

TABLE OF CONTENTS

Report

PART 1: THE REPORTING SYSTEMS OF INTERNATIONAL CONVENTIONS

1.1 Reporting systems of Biodiversity-related Conventions

- 1.1.1. The harmonization process of the reporting systems of Biodiversity-related Conventions
 - 1.1.1.1 The WCMC Feasibility Study
 - 1.1.1.2 The Cambridge Workshop: Towards Harmonization of National Reporting
 - 1.1.1.3 The Issue Management Group on Harmonization of Reporting for Biodiversity Treaties
- 1.1.2. The reporting systems of each of the Biodiversity Conventions included in the project
 - 1.1.2.1 The Convention on Biological Diversity (CBD)
 - 1.1.2.2 The RAMSAR Convention
 - 1.1.2.3 The UNESCO Convention on World Natural and Cultural Heritage
 - 1.1.2.4 Convention on Migratory Species (CMS-Bonn Convention)
 - 1.1.2.5 Convention on International Trade in endangered Species of wild Fauna and Flora (CITES-Convention)
- 1.1.3. The Convention on the conservation of European Wildlife and Natural Habitats (Bern Convention)

1.2 Reporting systems of Conventions for the protection of the Atmosphere

- 1.2.1. The Reporting System of United Nations Framework Convention for Climate Change (UNFCCC) and of Kyoto Protocol to the Convention
 - 1.2.1.1 The Reporting System of the UNFCCC
 - 1.2.1.2 The Reporting System of the Kyoto Protocol
- 1.2.2. The 1979 UNECE Convention on Long Range Transboundary Air Pollution (LRTAP) and its Protocols
- 1.2.3. The Montreal Protocol on substances that deplete the ozone layer

1.3 The reporting systems of the Conventions regarding chemicals and hazardous wastes

- 1.3.1. The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their disposal
- 1.3.2. The Rotterdam Convention on the Prior Informed Consent Procedure for certain hazardous chemicals and pesticides in international trade
- 1.3.3. The Stockholm Convention on Persistent Organic Pollutants

1.4 The reporting systems of the Conventions for the protection of Seas and Oceans

- 1.4.1. International Conventions for the Protection of marine environment
 - 1.4.1.1 The United Nations Convention on the Law of the Sea
 - 1.4.1.2 The 1972 London Convention on the prevention of marine pollution by dumping of wastes and other matters
 - 1.4.1.3 The MARPOL 73/78 Convention
- 1.4.2. Reporting requirements of Sea Safety Conventions
- 1.4.3. Reporting requirements of International Conventions and Protocols to combat emergency situations
- 1.4.4. The reporting systems of the International Conventions for Liability and Compensation
- 1.4.5. Reporting requirements of Conventions for the protection of marine living sources
 - 1.4.5.1 The International Convention on the regulation of Whaling

- 1.4.5.2 Convention on the Conservation of Antarctic marine living sources
- 1.4.6. The reporting systems of two important Regional Sea Conventions
 - 1.4.6.1 The OSPAR Convention
 - 1.4.6.2 The Helsinki Convention on the protection of the Marine Environment of the Baltic Sea Area

1.5 Reporting Systems of other Conventions

- 1.5.1. UNECE Convention on access to information, public participation in decision-making and access to justice in environmental matters (Aarhus Convention)
- 1.5.2. The United Nations Convention to Combat Desertification UNCCD)

PART 2: THE REPORTING SYSTEMS OF EUROPEAN ENVIRONMENTAL DIRECTIVES

2.1 Introduction

2.2 The Reporting System established under the Standardised Reporting Directive

2.3 A new approach in the European environmental legislation and the relevant developments in reporting

- 2.3.1. Air Quality Framework Directive
- 2.3.2. Water Framework Directive
- 2.3.3. Water related Directives that are not going to be repealed by the Water Framework Directive and their specific reporting requirements
- 2.3.4. The innovative reporting system of the Water Framework Directive
- 2.3.5. The IPPC Directive and the EPER System
- 2.3.6. The reporting requirements of the European Climate Change Legal Regime
- 2.3.7. The reporting requirements of the Directives relating to the protection of marine environment
 - 2.3.7.1 Decision 2850/2000/EC for Accidental Marine Pollution
 - 2.3.7.2 The Directives for the protection of the marine environment
- 2.3.8. The SAP requirements and the relevance of the EU Directives
 - 2.3.8.1 SAP requirements and Water related Directives
 - 2.3.8.2 SAP requirements and Waste-Related Directives
 - 2.3.8.3 SAP requirements and Directives Related to Prevention of Industrial Pollution
- 2.3.9. General Conclusions for the European Reporting System and future perspectives

PART 3: REPORTING PROCESS ON THE IMPLEMENTATION OF NON-LEGAL BINDING INSTRUMENTS

3.1 The non-legal component of UNEP/MAP and the perspective of establishing a reporting system

3.2 The reporting process to CSD on the establishment and implementation of National Sustainable Development Strategies

- 3.2.1. Guidelines for National Reporting
- 3.2.2. The efforts to reduce the reporting burden of the countries
- 3.2.3. The role of indicators within the framework of the national reporting process

3.3 Conclusions and Recommendations

PART 4: THE REPORTING SYSTEM OF UNEP/MAP IN THE LIGHT OF THE COMPARATIVE ANALYSIS

4.1 Concluding remarks and recommendations

- 4.1.1. Reporting Obligations
- 4.1.2. Reporting Frequency
- 4.1.3. Reporting on Recommendations and Decisions
- 4.1.4. Reporting on the implementation of the Provisions of SAP
- 4.1.5. Reporting procedure concerning the non-legal component

4.2 General Remarks and Recommendations for the parts 1-8 of the Reporting Format

- 4.2.1. Part 1: General Information
 - 4.2.1.1 Introduction
 - 4.2.1.2 Findings and Proposals
- 4.2.2. Part 2: Implementation of the Convention for the Protection of the Mediterranean Environment and the Coastal Region of the Mediterranean
 - 4.2.2.1 Introduction
 - 4.2.2.2 Remarks and Recommendations
- 4.2.3. Part 3: Implementation of the Protocol for the Prevention and Elimination of Pollution of the Mediterranean Sea by Dumping from Ships and Aircraft and Incineration at Sea
 - 4.2.3.1 Introduction
 - 4.2.3.2 Remarks and Recommendations
 - 4.2.3.3 Proposal for the introduction of two new reporting requirements
- 4.2.4. Part 4: Implementation of the Protocol concerning Cooperation in Preventing Pollution from Ships and, in Cases of Emergency, Combating Pollution of the Mediterranean Sea
 - 4.2.4.1 Introduction
 - 4.2.4.2 General remark
- 4.2.5. Part 5: Implementation of the Protocol for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources and Activities
 - 4.2.5.1 Introduction
 - 4.2.5.2 Remarks and Recommendations
- 4.2.6. Part 6: Biennial report on the implementation of the Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean
 - 4.2.6.1 Introduction
 - 4.2.6.2 General Remarks and Recommendations
- 4.2.7. Part 7: Implementation of the Protocol on Pollution resulting from Exploration and Exploitation of the Continental Shelf and the Seabed and its Subsoil
 - 4.2.7.1 Introduction
 - 4.2.7.2 General Remarks and Recommendations
- 4.2.8. Part 8: Implementation of the Protocol on the Transboundary Movement of Hazardous Wastes and their Disposal
 - 4.2.8.1 Introduction
 - 4.2.8.2 General Remarks and Recommendations

Indicative list of Literature References for the Comparative Study

Annexes

- Annex I: Table 1: Reporting Systems of the Biodiversity related Convention
- Annex II: Table 2: International Marine Conventions / Two Regional Conventions and relevant EC Directives
- Annex III: Table 3: Pollution Prevention Conventions and relevant EC Directives
- Annex IV: Table 4: Reporting Systems of Other Conventions

PART 1: THE REPORTING SYSTEMS OF INTERNATIONAL CONVENTIONS

1.1. Reporting systems of Biodiversity-related Conventions

1.1.1. The harmonization process of the reporting systems of Biodiversity-related Conventions

The ex-post evaluation of the impact and the effectiveness of the International and regional Conventions through monitoring and reporting is of key importance for:

- Establishing future trends in the state of Environment
- Assessing the effectiveness of measures taken by the Contracting Parties and therefore checking the compliance with the legal binding provisions.

Reporting constitutes therefore an integral part of compliance mechanisms, as Contracting Parties are required to report on national implementation measures. Additionally the very requirement for reporting gives an incentive to the Contracting Parties to comply with the provisions stipulated in the relevant legal instrument.

Furthermore, it must be taken into account that each country needs access to a wealth of information in order to fulfill its reporting obligations arising from various MEAs and Regional Conventions. This information is in many cases not properly organized within the country or it is not easily available, as it requires accessibility to specific databases or information networks. ***Thus, the fulfillment of the various reporting obligations by the States requires in many cases an improvement of national information networks in many cases.***

As the number of International and Regional Conventions increases, the reporting "fatigue" for the States subsequently increases, too. Resolution 55/198 of the UN General Assembly concerning enhancing complementarities among international instruments related to environment and sustainable development calls for effective coordination and management of MEAs as one of the critical issues addressed under international environmental governance.

The harmonization of information management and reporting is one of the core tasks being carried out by UNEP within the process of enhancing international environmental governance. The harmonization of information management and reporting is mainly understood as the process of effective function and coordination of those mechanisms that make each individual reporting process or an integrated process easier or more straightforward for Contracting Parties to implement. Therefore, the starting point of the analysis concerning the reporting systems of the International Conventions is to be found in the Biodiversity-related Conventions where efforts for the harmonization of the reporting systems have already taken place.

As a first step for harmonizing reporting obligations under MEAs, UNEP has undertaken the initiative to implement a project entitled "**Streamlining National reporting under Biodiversity-Related Conventions: Pilot Case Studies in Selected Countries**". This project is an umbrella project encompassing six pilot projects to be implemented by the interested countries such as Belgium, United Kingdom, Ghana, Indonesia, Panama. The biodiversity Conventions included in the project are the five global Conventions i.e the Convention on Biological Diversity (CBD), the Convention on International Trade in endangered Species of Wild Fauna and Flora (CITES), the Convention on Migratory Species (CMS), the Convention on Wetlands of international importance (RAMSAR Convention) and the Convention concerning the protection of the World Cultural and World Natural Heritage (WHC). Furthermore, the Specially Protected Areas and Wildlife Protocol (SPAW) under the Convention for the Protection and Development of the marine environment of the wider

Caribbean Region (Carthagena Convention) is also being considered in the pilot project currently implemented by Panama.

1.1.1.1. The WCMC Feasibility Study

Within the framework of this pilot project, the Five Biodiversity Treaty Secretariats and UNEP commissioned the World Conservation Monitoring Center (WCMC) to undertake a Feasibility Study to identify opportunities for harmonizing information management within the Treaties.

The most important conclusions of the UNEP-WCMC Feasibility Study¹ are presented in the table in the next page. As far as the reporting obligations are concerned, the WCMC Study proposed the standardization of guidelines to be used for preparing reports under all biodiversity-related Conventions. The importance of clear guidelines for achieving better compliance was presented through the comparative analysis of the relevant reporting obligations of both CITES and CMS, and it was concluded that clearer guidelines could substantially contribute to higher levels of compliance with the reporting obligations. Finally, the harmonization of the reporting requirements and their timing, where possible, should be seen according to the Study also as a mean to encourage the setting of priorities of action at the national level and to achieve better national level co-ordination

Relevant conclusions from the 1998 WCMCF Feasibility Study

a) While the Convention on Biodiversity Diversity has broad information requirements, the RAMSAR Convention focuses **on wetlands of international importance**. Each of the other three Conventions (CITES, CMS, WCH) has a particular focus. Especially CITES and CMS are focused **on species**, while the World Heritage Convention is targeted **at sites**.

b) The Convention on Biological Diversity requires information on the full spectrum of biodiversity, namely ecosystems, habitats, species, communities and described genomes and genes of social, scientific or economic importance. Of these, only species data are significantly required by the other Conventions -being more important for the CITES and CMS Convention correspondingly- while habitat present at sites is important for the RAMSAR and the World Heritage Convention.

c) The most important species related data for the RAMSAR Convention and the World Heritage Convention are range, distribution, population size and habitat requirements. One of the key links shared by all the Conventions concerns **the status of species**.

d) The RAMSAR Convention and the World Heritage Convention require very similar information on **sites**. For example, each site must be described in some detail, while more general information is required by the reporting system of the Convention on Biodiversity Diversity.

e) There is no apparent requirement for site-related data for the CMS Convention and only a limited requirement for the CITES-Convention with regard to particular species. However, the designation of suitable sites based on species criteria could form part of the *in situ* and legislative activities undertaken by Parties as part of their implementation activities. This implies that certain conservation-related activities -undertaken under the specific provisions of one Convention could be of significance to the others.

¹ Feasibility Study for a Harmonised Information Management Infrastructure for Biodiversity-related Treaties, Compiled by the World Conservation Monitoring Centre with the support of UNEP and the five Secretariats of the biodiversity Treaties.

1.1.1.2. The Cambridge Workshop: Towards Harmonization of National Reporting

In October 2000 UNEP convened a workshop in Cambridge to review the issue of the harmonization of national reporting procedures of biodiversity-related treaties. The workshop, which was attended by eight countries and eight Convention Secretariats, discussed possible actions to achieve harmonization and recommended a series of national pilot projects to test various approaches. More particularly, four pilot project ideas have been developed further for implementation in a number of countries in order to test them and to move from words to action. The four pilot project ideas are:

i) **Modular reporting:** The concept of modular reporting is based on the idea that the information required for the implementation of the Conventions and reporting on this implementation can be defined as a series of discreet **information packages or modules**, which respond to the reporting requirements of any given Convention. The information required for any given purpose could be defined as a list of modules.

ii) **Consolidated Reporting:** The main idea of consolidated reporting is to produce an "integrated" and coherent report that would satisfy the obligations of a range of International Conventions to which a State is a Contracting Party. In the first pilot phase this would be applied only to biodiversity-related Conventions and then it could be extended to other multilateral agreements.

iii) **Linking reporting to State of Environment reporting process:** Many countries, such as the UNECE-Countries and the OECD Countries, have to report data for "the State of environment process", which may or may not be linked to international reporting requirements. The pilot project in this field would examine the potential of finding synergies between the two reporting processes, especially through incorporating the State of environment requirements into reporting requirements of international agreements.

iv) **Information management and regional support:** This pilot project aims at identifying ways to improve national reporting through better information management at the national level and enhanced cooperation among neighbouring countries.

Another important project, which is already under way, has its main objective the development of a **detailed consolidated inventory** of all reporting obligations placed on Contracting Parties according to the various International Conventions. This information would be compiled in the form of an annotated list of specific questions or information elements demanded by each obligation and each of these questions would be keyworded to facilitate analysis.

1.1.1.3. The Issue Management Group on Harmonization of Reporting for Biodiversity Treaties

In January 2001, the Environmental Management Group (EMG) established an Issue Management Group on Harmonization of Reporting for Biodiversity-related Conventions (IMG) and appointed UNEP as task manager. In conjunction with IMG UNEP prepared a background paper entitled "Harmonization of Information management and reporting for Biodiversity-related Treaties". Additionally a harmonization website (<http://www.unep-wcmc.org/conventions/harmonization/>) was established in order to facilitate communication and exchange of information among participating countries, MEA Secretariats and other interested Parties.

When results of all pilot projects become available, UNEP/DEC and UNEP-WCMC will attempt to prepare preliminary guidelines for coordinated reporting at the national level. A document, outlining recommendations for consideration at the international level will also be prepared. **Because the harmonization process has not yet been completed, it is of**

importance that the existing reporting requirements of each of the Biodiversity-related Treaties is presented separately, but through a comparative analysis.

1.1.2. The reporting systems of each of the Biodiversity Conventions included in the project

1.1.2.1. The Convention on Biological Diversity (CBD)

According to Article 26 of the Convention, the objective of national reporting is to provide information on measures taken for the implementation of the Convention and on the effectiveness of these measures. **National reports have to be submitted on a four-yearly basis and will be considered at alternate COP Meetings according to the Decision V/19.** In the same Decision a reporting format developed by SBSTTA 5 was endorsed by the Contracting parties and it would serve, as it was stated, both as a guide for future national reporting and as means by which the status of national implementation can be measured. Par .2 of the aforementioned Decision stipulated some important guidelines on national reporting.

Building on the elements of the Decision of V/19, Decisions VI/25 and VII/25 developed further the requirements for national reporting focusing, especially **on the need for developing questions on strategic goals and objectives established under the Strategic Plan and on the implementation of National Biodiversity Strategies** In addition, **specific attention is paid to the importance of the consultative process by the compilation of national reports and to need for reduction of complexity and also for the identification of the obstacles encountered by the implementation.** Through Decision VII/25 the format for the third national report and general guidelines for its submission were endorsed.

The reporting format responds to the requirements set in the aforementioned Decisions and it is designed to place more emphasis on the actual outcomes of the implementation of the policies of the Convention than on the administrative aspects. The development of the questionnaire in this third national report format is based on the Articles and Programmes of Work of Convention and on those elements of the Decisions of the Contracting Parties specifically addressed to the Parties. ***Parties are required to submit the third national report both in electronic and hard copy paper formats. These national reports are available on CBD website in MS-Word and PDF in original language.***

A systematic view of the reporting format of the third National Report leads to the conclusion that in many aspects a quite developed reporting system has been established. Especially, Part B of the reporting format can be seen as very innovative, as the Contracting Parties have to describe their priority setting, challenges and obstacles encountered by the implementation as well as outline concrete steps for achieving provisional goals and targets. A very detailed list of factors and parameters that can affect the implementation as well as their extent also constitutes a part of the reporting format in order to enable States to analyze and present their implementation problems. Additionally, it has to be underlined that the reporting format is not only target-oriented in terms of providing information for achieving concrete targets but also theme-oriented in terms of providing information for the implementation of the Convention in some key-thematic areas, such as inland water ecosystem, marine and coastal biological diversity that are defined in COP-Decisions. **Last but not least, the setting of the current reporting format demonstrates the tendency to incorporate requirements concerning the implementation of the COP-Decisions into the core of the mandatory reporting obligations in order to safeguard their effective implementation.**

1.1.2.2. The RAMSAR Convention

According to the Resolution VII/27 of COP 7, RAMSAR' s Standing Committee adopted a format for National Reports, which Parties were urged to use as a planning tool for the implementation of the Convention. This Decision taken in COP 7 indicates a significant shift in the purpose of the national reporting process. National Reports were previously required every three years based merely on a description of actions taken.

National Planning Tool

All Parties are now urged to adopt this comprehensive national reporting tool as soon as possible and to use it to identify gaps and areas of highest priority of action in order to fulfill the requirements and to reach the goals set in the Convention' s Work Plan. This should include the setting of realistic national targets on the basis of the global target established in the Convention' s Work Plan.

COP 7 urged, thus, Parties to prepare their National Reports for COP 8 in consultation with their National Ramsar/Wetland Committees where they exist and also with the relevant Ministries. ***The use of this operational structure provides a framework for collective action and a feedback to decision-makers. Furthermore, it promotes enhanced participation from different players at national levels, when it is considered a planning and monitoring tool for wetland conservation and wide-use.***

The reporting frequency is still **triennial** and Contracting Parties had to submit their national report according to the new format by September 2002². A total of 119 Contracting Parties out of 125 have submitted their reports in preparation of COP 8. The reports are all available (in the language of submission only) in the RAMSAR Website (http://ramsar.org/cop8_nr_natl_rpt.index.htm). A relational database has also been created to store and analyze the information provided in the National Reports for COP 8 and nearly 135 indicators have been developed. Many of these indicators are going to be used for the preparation of the reporting format for COP 9. It is of importance that according to Resolution VIII.6 the development of **National Wetlands Inventories** is recognized as one of the core elements of the future reporting process. In this Resolution a Framework for Wetlands Inventory was adopted as Annex, in order to facilitate Parties to develop such inventories.

1.1.2.3. The UNESCO Convention on World Natural and Cultural Heritage

Under Art 29 of the World Heritage Convention, Parties are requested to give information on the legislative and administrative provisions that they have adopted for the application of the Convention. In 1998 and upon the request of the General Conference of UNESCO 1997, the World Heritage Committee adopted a number of Decisions with regard to the submission of periodic reports, including a "Format and Explanatory Notes for the periodic reporting on the application of WHC".

The periodicity of the reporting obligation was defined **in six years** and the format consists of two sections:

Section I constitutes the Party 's report on the application of relevant articles of WHC, including those relating to the identification of properties of cultural or natural value, the protection, conservation and presentation of cultural and natural heritage and international cooperation and fund-raising.

² The reporting format was transmitted to Parties, both in hard copy and in diskette with a diplomatic note dated 20 March 2000.

Section II refers to the state of conservation of specific World Heritage properties located on the Party' s Territory. It aims at facilitating the World Heritage Committee to obtain an assessment of whether the world heritage's value/s for which a property was inscribed on the World Heritage List is/are maintained over time. Additionally, Parties are requested to provide up-dated information on the management, factors affecting property and monitoring arrangements.

The reporting format also contains very detailed Guidelines in order to assist Parties to complete the report. Guidelines and format are available both in MS-Word and in PDF format. An Internet-based form is also being developed. In addition, Parties have to submit **site-specific conservation reports**. These "state of conservation reports" which are examined twice a year in the WH Bureau and Committee Meetings, are compiled in co-operation with IUCN and include information on sites received from State-Parties as well as from NGO's and individuals.

1.1.2.4. Convention on Migratory Species (CMS-Bonn Convention)

Article VI par. 3 of the Convention on Migratory Species (CMS) stipulates that Parties they considered themselves Range States for migratory birds must inform the Secretariat at least six months before COP of the measures they are taking to implement the Convention. CMS Parties should also keep the Secretariat informed in regard to which of the migratory species listed in any of the Appendices they consider themselves to be a Range States, including provision of information on their flag vessels operating outside national jurisdiction limits and engaged in activities in taking by any of the migratory species listed in Appendices (Article VI par.2 of the Convention).

Resolution 6.5 of Contracting Parties foresees the development of an Information Management Plan and national reporting. It recommends that the format of national reports should include a standard minimum requirement of information such as a "tick box" pro forma. Reports should also cover the national status of species listed under the Convention, the legal and administrative structures and management activities. It should be underlined that the reporting format has not been developed yet so that remarks regarding its periodicity, form, nature and extent cannot be ventured.

1.1.2.5. Convention on International Trade in endangered Species of wild Fauna and Flora (CITES-Convention)

Another International Biodiversity Convention, which was signed in 1973 and is thus relatively old, is the Convention on International Trade in Endangered Species of wild fauna and flora. The main aim of the Convention is to protect these valuable species from international trade. According to the relevant provisions of the Convention, each Party must maintain records of trade in specimens of species included in its Appendices I, II and III.

Parties have thus, to submit **an annual report** containing a Summary of permits and trade in species included in the three Appendices of the Convention. According to the Art.VIII, par. 7, b, Parties must also submit **a biennial report** on legislative, regulatory and administrative measures they have taken to enforce the provisions of the Convention.

1.1.3. The Convention on the conservation of European Wildlife and Natural Habitats (Bern Convention)

The Bern Convention developed under the auspices of the Council of Europe and adopted in Bern in 1979, constitutes an important legal instrument at the regional level. The Convention, which entered into force in 1982, sets specific requirements for Contracting Parties to adopt measures to maintain the population of fauna and flora at a level which satisfies ecological,

scientific and cultural requirements, while taking into account social and economic needs. Bern Convention is a good example of how to approach conservation at the regional level in a practical way that remains close to the people involved.

Parties have to report to Secretariat **every four years** on the measures that they have taken to implement the Convention. It is a general reporting obligation that has to be distinguished from the specific reporting obligation established under Article 9 par. 2 of the Convention (**reporting on derogations**).

According to Art. 9 par. 2 of the Convention, Contracting Parties have to report to the Standing Committee **every two years on the exceptions** made under par.1 of Art. 9 and especially exceptions from the provisions of the Articles 4 (Protection of Habitats), Art. 5. 6 and 7 (Protection of Species). As stipulated in Art. 9 par.2, the reports must specify:

- the populations which are or have been subject to the exceptions and, when practical, the number of specimens involved.
- the means authorized for the killing or capture
- the conditions of risk and the circumstances of time and place under which exceptions were granted.
- the authority empowered to declare that these conditions have been fulfilled and to take decisions in respect of the means that may be used, their limits and the persons instructed to carry them out.
- the controls involved.

The procedures for monitoring and reporting Parties' success in implementing the Convention are constantly being improved. The Standing Committee examines the detailed national reports submitted by the Parties every four years, assesses their conservation performance and defines what measures they should adopt in order to fulfill their undertakings.

1.2. Reporting Systems of Conventions for the protection of the Atmosphere

1.2.1. The Reporting System of United Nations Framework Convention for Climate Change (UNFCCC) and of the Kyoto Protocol to the Convention

1.2.1.1. The Reporting System of the UNFCCC

Within the framework of the UNFCCC and of the Kyoto Protocol to the Convention, the most extensive and innovative reporting system in the international law regime has been developed. This system can, thus, serve to some extent as a role model for the reporting systems of the other International Conventions. Therefore, the two main elements of the UNFCCC reporting system, the **national inventories** and the **national communications** are going to be described in detail.

aa) National Inventories

Article 12 par. 1 of the UNFCCC requires that Annex I Parties shall communicate **annually** to the COP, through Secretariat, a national inventory of anthropogenic emissions by sources and removal by sinks of greenhouse gases not controlled by the Montreal Protocol. COP 5 adopted very detailed Guidelines and set also the principles on which the development of annual national inventories should be based. ***The establishment and further development of national annual inventories should, thus, be based on the principles of transparency, consistency, comparability, completeness and accuracy.***

A certain methodology is also provided to the Contracting Parties for the development of national inventories. Through the Secretariat, Parties have to submit a **national inventory report**, which must contain detailed and complete information on their inventories for all the

years from the base year to the year of the current annual inventory, in order to ensure its transparency. The national inventory report has to be submitted **annually in one of the official languages of the UN**, in its entirety to the Conference of the Parties, either as a printed document or in electronic form. A common reporting format has already been developed.

bb) National Communications

In accordance with Article 12. par. 2 of UNFCCC, Annex I Parties shall communicate information on policies and measures adopted to implement commitments under Art. 4. par. 2 a and b of the Convention. COP 5 adopted Guidelines for the preparation of national Communications for Annex I Parties. The Guidelines stipulate that the compilation of National Communications should be based on the same principles on which the national inventories should be based, namely **on consistency, transparency, comparability, accuracy and completeness**.

According to these Guidelines the National Communications should contain the following elements:

- **an executive summary**, which summarizes the information and data from the full document
- **a description of their national circumstances and how their national circumstances affect greenhouse emissions and removals³**.
- **greenhouse gas inventory information in terms of summary information from national greenhouse gas inventory**
- **detailed information on policies and measures adopted to implement commitments under Article 4. par. 2.(a) and (b)**.

The part of national communications concerning the description of policy and measures constitutes the most extensive and innovative part of national communications. The description of policies and measures should include **the overall policy context**, in which they have been adopted and implemented, so that they can be seen as part of a general strategy. The policy context covers **the national targets for greenhouse gas mitigation, the national sustainable development strategies and relevant policies objectives**. In addition, Parties should give priority to policies and measures or combinations of measures, which have the most significant effect on GHG Emissions and removals and may indicate those which are innovative or effectively replicable by other Parties.

The presentation of each policy and instrument must include information on each of the following subject headings: ***name and short description of the policy or measure, objectives of the policy or measure, the greenhouse gas or gases affected by the measure, the type or types of policy or measure (regulatory, economic and fiscal instrument), the status of implementation, the implementing entity, a quantitative estimation of the impact of individual policies and measures, the costs of policies and measures including also the economic cost, the non- greenhouse gas mitigation benefits of policies and measures and finally the interaction of the adopted policies and measures with other policies and measures.***

In conclusion, it must be underlined that the United Nations Convention on climate change (UNFCCC) has been in the vanguard of introducing a rigorous reporting system of policies and measures in relation to CO₂ Reduction Programmes and of establishing a clear link between the measures taken and their effectiveness in achieving concrete goals. It has also

³ Especially the following headings are recommended in the Guidelines in order to improve comparability of national communications: government structure, population profile, geographic profile, climate profile, economic profile, energy, transportation, industry, waste, building stock and urban structure, agriculture and forest.

contributed crucially to providing reporting formats and methodologies that facilitate the provision of comparable and clear data by the Parties.

However, the reporting Guidelines suffer to some extent from several weaknesses especially in terms of insufficient clarity of the categories of information requested. Some examples of possible confusion are on the one hand, the terms "status of implementation" and "costs", since status of implementation includes also all manner of financial planning details, and on the other hand the terms "estimation of mitigation impact" and "indicators of progress", because, if the estimation has been made after the measures that have been taken, it also constitutes an indicator of progress.

1.2.1.2. *The Reporting System of the Kyoto Protocol*

Because of the detailed nature of the requirements of the Kyoto Protocol, its effective implementation depends on two crucial factors: whether Parties stick by the Protocol's rulebook and comply with their commitments and whether the emissions data used to assess compliance are reliable. The monitoring and reporting procedures of the Protocol build upon the reporting and review procedures established under the Convention, particularly the in depth review process. They also involve additional accounting procedures that are needed to track transactions in various units representing GHG emissions reductions under the Kyoto Protocol and the removal units by land use, land use change and forestry (LULUCF) activities.

The Protocol foresees detailed reporting requirements for the Annex I Parties in Article 5, 7 and 8. Article 5 commits Annex I Parties to have in place, no later than 2007, national systems for the estimation of greenhouse gas emissions by sources and removal by sinks. Article 7 requires that Annex I Parties incorporate in its annual inventories and national communications the necessary supplementary information to demonstrate compliance with Article 3 of the Protocol. Article 8 of the Protocol stipulates that the expert review teams shall review the inventories and national communications that will be submitted by Annex I Parties. The review process, according to Article 8 par. 3, can provide "a thorough and comprehensive technical assessment of all aspects of the implementation by a Party of Protocol".

Contracting Parties reached agreement on the details of Articles 5, 7 and 8 at COP 7. In the so-called Marrakesh Accords, detailed provisions for the accounting, reporting and review procedures were set out, mainly aiming at ensuring transparency of all data, except for data designated as confidential, and their availability to the public. Some sections of Guidelines under Articles 7 and 8 were not completed in order to ensure consistency with other future decisions.

1.2.2. The 1979 UNECE Convention on Long Range Transboundary Air Pollution (LRTAP) and its Protocols

The 1979 LRTAP Convention constitutes a regional legal framework, aiming at protecting man and the environment against air pollution and includes a general obligation for Parties "to limit and, as far as possible, gradually reduce and prevent air pollution, including long-range transboundary air pollution (Article 2 of the Convention). The LRTAP Convention provided, thus, the forum for the adoption of 8 Protocols establishing more detailed provisions in relation to particular substances.

With the exception of the first Protocol for "Long –Term Financing of the Co-operative Programme for Monitoring and Evaluation of the Long Range Transmission of Air Pollutants in Europe (EMEP)" the Convention and the Protocols foresee several reporting obligations. The minimum reporting obligations understood as **legal obligations** for the respective

Parties that are in line with the provisions of the Convention and its Protocols, are the following:

- i) According to Article 8 par. (a) of the Convention, each Party has to exchange available information on emissions of agreed air pollutants at periods to be agreed upon.
- ii) Each Party to the 1985 Helsinki Protocol on the reduction of sulphur emissions has, in accordance with Article 4 of the Protocol, to provide **annually** its level of national sulphur emissions and the basis upon which it has been calculated.
- iii) Each Party to the 1998 Sofia Protocol concerning the control of emissions of nitrogen oxides has, in accordance with Article 8 of the Protocol, to provide **annually** its level of national emissions of nitrogen oxides and the basis upon it has been calculated.
- iv) Each Party to the 1991 Geneva Protocol on the control of emissions of Volatile Organic Compounds (VOCs) has, in accordance with Article 8 of the Protocol, to report on the levels of emissions of VOCs in its territory by total and to the extent feasible by sector of origin and by individual VOC.
- v) Each Party to the 1994 Oslo Protocol on further reduction on sulphur emissions has, in accordance with Article 5 of the Protocol, to report **annually** on its level of national sulphur emissions, containing information for all relevant sources categories.
- vi) Each Party to the 1998 Aarhus Protocol on heavy metal has, in accordance with Article par. 5 and Article 7, to develop and maintain emission inventories for cadmium, lead and mercury.
- vii) Each Party to the 1998 Aarhus Protocol on Persistent Organic Pollutants has, in accordance with Article 3 par.8 and Article 9 of the Protocol, to develop and maintain emission inventories for the substances listed in Annex III to the Protocol.
- viii) Each Party to the 1999 Gothenburg Protocol to Abate Acidification, Eutrophication and Ground-level Ozone that is within the geographical EMEP has, in accordance Article 7 par1 (b) and (c) to report information on: aa) levels of emissions of sulphur, nitrogen oxides, ammonia and volatile organic compounds bb) levels of emissions in the reference year cc) data on projected emissions and current reductions plans dd) any exceptional circumstances justifying higher emissions levels.

In addition to the reporting requirements of the Convention and its Protocols, Contracting Parties are encouraged to report on emissions and projections for review and assessment purposes. In order to facilitate Contracting Parties, Secretariat has developed a specific reporting format, which is a standardized reporting format for reporting on estimation of emissions. In particular, the reporting format includes the following elements:

- a. National annual emissions and national annual sector emissions
- b. Total and aggregated sector emissions for reporting on emissions of certain substances, such as sulphur, nitrogen oxides, ammonia etc.
- c. For the years 2010, 2015 and 2020, projected activity data and projected national data and projected national total emissions of sources categories listed in Annex IV of the reporting format.

The compilation of national reports should be based on **transparency, consistency, comparability, completeness and accuracy**⁴. These are the same principles that are also recognized as fundamental for emissions reporting in the United Nations Framework Convention on Climate Change. The complied reporting formats are submitted annually to the Secretariat preferably in electronic form. The Secretariat checks that each submission is

⁴ See Economic Commission for Europe, Executive Body for the Convention on long-range transboundary air-pollution, Draft Guidelines for estimating and reporting emission data, EB.AIR/GE.1/2002/7.

made through the relevant national authority and then forwards the submission to the Meteorological Synthesizing Center-West for storage, management and consistency analysis. The elaborated data are contained in an electronic database, which was developed in order to increase accessibility and transparency (<http://webdat.emep.int>).

1.2.3. The Montreal Protocol on substances that deplete the ozone layer

The Montreal Protocol, which is the first and the only Protocol to Vienna Convention for the protection of the Ozone Layer, constitutes a landmark international environmental agreement, as it establishes a precedent by introducing new regulatory techniques and institutional arrangements and by implementing innovative financial mechanisms. After the changes introduced with 1990 Amendments Article 7 of the Protocol foresees detailed reporting obligations for the Contracting Parties. According to the aforementioned Article, Parties have to report **annually** to the Secretariat ***data on the production, imports and exports of controlled substances in Annexes A and B and Group of Annex C of the Protocol, and separate data on the amounts used for feedstocks, the amounts destroyed by approved technologies and imports and exports to Parties and non-Parties.***

A reporting format in the form of a questionnaire has been developed that also contains detailed guidelines in order to facilitate Parties by the reporting process. The development of the questionnaire is based on the relevant Articles of the Protocol that foresee limitations and reductions of the calculated levels of consumption of certain substances and on the Decisions that specify the Provisions of the Protocol. The reporting system of the Montreal Protocol reaffirms, thus, the tendency to include the provisions of relevant Decisions of the Contracting Parties into the core of the mandatory reporting obligations.

1.3. The reporting systems of the Conventions regarding chemicals and hazardous wastes

1.3.1. The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their disposal

The 1989 Basel Convention establishes a global regime for the control of international trade in hazardous wastes and other wastes, as it sets forth general obligations requiring all Parties to ensure that transboundary movements of wastes are reduced to the minimum with environmentally sound and efficient management.

In accordance with Articles 13 and 16 of the Convention Contracting Parties have the obligation to report to the Secretariat **on an annual basis**. The Secretariat has prepared a reporting format in the form of a questionnaire, which consists of two Parts and a "Manual for the questionnaire" in order to facilitate Parties by the compilation of national reports. The questionnaire is available both in electronic form and in hard copy version.

In the Compilation Part I of the questionnaire, Parties have to report ***on wastes controlled for the purpose of transboundary movements, restrictions on transboundary movements of hazardous wastes and other wastes, control procedures, reduction and/or elimination of the generation of hazardous wastes subject to transboundary movements, effects on human health and environment and bilateral and multilateral agreements.***

In the Compilation Part II, Parties have to provide data ***for the generation and transboundary movements of hazardous wastes, the amount of hazardous wastes***

exported and imported, the disposals which did not proceed as intended and the accidents occurring during transboundary movements and disposals.

Besides the periodic reporting obligation, Article 13 of the Basel Convention foresees also **ad hoc reporting obligations**. In particular, Contracting Parties are obliged, whenever it comes to their knowledge, to ensure that, in case of an accident occurring during the transboundary movement of hazardous wastes or other wastes, which could present risks to human health and to the environment in other States, these States are going to be immediately informed. Through the Secretariat, Contracting Parties have also to inform each other of changes concerning the designation of competent authorities and focal points, changes in their national definition of hazardous wastes and decisions made by them not to authorize the import of hazardous wastes within the area of their national jurisdiction.

It is of importance that the Secretariat has also published an international report with the title "Global Trends in Generation and Transboundary Movements of hazardous wastes and other wastes", which is based on data provided by the Parties to the Secretariat, covering the period 1993-2000.

This global report serves the following purposes regarding the effective implementation of the Convention:

- the identification of global trends and patterns in the generation and transboundary movements of hazardous wastes and other wastes
- the identification of possible drawbacks and weaknesses in data reporting that hamper the analysis
- the formulation of conclusions and recommendations for the further improvement of the reporting process.

In conclusion, it must be underlined that the Basel Convention has developed a quite detailed reporting system, which responds to the regulative context and to the objectives of the Convention. The frequency of reporting obligation should be also seen with regard to the "kind" of data to be provided and subsequently to the need for their constant monitoring.

1.3.2. The Rotterdam Convention on the Prior Informed Consent Procedure for certain hazardous chemicals and pesticides in international trade

According to Article 1 of the Convention, the 1998 Rotterdam Convention has as its main objective "to promote shared responsibility and co-operative efforts among Parties in the international trade of certain hazardous substances in order to protect human health and the environment from potential harm and to contribute to their environmentally sound use, by facilitating exchange of information about their characteristics, by providing for a national decision-making process on their import and export and by disseminating these decisions to Parties". The Convention entered into force in February 2004 and the First Conference of Parties took place in Geneva on 20-24 September 2004.

Article 18 par. 5 of the Convention requires that the Conference of the Parties must keep under continuous review and evaluation the implementation of the Convention. Paragraph 3 of the Decision **COP1/20/Add. 1** stipulates that Contracting Parties should submit to the Secretariat the information that is deemed useful for consideration by the Conference of the Parties as called for in par. 5 of the Article 18 of the Convention, including, *inter alia*, relevant experiences gained by the respective Parties. According to par. 4 of the afore mentioned Decision, Parties must submit the information referred in par. 3 **at least once in every period between two ordinary Meetings of the Conference of the Parties**, and at least six months in advance of the Meeting of the Conference of the Parties.

In the same Decision, a questionnaire consisted of two parts and presented in the Appendix, was also adopted. The First Part of the Questionnaire includes all relevant provisions of the Convention that require Parties to take action. Parties should, thus, **submit information on the implementation of the Articles mentioned in the First Part**. The Second Part contains questions specially focused on the implementation of the Articles mentioned in the First Part, on the problems encountered and on the experience gained by the implementation process.

It is obvious that the reporting system of the Rotterdam Convention is still at its very early stages, as the questionnaire has not been developed in detail. The further development of the questionnaire and the adoption of clear-cut guidelines for the compilation of national reports can be of crucial importance for the effective function of the reporting system as the primary source of information for the compliance mechanism of the Rotterdam Convention. At this moment, only special attention to the data concerning the implementation of the Convention can be of relevance.

1.3.3. The Stockholm Convention on Persistent Organic Pollutants

The 2001 Stockholm Convention on persistent organic pollutants constitutes the first international legal instrument, which aims to protect human health and the environment from certain persistent organic pollutants. To achieve this goal, it imposes measures to reduce or eliminate releases from the production and use of certain POPs. Stockholm Convention, which has not yet entered into force, foresees a number of provisions that include reporting obligations.

The general reporting obligation is established in Article 15 of the Convention. According to Article 15 par.1, each Party has to report to the Conference of the Parties on the measures it has taken to implement the provisions of the Convention and on the effectiveness of such measures in meeting the objectives of the Convention. Paragraph 3 of Article 15 stipulates that the reporting must be carried out at **periodic intervals** and in a format to be decided by the first Conference of the Parties. It is of utmost importance that when the timing and periodicity of the reporting obligation under Article 15 is to be defined, the timing of the reporting obligations established under the other Articles of the Convention as well as the periodicity of the Meetings of the Conference of the Parties must be taken into account in order to achieve synchronization to the extent that it is possible.

The other reporting obligations established under Stockholm Convention on POPs can be described as follow:

- **Article 5 subparagraph (a) of the Convention** requires each Party to develop an Action Plan and subsequently to implement it as a part of its national Implementation Plan specified in Article 7, designed to identify, characterize and address the release of chemicals listed in Annex C of the Convention. The Party has, thus, to report on it to the Secretariat within two years of the date in which the Convention entered into force for that Party. Furthermore, according to **Article 5 subparagraph a (v)** each Party has to report **every five years** on the review to be undertaken of those strategies pursuant to the development of the aforementioned Action Plan.
- **Article 7 of the Convention** requires each Party to develop and endeavour to implement an **Implementation Plan** and to review and update its plan on a periodic basis and in a manner to be specified in a Decision of the Conference of the Parties. Each Contracting Party has to transmit the Implementation Plan to the Conference of the Parties within two years of the date in which the Convention enters into force for that Party.
- **Article 16 of the Convention requires** an evaluation of the effectiveness of the strategies adopted and the measures taken to implement the Convention, commencing four years after the entry into force of the Convention and periodically thereafter.

- **Annex A, part II subparagraph (g)** requires each Party to provide a report every five years on progress in eliminating polychlorinated biphenyls and submit it to the Conference of the Parties pursuant to the Article 15.
- **Annex B, part II, paragraph 4 requires** each Party that uses DDT to provide to the Secretariat information on the amount used, the conditions of such use and its relevance to the Party's disease management Strategy every three years in a format to be decided by the Conference of the Parties.

The description of the designed reporting system leads to the conclusion that the Stockholm Convention as a modern Convention has a similar methodological approach concerning reporting requirements with other relatively new Conventions and with the EU Framework-Directives, such as the Water Framework Directive. In particular, this means that besides the general reporting obligation under Article 15, numerous reporting obligations on the implementation of the most important tools and on the achievement of specific targets of the Convention are also established. The synchronization of the general reporting requirement with the various reporting requirements in terms of periodicity and timing seems to be the major challenge by the development of the reporting system of Stockholm Convention after its entry into force in order to minimize the reporting fatigue of the Parties to the highest possible extent.

1.4. The reporting systems of the Conventions for the protection of Seas and Oceans

Marine environment protection rules can be divided into two main categories: global rules (of which the United Nations Convention on the Law of the Sea (UNCLOS) is the most comprehensive and the London Convention and the MARPOL 73/78 Convention the most specific) and regional rules. The second category includes Treaties under the UNEP Regional Seas Programme, such as the Barcelona Convention and those which are ad hoc regional and sub-regional arrangements establishing special rules in Europe and the Antarctic, such as the OSPAR Convention and the Helsinki Convention. First the reporting systems of the most important international Conventions are going to be analyzed, and then two regional Conventions with great relevance to the Barcelona Convention are going to be examined.

1.4.1. International Conventions for the protection of marine environment

1.4.1.1. The United Nations Convention on the Law of the Sea

Part XII of the United Nations Convention on the Law of the Sea (UNCLOS), which comprises forty-six Articles, divided into eleven sections, addresses the protection and the preservation of the marine environment. Article 193 of UNCLOS declares that "states have the sovereign right to exploit their national resources pursuant to their environmental policies and in accordance with their duty to protect and preserve the marine environment. Article 194 par. 1 further elaborates the obligation and distinguishes between the duty to protect the environment and the responsibility not to cause damage by pollution to other States".

In section 4 of Part XII entitled "Monitoring and Environmental Assessment", Article 204 par. 2 states that Parties shall keep under surveillance the effects of any activities which they permit or in which they engage in order to determine whether these activities are likely to pollute the marine environment. Furthermore, Article 205 states that States shall publish reports on the results obtained pursuant to Article 204 or provide such reports at appropriate intervals to the competent international organizations, which should make them available to all the States.

It is obvious that because of the general nature and context of the provisions established under UNCLOS, the general reporting obligation established under the Article 205 is also vague and provides no further specifications concerning the reporting requirements. As is the case with the other provisions of UNCLOS, Article 205 serves as a basis for more detailed reporting standards in other relevant International Conventions.

1.4.1.2. The 1972 London Convention on the prevention of marine pollution by dumping of wastes and other matters

aa) The 1972 London Convention

The 1972 London Convention is an instrument of global application, aiming at preventing the pollution of the sea by dumping of waste and other matters that are liable to create hazards to human health, harm living sources and marine life, damage amenities or interfere with other legitimate uses of the sea (Article I of the Convention). Dumping is defined by Article III of the Convention, while the rules which prohibit or regulate the dumping of waste are central to the Convention. The Convention is administered by the **Consultative Meetings of the Parties**, which are responsible for keeping under review the implementation of the Convention and for receiving the reports of the Parties.

Article VI par. 1 c of the Convention states that each Party has **to keep records of the nature and quantities of all matter permitted to be dumped and the location, time and method of dumping**, while **Article VI par. 1 d** stipulates that Parties have to monitor individually or, in collaboration with other Parties and competent international organizations, the conditions of the sea for the purposes of this Convention. **A general reporting obligation** is established in **Article VI par. 4** of the Convention, where it is stated that each Party, directly or through a Secretariat established under a regional agreement, shall report to the Organization and, where appropriate to other Parties, **the information specified in sub-paragraphs c (dumping permissions) and d (conditions of the sea) of paragraph 1 of this Article and the criteria, measures and requirements it adopts in accordance with paragraph 3 of the Article.** The procedure to be followed and the nature of such reports shall be agreed by the Parties in consultation.

The Secretariat has developed a reporting format, but the results of the reporting process presented by the Secretariat to the 25th Consultative Meeting of the Parties were rather disappointing. In particular, it was demonstrated that despite the efforts to improve the reporting rate in recent years, less than 50 % of the Contracting Parties have submitted reports. **In 2002, the reporting format was simplified and it is hoped that this can lead to higher return rates of reports.**

Furthermore, paying special attention to compliance issues the Consultative Meeting developed in the period 2001-2002 the **“Reporting Procedure of observed dumping incidents, which may be in violation of international ocean dumping Treaties** (London Convention 1972 and the 1996 Protocol thereto). A special **“Incident Information Form”** was developed and it was also agreed that the Secretariat has to make a compilation report, consisting of all the incidents reports it has received and present them to each consultative Meeting for further consideration. Article VII of the London Convention which states that **“Contracting Parties agreed to cooperate in developing procedures for the effective application of this Convention, in particular on the high seas, including also procedures for the reporting of vessels and aircraft observed dumping in contravention with the Convention”** was recognized as the legal basis for the development of this **ad-hoc reporting procedure**.

bb) The 1996 Protocol to the London Convention

Upon its entry into force, the 1996 Protocol will replace the Convention. The Protocol has similar provisions to that of the Convention, but it is more restrictive, as it has introduced a precautionary approach to environmental protection from dumping of wastes or other matters. The Protocol has not yet entered into force.

Art 9 par. 4 of the 1996 Protocol contains a modified provision for reporting in comparison with the relevant provision of the Convention (Article VI par. 4). The major modifications in relation to the Article VI par. 4 of the Convention are to be found in the **par. 4.2 of Article 9 of the Protocol, where it is stated that each Party has to report on the administrative and legislative measures it has taken to implement the provisions of this Protocol, including a summary of enforcement measures and in par.4.3 of Article 9 of the Protocol, where it is stated that Parties also have to report on the effectiveness of the measures referred to in par. 4.2 of Article 9 and any problems encountered in their application.** Furthermore, Article 9 par. 4 stipulates that reports including information referred to in par. 1.2 and 1.3 of same Article (**records of dumping permits**) have to be submitted **on annual basis**, while reports including information referred to in par 4.2 (**administrative and legislative measures**) and in par 4.3 (**effectiveness of the measures taken**) must be submitted **at regular intervals**.

1.4.1.3. The MARPOL 73/78 Convention

The main international Convention regulating pollution from vessels is the MARPOL 73/78 Convention. The detailed rules on pollution from ships are set out in six Annexes to the Convention. Further clarifications to its various provisions have also been adopted by the IMO Protection Environment Committee in the form of Resolutions setting out unified interpretations or amendments to the Convention.

MARPOL 73/78 also sets provisions for the detection of violations and enforcement, such as port inspections to verify whether ships have discharged harmful substances, reporting requirements on incidents involving harmful substances and the communication of information to the IMO. Especially Article 6 par. 1 of the MARPOL Convention 73/78 states that Parties to the Convention shall cooperate in the detection of violations and the enforcement of the provisions of the present and applicable measures of detection and environmental monitoring, adequate procedures for reporting and accumulation of evidence. Furthermore, Article 11 regulates the modalities and the context of information that has to be submitted by the Parties to the Organization, while Protocol I to Convention sets out detailed provisions concerning reports on incidents involving hazardous substances (**Article 8 of the Protocol**).

IMO Resolution A. 852 (20), which amended previous relevant IMO Resolution 648 (16), has specified the provisions set out in the Protocol I of the Convention. In addition it has introduced in its Annex **the general principles for ship reporting systems, the guidelines for reporting incidents involving dangerous goods and the guidelines for reporting incidents involving harmful substances and/or marine pollutants**. In the Appendix to the Decision, the relevant procedures and a standard reporting format were adopted, while Guidelines for detailed reporting requirements are also provided.

The results of the reporting process of the MARPOL Convention can not be described as satisfactory, as only a small part of the Contracting Parties have complied with their reporting obligations. As a result no clear picture regarding compliance with the Convention⁵ can be

⁵ According to the report of the United States Accounting Office requested by Congress “ International Environment: International Agreements are not well-monitored?, GAO?RCED

formed. There is no evidence that the situation is improving, although the IMO Resolution A. 852/20 has crucially contributed to the enhancement of the reporting procedure.

The implementation gap of the MARPOL Convention, as it is also demonstrated by the reluctance of the Contracting parties to report on the implementation of the Convention, the occurred violations and the imposed penalties, was one of the main reasons for the Commission Initiative on a legislative proposal for a Directive on sanctions for ship-source pollution, including criminal sanctions⁶.

1.4.2. Reporting requirements of Sea Safety Conventions

The protection of the marine environment is regulated in a more indirect way by the International Conventions that address matters relating **to the sea safety**.

In particular, the following most important International Conventions have set out international Standards on the safety of the shipping:

- i) International Convention on Load Lines, as amended, London, 5 April 1966 and the Protocol to the Convention, London 11/02/1988, entered into force 3/02/2000.
- ii) Convention on the International Regulations for preventing Collisions at sea (COLREG Convention) entered into force in 1997 and amended in 1983, 1987, 1989, 1993.
- iii) International Convention for the Safety of life at Sea (SOLAS Convention), entered into force in 25/05/1980, Protocol to the Convention entered into force 3/02/2000.
- iv) International Convention on Standards of Training, Certification and Watchkeeping for seafarers, amended version entered into force on 1/02/1997.
- v) ILO Convention concerning Minimum Standards in merchant ships entered into force on 28/11/1981
- vi) International Convention on the control of harmful anti-fouling systems on ships, London 2001.

As these Conventions mainly establish detailed commitments on the design and the construction of ships, equipping, manning and operational requirements and matters relating to the training of the crew, their reporting requirements, when set out, are mainly of an ad-hoc and technical nature. It should be noted that only the International Convention on the control of harmful anti-fouling systems of ships being a new Convention contains a specific Article establishing an annual reporting obligation for the provision of information regarding antifouling systems approved, restricted or prohibited under its domestic law (Article 9).

1.4.3. Reporting requirements of International Conventions and Protocols to combat emergency situations

The protection of marine environment from emergency situations posing threats to it is the main objective of several International Conventions and Protocols that provide a framework for cooperation in these cases. **The 1969 International Convention relating to the Intervention on the High Seas in cases of oil pollution casualties and the 1973 Protocol to the Convention on Intervention on the High Seas in cases of marine pollution other than oil pollution casualties** were the first International legal instruments to address the problem of marine pollution caused by emergency situations. Only the prior notification and the consultation that must take place between the coastal state and the other affected state is required by the two legal instruments, while no general reporting obligation is stipulated.

1992, only thirteen of the fifty seven Parties to MARPOL Convention have submitted reports on violations and penalties they had imposed in 1989.

⁶ Proposal for a Directive of the European Parliament and of the Council on ship-source pollution and the introduction of sanctions, including criminal sanctions, for pollution offences, 2003/0037 (COD).

Another important legal instrument aiming at creating incentives to encourage salvors to take measures to protect the marine environment is **the 1989 International Convention on Salvage**. It is of relevance that the Salvage Convention does not set out any specific reporting obligation.

The international cooperation in the event of a major oil pollution threat is also crucially promoted by **the 1990 London International Convention on Oil Pollution Preparedness, Response and Co-operation Convention (1990 OPRC Convention)**, which is applicable to ships, offshore units, sea ports and oil handling facilities. The Convention, which entered into force in 1995, sets out detailed provisions on **oil pollution reporting procedures** (Article 4) and **the action to be taken on receiving an oil pollution report** (Article 5). It should be clarified that when it is stated in **Article 4 par. 2 that reports under Article 4 par. 1 i** (in case of a ship) shall be made in accordance with the requirements developed by the Organization and based on the guidelines and general principles adopted by the Organization, this refers to **Article 8** of the Protocol I to MARPOL Convention and to the IMO Resolution A. 852/20 on ship reporting systems and ship reporting requirements that amended previous Resolution A. 648/16. Further, it must be underlined that also **the reports under Article 4 par.1 (a) ii** (in case of an offshore unit), b, c, d have to be prepared in accordance with the general principles and guidelines adopted in the IMO Resolution A. 852/20 on ship reporting systems.

The **2000 Protocol to the OPRC Convention on Preparedness, Response and Co-operation to pollution incidents by hazardous and Noxious Substances (HNS Protocol)**, which has not yet entered into force, has similar provisions to that of the Convention and aims at promoting international cooperation in combating major pollution incidents involving hazardous and noxious substances. Parties to the Protocol will be required to take measures for dealing with pollution incidents, while ships will be required to carry a shipboard pollution emergency plan to deal especially with incidents involving hazardous and noxious substances.

1.4.4. The reporting systems of the International Conventions for Liability and Compensation

Several International Conventions establishing rules for liability in relation to pollution or damage to the marine environment have been adopted. The most important International Treaties for Liability and Compensation are the following:

- the 1992 International Convention on Civil Liability for Oil Pollution Damage
- the 1992 International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage
- the 1996 International Convention on Liability and Compensation for damage in Connection with Carriage of Hazardous and Noxious substances (HNS Convention)
- the 2001 International Convention on Civil Liability for Bunker Oil Pollution Damage (Bunker Convention).

Because of the specific regulative context of the so-called Liability Conventions, no general reporting requirements are established. This lies mainly in the fact that the main objective of these Conventions is to set out provisions for establishing liability, for requiring restoration where possible, and for providing compensation. ***The nature of the liability regime is, thus, focusing on the compensation and on a limited restoration of the marine environment, while no special attention is paid to the development of a quite detailed reporting system.***

1.4.5. Reporting requirements of Conventions for the protection of marine living sources

1.4.5.1. The International Convention on the regulation of Whaling

The **International Convention on the Regulation of Whaling** is a Convention with a long history, as it was signed in Washington DC on 2nd December 1946. The main aim of the Convention is to provide a regulatory framework for the conservation of whale stocks and thus make possible the ordered development of the whaling industry.

Article VIII par. 3 of the Convention states that “each Contracting Government shall transmit to such body as maybe designated by the Commission, in so far as practicable, and at intervals of not more than a year, scientific information available to that government with respect to the whales stock, also including the results of research conducted pursuant to par.1 of this Convention to Article IV”.

Article VIII par. 3 of the Convention is, thus, recognized as the legal basis for national scientific reports. The development of these reports has been further formalized in the Rules of Procedure of the Scientific Committee. All the Contracting Parties are urged by the Commission to provide **National Progress Reports** to the Scientific Committee, which was deemed responsible for receiving national reports. National reports have to be submitted according to the most recent Guidelines that are also available on the web (www.iwcoffice.org/commission/sci_com/progress). National Scientific Reports contain general information that covers the intersessional period (or if a report was not submitted last year, the period since the last report), while statistical data should be provided by calendar year or season as explained in the Guidelines.

1.4.5.2. Convention on the Conservation of Antarctic marine living sources

Another Regional Convention for the protection of marine living sources, which has detailed reporting requirements, is the **Convention on the Conservation of Antarctic marine living resources**. In particular, Article XX par. 1 states that the Members of the Commission, shall, to the greatest extent possible, provide **annually** to the Commission and to the Scientific Committee such statistical, biological and other data and information as the Commission and Scientific Committee may require in the exercise of their functions. Furthermore, par. 2 of Article XX requires that Members of the Commission shall provide, in a manner and at such intervals as may be prescribed, information about their harvesting activities, including fishing areas and vessels, so as to enable reliable catch and efforts statistics to be compiled.

1.4.6. The reporting systems of two important Regional Sea Conventions

1.4.6.1. The OSPAR Convention

The 1992 OSPAR Convention has introduced a new approach to the protection of the marine environment, as it regulates all sources of marine pollution in one single instrument. The Convention, which constitutes a unification of two earlier Conventions, the Oslo Convention and the Paris Convention, reflects in its provisions the significant legal developments, which emerged especially after the United Nations Conference on Environment and Development in Rio. Therefore, it incorporates the **precautionary principle** and the **polluters pays principle**, adopts the concepts of best available techniques, best available practice and clean technologies and makes a commitment to sustainable management rather than to sustainable development. The Convention entered into force in March 1998.

Article 22 of the Convention states that:

"Contracting Parties shall report to the Commission **at regular intervals** on:

- a) the legal, regulatory, or other measures taken by them for the implementation of the provisions of the Convention and of Decisions and Recommendations adopted thereunder, including in particular measures taken to prevent and punish conduct in contravention of those provisions
- b) the effectiveness of the measures referred to in subparagraph a of this Article
- c) problems encountered in the implementation of the provisions referred to in subparagraph a of this Article

In the first Ministerial Meeting of the OSPAR Convention, held in July 1998 (Portugal) **the OSPAR Decision 98/1**, which revoked a whole range of Decisions, Recommendations and other agreements and the **Standard Implementation Reporting and Assessment Procedure** were adopted.

The basic element of the Standard Procedure is that for each instrument (Decision or Recommendation) a lead country must be designated. The lead country has to prepare, where it does not already exist, a reporting format, which has to be agreed by the relevant Committee. The reporting formats that are attached to all new Decisions and Recommendations, should consist of two sections: **a section for assessment of compliance and a section for measuring the effectiveness of the measures taken**. Contracting Parties have then to report, in accordance with the timetable laid down in the Standard Procedure, on what they have done to implement the instrument. It is the responsibility of the lead Country to prepare **an overview of the implementation reports**, which is discussed by the relevant Committee and approved for publication by the OSPAR Commission.

The first experiences gained since the adoption of the Standard Procedure demonstrate that there have been difficulties in obtaining information from all the Contracting Parties. However, it is of crucial importance that the Heads of Delegation have decided **to issue regularly a report on the status of submission of implementation reports and to approve its publication in the Commission's annual report**. The publication of countries performances in fulfilling their reporting obligations can function as an important incentive for enhancing the quality and accuracy of their reports.

The overview of the submitted implementation reports for 38 instruments have now been published on the OSPAR website (www.ospar.org). This can be considered a very positive step for improving data accessibility and increasing public awareness.

1.4.6.2. *The Helsinki Convention on the protection of the Marine Environment of the Baltic Sea Area*

The main goal of the new Helsinki Convention, which entered into force in July 2000, is to protect the marine environment from all sources of pollution and to restore and safeguard its ecological balance. According to Article 16 of the Helsinki Convention, Contracting Parties shall report at regular intervals on:

- a. the legal, regulatory or other measures of the provisions of these Convention, of its Annexes and of the Recommendations adopted thereunder.
- b. the effectiveness of the measures taken to implement the provisions referred in the sub-paragraph a) of this Article
- c. problems encountered in the implementation of the provisions to in sub-paragraph a) of this Article.

It has to be underlined that the provisions of the Convention are specified through the adoption of the so called HELCOM Decisions on measures to address certain pollution sources or areas of concern mainly **in the form of Recommendations**. These

Recommendations have to be implemented by the Contracting Parties through their national legislation or other regulatory and administrative measures.

The reporting procedure of the Helsinki Convention is mainly focused on reporting on the implementation of the HELCOM Recommendations. The request for Contracting Parties to report on their implementation was initially made at the Seventh Meeting of the Commission in 1986 (HELCOM 7/14, Paragraph 3.3). Since then, the reporting procedures on how the Contracting Parties should submit information on their implementation of HELCOM Recommendations have been revised within the subsidiary bodies.

The reporting system of the Helsinki Convention is very similar to that of the OSPAR Convention. A lead country is designated for each Recommendation, which has to prepare the reporting format or to revise it, if needed. The Countries have, then, to compile their national implementation reports and provide them to the Lead Country as well as submit a copy to the Secretariat. The Lead countries should review and assess the national implementation reports and submit the evaluation reports to the Secretariat. The Secretariat elaborates the final report on the implementation on HELCOM Recommendations that has to be approved by the next Commission Meeting.

On the whole, the system of reporting on the implementation of the HELCOM Recommendations is regarded by the HELCOM Committee as very time and resource consuming. In addition, the lead country often encounters difficulties in interpreting the reports due to the considerable variety in the information submitted by the Contracting Parties that makes it hard to make a thorough analysis of the real status of implementation. Another important factor that also has implications for the latter assessment of the status of implementation is the great extent to which the context and the exactness of the HELCOM Recommendations vary. The Contracting parties have, thus, to report on the implementation of instruments designed in very different ways, with the consequence of increasing of their reporting fatigue and of having significant impacts on the quality of the submitted data. Finally, while it is focused on the provision of information on legal, administrative or, other measures taken to implement the HELCOM Recommendations, very little information is provided on the practical implementation of these Recommendations.

As the need for increasing the efficiency of the reporting system on HELCOM recommendations was recognized, various efforts have been undertaken towards this direction. The project undertaken by the Finnish Environment Institute for the Helsinki Commission entitled "Harmonization of HELCOM Recommendations with EU Directives and OSPAR Decisions and Recommendations" can be mentioned as a characteristic example of efforts undertaken in this direction. The HELCOM LAND Meeting approved the general approaches of the project and takes them into consideration by the further elaboration of the Recommendations in order to harmonize them with other similar legal instruments, such as EU Directives or International and Regional Agreements.

1.5. Reporting Systems of other Conventions

1.5.1. UNECE Convention on access to information, public participation in decision-making and access to justice in environmental matters (Aarhus Convention)

Aarhus Convention constitutes an innovative regional legal instrument for improving the availability and accessibility to environmental information and for enhancing public participation in environmental-related decision-making. The Convention is built on three pillars: access to environmental information, public participation in environmental decision-making and access to justice on environmental matters.

At their First Meeting held in October 2002 (Lucca, Italy), Contracting Parties adopted Decision I/18 concerning reporting requirements. The Legal Basis of the Decision is Article 10 par. 2 of the Convention, which states **that at their Meetings, Parties shall keep under continuous review the implementation of the Convention on the basis of the regular reporting.**

According to par. 1 of the aforementioned Decision, each Party has to submit to the Secretariat in advance to the second Meeting of the Parties a report that consists of two parts: The first part contains a report on the necessary legislative, regulatory and other measures it has taken to implement the relevant provisions of the Convention (implementation report) and the second part includes a report on any other activities undertaken for the further implementation of the Convention and their practical application (activity report). Each Party also has to review the report and submit an updated version of it to the Secretariat in advance of each subsequent Meeting.

According to the Decision, two important procedural requirements must be fulfilled by the compilation of national reports: **transparency and public involvement by the preparation process and timeliness in the reporting process.** Especially, active public involvement and dialogue between public and public authorities by the preparation of national reports is recognized in par. 3 of the Decision I/8 as well as in its Preamble as an important procedural requirement in order to improve the quality of the reports and to strengthen the credibility of the reporting process.

Timeliness of reporting by national focal points is also recognized as necessary (Decision I/8 par. 4) in order to enable the Secretariat to prepare the synthesis report so that both the synthesis report and the national implementation reports can be translated and distributed six weeks before the Meeting of the Parties, as required by the Rules of Procedure. Furthermore, for the reports to provide a clear picture on compliance, it is important that they include as much complete information as possible and at least address all the items in the reporting format (**completeness of reports**).

The description of the newly established reporting system of the Aarhus Convention leads to the conclusion that it is one of the most innovative reporting systems as it establishes a precedent by setting out clear procedural requirements for the reporting process, such as transparency and public involvement. However, the major innovation lies in the fact that the Compliance Committee established under the Decision I/7 of the Contracting Parties has to oversee the fulfillment of these procedural requirements by the compilation of national reports, as it is stipulated in par. 13 c of the afore mentioned Decision (The Committee shall monitor, assess and facilitate the implementation of and compliance with the reporting requirements under Article 10 par. 2 of the Convention). This demonstrates in the most explicit way the interdependence between an effective reporting process and the compliance mechanism and the possible role of a Compliance Committee for improving the reporting process in several aspects.

In this context, the Aarhus Convention Compliance Committee made a proposal for an integrated procedure in the run up to the Meeting of the Parties, which attempts to address the needs of both compliance mechanism and reporting process. Finally, Article 5 of the Aarhus Convention must be seen as a relevant provision regarding the future development of reporting systems and the importance for the availability of environmental information to the public. In particular, Article 5 par. 9 of the Convention states that each Party –taken into account international processes, where appropriate- shall take steps to establish progressively a **coherent, nationwide system of pollution inventories or registers** on a structured, computerized and publicly accessible database compiled through standardized reporting. Furthermore, it is stated that such a system may include inputs, releases and transfers of a specified range of substances and products, including water, energy and

resource use from a specified number of activities to environmental media and to on-side and off-side treatment and disposal sites. Therefore, Article 5 par. 9 of the Aarhus Convention in association with relevant provisions of other Conventions must be recognized as the legal basis for the development of ***national pollution inventories***, which also constitute a core element of the reporting obligations of several International Conventions.

1.5.2. The United Nations Convention to Combat Desertification (UNCCD)

The United Nations Convention to combat desertification adopted in 1994 has introduced a new integrated approach to the major problem of desertification and constitutes an important tool, yet to be fully utilized, to address acute social, economic and political issues intrinsically linked to the effects of desertification and drought.

According to Article 26 par. 1 of the Convention, each Party has to communicate to the Conference of the Parties for consideration at its ordinary sessions, through the Permanent Secretariat, reports on the measures which it has taken for the Convention.

The reporting procedure, the format (not available in electronic form) and the context of reporting were outlined in Decision 11/COP. 1. In this Decision, also in line with the provisions of Article 26 of the Convention, special reference is made among the reports that have to be submitted by affected countries implementing National Action Programmes pursuant to Articles 9-15 of the Convention, to the reports that have to be submitted by developed affected countries and the reports on joint, subregional and regional action Programmes.

The reports submitted by Countries that have to implement National Action Programmes must include the following elements: ***a table of contexts, a summary not exceeding six pages, the strategies and priorities established within the framework of sustainable development strategies and plans, the institutional measures taken to implement the Convention, the participatory and the consultative process in support of the preparation and implementation of action plans, the measures taken or planned within the framework of national action programmes, financial allocations from national budgets in support of implementation, and a review of the benchmark and indicators utilized to measure progress.***

The reports of affected developed country Parties not preparing Action Programmes must contain the following elements: ***a table of contents, a summary not exceeding six pages, the strategies and priorities within the framework of sustainable development plans and policies to combat desertification and mitigate the effects of drought and any relevant information on their implementation.***

Due to the evolving nature of the reporting process, the COP decided to add to the existing reporting of Decision 11/COP.1, ***priority areas*** and ***key thematic topics*** identified in Decision 8/COP.4 at COP 4 and in Decision 1/COP. 5 at COP 5. Furthermore, Country Parties are requested to submit as part of their national reports a country profile containing statistical data on geo-topographic, biophysical and socio-economic indicators relevant for the assessment of desertification at national level.

The frequency of reporting is defined by the relevant COP Decisions. In particular, COP 3 initiated the review of national reports of affected African reports, while COP 4 examined the reports of other affected countries of other regions. In general, reports are to be submitted 6 months prior to the session in which they are to be reviewed.

In conclusion, it must be underlined that an essential component of national report preparation is its participatory and integrated approach, so that the reports reflect the views of various stakeholders. Furthermore, it should be noted that the UNCCD Secretariat has

issued an updated a **Help Guide** in order to facilitate the Countries by the process of compilation of national reports in light of the COP 6. The methodology adopted by the reporting formats concerning indicators for the UNCCD implementation process is also of crucial importance for assessing compliance with the Convention through the implementation reports.

Part 2: THE REPORTING SYSTEMS OF EUROPEAN ENVIRONMENTAL DIRECTIVES

2.1. Introduction

The 6th Environmental Action Programme highlights the need to:

"review and regularly monitor information and reporting systems with a view to a more coherent and effective system in order to ensure streamlined reporting of high quality, comparable and relevant environmental data and information".

The 6th Environmental Action Programme also identifies the need to undertake "ex ante" evaluation of possible impacts of new policies and ex-post evaluation of the effectiveness of existing measures in meeting their environmental objectives. The constant improvement of the reporting systems is recognized, thus, as an important objective in terms of assessing compliance with European Directives and of measuring the effectiveness of the measures taken for their practical implementation.

Reporting obligations are not a new element in the European environmental legislation, but have a rather long established tradition dating back to the first adopted Directives in this field, such as the 1975 Surface Water Directive. Over the years reporting requirements have been constantly developed in order to provide the Commission with information relating to the implementation of the relevant legislation. Most legislation contains, thus, some level of reporting requirement, whether it is in the form of a report or communication to be submitted by the Member States to the Commission or information made available upon request. However, as demonstrated in relevant studies, more than one half of the reports that had to be submitted to the Commission were either delayed or not produced at all.

The introduction of the Standardised Reporting Directive 91/962 represents the first important effort to make the reporting system of European environmental legislation more coherent and to reduce the "burden" of Member-States.

2.2. The Reporting System established under the Standardised Reporting Directive

The Standardised Reporting Directive 91/962 aimed at making the existing reporting system more consistent and complete by requiring reports to be submitted on a sectoral basis for certain environmental Directives **every three years**. The majority of Directives in the field of water and waste legislation falls under the scope of its application. It is estimated that only one third of the total of European Environmental Legislation is covered under the Standardised Reporting Directive.

Each Directive is to report on the basis of a questionnaire, which is different for each of them. The questionnaires for waste and water legislation focus heavily on compliance data. Questions can generally be targeted to the two following kinds of information:

- ***The legislative, regulatory and administrative measures taken for the transposition of the Directive into the national legal order (transposition into national law order).***
- ***The measures taken for the practical implementation of the relevant Directive (practical implementation).***

Questions are mainly in the form of "yes" or "no" and for requesting further information questionnaires use wording such as "giving details", "reasons why" and "if no, why". The systematic analysis of the questionnaires under the Standardised Directive in the field of waste and water legislation leads to the conclusion that there is neither a systematic request for description of the measures taken nor an attempt to classify the measures in order to make them comparable across Member States. It is also worth mentioning that the questionnaires do not focus on asking information useful for assessing the effects and effectiveness of the measures taken.

The effects of the Standardised Directive towards harmonization of reporting requirements and of reducing the reporting "fatigue" of Member-States are not remarkable as each Directive is to report on a different questionnaire and there is little harmony in the type of information requested by each of them. Additionally, the fact that the questionnaires are published several months or years after the introduction of the Directive, which means that they cannot provide current information regarding the achievement of its original goals, should also be taken into account.

The Commission Summary Report on the Implementation of waste Directives⁷, published in January 2000, underlines, thus, the inability of these questionnaires to extract comparable and adequate information from Member States and cites the lack of common approaches and methodologies as a major barrier to a Community wide evaluation of the progress. Therefore, the report foresees several adaptations of the waste questionnaires in order to address the need for a greater balance of information on the experience gained by the practical application of the Directives. It should also be underlined that DG Environment is at present working on a proposal for the review of the Standardised Directive.

2.3. A new approach in the European environmental legislation and the relevant developments in reporting

Since the Standardised Directive came into effect, new important legislation has been introduced aimed at approaching environmental problems in a more integrated manner in order to comply with the context of the sustainable development principle. The Air Framework Directive 96/62, the Directive on Integrated Pollution and Prevention Control (IPPC) 96/61, the Water Framework Directive 2000/60 and the Climate Change Monitoring Mechanism (Decision 280/2004) have introduced this new approach into the environmental legislation, which is also reflected in their reporting systems.

2.3.1. Air Quality Framework Directive

The Air Quality Framework Directive has a quite developed reporting system. Member States have to report **every three years** on the measures taken to meet the emission limits stipulated in the Air Quality Framework Directive and its daughter Directives, the foreseen timetables for implementation and the preparation of long term plans for a good air quality. Furthermore they have to estimate the time needed in order to improve the air quality according to the requirements of the Directive.

2.3.2. Water Framework Directive

The Water Framework Directive represents a new approach to the sustainable water management, as it introduces the model of integrated water management at the river basin level. The **Water Framework Directive** has also introduced a new approach to data collection and reporting, as it provides a more streamlined reporting process and a clearer distinction between the information needs of different actors at different levels.

Under the reporting system before the introduction of the Water Framework Directive, Member States were required to report on 10 water-related Directives. The Majority of these Directives are going to be repealed by the Water Framework Directive⁸ and their reporting

⁷ Report from the Commission to the Council and the European Parliament on the implementation of Community waste legislation for the period 1995-1997, COM (1999)752, Brussels, 10.1.2000

⁸ Especially the following Directives are going to be repealed:
- Exchange of Information Decision (77/95)-Date of repeal: 2007.
- Surface Water Directive (75/440 amended by 79/869)-Date of repeal: 2007

requirements are designed - as it was mentioned- according to the provisions of the Standardised Reporting Directive. The results regarding the fulfillment of reporting obligations by the Member States under the system of Standardised Directive in the field of water related-Directives are not satisfactory, as the information is not often submitted or, when submitted, it is incomplete.

2.3.3 Water related Directives that are not going to be repealed by the Water Framework Directive and their specific reporting requirements

Additionally, Member States are required to report on other four water-related Directives that are not going to be repealed by the Water Framework Directive. Two of them, namely **the Urban Waste Water Treatment Directive (91/271/EEC)** and **the Nitrates Directive (91/676/EEC)** have their own reporting systems, using as reporting form questionnaires that have been developed separately from the Standardised Reporting Directive but following the same procedure. The other two Directives, namely the **Drinking Water Directive (98/83 EC)** and the **Bathing Water Directive (76/160/EEC)** fall under the scope of the Standardised Directive.

It is worth mentioning that the nature and the extent of the monitoring and reporting requirements of the Nitrates Directive constitutes an important and unusual feature in comparison with the other water-related Directives before the introduction of the Water Framework Directive. **Member States are required not only to describe the content of Action Programmes for combating water pollution caused by the Nitrates, but they also have to assess their effectiveness in order to be able to make adjustments should the Action Programmes prove to be inadequate.** The reports have to be submitted **every four years** in hard copy or in electronic form but no electronic reporting format has been developed yet. The data accessibility can not be described as satisfactory, as reports have to be submitted to the Commission that is responsible for preparing a Summary Report which will be available to the public.

From another point of view, **Nitrates Directive also constitutes a characteristic example of the interdependence between the effective implementation of a legal instrument and the function of its monitoring and reporting system.** In particular, as Member States failed to implement the Nitrates Directive and this failure resulted in infringement proceedings against no fewer than 13 of 15 Member States, this has also extended in the way that Member States fulfilled their reporting obligations. Only few countries submitted their reports with substantial delay and these reports proved to be disappointing in relation to the evaluation of the effectiveness of Action Programmes. Commission shares the view that the reporting requirements of the Directive can be improved if they can be enriched with the requirement to report on the problems experienced in the implementation of the Directive.

The other Directive, which actually has its own reporting system although it falls under the scope of the Standardised Reporting Directive, is the Bathing Waters Directive. Because of the regulative context and scope of the Directive (protecting the quality of Bathing Waters), Member States have to report **annually** on data regarding compliance with the Directive, such as geographic designations, numbers of samples taken in the bathing season and summary monitoring results. The reporting format is in electronic form and there is also a specified data form for numerical data and a "read me free" format for supporting information. The data are very easily accessible, because they are compiled by the Commission in a website and in a summary report, which is also available on the web. The public can, thus,

-
- Freshwater Fish Directive (78/659/EEC)- Date of repeal: 2013
 - Shellfish Waters Directive (79/923/EEC)-Date of repeal: 2013.
 - Groundwater Directive (80/60/EEC)-Date of repeal: 2013
 - Dangerous Substances Directive (76/464/EEC)-Date of repeal: 2013.

be directly informed about the quality of bathing waters throughout Europe. In conclusion, it should be underlined that the Bathing Water Directive, which is now under modification, has a reporting system that seems to reflect the new requirements for data accessibility to the public and also for measuring the effectiveness of the measures taken.

2.3.4. The innovative reporting system of the Water Framework Directive

As stated above, the Water Framework Directive has introduced a new approach to data and information collection and reporting. First of all, the Directive itself lays down general reporting requirements. In particular, Member States have to report to the Commission at different stages and for different purposes and the Commission itself has to report to the Council and to the European Parliament about the implementation progress of different elements of the Directive. The reporting requirements of the Water Framework Directive are shown in detail in table 1.1

It is also of great importance that besides the general reporting requirements, specific templates for reporting have been included in some of the Guidance Documents, such as WATECO and IMPRESS that have been developed under the Common Implementation Strategy⁹ (CIS).

Reporting obligations of the Water Framework Directive					
Subject	Article	Responsibility	To	Report due date	Frequency /review
List of competent Authorities	3.8/Annex I	Member States	Commission	22/6/2004	3 months after change
Characterisation of river basin human activities/economic analysis	5, 15par. 2	Member States	Commission	22.03.2005	22/12/20013, every 6 years thereafter
Monitoring Programmes	Art. 8, 15par.2	Member States	Commission	22/3/2007	Latest date .report to be submitted within 3 months after completion
River basin management Plans	Art. 15 par. 1	Member States	Commission	22/3/2010	22/12/2015, every six years thereafter
Registry of protected areas	Art 6	Member States	Commission	22/3/2010	22/12/2015, every six years thereafter
Progress on Implementation of programme measures	Art. 11 and Art 15 par.3	Member States	Commission	Within 3 years of publication of River basin Programme of	

⁹ The Common Implementation Strategy-agreed by the Commission and the Member States-aims at supporting the coherent implementation of Water Framework Directive. In its framework, Member States experts have produced Guidance Documents, on how the Directive should be effectively implemented covering all the stages from the assessment of status through to reporting.

				measures	
Implementation	Art. 18 par. 1, 2	Commission	European Parliament, Council	22/12/2012	Every six years
Progress by Member States in implementation	Art 18par.3	Commission	European Parliament, Council	22/12/2006-report on characterization and economic analysis 22/12/2008-Report on monitoring measures	
Interim reports on implementation of programme of measures	Art. 18 par.4	Commission	European Parliament and Council	22/12/2015	Every six years

The European Commission (DG ENV, Eurostat) and European Environmental Agency in connection with the European Net of Water Directors are committed to continuing the development of **a new, comprehensive and shared European data and information management system for water**, including river basins and following a participatory approach towards the Member-States in order to have it operational and to implement it as soon as possible. The main aim is to make this data and information management system beneficial to all players and all levels. The challenge for the parties involved is, thus, to design an efficient system that recognizes multi-needs, makes best use of existing information in countries and respects the principles established in Aarhus Convention, such as transparency, accuracy and completeness.

2.3.5. The IPPC Directive and the EPER System

The IPPC Directive has introduced a new approach into the European Environmental Law Regime, because its main objective was to develop an integrated permitting scheme covering new and existing industrial installations, but not infrastructure projects. The innovative element of the Directive lies in the fact that emissions not only to air but also to water and soil are controlled and furthermore that certain requirements concerning energy use, waste flows and accident prevention are stipulated. Industrial installations falling under the scope of this Directive need, thus, an integrated permit and are subject to ongoing monitoring and updating of the permit conditions.

The reporting system of Directive 96/61 falls under the scope of the Standardised Reporting Directive. The questionnaire, which was issued by the Commission, is quite developed in comparison with other relevant questionnaires. Special attention is being paid on questions **regarding the development of the integrated permit scheme, the definition of best available technologies and the setting of quality standards.**

The abovementioned system constitutes only a part of the reporting system of IPPC Directive and cannot be described as a "source of innovation". The actual innovation of IPPC reporting system can be seen in the establishment of the **European Pollutant Emission Register (EPER)** according to the provisions of Art.15 of the Directive. The European Pollutant Emission Register, which is based on the emission data that Member States have to submit to the Commission, constitutes, thus, a European Register with comparable data on releases

from individual facilities by the activities covered by Annex I of IPPC Directive. Furthermore, according to Art 15.par.2 of the IPPC Directive, the results of the monitoring of emission releases should be made publicly available, while Art. 15 par. 3 states that an inventory of principal releases and sources responsible thereof is to be published by the Commission **every three years based on data supplied by the Member States**. Based on the provisions of Art.15, the Commission has adopted ***the Decision No 2000/479 on the implementation of a European Pollutant Emission Register***.

It must be underlined that the European Pollutant Register has already been established. Its development has taken the existing international inventories of CLRTAP/EMPE (Long Range Transboundary Air Pollution), UNFCCC, CORINAIR (European air emission Programme of the EEA) and the OSPARCOM and HELCOM list of hazardous substances) into consideration in order to enhance harmonization of international reporting requirements of Member States and to explore benefits from the comparability of emission data in different national inventories.

According to Art. 1 of the Decision 2000/479 Member States have to report to the Commission on emissions to air and water from all individual facilities with one or more activities as mentioned in Annex I of IPPC Directive. The emission data have to be reported for each facility according to the format of Annex A2 of the aforementioned Decision. Because of the specific nature of these data, Member States are required to provide this report on CD-ROMs. Furthermore, Member-States have to provide the Commission with an **overview report** that includes the national totals of all individually reported emissions for both source categories. Member States have to provide this overview report on paper and on CD-ROMs.

Art. 3 of the Decision No 2000/479 also states that Member States have to report to the Commission **every three years**, submitting their first report in June 2003 on the industrial releases in 2001. After review and evaluation of the Decision in 2006, a decision on subsequent annual reporting can be taken.

It must be underlined that the development of the European Pollutant Register System should be also viewed in the perspective of the Aarhus Convention. In particular, Art. 5 of the Convention stipulates that States have to collect and disseminate environmental information, which also includes the disclosure of site-specific information on relevant polluting sources by using public networks (Article 5 par. 9 establishing the obligation for developing emission inventories)

Thus, the new Directive 2003/4 amending Directive 90/313 on access to public information, which incorporates the relevant requirements of the Aarhus Convention into the European Legal System, establishes the obligation for the Member States to develop further **environmental databases available on the web in order to ensure the availability of environmental information to the greatest possible extent**. The development of the National Pollutant Emission Registries for the EU Member-States seems, thus, to be necessary not only in terms of the effective implementation of IPPC Directive, but also in terms of fulfilling the requirements of Directive 2003/4 on access to public information and of the Aarhus Convention.

2.3.6. The reporting requirements of the European Climate Change Legal Regime

The new Decision No 280/2004 amending Council Decision 93/389/EEC sets also new trends to the European reporting system, as Member States are required to report on a wide range of environmental and sectoral policies.

It is of great importance that the European Legislator has incorporated the essential elements of the non-legal binding UNFCCC Guidelines into a Community Decision. **Member**

States have, thus, a legal obligation to provide the information requested and to make their reports more consistent and comparable. The extensive reporting obligations of the Member States can be described as follow:

aa) According to Art. 3 par. 1 of the aforementioned Decision, Member States have to provide detailed information regarding anthropogenic emissions of greenhouse gases listed in Annex of Kyoto Protocol (carbon dioxide), provisional data of carbon monoxide, other relevant data and also the elements of the **national inventory report** that they have to submit within the Framework of UNFCCC.

bb) Member States also have to inform the Commission **about the National Programmes for Climate Change according Art. 2 par. 3 of the Decision** and they have to make them available to the public in order to increase transparency and to ensure the availability of data. The elements of these National Programmes are described in Art. 3 par. 2. Member States have thus to report according to the Art 3 par. 2 **every two years** on national policies and measures that constitute the National Programmes for coping with climate change. These reporting requirements seem to be the most extensive, as Member States have to provide the Commission with detailed information on policies and measures taken on a sectoral basis, on the objectives of these policies and measures, the type of policy instruments (economic instrument, regulation or guideline, voluntary agreement, information) and on the status of implementation of each policy or measure taken. They also have to report on the development of indicators to monitor and evaluate progress of the adopted policies and measures and on the quantitative effect including also the economic effect of measures taken in order to reduce greenhouse emissions.

cc).Furthermore, Member States -according to Art. 6 of the Decision 280/2004 in combination with Art. 19 of the emissions trading Directive (Directive 2003/87)- have to establish and maintain registries, in order to ensure the accurate accounting of issue, holding, transfer, acquisition, cancellation and withdrawals of emission reduction units and certified emission reductions (**National Registries**).

Another important Decision for the reporting system within the framework of the European Climate Change Regime is **Decision No C (2004)/30 establishing Guidelines for monitoring and reporting greenhouse gas emissions pursuant to Directive 2003/87**. The importance of the Decision lies not only in the establishment of specific guidelines for reporting of emissions for each category of activities listed in Annex I to Directive 2003/87, providing thus essential guidance to the Member States to develop their reporting systems concerning the transmission of specific emission data. Its significance can also be seen in the clear reference made to the following principles¹⁰, on which monitoring and reporting of greenhouse gas emissions should be based: **completeness, consistency, transparency, accuracy, cost effectiveness, materiality, faithfulness and improvement of performance in monitoring and reporting**. Although most of these principles have been developed within the Framework of UNFCCC, it is of importance that some progress has been achieved within the European Legal Framework for climate change regarding the development of new principles and the exact definition of existing principles for monitoring and reporting of greenhouse gas emissions.

In conclusion it must be underlined that the two aforementioned Decisions constitute a characteristic example of the continuing development of a reporting framework in relation to the Greenhouse Gas Reduction Programmes. The most innovative element of this reporting system is that it establishes a clear link between the instruments used and the measures taken and their effectiveness to achieve concrete and quantitative targets and objectives.

¹⁰ See Commission Decision of 29 January 2004 establishing guidelines for monitoring and reporting of green house gas emissions pursuant to Directive 2003/87, Official Journal of the European Union, 26.02.2004, L. 59, p. 4.

From another point of view, it should also be underlined that not very significant progress has been achieved in developing methodologies for the evaluation of the effects of the policies, measures and instruments. Additionally there has been a lack of transparency in the way that Member States estimate the impact of Greenhouse Gas Mitigation policies.

2.3.7. The reporting requirements of the Directives relating to the protection of marine environment

The European Legal Framework for the protection of marine environment cannot be characterized by its coherence and completeness. After taking into consideration both the inconsistency of the existing legal framework and the requirements of the 6th Environment Action Programme concerning the necessity for an integrated and coherent framework the European Commission made a proposal for the development of a Thematic Strategy in this field. The thematic Strategy has not been adopted yet, but the Commission Communication¹¹ thereof can give a clear picture of the harmonization that can be achieved through the adoption of the Thematic Strategy.

2.3.7.1. Decision 2850/2000/EC for Accidental Marine Pollution

A General Framework for the protection of marine environment from ship-source pollution was established through the **Decision 2850/2000/EC** setting up a Community Framework for cooperation in the field of the accidental and deliberate marine pollution. **The Framework is intended to support and supplement Member States' efforts at national, regional and local level for the protection of the marine environment against the risks of accidental or deliberate pollution, to contribute to improving the capabilities of the Member States for accident response, to strengthen conditions for their effective cooperation and their capacities to provide compensation in accordance with the polluter pays principle.** It is of importance that besides the general obligations for cooperation and for providing information, no specific reporting requirements are established under the Decision.

2.3.7.2. The Directives for the protection of the marine environment

The Directives for the protection of the marine environment aiming mainly at preventing and combating ship-source pollution can be seen as a characteristic example of the interdependence between the rules of international law and the rules of European law correspondingly. The Directives in this field mainly incorporate the context of the most important International Conventions and also specify their regulations, where it is necessary. Their reporting requirements are to some extent inspired by the relevant reporting requirements of the International Conventions. The ad hoc nature and scope of the relevant International Conventions and the European Directives have, thus, a great influence on the context and structure of their reporting systems.

An important Directive with relevance to the UNEP-MAP Legal component is the **Directive 2000/59** on port reception facilities for ship-generated waste and cargo residues. The Directive foresees requirements for ship owners to provide adequate reception facilities for waste of ships and also requirements for the use of these facilities. In addition, Member States have to establish procedures for waste inspections, which are spot checks. **An ad hoc reporting obligation** is established in Art. 4 par.3 of the Directive, so that Member States have to establish procedures in accordance with those agreed on by the IMO for reporting to port State alleged in for inadequacies of port reception facilities. **A general reporting obligation** is established in Art. 17 of the Directive, according to which Member

¹¹ Communication from the Commission to the Council and the European Parliament towards a Strategy to protect and conserve the marine environment, COM 2002, 539 final, Brussels 1.10.2002.

States have to submit the Commission a **status report** concerning the implementation of the Directive **every three years**, while they have to inform the Commission **once** about laws, regulations and administrative provisions adopted in order to comply with Directive (Art. 16).

Furthermore, the **Directive 2001/106/EC**, which has amended Council Directive 95/21/EC concerning the enforcement in respect of shipping using Community ports and sailing in the waters under jurisdiction of Member States, of international standards for ship safety, pollution prevention and shipboard living and working conditions (**Port State Control Directive**) also has some relevance with the Legal Component of UNEP-MAP. A reporting obligation is established in Article 17 in combination with the provisions of Annex X of the Directive. In particular, it is stated that Member States must provide the Commission **annually** with the following data for the preceding year by 1 April at the latest:

- Number of inspectors acting on their behalf in the framework of port state control of the ships
- Total number of the ships that entered their port at national level.

According to the requirements of Annex X Member States must also either provide the Commission every six months with a list of movements of individual ships other than regular ferry services that entered their ports or provide to SIRENAC¹² the IMO numbers and date of arrival of ships other than regular ferries that entered their ports.

Another important Directive in this context is **the Directive 2002/59** establishing a Community Vessel Monitoring System and repealing Directive 93/75. This Directive is also relevant to the UNEP-MAP Legal Component, as it sets up ship reporting requirements in accordance with the relevant IMO Resolutions (especially IMO Resolution 851 (20) on ship reporting requirements). Through their incorporation into the context of the Directive, these IMO Resolutions have become legal-binding for EU Member States. **An ad hoc reporting obligation for ship masters** is established in Art 17 of the Directive. According to the provisions of the aforementioned Article Member States have to monitor and take all appropriate measures to ensure that the master of the ship immediately reports to the coastal station responsible for that geographical area any incident of accident affecting the safety of the ship, any situation liable to lead to pollution of the waters or shore of a Member State, any slick of materials and containers or packaging drifting at sea.

A general reporting obligation is established in Art 26 of the Directive, according to which Member States must report to the Commission by 5-02-2007 on the progress in implementing this Directive and in particular the provisions of Art. 9, 10, 18, 22, 23 and 25, while Member States must report to the Commission by the 31/12/2009 on the full implementation of the Directive.

Directive 2003/44/EC amending Directive 94/24/EC on the approximation of laws, regulations and administrative procedures of Member States relating to recreational craft and the Directive **2003/24/EC** amending Council Directive 98/18 and standards for passenger ships are also relevant to the UNEP-MAP Legal Component.

A reporting obligation in form of Communication is stipulated in Art. 3 of Annex XVII of the **Directive 2003/44**, according to which Member States have to inform the Commission about the laws, regulations and administrative measures relating to recreational craft that they have adopted in order to comply with the regulations of the Directive by June 2004.

In the Directive 2003/24 on safety standards for passenger ships, a reporting obligation is foreseen in Art. 3 of the Directive, where it is stated that Member States have to inform the

¹² The SIRENAC information system established under the Paris Memorandum of Understanding on Port State Control provides a large amount of information for the identification of polluting or potentially polluting ships.

Commission about laws, regulations and administrative provisions adopted in order to ensure compliance with the Directive.

Finally a Proposal for a Directive on ship-source pollution and the introduction of sanctions, including criminal sanctions, for pollution offences (Proposal for a Directive of the European Parliament and of the Council on ship-source pollution and the introduction of sanctions, including criminal sanctions, for pollution offences, 2003/0037 (COD), which has not yet been adopted by the Council of Ministers, also foresees a reporting obligation in Art. 9. In particular, it is stated in this Article that Member States have to submit a report to the Commission **every three years** on the application of the Directive by their Courts and their administrations.

In conclusion it should be underlined that the majority of the Directives regarding ship-source pollution and protection of marine environment establish ad hoc as well as general reporting obligations. The frequency of the general reporting obligations varies from one to three years, while the vast majority of these Directives establishes a three year reporting period. Many of the reporting formats are similar to the reporting forms of the relevant International Conventions and they can usually be found in the specific Annexes of the Directives.

2.3.8. The SAP requirements and the relevance of the EU Directives

The Strategic Action Programme (SAP) is the basic operational instrument for implementing the provisions of the Land-based Sources Protocol (LSB) and for achieving its goals, namely to reduce pollution of the marine environment caused by land-based activities. The key land-based activities falling under the scope of SAP are either linked to the urban environment (especially, municipal wastewater treatment and disposal, urban solid waste disposal and activities contributing to air pollution from mobile sources) or are industrial activities responsible for release of toxic persistent and bioaccumulative substances, paying special attention to the persistent organic pollutants.

The development of SAP is based on two crucial regulations of LSB Protocol: Art 6 of the Protocol stipulates that all point source discharges and releases be strictly subject to authorization or regulation by the competent authorities of the Parties. Furthermore, Art. 6 foresees that Member States would be expected to establish systems of inspection by the competent authorities to assess the compliance with the authorizations and regulations. In addition, Article 7 states that Member States should adopt common guidelines and environmental quality criteria as well as set specific standards for sectors listed in Annex I of the Protocol.

The European Directives that contain provisions relevant to SAP can thus be divided into the following categories:

- Directives relating to Water management and protection
- Directives relating to Waste management
- Directives related to the pollution control of industrial activities.

Because of the close contextual and functional linkage between the SAP requirements and those of European Directives, it is of utmost importance that by the design of SAP reporting requirements, the provisions and the reporting requirements of the relevant EU Directives must be taken seriously into consideration. A brief analysis of the provisions of the EU Directives relevant to SAP will be presented in order to serve a guiding function by the designing of SAP reporting requirements.

2.3.8.1. SAP requirements and Water related Directives

The adoption of National Action Plans covering each coastal administrative region located in the Mediterranean drainage basin within the national border of each Mediterranean country constitutes the most important task that these countries should undertake in order to fulfill the goals of SAP at national level. One major step for the preparation of National Action Plans is the **National Diagnostic Analysis**, which aims at identifying and assessing the national conditions and the environmental pressures including impacts on the environment and their significance, specific contaminants and sources of degradation.

The Water Framework Directive has a similar approach, as Member States according to Art. 5 have to conduct an analysis of human impact including economic parameters for each river basin district.

Despite the general similarity of the approach, it has to be taken into consideration that while Mediterranean Countries had to prepare the National Diagnostic Analysis by 2002, EU Member States have to carry out this analysis after characterization of river basin districts by the end of 2004 and to inform the Commission three months thereafter at the latest. The outcome of the National Diagnostic Analysis by the European Mediterranean Countries can, thus, be very useful while carrying out the analysis according to Art.5 of Water-Framework Directive. Elements contained in the aforementioned analysis should to be taken seriously into consideration, while designing the reporting requirements of National Action Programmes according to SAP, because they are quite extensive and include a wide range of parameters, as they reflect the integrated management model for water resources.

Furthermore, the SAP requires that Parties -within the Framework of National Action Programmes- have to adopt gradually common guidelines, environmental quality targets and specific quantitative requirements of the discharged substances as well as methods of discharging them.

In this context, it should be underlined that the Water Framework Directive also adopts a combined approach in terms of setting technical standards including the use of best available technologies and taking measures to control pollution at source as well as setting quality objectives.

Especially, both SAP and the Water Framework Directive establish a list of priority substances for which water quality standards and emissions controls have both to be applied. Releases of certain of these priority substances have to be phased out according to both of the regulatory approaches. It is of importance that SAP has predetermined percentage reductions to be achieved within a specified time schedule. On the other hand the Water Framework Directive has a requirement for the achievement of good status of waters involving both good status in terms of good ecological status and good chemical status.

The specific reporting requirements relating to the efforts for the phasing out or the reduction of specific priority substances according to SAP can also take into account the relevant reporting requirements of Water Framework Directive, although there are deviations in the timeframe between the two legal instruments.

Furthermore, it is of importance that the preparations of updated microbiological criteria for bathing waters by the Mediterranean countries in order to respond to the requirements of SAP should be "facilitated" by the relevant European Guidelines that take into consideration the criteria and quality standards that are to be issued under the ongoing revision of the Bathing Water Directive. The annual reporting obligation established by the Bathing Water Directive also demonstrates the need for constant reporting because of the specific nature and scope of the subject (quality of bathing waters).

2.3.8.2. SAP Requirements and Waste-Related Directives

Another important goal of SAP that has to be incorporated into the National Action Programmes is to control the adverse environmental effects caused by the improper discharge of municipal sewage into coastal environment that may carry pathogens, plastics and other toxic substances.

The relevant legal instrument in the field of European legislation is the Urban Waste Water Treatment Directive (91/271/ECC) that aims at reducing the pollution of surface waters from discharges by establishing the obligation for the connection of urban agglomerations to a sewer system and for carrying out primary or secondary treatment of wastewater. European countries were obliged to connect agglomerations with more than 100.000 inhabitants to a sewer system no later than 2000, while Mediterranean Countries are obliged according to the SAP to ensure the connection of urban agglomerations to a sewer system by 2005.

The experience concerning the implementation of Directive 91/271 can be characterized as successful as it is clearly demonstrated in the national reports. This must be taken into consideration by the implementation of the SAP requirements and by the establishment of the relevant reporting obligations. The specific requirements of the Directive 91/271 regarding the application of stricter controls and measures for sensitive areas can be taken into consideration in order to design appropriate reporting requirements relating the incorporation of these elements into National Action Programmes and their effective implementation.

In this context it should be underlined that the treatment of urban solid waste is not regulated by a specific Directive, while specific kinds of urban solid waste, such as batteries, electrical and electronic waste and hazardous household waste constitute the subject of several separate Directives.

From another point of view, SAP has foreseen specific measures for the management of urban solid waste so that Mediterranean countries have to develop relevant national Programmes for sound solid waste management according to the adopted Guidelines.

Because of the specific necessity for a sound management of those kinds of waste that are regulated by the relevant EU Directives, it should be underlined that the development of SAP Guidelines for sound solid waste management should incorporate relevant requirements for these specific kinds of waste. In addition, this should be also reflected in the reporting requirements regarding the implementation of the relevant provisions of SAP.

2.3.8.3. SAP requirements and Directives Related to Prevention of Industrial Pollution

The ultimate target of SAP is that by 2025 the point source discharges and air emissions from industrial installations in the Mediterranean Region should be reduced according to the provisions of the Land-based Protocol. This requires first of all that point source discharges and releases from industrial installations have to be the subject of authorization by the competent authorities.

For the European Countries, the relevant legal instrument concerning the prevention or reduction pollution from several industrial sources is -as it has already been mentioned- the IPPC Directive.

It should be underlined that both SAP as well as IPPC have a similar regulatory approach. Especially, SAP requires that countries should establish a set of guidelines on best available techniques (BAT) and best environmental practices (BEP) to be used as control standards within the framework of authorization procedures. Furthermore, countries are expected to

make or update inventories of point source discharges and emissions of industrial pollutants in hot-spots or areas of concern as well as inventories of the uses and the quantities of pollutants produced for certain groups of substances. Finally, it is within the discretion of Parties that they establish and make publicly available a Pollutant Release and Transfer Register (PRTR) as a part of SAP reporting requirements.

The IPPC Directive also has relevant provisions that are reflected in its reporting requirements, because Directive sets out a permitting scheme for the specific industries according to which the application of best available technologies (BAT) is a precondition for receiving authorization. Furthermore, an obligation for the Member States to maintain **inventories** of emission data of specified industrial sources is established, while the establishment of a **European Pollution Emission Register** based on the national reports is also foreseen in Article 15 of the Directive.

According to both frameworks, environmental quality criteria as well as emission limit values have to be set up, although there is also here a deviation in the timeframe. In addition, according to Article 16 of the Water Framework Directive Commission has to set European water quality standards and emission standards for the priority substances.

The setting of BAT Guidelines within the framework of SAP has, thus, to take into account the already adopted European BAT-Reference Documents and those to be adopted by 2005. The existing emission values and quality standards are also of relevance. Furthermore, the Development of Pollution Registers within the Framework of SAP as well as within IPPC has to be in accordance with the principles and requirements laid down in the Aarhus Convention and should constitute an integral part of the reporting requirements. The provision of technical and financial assistance to the Parties of UNEP-MAP in order to develop a Pollution Register as part of SAP-reporting requirements is, thus, of great importance.

2.3.9. General Conclusions for the European Reporting System and future perspectives

1. Almost all items of environmental legislation require Member States to report to the Commission information falling into one of the following five types:

- i) Legal Transposition
- ii) Practical Compliance
- iii) Environmental data
- iv) Description of policy measures
- v) Policy effects and effectiveness.

More emphasis is given to the types of information **i, ii and iv**. On the basis of statistical data, the vast majority of European Environmental Directives does not request information describing the objective and type of national measures and instruments adopted and their impact on the practical implementation of the Directive. In addition, less than 20% of the environmental legislation requires Member States to assess the effects and the effectiveness of such measures. The frequency of reporting varies from one to six years, while the triennial reporting obligation remains the rule.

2. The requirement to provide information about Member States ' policy measures in order to attain specific or general objectives and therefore to assess their effectiveness is a relatively recent development, reflecting the move towards Framework Directives and the establishment of quantitative targets for their achievement. The incorporation of the UNFCCC Reporting Guidelines into European Legislation through the adoption of relevant Decisions (Decision 280/2004) was not only important because these progressive Guidelines became legal-binding for Member States. It was also important because of the introduction of

a requirement for describing policy measures and their effects in detail and also for measuring their effectiveness.

3. The Standardised Reporting Directive was the first attempt by the European Commission in order to make the reporting requirements of EU Directives more consistent and more complete. The majority of water and waste-related Directives falls under its scope of application. The first results of the implementation of Standardised Directive were not very satisfactory as there is a little harmony in the type of information requested by each questionnaire, while little attention is paid to the reporting on the effectiveness of programmes and measures taken. The questionnaires developed under Standardised Directive are, thus, being constantly improved. This improvement relates to the widening of their context after taking into consideration the following parameters: **description of measures** (what kind of measures are being undertaken, what kind of measures are they), **effects** (provide baseline data on the driving forces of waste or of water pollution, assess the future effects of measures on driving forces of pollution) and **effectiveness** (what the costs of different measures are).

4. Till recently, little attention has been paid to providing Member States with guidance in the form of frameworks and methodologies for describing policy measures and for evaluating their effects and their general impact. The lack of explicit guidance on the nature of data and indicators needed in order to evaluate effectiveness reduces the comparability of Member States' reports. Thus, it is necessary to provide Member States with guidance in this field.

5. The review of environmental reporting launched by Environment DG¹³ as part of the Sixth Environment Action Programme aims at creating a more coherent and effective system for reporting data on the environment. The European Environment Agency (EEA) and the European Environment Information and Observation Network (EIONET) have cooperated within the framework of the "bridging the gap process" in order to produce a more balanced reporting system which meets policy needs, addresses the issue of reporting fatigue and uses the advantages of the new technologies.

Towards this direction, work on indicators is developing rapidly. However, it will be some time before reporting obligations have been returned to deliver the data, information and assessments required for policy-relevant indicators. Most progress can be observed in the area of common frameworks and approaches, such as indicators and streamlined institutional cooperation. Within the Framework of the new EEA Strategy, there are proposals to develop a Common shared European Environment System, which is often referred to as "Reportnet". The development of Reportnet should use to the highest possible extent the opportunities available by new electronic and communication technologies.

6. Various projects on the further development of reporting¹⁴ have been carried out that have led to the following important conclusions:

- Overall, the experience of operating e-reporting systems has been positive, but it has to be taken into consideration that only Scandinavian systems of e-reporting have been operational for an extended period of time.
- The most important benefits of e-reporting are better transparency, better communication between respondents and regulatory authorities and avoidance of errors regarding data handling.

¹³ Environment DG 2002, Review of environmental reporting, Discussionpaper, 9/04/2002.

¹⁴ Finnish Comparison Programme on self-monitoring and electronic reporting, 2002; IMPEL Information exchange reporting system.

- Finally, it is of utmost importance that the electronic provision of public access to environmental information provide an opportunity for better awareness of decisions within society and for better participation.

Part 3: REPORTING PROCESS ON THE IMPLEMENTATION OF NON-LEGAL BINDING INSTRUMENTS

3.1. The non-legal component of UNEP/MAP and the perspective of establishing a reporting system

In 1995, the Barcelona Resolution on the Environment and Sustainable Development in the Mediterranean Basin was adopted. In this Resolution, the Contracting Parties adopted the **Mediterranean Action Plan Phase II** and also a **set of Priority Fields of Activity for the Environment and Development in the Mediterranean Basin** for the period 1996-2005. MAP Phase II has two operative components:

a) The first component "Sustainable Development in the Mediterranean" consists of the following four parts: i) integrating environment and development ii) Conservation of nature, landscape and sites iii) assessment, prevention and elimination of marine pollution and iv) information and participation

b) The second component "Strengthening the legal Framework".

While the efforts undertaken by each Contracting Party for implementing the legal component are described in the biennial national report progress according to the Article 26 of the Barcelona Convention, no specific reporting procedure is established for the Non-Legal Component of MAP Phase II.

It should be underlined that the elements of the MAP Phase II Non-Legal component as well as the set of Priority Fields of Activities, the recommendations of the MCSD and the Mediterranean strategy¹⁵ constitute a Framework of Action that Contracting Parties have to take into consideration when developing and implementing their National Sustainable Development Strategies and the relevant policies in several fields. ***Therefore, any discussion for establishing a reporting process on the implementation of the Non-Legal Component of MAP Phase II has to take into account the recent developments for the establishment of reporting processes concerning National Sustainable Development Policies and Strategies.***

It is obvious that there is an increasing tendency concerning the establishment of national reporting processes to International and Regional Organizations on the development and implementation of National Sustainable Development Strategies.

The most important effort established at international level for reporting on National Sustainable Development Strategies is the Reporting Process to the United Nations Commission on Sustainable Development (CSD).

3.2. The reporting process to CSD on the establishment and implementation of National Sustainable Development Strategies

In the Johannesburg Plan of Implementation, it was recommended that the Commission on Sustainable Development (CSD) must give consideration to more effective use of national reports with respect to the means of implementation and National Sustainable Development Strategies.

At its eleventh session the CSD encouraged countries to present, **on a voluntary basis**, national reports in particular to the Commission's review sessions, focusing on concrete progress, including achievements, constraints, challenges and opportunities.

¹⁵ A Mediterranean Strategy on Sustainable Development is going to be submitted for adoption at the 14th Meeting of the Contracting Parties in 2005

3.2.1. Guidelines for National Reporting

The CSD invited, thus, the Secretariat of the Commission to improve national reporting Guidelines and Questionnaires, because Guidelines for national reporting prior to the Johannesburg Summit did not prove to be not very effective. Based on the lessons learned, the Commission Secretariat adopted a more streamlined approach to national reporting Guidelines.

The current Guidelines for national reporting consist of four parts:

- **Part I** comprises the Fact Sheet Framework, in which current information on national focal points is requested
- **Part II** requests information on **National Sustainable Development Strategies** in response to the CSD-11 requirement to provide information **on the status of National Sustainable Development Strategies**
- **Part III** relates to the country's progress on the development of indicators for sustainable development in response to the relevant Decision of CSD-11
- **Part IV** provides guidelines for a case study on a best practice or lessons learned on the three thematic issues that contain each thematic cycle of the CSD Work Programme (water, sanitation and human settlements were the three areas of the first two year cycle of CSD, 2004-2005).

It must be underlined that Guidelines for reporting on the three themes of the CSD work cycle, contained in part IV, focus on **several important parameters** that comprise a generic set of **national reporting parameters** that can also be used in the future cycles. These basic parameters that have their origins in the Agenda 21 and the Johannesburg Plan of Implementation are the following: i) **time-bound targets and commitments** (updated information on progress in relation to the specific commitments and targets of Agenda 21, the Millennium Development Goals and the Johannesburg Plan of Implementation) ii) **integrative perspective of the three dimensions of sustainable development** (updated information on progress to pursue policies for achieving synergies among the three dimensions of sustainable development) iii) **means of implementation** (update information on the means by or through which progress was achieved i.e decisions-making, capacity building, training, education and awareness-raising, research and technology and financing) iv) **challenges and obstacles to implementation** (updated information on the challenges encountered in the country' efforts to fulfill international commitments for promoting sustainable development) v) **major groups involvement** (providing information on the role of major groups, such as women, NGOs, local authorities, workers and trade unions in decision-making and implementation related to the progress reported) vi) **emerging issues and opportunities post-Johannesburg** (giving countries the opportunity to report on other aspects related to the themes under review).

3.2.2. The efforts to reduce the reporting burden of the countries

The Secretariat of the CSD has undertaken various efforts in order to facilitate countries by the national reporting process. In particular, the Commission Secretariat had prepared prior to the Johannesburg Summit a draft set of country profiles for each reporting country, which addressed all the chapters of the Agenda 21. The draft profiles were, then, sent to each country for verification and updating. Countries submitted their profiles to the Summit that are now available on the website (www.un.org/esa/sustdev/natlinfo/process.pdf).

Furthermore, using the information contained in 2002 country profiles the Commission Secretariat has prepared draft thematic profiles on water, sanitation and human settlements defined as the themes of the biennial work cycle of CSD to serve as a basis for updating by each reporting country. Each reporting country has, thus, received three draft thematic profiles in December 2003 for update in accordance with the 2003 National Reporting

Guidelines that had to be sent back before the 12th CSD Session. It must be underlined that the Commission Secretariat is also in the process of developing a national reporting database in order to facilitate the work of national focal points in updating their information to be submitted to the CSD.

It is, thus, obvious that the Commission Secretariat plays a crucial role in facilitating countries to meet their reporting obligations, mainly through preparing draft country or thematic profiles.

3.2.3. The role of indicators within the framework of the national reporting process

Taking into consideration the relevant provision of the Johannesburg Plan of Implementation (par 130), according to which countries are encouraged to work further on the development of indicators of sustainable development, the CSD is putting special emphasis on the development of those indicators. Therefore, the 2003 National Reporting Guidelines require countries to provide information on their efforts to develop indicators on sustainable development. It is, though, remarkable that only 38 countries have responded to the Part of the Guidelines concerning the development of indicators.

In the report of Secretary General for the 12th Session of CSD, it is stated as a conclusion that much work still remains to be done in the development and implementation of sustainable development indicators. The lack of basic data and/or statistics, in terms of both quality and quantity, is further regarded as the most fundamental challenge in the development of indicators that countries throughout the world are facing. Therefore, many countries, especially developing countries, need to be supported through financial and technical assistance to carry out this endeavour.

3.3. Conclusions and Recommendations

The analysis of the reporting process to the CSD leads to the conclusion that it can serve as a role model for the development of similar reporting processes on the establishment and the implementation of sustainable development Strategies and policies. This is, thus, of great relevance for the development of a reporting process for the UNEP-MAP Non-Legal Component.

Contracting Parties of the Barcelona Convention and its Protocols should take the following elements and characteristics of the CSD Reporting process into consideration, if they decide to establish a reporting process for the non-legal component of UNEP-MAP:

- the facilitative role that the Secretariat can play in helping countries to fulfill their reporting obligations
- the concentration of the reporting process on several important national reporting parameters (time-bound targets and commitments, integrative perspective of the three dimensions of sustainable development concept, means of implementation) arising from non-legal binding texts and agreements, such as the Agenda 21 and the Johannesburg Plan of implementation, when countries have to report on the progress achieved on National Sustainable Development Strategies.
- the emphasis given to the reporting on the three thematic issues of the biennial CSD work cycle
- the importance given to the development of indicators on sustainable development in order to assess progress achieved in implementation of Sustainable Development Strategies and policies.
- the facultative character of the reporting obligation

It can, thus, be recommended that the Contracting Parties decide for the introduction of a separate report on the progress achieved in the implementation of the UNEP-MAP

Non-Legal component. At its first phase, the reporting obligation should be established on a voluntary basis and in a time frequency of the two years cycle. Furthermore, it can be recommended that the Contracting Parties at their biennial ordinary meetings choose three or four thematic issues arising from the set of the Priority Fields of action or the MCSD recommendations, on which countries have to report on the progress achieved concerning time-bounded targets and implementation of concrete policies and strategies.

Part 4: THE REPORTING SYSTEM OF UNEP/MAP IN THE LIGHT OF THE COMPARATIVE ANALYSIS

4.1. Concluding remarks and recommendations

4.1.1 Reporting Obligations

The Barcelona Convention, as is the case with the majority of International Conventions, has a clear legal basis for establishing reporting obligations to the Contracting Parties. *Article 20 of the 1976 Barcelona Convention stipulated that the Contracting Parties shall transmit to the Organization reports on the measures adopted on the implementation of the Convention and of the Protocols to which they are Parties, in such a form and at such intervals as the meetings of Contracting Parties may determine.* The interpretation of Article 20 leads to the conclusion that the reporting obligation is strictly established only for the UNEP-MAP Legal Component and in particular for its legal instruments *strictu sensu*. *Therefore, Contracting Parties don't have a legal obligation to report on the implementation of the UNEP-MAP Non-legal Component and of the recommendations adopted by the Contracting Parties at their Meetings.*

In conclusion, the Contracting Parties have to report on the implementation of the provisions of the Barcelona Convention and its Protocols as well as of the legal-binding Decisions or Recommendations. As legal-binding can be characterized those Decisions and Recommendations that specify the terms and the provisions of the Convention and its Protocols in a clear and precise way so that they constitute an integral part of the UNEP-MAP legal component. Subsequently they fall into the scope of the reporting obligation established under Article 20 of the Barcelona Convention (1976). The legal-binding Decisions and Recommendations have to be distinguished from the non-legal binding Decisions, Recommendations or Resolutions that either refer to the context UNEP-MAP Non-Legal Component or are of general character.

The 1995 amended version of the Barcelona Convention establishes a much more comprehensive reporting obligation in Article 26 of the Convention. In particular, the Contracting Parties have to report on:

- i. The legal, administrative or other measures taken by them for the implementation of the Convention, its Protocols and of the Recommendations adopted by their Meetings;
- ii. The effectiveness of the measures referred to in the preceding paragraph and the problems encountered in the implementation of the instruments, as mentioned above.

It is up to the Contracting Parties to decide how to interpret Article 26 of the Convention. There are mainly two basic options concerning its interpretation.

First option: According to the first option for interpreting Article 26, a legal obligation is established on every Contracting Party to report on every measure taken by it in order to implement the provisions of the UNEP-MAP Legal Component as well as the provisions of the UNEP-MAP Non-Legal Component.

The information and data to be submitted can be divided into the following categories: a) Information required in compliance either with specific provisions of the Convention and each individual Protocol or with the provisions of the legal-binding Decisions and Recommendations as defined above b) information required in compliance with Decisions, Resolutions and Recommendations on matters not specifically required in terms of the Convention or any of the Protocols. This second category mainly refers to matters falling under any aspect of the MAP Phase II, the Priority Fields of Activities for the Environment

and Development in the Mediterranean Basin; Strategic Action Programmes for the Protection of Marine Biodiversity, the Mediterranean Strategy for Sustainable Development and recommendations and decisions of the Contracting Parties meetings.

The second option is based on the interpretation of Article 26 in such a manner that Contracting Parties have to submit information and data required in compliance with the specific terms and provisions of the Convention and each individual Protocol. Furthermore, Contracting Parties have to report information and data required in compliance with provisions of the legal-binding Decisions seen as further specifications of the provisions of the Legal Component.

The comparative analysis of a great number of International Conventions and of the two Regional Sea Conventions that have great relevance to the UNEP-MAP Legal Component in terms of their regulatory context, namely the OSPAR Convention and the Helsinki Convention, leads to the conclusion that the legal obligation for reporting on a mandatory basis should include only the data and information required according to the second option. In particular, Contracting Parties, besides their obligation to report on the measures taken to implement the provisions of the Convention and of the Protocols, do not have to report on matters falling under any aspect of every Decision, Resolution or Recommendation adopted by them. They only have to report on the implementation of the legal-binding Decisions of the Contracting Parties.

4.1.2. Reporting Frequency

Concerning reporting frequency, the biennial cycle of reporting can be regarded as adequate, because it provides Contracting parties at their ordinary meetings with the opportunity to form a clear picture of the status of implementation of the Barcelona Convention and its Protocols. *The legal basis of the biennial reporting cycle is to be found in the systematic interpretation of Articles 18 and 26 of the revised Barcelona Convention. It refers to the general reports that include information and data for the legal and administrative measures taken by each Contracting Party to implement the provisions of the Convention and each individual Protocol as well as those of the legal-binding Decisions of the Contracting Parties.*

Concerning the specific reports required by each individual Protocol and mainly including technical information for their implementation, it is up to the Contracting Parties to decide whether they will be submitted annually or biennially.

Taking into consideration the scope of the Protocols and the relevant developments in international law (Article 9 par. 4 of the 1996 Protocol to the London Dumping Convention and the Basel Convention on the control of transboundary movements of hazardous wastes), it can be recommended that the specific reports of concrete individual Protocols, such as the Dumping Protocol and the Hazardous Wastes Protocol, should be submitted annually. A summary of the technical data contained in these technical annual reports can be introduced as a specific reporting requirement in the biennial report.

4.1.3. Reporting on Recommendations and Decisions

The reporting procedure of the Decisions and Recommendations within the framework of the OSPAR as well as the HELSINKI Convention, as it was described in chapter II can provide an option on how to report on the legal-binding Decisions and Recommendations adopted by the Contracting Parties in order to specify the provisions of the Barcelona Convention and its Protocols. Contracting Parties have to decide after a thorough consideration of the advantages (exactness and high grade of detail of the reported information) and inconveniences (time consumption, waste of human resources) of this system, if a similar system is to be adopted within the framework of the Barcelona Convention and its Protocols. Another option could be to develop a specific reporting format for reporting on a list of legal-

binding Decisions and Recommendations which would be included in the general reporting format for the Convention and for each individual Protocol.

At a first pilot phase a list of Decisions and Recommendations, which are of crucial importance concerning the specification of the provisions of the Barcelona Convention and its Protocols, could be chosen per each biennium as the subject of the reporting process. Reporting on the implementation of the adopted List of Decisions and Recommendations either in a reporting procedure similar to those of the OSRAR Convention and the Helsinki Convention or in the form of a specific reporting format included in the general reporting format, constitutes an integral part of the obligatory reporting obligation established under Article 26 of the Convention. Its frequency should, thus, be biennial. The Secretariat as well as the Contracting Parties could then form at their Ordinary Meetings a clearer picture concerning the implementation of the Legal Component of MAP.

4.1.4. Reporting on the implementation of the Provisions of SAP

Reporting on the implementation of the provisions of the Strategic Action Programme (SAP) to address pollution from land-based activities constitutes an integral part of the mandatory reporting obligations of the Contracting Parties. This lies in the fact that SAP constitutes the operational element of the Land-Based Sources Protocol (LSB Protocol) because it specifies its provisions in order to be effectively implemented (Article 5 of the Protocol). The reporting format of the LSB Protocol should be, thus, re-designed in such a way that it reflects the basic provisions of SAP.

4.1.5. Reporting procedure concerning the non-legal component

The Contracting Parties have to decide if a separate reporting obligation on other issues within the Programme, arising from the non-legal binding Decisions, Recommendations and Resolutions is to be established. This reporting obligation would mainly refer to the MAP Phase II, the Priority Fields of Activity for Environment and Sustainable Development for the Mediterranean (UNEP-MAP Non-Legal Component), the Mediterranean Strategy on Sustainable Development, Recommendations of the Mediterranean Commission for Sustainable Development, SAP-BIO, etc. The Reporting process to the CSD, as it has already been analyzed, can serve as a model for the development of such a process within the Framework of UNEP-MAP.

One of the crucial issues that has to be decided by the Contracting Parties is if this reporting process would be of mandatory or voluntary nature. Taking into consideration the voluntary character of the reporting process to the CSD as well as the early stage of the development of the Reporting system of UNEP-MAP, it seems reasonable for the reporting obligation to be of voluntary character, especially in its first stage. Furthermore, the UNEP-MAP Secretariat should provide assistance to the countries to fulfill their reporting obligation, especially in the first pilot period.

4.2. General Remarks and Recommendations for the Parts 1-8 of the Reporting Format

4.2.1. Part 1: General Information

4.2.1.1. Introduction

In the first introductory part of the reporting format- Contracting Parties have the obligation to provide information on the following issues:

- a. Name of Contracting Party
- b. Period covered by the report

- c. National Organization responsible for the compilation of the report
- d. National Authorities that have participated in the reporting process
- e. Assistance received from UNEP-MAP towards the compilation of the present report
- f. Ratification of amended or new versions of the Barcelona Convention and its Protocols
- g. General remarks on overall national environmental situation during the period under review (optional)
- h. Brief description of any problems or constraints of the Convention and Protocols (optional)

On the basis of the analysis provided in the first and in the second part of the comparative study, information on overall environmental situation is likely to be found in the national reports prepared by the Contracting Parties in the form of:

- a. Reports required within the framework of the “State of Environment” process established by UNECE. In particular, general remarks on the overall environmental situation required in the first part of the reporting format (1.7) can be extracted from the information included in the “State of Environment” Reports submitted by South –Eastern Mediterranean Countries that participate in this process. These are Mediterranean Countries whose economies are considered to be in transition, namely Albania, Serbia and Montenegro, Bosnia-Herzegovina and Croatia.
- b. Reports required by OECD in the form of “National Environmental Performance Reports. These reports have to be submitted by OECD Member States, namely France, Italy, Spain and Greece.
- c. Country Profiles that have to be submitted by all countries to the Commission for Sustainable Development every two years.

4.2.1.2. Findings and Proposals

The first part of the reporting format (General Information) mainly concerning National Organizations responsible for the compilation of the report is to some extent typical of the introductory part of almost every reporting system in the international law regime. Specific Attention should be paid to the reporting requirements number 7 and 8 of the first Part.

In particular, reporting requirement number 7 of the First Part requires/requests Contracting Parties to provide information on the overall national environmental situation. The kind of information to be submitted is, as it has already been analyzed, very similar to the information required within the framework of the State of Environment process to UNECE and to the “National Environmental Performance” process required by OECD.

In a future modification of the reporting format, the Contracting Parties might be requested to submit a summary not exceeding 5 or 6 pages, where at first the overall environmental situation is described. Furthermore, countries should be encouraged to use data submitted to the aforementioned reporting processes either to UNECE or to OECD and give information concerning the development of environmental indicators or of indicators of sustainable development. Contracting Parties might also be requested to describe briefly the state of development and the status of implementation of National Sustainable Development Strategies, mainly using the information submitted to the Commission for Sustainable Development. Furthermore they should be encouraged to report on the development of thematic Strategies for the protection of marine environment, if they exist.

Concerning reporting requirement 8 of the first part (Brief description of any problems or constraints in implementation of the Convention and its Protocols), it must be underlined that there is no reason justifying the optional character of this reporting requirement. *It must be taken into consideration that the reporting systems of the majority of the International Conventions, including the most important ones, such as the Biodiversity Convention, the*

Convention to combat desertification and the two Regional Sea Conventions (the OSPAR Convention and the HELSINKI Convention) pay special attention to the description of the problems and constraints encountered by their implementation. For assessing compliance, reporting requirements focusing on the description of the problems encountered in the implementation of the relevant legal instrument is proposed to be of mandatory nature.

As stated, Contracting Parties to many International Conventions¹⁶ have to report whether the compilation of national reports has taken place within the framework of a consultative and participatory process, based on transparency and the public involvement. *Transparency and the active participation of all interested stakeholders are, thus, recognized as basic procedural reporting requirements, in order to increase the quality of the reports and to strengthen the credibility of the reporting process. This leads to the conclusion that the introduction of a new reporting requirement concerning the consultative and participatory process by the compilation of national reports in the First Part of the reporting format of UNEP-MAP Legal Component is deemed as necessary.*

The proposed reporting requirement can be described as follow:

Describe the process of compilation of the national report, paying special attention to the description of its participatory and consultative character.

4.2.2. Part 2: Implementation of the Convention for the Protection of the Mediterranean Environment and the Coastal Region of the Mediterranean

4.2.2.1. Introduction

In accordance with the reporting obligation established under Article 26 of the Barcelona Convention, Contracting Parties have to report on the following elements concerning the implementation of the Convention:

- 1) Signature and Ratification of International Legal Instruments (It is distinguished between the Bilateral or Multilateral Agreements relevant to the terms of the Convention and its Protocols in accordance with Article 3 par.2 of the Convention and the international or regional environmental legal instruments relevant to the objectives of the Mediterranean Action Plan). A similar reporting requirement is also to be found in the reporting format of the Basel Convention.
- 2) Legal and administrative measures taken for the implementation of the following basic principles and provisions of the Convention:
 - a) Precautionary Principle (Article 4 par. 3 a of the Convention)
 - b) Polluter pays principle (Article 4 par.3 b of the Convention)
 - c) Undertaking of Environmental Impact Assessment Studies for relevant activities (Article 4 par.3 c of the Convention)
 - d) Promotion of Integrated management of coastal zones (Article 4 par.3 c of the Convention)
 - e) Establishment or improvement of marine pollution monitoring Programmes (Article 12 of the Convention)
 - f) Access of information by the public and participation of the public in decision making process (Article 15 of the Convention)
- 3) Brief description of any problems or constraints in the implementation of the Convention (Article 12)

¹⁶ Requirements concerning transparency and public participation by the compilation of National Reports can be found in the reporting systems of the Convention on Biological Diversity, the Convention to combat desertification, the Aarhus Convention, the RAMSAR Convention and the United Nations Framework Convention to combat climate change.

On the basis of the analysis provided in the first part of the comparative study information concerning the implementation of polluter pays principle (Reporting requirement 2.2) is likely to be found in the National Reports for Environmental Performance submitted primarily to OECD, which focuses on the use of economic instruments, and secondarily to UNECE. Similar Information is also likely to be found in the National Communications that have to be submitted every two years to the Secretariat of the United Nations Framework Convention to combat Climate change.

Information concerning the undertaking of Environmental Impact Assessment Studies (reporting requirement 2.3) is for the Mediterranean EU/EC countries, parties to the Barcelona Convention, to be found in the reports that they submit to the Commission for the implementation of the Directive 85/335/EEC as it was amended by the Directive 97/11. Because of the contextual relevance, information concerning undertaking Environmental Impact Assessment Studies primarily in a transboundary context can also be included in the reports that Contracting Parties to the ESPOO Convention submit to the Secretariat of the Convention on regular basis.

Information concerning public access to environmental information and public participation in decision-making is also to be found in the reports that Contracting Parties to Aarhus Convention submit to the Secretariat on regular basis.

4.2.2.2. *Remarks and Recommendations*

No specific remarks can be made regarding reporting requirement number 1 of the second part (Signature and Ratification of international legal instruments), because it should be regarded as satisfactory in terms of responding to the content of Article 3 par. 2 of the Barcelona Convention. A similar reporting requirement can also be found in the reporting system of the Basel Convention.

Furthermore, according to the reporting requirement 1.2, countries are encouraged to inform Secretariat concerning the signature and ratification of a list of International or Regional Environmental Conventions presented in the Appendix attached to the reporting format that are relevant to the objectives of Mediterranean Action Plan. In addition, it is at the discretion of the Contracting Parties to present another list with International or Regional Environmental Agreements that have signed and ratified which are not contained in the Appendix but are relevant to the UNEP-MAP Legal Component. The Lists of the International and Regional Conventions attached to the reporting format can be regarded as very facilitating for the Contracting Parties.

Regarding reporting requirement number 2 (Legal and Administrative measures taken to implement the provisions of the Convention) the following remarks and recommendations can be made:

The Contracting Parties are required to report on the legal and administrative measures that they have taken for the application of the Precautionary Principle and the Polluter Pays Principle established under the Article 4 par. 3 a and b of the Convention correspondingly.

Because of the relatively vague context primarily of the Precautionary Principle and secondarily of the Polluter-Pays principle, Contracting Parties would be facilitated, if they had to report on the type or types of the policy and measures adopted, their objectives, the status of implementation and the costs of these policies and measures including the economic cost. Furthermore, information on the general framework of the adopted policies and measures, should also be required, so that MEDU Secretariat can form a comprehensive view of the general framework concerning the application of these two important principles.

Taking into consideration the design of the reporting requirements of the United Nations Climate Change Convention, the Contracting Parties to the Barcelona Convention might be requested to give some indications about the type of the instruments (regulatory, fiscal, economic) and the measures adopted, their objectives, the status of their implementation as well as the general policy framework for the application of the Precautionary Principle and the Polluter Pays Principle under the terms of Article 4 par. 3 a and Article 4 par. 3 b correspondingly.

According to the reporting requirement 2. 2, Contracting Parties have to report on the legal and administrative measures that they have taken to conduct Environmental Impact Studies for relevant activities in accordance with Article 4 par. 3 of the Barcelona Convention. For the Mediterranean EU-Member States to respond to this reporting requirement means that they have to provide MEDU Secretariat with information concerning the transposition of the 85/337 as it was amended by the Directive 97/11 into their national legal systems and the administrative measures that they have taken for its implementation. Data concerning the practical implementation of the Directive can also be of great relevance. For the other Mediterranean Countries, it should be required that they report not only on the title and objectives of laws and regulations, but also on their context. In addition, they should have to provide the Secretariat with some general data concerning the practical application of the instrument of Environmental Impact Studies.

The reporting requirement 2.2 can be modified as follows:

Contracting Parties might be requested to give detailed information about the legal framework for undertaking of Environmental Impact Assessment Studies for relevant activities in accordance with Article 4 par. 3 c of the Convention. Special attention should be paid to the criteria adopted for the categorization of several activities and projects and for the list of those activities that have to undergo an environmental impact assessment study prior to their authorization. Data concerning the practical implementation of the enacted legislation also have to be provided.

According to the reporting requirement 2. 3, Contracting Parties have to report on the legal and administrative measures that they have taken for the promotion of the integrated coastal zone management in terms of Article 4 par. 3 e of the Barcelona Convention.

It should be taken into account that the requirements of the Recommendation of the European Parliament and of the Council of 30 May 2002 concerning the implementation of Integrated Coastal Zone Management are of great relevance to Article 4 par. 3 c of the Barcelona Convention. In a future modification of the reporting format, reporting requirement 2.3 can be modified in order to facilitate Contracting Parties to provide a comprehensive view of their policies and strategies for integrated coastal zone management. The proposed reporting requirement could be as follows:

Contracting Parties might be requested to give detailed information on the Strategies proposed and adopted at the national level for integrated coastal zone management and on the actions taken to implement these Strategies. Furthermore, Contracting Parties should also be encouraged to make an evaluation of the impact of these Strategies on the status of the coastal zones and a general evaluation of the implementation and application of all policies and measures adopted for the achievement of concrete goals in the coastal areas.

No specific remarks can be made concerning the formulation of reporting requirement 2. 4, according to which Contracting Parties have to report on the legal and administrative measures that they have taken for the establishment or improvement of marine pollution monitoring programmes in accordance with Article 12 of the Convention.

From a general point of view, it has to be underlined that the provision of data concerning marine pollution, which are mainly of scientific nature, has always been covered by the MED

POL Programme. The monitoring component of MED POL Programme is, thus, in many ways linked with the reporting system of the UNEP-MAP Legal Component and with the compliance mechanism to be established. It is recommended that the future development of the reporting system of the UNEP-MAP Legal Component to be accompanied with a thorough review of data reporting requirements within the MED POL's framework. Although the review of MED POL's monitoring component falls outside the scope of this document, it is of relevance that this review, which takes into consideration all the requirements of the Barcelona Convention and of each individual Protocol as well as technical details, can crucially contribute to the effective function of the future compliance mechanism, if Contracting Parties decide so.

The last point of reporting requirement 2 (2.5) relates to the legal and administrative measures that the Contracting Parties have taken in order to ensure the public access to information and the public participation in decision-making processes in accordance with the Article 15 of the Convention.

This provision of the Barcelona Convention (Article 15) is to a great extent influenced by the relevant provisions of the Aarhus Convention. In particular, the access to public information and the participation in decision-making processes constitute the two pillars of the Aarhus Convention, while the third pillar, as already stated, relates to the access to justice on environmental matters.

In a future modification of the reporting format, reporting requirement 2.5 should be changed in such a way so as to give emphasis not only on the description of the legal and regulatory measures adopted for the implementation of Article 15 of the Convention, but also on the action taken for the practical implementation of procedural requirements concerning access to information and public participation.

Concerning reporting requirement 3 of the Part 2 (Brief description of any problems or constraints in implementation of the Convention) it should be underlined that there is no reason justifying its optional character. *In a future modification of the reporting process, this reporting requirement should be re-designed so that it becomes mandatory. Furthermore, emphasis might be given on the description of the problems and constraints in implementation of the Convention. Contracting Parties should, thus, be required to provide a thorough and comprehensive analysis of the reasons that make the implementation of the Convention difficult. On this basis actions and measures to improve implementation should be planned and taken also with the support of the Secretariat, if appropriate.*

Finally a short list of legal-binding Decisions for each biennium in terms of specifying the provisions of the Barcelona Convention should be quoted so that Contracting Parties can report on their implementation.

4.2.3. Part 3: Implementation of the Protocol for the Prevention and Elimination of Pollution of the Mediterranean Sea by Dumping from Ships and Aircraft and Incineration at Sea

4.2.3.1. Introduction

Contracting Parties to the Dumping Protocol of the Barcelona Convention have to report on the legal and administrative measures that they have taken for the implementation of the following provisions of the Protocol (Reporting requirement 1):

- a) The prohibition of dumping of wastes and other matter (Article 4 of the Protocol)-reporting requirement 1.1
- b) The issue of permits and the conditions governing such issue (Articles 5 and 6 of the Protocol)-reporting requirement 1.2

- c) The application of measures required to implement the Protocol to ships and aircraft registered in the territory of the reporting country or flying its flag (Article 11 a), loading in the territory of the reporting country wastes or other matter intended for dumping (Article 11 b) and believed to be engaged in areas under national jurisdiction (Article 11 c)-reporting requirement 1.3
- d) The obligation to report possible contraventions of the Protocol (Article 12)-reporting requirement 1.4

Contracting Parties might provide MEDU Secretariat, where appropriate, with information submitted to IMO on legal and administrative measures taken under the terms of the 1972 London Dumping Convention including the following elements:

- a) The organization of monitoring, individually or in collaboration with other Parties and competent Organizations, the condition of the sea for the purposes of the Convention-reporting requirement 2.1
- b) The criteria, measures and requirements adopted for issuing permits-reporting requirement 2.2

Contracting Parties should also describe briefly any problems or constraints encountered in the implementation of the Protocol-reporting requirement 3.

It should be underlined that although reporting requirement number 2 (Information submitted to IMO under the terms of the London Convention) would remain optional, national reports of the Mediterranean Contracting Parties to the London Dumping Convention can constitute the basis for the biennial report under the Dumping Protocol of the Barcelona Convention. However, a substitution of the report under the Dumping Protocol of the Barcelona Convention with the report under the London Convention does not seem to be realistic for the near future not only due to the deviation concerning time frequency but also due to some differences concerning the information to be submitted.

4.2.3.2. Remarks and Recommendations

The reporting requirements of the third part of the biennial report refer to the implementation of the Dumping Protocol to the Barcelona Convention. These reporting requirements have to be analyzed primarily in comparison with the relevant requirements of the 1972 London Dumping Convention, the 1996 Protocol to the Convention and secondary with the provisions of the Directive 2000/59 on port reception facilities for ship-generated waste and cargo residues.

Contracting Parties are obliged according to reporting requirements 1.1, 1.2, 1.3 and 1.4 to provide the Secretariat with information on the legal and administrative measures that they have taken to implement the basic provisions of the Protocol, as presented in the introduction. In general, these reporting requirements can be regarded as satisfactory.

However, in a future modification of the reporting format reporting requirement 1.2 could be changed, so that more emphasis is given to the description of the procedures for the issue of permits. The reporting requirement 1.2 can be modified as follow:

Legal and administrative measures taken under the terms of the Protocol regarding the issue of permits and the conditions governing such issue in terms of Articles 5 and 6 of the Protocol. Contracting Parties are requested to give some detailed information about the administrative procedures established for the issue of permits, the national competent authority responsible for this and the guidelines and the criteria governing the issue of permits¹⁷ (The underlined part constitutes the proposed amendment).

¹⁷ The underlined part represents the proposed modification in reporting requirement 1.2

The other two reporting requirements of the third part are not mandatory.

Concerning reporting requirement 2 (information submitted to the Maritime Organization on legal /and administrative measures taken under the terms of the 1972 London Convention), *it should be underlined that there is no legal ground to establish a mandatory obligation for submitting information and data required under the terms of another International Convention, such as the London Convention. Therefore, the optional character of the reporting requirement can be seen as justified.*

Although this reporting requirement would also remain optional in the future, it is very useful in many aspects, because it can crucially contribute to seeking synergies between the two relevant legal instruments aiming at their effective implementation. In this context, a close cooperation between the MEDU Secretariat and the Secretariat of the London Convention is deemed necessary in order to achieve a harmonization of the reporting processes of the two legal instruments to the extent that it is possible. This could be one of the factors that can lead to the reduction of the "reporting fatigue" of the Contracting Parties.

Concerning reporting requirement 3 (brief description of any problems and constraints encountered in its implementation), it has to be mentioned what has already been stated for the relevant requirement in the second part (reporting requirement 3). Its optional character can not be regarded as justified. *In a future modification of the reporting format the reporting requirement number 3 has, thus, to become mandatory. The modified reporting requirement could be as follows:*

Give a detailed description of the problems and constraints encountered by the implementation of the Dumping Protocol.

4.2.3.3. Proposal for the introduction of two new reporting requirements

Taking into consideration the relevant provision of the Protocol to the London Convention (Article 9.par 4), which has great contextual relevance to the Dumping Protocol to the Barcelona Convention, as well as the general tendency to undertake an evaluation of the effectiveness of the measures taken by the Contracting Parties, the introduction of a new reporting requirement is deemed necessary. The proposed reporting requirement would refer to the evaluation of the effectiveness of the permitting system for dumping. Article 26 i of the new version of the Barcelona Convention can be recognized as the legal basis for the introduction of this new reporting requirement.

In a future modification of the reporting format the new reporting requirement could have the following form: *Contracting Parties might be requested to provide MEDU Secretariat with an evaluation of the effectiveness of the legal and administrative measures taken to implement the provisions of the Dumping Protocol, paying special attention to the effectiveness of the system governing the issue of permits established under Articles 5 and 6 of the Protocol.*

The second reporting requirement could be a summarized version of specific information concerning the permits issued. This kind of information is mainly included in the specific report for the implementation of the Protocol. The introduction of this reporting requirement is considered necessary, because it can help Secretariat and Contracting Parties to have an overview of the function of the permitting system as core element for the implementation of the Protocol. The proposed reporting requirement could be as follows:

Contracting Parties have to provide MEDU Secretariat with a summarized version of the information concerning the permits issued in the period under review.

Finally a short list of legal-binding Decisions in terms of specifying the provisions of the Dumping Protocol should be introduced as an Appendix to the reporting format so that Contracting Parties should report on their implementation

4.2.4. Part 4: Implementation of the Protocol concerning Cooperation in Preventing Pollution from Ships and, in Cases of Emergency, Combating Pollution of the Mediterranean Sea

4.2.4.1 Introduction

Contracting Parties to the Prevention and Emergency Protocol of the Barcelona Convention have to report on the legal and administrative measures that they have taken for the implementation of the following provisions of the Protocol (Reporting requirement 1) concerning:

- a the implementation of international regulations to prevent, reduce and control pollution of the marine environment from ships (Article 3 par.1 a of the Protocol)-reporting requirement 1.1
- b the maintenance and promotion of contingency plans and other means of preventing and combating pollution incidents (Article 4 par.1)-reporting requirement 1.2
- c the measures taken in conformity with the international law to prevent the pollution of the Mediterranean Sea from ships (Article 4 par.2)-reporting requirement 1.3
- d the development of monitoring activities (Article 5)-reporting requirement 1.4
- e the establishment and dissemination of information by each Contracting Party to other Contracting Parties (Article 7 par.1)- reporting requirements 1.5.1, 1.5.2,1, 5.3, 1.5.4, 1.5.5
- f the information exchanged directly with other Parties and communicated to the Regional Center (Article 7 par.2)- reporting requirement 1.6
- g bilateral and/or multilateral agreements concluded within the framework of the Protocol (Article 7 par.3)-reporting requirement 1.7
- h port reception facilities (Article 14)-reporting 1.8
- i assessment of risks of the maritime traffic (Article 15)-reporting 1.9
- j national, sub-regional or regional strategies in places of refuges of ships in distress (Article 16) –reporting requirement 1.10

Contracting Parties are also invited to report on the problems or constraints encountered in the implementation of the Protocol-reporting requirement 2.

The majority of the Sea Safety Conventions and the International Conventions for emergency situations that have similar provisions with those of the Prevention and Emergency Protocol have not yet developed reporting systems for regular reporting but only for ad-hoc reporting. As such information submitted according to the provisions of the aforementioned Conventions can be used in terms of the regular reporting under the Prevention and Emergency Protocol only to limited extent.

4.2.4.2. General remark

In the fourth part of the reporting format, Contracting Parties are required to provide MEDU Secretariat with information concerning the legal and administrative measures that they have taken for the implementation of the Prevention and Emergency Protocol. Because of the scope and the nature of the Protocol, the majority of the reports that have to be submitted in accordance with its relevant provisions, are of an ad hoc nature. *Therefore, the biennial report for the implementation of the Emergency Protocol should constitute a summarized version of the ad hoc submitted reports in the period under review.*

Taking the specific character of the Emergency Protocol into consideration, it can be recommended that the relevant reporting format responds fully to its scope and nature. Therefore, it is proposed that it could remain unchanged in a future modification of the reporting format.

4.2.5. Part 5: Implementation of the Protocol for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources and Activities

4.2.5.1. Introduction

Contracting Parties to the Land-based Sources Protocol (LBS) of the Barcelona Convention have to report on the legal and administrative measures that they have taken for the implementation of the following provisions of the Protocol (Reporting requirement 1) concerning:

- a the elaboration and/or implementation national action plans and programmes and joint measures adopted by the Contracting Parties (Articles 5 par.2 , 5 par.3, 5 par.4)-reporting requirement 1.1
- a the reduction to the minimum the risk of the pollution caused by accidents (Articles 5 par.5)-reporting requirement 1.2
- b the establishment of authorizations and regulations systems for control of discharges, including systems of inspection and sanctions (Article 6)-reporting requirement 1.3
- c the implementation of resolutions adopted by Contracting Parties regarding standards and criteria for the quality of seawater used for specific purpose (Article 7 par.1)-reporting requirement 1.4
- d the assessment of levels of pollution along the coast, in particular with regard to the sectors of activity and categories of substances listed in Annex I of the Protocol (Article 8 a)-reporting requirement 1.5
- e the evaluation of the effectiveness of national action plans, programmes and measures implemented under the Protocol (Article 8 b) –reporting requirement 1.6

Furthermore, Contracting Parties have to report in brief on any problems or constraints encountered in the implementation of the Protocol (reporting requirement 2).

The presentation of the reporting requirements in the fifth part leads to the conclusion that they are of general character. The information to be submitted could be further specified, if reporting requirements concerning SAP Provisions would be incorporated in the reporting format. Furthermore, it should be underlined that information concerning reporting requirements 1.2 (Reduction of pollution caused by accidents) 1.3 (establishment of authorizations and regulations systems for control of discharges), 1. 4 (implementation of resolutions for the quality of seawater) and 1.5 (assessment of levels of pollution) is for Mediterranean EC Member States to be found in the reports that they submit to the Commission concerning the implementation of the Directive 96/86 on the control of major accident hazards (Seveso II Directive) as it was extended by the Directive 2003/105/EC, IPPC Directive, the 76/160/EEC Directive on bathing water quality, the Directive concerning water pollution by discharges of dangerous substances (76/464/EEC), the Water Framework Directive (2000/60/EC) and the Directive 91/271/EEC concerning urban wastewater treatment correspondingly. For other Mediterranean Countries information concerning pollution caused by land-based sources is not easily to be found in the form of national reports because there is no international legal instrument regulating marine pollution from land-based sources.

4.2.5.2. Remarks and Recommendations

The legal basis for the establishment of a reporting obligation concerning the implementation of the Land-based Sources Protocol (LBS-Protocol) can be found not only in Article 26 of the Barcelona Convention, but mainly in Article 13 of the Protocol (amended version). In particular, it is stated in Article 13 that Contracting Parties have to report every two years on the measures taken, results achieved and difficulties encountered in the application of the Protocol.

The design of the fifth part of the reporting format is based, thus, on the provisions of Article 13 of the Protocol. *It should be underlined that the provisions concerning the implementation of the Strategic Action Programme (SAP), which constitutes the operational element for the implementation of the Protocol, are not included in the general biennial report. A specific reporting format should be developed as an integral part of the general report which will incorporate reporting requirements concerning SAP Provisions into the reporting format.*

According to reporting requirement 1.1 Contracting Parties have to report on the legal and administrative measures that they have taken in order to elaborate and implement National Action Plans and Programmes and joint measures in accordance with Article 5 par.2, par.3 and par.4 of the Protocol.

To analyze the aforementioned reporting requirement, reporting requirements established within the framework of other International Conventions, where Contracting Parties have to report on the elaboration and the implementation of National Action Plans and Programmes, such as the United Nations Convention on Climate change and the United Nations Convention to combat desertification, should be taken into consideration. This leads to the conclusion that the reporting requirement 1.1 of the fifth part needs to be more detailed in order to encourage Contracting Parties to provide a comprehensive and thorough view of the adopted National Action Plans and Programmes. In a future modification of the reporting format, reporting 1.1 could be as follows: Legal and Administrative measures taken under the terms of the Protocol to elaborate and/or implement National Action Plans and Programmes measures adopted by the Contracting Parties (Articles 5 par.2, 5 par.3, 5 par. 4). Contracting Parties are requested to give information in detail concerning the concrete targets to be attained and the types of measures and policies adopted within the framework of National Action Plans and Programmes, the status of their implementation, the implementing entities, a quantitative estimation of the impact of their implementation and an estimation of the implementation costs, including economic cost. (The underlined part constitutes the proposed amendment).

According to reporting requirement 1.2, Contracting Parties have to report on the legal and administrative measures that they have taken in order to reduce to the minimum the risk of pollution caused by accidents in accordance with Article 5 par 5 of the Protocol. This reporting requirement relates mainly to the preventative measures that have to be taken in order to avoid accidental pollution. For Mediterranean EU Member States the fulfillment of this reporting requirement relates, thus, to the fulfillment of reporting obligations concerning the implementation of relevant Directives for accidental industrial pollution, such as the SEVESO II Directive.

Preventative measures against accidental pollution should be seen as specific part of Strategies and Policies to reduce pollution mainly caused by industrial sources and secondarily by improper municipal and industrial wastewater treatment.

Taking this into account, it can be recommended that reporting requirement 1.2 could be changed in a future modification of the reporting format. The proposed reporting requirement could be as follows: Legal and administrative measures taken under the terms of Protocol to reduce to the minimum the risk of the pollution caused accidents (Article 5 par.5). Contracting Parties are requested to describe in detail the preventative measures adopted either within the framework of National Action Programmes in terms of Article 5 of the Protocol and of the relevant provisions of Strategic Action Programme or separately in order to minimize accidental pollution. (The underlined part constitutes the proposed amendment).

According to the reporting requirement 1.3 of the fifth Part, Contracting Parties have to report on the legal and administrative measures that they have taken in order to establish authorization or regulations systems for the control of discharges, including systems of

inspection and sanctions in terms of Article 6 of the Protocol. It is of importance that the new Article 6 of the Protocol pays special attention to the regulation of the polluting activities at source and to the control of inputs of Annex I substances into the marine environment through municipal and industrial discharges.

A similar regulatory approach can be found in a number of European Directives. In particular, the Water Framework Directive requires that the input of discharges into surface waters have to be subject to prior authorization by the competent authorities (Article 9), while Directive 96/61 (IPPC Directive) requires that point source discharges and emissions caused by several industrial activities should be authorized within the framework of an integrated permitting scheme. Furthermore, Directive 91/271 establishes the obligation for the connection of urban agglomerations to a sewer system and for carrying out primary or secondary treatment of wastewater. In addition, it must be taken into account that Regulation requires that Member States establish Environmental Inspectorate as an institutional authority which safeguards the proper implementation of the environmental legislation.

Finally, it should be underlined that there is no International Convention that regulates the pollution of the marine environment from land-based sources.

Taking the relevant requirements arising from the European legislation into consideration, it can be recommended that reporting requirement 1.3 should be modified. The proposed reporting requirement could be as follows:

Legal and administrative measures taken to establish authorization or regulation systems for control of discharges, including systems of inspections and sanctions in accordance with Article 6 of the Protocol. *In particular, Contracting Parties are requested to describe in detail the authorization system established for the input of discharges into marine environment caused by industrial activities, the authorization system established for the input of discharges caused by other activities (agriculture, tourism) and the rules governing the treatment of urban waste water.*

According to reporting requirement 1.4 Contracting Parties have to report on the legal and administrative measures that they have taken in order to implement Resolutions adopted by Contracting Parties regarding standards and criteria for the quality of seawater used for specific purposes in accordance with Article 7 par 1 of the Protocol. In particular, Contracting Parties have to report on the following measures adopted under the terms of Article 7 par.1 of the original version:

- Interim environmental quality criteria for bathing waters (1985)
- Interim environmental quality criteria for shellfish waters (1987)

No specific remarks can be made for the formulation of this reporting requirement. *It could only be noted that the national activities proposed in various sectors of SAP require the application at national level of common measures adopted by the Contracting Parties. In addition, SAP contains a full programme of expected reductions of emissions/ releases of pollutants in accordance with an agreed schedule, which are going to be adopted mainly in the form of Resolutions. Therefore, it is expected that a number of Resolutions need to be adopted in order to make operational the relevant provisions of SAP and Contracting Parties can be requested to report in accordance with Article 7 of the Protocol.*

No specific remarks can be made concerning reporting requirement 1.5. According to this reporting requirement, Contracting Parties have to report on the legal and administrative measures that they have taken in order to assess levels of pollution along the coast, in particular with regard to the sectors of activity and categories of substances listed in Annex 1 of the Protocol. *This reporting requirement could remain unchanged in a future modification of the reporting format because it responds to the fullest possible extent to the context of Article 8a of the Protocol. From another point of view it could be useful for the Contracting*

Parties take into consideration the methodologies used for the preparation of inventories established under IPPC Directive, Aarhus Convention and United Nations Convention to combat climate change.

Furthermore, reporting requirement 1.6 (Legal and administrative measures taken in order to evaluate the effectiveness of national action plans, programmes and measures implemented under the Protocol) should also remain unchanged in a future modification of the reporting format. *This lies in the fact that its formulation is in accordance with the regulatory context of Article 8 b of the Protocol. Furthermore, it responds to the general trend in international law regime for establishing provisions and subsequent reporting obligations concerning an evaluation of the adopted policies and strategies.*

Finally, with regard to the reporting requirement 2 of the fifth part (Brief description of any problems and constraints encountered in implementation of the Protocol), it should be noted that there is no reason justifying its optional character. This has already been mentioned for the relevant requirements of Part 2, 3 and 4. The aforementioned remark is of specific importance with regard to the implementation of the Land-Based Sources Protocol. The specific importance of this remark in case of the LBS Protocol lies in the fact that it is widely recognized that the elimination or even reduction of the pollution caused by land-based sources to the marine environment is one of the most crucial issues that have not yet been successfully addressed, even at the European level.

Therefore, this reporting requirement should become not only mandatory but also more detailed in a future modification of the reporting format. The proposed reporting requirement could be as follows: *Contracting Parties have to describe in detail the experiences gained and the lessons learned concerning the elimination and reduction of the pollution caused to marine environment by land-based sources. Special attention should be given to the description of any problems or constraints encountered in the implementation of the Convention.*

Proposal for the introduction of a new reporting requirement

It is deemed necessary that a new reporting requirement could be introduced in order to facilitate MEDU Secretariat as well as Contracting Parties at their Ordinary Meetings to have an overview concerning the implementation of LBS Protocol. This reporting requirement could be a summarized version of the permits issued for input of discharges by point sources and could have the following formulation:

Contracting Parties should provide Secretariat with a summarized version of the permits issued for input of discharges by point sources during the period under review.

4.2.6. Part 6: Biennial report on the implementation of the Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean

4.2.6.1. Introduction

Contracting Parties to the Protocol concerning special protected areas and Biological Diversity in the Mediterranean (SPAMI Protocol) have to report on the legal and administrative measures that they have taken for the implementation of the following provisions of the Protocol (Reporting requirement 1) concerning:

- a the protection, preservation and management of marine and coastal areas of particular natural or cultural value and for the protection, preservation and management of threatened and endangered species of marine and coastal flora and fauna (Article 3 of the Protocol)- reporting requirement 1.1

- b the establishment of specially protected marine and coastal areas (Article 5)-reporting requirement 1.2
- c the protection in conformity with Article 6, in particular concerning the application of the other Protocols and Treaties, the prohibition of dumping or discharge affecting protected areas, the regulation of passage of ships, the regulation of introduction of species, the regulation of activities, the regulation of scientific activities and finally the regulation of fishing, hunting, taking of animals, harvesting of plants, and trade in plants and animals (Article 6) –reporting requirement 1.3
- d the planning and management of special protected areas (Article 7)-reporting requirement 1.4
- e the protection and conservation of species (Article 11)- reporting requirement 1.5
- f the regulation of non-indigenous or genetically modified species (Article 13)-reporting requirement 1.6
- g the exemptions granted from protection measures (Article 12, 18)

Furthermore, Contracting Parties have to report in brief on any problems or constraints encountered in the implementation of the Protocol (reporting requirement 2).

Finally, it should be clarified that Contracting Parties don't have a legal obligation to report on the measures that they have taken to implement the regional Strategy for the protection of biodiversity (SAP-BIO). This lies in the fact that the development of this Strategy was not based on a relevant provision of the SPAMI Protocol, as it is the case with the establishment of SAP based on Article 15 of the LBS Protocol. Therefore, SAB-BIO does not have a legal-binding character.

4.2.6.2. General Remarks and Recommendations

In the Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean there is a specific legal basis for the establishment of the reporting obligation. In particular, Article 23 of the Protocol states that Contracting Parties have to submit to the Ordinary Meetings of the Parties a report on the implementation of the Protocol containing the following elements:

- the status and state of areas included in the SPAMI (Specially protected areas of Mediterranean importance)
- any change in the delimitation of SPAMIs and protected species
- possible exemptions allowed pursuant to Articles 12 and 18 of the Protocol.

It is remarkable that the design of the reporting requirements in Part 6 is strictly based on the implementation of Articles of the Protocol in terms of the adopted legal and administrative measures, while very little attention is paid to the experience gained and the lessons learned in its implementation.

This is not the case with the majority of Biodiversity- related Conventions, because their reporting systems are focusing heavily on the problems and obstacles encountered in their implementation and on the lessons learned. The Convention on Biological Diversity can be mentioned as an example reflecting this general tendency. In particular, the reporting format of the Biodiversity Convention contains in Part B (Priority Setting, Targets and obstacles) a list of factors that could function as obstacles to the implementation of the Convention. Contracting Parties have, thus, while compiling the national report format, to mark which of those factors represent problems or constraints for the implementation of the Convention. Furthermore, according to the Council Directive 92/43 on the Conservation of Natural Habitats and Wild Fauna and Flora, which lays down a wide range of protection measures for habitats and species, including also marine and coastal habitats and species, EU Member States are obliged to submit a detailed report every six years. This report should contain any measure taken in order to implement the Directive as well as the status of habitats and species in view of the adopted policies and measures. In addition, specific attention is paid to

the experiences gained and in particular to the successes and difficulties encountered in the implementation of the Directive during the period under review.

Therefore, the following changes could be proposed in case of a future modification of the reporting format:

First of all, reporting requirement 2 of the 6th part (Brief description on the problems and measures encountered in the implementation of the Convention) should not only become mandatory but also more detailed. The proposed reporting requirement could be as follows: *Contracting Parties have to describe in detail the experiences gained and the lessons learned concerning the protection and management of Specially Protected marine and coastal areas (SPAMIs). Special attention should be paid to the description of the problems and constraints encountered in this process and to the role of the local communities.*

Furthermore, a new reporting requirement concerning an evaluation of the effectiveness of the adopted measures could be introduced. The new reporting requirement could be as follows:

Contracting Parties should provide the Secretariat with an evaluation of the effectiveness of the adopted policies and measures with regard to their capacity to achieve concrete goals and targets for the protection of SPAMIs. In addition, the adopted policies and measures should be evaluated also with regard to their contribution to the achievement of goals and targets established within the framework of National Biodiversity Strategies.

Another reporting requirement that could be introduced in a future modification of the reporting format would refer to the status of the fauna and flora as result of the policies and measures adopted. The introduction of this reporting requirement is deemed necessary, because it can help Secretariat and the Contracting Parties to form a clear picture relating to the implications of the adopted policies. The proposed reporting requirement could be as follows:

Contracting Parties should provide Secretariat with a summarized version of the status of fauna and flora in SPAMIs as a result of the adopted policies and measures.

Finally, it is considered necessary that reporting requirement 1.4 (Regarding planning and management of special protected areas) be changed in a future modification of the reporting format. The reason for the proposed modification lies in the fact that more attention should be given to the description of the management authorities and to the Programmes of measures (Master Plans) adopted for the management and protection of SPAMIs. The proposed reporting requirement could be as follows: Legal and administrative measures taken under the terms of the Protocol regarding planning and management of Specially Protected Areas. Special attention should be given to the description of the establishment of competent authorities as well as to the programmes of measures for management and protection of SPAMIs. (The underlined part constitutes the proposed amendment.)

4.2.7. Part 7: Implementation of the Protocol on Pollution resulting from Exploration and Exploitation of the Continental Shelf and the Seabed and its Subsoil

4.2.7.1. Introduction

Contracting Parties to the Protocol on Pollution resulting from Exploration and Exploitation of the Continental Shelf and the Seabed and its Subsoil have to report on the legal and administrative measures that they have taken for the implementation of the following provisions of the Protocol (Reporting requirement 1) concerning:

- a the prior written authorization for seabed exploration and/or exploitation (Article 4. par.1) and the requirements for such authorization (Article 5 and Annex 4)-reporting requirement 1.1
- b the control of use, storage and disposal of chemicals in authorized activities covered by the Protocol (Article 9) –reporting requirement 1.2

- c the discharge of sewage from installations (Article 11)-reporting requirement 1.3
- d the disposal of garbage from installations (Article 12)- reporting requirement 1.4

- e the disposal of wastes and harmful or noxious substances and materials in designated onshore reception facilities (Article 13)-reporting requirement 1.5
- f the safety measures in accordance with Article 15 –reporting requirement 1.6
- g the contingency planning in accordance with Article 16-reporting requirement 1.7
- h the notification of events on the installation or at sea likely to cause pollution (Article 17)-reporting requirement 1.8
- i the removal of installations in accordance with Article 20 of the Protocol-reporting requirement 1.9
- j the activities initiated before the entry into force of the Protocol (Article 29)-reporting requirement 1.10

Furthermore, Contracting Parties have to report in brief on any problems or constraints encountered in the implementation of the Protocol (reporting requirement 2).

It should be underlined that information concerning activities of exploration and exploitation of seabed is likely to be found in the national reports submitted to IMO for the implementation of MAR-POL Convention and its Annexes, because they include relevant provisions.

4.2.7.2. General Remarks and Recommendations

As stated, the reporting requirements in the seventh part of the reporting format refer to the implementation of the Protocol on pollution resulting from Exploration and exploitation of the Continental Shelf and the Seabed and its Subsoil. It is of importance that this Protocol to the Barcelona Convention –though have not yet entered into force- constitutes one of the few international legal instruments regulating pollution from seabed activities caused by the release of harmful substances arising directly from the exploration and exploitation of seabed materials. International Legislation for pollution from this source is, thus, underdeveloped.

The legal basis for the establishment of a reporting obligation on the implementation of this Protocol is to be found –besides the general provision of Article 26 of the Barcelona Convention- mainly in the Article 25 of the Protocol. In particular, Article 25 of the Protocol stipulates that Contracting Parties shall inform one another directly or through the Organization of the measures taken and, if the case arises, of difficulties arising from the application of the Protocol. The development of the reporting format was, thus, based on the provisions of Articles 25 and 30 (Meetings of the Ordinary Parties) of the Protocol.

From a general point of view, the reporting format for the general biennial report on the implementation of the Protocol can be regarded as satisfactory, because the formulation of the reporting requirements covers all the important provisions of the Protocol. Therefore, only few changes and modifications concerning the reporting format Part 7 could be proposed.

First of all, a new reporting requirement for the evaluation of the effectiveness of the adopted measures and also for the situation of seabed within national jurisdiction of the Contracting Parties in terms of its environmental integrity should be introduced. Such an introduction is regarded as necessary, as it has already been mentioned in similar cases. It can help the Secretariat and Contracting Parties at their Meetings to form a clear picture concerning the link between the adopted measures and the results achieved. The proposed reporting requirement could be as follows: *Contracting Parties have to evaluate the effectiveness of the adopted policies and measures in order to prevent or reduce the pollution from seabed activities. In addition, they have to provide Secretariat with a summarized version of the situation of the seabed falling within the jurisdiction of each Contracting Party mainly in terms of its environmental integrity and also as a result of the adopted policies and measures.*

The other proposed modification of the reporting format relates to the reporting requirement 2 (Brief description of any problems or constraints encountered in the implementation of the Protocol). As it has already been mentioned for the relevant reporting requirements in the other parts of the reporting format, there is no reason justifying its optional character.

Furthermore, problems and constraints encountered in the implementation of this Protocol are of general interest, because the Protocol is one of the few international legal instruments concerning pollution of the seabed. The experiences of its implementation are, thus, of general importance for international law regime in the field of marine pollution. In the case of a future modification of the reporting format, this reporting requirement should not only become mandatory, but also more detailed. The proposed reporting requirement could be as follows: *Contracting Parties have to describe in detail the experiences gained and the lessons learned relating to the pollution of the seabed caused by seabed activities. Special attention should be paid to the description of the problems and constraints encountered in the implementation of the Protocol.*

4.2.8. Part 8: Implementation of the Protocol on the Transboundary Movement of Hazardous Wastes and their Disposal

4.2.8.1. Introduction

Contracting Parties to the Protocol on the Transboundary Movement of Hazardous Wastes and their Disposal have to report on the legal and administrative measures that they have taken for the implementation of the following provisions of the Protocol (Reporting requirement 1) concerning:

- a. the reduction or elimination of the generation of hazardous wastes (Article 5 par.2) – reporting requirement 1.1
- b. the reduction of the transboundary movement of hazardous wastes or the contribution to the elimination of such movement in the Mediterranean (Article 5 par 3)- reporting requirement 1.2
- c. the prohibition of the export and transit of hazardous wastes to developing countries or the prohibition of all imports and hazardous wastes (Article 5 par.4)- reporting requirement 1.3
- d. the prevention and punishment of illegal traffic (Article 5 par.5 and 9) –reporting requirement 1.4
- e. the control of transboundary movements of hazardous wastes (Article 6), in particular regarding prior notification of transboundary movements of hazardous wastes through territorial seas-reporting requirement 1.5

Furthermore, Contracting Parties have to report in brief on any problems or constraints encountered in the implementation of the Protocol (reporting requirement 2)

4.2.8.2. General Remarks and Recommendations

As stated, part 8 of the reporting format contains reporting requirements on the implementation of the Protocol on the prevention of pollution of the Mediterranean Sea by Transboundary Movements of hazardous wastes and their disposal. The legal basis for the establishment of a periodic reporting obligation on the implementation of the Protocol is to be found –besides Article 26 of the Barcelona Convention as general legal basis- mainly in Articles 11 (Transmission of Information) and 8 par. 2 (Regional Cooperation) of the Protocol. In particular, Article 11 states Contracting Parties shall inform each other of the measures taken, of the results achieved and, if the case arises, of the difficulties encountered in the implementation of the Protocol. Furthermore, Article 8 par.2 stipulates that the Parties shall submit annual reports to the Organization regarding the hazardous wastes they generate and

transfer within the protocol area in order to enable the Organization to produce a hazardous waste audit.

Therefore, the general biennial report on the implementation of the Protocol contains requirements dealing with legal and administrative aspects of the Protocol, while the information to be submitted in accordance with Article 8 par.2 of the Protocol is mainly contained in the periodic report on the technical implementation of the Protocol that has to be submitted annually.

It has to be underlined that the general biennial report contained in Part 8 of the Protocol includes to a great extent similar requirements with those included in the annual periodic report on the implementation of the Basel Convention. This is of great importance, because the adoption of the Mediterranean Protocol on the transboundary movements of hazardous wastes was inspired and based on the Basel Convention on the Control of Transboundary Movements of hazardous wastes and their disposal. Furthermore, the Annexes of the Basel Convention and of the Mediterranean Protocol are practically identical, because Annex I (Categories of wastes to be controlled) and Annex II (categories of wastes requiring special consideration) to the Basel Convention are grouped together in Annex I of the Mediterranean Protocol, while the code letters and numbers for various substances are identical in both legal instruments.

Taking this into consideration, the reporting requirements contained in Part 8 of the reporting format could, thus, be regarded as satisfactory in general terms, as they cover the implementation of the most important Articles of the Protocol dealing with legal, regulatory and administrative aspects.

From another point of view, as it has already been mentioned, concerning the relevant requirements in the other parts of the reporting format, the reporting requirement 2 (brief description of any problems and constraints encountered in the implementation of the Protocol) should not only become mandatory, but also more detailed in the case of a future modification of the reporting format. The proposed requirement could be as follows: *Contracting Parties have to describe in detail the experience gained and the lessons learned relating to the reduction of pollution within the area of your national jurisdiction caused by the transboundary movement of hazardous wastes and their disposal, mainly as a result of the Implementation of the Protocol. Special attention should be paid to the description of the problems and constraints encountered in the implementation of the Protocol.*

Finally, the introduction of a reporting requirement concerning the evaluation of the effectiveness of the adopted measures is deemed necessary, because it can help the Secretariat as well as Contracting Parties at their Ordinary Meetings to form a clear picture for the link between the adopted measures and the results achieved. The proposed reporting requirement could be as follows: *Contracting Parties have to evaluate of the effectiveness of the legal and administrative measures adopted for the implementation of the Protocol mainly in relationship with the achieved results.*

Indicative list of Literature References for the Comparative Study

Discussion document-Legislative complementarity and harmonisation of biodiversity-related multilateral environmental agreements, Prepared by C. Lasen Diaz (Foundation for International Environmental Law and Development for UNEP/UNDP/GEF Biodiversity Planning Support Programme, February 2002.

Ph. Sands, International Environmental Law, 3rd Edition, London 2003

Fifth Ministerial Conference "Environment for Europe" , Guidelines for strengthening compliance and implementation of multilateral agreements in the ECE Region, ECE/CEP/107, Kiev 21-23 May 2003.

Overview of compliance mechanisms under ECE environmental conventions

M. A Fitzmaurice/ C. Redgwelt, Environmental non-compliance procedures and environmental law, Netherlands Yearbook

United Nations Environment Programme-Mediterranean Action Plan, Setting up an implementation and compliance mechanism under the Barcelona Convention and its Protocols, Athens 2004.

United Nations Environment Programme-Mediterranean Action Plan, Implementation and compliance under the OSPAR Convention, Athens 2004.

Interrelationship between IPPC, EIA, SEVESO Directives and EMAS Regulation, Final IMPEL Report, December 1998

The contribution of EU Monitoring and Reporting to sound and effective policy- making, Draft Paper 1 for the project: *Towards a new Framework for reporting on environmental policies and measures*, Prepared by D. Wilkinson on behalf of the European Environmental Agency, September 1999.

Reporting by EU Members on environmental policies and their effects: Summary of EU Reporting Requirements and the example of CO2 Reduction Programme, Draft Paper 2 for the Project *Towards a new Framework for reporting on environmental policies and measures*, Prepared by D. Wilkinson and J. Newcombe on behalf of the European Environmental Agency, November 1999.

Reporting on the effects and effectiveness of measures taken to implement EU environmental legislation: Case Study-the Waste Directives, Paper produced within the framework of European Environmental Agency Project "Reporting on effects of measures", Copenhagen 2000.

Guidance Document for EPER Implementation according to Art. 3 of the Commission Decision 2000/479, European Commission-Directorate General for Environment, November 2000.

Development of common tools and an information infrastructure for the shared European environment information system, Preparatory Report for Reportnet, European Environmental Agency, Copenhagen 2002.

Report of the IMPEL Information Exchange Project on e-reporting, April 2004.

Effective legislation needs a good legal base: Final Report of the IMPEL better legislation project, Report adopted at the IMPEL Plenary Meeting , Rome, November 2003.

Reporting for Water-Concept Report "Towards a shared Information System for Water, The final version was agreed on the Meeting of the Waters Directors on 24/25 November 2003 in Rome.

A comparative analysis of the SAP and the EU Measures to combat pollution of the marine environment from municipal and industrial sources, UNEP-MAP, MED POL Programme, Athens 2004.

Guidelines for the evaluation of the effectiveness of the implementation of the Strategic Action Programme (SAP), Annotated Version, Paper produced on behalf of UNEP-MAP.

Report from the Commission to the Commission, the European Parliament, the European Economic and Social Committee and the Committee of Regions on the Implementation of Council Directive 91/271/EEC concerning urban waste water treatment, Brussels 23.04.2004.

Annex I

TABLE 1:
REPORTING SYSTEMS OF THE BIODIVERSITY RELATED
CONVENTION

TABLE 1:
REPORTING SYSTEMS OF THE BIODIVERSITY RELATED CONVENTION

	Frequency of Reporting	Type of Reporting	Subject of reporting (Kind of information requested)	Specific measures to be reported
Convention on Biological Diversity (CBD)	Every four (4) years	Questionnaire	Information on the full spectrum of biodiversity, namely ecosystems, habitats, species, communities and described genomes and genes of social, scientific or economic importance. Information on target-oriented and theme-oriented implementation of the several articles of the Convention. Special attention is paid to the information concerning problems encountered in the implementation of the Convention and to the assessment of the efficiency of the measures taken	Development of National Biodiversity Strategies, Setting of concrete goals and all kind of measures adopted to achieve these goals (legislative, regulatory and administrative measures). Specific attention is paid on the measures taken for the management of Special Protected Areas.
RAMSAR Convention	Every three (3) years	Reporting format in the form of a National Planning Tool	Information on the status of wetlands of international, regional and national importance. Information on the establishment of national wetland inventories	Development of National Strategies or National Action Plans for the protection of wetlands; measures adopted within the framework of those Strategies (Legislative, Regulatory and Implementation measures), institutional arrangements, such as the establishment of National Wetland Committees
UNESCO Convention on World Cultural Heritage (WCH)	Every six (6) years	a) Report in the form of a Questionnaire divided in two sections: Section I: report	- Information concerning the identification of properties of cultural and natural value, the measures adopted for their protection, conservation and management. - Information concerning international cooperation and fund-raising.	Legislative, regulatory and administrative measures adopted in order to implement the provisions of the Convention. Specific emphasis is given to the special institutional arrangements necessary for the

		on the application of Articles of WCH. Section II: state of conservation of specific WH properties b) Site-specific conservation reports examined twice a year in the WH Bureau	-Information on the state of conservation of specific world heritage properties cited at the Party' s territory.	implementation of the Convention, such as the establishment of management bodies for areas of cultural and natural value.
Convention on Migratory Species (CMS-Convention)	Reporting frequency has not yet been defined by a specific Resolution of the Contracting Parties. Article VI of the Convention (inform the Secretariat at least six months before COP about the measures taken)	A reporting format has not been developed yet.	According to Article VI of the Convention and Resolution 6.5 Parties considered themselves to be Range States for migratory birds should inform Secretariat on the measures taken for the implementation of the Convention. Information on the status of migratory species listed in the Appendices.	-As the reporting format has not been developed yet, no specific mention can be made about the kind of measures that have to be reported in a future reporting format.
Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES Convention)	Annually on the permits and trade in species. Biennially on the legislative, regulatory and	a) Annual report mainly in the form of a technical report containing a summary of permits and trade	-Information on the permits and trade of species (annual report) -Information on the legislative and regulatory measures taken for the implementation of the Convention.	Legislative, regulatory and administrative measures for the enforcement of the Convention. No emphasis is given on the measures taken for the practical implementation of the Convention or

	administrative measures taken for the implementation of the Convention	in species included in the three Appendices of the Convention b) Biennial Report on the legislative, regulatory and administrative measures taken for the implementation of the Convention		on the results achieved but only on the legal and regulatory framework adopted for its implementation.
Convention on the conservation of European Wildlife and Natural Habitats (Bern Convention)	- Every four (4) years (Implementation Report) - Every two years (Derogations report)	a) A four-year implementation report b) A biennial report on derogations	- The implementation report contains information on the measures taken for the implementation of the Convention as well as on the conservation status of the protected fauna and flora - The biennial report on derogation contains information on the exceptions made under Article par. 1 of Article 9 of the Convention concerning the protection of habitats and species.	Legislative, regulatory and administrative measures taken for the implementation of the Convention. No specific emphasis is given on the measures taken or the practical implementation of the Convention.
Directive 92/43	- Every six years	Report in the form of a questionnaire	- Information on the status of habitats and species as a result of the adopted policies and measures - Information on the policies and measures adopted for the implementation - Information on the experience gained and the lessons learned by the implementation of the Directive	Legislative, Regulatory (lists, designation of sites) and administrative measures for the implementation of the Directive. Emphasis is also given on the establishment of the necessary institutional framework, such the establishment of management bodies for the special protected areas.

Conclusion

The information submitted by the Contracting Parties of the Barcelona Convention concerning the implementation of SPAMI Protocol can be useful for them in many aspects, while compiling the national reports for the other international biodiversity related Conventions. This lies mainly in the fact that reports are submitted every two years and can thus constitute a valuable basis of information concerning marine biodiversity for Contracting Parties. Furthermore, reporting on the legislative, regulatory and administrative measures taken for the implementation of SPAMI Protocol constitutes also an integral part of National Biodiversity Strategies so that this mainly in a summarized version could be used as a source of information for other reporting procedures. If SPAMI Report could focus more on the experiences gained and the lessons learned by its implementation, the submitted information could be of more relevance for other biodiversity-related Conventions.

Annex II

TABLE 2:

**INTERNATIONAL MARINE CONVENTIONS/TWO REGIONAL
CONVENTIONS AND RELEVANT EC DIRECTIVES**

TABLE 2:

INTERNATIONAL MARINE CONVENTIONS/TWO REGIONAL CONVENTIONS AND RELEVANT EU DIRECTIVES

	Frequency of Reporting	Type of Reporting	Subject of reporting (Kind of information requested)	Specific measures to be reported
The United Nations Convention on the Law of the Sea	At appropriate intervals according to Article 205 of the Convention.	General Report in the form of an information report	Information on the results of the measures taken concerning any activities which Contracting Parties permit or in which they engage in order to determine whether these activities are likely to pollute marine environment (Articles 204 and 205 correspondingly)	Because of the general nature and context of the provisions established under UNCLOS no specific information concerning different kinds of measures (legislative, regulatory and administrative measures) to be adopted is required.
The MARPOL 73/78 Convention	Because reporting is primarily of ad-hoc and technical nature, reporting at regular intervals is not established under the terms of the Convention.	a) A specific reporting format for reporting on incidents involving dangerous goods, harmful substances and/or other marine pollutants was adopted in the IMO Res.852(20), which modified previous Resolution 652 (16). Reporting format is accompanied by quite detailed Guidelines b) Communication of	Information on incidents involving harmful substances, dangerous goods and other possible marine pollutants.	Applicable measures of detection of violations and environmental monitoring, such as port inspections.

		Information to IMO in certain cases		
Sea Safety Conventions	Because of the technical nature of their regulations, no regular reporting obligations are established in the majority of Sea Safety Conventions. An annual reporting obligation is established only in the International Convention on the control of harmful anti-fouling systems of the ships	<ul style="list-style-type: none"> - The majority of Sea Safety Conventions foresee only technical or ad-hoc reporting obligations. The required reports are, thus, of ad-hoc and technical nature. - The annual report established under International Convention of the control of anti-fouling systems of the ships is also of technical nature. 	<ul style="list-style-type: none"> -Ad hoc and technical reporting obligations established under the majority of sea safety Conventions require specific information on the design and construction of the ships, equipping, manning and training of the crew. -Information concerning approval, restriction or prohibition of anti-fouling systems is required according to the provisions of Article 9 of International Antifouling Convention. 	-Because of the technical nature of the Conventions, reporting on legislative, regulatory and administrative measures and on institutional arrangements is not required.
International Conventions and Protocols to combat emergency situations	No general reporting obligation at regular intervals is foreseen in the Emergency Conventions. Only ad-hoc reporting obligations are established.	<ul style="list-style-type: none"> -Specific reporting formats for ad-hoc reporting obligations, such as the reporting procedure for oil pollution (Article 4 of OPRC Convention). -Reporting format adopted in the IMO Res. 852/20 on ship reporting systems 	<ul style="list-style-type: none"> -Information on preparedness and response to an oil pollution accident -Information on oil pollution emergency plans on ships, offshore units, sea ports and oil handling facilities -Information on international and regional cooperation on pollution response. 	-No emphasis is given on the regulatory framework for pollution response but mainly on measures on the practical implementation of the Conventions (mainly measures concerning response and preparedness for oil pollution accidents)

		and ship reporting requirements is also used for reporting according to the provisions of the OPRC Convention.		
International Conventions for Liability and Compensation	No general reporting obligations at regular intervals are established in these Conventions.	No reporting formats have been yet developed. (Not special attention is paid to the development of reporting systems. The main aim is to establish rules for liability and compensation)	-----	-----
International Conventions for the protection of marine living sources	- Every year both for International Convention on the Regulation of Whaling and for the Convention on the conservation of Antarctic living sources	-National Reports in the form of scientific reports to be received by the Scientific Committee	Scientific Information, statistical, biological and other data	No emphasis is given to the adoption of legislative and administrative measures, while reports focus on scientific and research activities.

<p>Two important Regional Sea Conventions: 1. The OSPAR Convention 2. The Helsinki Convention on the protection of the Marine Environment of the Baltic Sea Area</p>	<p>At regular intervals, as it is stipulated in Article 22 of the OSPAR Convention and 16 of the Helsinki Convention correspondingly</p>	<p>-Reporting systems of both Conventions focus on reporting on the Decisions and Recommendations adopted to specify their provisions. -Under the OSPAR Convention the Standard Implementation Reporting and Assessment Procedure was adopted. For each Decision a lead country that prepares the reporting format and receives national reports has to be designated. -A similar reporting system -foreseeing also the designation of a lead country for reporting on each Decision- has been adopted within the framework of HELSINKI Convention</p>	<p>-Information on both the regulatory and technical measures taken to implement the context of each relevant Decision or Recommendation -Information on compliance with the technical standards and environmental objectives set out in each Decision or Recommendation -Information on the results achieved after the adoption of the measures and assessment of their efficiency.</p>	<p>-Legislative, regulatory and administrative measures taken for the implementation of each Decision and Recommendation -Technical measures as well as measures taken for the practical implementation of each Decision</p>
---	--	---	--	---

<p>Directive 2000/59/EC on port reception facilities</p>	<p>a) Every three years b) After the transposition of the Directive into their legal systems, States have to inform the Commission once about the legislative and regulatory measures</p>	<p>a) Status Report on the implementation of the Directive being mainly of technical nature b) Ad-hoc report concerning Port State alleged in inadequacies for port reception facilities</p>	<p>-Information on the status of implementation of the Directive mainly concerning compliance with requirements for port reception facilities</p>	<p>Only measures for the practical implementation of the Directives</p>
<p>Directive 2001/106/EC (Port State Control Directive)</p>	<p>Every year</p>	<p>Technical Report</p>	<p>-Information on the number of inspectors acting on the behalf of Member States in the framework of port state control of ships -Information on the total number of ships that entered their ports at national level</p>	<p>Measures to enforce international standards for ship safety, pollution prevention and shipboard living and working conditions</p>
<p>Directive 2002/59/EC</p>	<p>No reporting obligation at regular intervals is established</p>	<p>-A General report concerning the implementation of the Directive is under Article 26 of the Directive - Ad- hoc reports to be submitted by ship-masters</p>	<p>-Information on the regulatory framework only included in the General report -Information on the compliance with the ship reporting requirements and the establishment of monitoring systems included mainly in ad-hoc reports</p>	<p>-Legislative, regulatory and administrative measures as well as institutional arrangements taken for the implementation of the Directive</p>

Conclusion

Because of the specific regulative context and scope of application of the International Conventions for the protection of marine environment, the reports to be submitted are mainly of ad-hoc and technical nature. The design of the reporting format of the Emergency Protocol to the Barcelona Convention also responds to its specific context and scope of application, similar with that of the aforementioned Conventions. The information that has to be submitted for the so-called Emergency Conventions as well as for the MAR-POL Convention could also be of relevance, while compiling Reporting Format for Emergency Protocol.

Annex III

TABLE 3:

**POLLUTION PREVENTION CONVENTIONS
AND RELEVANT EC DIRECTIVES**

TABLE 3:
POLLUTION PREVENTION CONVENTIONS AND RELEVANT EC DIRECTIVES

	Frequency of Reporting	Type of Reporting	Subject of reporting (Kind of information requested)	Specific measures to be reported
The 1972 London Convention on the prevention of marine pollution by dumping of wastes and other matters (and the 1996 Protocol to the Convention)	-Annual reporting obligation for records of dumping permits - At regular intervals for measures taken and their effectiveness	- An annual technical report containing information on the nature and quantities of all matter permitted to be dumped and the location, time and method of dumping - A regular report on the implementation of the Convention - Ad-hoc reports: A specific reporting format for observed dumping incidents was adopted	- Annual technical report contains information on the records of all the matter permitted to be dumped and the location, time and method of dumping. - Regular report contains information on dumping permissions and the conditions of the sea. Specific information concerning the criteria, measures and requirements for dumping permissions is also requested. Information on monitoring the conditions of the sea.	- Legislative, administrative and regulatory measures adopted for the effective application of this Convention. Specific measures established within the framework of the permitting scheme.
The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their disposal	Every year	- Annual report in the form of a Questionnaire consisting of two Parts: Part I- Information on wastes Part II-Information for the generation and	- information on wastes controlled for the purpose of transboundary movements, restrictions on transboundary movements of hazardous wastes, control procedures, reduction and/or elimination of the generation of hazardous wastes, effects on human health and environment and bilateral and multilateral agreements - data for the generation and transboundary	Regulatory and administrative measures to ensure that transboundary movements of wastes are reduced to the minimum with environmentally sound and efficient management

		transboundary movements of hazardous wastes -Ad hoc reporting is also foreseen in case of an accident occurring	movements of hazardous wastes, amount of hazardous wastes exported and imported, the disposals which did not proceed as intended and the accidents occurring during transboundary movements and disposals	
The Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade	At least once in every period between two ordinary Meetings of the Conference of the Parties	Reporting format in the form of a Questionnaire consisting of two parts	Information on the implementation of the Articles referred in this part Information on the problems encountered and on the experience gained by the implementation process	Measures and actions in order to protect human health and the environment from potential harm and to contribute to their environmentally sound use by providing for a national decision-making process on import and export of certain hazardous substances
The IPPC Directive	Every three years	a) Reporting format in the form of a Questionnaire. b) Inventory of principal releases and sources is to be published by the Commission every three years based on data supplied by the Member States	Information regarding the development of the integrated permitting scheme, the definition of best available technologies and the setting of quality standards. Information on the emissions to air and water from all individual facilities with one or more activities. site-specific information on relevant polluting sources by using public networks	- Legislative and administrative measures concerning the establishment of the permitting scheme - Institutional arrangements necessary for the function of the permitting scheme such as the designation of a competent authority or measures taken to ensure effective coordination

Annex IV

TABLE 4:

REPORTING SYSTEMS OF OTHER CONVENTIONS

TABLE 4:
REPORTING SYSTEMS OF OTHER CONVENTIONS

	Frequency of Reporting	Type of Reporting	Subject of reporting (Kind of information requested)	Specific measures to be reported
Aarhus Convention	At Regular Intervals mainly in advance to the next Meeting of Contracting Parties	Reporting format consisting of an implementation report focusing on the implementation of the Articles of the Convention and of an activity report	-Information on the necessary legislative, regulatory and other measures taken for the implementation. -Information on the measures taken for the practical implementation of the Convention -Information on other relevant activities undertaken.	-Legislative, regulatory and administrative measures -Measures for practical implementation -Efforts to establish emission inventories
UN Convention to Combat Desertification (UNCCD)	6 months prior to the session in which the reports are to be reviewed	Two kinds of reporting formats: aa) reporting format for reports that have to be submitted by affected Countries that implement National Action Programmes bb) Reporting formats for reports that have to be submitted by developed countries (Article 26 of the Convention)	-Information on priorities and strategies within the framework of sustainable development strategies and plans, --Information on financial allocations from national budget -A review of information on the benchmark and indicators utilized to measure progress Country profile with statistical data on geo-topographic, biophysical and socio-economic indicators relevant to the assessment of desertification.	-Legislative, regulatory and administrative measures within the framework of national sustainable development policies -Institutional framework in terms of establishing institutional bodies responsible for combating desertification

United Nations Framework Convention for Climate Change (UNFCCC)	Every year for submission of national inventories Every two years for submission of national communications	Report consisting of two separate parts: a) national inventories b) national communications	-National inventories contain specific information on anthropogenic emissions by sources and removals by sinks of greenhouse gases not controlled by the Montreal Protocol -National Communications contain detailed information of policies and measures taken within the framework of National Sustainable Development Strategies as well as on their effects on greenhouse gas mitigation	Special emphasis is given on the description of the type of the measures adopted (regulatory, economic and fiscal measures), on the status of their implementation, on the quantitative estimation of their impact as well as on the costs for their implementation including economic costs

Conclusion

Although these Conventions have no direct relevance to the regulative context of the Barcelona Convention and its Protocols, their reporting systems could serve to some extent as role models for the future development of the reporting system of the UNEP-MAP Legal Component. This lies primarily in the fact that their reporting systems contain far-reaching and innovative reporting requirements so that it is facilitating for Contracting Parties to submit the appropriate piece of information.