

Chapter 1

Marine and coastal biological diversity

Decision II/10 and Decision IV/5. Conservation and sustainable use of marine and coastal biological diversity

320. Does your national strategy and action plan promote the conservation and sustainable use of marine and coastal biological diversity?	
a) no	
b) yes – limited extent	X
c) yes – significant extent	
321. Has your country established and/or strengthened institutional, administrative and legislative arrangements for the development of integrated management of marine and coastal ecosystems?	
a) no	
b) early stages of development	
c) advanced stages of development	
d) arrangements in place	X
322. Has your country provided the Executive Secretary with advice and information on future options concerning the conservation and sustainable use of marine and coastal biological diversity?	
a) no	X
b) yes	
323. Has your country undertaken and/or exchanged information on demonstration projects as practical examples of integrated marine and coastal area management?	
a) no	
b) yes – previous national report	
c) yes - case-studies	
d) yes - other means (please give details below)	X
324. Has your country programmes in place to enhance and improve knowledge on the genetic structure of local populations of marine species subjected to stock enhancement and/or sea-ranching activities?	
a) no	
b) programmes are being developed	
c) programmes are being implemented for some species	X
d) programmes are being implemented for many species	
e) not a perceived problem	
325. Has your country reviewed the programme of work specified in an annex to the decision, and identified priorities for national action in implementing the programme?	
a) no	
b) under review	X
c) yes	

Decision V/3. Progress report on the implementation of the programme of work on marine and coastal biological diversity (implementation of decision IV/5)

326. Is your country contributing to the implementation of the work plan on coral bleaching?	
a) no	
b) yes	X
c) not relevant	

327. Is your country implementing other measures in response to coral bleaching?	
a) no	
b) yes (please provide details below)	X
c) not relevant	
328. Has your country submitted case-studies on the coral bleaching phenomenon to the Executive Secretary?	
a) no	X
b) yes	
c) not relevant	

Further comments on implementation of these decisions and the associated programme of work

Question 320.

Diagnostic documents and recommendations were prepared for the Workshop “*Avaliação e Ações Prioritárias para a Conservação da Biodiversidade das Zonas Costeira e Marinha*” [Assessment and Priority Actions for the Conservation of the Biodiversity of the Coastal and Marine Zones held in Porto Seguro, Bahia, in October, 1999.

The *Programa Antártico Brasileiro - PROANTAR* [Brazilian Antarctic Programme – PROANTAR] includes the *Grupo de Avaliação Ambiental – GAAM* [Environmental Evaluation Group – GAAM] which evaluates the impact of Brazilian activities on the Antarctic environment. Activities include scientific research, operations monitoring, logistic support, and tourism. One of its attributes is systematic environmental monitoring of the Antarctic environment and its associated ecosystems. See comments on Questions 174 and 178.

Question 321.

The *Gestão Integrada do Mosaico de UCs Marinhas e Costeiras do Estado de Santa Catarina* [Integrated Management and Administration Project of the Mosaic of Marine and Coastal Protected Areas of the State of Santa Catarina] project is coordinated with the *Diretoria de Áreas Protegidas* [Directorate for Protected Areas] of the MMA. This is a pioneer project in its application of the regulations and measures proscribed in the *Sistema Nacional de Unidades de Conservação – SNUC* [National Protected Areas System – SNUC]. Its aim is to improve the effectiveness of the state’s marine and coastal protected areas.

Law No. 7661, dated from May 16th 1988, Article 1, created the *Plano Nacional de Gerenciamento Costeiro – PNGC* [National Coastal Administration and Management Plan – PNGC] as part of the *Política Nacional para os Recursos do Mar - PNRM* [National Policy for Marine Resources – PNRM], and the *Política Nacional do Meio Ambiente – PNMA* [National Environment Policy – PNMA]. Much still needs to be done regarding legislation for the integration of coastal and marine ecosystem management and administration.

Brazil has a national policy and strategy embracing the main themes related to oceans, seas and coastal zones, and their biotic and abiotic resources. The *Política Nacional para os Recursos do Mar – PNRM* [National Policy for Marine Resources – PNRM], approved by Presidential Decree, 12th May, 1980, promotes the integration of the Brazilian territorial sea, the exclusive economic zone and continental platform, and the rational exploitation and sustainable use of marine resources, including fisheries, minerals, the biotechnical and energetic potential of the water column, and the sea floor with interest in the economic and social development of the country, besides the ecological sustainability. The implementation the PNRM is coordinated by the *Comissão Interministerial para os Recursos do Mar – CIRM* [Inter-ministerial Commission for Marine Resources – CIRM], a collegiate organ, the composition and goals of which are described in the comments on Questions 1 and 2. The programmes and activities of this commission are incorporated in the Pluri-annual Plan (PPA). They include:

- The *Plano Setorial para os Recursos do Mar – PSRM* [Sectoral Plan for Marine Resources – PSRM], currently in its 5th version (V PSRM), 1999-2003;
- The *Plano Nacional de Gerenciamento Costeiro – PNGC* [National Plan of Coastal Administration and Management – PNGC], the 2nd version (PNGC II) of which was approved in 1997;

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- The *Plano de Levantamento da Plataforma Continental Brasileira – LEPLAC* [Survey of the Brazilian Continental Platform – LEPLAC], the aim of which is to map the country's continental platform under Brazil's jurisdiction, according to Article 76 of the United Nations Convention on the Law of the Sea (UNCLOS). (LEPLAC is in execution since 1988 and will be concluded next year);
- *Programa Antártico Brasileiro - PROANTAR* [Brazilian Antarctic Programme], the responsibility of the CIRM, since its began in 1982.

The *Política Marítima Nacional – PMN* [National Maritime Policy – PMN], instituted by Decree No. 1265, 11th October, 1994, was established to “orientar o desenvolvimento das atividades marítimas do País, de forma integrada e harmônica, visando à utilização efetiva, racional e plena dos mares” [“guide the integrated and harmonious development of the country's marine activities, with a view to an effective, rational and full use of the seas”]. The *Comissão Marítima Nacional – COMANA* [National Maritime Commission – COMANA], created in 1983 and presided over by the *Comandante da Marinha do Brasil* [Commander of the Brazilian Navy], is responsible for its implementation.

The *Política Nacional do Meio Ambiente – PNMA* [National Environment Policy – PNMA], established by Law No. 6938, 31st August, 1981, is also important in this context.

These policies and action plans make up a national strategy which, combined with the specific initiatives of the *Política Nacional de Biodiversidade - PNB* [National Biodiversity Policy] (under elaboration) and the *Programa Nacional da Diversidade Biológica – PRONABIO* [National Biodiversity Program – PRONABIO], contemplate the conservation and sustainable use of coastal and marine biological diversity.

There are two mechanisms which aid in the coordination and articulation of the organizations responsible for the integrated administration and management of coastal and marine ecosystems.

- The first is the *Comissão Interministerial para os Recursos do Mar – CIRM* [Inter-Ministerial Commission for Marine Resources – CIRM], created in 1974, the main purpose of which is to coordinate the execution of the *Política Nacional para os Recursos do Mar – PNRM Nacional* [National Policy for Marine Resources – PNRM]. The CIRM is composed of representatives of 10 Ministries - Ministry of Foreign Affairs (MRE); Ministry of Education and Culture (MEC); Ministry of Science and Technology (MCT); Ministry of Environment (MMA); Ministry of Transport (MT); Ministry of Development, Industry and Foreign Commerce (MDIC); Ministry of Planning, Budget and Administration (MPOG); Ministry of Mines and Energy (MME); Ministry of Sports and Tourism (MET); Ministry of Defence (MD)- besides the *Casa Civil* [Home Office] of the Presidency of the Republic. The Coordinator of the Commission is the *Comandante da Marinha do Brasil* [Commander of the Brazilian Navy]. There are several collegiates linked to the CIRM, for the supervision, coordination and execution of the plans and programmes of the PNRM.
- The second mechanism is the *Conselho Nacional do Meio Ambiente – CONAMA* [National Environment Council – CONAMA], presided over by the Minister of Environment the *Secretaria Executiva* [Executive Secretariat] of which is in the Ministry of Environment (MMA). CONAMA has representatives of the Ministries, State Governments and Federal District, Municipalities, NGOs and people from the industrial, commercial and agricultural sectors.

The CIRM, as such, supervises the implementation of the *Plano Nacional de Gerenciamento Costeiro – PNGC* [National Coastal Administration and Management Plan- PNGC]

The relevant legislation is as follows: Law No.6938, 31st August, 1981 - the *Política Nacional do Meio Ambiente Nacional – PNMA* [National Environment Policy – PNMA]; Law Decree No. 221, 28th February, 1967, which instituted the *Código de Pesca* [Fisheries' Code]; Law No.7661, 16th May, 1988, which instituted the *Plano Nacional de Gerenciamento Costeiro - PNGC* [National Coastal Administration and Management Plan – PNGC]; Law No. 8617, 4th January, 1993, on the Territorial Sea and Adjacent Zone, the Exclusive Economic Zone and the Brazilian Continental Platform; Law No. 9433, 8th January, 1997, on the *Política Nacional de Recursos Hídricos - PNRH* [National Policy for Water Resources - PNRH] and instituting the *Sistema Nacional de Gerenciamento de Recursos Hídricos – SNGRH* [National System for the Administration and Management of Water Resources - SNGRH]; Law No. 9537, 11th December, 1997, on *Segurança do Tráfego Aquaviário em Águas sob Jurisdição Nacional* [Traffic Safety in Waters under National Jurisdiction]; Law No. 9605, 12th February, 1998, on the penal and administrative sanctions for conduct and activities harmful to the environment; Law No. 9966, of 28th April, 2000, on the conservation, control and inspection of the pollution caused by oil and other harmful or dangerous substances released in waters under national

jurisdiction; Provisional Measure No. 2052, 29th June, 2000, on access to the national genetic patrimony and associated traditional knowledge; and Law No. 9985, 18th July, 2000, which institutes the *Sistema Nacional de Unidades de Conservação – SNUC* [National Protected Areas System – SNUC].

Brazil is also a signatory to the principal international rights conventions and agreements which define the global framework within which each country can develop the common goal of sustainable use of coastal and marine resources. Of note are the following.

- *United Nations Convention on the Law of the Sea (UNCLOS)*. Signed by Brazil in 1982 ratified in 1988, and in force since November 16th, 1994. UNCLOS is one of the largest and most significant undertakings of the normative history of international relations, regulating the use of the seas and its resources.
- *Agreement relating to the implementation of Part XI of the United Nations Convention on the Law of the Sea of 10 December 1982*. In force since 1996, it made some of the provisions of UNCLOS regarding the resources of the "Area" more flexible, allowing countries of all the blocks and geographical regions, even those until then reticent, to adhere to the Convention.
- *Agenda 21*. Adopted during the United Nations Conference on Environment and Development (UNCED), held in the Rio de Janeiro, in 1992 (Rio), Chapter 17 is dedicated to the conservation of the oceans, all seas and coastal zones, and the conservation, rational use and development of its living resources.
- *United Nations Convention on Biological Diversity (CBD)*. Ratified by Brazil and in force since 1994, the main aim is to assure the conservation of biological diversity and promote the just and equal partition of the benefits arising from the use of genetic resources.
- *United Nations Code of Conduct for Responsible Fisheries*. Approved during the 18th Meeting of the Food and Agriculture Organization (FAO) in 1995, it sets policy guidelines for fisheries, based on the principles of sustainable use and the equitable distribution of the economic benefits.
- *Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks*. Signed by Brazil in 1997, currently in the process of being ratified.
- *International Convention for the Prevention of Pollution from Ships, London, 1973, and its Protocol concluded in London in 1978, its amendments of 1984 and its Optional Annexes III, IV and V (MARPOL 73/78)*. In force in Brazil since 4th March, 1998, this convention regulates environmental conservation of the seas and coastal zones, against pollution, for the elimination of international pollution from oil and another harmful substances and for the reduction of accidental leakage of such substances to a minimum.
- *Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter*. London Convention, 1972. The convention requires that "Contracting Parties shall individually and collectively promote the effective control of all sources of pollution of the marine environment, and pledge themselves especially to take all practicable steps to prevent the pollution of the sea by the dumping of waste and other matter that is liable to create hazards to human health, to harm living resources and marine life, to damage amenities or to interfere with other legitimate uses of the sea." (Article 1).
- *International Convention on Oil Pollution Preparedness, Response and Cooperation*, London, 1990 (OPRC 90).
- *International Convention on Civil Liability for Oil Pollution Damage (CLC- 1969)*.
- *Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal*. Convention of Basel, 1989.
- *Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (UNEP/GPA)*.
- *Convention on Wetlands of International Importance Especially as Waterfowl Habitat – the RAMSAR Convention*. Ratified by Brazil by Decree No.33, 16th June, 1992; and promulgated by Decree No.1905, 16th May, 1996.
- *United Nations Framework Convention on Climate Change*. Signed in Rio de Janeiro, in 1992 and in force since 1994, this convention of enormous relevance for the oceans. It provides guidelines for the marine research needed for a broad understanding of the role the oceans play in regulating climate.
- *International Convention for the Regulation of Whaling, 1946, and Protocol*.
- *The 1963 Partial Test Ban Treaty (PTB)*, which banned nuclear explosive tests in the atmosphere, under water and in outer space. Moscow, 5th August, 1963.
- *International Convention for the Conservation of Atlantic Tunas*, Rio de Janeiro, 14th May, 1966. Ratified by Brazil on 1st April, 1969.
- *Additional Protocol to the Convention*, ICCAT, Paris, 10th July, 1984.
- *The Antarctic Treaty*, Washington, 1st December 1959. Ratified by Brazil in 1975). As of 15th May 2000, Brazil achieved consultative status by acceding to the Treaty and by conducting substantial scientific research in Antarctica.

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- *Treaty on the Prohibition of the Emplacement of Nuclear Weapons and Other Weapons of Mass Destruction on the Sea-Bed and Ocean Floor and in the Subsoil Thereof*, London, 11th February, 1971. Ratified by Brazil in 1988.
- *Convention for the Conservation of Antarctic Seals*, London, 11th February, 1972. The convention was set up to protect all six species of seal found in the Antarctic following concerns about a possible resumption of commercial sealing in the region in the mid 1960s. However commercial sealing has not been resumed in the Antarctic and the provisions of the Convention have never been put to use although it remains in force. Ratified by Brazil on 11th February 1991.
- *Convention on the Conservation of Antarctic Marine Living Resources*, Canberra, 20th May, 1980. In force in Brazil since 1986.
- *Protocol on Environmental Protection to the Antarctic Treaty*, Madrid, 3rd October 1991. Ratified by the Brazil in 1995.
- *Conservation Agreement of the South Atlantic Natural Resources between Brazil and Argentina*, Buenos Aires, 29th December, 1967. In force in Brazil since 1969.
- *Fishing Agreement between Brazil and Argentina*, Buenos Aires, 29th December, 1967. In force in Brazil since 1969.
- *Agreement on Fishing and Conservation of Living Resources*, between Brazil and Uruguay, Montevideo, 12th December, 1968. In force in Brazil since 1969.
- *Resolution for the Zone of Peace and Cooperation of the South Atlantic*, 27th October, 1986. Includes dispositions regarding the development and sustainable use of marine resources.
- *Mercosul Agreements* (Environment Group).

This action has been accomplished by the United Nations Commission on Sustainable Development – CSD. Brazil introduced its *Política para a Gestão Integrada dos Ambientes Costeiros e Marinhos* [Policy for the Integrated Administration and Management of Coastal and Marine Environments] (including a summary of the main initiatives underway) during the CSD-IV (1996) and CSD-VII (1999) meetings, when oceans and coastal zone were priority themes.

Notable is the project *Identificação e Delimitação de Estoques Pesqueiros da Guaiúba (Ocyurus chrysurus) por Meio de Métodos Moleculares* [Identification and Delimitation of Guaiúba (*Ocyurus chrysurus*) Stocks through Molecular Methods], part of the *Programa de Levantamento do Potencial Sustentável dos Recursos Vivos da Zona Econômica Exclusiva –REVIZEE* [Programme for Assessing the Sustainable Potential of the Living Resources of the Exclusive Economic Zone – REVIZEE]. There are other similar initiatives within the scope of REVIZEE.

There is still no national policy to guarantee the protection the coral reefs. However, a national workshop on the theme was held in 1997, International Coral Reef Year. As a strategy to implement one of the suggestions from this event, a project was negotiated with the International Development Bank (IDB) for the Conservation of the Coral Reefs of the Region of Tamandaré (southern Pernambuco) and Paripueira (northern Alagoas), potential one of the largest areas for tourism on the Brazilian coast. A federal coastal and marine Area of Environmental Conservation (APA) has been established there with the support of the IDB. The aim is to conserve the reefs of the region, through the integrated administration and management of the coastal and marine areas influence them, enabling control of the terrestrial impacts on the reefs and their sustainable use for fishing and tourism. It is a pilot-project, the results of which will provide an important contribution to an eventual national coral reef policy.

The *Sistema Nacional de Unidades de Conservação*- SNUC [National Protected Areas System – SNUC] includes a number of different categories of coastal and marine protected areas for coral reef conservation.

The following are some specific programmes that promote integrated management and sustainable development of the coastal zone, including environmental impacts; marine environmental conservation, through terrestrial and marine activities; and the sustainable use and conservation of marine living resources, in the open sea and in those under national jurisdiction.

- *Programa Nacional de Gerenciamento Costeiro – GERCO* [National Programme for Coastal Management – GERCO]. This programme is responsible for implementing the *Plano Nacional de Gerenciamento Costeiro – PNGC* [National Coastal Administration and Management Plan - PNGC], an integrated, decentralized, participatory, planning and management programme for socio-economic activities in the Coastal Zone, which guarantees sustainable use through the control, conservation, protection and restoration of natural resources and coastal ecosystems;

- *Programa de Avaliação do Potencial Sustentável de Recursos Vivos na Zona Econômica Exclusiva – REVIZEE* [Programme for Assessing the Sustainable Potential of the Living Resources of the Exclusive Economic Zone - REVIZEE]. The aim is to survey the sustainable potential of the living resources in the Exclusive Economic Zone, with the following goals: a complete inventory of the living resources and environmental characteristics in the Exclusive Economic Zone, including biomass estimates, and establish potential sustainable off-take;
- *Programa de Ação para Proteção do Meio Ambiente Marinho das Atividades baseadas em Terra na Região do Atlântico Sudoeste - PASO* [Action Program for Protection of the Marine Environment from Land-Based Activities in the Southwest Atlantic – PASO]. A regional initiative for the implementation of the Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities (GPA) linked to the United Nations Environment Programme (UNEP), of which the Ministry of Environment is the focal point. The aim is to prevent the degradation of marine ecosystems resulting from activities on the coast and inland;
- *Programa Nacional da Diversidade Biológica – PRONABIO* [National Biodiversity Programme - PRONABIO], of the Ministry of Environment, the purpose of which is to inventory and disseminate information about biodiversity, identifying degradation processes, and opportunities and priority actions for the sustainable use of biological resources;
- *Programa Global de Observação dos Oceanos – GOOS/Brasil* [Global Ocean Observing System – GOOS/Brasil]. The aim is to implement the systematic collection, analysis and dissemination of reference data on oceanic and coastal areas, generating products which will contribute to the socioeconomy of the Country;
- *Programas, Projetos e Iniciativas para Proteção de Ecossistemas e de Espécies Marinhas Ameaçadas* [Programmes, Projects and Initiatives for the Protection of Threatened Marine Species]. Projects managed by the *Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis - IBAMA/MMA* [Brazilian Institute for the Environment and Renewable Natural Resources – MMA/IBAMA] include: *Centro Nacional de Conservação e Manejo de Tartarugas Marinhas – Projeto TAMAR* [National Centre for Conservation and Management of Marine Turtles - TAMAR Project]; *Projeto de Manejo e Conservação de Sirênios* [Manatee Management and Conservation Project], *Projeto de Proteção à Baleia Jubarte* [Project for the Protection of the Humpback Whale]; and *Conservação e Manejo de Aves Marinhas* [Conservation and Management of Marine Birds].
- *Programa de Consolidação do Sistema de Unidades de Conservação do MMA/IBAMA* [Consolidation Programme for the Protected Areas System of the MMA/IBAMA]. Protected areas planning and management.
- *Programa Train-Sea-Coast Brasil* [Train-Sea-Coast Programme Brazil], hosted by the University of Rio Grande – FURG, and linked to the capacity-building network TRAIN-X, of the United Nations;
- *Programa de Mentalidade Marítima – PROMAR* [Marine Mentality Programme – PROMAR]. The aim is to “to stimulate, by means of planned, objective and systematic actions, the development of a marine mentality in the Brazilian population, in accordance with national interests and geared to a greater knowledge of the sea and its resources, of its importance for Brazil, of the responsibility of its rational and sustainable exploitation and of the need to preserve it”. [“*estimular, por meio de ações planejadas, objetivas e sistemáticas, o desenvolvimento de uma mentalidade marítima na população brasileira, consentânea com os interesses nacionais e voltada para um maior conhecimento do mar e seus recursos, da sua importância para o Brasil, da responsabilidade de sua exploração racional e sustentável e da necessidade de preservá-lo.*”]. PROMAR is run by an Executive Committee, which includes, among others, the Ministry of Environment (MMA) and the Ministry of Education (MEC).

The *Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis – IBAMA* [Brazilian Institute for the Environment and Renewable Natural Resources – IBAMA] manages a number of environmental education initiatives for the coastal and marine zone which emphasize their importance and the need for the sustainable use and conservation of the ocean's ecosystems.

Brazil maintained two representatives on the Independent World Commission on the Oceans (IWCO), created by the United Nations General Secretariat and UNESCO for initiatives commemorating the International Year of the Oceans (1988). One was one of the Vice-presidents of the Commission. Brazil also created an Independent National Commission about the Oceans.