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Towards a new ocean governance

Report¹

Committee on the Environment, Agriculture and Local and Regional Affairs

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Summary

The Parliamentary Assembly notes that in recent decades the oceans have been particularly seriously affected by environmental problems, in spite of the 1982 United Nations Convention on the Law of the Sea and the many legal instruments.

Climate change, coastal activities, the building of dams and the pressure of urbanisation have played a major part in the contamination of the oceans.

Bearing in mind that this situation is all the more alarming as ocean resources are limited, the Assembly invites states to adopt policies for coastline management and supervision of economic activity, to promote the establishment and management of marine protected areas, to put in place an integrated maritime policy based on the principles in the European Union "Blue Book", to make sure that resources are distributed fairly and help less developed countries to manage ocean resources.

The Assembly also invites the Committee of Ministers to instruct a committee of experts to define a legal and institutional framework for new ocean governance.

The Assembly also wishes to continue exploring this area, in particular with regard to the preservation and potential of the oceans and the impact of the exploitation of maritime resources on the various aspects of sustainable development.

1. Reference to committee: [Doc. 11463](#), Reference No. 3405 of 21 January 2008.



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A. Draft resolution

1. The Parliamentary Assembly notes with great concern that, in recent decades, the oceans, which cover two-thirds of Earth's surface, have been particularly affected by environmental problems, in spite of the 1982 United Nations Convention on the Law of the Sea and the many standard-setting legal instruments that have supplemented it.
2. The Assembly underlines that climate change and the greenhouse effect are closely interrelated with ocean processes, leading to harmful consequences such as rising sea levels, alteration of marine currents, imbalances in ecosystems, the decline of biodiversity and of certain fish species and, in particular, the flagrant decrease in the capacity of the oceans to absorb carbon dioxide.
3. The Assembly notes that the trends affecting coastal areas also have major repercussions for the preservation of the oceans. The reduction in sedimentation caused by the building of dams and the extraction of sand has combined with the pressure of urbanisation to speed up coastal erosion. Moreover, the use of coastal areas for activities as varied as tourism, fishing, port services, industry, agriculture and urban activity (waste, wastewater, etc.) has had a strong impact on the pollution of the oceans.
4. Scientific and technological know-how have also led to our extracting ever more value from the oceans and to speedier deterioration of the marine environment. This situation is all the more alarming since it is now recognised that ocean resources are limited.
5. The Assembly therefore calls on scientific experts and institutions to share all the information available and their knowledge in this area and make them accessible to the public and political and economic decision makers.
6. The Parliamentary Assembly therefore supports the establishment of an information network in order to introduce a new type of governance offsetting the irrationality, injustice and unsustainability of exploiting the resources of the oceans.
7. The Assembly therefore calls on member and non-member states to:
 - 7.1. take measures to raise public awareness of the problems and potential of the oceans;
 - 7.2. make sure that resources are distributed fairly and help less developed countries to manage ocean resources;
 - 7.3. put in place an integrated maritime policy based on the principles in the European Union "Blue Book";
 - 7.4. encourage scientific research on the oceans and its application to territorial waters and oceanic platforms;
 - 7.5. encourage the establishment of a network of scientific and technological institutions, universities and companies for sharing and monitoring data on the oceans and disseminating it widely;
 - 7.6. adopt ocean-friendly policies for coastline management, supervision of economic activity and water-basin preservation;
 - 7.7. implement or, if they have not done so, sign and/or ratify existing conventions on the law of the sea and in particular on people who work on, or make use of, the sea.
8. The Assembly wishes to continue its consideration of this area, in particular with regard to the preservation and potential of the oceans and the impact of the exploitation of maritime resources on the various aspects of sustainable development.

B. Draft recommendation

1. The Parliamentary Assembly refers to its Resolution ... (2009) "Towards a new ocean governance".
2. The Assembly draws attention to the proposals in the "Blue Book" issued in 2007 under the title "An integrated maritime policy for the European Union", which call for Europe to take steps as quickly as possible to agree policies and actions geared towards a common vision of the role of the oceans for the future of humankind.
3. The Assembly also refers to the principles set out in the EurOcean intergovernmental project for co-ordinating maritime scientific and technological information.
4. It also believes that the Council of Europe is the most appropriate institution for promoting a new vision of the oceans through a new legal and institutional framework aimed at establishing a new type of governance of the oceans.
5. In view of the increase in maritime insecurity and in illegal immigration, human trafficking and piracy, the Assembly underlines the need to take measures to guarantee the social rights of seafarers as set out in the European Social Charter and to establish standards for maritime security and pollution.
6. In the more specific case of the North Atlantic, there have been rapid changes in the nature of the pollution it suffers. In particular, its waters have been affected by land-based pollution, shipping, over-exploitation of resources and oil production.
7. The Assembly observes that new regions, such as the Arctic and Greenland, are being intensively exploited, and that this can have harmful consequences for the environment and climate change in general.
8. The Assembly therefore calls on the Committee of Ministers to:
 - 8.1. instruct a committee of experts to define a legal and institutional framework for new ocean governance;
 - 8.2. invite the Parliamentary Assembly to take part in the work of the committee of experts.
9. The Assembly also recommends that the Committee of Ministers call on governments of member states to:
 - 9.1. take part in the EurOcean intergovernmental project;
 - 9.2. promote the establishment and proper management of marine protected areas;
10. The Assembly also calls on the Congress of Local and Regional Authorities to:
 - 10.1. analyse and encourage cases of good practice in sharing information and governance of the seas and oceans at a regional level;
 - 10.2. develop awareness-raising programmes that deal with defending and conserving the oceans and their potential;
 - 10.3. adopt policies for coastline management, sewage treatment, supervision of economic activity and water-basin preservation.

C. Explanatory memorandum by Mrs Maria Manuela de Melo, Rapporteur

1. A new vision for the oceans

1. An integrated and interdisciplinary vision for the oceans, which is becoming increasingly widely accepted, is consistent with the aims of the Council of Europe in terms of the discussion through its organs of "questions of common concern" (Article 1b of the Statute of the Council of Europe). The vision is based both on recognition of the limited resources of the oceans and on the increasing use made of them.
2. The scientific community, experts and policy makers all agree that the environmental and social issues affecting our planet are all the more significant when it comes to the oceans: the concentration of people in coastal regions, rising sea levels, water pollution and acidification, declining biodiversity and the scarceness of fish stocks are worrying trends confronting the international community.
3. The oceans are once again the focus of attention. Since the entry into force of the United Nations Convention on the Law of the Sea, the issue has acquired greater significance. At play here have been political and economic factors such as globalisation and the oceans' role in it and environmental factors relating to the objectives of sustainable development.
4. To address the new situation, the United Nations Convention on the Law of the Sea has been supplemented by other instruments, including the New York Agreement on the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, the Convention on Biological Diversity, the Rio Declaration on Environment and Development, Agenda 21, in particular Chapter 17, the Johannesburg Summit, the Kyoto Protocol, numerous documents adopted by the United Nations Food and Agriculture Organisation (FAO), in particular the Code of Conduct for Responsible Fisheries, and the many instruments of the International Maritime Organisation on pollution, shipping safety and seafarers. This body of standards may be regarded as the "new ocean regime".

2. European Union maritime policy

5. The European Union's future maritime policy will involve an integrated approach based on political and institutional co-ordination with sound scientific and technological backing.
6. The European Union initiated debate in 2005 with a proposal on the establishment of a European maritime policy consistent with the priorities of the Lisbon Strategy and the Göteborg Sustainable Development Strategy: "Towards a future Maritime Policy for the Union: A European vision for the oceans and seas". In June 2006, a Green Paper setting out the main thrusts of a future integrated maritime policy for the Union was submitted for public consultation, with various stakeholders involved in the process. The Commission subsequently adopted a communication on "An integrated maritime policy for the European Union", known as the Blue Book. It was approved in October 2007, marking a decisive step towards the establishment of an integrated maritime policy for the European Union.
7. The management of oceans and coastal regions is no longer considered from a purely sectoral angle but as a whole. The policy agreed is based on two pillars: the Lisbon Strategy – which seeks to stimulate growth and create more and better jobs in the European Union on the basis of excellence in research, high quality scientific and technological know-how and proper access to information – and defending and improving the biophysical state of the oceans and their resources.
8. In the EU context, the establishment of major marine ecosystems and environmental regions has also been approved. The Natura Network and marine protected areas are further useful instruments for safeguarding biodiversity.
9. A passage in the closing pages of the Green Paper states the following: "As the awareness in Europe of the links and interactions between the oceans and seas and many different maritime activities grows, this will not only lead to better policy making and to the identification and exploitation of new, sustainable opportunities, but also to the development of a common vision of the role of the oceans in our lives, the broad heritage on which we can build, and the rich promise of our maritime future."
10. The Blue Book highlights this new vision of the oceans, underlining that we are at a crossroads in our relationship with them. Although our increased scientific and technological know-how enables us to extract ever more value from the oceans, it is also leading to conflicts of use and to the deterioration of the marine environment. The solution to the problem lies in sustainable development of the oceans, based on a

“European strategy for marine and maritime research”, which the European Commission had undertaken to present in 2008. In the area of social rights, in particular the rights of seafarers, the Blue Book supports the integration of the ILO Convention on maritime labour standards into Community law.

11. The geography of European Union countries, some of which have overseas territories, and Europe's international influence mean that a future European integrated maritime policy will have global significance and be well suited to addressing the problems and potential of the oceans.

3. The Council of Europe and implementation of the European maritime policy

12. Given the fact that it includes non-European Union European countries and has some major coastal countries from other continents as observers, and in view of its influence in environmental and social policymaking, the Council of Europe has a key part to play in implementing an integrated maritime policy extending beyond the EU. In this connection, the Blue Book supports discussions with countries such as Norway, the United States, Canada, Australia and Japan which have already adopted an integrated maritime approach. The nature and membership of the Parliamentary Assembly of the Council of Europe mean that it has a key role here.

13. The Council of Europe is also favourably positioned with regard to other areas deemed vital in the Blue Book such as shared responsibility over the seas which the EU shares with its closest neighbours and support for maritime policy and law of the sea capacity building in developing countries.

14. In the context of closer ties between the Council of Europe and the EU, there is an urgent need for the Assembly to consider issues related to the EU's integrated policy which seeks to maximise the sustainable use of the oceans and seas, build a knowledge and innovation base for the maritime policy, deliver the highest quality of life in coastal regions, promote Europe's leadership in international maritime affairs and raise the visibility of maritime Europe. The Blue Book also covers other aspects related to the principles defended by the Council of Europe, in particular the rights of seafarers, which should be considered in the context of the social rights enshrined in the European Social Charter, and the right to maritime security, where illegal immigration, human trafficking and piracy are serious causes for concern. “New” rights must also be taken into account, in particular the right to fairer distribution of resources (highlighted at the Johannesburg Summit in 2002) and, even more so, the right to a high-quality environment. These rights, which come under the principles of human solidarity and sustainable development, are among the Council of Europe's core concerns.

15. The situation of the oceans against the background of climate change (their ability to store CO₂ is threatened by acidification) and the great potential they offer (in particular, renewable energies, oil, water resources, food, biotechnology and fishing) are issues of particular interest to the Committee on the Environment, Agriculture and Local and Regional Affairs. At the recent spring session, the President of the Congress of Local and Regional Authorities of the Council of Europe said: “I would like to stress in this respect that the environmental crisis in which our planet finds itself today can only be resolved if local and regional authorities take the lead, alongside national governments and international organisations, in pursuing innovative approaches and favouring (...) change in citizens' behaviour.”

16. In 1998, the Assembly drew up two reports which were already in keeping with the thrust of the Blue Book. One of the reports, “Future challenges in European maritime science and technology”, by Pedro Roseta, already proposed the establishment of a European body for co-ordination in maritime affairs, or a kind of European maritime agency. The second report, on sustainable exploitation of living marine resources, by Lino de Carvalho, showed the urgent need for concerted action. In the same year, the Assembly adopted [Resolution 1169 \(1998\)](#) and [Recommendation 1388 \(1998\)](#) on “The oceans: state of the marine environment and new trends in international law of the sea”.

17. According to the oceanographic expert, Professor Ruivo, it will be necessary “to find other advanced methods of managing the oceans and their resources, while taking account of the interests of future generations.” This will have to be done by an integrated institution, as, in his view, “there is a major difference between the management of the oceans and other areas of international co-operation. The oceans are not only dynamic and interactive; they also provide resources and a variety of environmental services.” Any such integrated institution should be established within the Council of Europe.

18. The need to bring together all the stakeholders and institutions with a view to agreeing and implementing a European maritime policy was also reasserted at the seminar on “Environmental and scientific issues of the North Atlantic: A European perspective”, organised by the Committee on the Environment, Agriculture and Local and Regional Affairs in the Azores on 18 October 2007.

4. The case of the North Atlantic

19. In view of the diversity of its major marine ecosystems, the North Atlantic offers a case study of the challenges facing the oceans and a testing ground for new types of governance. It is a maritime environment directly linked to Europe, which stands out among the oceans for its size and the use made of its resources, as well as its role in history.

4.1. In the North Atlantic, we find all the dangers which threaten the oceans:

4.1.1. Pollution

20. In recent decades, there have been rapid changes in the nature of the pollution of the North Atlantic. The ocean's "state of health" has been affected, above all, by pollution from land-based sources carried out to sea by rivers and the atmosphere. Overall, it accounts for 77% of marine pollution. The other sources are shipping (12%), over-exploitation of resources (10%) and oil production.

21. Pollution from land-based sources is linked to increased human settlement in coastal areas, which very often leads to excessive urbanisation, the concentration of business activities with a high environmental impact and the pollution of rivers. In addition to the release or deliberate dumping of extremely dangerous waste (pesticides, heavy metals, radioactive waste), the North Atlantic is also affected by pollution caused by shipping.

22. The European Union alone uses shipping to transport 90% of its goods for foreign trade and 40% of those for domestic trade. The vessels at sea include increasing numbers of oil tankers which are highly polluting, not only in the event of accidents but also on a less visible but continuous basis through the release of hydrocarbons – which contain mutagenic and carcinogenic components – and tributyltin (TBT). TBT compounds, which are highly toxic even in small concentrations, are used as antifouling agents in the paint for ships' hulls. They pass through the food chain and can cause serious damage to the human immune system.

4.1.2. Impact of climate change

23. Climate change and the greenhouse effect are closely interrelated with the oceans. The most obvious sign of this interrelationship is the rise in sea levels, which is a cause of concern for countries with high levels of population in low-lying coastal areas.

24. This situation has already created a new humanitarian problem: environmental refugees. The concept is still being defined, but according to the International Federation of Red Cross and Red Crescent Societies, nowadays there are more refugees due to environmental reasons than due to armed conflicts. The number of environmental refugees varies greatly between authors, depending on the definition adopted. According to the estimates of various authors, such as Richard Black, the number could currently be approximately 10 million, while other authors point to 50 million people by 2010 having being forced to flee the countries or regions where they lived because of the rise in sea levels, desertification, drying of aquifers, amongst other severe environmental changes, with serious implications for human rights.

25. In 2007, in Papua New Guinea in the Pacific Ocean, a number of inhabitants were already forced to leave the islands they inhabited due to the rise in sea levels. They can be considered the first environmental refugees for this motive.

26. This new category of "refugees" is not yet protected by international agreements, which is a cause of concern for the UN High Commissioner for Refugees (UNHCR).

27. The phenomenon of the rise in sea levels is related to the reduction of the polar ice caps and glaciers, the largest fresh water reserves of the planet. The effects of the thawing of the ice are reflected not only in the rise in sea levels, but also in the alteration of currents, disequilibrium of ecosystems and increase in the greenhouse effect.

28. It is more difficult to determine and measure what is happening under the ocean surface as a result of the increase in temperatures and in CO₂ levels in the atmosphere. It is well-known that the deep seas hold the largest stock of carbon on the planet. In the deep seas, the high pressures and low temperatures mean that the carbon gas is in the form of methane, which freezes as methyl hydrates.

29. Every year, the stocks increase with the fixing of some of the CO₂ from the atmosphere captured by marine plants for photosynthesis, under the process known as the “biological pump”. Yet the increase in CO₂ in the atmosphere is leading to rapid acidification of seawater, causing serious harm to plankton, which can reduce oceans’ ability to absorb carbon dioxide.

30. Another consequence of global warming is the rapid change in the temperature of seawater, currents and plankton ecosystems. Data from the Continuous Plankton Recorder (CPR) show acceleration in primary production and an increase in the quantity of benthic animals throughout the North Atlantic.

31. At the same time, great reductions can be seen in certain fish species, for instance North Sea cod. Rising temperatures towards the Arctic are causing major migration of plankton and, for the first time in 800 000 years, the movement of phytoplankton from the Pacific to the northwest Atlantic – made possible by rapid melting of the Arctic ice in northern Canada – has been observed.

32. Plankton is sounding the alarm regarding the consequences of the increase in CO₂ in the atmosphere, which are unpredictable but will have an extremely negative socio-economic impact.

4.1.3. Biodiversity

33. The ecosystems of the oceans and coastlines provide a wide range of goods and services that are fundamental to continued human well-being.

34. According to the world conference on Marine Biodiversity, held in Valencia, Spain, in November 2008, all ecosystem services ultimately derive from ecosystem functions, arising from the interactions of organisms with their environment activities in the ecosystem. These services are provided both on a global scale – including the production of oxygen, nutrient cycles, carbon capture through photosynthesis and carbon sequestration – and on a regional scale, including the stabilisation of coastlines, bioremediation of waste, and a variety of aesthetic and cultural uses. A power bound estimate of the total economic value of this ecosystem services indicates that it exceeds, by at least two orders of magnitude, the value of the more usual forms of direct extraction of resources. Without biodiversity there would be no ecosystem services. Maintaining biological diversity is crucial to maintaining ecosystem resilience and hence the continued provision of ecosystem services. However, only one percent of the oceans are protected by marine protection areas, whereas by 2012 there should be networks representing the different ecosystems of the Oceans.

35. Fishing is regarded as the activity which poses the greatest threat to marine ecosystems and biodiversity, and fish stocks are believed to be among the most exploited resources. Legislation and international agreements are moving in the direction of protecting fish stocks and preserving fish biodiversity. Given that economic activity related to fishing and aquaculture is very important in the European context, the management of fisheries is currently based on an ecosystem approach.

36. Nevertheless, between 22 and 53% of species fished in the northeast Atlantic have fallen below safe biological levels, some irreversibly. In spite of the development of new fishery technologies, catches have fallen substantially, both because of the measures taken to ensure the sustainability of the stocks and also because of the reduction in the latter. According to Eurostat, 8 000 000 tonnes of fish were caught in the EU 27 in 1995. The figure fell to approximately 7 500 000 tonnes in 2000 and almost 5 500 000 tonnes in 2005.

37. The countries with significant fishery sectors include the United Kingdom (with approximately 650 000 tonnes caught in 2005), Spain (with approximately 750 000 tonnes in 2005) and France (almost 600 000 tonnes in 2005). These countries all have North Atlantic coastlines.

38. Of the total EU 27 catch in 2005, 74% came from the northeast Atlantic (and the remainder mainly from the Mediterranean, the central, south and northwest Atlantic and the Indian Ocean).

39. However, it is not just fish stocks that are under threat. Marine diversity as a whole is suffering the consequences of climate change and human activity. Some measures taken to manage marine biodiversity sustainably are nevertheless beginning to produce effects, for instance the establishment of the Natura Network within the EU, the establishment of marine protected areas and the extension of these areas to zones outside national waters.

4.1.4. Uncoordinated coastal development

40. While the impacts on coastal areas have never been so intense, there is growing awareness that what happens on land is vital to the preservation of the oceans. That is why integrated coastal management is becoming increasingly important.

41. The reduction in sedimentation caused by the building of dams, the extraction of sand and the building of flood barriers has combined with the pressure of urbanisation to speed up coastal erosion. Moreover, anthropogenic forcing and climate change are causing a rise in sea levels, which, according to some data, could reach 1.5 mm/year in the coming years.

42. Lastly, the use of coastal areas for activities as varied as tourism, fishing, port services, industry and urban development has also heightened the pressure on coastlines. In the North Atlantic, where there are particularly high levels of urban development and population along the coast, an approach geared towards integrated coastal management is all the more appropriate.

4.2. In spite of these problems, the North Atlantic has great resources and great potential

4.2.1. Fishery resources

43. The level of fish stocks in the North Atlantic is still significant, in spite of intensive fishing. The fishery sector must take account of the need to develop the fishing effort with increasing care (in particular in terms of the quotas applied to catches and the vessels), to strengthen the link between science and the use of stocks and to defend the existence of marine protected areas. These three factors are vital to the sustainable development of the fishery industry and to the preservation of fish species.

44. Alongside capture fisheries, there has been growth in aquaculture. According to Eurostat, it accounted for 13% of the fish produced in the EU 27 in 1995, 17% in 2000 and 18% in 2005. The increase in supplies from fish farming could help relieve the pressure of demand on the capture fisheries sector. However, fish farming is an activity where attention also has to be paid to environmental protection and to possible conflict between the various uses made of the oceans.

45. According to Eurostat figures for 2007, the United Kingdom, France and Spain, the coastal states of the northeast Atlantic, are among the leaders in the development of aquaculture.

4.2.2. Biological resources

46. The deep seas make up 85% of the European Atlantic Ocean (OSPAR zone) and 76% of its exclusive economic zones. In the middle of the North Atlantic, along the underwater mountain range of which the Azores form the visible part, fields of hydrothermal vents identical to those discovered in the Pacific in 1978 have now been found. They are home to forms of life which would not be expected in the relevant conditions, constituting a hitherto unknown animal kingdom – the *archaea* – which employs chemosynthesis to survive. This discovery has opened up new prospects for studying the appearance of life on earth.

47. Three of the hydrothermal fields in the Azores zone are currently being studied: Rainbow, at a depth of 2 300 m, Lucky Strike, at 1 700 m, and Menez Gwen, at 840 m. The studies conducted show that the walls of the volcanic vents are rich in gold, silver, copper, zinc and cobalt, with the surrounding area being a habitat for endemic, diverse and advanced fauna which is of great interest in biological and biotechnological terms. Under extreme conditions – without light, with little oxygen, low pH levels, high pressure and temperatures (over 350°), seismic and volcanic activity and fluids rich in heavy metals – organisms present in large quantities (over 20 kg biomass/m²) have developed genetic structures for adapting to the environmental conditions and using the very toxic hydrogen sulphide to produce the energy they need via chemosynthesis.

48. LabHORTA, a laboratory attached to the Department of Oceanography of the University of the Azores, pools the results of an ambitious scientific research programme involving scientists of different disciplines and origins. It is hoped that application of the knowledge acquired will be of direct benefit to human health and well-being, in particular in cases of exposure to mercury, DNA lesions and immunological problems.

4.2.3. Renewable energy

49. The North Atlantic has all the potentialities for the exploitation of energy offered by the oceans.

50. In addition to “off-shore aeolian energy”, which opens up the oceans to a form of energy production with limitations on land, the sea also offers the immense energy potential of its waves and tides.

51. Wave energy, already being developed along various points of the European coastline, has just entered a new phase in Portugal: production of electricity on a pre-commercial scale, using industrially produced equipment. Wave energy, the potential expansion of which is vast, could and should be a central area of R&D in Europe.

52. We should also consider energy which can be obtained from carbon deposits in deep sea beds, estimated to contain twice as many carbon resources as all the petrol, gas and coal resources found on the Earth, as well as the energy which can be obtained from biomass, through the catalytic use of bacteria living in symbiosis with the fauna of hydrothermal sources.

4.2.4. Other resources are also found, such as:

4.2.4.1. Water and mineral salts

53. Water is a particularly important ocean resource. Four-fifths of all the water resources existing on the Earth are found in the oceans. Considering that, of the total water of the Earth, only 3% is potable, the water of the oceans constitutes an enormous reservoir, especially now that desalinisation is, due to technological progress, increasingly more easily achieved.

54. In addition to making sea water potable, desalinisation also allows for the use of the salt which results from the process. Sodium chloride represents 3% of the composition of sea water, being its most abundant mineral resource as well as its most extracted. This is followed by magnesium, also extracted in large quantities. Growth in extraction shows enormous potentialities. However, the equilibrium of the mineral presence in sea water should not be altered, in the light of the example given by the overexploitation of other resources and its harmful consequences.

55. To start with, most of these resources tend to be extracted from locations on land, due to their easier access. However, the exhausting of land resources has led to an increase in the exploitation of the sea.

56. In addition to these mineral resources, there are many others, which have still to be discovered or developed – with some chemical tests indicating approximately 60 chemical elements dissolved in sea water – constituting true potentialities of the ocean.

4.2.4.2. Geological resources at the bottom of the sea

57. Many and highly valuable geological resources are already well known in spite of the fact that most sea beds are as yet inaccessible, which therefore suggests there are many more. Apart from oil and gas, geological resources include aggregates and marine placers, phosphorites, polymetallic sulphites, manganese nodules and crusts and methane hydrates. Currently we extract tin, titanium and diamonds, resulting from mineral deposits present in the oceans due to the erosion of the initial sites of their formation. Manganese nodules – agglomerates of various minerals such as nickel, cobalt or copper – are paid special attention in the United Nations Convention on the Law of the Sea, and continue to be protected, partly also due to the cost of their extraction.

58. Their extraction is an important vector in the “sea economy”, but requires the prior definition of rules to prevent the destruction of the ecosystems with which they coexist.

4.3. The North Atlantic and marine information management

59. Marine information management is a fundamental aspect of ocean governance. This was recognised by the Council of Europe in a report (Oceans) published in April 1999, which stated that *“there is a growing need for dialogue between scientists and political and administrative decision-makers. It is most important for decision-makers to tell the scientific community what kind of information is needed to make their decisions, and for the scientific community to communicate and provide clear, policy-oriented information to the decision-makers.”*

60. European maritime policy also recognises the role of marine information management as a key component of integrated ocean development. The Blue Book calls for the establishment of a European Marine Data and Observation Network. However, while such a network is vital, efficient marine information management is equally important.

61. Research and know-how are now recognised as being vital in relation to ocean issues but they must both be accessible and be shared among scientists and between them, policy-makers and economic players at local, regional and European level.

62. EurOcean is a model example of a body fostering synergy in the fields of maritime science and technology, which also seeks to avoid the dispersion and duplication of know-how. It compiles the findings of the research conducted by national bodies and the information available on the many European websites concerning the maritime sector on a special portal.

63. In order to be able to reach all stakeholders, marine information management must encourage the development of quantitative indicators and common standards for marine science and technologies, help ensure co-operation and co-ordination between European bodies in information sharing and undertake public education activities. It is necessary to set up a European Maritime Information Network alongside the European Marine Data and Observation Network in order to establish a co-ordinated, cross-sectoral information and knowledge platform on ocean issues.

64. The support of the Parliamentary Assembly of the Council of Europe for the development of information management tools for ocean governance is primordial.

4.4. The North Atlantic and governance

65. The different and sometimes concurrent uses made of the resources available mean that growing attention is being paid to ocean governance. The key features of this new type of governance are as follows: public management, transparency, existence of a clear legal framework, information and accountability. The specific principles of ocean governance are sustainable development, the precautionary principle, the polluter-pays principle, self-regulation, conservation of biodiversity and intergenerational equity (already present in the Brundtland report), as well as the principles of integration and consensus, the latter of which played a major role in the negotiations on the United Nations Convention on the Law of the Sea.

66. The new ocean regime is currently going through a phase of unprecedented structuring in institutional terms. The experience of implementation of an integrated maritime policy for the European Union is a significant advance towards global governance, the next stage being to extend it to other countries.

67. Several agreements on the governance of specific aspects concerning the North Atlantic have already been concluded, although not all have come into force, and clearly illustrate the need for co-ordination between countries. In particular, these include:

- The Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR Convention), Oslo, 1972 – Paris, 1974 (entered into force in 1988);
- The Convention on Future Multilateral Co-operation in the North-East Atlantic Fisheries (entered into force in 1982);
- The International Council for the Exploration of the Sea (ICES), an intergovernmental organisation which co-ordinates and promotes marine research in the North Atlantic (the oldest organisation of its kind in the world, 1964 Convention).

and two other agreements, which have not entered into force:

- The co-operation agreement for the protection of the coasts and waters of the north-east Atlantic against pollution (Lisbon Agreement) 17 October 1990;
- Protocol to the Lisbon Agreement, the Co-operation agreement for the protection of the coasts and waters of the north-east Atlantic against pollution by hydrocarbons and other harmful substances of 20 May 2008;

5. Conclusions and recommendations

68. It is necessary to extend this new, integrated, multidisciplinary vision of the problems and potential of the oceans to the whole planet. The oceans, which cover two-thirds of the Earth's surface, are where the most serious environmental issues are to be found. Faced with this situation, a number of legal instruments have been introduced to complement the United Nations' Convention on the Law of the Sea. These instruments make up a set of regulations usually known as the "new ocean regime."

69. In October 2007, the European Union published the Blue Book "An Integrated Maritime Policy for the European Union". It is based on the one hand on the Lisbon Strategy to stimulate quantitative and qualitative growth in employment based on scientific and technological knowledge. And, on the other hand, to defending and improving the biophysical statute of the oceans and their resources. Humanity's relationship with the oceans is at a crossroads: our ever expanding technological and scientific knowledge is leading us to

increasingly exploit ocean resources, but this exploitation has resulted in conflicts that pit the use of these resources against the deterioration of the marine environment. The EU also believes that it will only be possible to define policies and possible new action, and develop a joint vision concerning the role of the oceans in our lives and for the future of humanity, if Europeans are made aware of the connections and interactions between the seas and oceans, and the numerous marine activities. In this context, it is essential for different scientific institutions to share information using networks that can be accessed by a variety of audiences.

70. Due to its supra-EU dimension and the nature of its mission, the Council of Europe is the only institution for promoting this new vision of the oceans and for defining the legal and institutional framework necessary for substantiating new forms of governance, based on public management, transparency, a clear legal framework, shared information, assessment and accountability. Many principles in the Blue Book on environmental protection measures can be found in the resolutions and recommendations of the Parliamentary Assembly of the Council of Europe. These texts, which are included in its publication entitled "Oceans", were involved in the founding of EurOcean, and are included in the priorities of the Committee on the Environment, Agriculture and Local and Regional Affairs as well as of other committees, as can be seen from the most recently approved documents or reports under preparation. The possibility of creating a spirit of co-operation in the heart of Assembly, involving integrating data and solutions from a sectorial approach, would set an excellent example for the public and private institutions involved in defining and implementing a new form of governance of the oceans, and would also scale up the Council of Europe's increasing collaboration with the European Union and with the United Nations.

71. Having realised the irrationality, injustice and unsustainability of exploiting the resources of the continents and seen their consequences, the oceans should be considered as a place where it is still possible to avoid repeating the same human rights violations.

Reporting committee: Committee on the Environment, Agriculture and Local and Regional Affairs

Reference to committee: Doc. 11463, Reference No. 3405 of 21 January 2008

Draft resolution and draft recommendation adopted unanimously by the committee on 4 September 2009

Members of the Committee: Mr Alan **Meale** (Chairman), Mrs Maria Manuela de **Melo** (1st Vice-Chairperson), Mr Juha Korkeaoja (2nd Vice-Chairman), Mr Cezar Florin Preda (3rd Vice-Chairman), Mr Remigijus Ačas, Mr Ruhi **Açikgöz**, Mr Artsruni **Aghajanyan**, Mr Miloš Aligrudić, Mr Alejandro Alonso Núñez (alternate: Mr Gabino **Puche Rodriguez Acosta**), Mr Gerolf **Annemans**, Mr Miguel Arias Cañete, Mr Alexander Babakov, Mr Ivan Brajović, Mrs Elvira **Cortajarena Iturrioz**, Mr Veleriu Cosarciuc, Mr Vladimiro Crisafulli, Mr Taulant Dedja, Mr Hubert **Deittert**, Mr Karl Donabauer, Mr Miljenko **Dorić**, Mr Gianpaolo Dozzo, Mr Tomasz **Dudziński**, Mr József Ékes, Mr Savo Erić, Mr Bill **Etherington**, Mr Nigel **Evans**, Mr Joseph **Falzon**, Mr Relu Fenechiu, Mr Zahari Georgiev, Mr Peter Götz, Mr Rafael **Huseynov**, Mr Jean Huss, Mr Fazail Ibrahimli, Mr Ivan Ivanov, Mr Igor **Ivanovski**, Mr Bjørn Jacobsen, Mrs Danuta Jazłowiecka, Mr Birkir Jon Jonsson, Mr Stanisław Kalemba, Mr Guiorgui Kandelaki, Mr Haluk **Koç**, Mr Bojan Kostres, Mr Pavol Kubovic, Mr Paul Lempens, Mr Anastosios Liaskos, Mr François Loncle, Mr Aleksei Lotman, Mrs Kerstin Lundgren (alternate: Mr Kent **Olsson**), Mr Theo Maissen, Mrs Christine **Marin**, Mr Yevhen **Marmazov**, Mr Bernard **Marquet**, Mr José **Mendes Bota**, Mr Peter Mitterer, Mr Pier Marino Mularoni, Mr Adrian Năstase, Mr Pasquale Nessa, Mr Tomislav Nikolić, Mrs Carina Ohlsson, Mr Joe **O'Reilly**, Mr Germinal Peiro (alternate: Mr Alain **Cousin**), Mr Ivan Popescu, Mr René **Rouquet**, Mrs Anta Rugâte, Mr Giacinto Russo, Mr Fidas Sarikas, Mr Leander Schädler, Mr Herman Scheer, Mr Mykola Shershun, Mr Hans Kristian Skibby, Mr Ladislav Skopal, Mr Rainer **Steenblock**, Mr Valerij **Sudarenkov**, Mr Laszlo Szakacs, Mr Vyacheslav Timchenko, Mr Bruno Tobback (alternate: Mr Daniel **Ducarme**), Mr Dragan Todorovic, Mr Nikolay Tulaev, Mr Tomas **Ulehla**, Mr Mustafa Ünal, Mr Peter Verlič, Mr Rudolf **Vis**, Mr Harm Evert Waalkens, Mr Hansjörg Walter, Mrs Roudoula Zissi

N.B. The names of those members present at the meeting are printed in bold.

Secretariat to the Committee: Mrs Agnès Nollinger, Mr Bogdan Torcătoriu and Mrs Dana Karanjac