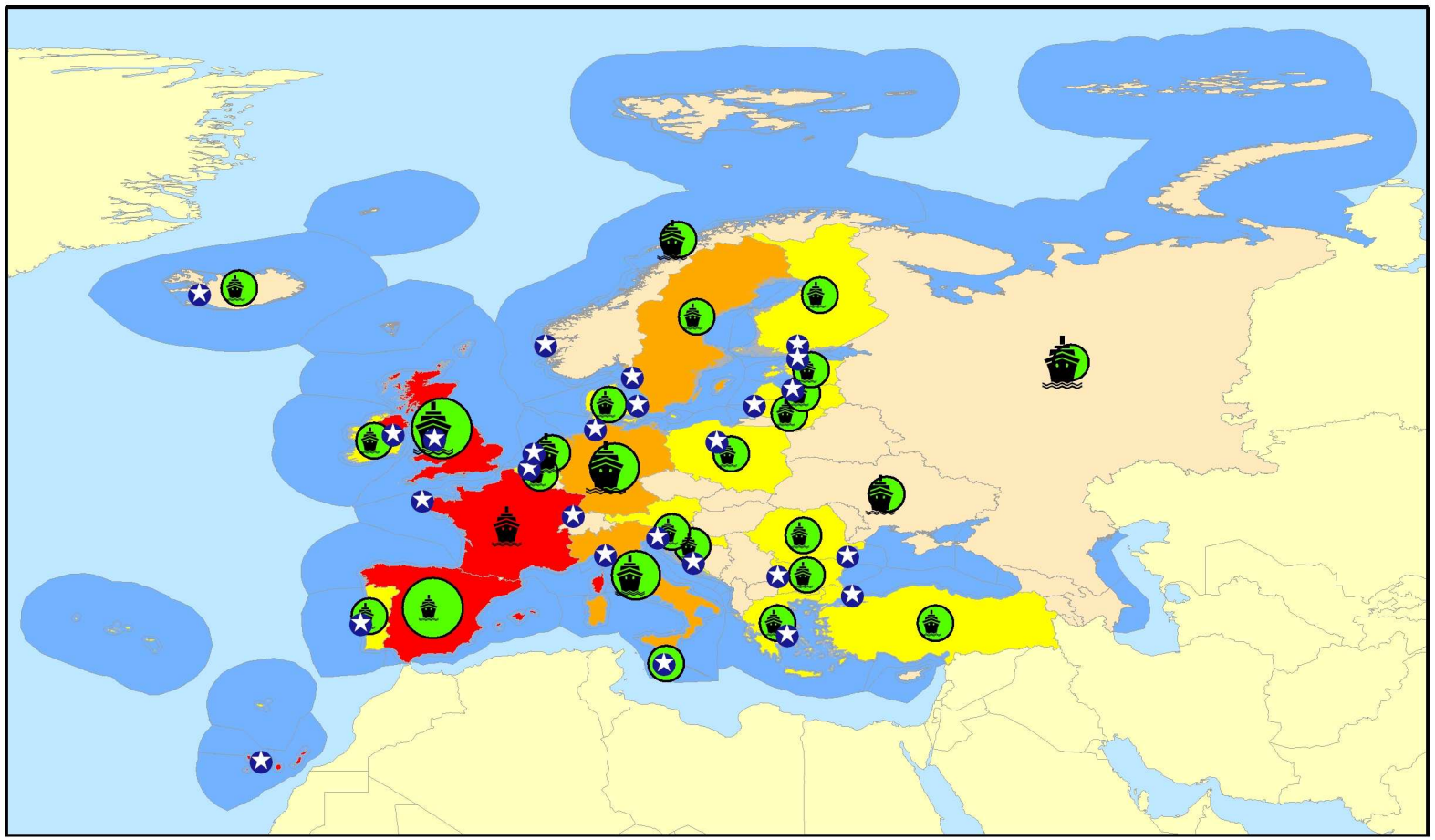
53. MARINE SCIENCES. INSTITUTIONS AND FACILITIES*

Europe possesses over 280 marine research institutions, 36 oceanographic vessels, and some 8,000 scientists associated with marine research, 3,700 of whom are regularly on board ship. They are very unequally distributed from country to country, as is the importance given to marine research in each of the institutions. The oceanographic vessel is the basic piece of research equipment, and multipurpose craft of over 35m (138ft) in length are the most appropriate for research purposes. The European fleet, with Germany at the head with 8 vessels, ranges between 37 and 121 metres (145-476 feet) in length and the vessels are about thirty years old on average.

There is a certain balance maintained between the disciplines found in marine research: physics, chemistry, biology, biochemistry, geology and geophysics are all present roughly to the same extent (10-12%). For obvious reasons, the operational area of the oceanographic vessel fleet focuses on the North Atlantic (over 50%) and the Mediterranean Sea (15%), although their presence extends throughout all other oceans, especially the waters around the Antarctic. The most-researched area of the oceans is the abyssal plain, on which the greatest hopes are pinned as far as industry and bioprospecting are concerned, followed by the continental shelf and coastal zones. Although other procedures for obtaining oceanographic data are developing rapidly, vessels will still be needed for marine research, but using highly advanced technical equipment in order to stay at the cutting edge in a marine environment that is increasingly competitive.



* Source: National Fleets of Research Vessels in Europe. Assessments of characteristics in comparison with future requirements. Administration of the European Communities DG XII. Brussels, 2000


European institutes and research centres
Infraestructure
1 < 13
13 < 25
25 < 50
Data centres
Vessels
1 < 9
9 < 19
19 < 30
Research center
1 < 13
13 < 25
25 < 50

54. MARITIME HERITAGE

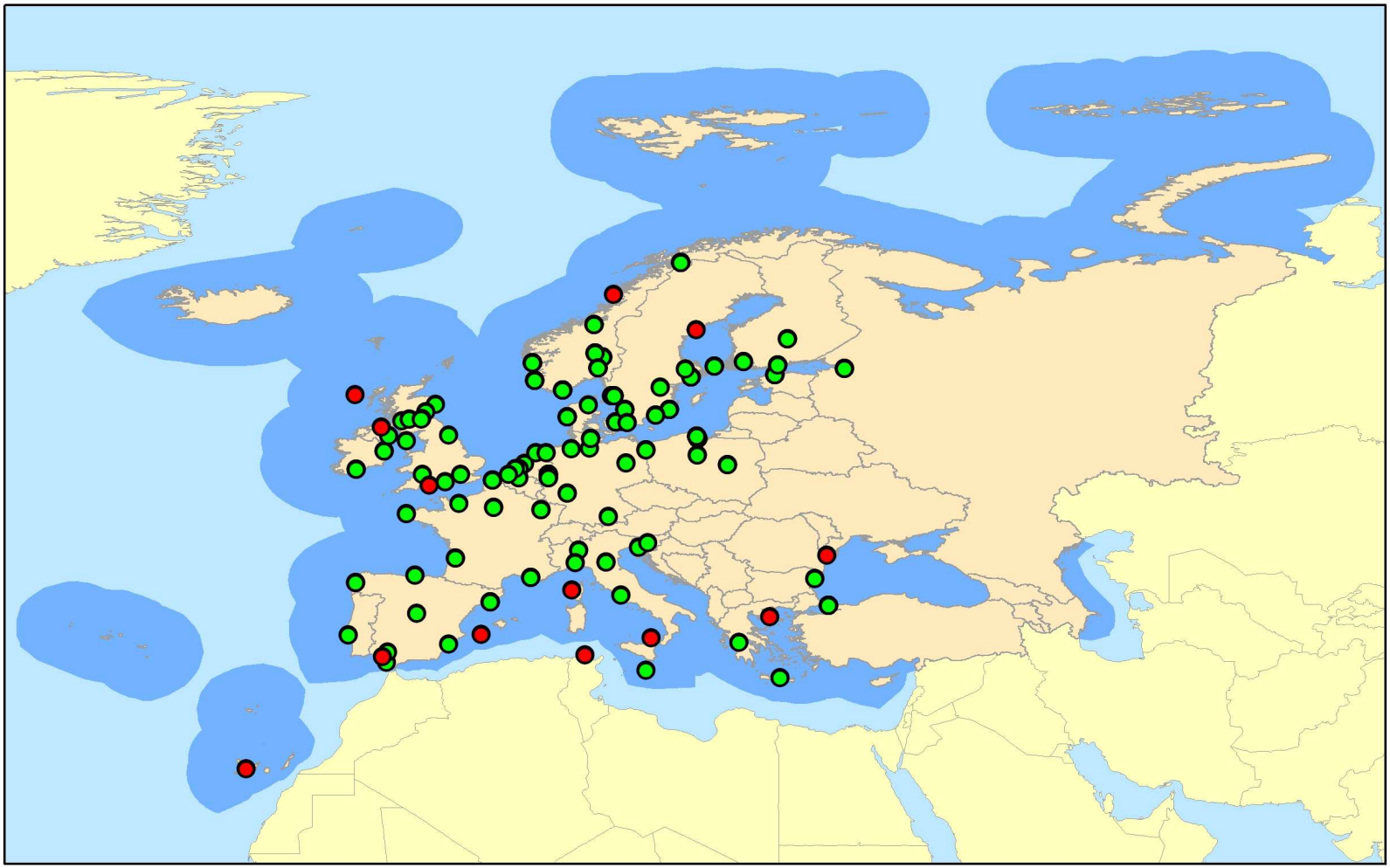
Interest in Europe's maritime heritage has increased notably in recent years. Apart from the international environment, which is right for the preservation, protection and recovery of everything related to marine activity, in Europe the progressive disappearance of activities traditionally linked to the seas is forcing a thorough and complete conversion of coastal zones and their function in economic development. Maritime heritage is thus beginning to be considered a valuable resource which, together with tourism and other leisure activities, would allow coastal zones to be converted into service areas at the same time that they provide the foundations and content for what is already being referred to as a "marine identity".

Apart from national programmes to promote maritime culture, at the heart of which are maritime museums, the most important international instrument for propagating maritime heritage is the UNESCO Convention on the Protection of the Underwater Cultural Heritage (2001). As its very name suggests, this initiative is aimed at underwater heritage, which UNESCO regards as an integral part of the cultural heritage of mankind, and which technical advances in the exploration of the seabeds have greatly endangered by facilitating the pillaging of existing wrecks (it is estimated that there are over three million wrecked vessels that remain to be located) and other archaeological remains and artefacts lost in the seas throughout history.

A major part of the maritime cultural heritage is of an immaterial nature and comprises knowledge, traditions, skills and trades, and institutions linked to a range of maritime activities that are also at great risk due to the fact that they are no longer profitable, to the abandoning of skills and trades, and to technological innovation itself.

UNDERWATER CULTURAL HERITAGE MEANS ALL TRACES OF HUMAN EXISTENCE HAVING A CULTURAL, HISTORICAL OR ARCHAEOLOGICAL CHARACTER WHICH HAVE BEEN PARTIALLY OR TOTALLY UNDER WATER, PERIODICALLY OR CONTINUOUSLY, FOR AT LEAST 100 YEARS.
(ARTICLE 1, PARAGRAPH 1)

(UNESCO Convention on the Protection of the Underwater Cultural Heritage, 2001)


Heritage of Mankind sites (Convention on the Protection of the Underwater Cultural Heritage)
Maritime museums

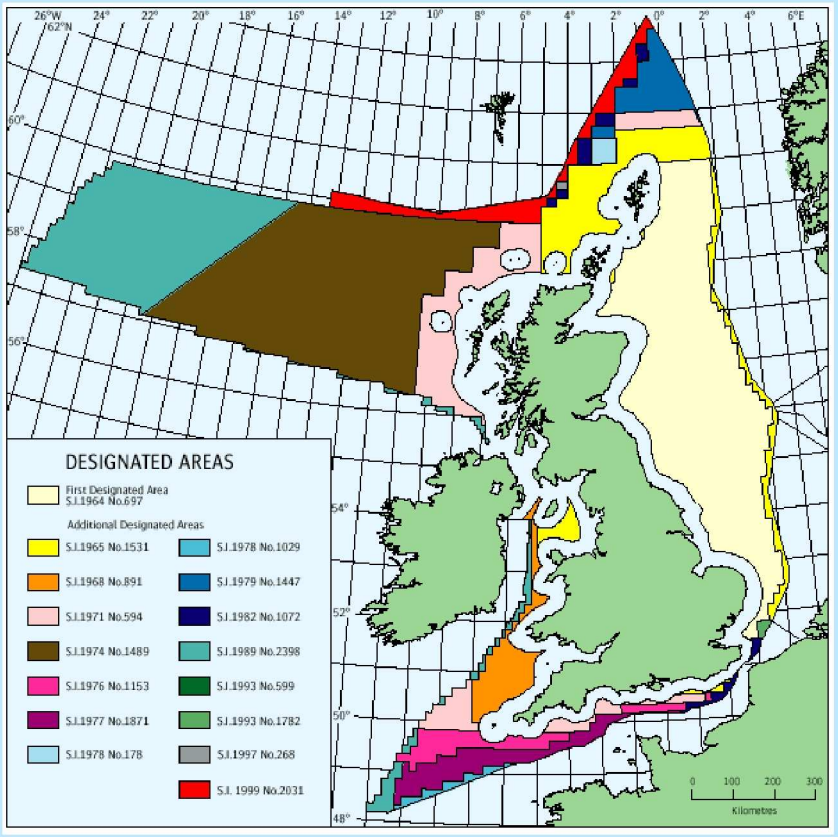
55. SPATIAL PLANNING IN COASTAL-MARINE AREAS

The growing number of activities and uses found in European waters and along European coasts has given rise to complex problems and conflicts to which it is not always easy to find a solution. As on *terra firma*, some kind of public intervention is needed in the form of spatial planning, to allow priorities to be established and limits to be put on the usage made of certain, specific areas, the siting of activities and facilities, and the protection of sensitive ecosystems, and also to allow investments to be made in a rational way in order to create new uses. The land management instruments traditionally used on *terra firma* are gradually being extended towards the marine environment, an area which, although subject to similar processes as emerged land (competing usages, conflicts, harm to the environment, etc.), does obviously have substantially different physical features. Planning mechanisms, supported by legislation and planning/implementation tools, should address the environment and ecosystems, but without forgetting the economic aspect, since there is also the issue of directing, fomenting and limiting maritime activities, creating opportunities and contributing to general European socio-economic advancement. The Canadian and Australian examples allow us to analyse what these types of experiences consist of, as do the examples of Germany, The Netherlands and Britain in our geographical context.

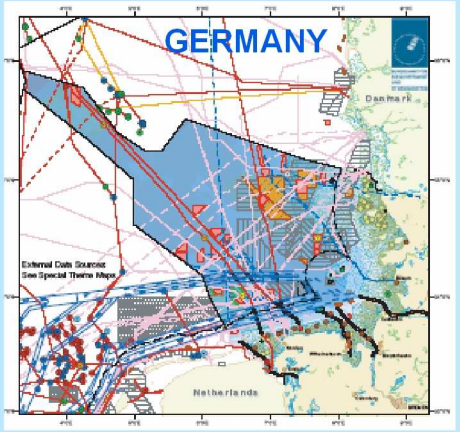
In the case of German waters, the EEZ in both the North and Baltic Seas has been regulated since 2004 by the same federal law that governs emerged land. This planning is clearly directed at integration and conflict-resolution, and contains platforms such as the sustainability of spatial development and the protection of the marine environment. In the case of The Netherlands, a similar planning policy has been established for the North and Wadden Seas. As for Great Britain, a pilot scheme is already being implemented and a marine legislation bill (the *Marine Bill*) has been put forward for the management of various marine regions (northern Scotland, areas of the North Sea, the English Channel area, the Irish and the Celtic Seas, etc.).

KEY ASPECTS OF MARINE SPATIAL PLANNING	
Jurisdictions	Limits of TS, EEZ and Continental Shelf
Shipping	Routes, traffic separation schemes, anchorages, restricted areas, etc.
Hydrocarbons exploitation	Platforms, pipelines
Energy production	Power stations (e.g.: wind.)
Dumping	Siting of areas
Nature conservation	Protected areas, ecologically important areas
Military operations	Areas for shipping and manoeuvres, firing ranges, etc.
Underwater cables	Path taken by cables
Aquaculture	Siting and surface area of areas
Sediment extraction	Siting of areas

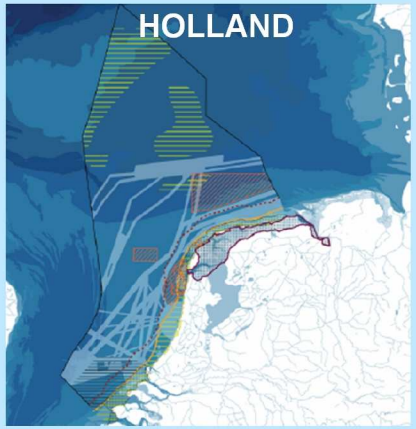
UNITED KINGDOM



GERMANY



HOLLAND



56. THE NEW EUROPEAN MARITIME POLICY: NEW STRATEGIC OBJECTIVES

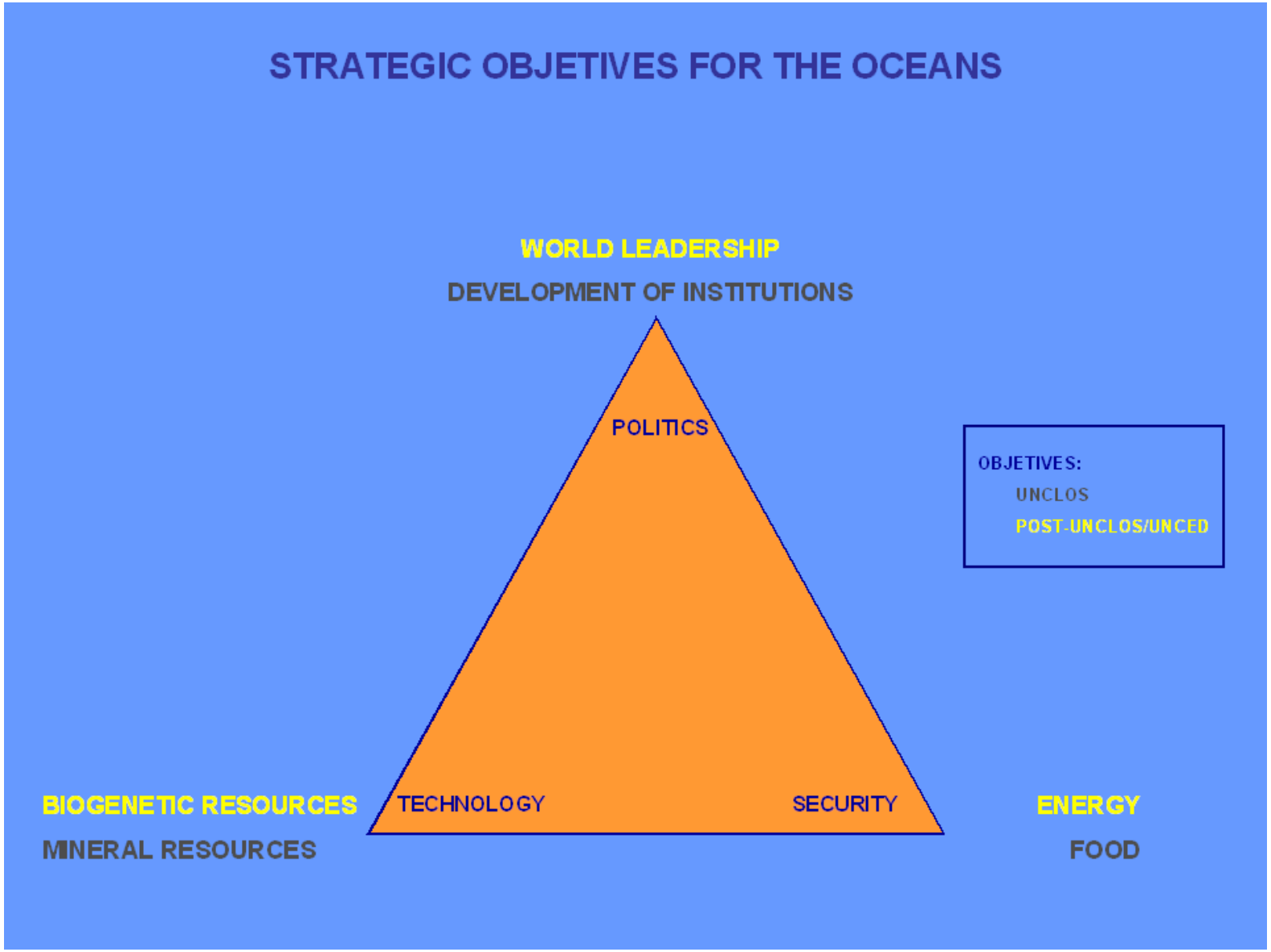
The Green Paper on EU Maritime Policy (2006) is the European response to the new generation of science-, technology- and innovation-based ocean strategies (Canada, the United States, Australia) aimed at new objectives, such as strengthening security and access to new resources. During the second half of the 20th century, both developed and developing countries shared strategic objectives in the way they used the seas, the core of which was the consolidation of widened jurisdictions and the formulation of productivist fisheries policies. With the maritime tradition of modernity a thing of the past, the new ocean strategies are targeted at three major objectives: strengthening security, the development of advanced technologies, and new social and political values. Compared to the priority given to food security up to the middle of the 20th century, the most advanced societies now establish their priorities as energy supply (access to new energy sources), migratory flows by way of the seas, security for trade routes (greater dependence on external trade due to economic dislocation), and global terrorism, similarly linked to maritime transport and the mass use of containers**.**

The exploitation of new resources on the seabed, such as bioprospecting (also called *blue biotechnology*) and international ocean leadership complete the roll of new strategic objectives in which vital aspects such as energy dependence, trade flows, communication networks (data, voice and picture) and territorial dominion are inexorably linked to the oceans.

New social and political values are one of the most significant aspects of marine governance: less intervention by the State and a greater role for the various social agents –the principle of representation, partnership and legitimacy- and, particularly, the new values/principles of *environmental ethics.*

THE NEW STRATEGIC FRAMEWORK		
World leadership	Energy supply Migratory flows Trade Global terrorism	Security
Innovation Competitiveness Science	Seabeds Bioprospecting Environmental hazards	Technology
Ocean governance Maritime identity Maritime heritage	Civil society State=Nationalism/Multilateralism Heritage of Mankind	Politics

STRATEGIC OBJETIVES FOR THE OCEANS



APPENDIXES

I. GLOSSARY

Area: The sea and ocean bottoms and subsoil outside the limits of national jurisdiction. The Area and its resources are part of the common heritage of mankind and no State, individual or legal entity can appropriate them. The Area's natural resources are *in situ* mineral resources.

Coral reef: A marine formation of biological origin created by organisms with a calcareous skeleton (corals) which live in symbiosis with a variety of species of algae.

***Continental shelf*:** The natural extension of coastal States' shores as far as the outer edge of the continental margin, or to a distance of 200 miles if the continental margin does not extend to said distance. The continental margin comprises the underwater extension of the continental mass of the coastal State and is made up of the seabed and subsoil of the continental shelf, and the continental rise and slope.

Coastal resources: Are the products for the production of goods and services which respond to demand from society and include both renewable and non-renewable natural resources, constructed resources and objects of cultural, historical and archeological value.

Contiguous zone: Waters outside and adjacent to the territorial sea where a coastal State can implement customs, tax, immigration and health measures. It cannot exceed 24 miles in width from the straight base lines from which territorial seas are measured.

Demersal fishery: Fisheries resources that live on or in the seabed.

Exclusive Economic Zone: A maritime area outside and adjacent to the territorial sea where a coastal State exercises its right of sovereignty for the purpose of the exploration, exploitation, conservation and management of living and non-living natural resources on the seabed, in the subsoil of the sea, and the overlying waters. Its width is 200 miles counted from the straight base lines from which territorial seas are measured.

Food network: A web of food relationships that exists between the species in an ecosystem and that reflects the direction of the flow of the matter and energy that pass through it. All food networks can be thought of as the sum total of food chains. In most ecosystems, two parts of the food network can be easily distinguished: one based on living organic matter, and the other on dead matter, or detritus.

GOOS: Global Ocean Observing System; an international cooperation programme for the systematic gathering of oceanographic data under the auspices of the Intergovernmental Oceanographic Commission (UNESCO).

***High sea*:** All those areas of the sea that are not included in the exclusive economic zone, the territorial sea, inland waters or archipelagic waters in the case of an archipelagic State. The high sea is open to all States and will only be used for peaceful purposes.

Inland waters: Waters situated between straight base lines and the coastline. States exercise full territorial sovereignty over these waters, their beds and subsoil and the airspace over them.

Integrated management: An operational level that refers to the coordination between all the competent agencies of all the tasks required for planning and implementing integrated coastal management activities, including the acquisition and distribution of the resources on which they act.

Large sea ecosystems: Are extensive aggregates of marine stocks linked to one-another in predator-prey relationships. The minimum size of these units is approximately 200,000 sq km (58,000 sq nl mls). Within the large sea ecosystems physical, biological and chemical processes take place, the movement of basic nutrients through phytoplankton, zooplankton and the lower levels of the food chain to more developed organisms corresponding to species with a greater commercial value. The effects of human activities (fishing, pollution, the destruction of habitats, etc., that affect the ecosystem's structure) must be added to the natural processes.

Normal base line: The normal base line used to measure the width of the territorial sea is the low tide line along the whole of the coast.

OTEC: Ocean Thermal Energy Conversion. A device for producing energy from vertical temperature gradients.

Pelagic fishery: Free-swimming fisheries resources inhabiting the open sea away from the seabed.

Phytoplankton: Plankton composed of autotrophic organisms, basically plants. This is a relatively low-biomass, high-production system. It is made up of single-celled autotrophic organisms (capable of feeding on inorganic substances) and some heterotrophes. The size of these organisms is usually between 2 and 200 micrometres and rarely more than a millimetre.

Protected area: A geographically-defined area designated and managed so as to achieve some specific conservation purposes.

Plankton: Microscopic animals and plants for the most part, that float or swim feebly in fresh or salt water. They are transported passively by the winds, waves or currents. Plankton comprises a huge group of aquatic organisms that are classified either as zooplankton or phytoplankton. The smallest organisms (diatoms) are known as monoplankton. All the animals that live in the open sea depend, in the final instance, on phytoplankton, which are at the base of the food pyramid.

Primary production: In marine ecology, primary production refers to the amount of organic material produced by unit of time and volume, i.e.: grammes of carbon (the main constituent of organic material) divided by year (or some other time measure, such as hours or days), and square metre, and the entire water column that extends beneath said square metre (gC/yr per sq m).

***Straight base line*:** When coasts have deep openings and indentations, or when there is an island strip, straight base lines might be plotted to measure the width of the territorial sea. They are obtained by joining the most seaward points of the coast and should not stray substantially from the general direction of the coast.

TAC: A cap on the volume of catches for a specific species. The TAC (Total Allowable Catch) for each species is fixed by the corresponding administration on the basis of a scientific report. The TACs that the corresponding administration can establish may be higher than scientists' recommendations, taking into account political and social considerations and the economic viability of the sector.

Territorial sea: A strip of sea adjacent to a coastal State's territory and inland waters over which the State exercises full sovereignty, both regarding surface waters and the overlying airspace, and the seabed and the subsoil of said sea. The maximum outer limit of the territorial sea is 12 miles.

TEU: The Twenty-foot Equivalent Unit, or TEU, is a basic unit for expressing the capacity for container transport on totally cellular container ships, partial container ships and roll on-roll off vessels. The purpose of this unit is to standardise vessels designed for the transport of twenty-foot, thirty-foot and forty-foot long containers

with a standard height and width of eight feet. Capacity can also be expressed in FEUs (Forty-foot Equivalent Units).

Zooplankton: Plankton comprised of heterotrophic organisms, basically animals.

II. FACTS AND FIGURES

TABLE 1. GENERAL DATA.

Country	Land area (sq. km) (A)	Coastline (km) (B)	Jurisdictions (C)						Area EEZ(200 milles; sq. km) (D)	Ratio SL[1]/ZEE	Area Continental Platform (sq. km; to 200m isóbath) (D)	Area Territorial Sea (sq. km)	Advantaged/ Disadvantaged (E)
			Legislation SBL[2]	Territorial Sea (mn)	Contiguous Zone (mn)	EEZ (mn)	Continental Shelf (mn); Parties to 1982 Convention[3]	Fisherie Zone					
Germany	357021	3624	Sí	12		200[4]	200m[5]/Expl.[6] 1982		57485	0.063043	57485	18385	D
Austria	83870												D
Belgium	30528	76		12	24	[7]	DLM[8] 1982	[9]	3447	0.022048	3447	1523	D (12)
Denmark	43094	5316	Sí	12		200	200m/Expl. 1982	200[10]	105989	0.050156	105989	24760	D
Spain	504782	7268	Sí	12	24	200[11]	N/A[12] 1982	[13]	1039233	0.006994	77920	115821	A (77)
Finland	338145	31129	Sí	12[14]	14[15]		200m/Expl. 1982	[16]	87171	0.357103	85109	55123	D
France*	547030	3427	Sí	12	24	200[17]	200m/Expl. 1982		341285	0.010041	160661	73382	D (24)
Greece	131940	15147		6[18]			200m/Expl. 1982		505572	0.02996	81451	114814	A (56)
The Netherlands	41526	1914	Sí	12		[19]	200m/Expl. 1982		71843	0.026641	71843	13223	D (12)
Ireland	70280	6437	Sí	12			Defined by coordinates 1982	200	410310	0.015688	139935	39358	A (49)
Italy	301230	9226	Sí	12			200m/Expl. 1982		541915	0.017025	116834	155629	A (48)
Luxembourg	2586												D (12)
Portugal	92391	2830	Sí	12	24	200	200m/Expl. 1982		1727408	0.001638	26902	64145	A (214)
United Kingdom	244820	19717	Sí	12[20]		200[21]	Defined by coordinates 1982	200 or	764071	0.025805	541814	168145	A

[1] SL: Shoreline Lenght.
[2] Straigth Base Line
[3] Or, where the State is not a party to it, parties to 1958 Convention/Outer limit claims as reflected in legislation.
[4] Defined by coordinates..
[5] 200m:200m-depth of 200 metres.
[6] Expl.: Depth of exploitability.
[7] Defined by point coordinates.
[8] The symbol DLM is used when national legislation establishes the limits of a given zone by referente to the delimitation of maritime boundaries with adjacent or opposite States (or to a mediam (equidistant) line in the absence of a maritime boundary delimitation agreement).
[9] Has the same surface area as the EEZ.
[10] For Greenland and the Faeroe Islands.
[11] In the Atlantic Ocean.
[12] N/A Not Available.
[13] In the Mediterranean Sea.
[14] With certain exceptions extends to 12 nautical miles unless defined by geographical coordinates. In the Gulf of Finland the outer limit of the territorial sea does not approach the mean line by more than three nautical miles in any place, according to the Law that amends the Law on Finnish Territorial Seas (981/95).
[15] Two miles outside the outer limit of the territorial sea.
[16] Defined by coordinates.
[17] Applies to the North Sea, the English Channel and the Atlantic Ocean from the Franco-Belgian border to the Franco-Spanish border, Saint Pierre and Miquelon, French Guiana, Reunion Island, New Caledonia, French Polynesia, French southern and Antarctic lands, Wallis and Futuna, Tromelin, Glorioso, Juan de Nova, Europa and Bassas de India Islands, Clipperton Island, Mayotte, Guadalupe and Martinique.
[18] A limit of 10 miles applies for the purpose of civil aviation regulation.
[19] Defined by point coordinates.

Country	Land area (sq. km) (A)	Coastline (km) (B)	Jurisdictions (C)						Area EEZ(200 milles; sq. km) (D)	Ratio SL[1]/ZEE	Area Continental Platform (sq. km; to 200m isóbath) (D)	Area Territorial Sea (sq. km)	Advantaged/ Disadvantaged (E)
			Legislation SBL[2]	Territorial Sea (mn)	Contiguous Zone (mn)	EEZ (mn)	Continental Shelf (mn); Parties to 1982 Convention[3]	Fisherie Zone					
Sweden	449964	26384	Sí	12		[23]	200m/Expl. 1982	12[22]	160885	0.163993	154604	85308	D
Cyprus	9250	671	Sí	12			200m/Expl. 1982		98707	0.006798	4042	13679	D
Slovakia	48845												D
Slovenia	20273	46,6					N/A 1982		220	0.211818	220	171	D
Estonia	45226	2956	Sí	12[24]		[25]	Defined by coordinates		36992	0.079909	36992	24279	A
Hungary	93030												D
Latvia	64589	565	Sí	12	12	[26]	CM[27]/200 1982		28452	0.019858	27772	12584	A
Lithuania	65200	258	Sí	12[28]	24		N/A		7031	0.036695	7031	2018	A
Malta	316	198	Sí	12			200m/Expl. 1982	25	54823	0.003612	5301	3976	D (15)
Poland	312685	1032		12		[29]	N/A 1982		29797	0.034634	29797	10632	D (2)
Czech Republic	78866												D
Bulgary	110910	457	Sí	12	24	200	DLM 1982		34307	0.013321	10426	6506	D
Romania	237500	696	Sí	12	24	200	N/A1982		23627	0.029458	19303	5343	D
Croatia	56542	5663	Sí	12			DLM		59032	0.095931	50277	31710	D
Turkey	780580	8140		6[30]		200[31]	N/A		261654	0.03111	56093	81006	D
Total	5163019	153177,6							6451256		1871248	1121520	
* Guadeloupe	1780	581							95832	0.00606	4045	11582	
Reunion Island	2517	219							315002	0.0007	485	5703	
Martinique	1100	369							47204	0.00782	1416	5121	
French Guiana	91000	763							135048	0.00565	46741	8200	
Total overseas territory	96397	1932							593086		52687	30606	
Total France	643427	5359							934371		213348	103988	
Total EU 15	3335604	134427							6409700		1676681	960222	
Total EU 27	5259416	155109,6							7044342		1923935	1152126	

Source:

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[20] Three nautical miles in Anguilla, Guernsey, British Indian Ocean Territory, the British Virgin Islands, Gibraltar, Montserrat and Pitcairn; 12 nautical miles in the United Kingdom, Jersey, Bermuda, the Caiman Islands, the Falkland Islands, the Isle of Man, Saint Helena and Dependencies, South Georgia and South Sandwich Islands and the Turks and Caicos Islands.

[21] Bermuda, Pitcairn, South Georgia and South Sandwich Islands.

[22] Twelve nautical miles in Guernsey; 200 nautical miles in the United Kingdom, Anguilla, British Indian Ocean Territory, the British Virgin Islands, the Caiman Islands, the Falkland Islands, Montserrat, Saint Helena and Dependencies and the Turks and Caicos Islands.

[23] Will be determined by agreement or equidistant line.

[24] Defined by coordinates in some parts of the Gulf of Finland.

[25] Defined by coordinates.

[26] Limits established by international agreements with the Republics of Estonia and Lithuania and the Kingdom of Sweden.

[27] Outer edge of the continental margin or to 200 nautical miles where the outer edge does not extend up to that distance.

[28] According to *The World Factbook*, 2003.

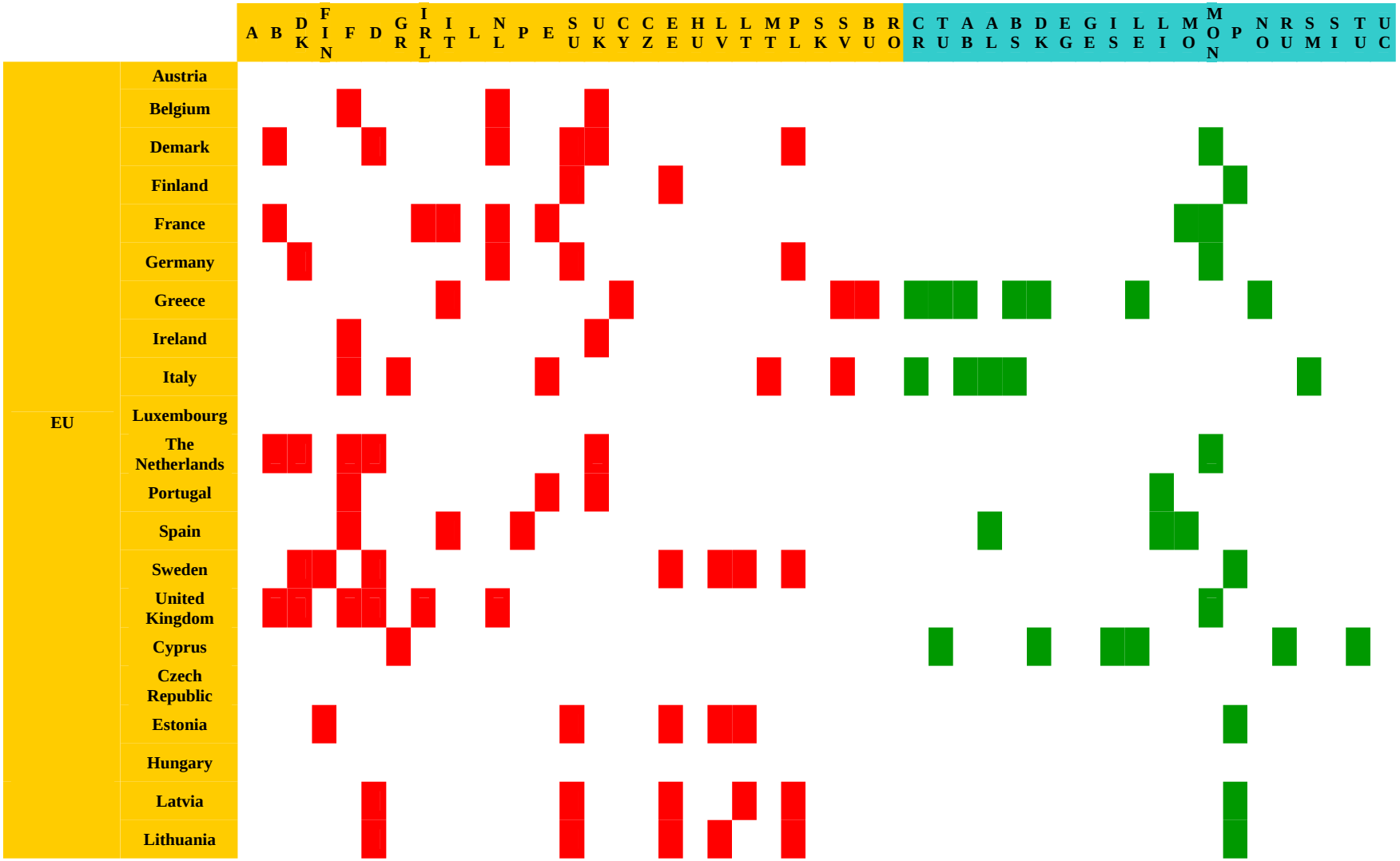
[29] To be defined by international treaties.

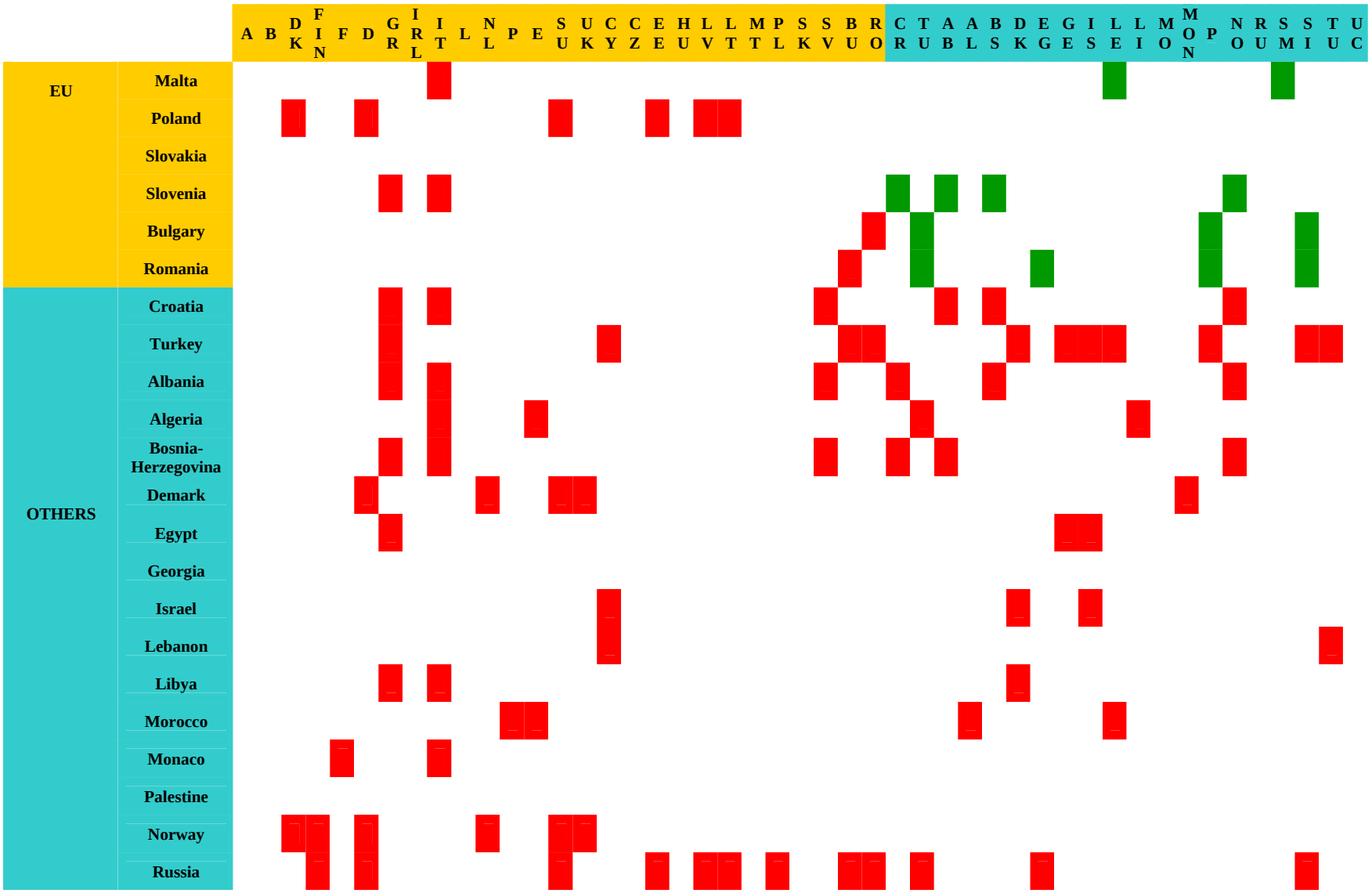
[30] Six nautical miles in the Aegean Sea; 12 nautical miles in the Black Sea.

[31] In the Black Sea.

(A) The World Factbook 2004. Central Intelligence Agency, 2004.
(B) World Resources Institute.
(C) Division for Ocean Affairs and the Law of the Sea. United Nations.
(D) Sea Around Us Project. The University of British Columbia.
(E) Lucchini, L. y Voelckel, M: "Les Etats et la Mer". La Documentation Française, Paris, 1977

TABLE 2. MARITIME BOUNDARIES IN EUROPE

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Palestine
Norway
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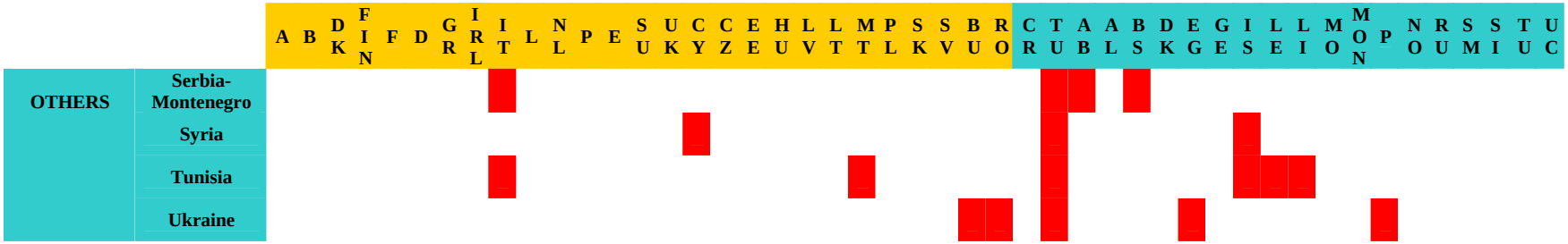

Boundaries with non-EU countries.

TABLE 3. DISPUTED BOUNDARIES AND TERRITORIES

Territory/Boundaries	Countries in dispute
Egean sea	Greece, Turkey
Barents sea	Norway, Russia
Jan Mayen Island	Iceland, Norway
Island Rockall	Ireland, United Kingdom, Demark (1), Iceland (2)
Baltic sea	Estonia, Finland; Estonia, Russia; Estonia, Lithuania; Lithuania, Latvia
Aalaud Islands	Finland, Sweden
Árctic	Russia, Norway, Greenland
Selvagens (Savage) Islands	Portugal, Spain
Gibraltar	Spain, United Kingdom
Svalbard	Norway, Russia
Sevastopol	Ukraine, Russia
Kaliningrad	Lithuania, Russia (2)
Island of Hesseloe	Demark, Sweden (1)
English Channel	France, United Kingdom (1)
Adriatic sea.	*1 Albania, Italy (2); *2 Bosnia-Herzegovina, Croatia (2); *3 Croatia, Slovenia (2); *4 Croatia, Montenegro (2); Albania, Greece (2)
Black sea	Romania, Ukraine (2)

*1 Srait of Otranto
*2 Bahía de Klek
*3 Gulf of Piran
*4 Gulf of Kotor

Sources: Suárez de Vivero, J L. Los océanos. Medio ambiente, recursos y políticas marinas. Barcelona, Ediciones del Serbal. 2001
(1)Henry W. Degenhardt. Maritime affairs : a world handbook : a reference guide to maritime organizations, conventions and disputes and to the international politics of the sea. Editorial consultant, Brian Merdedith MBE. (2)Martin Pratt and Janet Allison Brown . Borderlands under stress. London, Kluwer Law International. 2000

TABLE 4. INTERNATIONAL STRAITS

Straits	Coastal States	Ocean	Length (nautical miles)		Depth (metres)	
			max.	min.	max.	min.
Gibraltar	Spain, Morocco, United Kingdom	Atlantic sea Mediterranean sea	24	7.5	1092	18.2
Dover	France, United Kingdom	North Atlantic	26	17	36.4	20.02
Menorca Channel	Spain	Mediterranean sea	26	19.75	145.6	43.68
Messina	Italy	Mediterranean sea	9	1.75	546	69.16
Bonifacio	France, Italy	Mediterranean sea	9	3.4	145.6	49.14
Dardanelles	Turkey	Mediterranean sea	4	0.75	91	45.5
Bosphorus	Turkey	Mediterranean sea	2.25	0.32	72.8	
Kythera Channel	Greece	Mediterranean sea	16.75	10.50	546	70.98
Carpathian	Greece	Mediterranean sea	26	23	1274	45.5
Oresund	Sweden, Demark	North sea	15.75	2	25.48	8

Sources: Laurent Lucchini, Michael Voelckel. Les etats et la mer: le nationalisme maritime. Paris, La Documentation française.1977.
R.H.Kennedy. Conferencia de las Naciones Unidas sobre el derecho del mar. Documentos oficiales. Vol. I: documentos preparatorios. Ginebra 24 febrero-27 abril 1958

TABLE 5. COASTAL PRESSURE

Country	Land area (Km^2)	Length Coastline	Ratio LC/Sup	Total population 2004	% population 100 Km	Total population 100 Km	Ratio inhab. 100km/Km coastline	Ratio inhab./Km coastline
Germany	357021	3624	0,01	82424609	15	12363691,4	3411,61	22744,10
Belgium	30528	76	0,00	10348276	83	8589069,08	113014,07	136161,53
Demark	43094	5316	0,12	5413392	100	5413392	1018,32	1018,32
The Netherlands	41526	1914	0,05	16318199	93	15175925,1	7928,91	8525,70
France	547030	3427	0,01	60424213	40	24169685,2	7052,72	17631,81
Spain	504782	7268	0,01	40280780	68	27390930,4	3768,70	5542,21
Italy	301230	9226	0,03	58057477	79	45865406,8	4971,32	6292,81
Portugal	92391	2830	0,03	10524145	93	9787454,85	3458,46	3718,78
Greece	131940	15147	0,11	10647529	99	10541053,7	695,92	702,95
United Kingdom	244820	19717	0,08	60270708	99	59668000,9	3026,22	3056,79
Ireland	70280	6437	0,09	3969558	100	3969558	616,68	616,68
Sweden	449964	26384	0,06	8986400	88	7908032	299,73	340,60
Finland	338145	31129	0,09	5214512	73	3806593,76	122,28	167,51
Estonia	45226	2956	0,07	1341664	86	1153831,04	390,34	453,88
Latvia	64589	565	0,01	2306306	75	1729729,5	3061,47	4081,96
Lithuania	65200	258	0,00	3607899	23	829816,77	3216,34	13984,10
Poland	312685	1032	0,00	38626349	14	5407688,86	5240,01	37428,63
Slovenia	20273	46,6	0,00	2011473	61	1226998,53	26330,44	43164,66
Cyprus	9250	671	0,07	775927	100	775927	1156,37	1156,37
Malta	316	198	0,63	396851	100	396851	2004,30	2004,30
Bulgary	110910	457	0,00	7517973	29	2180212,17	4770,70	16450,71
Croatia	56542	5663	0,10	4496869	39	1753778,91	309,69	794,08
Romania	237500	696	0,00	22355551	6	1341333,06	1927,20	32120,04
Turkey	780580	8140	0,01	68893918	58	39958472,4	4908,90	8463,63
Luxembourg	2586			462690				
Austria	83870			8174162				

Country	Land area (Km^2)	Length Coastline	Ratio LC/Sup	Total population 2004	% population 100 Km	Total population 100 Km	Ratio inhab. 100km/Km coastline	Ratio inhab./Km coastline
Czech Republic	78866			10246178				
Slovakia	48845			5423567				
Hungary	93030			10032375				
Russia	17075200	110310			15			
Albania	28748	649			97			
Iceland	103000	8506			100			
Norway	324220	53199			95			
Serbia-Montenegro	102350				8			
Ukraine	603700	4953			21			

Sources: The World Factbook 2004. Central Intelligence Agency, 2004.
World Resources Institute.

TABLE 6. NATIONAL COASTAL-MARINE REGULATORY FRAMEWORK

Country	Coastal zone legislation	Marine space legislation	Marine space legislation/strategies
Germany		Ley Federal de Planificación Espacial (aplicada a la ZEE en 2004)	
Belgium		Ley 20 de Enero de 1999 sobre la Protección del Medio Marino	
Bulgary	Ley de Regulación de la Estructura Costera del Mar Negro		Estrategia Nacional y Plan de Acción para la Protección y Rehabilitación del Mar Negro
Croatia		Código Marítimo	
Spain	Ley de costas de 1988		
Estonia	Ley de Protección de las Aguas Marina y Dulce Costera		
Finland			Programa Finlandés para la Protección del Mar Báltico (2002)
France	Ley Nº 86-2 (3.1.86) relativa a la Ordenación, la Protección y Valorización del Litoral		
Greece	Ley de Costas y Aguas Offshore, 1940		Esquemas de Valorización del Mar, 1983
The Netherlands			Plan Integrado de Ordenación para el North sea, 2015 (2005)
Ireland	Ley de Protección de Costas 1963	Ley de Jurisdicción Marítima (1959). Ley de Modificación de la Jurisdicción Marítima (1987)	
Italy		Ley de Protección del Mar 1982	
Latvia	Ley de Protección Franja Costera; Estrategia para la inversión Costera de Latvia		
Lithuania	Ley de la Zona Costera (2002); Programa Nacional de Ordenación de la Zona Costera (2003)	Ley de Protección del Medio Ambiente Marino (1997)	
Norway		Ley de Recursos Marinos (2005)	
Poland	Primer Programa Regional para la Ordenación Integrada de la Zona Costera Occidental	Ley sobre Áreas Marinas y Administración Marítima de la República Polaca (1991)	
Portugal	Planes de Clasificación de la Franja Costera. Decreto-Ley 1993		Estrategia Nacional Marítima (2006)
United Kingdom	Ley de Protección de la Costa 1949	Proyecto de Ley del Mar (2006)	Evaluación Integrada del Estado de los Mares Británicos (2005)
Romania			Plan Nacional Estratégico para la Protección y Rehabilitación del Mar Negro. Informe de Seguimiento
Sweden			El Mar: Tiempo para una Nueva Estrategia (2003)
Turkey	Ley de Costas		

Source: http://ioc3.unesco.org/marinesp/

TABLE 7. RELEVANT WORLD AND REGIONAL AGREEMENTS AND CONVENTIONS

Name	Objective or main purpose	Signatories / parties to the contract
General		
Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR)	The implementation of every measure possible to stop and eradicate pollution and of the measures required for the protection of marine areas from the adverse effects of human activity with a view to safeguarding human health and conserving marine ecosystems and, should it be necessary, the restoration of marine areas that have been harmed.	
Convention on the Protection of the Marine Environment of the Baltic Sea Area (HELCOM)	The adoption of appropriate legal or administrative measures or other pertinent measures to stop and eradicate pollution with a view to fomenting the ecological restoration of the Baltic Sea area and the preservation of its ecological balance. The Baltic Sea Joint Comprehensive Environmental Action Programme (JCP) focuses on investments linked to the recovery of specific polluted areas in the catchment area.	
Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (BARCOM)	The execution of agreed actions to prevent and eradicate marine pollution and to implement the sustainable management of the Mediterranean Sea.	
Convention on the Protection of the Black Sea Against Pollution	The adoption of all necessary measures consistent with international legislation and the articles of this Convention to prevent, reduce and control pollution with a view to protecting and conserving the marine environment of the Black Sea.	
Arctic Commission	Forum which acts as a mechanism for responding to the common concerns and challenges faced by governments and the population of the Arctic area.	
United Nations Conference on the Law of the Sea (UNCLOS)	The management of the oceans in all aspects.	International agreement
Hazardous Substances		
Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London Convention)	The control of all sources of marine pollution by waste dumping.	International agreement

Name	Objective or main purpose	Signatories / parties to the contract
Stockholm Convention on Persistent Organic Pollutants (POPs)	The establishment of measures to control the production, import, export, elimination and use of persistent organic pollutants (pending implementation).	International agreement
Rotterdam Convention on the Prior Informed Consent Procedure (PIC) for Certain Hazardous Chemicals and Pesticides in International Trade	The instigation of shared responsibility between exporting and importing countries in matters concerned with the protection of human health and the environment from the harmful effects of certain hazardous chemical products which are subject to international trade.	International agreement
Radioactive Substances		
International Atomic Energy Agency	The formulation of nuclear security norms amongst other things and, on the basis of these, instigation to attain and maintain a high level of security in nuclear energy applications and also the protection of human health and the environment from ionising radiation.	International organisation
Fisheries Management		
International Baltic Sea Fishery Commission (IBSFC)	Cooperation with a view to preserving and increasing living resources in the Baltic Sea and the Belts and achieving the highest possible performance and, in particular, to increasing and coordinating studies to these ends.	
North East Atlantic Fisheries Commission (NEAFC)	The promotion of the conservation and optimisation of fisheries resources in the North Eastern Atlantic within a framework adapted to the enlarged coastal waters State jurisdiction regime with regard to fishing and, consequently, to encourage international cooperation and consultations on these resources.	Bulgary, Cuba, Denmark (with regard to the Faeroe Islands and Greenland), the European Union, Iceland, Norway, Poland and the Russian Federation.
North Atlantic Salmon Conservation Organisation (NASCO)	To contribute by way of consultation and cooperation to the conservation, recovery, improvement and rational management of salmon stocks making use of the best scientific information available.	Canada, Denmark (with regard to the Faeroe Islands and Greenland), the European Union, Iceland, Norway, the Russian Federation and the United States.
International Commission for the Conservation of Atlantic Tunas (ICCAT)	Responsible for the conservation tuna and oily fish species in the Atlantic Ocean and adjacent seas.	32 countries including the European Union.
United Nations Food and Agriculture Organisation (FAO)	The main agency in the field of agriculture, forestry, fisheries and rural development. FAO Code of Conduct for responsible fisheries.	International organisation.

Name	Objective or main purpose	Signatories / parties to the contract
Agreement on application of United Nations Conference on the Law of the Sea (UNCLOS) with regard to the conservation and management of straddling stocks	To define principles for the conservation and management of fish stocks and to establish the obligation of subordinating said management to the precautionary principle and the best possible scientific information available.	International agreement.
Nature Conservation		
Agreement on the Conservation of Small Cetaceans of the Baltic and North Seas (ASCOBANS)	Regional agreement by virtue of the conservation agreement of migratory species (see below) with a conservation and management plan that stipulates measures on, amongst other things, (a) prevention, (b) fishing practices, (c) the regulation of activities that affect food resources, (d) the prevention of disruption, (e) studies and research on conduct and (f) the application of legislation banning the international capture and killing of small cetaceans.	
Agreement on the Conservation of Cetaceans of the Black Sea, the Mediterranean Sea and contiguous North-Eastern Atlantic Area (ACCOBAMS)	Regional agreement by virtue of the convention for the conservation of migratory species (see below) that establishes, amongst other things, protection measures for dolphins, porpoises and other whales, and a network of large protection areas where they can feed, mate and raise their young.	Albania, Bulgary, Croatia, Spain, Georgia, Malta, Morocco, Monaco, Romania and Tunisia. The first meeting of the signatories was also attended by Bosnia Herzegovina, Egypt, France, the United Kingdom, Greece, Libya, Lebanon, Portugal, Tunisia, Turkey, the Ukraine and the European Union.
Convention on the protection of the environment through Criminal Law	A European convention by which a series of acts that are committed intentionally or by negligence are considered to be criminal acts whenever they cause or might cause long-term harm, especially with regard to water quality, or they cause or might cause death or bodily harm to any person. The Convention defines the concept of criminal responsibility of individuals and legal entities, specifies the measures that States should adopt and authorises them to confiscate property and defines the competences held by the authorities. It also establishes measures for international cooperation.	States signatories to the Council of Europe.
Trilateral Wadden Sea Cooperation (CWSS)	Cooperation on the protection and conservation of the Wadden Sea in the areas of management, surveillance and research, and also political affairs.	Denmark, Germany, the The The The The Netherlands
Convention on biological diversity	The preservation of biological diversity.	International Agreement.

Name	Objective or main purpose	Signatories / parties to the contract
	The Jakarta Mandate: the protection of marine and coastal diversity.	
Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention)	The conservation of migratory species (land and sea birds)	International agreement.
Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention)	The conservation of wildlife (both flora and fauna) and their natural habitats, especially the species and habitats which require cooperation between a number of States for their conservation. The instigation of said cooperation.	International agreement.
Sea Transport		
International Maritime Organisation (IMO)	Specialist United Nations agency responsible for the formulation of measures to improve safety in international sea transport and halting pollution form ships. Also deals with legal topics such as those relating to civil responsibility and compensation and facilitating international sea traffic.	International organisation.
Convention for the prevention of pollution from ships (MARPOL 73/78)	The prevention and minimisation of pollution caused by ships through break-downs or accidents.	International Agreement.
Paris Memorandum on Port State Control	The withdrawal by the State port of ships that do not comply with rules and regulations through a standardised control system.	International Agreement.
International Convention on Control of Harmful Anti-fouling Systems on Ships	A ban on the use of harmful organotin compounds in anti-fouling paints for ships and the creation of a mechanism to stop the potential future use of other harmful substances in anti-fouling systems (pending implementation).	International Agreement.
Fight against marine pollution		
Agreement for Co-operation in Dealing with Pollution of the North Sea by Oil and Other Harmful Substances (Bonn Agreement)	An international agreement between North Sea coastal States along with the EC to offer mutual assistance and cooperation in the fight against pollution and implement surveillance as an aid for detecting and combating pollution and preventing infringements of anti-pollution regulations.	Belgium, Denmark, France, Germany, The Netherlands, Norway, Sweden, the United Kingdom, the European Union. Ireland has applied to join the Agreement.
North East Atlantic Agreement for Cooperation in the Protection of Coasts and Waters against Pollution Due to Hydrocarbons and Other Harmful Substances (Lisbon Agreement)	Cooperation in coastal protection and the waters of the North-Eastern Atlantic through appropriate measures to contend with incidents of marine pollution by hydrocarbons or other harmful substances (pending implementation).	France, Portugal and Spain.
Assessment and Monitoring		

Name	Objective or main purpose	Signatories / parties to the contract
European Environment Agency (EEA)	Support for sustainable development and aid for achieving a significant and measurable improvement in the European environment by supplying the authorities and the people with trustworthy, pertinent, specific and up-to-date information.	
International Council for the Exploration of the Sea (ICES)	Forum for the instigation, coordination and spreading of research studies on physical, chemical and biological systems in the North Atlantic and expert advice on human impact on the environment, especially on the effects of fishing in the North Eastern Atlantic. Contributions to data- and information-sharing through publications and meetings. Serves as a centre for marine data in the fields of oceanography, the environment and fisheries.	
The Arctic Monitoring and Assessment Programme (AMAP)	The supply of adequate and trustworthy information on the situation of the environment in the Arctic and on the threats that hang over the area and to provide expert scientific advice on the actions required to support the Arctic governments in the taking of corrective and preventative measures with regard to pollutants (see also The Arctic Council).	
Other		
North Sea Commissions (NSC)	Periodic ministerial conferences for a wide-ranging appraisal of the measures required to protect the environment of the North Sea.	

Source: Communication from the Commission to the Council and European Parliament: Towards a Strategy to. Protect and Conserve the Marine Environment. European Communities Commission. Brussels, 02.10.2002 COM (2002) 539 final

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