

## ENVIRONMENT

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## I. GENERAL POLICY

### 1. Are there any constitutional provisions in relation to environmental protection and/or sustainable development?

The Constitution of the Republic of Macedonia ("Official Gazette of RM" No. 52/91) and Amendments to the Constitution of the Republic of Macedonia (Decision for Proclamation of the Amendments to the Constitution of RM, "Official Gazette of RM" No. 52/91, 1/92, 31/98, 91/01,84/03) contains provisions regarding environment protection. Although the Constitution does not contain the term "sustainable development", it contains articles referring to fundamental principles upon which the sustainable development is founded.

Under the General Provisions of the Constitution, **Article 8, paragraph 1, item 10**, one of the basic principles of the fundamental values of the constitutional order of the Republic of Macedonia is space development based on urban and rural planning to promote and improve social wellbeing and protection and promotion of the environment and nature.

The right to a healthy environment, as one of the Basic freedoms and rights of the citizens, is regulated in the Constitution of the Republic of Macedonia as a social right which guarantees the right of citizens to a healthy living environment. At the same time, citizens are obliged to improve and protect the environment, while the republic is obliged to provide conditions for the exercise of this citizens' right (Article 43).

The Constitution of the Republic of Macedonia specifies that the freedom of the market and entrepreneurship can be restricted by law only for reasons of the defense of the Republic, protection of the nature and environment or public health (Article 55).

All the natural resources of the Republic of Macedonia, the flora and fauna, amenities in common use, as well as the objects and buildings of particular cultural and historical value determined by law, are goods of common interest for the Republic and enjoy specific protection. The law regulates the manner and conditions under which specific goods of general interest for the Republic can be ceded for use (Article 56).

International agreements ratified in accordance with the Constitution are part of the internal legal order and cannot be changed by law (Article 118). The courts judge on the basis of the Constitution, the laws and the international agreements ratified in accordance with the Constitution.(Article 98, paragraph 2)

Amendment XVII of the Constitution of the Republic of Macedonia specifies that "in units of local self-government, citizens directly and through representatives, participate in decision-making on issues of local relevance particularly in the fields of public services, urban and rural planning, environmental protection."

The Amendment IV of the Constitution of the Republic of Macedonia contains the key principles of sustainable development, i.e. it reads "The citizens of the Republic of Macedonia... taking responsibility for the presence and for the future of their fatherland, ... and responsible to future generations for preserving and developing everything that is valuable...". The Constitution contains the three pillars upon which the concept of sustainable development is founded, those being: economic development, social equity and the environmental protection. Namely "The citizens of the Republic of Macedonia... have decided to establish the Republic of Macedonia as an independent, sovereign state, with an intention to... guaranteeing human rights and civil liberties, to provide... social justice, economic welfare and prosperity in the life of the individual and the community...".(Amendment IV)

The basic freedoms and rights of human beings and citizens as stipulated in the Constitution of the Republic of Macedonia correspond with the three pillars of the sustainable development, those being:

- The right to work, to free choice of employment... (Article 32)
- The right to social security and social insurance... (Article 34)
- The right to a healthy living environment ... (Article 43).

In addition, the Constitution of the Republic of Macedonia guarantees the right to education, the right to health care insurance, etc., and the republic is the entity that provides protection especially for mothers, children and minors and “provides special care and protection for the family”, etc.

## **2. Is there a general environmental protection framework act, serving as a basis for other environmental legislation?**

Yes. In 1996, in line with the model of framework environmental laws of the Council of Europe, the Law on Environment and Nature Protection and Promotion (Official Gazette of RM No 13/03 consolidated text) was developed and adopted in the Republic of Macedonia. The Law has provided the basic legal framework of environmental protection and introduced the basic instruments of environment and nature protection and improvement, before that regulated by individual laws. The Law defines the rights and responsibilities of legal entities and natural persons in the areas of environment and nature protection and improvement; the development of planning documents in the area of environment, such as the National Environmental Action Plan (NEAP) and Local Environmental Action Plans (LEAPs); and stipulates the protection control mechanisms. For the first time the Law regulates the issues of environmental labelling, environmental monitoring as an integrated system, including environmental information system. According to the Law, the access to environmental information is free and such information is public. The Law also regulates the issue of environmental impact assessment, in a manner suitable to the circumstances in the Republic of Macedonia at the time of its adoption. The Law has provided for the establishment of the Fund of Environment, intended to support the environment and nature protection and improvement, as an economic instrument. Significant benefit brought by the Law was the establishment of the State Environment Inspectorate, as law enforcement instrument. The Law has significantly contributed to the development of environmental policy in the Republic of Macedonia and to the increase of the public awareness. With few exceptions, the Law on Environment and Nature Protection and Promotion has not been fully harmonised with the relevant EU Directives.

In the last two years, the Ministry of Environment and Physical Planning has worked on the development of five environmental laws, including the Law on Environment as a framework law in the area of environment, which has transposed the segment of the *Acquis Communautaire* known as horizontal legislation, through the process of approximation of the national legislation to the EU legislation. The Draft Law on Environment is expected to be adopted by the end of the first quarter of 2005, see [22 Annex 01](#),.

The Framework Law on Environment incorporates the basic principles of environmental protection, on the basis of which the relevant environmental management procedures are regulated. They are common to the principles of the laws regulating individual areas of the environment. The Law regulates the issues of access to environmental information, public participation in environmental decision-making, environmental impact assessment procedure, plans for industrial accidents controlling, as well as control mechanisms available to environmental inspectors. The Law places specific emphasis on integrated environmental permits, with regard to which it introduces the system of gradual adjustment to the required standards for integrated pollution prevention and control, through the introduction of integrated permits for compliance with operational plans, representing a condition for existing installations in the Republic of Macedonia to continue their operations.

### **The major EU Directives transposed are:**

- Directive 85/337/EEC as amended by Directive 97/11/EC on the assessment of the effects of certain public and private projects on the environment;

- Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment;
- Directive 96/61/EC on Integrated pollution prevention and control;
- Directive 2003/4/EC of the European Parliament and of the Council on public access to environmental information and repealing Council Directive 90/313/EEC;
- Directive 2003/35/EC of the European Parliament and of the Council providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment and amending with regard to public participation and access to justice Council Directives 85/337/EEC and 96/61/EC;
- Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances;

The following Directive and document have been taken into consideration:

- Proposal for a Directive of the European Parliament and of the Council on environmental liability in regard to the prevention and remedying of environmental damage (Brussels, 23.1.2002, 2002/0021 COD);
- Council Directive 91/692/EEC of 23 December 1991 standardizing and rationalizing reports on the implementation of certain Directives relating to the environment.

This Law implements the requirements arising from the relevant international instruments ratified/signed by the Republic of Macedonia:

- Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Åarhus Convention), ("Official Gazette of RM" No 40/99).
- The Convention on Environmental Impact Assessment in Transboundary Context (Espoo Convention), ("Official Gazette of RM" No 44/99).
- Protocol on Strategic Environmental Assessment to the Convention on Environmental Impact Assessment in Transboundary Context (Kiev, Ukraine, May 2003)

The Draft Law on Environment is a basic law, which treats principally all environmental media and areas, including the basic global issues. It provides a foundation for the adoption of secondary legislation for the detailed regulation of certain issues related to the protection of the environment.

The Law provides a framework for the regulation of individual environmental media and areas, by the adoption of specific laws, including:

- Law on Waste Management ("Official Gazette of RM" No 68/04, 71/04), see [22 Annex 02](#),
- Law on Nature Protection ("Official Gazette of RM" No. 67/04), see [22 Annex 03](#),
- Law on Ambient Air Quality ("Official Gazette of RM" No. 67/04), see [22 Annex 04](#), and
- Draft Law on Waters, the adoption of which is expected by the end of the first quarter of 2005, see [22 Annex 05](#),.

The process of the new legislation development in the Republic of Macedonia is carried out in accordance with the Programme for Approximation of the National Legislation to the Legislation of the European Union, as well as in accordance with the European Partnership Action Plan, according to which the emphasis in the coming period shall be placed on the adoption of specific laws in the areas of noise, chemicals and genetically modified organisms.

In the framework of the CARDS 2005 Environmental Programme, activities have been projected concerning the approximation of the environmental legislation, aimed at estimating the required investments in the area of environment related to the acquis, as well as the responsibilities and obligations of the institutions in the Republic of Macedonia, and defining the time frame of the process of approximation to the relevant EU legal instruments.

### 3. What are the main principles regulating environmental legislation (e.g. polluter pays principle, precautionary principle, etc.)?

The new legislation of the Republic of Macedonia in the area of the environment protection and improvement incorporates the EU Environmental Policy Principles, but it also devotes high attention to the principles of environmental protection bearing national, regional and local mark. Each of the laws, under separate chapters, determines the basic principles on which legal provisions are based.

The Draft **Law on Environment**, the adoption of which is expected by the end of the first quarter of 2005, in Chapter II – Principles of environmental protection, contains the following principles:

**Principle of high level of protection** obliges each citizen to provide high level of protection of the environment and of human life and health, while undertaking or performing activities.

**Principle of integration** provides for the goals of the policy of environment protection and improvement to be integrated into other sector policies adopted by the bodies in the Republic of Macedonia (development, agriculture, transportation, etc.)

**Principles of sustainable development** pose the obligation that, in undertaking or performing any activity, care should be taken for rational and sustainable use of natural resources, for the purpose of satisfying the needs for the healthy environment, as well as social and economic needs of present generations, without jeopardizing the rights of future generations to satisfy their own needs.

**Polluter pays principle** imposes the obligation for the polluter to compensate for the costs of damage made in order to restore the environment, to the maximum extent possible, to the state before the damage.

**The user pays principle** is aimed at the user of resources compensating for the costs related to the sustainable development and environmental remedy resulting from the use of natural resources.

**Principle of subsidiarity** refers to the units of the local self-government which, within the scope of their competences determined by law, have the right and obligation to undertake, within their territory, all the measures and activities concerning environment protection and improvement, which are not under the exclusive competence of public bodies.

**Principle of proportionality** provides for the proportionality between the needs for development and the needs for environmental protection.

**Principle of prevention** poses the obligation that measures and activities for environment protection are undertaken prior to the appearance of harmful effects.

**Precautionary Principle** reaches slightly beyond the principle of prevention and establishes a basis for undertaking necessary measures for the environment protection, in case of a well founded suspicion, rather than waiting for the available scientific evidence.

**Cleaner Production Principle** establishes grounds for introduction and endeavouring towards cleaner types of production techniques and processes in general, thus towards emissions and waste minimization.

**Principle of international cooperation** states that the Republic of Macedonia will take an active part in the regional and wider international cooperation in the area of the environment protection and improvement.

**Principle of public participation and access to information** obliges the bodies of the Republic of Macedonia (both central and local) to provide all necessary measures and prescribe procedures by means of which the right of access to environmental information and public participation will be provided and to specify conditions for the public participation in the process of all environmental decision making.

**Principle of increasing the public environmental awareness** obliges the scientific, educational, health care, information, cultural and other institutions, including civil associations within the scope of their activities, to promote and provide for public awareness increase with regard to the importance of environment and its protection.

**The Law on Ambient Air Quality** ("Official Gazette of RM" No. 67/04), incorporates the principles contained in the Draft Law on Environment but it also stipulates, under separate chapter, other principles closely related to air protection:

**Principle of careful and responsible behaviour** referring to the activities that might have adverse impact on the quality of the ambient air, so that each individual is obliged to behave in careful and responsible manner, in order to avoid and prevent ambient air pollution and to avoid and prevent causing harmful effects on human health and the environment as a whole.

**Principle of time perspective** – the terms specified in plans, programs and decisions related to ambient air quality management should correspond with the time perspective of expected effects.

The **Draft Law on Waters**, the adoption of which is expected by the end of the first quarter of 2005, undertakes some of the principles stipulated by the Draft Law on Environment (which puts the protection of nature at high level), but it is also supplemented by the following principles of sustainable water resources management:

**Eco-social economic concept** defines waters as a part of natural processes requiring protection as habitats of flora and fauna in the environment. Water resources management is of public interest.

**Principle of the minimization of resources use** provides for careful and rational use of water during the activities that might have impact on waters.

**Principle of integration** - this principle incorporates the integrated water management, from several points of view: mutual linkage between surface and ground water resources, their relationship with water dependent ecosystems and with other environmental media, the consent of directly involved institutions and users and the link with other sectors, the cooperation in matters related to transboundary water resources, as well as the integration of measures and activities for water protection into all development, strategic, planning and program documents adopted by public bodies and by the local self-government units.

**Polluter pays principle** obliges water polluters to compensate for the expenses for reverting polluted waters into their previous condition.

**The principle of compensation for expenses** - A water user is obliged to compensate for all expenses arising from service delivery, including expenses related to the water resources used thereby and for the expenses related to the environment, in accordance with the polluter pays principle.

**Principle of pollution prevention at the source of pollution** – Pollutant emissions shall be prevented at the source of their occurrence.

**Time perspective principle** – according to this principle, the terms in plans and decisions for water resources management correspond with the time perspective of expected effects.

**Principle of stakeholders' participation** is a principle which obliges competent bodies to take into account the interests of all stakeholders in the decision making procedure related to water resources management and protection.

**Law on Waste Management** ("Official Gazette of RM" No. 68/04, 71/04), apart from the principles stipulated under the Draft Law on Environment contains the following principles:

**Principle of environmental protection in waste management** refers to the provision of a high level of protection of the environment, human life and health while undertaking activities related to waste management by legal entities and natural persons. At the same time, these are obliged to use raw materials the processing of which generates less waste, to apply technologies that provide for cleaner production and save natural resources. This principle indicates compulsory use of the Best Available Techniques (BAT) which is in the basis of Integrated Pollution Prevention and Control (IPPC).

**Proximity Principle** specifies that waste is processed primarily at the place of its generation, while waste that cannot be processed at the place of its generation, due to justified technical and technological or economic reasons, has to be transported for processing or be disposed of at the nearest sites determined for that purpose.

**Principle of universality of services** – Universality of services regarding waste management should be ensured through non-discrimination, service sustainability, quality and efficiency, transparency, economically affordable price and full coverage of the area of service delivery.

**Polluter pays principle** is identical to the equally titled principle in the Draft Law on Environment, only that it specifies that the waste generator and/or holder are obliged to bear all expenses arising from waste management, including expenses related to the waste collection, transportation,

treatment, storage, disposal, prevention and monitoring, as well as expenses related to the remedial measures for the damage caused by waste or damage that could be caused by waste.

**System of deposit** - When buying certain products, the buyer is obliged to pay some extra amount to the product price, which will be returned to him/her upon returning the used products and packaging back to the seller, provided that the used products and packaging can be processed and that this is marked in a manner specified in accordance with the law or other regulation.

**Law on Nature Protection** ("Official Gazette of RM" No. 67/04), is, apart from the principles stipulated under the Draft Law on Environment, founded on the following principles:

**Principle of high level of environmental protection** is identical to the equally titled principle of the Draft Law on Environment and of the particular Draft Law on Waters and Law on Waste Management, only that this principle emphasizes the protection of biological and landscape diversity, as well as of natural heritage.

**Principle of integration** - establishes grounds for integrated nature protection in all development strategic plans and documents which are in any way related to nature protection.

**User pays principle** aims at the user of natural resources compensating for expenses for the maintenance of natural balance.

**Principle of cooperation** imposes the obligation on state administrative bodies, units of the local self-government and other organisations and institutions to observe, in the course of their work, the principles, the goals, the measures and the activities concerning nature protection and to implement mutual and international cooperation in full.

#### **4. Is there a national long term strategy related to environmental protection and sustainable development?**

Strategic determinations of the Republic of Macedonia in the area of environment protection and improvement have been defined and elaborated in the National Environmental Action Plan (NEAP), developed in 1996 with the financial support provided by the World Bank. The development of the second NEAP is underway (2004/2005), supported by the European Union CARDS 2001 (for more details see [22 I P5](#))

In 2004, the Assembly of the Republic of Macedonia adopted the Spatial Plan of the Republic of Macedonia, which incorporates emphasized strategic development connotation and defines and establishes the basis, and at the same time feasible goals and directions of the development, especially with regard to the necessary qualitative and quantitative structural changes and the relevant and adaptable spatial planning solutions and options. This document constitutes the basis for the organisation, development, use and protection of space in the Republic of Macedonia, covering a 20-year period. The Study on the environment and nature protection, carried out within the framework of the Plan, specifies the goals and planning determinations for environment protection, as part of the overall activities in the field of spatial planning.

The process of elaboration of many sector specific strategic documents that define development policies and contain action plans for the implementation of specified actions, incorporates the environmental sector, i.e. the impacts from other sectors on the environment protection and improvement). (for more details see [22 I P12](#)).

The Republic of Macedonia is in the preparatory stage of developing the National Strategy for Sustainable Development and the Action Plan (NSSD and AP), during which several documents have been elaborated:

- „Conceptual approach for the creation and implementation of the National Strategy for Sustainable Development of the Republic of Macedonia”, 2000;
- „National sustainable development assessment of the Republic of Macedonia”, 2002;
- “Research concept supporting the creation and implementation of the National Strategy for Sustainable Development”, 2003.

According to the Decision taken by the Government of the Republic of Macedonia, the Ministry of the Environment and Physical Planning (MEPP) has been appointed as a focal point for the activities aimed at the development of the National Strategy for Sustainable Development of the Republic of Macedonia. According to the National Strategy for Integration of the Republic of Macedonia into the European Union, the NSSD and AP of the Republic of Macedonia are among the priorities of the Government. In addition, according to the „Council Decision on the principles, priorities and conditions contained in the European Partnership with the Republic of Macedonia”, adopted on 09.06.2004, the need for developing the National Strategy for Sustainable Development in accordance with the *acquis*, including comprehensive plan for implementation of the recommendations specified in the conclusions of the World Summit of the United Nations on Sustainable Development, in Johannesburg, 2002” is stated under short-term obligations in PP 30: Environment.. Acting upon this Decision, the MEPP developed a plan of measures and activities, which has been incorporated in the European Partnership Action Plan. The commencement of the development of the NSSD and AP of the Republic of Macedonia is planned in 2005, and the adoption thereof in 2008, to be followed up by its implementation.

The Ministry of the Environment and Physical Planning financed the development of the Guide to Local Agenda 21 (2004), for the purpose of the development and implementation of local strategies and action plans for sustainable development intended for the local self-government units.

**5. Is there a concrete action programme for the environment with short and medium term objectives, means provided and a timetable? Is it linked to the EU environmental *acquis* and how is its implementation monitored?**

In the Republic of Macedonia the National Environmental Action Plan was drawn up (1996, supported by the World Bank). The legal grounds for its adoption are composed of the Law on Environment and Nature Protection and Promotion (“Official Gazette of RM” No.13/03 consolidated text). The priority goal of this document was to establish the basis for the introduction of environmental management system and to define the goals of environmental policies by areas, as well as the key challenges faced by the country in the period of transition in the field of the environment. It identified the sources of pollution, competent institutions, etc.

The development of the NEAP 1 was the first step towards the integration of environmental policy into the economic and social development programme of the country. According to its recommendations, the establishment of the Ministry of Environment and the Fund of the Environment, with appropriate organizational set-up and their own budgets, was set as one of the top priority actions.

The Action Plan defined the areas, the goals and the actions and determined the time frame for their implementation: short-, medium- and long-term, without identifying the sources and levels of financial resources required. In the period following the adoption of the document, the actions specified in the NEAP have been partially financed by the budget of the Ministry of Environment and Physical Planning, through the Fund of the Environment, as well as through external donations.

With regard to the monitoring of the process of implementation of the Action Plan, it is obvious that the document does not include such mechanism. Based on this fact and in accordance with the identified deficiency of the NEAP 1, the said mechanism will be elaborated through the process of the drawing-up of the second NEAP.

In the context of the obligations of the Republic of Macedonia deriving from the Stabilisation and Association Agreement, the necessity to review the approach of the legislation, policies, mechanisms, etc., in the area of the environment has been noted, for the purpose of gradual implementation of the environmental *acquis* of the European Union. The process of the development of the second NEAP will take into account the terms for the implementation of the relevant EU Directives transposed, or to be transposed, into the Macedonian legislation, as specified in the Programme for Approximation of the National Legislation to the Legislation of the European Union. In



this context, the terms for the implementation of the obligations specified in the new environmental laws (Draft Law on Environment, Draft Law on Waters, Law on Waste Management – “Official Gazette of RM” No. 68/04, 71/04, Law on Ambient Air Quality – “Official Gazette of RM” No.67/04 and Law on Nature Protection – “Official Gazette of RM” No.67/04), which have been fully harmonised with the relevant EU Directives, will be taken into account.

With regard to the above, the second NEAP will specify short- and medium-term goals/actions for environment protection and improvement, observing the terms specified in the National Strategy for the Integration of the Republic of Macedonia into the EU, the European Partnership Action Plan and the Programme for Approximation of the National Legislation to the Legislation of the European Union. The sources and levels of financial resources required for their implementation will be determined in general, taking into account the resources available in the country within the Budget of the Republic of Macedonia, the Fund of Environment and donors’ programmes that support projects in the field of environmental protection.

The completion of the second NEAP will lay down the basis for the achievement of the following goals:

- Reform of the approach towards environment management (institutional strengthening in the area of monitoring, elimination of existing overlapping of competences between institutions and the establishment of a system and procedures that will provide for safe environmental management)
- Definition of frames of environment planning and management
- Definition and strengthening of institutional capacities regarding environment integration in economic and social areas/national progress in the process of sustainable development
- Facilitation in the process of transferring responsibilities in the area of the environment from central to the local level (decentralization)
- Strengthening the intersectoral / interministerial cooperation
- Creation of favourable conditions in the Republic of Macedonia regarding environmental protection, financing and investments

The second NEAP will contain the following chapters:

- Introduction – development of environmental policy in correlation with the processes of sustainable development establishment, decentralization, and integration of the Republic of Macedonia into the European Union;
- Policies and strategies for environment improvement and sustainable development, stakeholders involved and their roles;
- The state of the environment: air, water, waste, soil, nature and biological diversity, human health;
- Sectoral policies and their impacts on the environment: industry, energy, transport, agriculture, forestry, spatial planning, tourism;
- Mechanisms and instruments for: environmental management, institutional framework – interministerial and intersectoral planning, monitoring and evaluation of the environment and the process of implementation of the recommendations covered by the NEAP, financing and investment in environmental protection, economic instruments, public participation and access to information, etc.
- Setting priorities, goals and actions aimed at environmental quality improvement/Action Plan;
- Costs and potential financial resources for the implementation of the NEAP.

**6. How are you ensuring that your environmental legislation and policies are aligned with EU environmental legislation? What are the main difficulties encountered? Outline your investment plans and what you have done in the last 3 years to meet the demands of the environmental acquis.**

In order to provide an overview of the present status, institutions, mechanisms and planned activities in the process of harmonisation of the national legislation, as well as to determine the directions,

content and dynamics of the legislation harmonisation, including the one in the area of the environment, the Government of the Republic of Macedonia adopted a number of documents:

- Programme for Approximation of the National Legislation to the Legislation of the European Union, which is updated on an annual basis and represents a control mechanism in the monitoring of the process of legislation harmonisation. Chapter 22 Environment refers to: the provisions of the Stabilisation and Association Agreement (SAA) which establish the basis for the obligation concerning the harmonisation of national legislation, the implementation deadline, the competent body, the overview of the relevant EU legislation, as well as the overview of the existing national legislation and the planned legal acts to be adopted. The Chapter is divided into subgroups, in accordance with the CELEX structure. The Ministry of Environment and Physical Planning is the competent body with regard to the harmonisation of the legislation referred to in Chapter 22 of the Programme for Approximation of the National Legislation to the Legislation of the European Union,.

- Procedural Manual on the approximation of the legislation with that of the EU aimed at organizing the legislation harmonisation procedure in a uniformed manner and at delegating clear tasks to the competent bodies involved in the harmonisation process: on the manner of treatment, organization, coordination, reporting and control of relevant activities. The Procedural Manual contains: individual steps and activities that need to be taken by the Ministries, through the establishment of Working Groups (WGs) and Working Subgroups; the manner of submitting reports; etc.

According to Article 103 and Article 68 of the SAA, the harmonisation of the environmental legislation is an obligation of the Ministry of Environment and Physical Planning (MEPP), which has established the internal institutional structure required for the process of harmonisation of the national legislation with the EU legislation. Namely, two Sectors within the MEPP hold the responsibility for the European Integration: Sector of European Integration and Sector of Legislation and Standardisation, which is responsible for the harmonisation of environmental legislation and leads the WG 22 – Environment under the Programme for Approximation of the National Legislation to the Legislation of the European Union

Taking into consideration the terms specified in the Programme for Approximation of the National Legislation to the Legislation of the European Union, the MEPP prepares a work programme each year, defining the activities planned in accordance with the Programme for Approximation of the National Legislation to the Legislation of the European Union.

According to the experience of the Ministry of Environment and Physical Planning, the harmonisation of national environmental legislation with that of the EU has been so far achieved through:

- The establishment of inter-ministerial Working Groups for legislation harmonisation, which have developed into driving forces for most of the activities related to the drafting of legal texts and which created a platform for the development of the new environmental legislation compatible with the EU law. Members of the said WGs have been selected in such a way that a maximum possible balance of all stakeholders is achieved. Members of the WGs have been appointed upon prior official request by the MEPP and on the basis of the nomination from other stakeholders, including the relevant Ministries, governmental institutions, local self-government bodies, NGOs, business sector, the Economic Chamber of Macedonia and other organisations.

- An Action Plan for Environmental Legislation Harmonisation has been developed to serve the needs of the MEPP, as a Guide on individual steps required in the domain of analysis and drafting of laws. Each WG consisted of a core group which has initiated and managed the activities, while the wider WG has provided the required consultations. The respective core groups have regular meetings, while wider groups meet at longer intervals (mostly once a month). The core groups are composed mainly of members representing the MEPP and other bodies, and whenever possible the international and local, senior and junior, technical and legal experts are involved. Each WG has its secretariat which organizes the meetings of the WG, prepares the agenda, takes minutes from the meetings and provides communication within both the core and wider relevant working group, as well

as between the two of them. The secretariat also keeps records of the documents of the WG. Owing to such an approach, numerous institutions (both from the public and private sectors) are involved in drafting the relevant legal texts.

- With regard to each Directive relevant to drafting the law, Tables of Correspondance are prepared in order to present, in a tabular manner, the status of transposition and the extent of compliance of the current law with the draft national legislation.
- For the purpose of informing the public on the obligations deriving from the new environmental legislation, as well as providing public participation in the overall process, public debates and workshops are organized at all stages.
- Before the draft of the legal act is submitted to the Government of the Republic of Macedonia, a statement on its compliance with the EU law is prepared. This document includes all basic data on Directives transposed in the proposed legal act, as well as the relevant provisions of the SAA implemented through the legal act.

One of the key challenges faced during the drafting of laws was the lack of knowledge on the requirements of the Directives by participants representing other sectors. In this context, additional workshops were organized to present the goals and the policy of each relevant Directive or other EU act.

Another problem was posed by the current division of responsibilities among the state administrative bodies in the Republic of Macedonia. Some of them demonstrated resistance to the need for redefinition of the competencies of individual bodies, resulting from the need for integration of the environmental policy. In the context of the above, additional problem was the lack of human resources within state administrative bodies, and this was solved by involving experts participating in projects carried out by the MEPP, as well as by involving external experts.

In the Republic of Macedonia, there is no unique environmental investment plan, which would specify investments required for the purpose of the implementation of the Acquis Communautaire. Investments are mostly carried out on the basis of the priorities set in individual national plans and programmes, as well as on the basis of terms specified in laws. In addition, when determining the investments, the obligations deriving from the SAA are taken as the criteria for investment also as well as the relevant EU Directives.

In more specific terms, the National Environmental Action Plan (NEAP) has identified the priorities as well as the activities through which such priorities will be achieved. The activities indicated in the NEAP represent a frame for the allocation of financial resources of the Fund of Environment, the MEPP and the foreign donations.

Under the PHARE SOP 99 the initial analysis of the required economic, financial and administrative conditions for the approximation to the EU in the area of environment was completed. The document includes preliminary estimates of the expenses related to the required investments and the coverage of major investments arising from the EU high cost Directives. The document also contains an indicative frame for cost planning in the context of approximation to the EU and financial implications in environmental sectors requiring heavy investments.

With the support by the European Commission, through the Regional Environmental Reconstruction Programme for South Eastern Europe, the Priorities Environmental Investment Programme for South Eastern Europe was developed, which includes the Republic of Macedonia. The Program presents a list of priority environmental investments, which will certainly be useful in the process of investment planning at the national level.

According to the data of the State Statistical Office in the period between 2000 and 2002 following financial amounts in the area of environment protection were invested:

Environmental investments							
							In thousand denars
	total	waste	water	noise	air	soil and water	flora and fauna
2000	80.048	55.408	7.804	85	7.918	6.796	2.037
2001	91.190	33.030	21.632	30	23.906	8.182	4.410
2002	151.489	60.742	8.722	6.133	4.066	5.331	66.495
Source: State Statistical Office							

In the last three years the financial resources of the Fund of Environment and of the MEPP budget have been mainly invested in the following fields: water, air, waste and biological diversity, and the activities of public education and awareness raising have been supported, too.

The following investments are among the most significant:

- More than one billion denars from the Budget of the Republic of Macedonia, other funds, funds of the JSC Electric Power Company of Macedonia and resources generated through the sale of JSC Macedonian Telecommunication, have been invested in the development of the Hydro-system for Dojran Lake Salvage;
- more than 18.000.000 MKD have been invested in the establishment of river monitoring;
- 25.000.000 MKD have been invested in the construction of wastewater treatment plant in Prilep (Studencica);
- the MEPP contributed 10 million denars for the setting up of air quality monitoring stations;
- in total 5.000.000 MKD have been allocated for waste removal from illegal dump sites;
- for the purpose of environmental hot spot elimination, as is the case of tailings spill-over from the "Sasa" mine, and for the purpose of the rehabilitation of the Ramina land-slide, 150.000.000 MKD have been invested;
- around 15.000.000 MKD have been invested in biological diversity protection.

In the course of the last three years, the MEPP and the Environment Fund have executed investments amounting to 658.702.000,00 MKD, or by years:

- 2002 - 359.442.000 MKD
- 2003 - 149.100.000 MKD
- 2004 – 150.160.000 MKD.

**7. Give a detailed description (with staffing levels) of the administrative bodies (Ministries, agencies etc.) responsible for enacting, implementing and enforcing environmental legislation and policy? How are the responsibilities shared for the various sectors (water, waste, nature protection etc.)?**

According to the Constitution of the Republic of Macedonia ("Official Gazette of RM" No. 52/91) and Amendments to the Constitution of the Republic of Macedonia (Decision for Proclamation of the Amendments to the Constitution of RM, "Official Gazette of RM" No. 52/91, 1/92, 31/98, 91/01,84/03), the Assembly of the Republic of Macedonia as a representative body of the citizens and the institution entrusted with legislative authority in the republic, adopts laws and issues authentic interpretation of laws. For the purpose of performing activities within the scope of its competence, the Assembly also adopts decisions, declarations, resolutions, recommendations and conclusions. The organization and the functioning of the Assembly are regulated by the Constitution and by the Rules of Procedure of the Assembly of the Republic of Macedonia ("Official Gazette of RM" No. 60/02). The Assembly performs other activities stipulated in the Constitution and in the laws, including adoption of strategic and planning documents in the area of the environment, in cases in which it is authorized by law to do so. The Assembly adopts the Spatial Plan of the Republic of Macedonia as the most important document for the development of the Republic of Macedonia.

The Assembly discusses and decides on all laws and documents submitted thereto for adoption or consideration by the President of the Government of the Republic of Macedonia, the Government Representative or upon a proposal submitted by 10 000 citizens.

Discussion on proposals commences at the relevant commissions and bodies established within the Assembly. In the area of the environment, the Commission for Transport, Communications and the Environment has been established as a permanent body. Apart from this Commission, environmental laws, depending on the specific subject of regulation, are considered by the Commission for Agriculture, Forestry and Water Economy and the Commission for Political System and Inter-communities Relations. The ratification of international conventions, agreements and protocols is considered by the Foreign Policy Commission.

According to the Law on Organisation and Operation of the State Administrative Bodies ("Official Gazette of RM" No. 58/00, 44/00), the Ministry of Environment and Physical Planning holds the legal obligation to create and implement environmental policy in the Republic of Macedonia, to lead the activities in the area of the environment and to provide for rational use of space and natural resources.

According to the same law, the Ministry of Environment and Physical Planning (hereinafter: MEPP) performs activities concerning: monitoring of the state of the environment; water, soil, flora, fauna, air and ozone layer protection against pollution; protection against noise and radiation; protection of biological diversity, geological diversity, national parks and protected areas; restoration of polluted segments of the environment; proposed measures for solid waste treatment; spatial planning; spatial information system; supervision within the scope of its competences; and performs other activities stipulated by law. Bodies within the MEPP are: State Environment Inspectorate, Service for Environment and Service for Spatial Information System. The internal organisation of the MEPP is regulated by the Rulebook on Systematisation, covering its constituent bodies, as well. The total number of employees in the Ministry, including staff in the constituent bodies, is 91 full time employees (the status in 2004). Occasionally, the MEPP engages external personnel as well, for the purpose of performing individual activities (35-40 contract based staff).

According to the current setup the Service for Environment, carries out professional activities in the area of the environment. The proposed Draft Law on Environment, the adoption of which is expected by the end of the first quarter of 2005, the Service for Environment will be transformed into the Administration of Environment, as a body within the MEPP, with additional administrative activities under its competence.

The Administration of Environment will perform professional activities in nature protection, in waste, water, air, soil, noise protection and in other environmental areas. It will also regulate the environmental impact assessment (EIA) procedure for projects and the procedure concerning integrated environmental permitting and compliance permitting; it will manage the Cadastre of Environment and the Register of Pollutants and Polluters, including their characteristics. The Administration of Environment will be responsible for the environmental monitoring performance, as well as for permitting procedures and other activities stipulated by law.

Within the Service for Environment the Environmental Laboratory operates that carries out measurements and expert analyses of pollution. Due to the expanded competences of the Administration of Environment, it will need significant strengthening in the future. Under CARDS 2004 Project capacity strengthening of the Administration has been envisaged, including the Laboratory, which is part of the obligations under the European Partnership Action Plan.

The Service for Spatial Information System is responsible for carrying out professional activities related to the spatial information system, through GIS processing, analysis and presentation of digital spatial data.

The State Environment Inspectorate supervises the implementation of laws and other acts in the area of the environment. The Inspectorate conducts direct supervision of legal entities and natural persons with regard to the enforcement of and compliance with the conditions stipulated in individual permits.

According to the Law on Organisation and Operation of the State Administrative Bodies, other Ministries hold direct or indirect competences in the domain of environmental management. Apart from the MEPP, which has the leading role in the area of the environment, the public administration bodies with direct competences include: the Ministry of Defence performing activities related to civil protection; the Ministry of Interior performing activities related to: the implementation of the system of public security; production of, trade in, storage of and protection against inflammable liquids, gases, explosives and other dangerous materials and transportation of such materials; the provision of aid in cases of natural disasters and epidemics; the Ministry of Economy performing activities related to: geological surveys and exploitation of mineral resources and energy; the Ministry of Agriculture, Forestry and Water Economy performing activities related to: agriculture, forestry and water economy; use of agricultural land, forests and other natural resources; hunting and fishing; livestock and plants protection against diseases and pests; monitoring and studying of water status, maintenance and improvement of water regimes; hydro-melioration systems; study and research of meteorological, hydrological and bio-meteorological phenomena and processes; the Ministry of Health performing activities concerning health protection of the population through air, water, soil and foodstuff pollution monitoring; protection of the population against communicable diseases, harmful impacts of gases, ionising radiation, and noise; hygiene and epidemiologic status; the Ministry of Transport and Communications performing activities related to: inland waterways, housing and public works.

The above described setup indicates the existing fragmentation of competencies among bodies in the domain of environment management, which is partly overcome by the adoption of new environmental laws, providing for higher integration of environmental management. The MEPP has obtained full competence in the domain of water management, while the Ministry of Agriculture, Forestry and Water Economy remains the responsible body in the domains of irrigation, forestry, hunting and fishing. Waste management, nature protection and air quality management have been transferred under the full competence of the MEPP. Environmental monitoring is integrated as full competence of the MEPP, too.

According to the Law on the Local Self-Government (“Official Gazette of RM” No. 5/02), the local self-government units are competent and responsible for regulating and performing activities of public interest of local importance, as stipulated by law. The same Law defines the list of competences of the local self-government units, such as: environment and nature protection – measures for the protection and prevention of water, air and soil pollution, nature protection, protection against noise and non-ionizing radiation; public activities – drinking water supply; technological water supply; wastewater drainage and treatment; storm wastewater drainage and treatment; maintenance of public hygiene; collection, transportation and treatment of municipal solid and industrial waste; removal of damaged cars from public areas; maintenance and use of parks, green areas, forest parks and recreational areas; regulation, maintenance and use of river beds in urbanized parts.

In the area of environmental management in the Republic of Macedonia, the number of municipalities that have civil servants responsible directly for performing activities in environmental management is evidently low. Under the new environmental legislation, numerous responsibilities will be delegated to the local self-government units, especially in the domains of waste management, integrated environmental permitting and compliance permitting and inspection supervision. Within these, there are 68 communal inspectors performing supervision at local level. The Draft Law on Environment stipulates the appointment of municipal inspectors for environment that will undertake many responsibilities under the new laws. In the future, it will be necessary to strengthen the capacities of the local self-government units in environmental management. The CARDS 2004 envisages partial strengthening of the capacities of the local self-government units in the domain of integrated environmental permitting and compliance permitting.

## INSTITUTIONAL RESPONSIBILITY – by individual sectors

**Responsibility in water sector**

According to the current structure, the competences in the water sector in the Republic of Macedonia are fragmented among several Ministries, bodies and public enterprises. There are cases when the same aspects of water management are divided among several bodies.

According to the Law on Organisation and Operation of the State Administrative Bodies and according to the Law on Waters ("Official Gazette of RM" No. 4/98, 19/00), the competent state administrative body for water management (i.e. water economy) is the Ministry of Agriculture, Forestry and Water Economy (MAFWE), i.e. Water Economy Directorate as a body within the MAFWE (staff structure: Director, nine civil engineers with university degree and one employee with secondary school education). The primary responsibility of the Directorate is to plan water economy and to carry out the procedure for the issuance of water management consents and water management permits as instruments for the implementation of the policy in the area of water economy. The MAFWE also performs inspection supervision.

On the other hand, according to the Law on Organisation and Operation of the State Administrative Bodies, the MEPP is responsible for water protection and environmental quality monitoring, including water quality. The Ministry is responsible for water pollution control on the basis of the Law on Environment and Nature Protection and Promotion ("Official Gazette of RM" No. 13/03 consolidated text). Within the MEPP, the Service for Environment, as a constituent body of the Ministry, is responsible mainly for the professional aspects of water protection.

In compliance with the above legal grounds, the Ministry of Transport and Communications (MTC) is responsible for the utility infrastructure, covering the issues of wastewater treatment and water supply. The Ministry of Economy has responsibilities with regard to water resources management for the purpose of electricity generation and exploitation of mineral water resources as mineral resources.

In accordance with the Law on Organisation and Operation of the State Administrative Bodies, Law on Waters and Law on Safety of Foodstuffs and Products and Materials in Contact with Foodstuffs ("Official Gazette of RM" No. 54/02), the Ministry of Health, including the National Public Health Institute (NPHI), is responsible for health safety of drinking and bathing water and for the protection of the population against communicable diseases.

Within the Ministry of Agriculture, Forestry and Water Economy, the Hydro Meteorological Directorate is in place, which holds, *inter alia*, the responsibility for water quality monitoring and, in part, of the air quality monitoring.

The need for an integrated approach to water resources management (including the planning of management at the level of river basins, water use, protection of water against pollution, protection against harmful activity of the water, as well as water management facilities and service management) requires the integration of the organizational setup.

According to the Draft Law on Waters (the adoption of which is expected by the end of the first quarter of 2005), differentiation of responsibilities among relevant Ministries is accomplished and a system of coordination and close mutual cooperation is established. The MEPP will be responsible for the overall water management, including river basins management and permitting system, while the Ministry of Agriculture, Forestry and Water Economy will hold responsibility in the domain of irrigation. The Ministry of Health remains responsible for water health safety monitoring.

**Responsibility in air sector:**

The MEPP is responsible for air pollution monitoring and for the undertaking of measures for air pollution level reduction. The Ministry of Health is responsible for the health aspects of air quality. Within the Ministry of Health, the National Public Health Institute (NPHI) includes 10 regional branches throughout the Republic of Macedonia, measuring air quality in urban areas.

### **Responsibility in waste sector:**

The MEPP is responsible for waste management at the level of the Republic of Macedonia. The local self-government units are responsible for municipal and inert waste and for industrial non-hazardous waste from the installations subject to B integrated environmental permits. The Ministry is exclusively responsible for hazardous waste.

### **Responsibility in the domain of nature protection:**

The MEPP is fully responsible for the management and supervision in the field of protected areas and protected species. The Ministry of Agriculture, Forestry and Water Economy is responsible for forest management and forest protection, as well as for the regulation of the hunting and fishing field and the plant protection field.

According to the Law on Nature Protection ("Official Gazette of RM" No.67/04), national parks will be transformed into National Park Institutions to be responsible for the management of national parks. The administrative supervision over their operations will be performed by the MEPP, while the Administration of Environment will perform professional supervision over their activities.

Bodies within the Ministry of Agriculture, Forestry and Water Economy include:

- Plant Protection Directorate
- State Forestry and Hunting Inspectorate

### **Responsibilities in chemical management**

The responsibility for chemical management with the MEPP is stipulated in the Draft Law on Environment, which in general terms regulates the handling of chemicals and the manner of their packaging and labelling, and in the Law on Waste Management ("Official Gazette of RM" No. 68/04, 71/04), which regulates the treatment of waste Polychlorinated Biphenyls (PCBs). The Ministry of Health is responsible for the management of toxic substances, regulated in the Law on Poison Production ("Official Gazette of SFRY" No. 18/76) and the Law on Trade in Poisons ("Official Gazette of SFRY" Nos.13/91) and the Rulebook on the manner of destructing poisons and the packaging used to pack poisons and the manner of redrawing poisons from the market ("Official Gazette of SFRY" No. 7/83). The Ministry of Agriculture, Forestry and Water Economy is responsible for pesticides used for plant protection. According to the Programme for Approximation of the National Legislation to the Legislation of the European Union and the European Partnership Action Plan, the Law on Chemicals is envisaged to be drafted at the level of the framework in this area. It will define the competences of different authority in order to establish a unique system of chemical management.

### **Responsibilities in the sector of ionising radiation and radiation safety**

According to the Law on Ionising Radiation Protection and Safety ("Official Gazette of RM" No. 48/02), the MEPP is responsible for supervision over radioactive waste, while the Ministry of Health is responsible for the protection of the population against exposure to ionising radiation. This Law prescribes the establishment of the Radiation Safety Directorate which will integrate the management in this area.

### **Responsibilities in the noise control sector**

According to the current legislation, the MEPP is responsible for noise control outside the working environment, while the Ministry of Labour and Social Policy is responsible for noise control within working premises. According to the Programme for Approximation of the National Legislation to the Legislation of the European Union and the European Partnership Action Plan, the Law on Harmful Noise Prevention is envisaged to be drafted to determine the responsibilities of individual authorities in the Republic of Macedonia.



**8. Are there provisions relating to the training of administrative officials in the environmental field? How difficult is it to find suitably qualified personnel?**

The Law on Civil Servants ("Official Gazette of RM" No. 59/00, 112/00, 34/01, 103/01, 43/02, 98/02, 17/03, 40/03, 85/03, 17/04, 69/04) is the framework law in which the issues concerning the training of civil servants are regulated in general terms.

Section III, Rights and Duties of Civil Servants, of the Law on Civil Servants stipulates that each civil servant has a right and duty to improve professionally, i.e. to be trained in accordance with the needs of the employing body (Article 24, paragraph 1). The professional improvement, i.e. the training of civil servants, is carried out on the basis of an annual programme adopted by the employing body upon prior opinion on that programme by the Agency of Civil Servants (Article 24, paragraph 2).

According to the Rulebook on the Systematisation of Jobs in the Ministry of Environment and Physical Planning (MEPP), most organisational units envisage employment of staff with university degree in natural sciences.

In the Republic of Macedonia, there are institutions for higher education (faculties and institutes), which produce professionals highly educated in specific fields and this generally satisfies the needs of the MEPP. However, the Ministry faces the problem of the lack of specialised staff in the relevant environmental areas, mainly in the domains of environmental impact assessment, monitoring, integrated pollution prevention and control, climate change, chemicals, etc.

The mentioned needs are partly met through the courses and training carried out within the MEPP, as well as through the activities of international organisations. It is a usual practice that all the projects implemented through the MEPP contain training components in specific thematic areas covered by the scope of the project. In addition, in the last several years the MEPP increasingly applies the "on the job training" principle as a means of staff training. Thus, for example, in the framework of the PHARE SOP 99 and in the course of the drafting of the new environmental laws, the civil servants of the MEPP involved in the drafting of the legislative texts acquired knowledge on the manner and procedure of drafting laws, on the requirements under the relevant Directives, the development of gap analysis, the development of tables of concordance, and were involved in the acquisition of knowledge and exchange of experiences through study visits.

The employees of the MEPP participate in training courses organised and carried out by international organisations. Thus, for example, through the Japanese International Cooperation Agency (JICA), civil servants of the MEPP attended few months training courses in specific fields, for example: waste management, monitoring, nature protection, clean technologies, etc. Several training courses have been organised through the Swedish International Development Agency (SIDA) in the fields of waste management and environmental impact assessment. Training intended for environmental inspectors is organized through the Balkan Network for Environmental Legislation Enforcement (BERCEN), as part of the Regional Environmental Reconstruction Programme (REReP).

For the purpose of implementing its obligations, the MEPP needs properly qualified staff to support the activities of private sector to achieve environmental standards. In this context, it is necessary to initiate the strengthening of the capacities of consulting companies and individuals that should support, with their services, private entities to achieve compliance with the obligations deriving from the new environmental legislation.

In the Draft Law on Environment in order to promote environmental education and to ensure its rising to the level of legal obligation, one of the pillars on which the Ministry has based the environment protection and improvement is the education and training of professional staff in the area of environment through provision of the required support to educational and scientific institutions, to expert organisations and civil associations established for the purpose of the promotion of environmental protection and the implementation of educational activities.

## **9. What are the mechanisms for monitoring compliance with environmental legislation and the state of the environment?**

The Ministry of Environment and Physical Planning (MEPP) is the competent authority with regard to the monitoring of compliance with environmental legislation and of the state of the environment.

The State Environment Inspectorate, as a body within the MEPP, is the competent authority for inspection supervision over the enforcement of laws and regulations in the area of the environment. With regard to the activities within the scope of the responsibility of the local self-government units, the inspection supervision over the enforcement of and compliance with the environmental laws and other regulations is performed by authorised inspectors for environment.

The number of inspectors in the State Environment Inspectorate on the territory of the Republic of Macedonia is nine, four of whom are responsible for the supervision in the capital while the rest operate in several cities throughout the Republic of Macedonia, with defined priority areas of supervision. In performing inspection supervision, the State Environment Inspectorate works with the Central Laboratory of Environment, operating within the Service for Environment, a body within the MEPP. The Laboratory is equipped with appropriate equipment required for the performance of laboratory analyses and other tests of pollutions and emissions. The number of employees in the Laboratory is 12.

In the case of violation of provisions of the laws in the area of the environment, the State/municipal inspector may in accordance with the scope of his/her work by decision order the implementation of certain measures for removal of pollution and its effects; to restrict and temporarily suspend, until the final court decision, the activities of certain entities; to temporarily seize equipment that are sources of pollution; and to undertake other measures to provide for compliance with the conditions specified in the law or in the relevant permit. If the entities fail to act in accordance with the decision, i.e. fail to eliminate reasons for the caused state, the State Inspector will raise misdemeanour or criminal charges before the competent court, and will initiate procedure for withdrawal of obtained permits and authorizations. If, in certain cases, it is necessary to undertake urgent measures, the Inspector may issue oral order for removal of deficiencies.

According to the existing legal regulations, appeals submitted against the decisions taken by State Inspectors are settled by the Second Instance Commission for Settling Administrative Matters in the Area of Environment under the Government of the Republic of Macedonia. Administrative dispute against the decision of the second instance body may be initiated before the Supreme Court of the Republic of Macedonia.

According to the new laws, appeal against the decision taken by the state inspector and municipal inspector of the local self-government unit, by which administrative measure is imposed, may be submitted to the Minister of Environment and Physical Planning, in eight days after the receipt of the decision. Administrative dispute against the decision taken by the Minister may be initiated before the Supreme Court of the Republic of Macedonia.

According to the Draft Law on Environment, the Director of the State Environment Inspectorate and the Mayor of the local self-government unit are obliged to adopt annual programmes for the implementation of regular inspection supervision.

Taking into account the process of decentralisation, the Draft Law on Environment contains a separate Chapter to regulate the manner of and the procedure for the implementation of supervision over the operations of the local self-government bodies while implementing their competencies.

The supervision over the operations of the local self-government bodies while performing their activities arising from the laws in the area of environment is carried out by the Ministry of Environment and Physical Planning (MEPP). In performing the supervision, the Ministry monitors the legality of the operations of the local self-government bodies; undertakes measures and activities and raises initiatives related to the implementation of the competencies of the local self-government unit; assesses whether the local self-government bodies perform their competencies in accordance with the procedures and standards specified by law; indicates cases of going beyond the competencies of the local self-government unit and proposes measures for overcoming such situations; gives

recommendations regarding the performance of competencies; monitors the timely implementation of regulations; submits initiatives and proposals in cases of non-compliance with the laws and cases of conflict of competencies between bodies of the local self-government units ; monitors the legality of the decisions taken by the Mayor. When, despite indications and the undertaken measures and activities, the bodies of the local self-government unit fail to perform activities as stipulated by law, for which they are responsible and which are within the scope of their competence, their competence will be repealed and the performance of the competence will be taken over by the MEPP for not more than one year after the day of taking over the competence. The MEPP is obliged to inform the Ministry of Local Self-Government and the Ministry of Finance of all the activities undertaken in this context.

In the case of conflict of competencies among the bearers of legislative, executive and judicial branches of power and conflict of competencies between the state administrative bodies and the bodies of the local self-government units, the competent Court is the Constitutional Court of the Republic of Macedonia.

The **Criminal Code** ("Official Gazette of RM" Nos. 37/96, 80/99, 4/02, 43/03, 19/04) in its Chapter 22, Articles 218 to 234, stipulates the following criminal acts against the environment: Pollution of the environment, Contamination of drinking water, Production of harmful substances for livestock or poultry treatment, Unscrupulous delivery of veterinary aid, Communication of infectious diseases to flora and fauna, Contamination of fodder or water intended for livestock, Destruction of crops by use of harmful substances, Usurpation of immovable assets, Forest destruction, Causing forest fires, Illegal hunting, Illegal fishing, Endangerment of the environment and nature by waste substances, Unauthorized acquisition and disposition of nuclear substances, Entry of hazardous substances in the country and Torture of animals.

The **Law on Nature Protection** ("Official Gazette of RM" No. 67/04), stipulates the following types of criminal acts: Extermination of indigenous wild species, Introduction of wild species in nature, Reintroduction of wild species in nature, Illegal taking and use of genetic and biological material, Unauthorized damaging and destruction of speleological structures, Damaging or destruction of mineral and fossil finds.

The **Draft Law on Waters**, stipulates the following types of criminal acts: Unauthorised use of water and Unauthorized extraction of ground water.

In general, the amounts of penalty fees for violating the laws are specified in the **Law on Misdemeanours** ("Official Gazette of RM" No.15/97, 35/97) which stipulates that a fine of less than 1.000 MKD and more than 50.000 MKD may not be imposed on natural persons and with regard to legal entities a fine of less than 10.000 MKD or more than 300.000 MKD may not be imposed. An immediate fine (fine imposed on the spot) of not more than 10.000 MKD may be imposed on natural persons and a fine of not more than 100.000 MKD on legal entities.

According to the **Law on Environment and Nature Protection and Promotion** ("Official Gazette of RM" No.13/03 consolidated text) the amount of penalty fees imposed on legal entities may range between 50.000 and 300.000 MKD, while a fine of 5.000 to 50.000 MKD may be imposed on the responsible person of the legal entity. The amount of penalty fees imposed on natural persons may range between 10.000 and 50.000 MKD. In addition, there is a possibility to impose an immediate fine on natural persons in the amount of 5.000 MKD. Together with the penalty fee for legal entities, the court may also impose a security measure - prohibition of carrying out a given activity within a time period of six months to five years. With regard to the responsible person of the legal entity, in addition to a fine, a security measure - prohibition of carrying out a professional activity, operation or duty may be imposed for a period of three months to one year. An immediate fine (fine imposed on the spot) of 3.000 MKD may be imposed on a citizen for a minor misdemeanour. The fine will be collected on the spot by the inspector for environment who performs supervision over the enforcement of protection measures applicable within the protected natural goods, by an employee of the Ministry of Interior responsible for maintaining public order and peace, a ranger in a national park, or another person authorised to guard the protected natural good. When a citizen fails to pay immediate fine on the spot, the competent inspector will raise misdemeanour charges on the basis of his/her findings or upon a report by an employee of the Ministry of Internal Affairs responsible for

maintaining public order and peace, a ranger in a national park, or another person authorised to guard the protected natural good.

The **Draft Law on Environment** stipulates two types of misdemeanours: major and minor misdemeanours. The fine amounts for major misdemeanours range between 200.000 and 300.000 MKD for a legal entity. The fine specified for the responsible person of the legal entity ranges from 30.000 to 50.000 MKD, while the fine for natural persons ranges from 10.000 to 30.000 MKD. Together with the penalty fee for legal entities, in certain cases of misdemeanour, the court may also impose a security measure - prohibition of carrying out a given activity within a period of six months to three years. For natural persons a prohibition of carrying out professional activities within a period between three months and one year may be imposed.

The fine for minor misdemeanours ranges between 100.000 and 200.000 MKD for legal entities. A fine in the range from 10.000 to 30.000 MKD may be imposed on the responsible person in the legal entity. A fine in the range between 10.000 and 30.000 MKD may be imposed on natural persons. In addition to a penalty fee for legal entities, for certain misdemeanours, the competent court may impose a security measure - prohibition of carrying out operations within a time period of three months to one year, while for natural persons a prohibition of carrying out a professional activity within a period between three months and six years may be imposed.

The **Law on Ambient Air Quality** ("Official Gazette of RM" No. 67/04) specifies fines for misdemeanours in the range between 100.000 and 300.000 MKD for misdemeanours committed by legal entities, while a fine in the range from 10.000 to 50.000 MKD will be imposed on the responsible person of the legal entity. With regard to certain misdemeanours, the competent court may pronounce a security measure - prohibition of carrying out given operations within a period of six months to three years, in addition to a penalty fee for legal entities, while a prohibition of carrying out a professional activity within a period between three months and one year may be imposed on the responsible person of the legal entity. The amount of the penalty fee for a misdemeanour committed by natural persons ranges from 5.000 to 30.000 MKD. In case of non-compliance with the provisions of the Law a fine between 30.000 and 50.000 MKD will be imposed on the official and responsible person in the Municipality and in the City of Skopje, .

According to the **Law on Nature Protection** ("Official Gazette of RM" No. 67/04), the penalty fees for misdemeanours range between 100.000 and 300.000 MKD. A fine between 10.000 and 50.000 MKD may be imposed on the responsible person of the legal entity, and for certain misdemeanours a sentence of imprisonment may be imposed on natural persons. For certain misdemeanours security measures may be imposed: on the responsible person of the legal entity a security measure - prohibition of carrying out duties or operations within the period of six months to one year; and on the legal entity a security measure - prohibition of carrying out duties or operations within the period of six months to one year; on the legal entity a security measure - seizure of objects; and on natural persons a security measure - seizure of objects.

The Law also provides the possibility of imposing immediate fines (fines imposed on the spot), i.e. the collection of fines for committed misdemeanours on the spot by inspectors for environment and by an employee of the state administrative body, responsible for the matters of public order and peace. Such a power is also awarded to ranger services responsible for direct protection of protected areas established in accordance with the law.

According to the **Law on Waste Management** ("Official Gazette of RM" No. 68/04, 71/04), the amount of fines for the misdemeanours committed by legal entities and natural persons range as follows: from 50.000 to 300.000 MKD – for legal entities, while the amount of the fine for the responsible person of the legal entity ranges between 10.000 and 50.000 MKD. In addition to the fine, for the same misdemeanour a security measure -prohibition of carrying out operations within a period of three months to one year may be imposed.

The Law also provides for imposing immediate fines the amount of which ranges between 30.000 and 100.000 MKD for legal entities, depending on the type of misdemeanour and the activity performed.

The immediate fine for natural persons ranges from 1.000 to 10.000 MKD. Apart from competent inspectors the right and obligation to impose immediate fines, is also awarded to an employee of the state administrative body responsible for the matters of public order and peace. When a legal entity or a natural person fails to pay the immediate fine on the spot, the competent inspector for the environment or the municipal inspector for the environment will be obliged to raise misdemeanour charges, based on his/her findings or upon a report by an employee of the state administrative body responsible for internal affairs, for maintaining public order and peace, and the ranger in a protected area - national park,.

The Law on Waste Management stipulates specific penalties for performers of individual waste management activities, such as: **for waste collectors and transporters**, the amount of fines for legal entities range from 10.000 to 300.000 MKD; for responsible persons of legal entities from 10.000 to 50.000 MKD, depending on the type of the waste collected or transported. The amount of the fine for responsible persons of legal entities ranges from 10.000 to 50.000 MKD. Security measure – prohibition of carrying out operations within a period of three months to one year may also be imposed on the responsible persons of legal entities. Immediate fines for legal entities range from 5.000 to 100.000 MKD, depending on the type of waste.

Depending on the type of waste, the fine for **waste processors** with regard to committed misdemeanours ranges from 150.000 to 300.000 MKD for legal entities. The fines for responsible persons of legal entities range from 10.000 to 50.000 MKD, depending on the type of waste, and a security measure – prohibition of carrying out operations within a period of three to six months will be imposed on these persons. The immediate fine for legal entities processing waste ranges from 5.000 to 100.000 MKD, depending on the type of waste.

Depending on the type of waste being disposed, the fine for **waste disposers** with regard to committed misdemeanours ranges from 150.000 to 300.000 MKD for legal entities, while the fine for responsible persons of legal entities ranges from 10.000 to 50.000 and a security measure – prohibition of carrying out operations within a period of three to six months will be imposed on the persons, together with the fine.

Depending on the type of waste disposed, the immediate fine for legal entities disposing waste ranges from 30.000 to 100.000 MKD, while for natural persons the fine ranges from 1.000 MKD to 10.000 MKD.

The **Draft Law on Waters** specifies the fines for misdemeanours in the range between 10.000 and 300.000 MKD for legal entities, and the fine for responsible persons of the legal entities ranges from 10.000 to 50.000 MKD. The fine specified for natural persons ranges from 3.000 to 50.000 MKD.

According to the Law on Environment and Nature Protection and Promotion, the Ministry of Environment and Physical Planning is responsible for the general obligations concerning air, water, soil, nature, noise and waste monitoring, as well as for defining requests for monitoring, and the types and formats of monitoring data. In other legal regulations, the monitoring of different environmental media is not clearly defined and coordinated between the competent institutions. Many elements of the secondary legislation are based on laws that have undergone several amendments, thus creating different institutional framework.

In order to overcome the above described situation, the Draft Law on Environment stipulates the establishment of national monitoring network to carry out the monitoring of different environmental media on the territory of the Republic of Macedonia, composed of national environmental medium specific networks (hereinafter: national network), established in a manner and under conditions specified in separate laws.

The monitoring of individual media and segments of the environment may be performed by accredited legal entities, scientific and professional organisations, authorized by the MEPP in a manner and under conditions specified by the specific law.

The monitoring of immission /quality of individual environmental media and of emission sources through national and local networks, as well as through the self-monitoring by the operators, is performed in accordance with the methodology stipulated by the specific laws.

For the purpose of conducting the monitoring of individual environmental media and segments, the local self-government units may establish local monitoring networks.

The funds required for the establishment, operation, maintenance and development of the local monitoring network will be provided by the budget of the respective local self-government unit and from other sources, in accordance with the law and the relevant act of the local self-government unit.

The Ministry of Environment and Physical Planning may delegate the performance of the monitoring of given medium or segment of the environment covered by the national monitoring network to the local self-government units.

Owners or users of installations that are emission sources and pollute one or more environmental media and segments are obliged to perform monitoring of the sources of emission. The monitoring of the sources of emission, as well as of immission, may be conducted by their own services or through accredited scientific and professional organisations and other legal entities that meet the conditions for monitoring performance. They are obliged to monitor, on a regular basis (through measuring emissions or calculating and estimating the quantity of emissions), the emissions from the sources of emissions, to monitor on a regular basis the immissions close to the sources of emissions, as specified by law and in a manner stipulated in the integrated environmental permit. They must monthly report the data from regular emission monitoring at the source of pollution to the Ministry.

The state administrative bodies, the local self-government bodies and the entities that perform self-monitoring must submit the monitoring data to the Ministry of Environment and Physical Planning free of charge.

For the purpose of fulfilling the obligations of the Republic of Macedonia undertaken through the ratified international agreements, the Ministry of Environment and Physical Planning reports the data obtained from monitoring and other data related to the environment to the relevant international organisations.

For the purpose of environmental data management, the Ministry has established the Environmental Information System. This information system has been established and organised in order to develop relevant database, i.e. comprehensive, accurate, publicly accessible information on the state and the quality of the environment. The information system incorporates systematisation, storage and use of data collected through the monitoring of individual environmental media and segments.

The Ministry of Environment and Physical Planning is obliged to prepare the State of the Environment Report of the Republic of Macedonia every three years.

**10. Please detail the number of prosecutions for breaches of environmental law and the level of penalty for such breaches. Please provide information on the collection rates of fines imposed and the relevant statistics for breaches in the sectors of air, water and waste for the last three years and, if available, also for other environmental sectors.**

The Ministry of Environment and Physical Planning (MEPP) is the competent body for the implementation of the regulations in the area of the environment (for more details see [22.1.P9](#)).

Within the MEPP, the competent body for the implementation of inspection supervision over the enforcement of environmental regulations is the State Environment Inspectorate. The number of

inspectors for environment on the territory of the Republic of Macedonia is nine, four of whom are responsible for the supervision in the capital while the rest operate in several cities throughout the Republic of Macedonia, with defined priority areas of supervision.

In the course of the last three years the State Environment Inspectorate performed the following activities within the scope of its competences and on the basis of the environmental regulations:

- In 2001-271 conclusions from conducted inspections were prepared (hereinafter: minutes), 81 decisions on the implementation of compulsory measures were taken (hereinafter: decisions), 12 misdemeanour charges were brought before competent courts, of which nine misdemeanour procedures were settled and three are still in procedure.
- In 2002 - 510 reports with conclusion were prepared, 155 decisions were taken, 27 misdemeanour charges were brought before competent courts, of which 13 misdemeanour procedures were settled and 14 are still in procedure, three criminal charges were brought before competent courts, of which one was settled and two are still in procedure.
- In 2003 - 1143 reports with conclusion were prepared, 239 decisions were taken, and 69 misdemeanour charges were brought before competent courts, of which 13 were settled and 56 are still in procedure.

The following types of fines and sentences have been passed with regard to committed breaches of environmental regulations: warnings for misdemeanours, fines in the range between 2.000 to 200.000 MKD, and suspended sentences with a safety measure suspension from work for a period of one year for the committed criminal act.

The Second Instance Commission under the Government of the Republic of Macedonia responsible for settling matters in the area of transport, communications and environment through administrative procedure, has performed as follows with regard to the appeals submitted against the decisions issued by the first instance bodies:

- In 2001, of the total of 17 cases submitted, 2 were settled, and 15 transferred for settlement in 2002;
- In 2002, of the total of 24 new cases submitted, 12 were settled, including those transferred from 2001, and 27 cases were transferred for settlement in 2003;
- In 2003, the number of new cases submitted was 34, of which 55 were settled, together with previously transferred ones from 2002, and 6 cases were transferred for settlement in 2004;

In the period between 2001 and 2003, the status of administrative disputes initiated, under procedure and finalized by the Supreme Court of the Republic of Macedonia against administrative acts in the area of environment, was as follows:

- in 2001, one administrative case was registered; it was settled and the lawsuit was rejected as invalid;
- in 2002, five administrative cases were registered, four of which were settled and three were rejected as unfounded, one was rejected as invalid;
- in 2003, eight cases were registered, only one of them was settled and the lawsuit was rejected as unfounded.

With regard to the regulations in the area of communal activities, the State Communal Inspectorate under the Ministry of Transport and Communications has taken in total 31 decisions in the course of the last three years, based on the Law on Waste ("Official Gazette of RM" No. 37/98,16/04 repealed by the Law on Waste Management ("Official Gazette of RM" No. 68/04,71/04) and the Law on Communal Activities ("Official Gazette of RM" No. 45/97,23/99,45/02,16/04). Seven misdemeanour charges were brought against legal entities and responsible persons of legal entities - hazardous waste generators.

Communal activities of local importance are carried out by municipal communal inspectors appointed by the mayors of the local self-government units, and there are 68 in the territory of the Republic of Macedonia. The total number of decisions taken in the last three years, on the basis of the Law on Waste ("Official Gazette of RM" No. 37/98,16/04), the Law on Communal Activities ("Official Gazette of RM" No. 45/97, 23/99,45/02,16/04) and Law on Maintenance of Public Cleanliness, Collection and

Disposal of Communal Solid and Technological Waste ("Official Gazette of RM" No. 37/98) was 5666, while the number of charges brought for misdemeanours was 1476, of which 60 were rejected as expired; 181 are still in procedure and 1295 have been settled.

Fines in the range between 1.000 and 50.000 MKD have been passed for the above committed breaches, as well as misdemeanour warnings.

In the last three years the State Transport Inspectorate under the Ministry of Transport and Communications, acting on the basis of the removal of objects and materials from public roads section of the Law on Public Roads ("Official Gazette of RM" Nos. 26/96, 40/99, 96/00, 29/02, 68/04) took in total 38 decisions, brought 74 charges for misdemeanour, of which 19 were settled and 30 stopped, while 25 are still in procedure.

Fines in the range between 1.000 and 10.000 MKD have been imposed for the above committed breaches.

The State Agriculture Inspectorate under the Ministry of Agriculture, Forestry and Water Economy is the competent body inspection supervision over the implementation of: The Law on Agricultural Land ("Official Gazette of RM" Nos. 25/98, 18/99, 2/04), the Law on Fisheries ("Official Gazette of RM" No. 62/93), the Law on Quality and Quality Control of Fertilizers ("Official Gazette of SFRY" Nos. 10/73, 51/88, 20/90 and "Official Gazette of RM" No. 83/92), the Law on Pastures ("Official Gazette of RM" Nos. 3/98, 101/00), the Fire Protection Law ("Official Gazette of SFRY" Nos. 43/86, 37/87, 51/88, 36/90 and "Official Gazette of RM" No 12/93), Law on Waters ("Official Gazette of RM" Nos. 4/98, 19/00), the Law on Plant Protection ("Official Gazette of RM" Nos. 25/98, 6/00).

The total number of conducted controls in 2001 was 1638, on the basis of which 1231 reports with conclusions were produced, 365 decisions taken, 997 charges for misdemeanour brought, 216 of which were settled. In 2002, the total number of conducted controls was 1755, on the basis of which 1519 reports with conclusions were produced, 374 decisions taken, and 331 misdemeanour and 37 criminal charges brought. The number of settled misdemeanour proceedings was 60. In 2003, the total number of conducted controls was 1582, on the basis of which 1431 reports with conclusions were produced, 322 decisions taken, and 516 misdemeanour and 18 criminal charges brought. The number of settled misdemeanour proceedings was 78.

The State Forestry and Hunting Inspectorate under the Ministry of Agriculture, Forestry and Water Economy, employing 17 inspectors, is the competent body for inspection supervision over the implementation of: The Law on Forest ("Official Gazette of RM" Nos. 47/97, 7/00, 89/04), the Law on Hunting ("Official Gazette of RM" Nos. 20/96, 26/96, 34/97, 69/04), the Law on Seeds, Seedlings and Propagating Material and Sort Recognition, Approval and Protection ("Official Gazette of RM" Nos. 41/00). In 2002, the State Forestry and Hunting Inspectorate took 407 decisions, brought 344 misdemeanour and 10 criminal charges. The number of decisions taken in 2003 was 487, when 343 misdemeanour and seven criminal charges were brought.

The total number of **criminal charges** brought in the last three years was:

- **2001 - 10** criminal procedures were initiated, of which nine were settled and one is still in procedure.

The following sentences have been imposed: suspended sentence was imposed in eight cases and imprisonment in one.

- **2002 - 41** criminal procedures were initiated, of which 39 were settled and two are still in procedure.

The following sentences have been imposed: in one criminal procedure a person was acquitted and suspended sentences were given in 29 criminal procedures, while in eight cases the fines ranging from 6,000 to 10,000 MKD were imposed. One criminal procedure was settled in a different manner.



- 2003 - 17 criminal procedures were initiated, of which 16 were settled and one is still in procedure.

The following sentences have been imposed: suspended sentences were given in 5 criminal procedures, 7 cases were finalized with court warnings, 2 cases were finalized with fines and two cases with imprisonment.

The total number of **misdemeanours charges** submitted to the Courts of first instance on the territory of the Republic of Macedonia, by years, is shown in the table below:

	SUMMARY REPORT																				
	INITIATED PROCEDURES FOR MISDEMEANOUR			EXECUTED			IN PROCEDURE			STOPPED			EXPIRED			RETREATED			REJECTED		
AREA	2001	2002	2003	2001	2002	2003	2001	2002	2003	2001	2002	2003	2001	2002	2003	2001	2002	2003	2001	2002	2003
WASTE	219	120	307	151	55	144	0	12	27	25	7	25	3	0	0	0	0	1	0	0	2
NATURE	1481	1535	959	1091	1161	143	2	2	9	19	27	20				6	2	0	3	5	1
AIR	6		1	1	0	0	0	0	0	4	0	1	0	0	0						
NOISE	1	2	0	1	1	0															
WATER	626	764	462	393	452	255	5	5	6	62	31	2	0	0	0	63	27	27	16	0	0
TOTAL	2333	2421	1729	1637	1669	542	7	19	42	110	65	48	3	0	0	69	29	28	19	5	3
Source: data obtained from the courts of first instance in the Republic of Macedonia, and processed by the MEPP																					

a) In the area of **waste** handling, the following penalties have been imposed: warnings for misdemeanour and fines ranging from 1.000 to 10.000 MKD.

b) In the area of **air**, the following penalties have been imposed: one warning for misdemeanour and one fine in an amount of 10.000 MKD.

- c) In the area of the infringement of **nature** related regulations, the following penalties have been imposed: warnings for misdemeanour and fines ranging from 1.500 to 350.000 MKD.
- d) In the area of the infringement of **water** related regulations, the following penalties have been imposed: warnings for misdemeanour and fines ranging from 1.000 to 10.000 MKD.
- e) In the area of **noise**, warnings for misdemeanour have been imposed.

The data included in the answer originate from each inspection authority separately and refer solely to the misdemeanours in the area of environment.

Data referring to courts originate from the records kept by each court separately by areas, i.e. by laws. The data do not specify precisely the types of misdemeanours regulated by laws concerning exclusively misdemeanours against the environment. For this reasons, the data also include misdemeanours reported on the basis of the above mentioned laws, but can also refer to other misdemeanours specified in those laws.

The data was processed by the MEPP.

The rate of penalties collection for executed cases is 59.63 %, as reflected in the data contained in the column on executed procedures of misdemeanours in the above table.

With regard to the relevant statistics of the infringements of environmental regulations, the State Statistical Office possesses data on persons committing criminal acts, but not on the prosecution proceedings.

**11. Are economic instruments (taxes, duties, etc) used for environmental policy? Please estimate the percentage of GDP spent on environmental protection.**

Economic instruments for the policy of environment are regulated in an integrated manner by the Draft Law on Environment, the adoption of which is expected by the end of the first quarter of 2005.

The Draft Law is founded, *inter alia*, on the following principles:

- The user of natural resources is obliged to compensate for the costs required to provide sustainable development, as well as for the rehabilitation of degraded environmental media and individual areas resulting from the use of natural resources (user pays principle);
- The polluter is obliged to compensate for the costs for the elimination of the danger for the environment by pollution, to bear the costs for environment rehabilitation and to pay equitable compensation for the damage caused to the environment, as well as to revert the environment, to the maximum extent possible, into the state before the damage occurred (polluter pays principle).

With the adoption of the Law on Environment and Nature Protection and Promotion ("Official Gazette of RM" No 13/03 consolidated text), the Environment Fund was established for the first time in the Republic of Macedonia for the purpose of providing funds for environment protection and improvement. The Law stipulates specific fees through which a part of the financial assets of the Fund was generated. The Law has introduced the fees payable at the registration of motor vehicles which are higher for vehicles without catalytic converters (4 %), and lower for vehicles with catalytic converters (2 %).

The Draft Law on Environment, the adoption of which is expected by the end of the first quarter of 2005, will repeal the Environment Fund, and its current activities will continue to be carried out by a sector within the Ministry of Environment and Physical Planning. The above structure has resulted from the recommendations obtained through the cooperation of the Republic of Macedonia with the International Monetary Fund, to repeal the non-vital funds in the Republic of Macedonia, due to the treasury system of operations.

The Draft Law on Environment will introduce fees to be used as sources of funds for the implementation of measures and activities aimed directly at environment and nature protection and improvement.

The following categories of fees have been envisaged:

- **Import and export fees:** import of protected or used tires; import of used refrigerators, deep freezers, other cooling and freezing appliances; export of plants and their parts, branches and other parts of plants; import of ozone depleting substances classified in the Annexes to the Montreal Protocol; import of wastes and lead containing residues; ashes and lead containing residues; wastes and residues from used primary cells, primary car and other electrical batteries and wastes and residues containing lead; export of shelled and non shelled molluscs ; import of used vehicles; import of used tape recorders and other sound recording devices, television receivers, video monitors, video projectors.
- **Motor vehicles and vessels fees:** payable at the registration of motor vehicles and vessels, without catalytic converters (4 %), and with catalytic converters (2 %).
- **Fees for the use of natural resource – water:** for the use of water by water supply systems and the use of water for electricity production; for water bottling for commercial purposes; for water use for heat energy generation from geothermal water resources; for the use of water for fish breeding on fish farms.
- **Fees for the protection of water resources against wastewater discharges.**
- **Fees for use of natural resource – mineral resources:** sand, stone and gravel extraction, washing and separation; use of mineral resources for construction and decorative stone, marble, granite onyx, etc.
- **Fees for the use of the environment** paid by all employees in the amount of 0,20 % of the salary base for the calculation of a personal tax.
- **Wood cutting fee.**
- **Waste management fee:** for the generation of industrial non-hazardous waste; for the generation of residues from crude oil or oils and waste oils.
- **Cigarettes fee.**
- **Oil derivatives fees.**
- **Plastics and plastic products fees:**

Revenues generated on the basis of the above fees are revenues of the Budget of the Republic of Macedonia.

The following legal entities and natural persons are subject to payment of the above fees: those possessing the sources of environment pollution; those who pollute the environment through the use of products and substances; those who are users of natural resources; those who burden the environment with waste; those who import used products in the Republic of Macedonia, and those who produce or import products and goods which are environmentally harmful or contain substances harmful to the environment.

The following will be exempted from the payment of fees:

- legal entities and natural persons up to the fee that would be paid for the quantity and type of the waste transferred to legal entities and natural persons with permits for waste processing ;
- legal entities and natural persons that have established the system of collection and receipt upon return of used products and packaging up to the fee that would be paid for the quantity of the used products and packaging returned thereby;
- legal entities and natural persons that have exported waste from the Republic of Macedonia up to the fee that would be paid for the quantity and type of waste exported which is subject of the fee payment;
- legal entities and natural persons that have exported packaging of plastic mass or products in plastic packaging, up to the fee that would be paid for the quantity and type of the packaging made of plastic mass;

- legal entities and natural persons that have conducted environmental investments for the purpose of implementation of operational plans required under the compliance permits, will be exempted from the payment of a part of the fee paid in the preceding year;

The funds collected through the above fees will be used in accordance with the annual program for environmental investments, as stipulated in the Draft Law on Environment. The Programme is developed in accordance with the National Environmental Action Plan (NEAP) of the Republic of Macedonia, the Spatial Plan of the Republic of Macedonia, other strategies, programmes and acts in the area of environment, as well as international agreements ratified by the Republic of Macedonia. The Programme is adopted by the Government of the Republic of Macedonia, upon the proposal of the MEPP.

The funds of the Programme are used to finance the preparation and development of programmes, projects and other similar activities, as well as to cover the undertaking of preventive measures and measures aimed at the environment preservation, sustainable use, protection and improvement, and particularly at:

- protection, preservation and improvement of the quality of air, soil, water; water use, wastewater and storm water drainage and treatment;
- climate change mitigation: ozone layer protection, protection against radiation, GHG emissions abatement;
- rehabilitation and construction of landfills; encouragement of waste generation minimization, waste treatment and selection;
- conservation and improvement of biological diversity;
- protection of human health against pollution and promotion thereof;
- encouragement of Cleaner Production;
- improvement of the state of environment monitoring and assessment and introduction of environmental management systems;
- encouragement of sustainable use of natural goods;
- encouragement of sustainable development of rural areas;
- encouragement of achievement of environmental standards in economic activities, i.e. sustainable economic development;
- encouragement of educational, research and development studies, programmes, projects and other activities;
- supporting non-governmental and non-for-profit organisations in the area of environment;
- supporting development of Local Environmental Action Plans.

The allocation of the funds of the Programme is carried out by way of public competitions.

In addition to the provisions contained in this Law, there are certain economic instruments specified in other laws, related to, above all, the use of natural resources and public service provision in the field of waste management.

Activities related to economic instruments are envisaged in the process of development of the second NEAP (National Environmental Action Plan), which will give recommendations with regard to the future upgrading of economic instruments. Within CARDS 2004, part of the planned activities will focus on the institutional integration of the use of economic instruments, including capacity building within the MEPP with regard to the management of such instruments.

Specific instruments as taxes and customs duties used to support the policy of environment protection are regulated in the following manner:

#### **a) personal income tax**

In accordance with Article 6, paragraph 6, item 21-a of the Personal Income Tax Law ("Official Gazette of RM" Nos. 80/93, 3/94, 70/94, 71/96, 28/97, 8/01, 50/01, 52/01, 2/02, 44/02, 96/04), the income through sale of usable solid waste acquired by a natural person is not subject to taxation.

### **b) profit tax**

In accordance with Article 35 of the Profit Tax Law ("Official Gazette of RM" Nos. 80/93; 33/95, 43/95, 71/96, 5/98, 28/98, 11/01, 2/02, 44/02, 51/03), the tax base of the taxpayer will be reduced up to the level of funds invested in environment and nature protection.

According to Article 30 of the Profit Tax Law, the taxpayer is entitled to accelerated fixed assets depreciation in cases of achievement of technological modernisation or procurement of environment and nature protection preparations, up to the level which exceeds by 25 % the depreciation calculated by one of the methods for depreciation calculation.

According to Article 4, paragraph 1, item 18 of the Rulebook on the manner of calculation and payment of profit tax and prevention of double tax relief or double taxation ("Official Gazette of RM" Nos. 92/02, 54/03 and 56/03), resources serving environment and nature protection include resources intended for equipment, devices and instruments used for pollution reduction and for measurement of the status of air, water and soil pollution, introduction of clean technologies, as well as for the construction of municipal and industrial wastewater treatment plants, instalment of filters for protection of air against pollution, manufacturing of products from waste materials, collection and disposal of communal and hazardous substances, etc.

### **c) excise duty**

Higher excise duty is prescribed for petrol with lead content above 0.013 g/l (24.396 MKD / litre), compared to the excise duty prescribed for unleaded petrol with lead content below 0.013 g/l (21.692 MKD/litre) and for diesel fuel (12.121 MKD/litre).

### **d) customs duties**

In accordance with Article 183, line 7 of the Customs Administration Law ("Official Gazette of RM" Nos. 21/98, 26/98, 63/98, 86/99, 25/00, 109/00, 31/01, 4/02, 55/02, 42/03), all objects intended for direct environment and nature protection, provided they are not produced in the Republic of Macedonia, will be released from customs duties payment.

The Law on Customs Tariff ("Official Gazette of RM" Nos.23/03, 69/04) determines higher customs rates for goods that burden the environment in the course of their use: used tires, used cars, road truck-tractors, busses and trucks.

The National Budget of the Republic of Macedonia is an important economic instrument for the environment protection policy. Namely, Article 3 of the Draft Law on Environment stipulates that measures and activities intended for environment and nature protection and improvement are of public interest. According to the same Article, the State is obliged to provide the resources required for environment and nature protection and improvement. The state provides such resources mainly through allocation of funds to the budget of the MEPP, amounting 0.51 % of the total National Budget in 2003.

It is not possible to determine precisely the percentage of the GDP related to environment protection, due to the fact that investments in environmental protection are carried out on various bases and by various entities (private sector, NGOs, local self-government units, donors, Budget of the Republic of Macedonia, etc.).

According to the data available in the MEPP, the percentage of the GDP related to environment protection is approximately 0.25 %.

**12. Are there any mechanisms to provide for the protection of the environment to be taken into consideration in other policies, in particular agricultural, industrial, energy and transport policies in line with Article 6 of the EC treaty?**

The achievement of sustainability at the level of national development requires strategic approach, as well as long-term perspective and integration of different development processes within which solutions for complex challenges are offered. Sustainable development requires changes in the policies of many sectors, but it also requires coherence among them. This assumes the balancing of economic, social and environmental goals and their integration whenever it is possible, through the establishment of mutually supportive policies and practices. In this context, the process of development and adoption of documents, such as strategies, national programmes and plans in individual sectors should incorporate the concept of sustainable development, while the policy in the field of the environment should endeavour towards long-term conservation and improvement of the environment. The establishment of mechanisms through which the protection of the environment is taken into account while creating other policies is of particular importance.

The establishment of the Ministry of Environment and Physical Planning (MEPP) in 1999 followed the recognition of the commitment of the Government of the Republic of Macedonia to integrate the policy of environmental protection as an indispensable part of social living. This act provided the grounds for appropriate involvement of this sector in the overall development processes in the country, aimed at the establishment of the concept of sustainable development on national level.

There are mechanisms in the Republic of Macedonia that provide for the integration of environmental protection into other sectors' policies. Thus, for example, the process of drawing up legislation and strategic documents in different sectors is carried out through the establishment of working groups involving, among others, the representatives of relevant state administrative bodies, including representatives of the sector of the environment. In this way, the incorporation of the policy of environment protection in those processes is ensured.

The integration of environmental protection is also regulated in the Rules of Procedure of the Assembly of the Republic of Macedonia ("Official Gazette of RM" No.60/02). Namely, Chapter VII - Working bodies of the Assembly, defines the obligations of permanent and interim working bodies. This mechanism provides that working bodies review at their sessions the proposals submitted by the Government of the Republic of Macedonia in the presence of a representative of the Government. Working bodies may propose amendments and adopt conclusions with regard to them on the basis of the review of submitted proposals.

In addition to this, according to the Rules of Procedure of the Government of the Republic of Macedonia ("Official Gazette of RM" No. 38/01, 98/02, 9/03, 47/03, 67/03), documents in the area of the environment and sustainable development undergo compulsory review by the relevant Economic System and Current Economic Policy Commission of the Government of the Republic of Macedonia. Article 68 of the Rules of Procedure also stipulates the obligation for cooperation among Ministries and state administrative bodies while elaborating relevant documents. The materials submitted to the Government of the Republic of Macedonia for consideration and adoption, when related to the environment and physical planning, should be accompanied by the opinion of the MEPP.

On the other hand, the Government forwards the materials related to the environment and physical planning to the relevant competent institutions and interested state administrative bodies, requesting their opinion on such materials.

While considering certain items within its competence, the Government may, by means of decision, establish interim (ad hoc) bodies. The act for establishment defines their tasks, manner of work and composition. These bodies make decisions mainly in the framework of certain activities carried out in the sector of the environment, and are composed of representatives of sectors that may have significantly impact the environment, i.e. degrade the environment (e.g.: agriculture, forestry, industry, energy, transport, etc.).

The Draft Law on Environment, the adoption of which is expected by the end of the first quarter of 2005, in its Chapter X regulates the procedure of impact assessment with regard to the strategies, programmes and plans on the environment, the so called strategic environmental assessment. According to the Draft Law, planning documents that must be subjected to strategic assessment fall into the following areas: agriculture, forestry, fishery, energy, industry, mining, transport, regional development, telecommunications, waste management, water management, tourism, spatial and urban planning and land use, as well as the National Environmental Action Plan (NEAP) and Local Environmental Action Plans (LEAPs) (for more details see [22 II A P7](#)).

According to Article 69 of the Draft Law on Environment, the Ministry of Environment and Physical Planning prescribes the manner of information dissemination and public participation in the processes of the adoption of plans and legal acts. The said manner is regulated through by-law issued by the Minister of Environment and Physical Planning. The Ministry of Environment and Physical Planning and other bodies affected by the implementation of planning documents, legal entities and natural persons as well as the public may express their opinion on the draft planning document and report on the environment, to the body drafting the planning document within 30 days after the submission or dissemination of information thereon. This mechanism enables public participation in the process of drawing up strategic development documents.

The incorporation of the environmental protection policy in the processes of the creation of sectoral policies is to a certain extent evident in the analysis of the drawn-up strategic development documents. Documents that have incorporated the said mechanisms in the course of their development and implementation are listed below:

- *National Environmental Action Plan (NEAP 1) (1996)*

The process of integration of the environment into other sectors is one of the main principles on which the development of the NEAP 1 was founded. In the process of definition of priority activities in the area of environment protection, conditions existing in certain sectors and their interaction with the environment were taken into account. This has resulted in the establishment of grounds for inter-sectoral cooperation in the process of environment protection and foundations of sustainability of the development at the national level. The NEAP 1 was developed through cooperation of all relevant stakeholders who had jointly defined and proposed measures for environment protection by individual thematic areas. Recognizing the positive effects of the established mechanism of inter-sectoral cooperation, the same mechanism has been applied in the development of the second NEAP, expected to be adopted by the end of 2005.

- *National Environmental Health Action Plan (NEHAP 1) (1999)*

This document, the development of which involved representatives of the Ministry of Environment and Physical Planning (MEPP), recognises the linkage between the environment and health. Namely, it formulates guidelines aimed at overcoming environmental health problems, and identifies priorities and actions that treat, among other issues, institutional setup, stressing the need for the establishment of inter-sectoral cooperation, reform of environmental health services and capacity building, information systems strengthening, development of criteria and procedures for the assessment of environmental impacts on human health and their integration in decision making processes, establishment of control measures, updating and modernisation of the system of environmental-health risks assessment.

#### **- Spatial Plan of the Republic of Macedonia (2004)**

The Spatial Plan of the Republic of Macedonia, which has a stressed strategic development orientation, defines and specifies the main and feasible goals and directions of development. In terms of the necessary qualitative and quantitative structural changes, it defines relevant and adaptable spatial planning solutions and options.

The document specifies the goals and the planning determinants of the environment protection and improvement, as part of the overall activities in the field of spatial planning. Based on the relevant scientific data on the state of the environment and nature, areas and sites of degraded quality of the environment are identified, on the basis of which the goals and the planning determinants are defined, thus establishing the concept of their protection.

The Spatial Plan of the Republic of Macedonia is implemented through the development of spatial plans for regions, municipalities and areas of public interest. To this end, the Law on Implementation of the Spatial Plan of the Republic of Macedonia was adopted ("Official Gazette of RM" No. 39/04).

#### **- Strategy for Energy Efficiency in Macedonia by 2020 (2004)**

In October 2004, the Ministry of Economy promoted the Strategy for Energy Efficiency in the Republic of Macedonia by 2020, which defines the possibilities for efficient energy use, as well as the guidelines for the energy efficiency policy. The goal of the Strategy, which incorporates the Implementation Plan with specific measures and activities, is to develop a framework for the adoption of energy efficient practices. Generally, this means the promotion of the use of renewable energy sources, through the implementation of training programmes and initiatives and private sector support, in order to reduce the impacts of the energy sector on the environment.

#### **- Strategy and Action Plan for Biological Diversity Protection in the Republic of Macedonia (2004)**

The Strategy for Biological Diversity Protection and Action Plan was adopted by the Government of the Republic of Macedonia in 2004. It was developed with the financial support provided by the GEF through the World Bank. The Ministry of Environment and Physical Planning (MEPP) coordinated the process of its development.

The Strategy and Action Plan contain the most relevant mechanisms with regard to the protection, conservation and sustainable use of wild plant, fungi and animal species in the period until 2008. Under the Strategy, the analysis has been made and measures, actions and mechanisms for cooperation among sectors have been defined for the purpose of biological diversity protection. The Action Plan contains tasks with estimated costs, time frames and expected outcomes.

#### **- Strategy for Agriculture Development by 2005 (2001)**

The Strategy was developed through cooperation between the Macedonian Academy of Science and Arts and the Ministry of Agriculture, Forestry and Water Economy (MAFWE). The Strategy, in its Introduction, states that one of its main objectives is to achieve rational use of human and natural resources for the purpose of reducing environmental pollution caused by the agricultural sector. However, it does not envisage/define mechanisms, measures and activities through which the set objective will be attained.

### **13. Which international agreements concerning environmental protection have been signed and which ones have been ratified?**

The Republic of Macedonia takes an active part in international efforts aimed at solving the global environment pollution and degradation and has achieved significant progress in the international cooperation in the area of the environment, on bilateral, regional, European and global levels. In this context, the Republic of Macedonia is a signatory to a high number of multilateral environmental agreements, which are of great importance to the Republic of Macedonia in terms of its participation and influence in the Region and in Europe.



## **GENERAL**

### **Ratified:**

- **Convention on Environmental Impact Assessment in a Transboundary Context (Espoo, February 1991)**

The Convention was ratified by means of the Law on Ratification ("Official Gazette of RM" No. 44/99).

- **Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus Convention)**

The Convention was ratified by means of the Law on Ratification ("Official Gazette of RM" No. 40/99).

- **Energy Charter Protocol on Energy Efficiency and Related Environmental Aspects**

The Protocol was ratified by means of the Law on Ratification of the final document of the European Conference on Energy Charter ("Official Gazette of RM" No. 16/98).

### **Signed:**

- **Protocol on Strategic Environmental Assessment**

The Protocol has been adopted on the basis of the Espoo Convention. The Republic of Macedonia signed it in May 2003, in Kiev, Ukraine, at the Fifth Ministerial Conference "Environment for Europe".

- **Protocol on Pollutant Release and Transfer Registers**

The Protocol has been adopted on the basis of the Aarhus Convention. The Republic of Macedonia signed it in May 2003, in Kiev, Ukraine, at the Fifth Ministerial Conference "Environment for Europe".

## **NATURE**

### **Ratified:**

- **Convention on Biological Diversity (Rio)**

The Convention was ratified by means of the Law on Ratification ("Official Gazette of RM" No. 54/97). The Convention entered into force in 1998.

- **Convention on Wetlands of International Importance especially as Waterfowl Habitats (Ramsar)**

The Convention has been ratified by means of the Decree on Ratification ("Official Gazette of the SFRY" No. 9/77).

- **Convention on the Conservation of Migratory Species of Wild Animals (Bonn)**

The Convention was ratified by means of the Law on Ratification ("Official Gazette of RM" No. 38/99). The Convention entered into force in November 1999.

- **Convention on the Conservation of European Wildlife and Natural Habitats (Bern)**

The Convention was ratified by means of the Law on Ratification ("Official Gazette of RM" No. 49/97). The Convention entered into force in April 1999.

- **Convention for the protection of the World Cultural and Natural Heritage**

The Convention was ratified by the Socialist Federal Republic of Yugoslavia in 1977, published in the "Official Gazette of SFRY" No. 56/74. The Republic of Macedonia has taken it over by means of succession and became Party to the Convention on 08.09.1991.

- **Convention on International Trade in Endangered Species of Wild Fauna and Flora (Washington)**

The Convention was ratified by means of the Law on Ratification ("Official Gazette of RM" No. 82/99). The Republic of Macedonia became Party to the Convention on 02.11.2000.

- **European Convention for the Protection of Vertebrate Animals Used for Experimental and other Scientific Purposes**

The Convention was ratified by means of the Law on Ratification ("Official Gazette of RM" No. 13/02).

- **Protocol of Amendment to the European Convention for the Protection of Vertebrate Animals Used for Experimental and other Scientific Purposes**

The Protocol was ratified by means of the Law on Ratification ("Official Gazette of RM" No. 13/02).

- **European Landscape Convention (Firenza, 2000)**

The Convention was ratified by means of the Law on Ratification ("Official Gazette of RM" No. 44/03).

- **Agreement on the Conservation of Bats in Europe (London, 1991)**

The Agreement was ratified by means of the Law on Ratification ("Official Gazette of RM" No. 38/99), and entered into force in the Republic of Macedonia on 10.09.1999.

- **Amendment of the Agreement on the Conservation of Bats in Europe**

The Amendment was ratified by means of the Law on Ratification ("Official Gazette of RM" No.13/02).

- **Agreement on the Conservation of African-Eurasian Migratory Waterbirds (the Hague)**

The Agreement was ratified by means of the Law on Ratification ("Official Gazette of RM" No. 32/99), and entered into force in the Republic of Macedonia on 01.11.1999.

#### **Signed:**

- **Cartagena Protocol on Biosafety to the Convention on Biological Diversity (Cartagena Protocol)**

The Republic of Macedonia signed the Protocol on 26.07.2000. The Protocol ratification procedure is in progress.

- **Memorandum of Understanding on the Conservation and Management of the Middle-European Population of the Great Bustard (*Otis tarda*)**

The Republic of Macedonia signed the Memorandum on 07.11.2000 in Amman, Jordan.

### **ATMOSPHERE**

#### **Ratified:**

- **Vienna Convention for the Protection of the Ozone Layer (Vienna, March 1985)**

The Convention was ratified by means of the Law on Ratification "Official Gazette of SFRY" No. 1/90). The Republic of Macedonia has taken it over by means of succession on 10.03.1994.

- **Montreal Protocol on Substances that Deplete the Ozone Layer (Montreal, September 1987)**

The Protocol was ratified by means of the Law on Ratification "Official Gazette of SFRY" No. 16/90). The Republic of Macedonia has taken it over by means of succession on 10.03.1994.

- **The Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer – London**

The Protocol was ratified by means of the Law on Ratification (“Official Gazette of RM” No. 25/98).

- **The Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer – Copenhagen**

The Protocol was ratified by means of the Law on Ratification (“Official Gazette of RM” No. 25/98).

- **The Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer – Montreal**

The Protocol was ratified by means of the Law on Ratification (“Official Gazette of RM” No. 51/99).

- **The Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer – Beijing, 1991**

The Protocol was ratified by means of the Law on Ratification (“Official Gazette of RM” No. 13/02).

- **United Nations Framework Convention on Climate Change (New York, 1992)**

The Convention was ratified by means of the Law on Ratification (“Official Gazette of RM” No. 61/97), and entered into force in the Republic of Macedonia on 28.04.1998.

- **Kyoto Protocol to the United Nations Framework Convention on Climate Change**

The Protocol was ratified by means of the Law on Ratification (“Official Gazette of RM” No. 49/04).

- **Convention on Long-Range Transboundary Air Pollution (Geneva, 1979)**

The Convention was ratified by means of the Law on Ratification (“Official Gazette of the SFRY” No. 11/86). The Convention was taken over by the Republic of Macedonia by means of succession on 17.11.1991.

- **Protocol to the 1979 Convention on Long-Range Transboundary Air Pollution on Long-Term Financing of the Co-operative Programme for Monitoring and Evaluation of the Long-Range Transmission of Air Pollutants in Europe (EMEP, Geneva 1984)**

The Protocol was ratified by the Socialist Federal Republic of Yugoslavia (“Official Gazette of SFRY” No.2/87), and the Republic of Macedonia has taken it over by means of succession.

- **Stockholm Convention on Persistent Organic Pollutants**

The Republic of Macedonia signed the Convention in Stockholm, Sweden, on 22.05.2001. The Convention was ratified by means of the Law on Ratification (“Official Gazette of RM” No. 17/04)

**Signed:**

- **Protocol to the 1979 Convention on Long-Range Transboundary Air Pollution on Persistent Organic Pollutants (POPs)**

The Republic of Macedonia acceded to this Protocol by means of statement (Aarhus, June 1998). It has not ratified it yet.

- **Protocol to the 1979 Convention on Long-Range Transboundary Air Pollution on Heavy Metals**

The Republic of Macedonia acceded to this Protocol by means of statement (Aarhus, June 1998). It has not ratified it yet.

### **WASTE**

#### **Ratified:**

- **Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal**

The Convention was ratified by means of the Law on Ratification ("Official Gazette of RM" No. 49/97).

- **Amendment to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, Amendment to Annex I, Annex VIII and Annex IX (Kitchen, Malaysia, 23-27 February 1998)**

Amendments were ratified by means of the Law on Ratification ("Official Gazette of RM" No. 49/04).

### **SOIL**

#### **Ratified:**

- **United Nations Convention to Combat Desertification in Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa**

The Convention was ratified by means of the Law on Ratification ("Official Gazette of RM" No. 13/02), and entered into force in the Republic of Macedonia on 06.06.2002.

### **NUCLEAR SAFETY**

#### **Ratified:**

- **1986 Convention on Early Notification of a Nuclear Accident**

The Convention was ratified by means of the Law on Ratification and published in the "Official Gazette of SFRY" No. 15/89. The Convention was accepted on 20.09.1996 by means of succession, and entered into force on 17.11.1991.

- **1979 Convention on the Physical Protection of Nuclear Material**

The Convention was ratified by means of the Law on Ratification, and published in the "Official Gazette of SFRY" No. 9/85. The Convention was accepted on 20.09.1996 by means of succession, and entered into force on 17.11.1991.

- **Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency**

The Convention was ratified by means of the Law on Ratification, and published in the "Official Gazette of SFRY" No. 4/91. The Convention was accepted on 20.09.1996 by means of succession, and entered into force on 17.11.1991.

- **Vienna Convention on Civil Liability for Nuclear Damage**

The Convention was ratified by means of the Law on Ratification, and published in the "Official Gazette of SFRY" No. 5/77. The Convention was accepted on 08.04.1994 by means of succession, and entered into force on 08.09.1991.

- **Treaty on the Non-Proliferation of Nuclear Weapons**

The Treaty was ratified by means of the Law on Ratification, and published in the "Official Gazette of SFRY" No. 10/70. The Treaty was accepted on 30.03.1995 by means of succession, and entered into force on 17.11.1991.

- **Agreement for the Application of Safeguards in Connection with the Treaty on the Non-Proliferation of Nuclear Weapons**

The Agreement was ratified on 23.01.2002, and published in the "Official Gazette of RM" No. 13/02, and entered into force on 16.04.2002. Together with the Agreement, the **Small Quantities Protocol** was signed, as a Protocol signed by all countries that do not possess nuclear weapons.

- **Comprehensive Nuclear-Test-Ban Treaty**

**The Treaty was ratified by means of the Law on Ratification ("Official Gazette of RM" No.7/00).**

- Statute of the International Atomic Energy Agency (IAEA)

The Statute was published in the "Official Gazette of SFRY" No. 1/58. The Statute was accepted in February 1994 by means of succession, and entered into force on 17.09.1991.

- 1957 European Agreement Concerning International Carriage of Dangerous Goods by Road

The Agreement was ratified by means of the Law on Ratification, and published in the "Official Gazette of SFRY" No. 59/72. The Agreement was accepted by means of succession, and entered into force on 17.11.1991.

### **TRILATERAL AGREEMENTS**

#### **Signed:**

- **Declaration on the creation of the Prespa Park and the Environmental Protection and Sustainable Development of the Prespa Lakes and their Surrounding**

This Declaration was signed by the Prime Ministers of Macedonia, Greece and Albania, respectively, on 02.02.2000, in Germanos, Greece.

### **BILATERAL AGREEMENTS**

#### **Ratified:**

- **Agreement between the Government of the Republic of Macedonia and the Government of the Republic of Croatia on Cooperation in the Field of Environmental and Nature Protection (Zagreb, 2002)**

The Agreement was signed on 01.03.2002 in Zagreb, Republic of Croatia.

The Agreement was ratified by means of the Law on Ratification ("Official Gazette of RM" No. 13/03).

- **Agreement on Cooperation in the Field of Environmental and Nature Protection between the Government of the Republic of Macedonia and the Government of the Russian Federation (Moscow, 1998)**

The Agreement was signed on 27.01.1998 in Moscow, Russian Federation.

The Agreement was ratified by means of the Law on Ratification ("Official Gazette of RM" No. 16/98).

- **Agreement between the Government of the Republic of Macedonia and the Government of the Federal Republic of Yugoslavia on Cooperation in the Field of Environment (Belgrade, 2002)**

The Agreement was signed on 19.07.2002 in Belgrade, Federal Republic of Yugoslavia.

The Agreement was ratified by means of the Law on Ratification ("Official Gazette of RM" No. 13/03).

Signed:

- **Agreement between the Ministry of Environment of the Republic of Macedonia and the Ministry of the Environment and Waters of the Republic of Bulgaria on Cooperation in the Field of Environmental Protection (Sofia, 2000)**

The Agreement was signed on 09.06.2000 in Sofia, Republic of Bulgaria.

The Agreement was not ratified, as it was concluded between ministries.

- **Memorandum of understanding concerning Cooperation in the Field of Environmental Protection and Sustainable Development between the Macedonian Ministry of Environment and Physical Planning and the Albanian Environmental Agency (Pogradec, Albania, 2000)**

The Memorandum was signed on 07.09.2000 in Pogradec, Republic of Albania.

The Memorandum was not ratified, as it was concluded between the ministry and agency.

- **Memorandum of understanding and cooperation in sustainable development and the environment between Macedonia and Greece, i.e. Memorandum of understanding and cooperation in sustainable development and the environment between the Party of the Second Part to the New York Interim Accord, of September 13, 1995 and The Party of the First Part to the above Interim Accord (Skopje, 2000)**

Memorandum was signed on 04.09.2000, in Skopje, Republic of Macedonia.

The Memorandum was not ratified, as it was concluded between ministries.

- **Letter of Intent between Republic of Macedonia and Province of Low Austria on Establishment of Friendship and Cooperation in the Field of Environmental Protection (St. Pelten, 2000)**

The Letter of Intent was signed on 06.11.2000, in St. Pelten, Republic of Austria.

- **Agreement between the Government of Switzerland represented by the Swiss Agency for Development and Cooperation and the Macedonian Government represented by the Ministry of Environment and Physical Planning concerning the River Monitoring System in Macedonia**

The Agreement was signed on 16.02.2001, in Skopje, Republic of Macedonia.

- **Agreement between the Government of the Republic of Macedonia and the Council of Ministers of the Republic of Albania for the Protection and Sustainable Development of Lake Ohrid and its Watershed**

The Agreement was signed on 17.06.2004, in Skopje, Republic of Macedonia.

- **Protocol on Cooperation in the field of Environmental Protection between the Ministry of Environment and Physical Planning of the Republic of Macedonia and Ministry of Environment of the Czech Republic**

The Protocol was signed on 17.06.2004 in Prague, Czech Republic.

- **Memorandum of Understanding on the Conservation of the European Vultures: Black Vulture (*Aegypius monachus*); Bearded Vulture (*Gypaetus barbatus*); Griffon Vulture (*Gyps fulvus*) and Egyptian Vulture (*Neophron percnopterus*) between Ministry of Environment and Physical Planning of the Republic of Macedonia and The Consortium of NGOs consisting of Frankfurt Zoological Society (FZS); Black Vulture Conservation Foundation (BVCF); Foundation for Conservation of Bearded Vulture (FCBV); BirdLife International (BirdLife); Royal Society for Protection of Birds/BirdLife in United Kingdom (RSPB) and Ligue pour la Protection des Oiseaux/BirdLife in France (LPO)**

The Memorandum was signed on 17.06.2003, in Skopje, Republic of Macedonia.

**14. Has your country submitted a report to the Committee on Sustainable Development (CSD) on the implementation of Agenda 21?**

The Republic of Macedonia has submitted reports to the Commission on Sustainable Development (CSD) and they are available on the following WebSites: [www.johannesburgsummit.org](http://www.johannesburgsummit.org), [www.un.org/esa/sustdev/csd/csd](http://www.un.org/esa/sustdev/csd/csd), [www.moe.gov.mk/sustainable](http://www.moe.gov.mk/sustainable).

The Republic of Macedonia participated at the 9 Session of the CSD (held in New York, 2001) with separate reports by subject areas of the Session: energy, transport and atmosphere.

In 2002, the Government of the Republic of Macedonia adopted the National Assessment Report on Sustainable Development intended for the World Summit on Sustainable Development (WSSD), held in Johannesburg, 2002 and submitted it to the CSD. The National Assessment Report on Sustainable Development was developed in accordance with the Guidelines for NCSD Rio + 10 Assessment, Earth Council. The Ministry of Environment and Physical Planning (MEPP) coordinated the process of its development. With regard to its preparation, the Government of the Republic of Macedonia adopted Decision for establishment of National Preparatory Committee (NPC) and Coordinative Body (CB). The NPC was composed of representatives of all relevant Ministries and other state administrative bodies, including the sectors of science and education, the representatives of the local self-government through the Association of local self-government units, the Chamber of Commerce, the sector of business/industry, NGOs and other societies and associations of citizens. The development of the National Assessment itself lasted for more than a year, including the organisation of numerous working meetings and workshops, conducting of surveys, and creation of separate Web Sites on sustainable development and the publication of bilingual brochures, etc.

With regard to the 12 session of the CSD, held in April 2004 in New York, the Ministry of Environment and Physical Planning also coordinated the development of the Report which was submitted to the National Information Analysis Unit, UN/DESA/DSD. Taking into account that at the Session three thematic areas were considered: water, sanitation and human settlements, the Working Group was established for the purpose of the Report development and included representatives of the Ministry of Agriculture, Forestry and Water Economy, the Ministry of Health, as well as of the Sector for Physical Planning of the Ministry of Environment and Physical Planning. The Report was elaborated in accordance with the Guidelines for National Reporting to CSD 12, available at [www.un.org/esa/sustdev/natlinfo.htm](http://www.un.org/esa/sustdev/natlinfo.htm).

It should be noted that the Republic of Macedonia had submitted the data to CSD on the extent of Agenda 21 implementation before the 9 Session of the CSD, in the specified format - Country Profile, available at [www.un.org/esa/agenda21/natlinfo/countr/macedonia/index.htm](http://www.un.org/esa/agenda21/natlinfo/countr/macedonia/index.htm).

**15. Could you describe the national effort in the field of environmental research and development (e.g. level of funding of national institutes, etc.)?**

The interdisciplinary nature of environment protection poses difficulties with regard to the precise determination of activities and resources allocated for research aimed at its development and promotion.

The Draft Law on Environment, the adoption of which is expected by the end of the first quarter of 2005, contains a separate Chapter of provisions regulating research activities and education in the area of the environment. According to the Draft Law on Environment, the Ministry of Environment and Physical Planning provides financial support for researches related to the state of the environment and projects intended for environment protection, based on annual programme for environment promotion.

According to the Law, the funds for the Programme are provided from the Budget of the Republic of Macedonia, as well as from donations, presents, wills, foundations and other sources. The

Programme specifies the conditions and the criteria for awarding funds for research activity and for the implementation of environmental projects. The funds are awarded through public competition announced by the Ministry of Environment and Physical Planning, concerning the full implementation of a given project or part of the programme activities of environmental projects. The Ministry of Environment and Physical Planning submits annual reports on the implementation of the programme for environment promotion to the Republic of Macedonia.

Scientific research, as well as innovation activities, i.e. issues of research and development, are regulated by: Law on Science and Research Activity ("Official Gazette of RM", No.13/96, 29/02), Technological Development Enhancement and Facilitation Law ("Official Gazette of RM" No. 98/00) and Technical Culture Enhancement and Facilitation Law ("Official Gazette of RM" No. 53/00) and carried out by the Ministry of Education and Science (MES). Research and development in the field of the environment will be particularly enhanced by introducing this category in by-laws.

The draft application for the financing of scientific research projects (Form - OB 1), under item 11, requires that "the relevance of the research results to the protection and enhancement of the working and living environment, i.e. the quality of living," is defined, which is further on evaluated in the selection process through which the funding of the scientific research project is accepted or rejected.

The Programme for Technological Development for the period 2002-2006:

- in the section "Priority areas for enhancement and facilitation of technological development" - "sustainable development" is defined as a priority;
- in the section "Acquisition, technology and characterization of new and modern materials", "natural resources saving and environment protection" is defined as a priority.
- in the section "Genetic and biological research for human health promotion", the defined priority is "stimulation of multi-disciplinary research of basic nature in order to facilitate real and permanent progress in the domains of health care and the quality of life".
- in the section "Healthy food production", the "methods, analyses, detection and control of food safety and risks of the hazardous impact of environment on human health" is defined as a priority;
- in the section "Science and sustainable development", the defined priority refers to "the development of strategies for mitigation of adverse impacts of human activities on the environment, promotion of sustainable human settlements, environment degradation and protection";
- in the section "Social development and needs for new knowledge" the defined priority is "social integration and the need for the improvement of the quality of life";

Through public competition for awarding financial resources in the form of co-financing development projects, among other projects the projects intended for the improvement of the quality of living in terms of work humanisation and environment protection are co-financed.

According to the Decision on the Establishment of the Network of National Institutions in the Area of Culture ("Official Gazette of RM", No. 84/03), the Museum of Natural Science of Macedonia is a national cultural institution, financed by the Budget of the Republic of Macedonia. According to the Law on Museums ("Official Gazette of SFRY", Nos. 25/79, 51/88 and "Official Gazette of RM" No.12/93), its activity includes research, collection, staffing, professional and scientific processing and study, protection, keeping, dissemination and presentation of museum material, which, considering its expertise, include documents on and objects of flora, fauna and fungi of Macedonia. As such, its activity supports environment protection and promotion. The Ministry of Culture through annual programme aimed at financing the cultural projects of national interest finances the work programme of the Museum of Natural Science of Macedonia.

Environmental research and development hold prominent position in the Law on Cultural Heritage Protection ("Official Gazette of RM" No. 20/04, 71/04), where the protection of the immovable cultural heritage is carried out, *inter alia*, through such compulsory integration of heritage in spatial and urban plans and in plans and programmes for the environment and nature protection, as well as through its recognition as a factor of sustainable economic and social development, especially in the context of cultural tourism, housing, specific professions and education.



According to this Law, cultural sites representing specific parts of the landscape, that are outstanding as areas of specific interaction between man and nature, are protected as part of the immovable cultural heritage. The same is further provided for under the European Landscape Convention, ratified by the Republic of Macedonia ("Official Gazette of RM" No. 44/03). The Law also establishes integrated protection, through a set of conservation measures and through an active inclusion of immovable cultural heritage in the life of the community, representing a factor of sustainable social development, especially in the domains of space planning and development, investment based building, environment and nature protection and improvement, etc. The Law contains series of provisions on entities that will carry out the protection of immovable cultural heritage and its surrounding against physical destruction, environment and nature pollution, as well as on measures for environmental quality improvement within protected areas.

In the period 2000-2004, the Ministry of Education and Science has financed 39 scientific research projects related to the area of environment protection, with a total value of 17.810.000 MKD, and 13 development research and innovation projects related to the environment were co-financed, their total value being 7.165.000 MKD.

In the last decade, the Energy Research Centre of the Macedonian Academy of Science and Arts has worked on 14 research projects, with a total value of approximately 25.000.000 MKD, provided by the European Commission and from other foreign sources. These projects include analyses of the impacts of energy related and other technologies on the environment.

In the period 2001-2004, the Ministry of Environment and Physical Planning supported around 20 scientific research projects in the area of environment protection, with a total value of approximately 8.500.000 MKD.

**16. Please detail any initiatives or programmes of environmental regional co-operation in which your country is participating. In particular, outline your country's plans to follow up on the priority projects identified by yourselves in the framework of the REReP.**

The Republic of Macedonia carries out regional cooperation as a key segment of its international political activity, through permanent strengthening of the cross-border cooperation and active participation in regional initiatives and activities under the Stability Pact. Through active regional cooperation, the Republic of Macedonia contributes towards nourishing good neighbourly relations, security, stability and environment improvement in the Region.

The Republic of Macedonia is a member of the South-East Europe Cooperation Process (SEECP); Central European Initiative (CEI); Stability Pact (SP) and South-Eastern Cooperative Initiative (SECI). The procedure for full membership in the Black Sea Economic Initiative is underway, and in the Adriatic-Ionian Initiative and Segedin Process, the Republic of Macedonia has the status of observer.

In the framework of the above regional initiatives, the environment is discussed mainly in general context, as a factor that should be taken into account and that is especially stressed in the framework of the cooperation concerning the assessment of the impact of transportation corridors 8 and 10 on the environment.

In the context of the so called Athens Process for the establishment of regional energy market, preparatory activities are going on for the purpose of concluding an Agreement on Energy Communities in South-Eastern Europe, containing a separate segment on the environment.

In the framework of the Segedin Process, under the Stability Pact aimed at strengthening democracy and the role of local self-government in the countries of South-Eastern European Region through the promotion of cross-border cooperation between local authorities and the establishment of Euro-Regions, there has been significant increase in the interest of the local self-government units in the Republic of Macedonia with regard to the establishment of cooperation and raising initiatives for cooperation within Euro-Regions in the last several years. As a result of past activities, the following Euro-Regions have been established: Skopje-Nis-Sofia, Prespa-Ohrid and Prespa Park. Activities aimed at establishing additional Euro-Regions in other border municipalities are underway.

The Regional Environmental Reconstruction Programme for South Eastern Europe (REReP) is an initiative in the framework of the Second Round Table of the Stability Pact and represents its main environmental component. Furthermore, it is the first initiative raised and developed by the countries in the Region, including: Albania, Bosnia and Herzegovina, Bulgaria, Macedonia, Romania, Croatia, and Serbia and Montenegro. Kosovo, as a territory under UN administration, joined the initiative later. The REReP was adopted by the Ministers of Environment from the Region, as well as by the Stability Pact representatives, in 2000. This was followed by the establishment of institutional framework and the definition of tasks for the bodies implementing the Programme. The implementation of the Programme is supervised by the Task Force composed of representatives of all participating countries and of donors. It is co-chaired by the European Commission and one of the member countries. The Republic of Macedonia was the first country to co-chair the Task Force. It participates in many regional projects, and in some of them has acted as a Lead Country.

In the framework of the Regional CARDS 2002, the Ministry of Environment and Physical Planning (MEPP) participates in the regional project aimed at capacity building in the Balkan countries, with regard to environmental reporting and EIONET development. The goal of the project is to strengthen the cooperation with the European Environmental Agency (EEA), in order to facilitate integration in the EEA's work programme and prepare the future membership of the countries to this Agency. In addition, the Republic of Macedonia has planned its active participation in the regional CARDS 2003, for which the Terms of Reference are under development.

The Republic of Macedonia participates in the initiative for development of indicative map under the Pan-European Environmental Network, coordinated by the European Centre for Nature Conservation (ECNC). The project's goal is to define the contours of the network, thus identifying the key priority areas of European importance and the existing corridors among them; it will also indicate where and how new corridors may be established in order to meet the requirements concerning linkage between key species and the locations of buffer zones and crossings, if required. The final product will be the map illustrating the natural heritage of the Region. This will also raise the awareness and the understanding of environmental networks.

The Republic of Macedonia is actively involved in the regional initiative aimed at the establishment of the Emerald Network of Areas of Special Conservation Interest (ASCI), under establishment on the territories of the countries Parties to the Convention on the Conservation of European Wildlife and Natural Habitats ("Official Gazette of RM" No49/97). The project is carried out with the financial support provided by the Council of Europe. During the first phase of the project, 10% of the total number of areas of special conservation interest was covered. The second phase is expected to cover additional 30 % of the total number of sites in the Republic of Macedonia, proportionally representing different habitat types.

The Republic of Macedonia participates in the regional project for Capacity Building for Improving the Quality of Data Inputs to National Greenhouse Gas Inventories, based on the experience/knowledge acquired by the countries of the Region that have completed their first National Communications on Climate Change under the United Nations Framework Convention on Climate Changes (UNFCCC).

The Trilateral Project for Prespa Park is a regional initiative resulting from the Declaration signed by the Prime Ministers of Republic of Macedonia, Republic of Albania and Republic of Greece in February 2000 (Prime Ministerial Declaration on the Creation of the Transboundary Prespa Park and the Environmental Protection and Sustainable Development of the Prespa Lakes). The Trilateral Prespa Park Coordination Committee has been established as its highest body. The developed Strategic Action Plan (SAP) for sustainable development of the Prespa Park has provided a basis for the initiation of multi-annual Project on Integrated management of ecosystems within the transboundary area of the Prespa Park. It is currently under implementation.

The MEPP attaches high importance to the development of bilateral cooperation, including cooperation with regard to the protection, promotion and sustainable development of three natural lakes and border massifs belonging to the Republic of Macedonia and its neighbours. This cooperation contributes to the improvement of the overall transboundary cooperation. Agreements in

the area of the environment were signed with all neighbouring countries: Greece (2000), Albania (2000), Bulgaria (2000), Serbia and Montenegro (2002). Within the wider Region, bilateral cooperation was established with Croatia (2002); Russian Federation (1998) and the Czech Republic (June 2004). Cooperation on bilateral basis has been initiated with Hungary, Slovenia and Ukraine. It should be pointed out that cooperation with Bavaria, as particularly intensive, has been carried out through the activity of the mixed Macedonian-Bavarian Intergovernmental Commission, which takes environmental protection as high priority.

The transboundary cooperation is of vital importance to the development of the Region, and this has been recognised by all countries in the Region. However, there has been shortage of funds to bring such cooperation on a bilateral basis to a sufficient level. The Republic of Macedonia has acquired positive experiences through its transboundary cooperation with Greece, benefiting from the support of the European Union (EU) in the framework of the INTERREG. The initiative of the European Commission - New Neighbourhood Instrument, promoted in 2003, enabled the Republic of Macedonia to strengthen its transboundary cooperation with the Republic of Bulgaria and the Hellenic Republic and to take part in the initiative of the European Commission - INTERREG III B CADSES.

In the framework of this initiative, the Republic of Macedonia and the Republic of Bulgaria have formulated a Joint Programme Document, defining the goals, priorities and measures, as well as an indicative financial plan for the allocation of funds in 2004-2006 period, and for the improvement of the environment and protection of natural and cultural resources for the purpose of promoting sustainable development. These represent the core contents of the Programme.

The cooperation with the Republic of Greece will be based on the financial support provided through CARDS/INTERREG III A.

In the framework of the INTERREG III B CADSES Programme, the Institute of Urban Environment and Human Resources, Pantheon University in Athens, has initiated a regional project in the area of spatial planning in South Eastern Europe, aimed at developing spatial and territorial indicators and actions for the spatial planning observatory (ESTIA- SPOSE European Space Territorial Indicators and Actions to the Spatial Planning Observatory in Southeast Europe).

The Republic of Macedonia has taken an active part in the process of the establishment, development and implementation of the Regional Environmental Programme (REReP), which proved to be a successful and supportive mechanism for the implementation of institutional reforms and a basis for regional cooperation promotion. The Stabilisation and Association Process (SAP) induced certain changes in the implementation mechanism of the REReP, so that now it assists countries in meeting their obligations, especially obligations in regional context.

In the framework of priority areas under the REReP, the Republic of Macedonia has identified the following projects/activities:

**REReP Projects for institutional strengthening/capacity building** – some of the priorities have already been included in the planning for the CARDS Programme and their commencement is expected. For the purpose of inclusion of the country in the Community programmes in the area of the environment -LIFE, projects and activities are carried out for the purpose of institutional capacity building and enhancing the absorption capacity of the country. Assistance is also needed for institutional strengthening related to the process of further harmonisation of the national legislation with the EU law and the achievement of the relevant EU standards.

**REReP regional projects** – projects at regional level and transboundary projects play a key role in the context of the regional cooperation development, providing for experience and information exchange. This has been provided, for example, through the Balkan Environmental Regulatory Compliance and Enforcement Network (BERCEN), through cooperation with the European Environmental Agency (EEA), etc. In the framework of this priority, during the last meeting of the REReP Task Force, held in October 2004, in Belgrade, Serbia and Montenegro, the representatives

of the countries participating in the Programme, presented the possible areas for cooperation in a transboundary context.

**REReP infrastructure projects** – the Republic of Macedonia has identified a number of infrastructure projects in the area of the environment, under the REReP Project 1.2 or, to be more precise, under the Priority Environmental Investment Programme (PEIP). These are related to the implementation of the EU high cost directives. Resources required for the implementation of these projects are enormous compared to the funds available in the national budget. On the other hand, such projects may not be implemented through grants, nor fully financed through bilateral donations, and the Republic of Macedonia currently does not participate in the ISPA or other pre-accession programme. According to the announcements made during the last meeting of the REReP Task Force, held in October 2004 in Belgrade, the Infrastructure Steering Group will have more active role in the management and provision of the funds required for the implementation of the projects identified in the Priority Environmental Investment Programme (PEIP).

## II. SECTORAL POLICIES

### *A. Horizontal Legislation*

#### **1. Are there measures providing for public access to environmental information? Are there provisions on administrative and/or judicial review in case access to information is not granted?**

Yes. The Draft Law on Environment regulates in detail the public access to environmental information, in its Chapter VIII. According to the Draft Law, everyone has a right, without having to prove his/her interest, to request validated information and data on the environment. Environmental information available from or for the state administrative bodies; bodies of the local self-government units; legal entities and natural persons to which, by means of law, public authorisations have been awarded, including special duties, activities and services in the area of the environment; legal entities and natural persons performing activity or service in the area of the environment, on the basis of a contract.

The right of access to environmental information is exercised with regard to all information, in written, visual, audio, electronic or any other available form, referring to:

- **State of environmental media**, such as air and atmosphere, water, soil, biological and landscape diversity, including genetically modified organisms, as well as interactions among these elements;
- **Factors**, such as materials, energy, nuclear fuels and nuclear energy, noise, radiation or waste, including radioactive waste, emissions and other forms of release into the environment that affects or may affect environmental media and human health;
- **Measures**, including administrative measures, such as policy, legislation, plans, programmes, environmental agreements, as well as activities that may, both directly or indirectly, affect environmental media or environmental factors, as well as measures or activities for the protection of these elements;
- **Reports** on the implementation of environmental legislation;
- **Cost-benefit analyses** and other financial and economic analyses used in the framework of measures and activities undertaken for the purpose of environment protection and improvement;
- **Conditions related to human health and safety**, such as foodstuffs safety, human living conditions, sites of cultural importance and man-made structures, to the extent that they are or may be under the influence of environmental media or affect those media through impacts on any of the above mentioned elements and factors.

Upon a proposal submitted by the Ministry of Environment and Physical Planning (MEPP) the Government of the Republic of Macedonia disseminates and maintains a list of entities in possession of environmental information or on which environmental information is available. The List also specifies information in possession by each of the listed entities, and it will be available on the Internet. Judiciary and legislative bodies are exempted from this obligation.

The request for environmental information may be submitted to any of the entities that are in possession of environmental information or on which environmental information is available. They are obliged to provide access to environmental information within the shortest possible time, but not later than one month after the receipt of the request or two months after the receipt of the request at latest, when the scope and the complexity of the information is such that the period of one month is not sufficient to complete the documentation. In the latter case, the applicant will be informed, within the shortest possible time and before the expiry of one month, on the need for the term extension, explaining the reasons for the extension. The applicant requesting the information will be informed on the spot of the measurement procedure of the methods of analysis, the sampling and the pre-treatment of samples used to gather the information.

The information is submitted in a requested form, unless the requested information is in a predefined form and readily available and understandable to the public. In case the information may not be submitted in the requested form, the body to which the request for information has been submitted is obliged to inform the applicant of the reason why the information is submitted in a form different from the requested one within seven days after the receipt of the request.

A request for environmental information may be denied if the competent body is not in possession of the requested information or if the required information on entities is not available. The entity to which the request has been submitted is obliged to forward it to the entity which is in possession of the requested information within seven days after the receipt of the request, provided it has knowledge of this, and inform the applicant thereon, or inform the applicant which entity is most probably in possession of the requested information. Within the same term such entity is obliged to provide the information in its possession and make it available to the applicant.

A request for environmental information may also be denied if it is obviously irrational or too general. In this case, the competent body is obliged to advise the applicant, in writing, on the form, contents and scope of the request within 15 days after the receipt of the request. In case the request refers to information that is not finalized or serves internal needs and communication, the applicant will be informed of the entity preparing information and of the time in which it will be concluded.

Access to information may be denied when its dissemination may result in negative effects on:

1. confidentiality of procedures managed by competent bodies;
2. international relations, public security and national defence;
3. court procedure, right of legal entities and natural persons to fair trial, as well as on the right to initiate court or disciplinary procedure;
4. confidentiality of commercial or industrial information when such confidentiality is guaranteed by law, for the purpose of protecting legitimate economic interest;
5. protection of private persons and confidentiality of personal data;
6. protection of copyright;
7. interests of persons that have submitted the requested information without any obligation, if such persons disagree with the dissemination of such information; and
8. protection of certain wild species and/or habitat types.

In all of the above cases it should be assessed whether the protection of the public interest to which the requested information refers is more important than the interest served by submitting the information. Competent bodies are obliged to issue a decision on the denial of the request, in full or in part, i.e. a conclusion in writing that will contain reasons for denying the request as well as instructions on the possibility to file a complaint on the decision or the conclusion.

The applicant is entitled to submit complaint against the decision or conclusion to the Commission of the Government of the Republic of Macedonia for settlement of administrative matters at second instance in the area of environment when the body from which information has been requested is a state administration body. In case a complaint is raised against a decision or conclusion taken by a local self-government body or by a legal entity or natural person performing public authorisations, it will be submitted to the Ministry of Environment and Physical Planning.

The Ministry of Environment and Physical Planning is responsible for dissemination of environmental information and for facilitating access to environmental information in possession by other Ministries, local self-government bodies and other bodies and entities.

Within the Ministry of Environment and Physical Planning, the Public Relations Office was established in 1999, in order to improve the dissemination of public environmental information, as well as to promote the two-way communication with the public.

According to the Law on Hydro Meteorological Matters ("Official Gazette of RM" No. 19/92, 5/03), hydrological and meteorological data are public and disseminated in appropriate annual reports (Article 14). The **Hydro Meteorological Directorate** is obliged to inform the public of the weather situation and its development and of water resources, and to issue warnings concerning dangerous and harmful hydrological and meteorological conditions.

The Government of the Republic of Macedonia will stipulate when the compensation for the costs arising from the provision of information will be paid, what are the exemptions from the obligation to pay such compensation and what is the level of compensation. The level of compensation will be reasonable and will not exceed the real costs born for the purpose of submitting the requested information. Searching in the data registers or records and checking the information where they are kept or maintained will be free of charge.

The Second Instance Commission of the Government of the Republic of Macedonia that settles complaints against decisions or conclusions issued by first instance bodies is in accordance with the Law on General Administrative Procedure ("Official Gazette of SFRY" Nos. 52/56, 10/65, 18/65, 4/77, 11/78, 32/78, 9/86, 16/87, 47/86 and "Official Gazette of RM" No. 44/02) obliged to issue a decision within 60 days at latest. After the expiry of the term the party may initiate administrative dispute before the Supreme Court of the Republic of Macedonia, which is the competent court for administrative disputes settlement when it is not satisfied with the decision of the Second Instance Commission or when the Commission has failed to respond within the prescribed term. The same rule applies in cases in which the Ministry of Environment and Physical Planning functions as a second instance body.

The Draft Law on Environment is expected to be adopted by the end of the first quarter of 2005.

## **2. What are the provisions in relation to access to the courts and administrative complaints when it comes to organisations and individuals?**

Protection of the rights of individuals and organizations through administrative procedure

The administrative procedure in the Republic of Macedonia is carried out on the basis of the Law on General Administrative Procedure ("Official Gazette of SFRY" Nos. 52/56, 10/65, 18/65, 4/77, 11/78, 32/78, 9/86, 16/86, 47/86 and "Official Gazette of RM" No. 44/02) within the framework of state administrative bodies and the Government of the Republic of Macedonia. In case when administrative procedure is managed by the local self-government unit or by another state administrative body acting as a body of first instance, the right to appeal against the decision is submitted to the competent Ministry in the relevant area. On the other hand, when the state administrative body acts as first instance body, the right to an appeal is submitted to the Commission of the Government of the Republic of Macedonia for settlement of administrative matters at second instance in the area of environment, established as a standing body within the Government.

According to Article 49 of this Law, a party to an administrative procedure is the entity (whether legal entity or natural person) upon whose request the procedure has been initiated or against whom the procedure has been raised or who is entitled to participate in the procedure for the purpose of protecting his/her/its rights or interests (hereinafter : "party"). The party is entitled to raise an appeal against decision issued at first instance (Article 223). It is also entitled to initiate administrative dispute against the decision issued at second instance or in case of silence of the administration before the Supreme Court of the Republic of Macedonia (administrative disputes are resolved in accordance with the Law on Administrative Disputes ("Official Gazette of SFRY" No. 4/77, 36/77 and "Official Gazette of RM" No. 44/02).

The Commission of the Government of the Republic of Macedonia for settlement of administrative matters at second instance in the area of environment which decides on acts received from first instance bodies is obliged to issue a decision in accordance with the Law on General Administrative Procedure within 60 days. After the expiry of the term, the party may initiate administrative dispute before the competent Court, i.e. the Supreme Court of the Republic of Macedonia which is a competent court for settling administrative disputes, when it is not satisfied with the decision issued by the Commission of the Government of the Republic of Macedonia for settlement of administrative matters at second instance or when the Commission has not responded within the prescribed term. The same rule applies when the Ministry of Environment and Physical Planning functions as a second instance body.

In addition to regular legal remedies, the party may also use extraordinary legal remedies against final decision under administrative procedure, i.e. renewal of the procedure (Article 250).

The Draft Law on Environment regulates the rights and the obligations of the Republic of Macedonia, of the local self-government units, as well as the rights and obligations of legal entities and natural persons with regard to the provision of environment protection and improvement, for the purpose of citizens' exercising of the right to a healthy environment. With regard to the procedures stipulated by this Law, the Law on General Administrative Procedure is applied, unless stipulated otherwise in the Law.

In order to enable organisations and natural persons to have access to justice the Draft Law on Environment specifies the cases in which citizens' organisations established for the purpose of environment protection, as well as the public, enjoy the right to submit appeal to the Commission of the Government of the Republic of Macedonia for settlement of administrative matters at second instance in the area of the environment, thus providing a wider frame for exercising the right to an appeal compared to the one established under the Law on General Administrative Procedure.

The Draft Law on Environment establishes the right to access to justice for organisations and individuals for the purpose of protecting their rights and interests in several cases, which leads to a conclusion that this Law stipulates the right to appeal for persons who can not enjoy such right under the Law on General Administrative Procedure due to the lack of their legal interest.

These cases include:

**a) Protection of the right to access to environmental information**

The Draft Law on Environment specifies that everyone has a right, without having to prove his/her interest, to request from state bodies and legal entities and natural persons that are in possession of environmental information, validated information and data on the environment (Article 51). An appeal can be submitted to a second instance body against the decision or conclusion concerning the refused request. (for more details see [22 II A P1](#)).

**b) Protection of the rights under the environmental impact assessment procedure**

The Draft Law on Environment specifies that the concerned legal entities and natural persons, as well as citizens' associations established for the purpose of environment protection and improvement, have the right to submit appeal against the decision taken during the procedure for determination of the need to carry out environmental impact assessment (Article 81).

The concerned legal entities and natural persons, as well as citizens' associations established for the purpose of environment protection and improvement, have the right to submit an appeal against the decision by which the consent on the implementation of a project for which environmental impact assessment is required, has been awarded or refused. The appeal shall be submitted to the Commission of the Government of the Republic of Macedonia for settlement of administrative matters at second instance in the area of the environment within 15 days after the publication of the decision (Article 89, paragraph 1).

According to Article 89(2), the concerned legal entities and natural persons, as well as citizens' associations established for the purpose of environment protection and improvement, have the right to submit an appeal against the decision by which consent on the implementation of a project for which environmental impact assessment is required has been awarded or refused, to the Commission of the Government of the Republic of Macedonia for settlement of administrative matters at second instance in the area of the environment within 15 days after the publication of the decision, if the Ministry of Environment and Physical Planning has failed to fulfil its obligations related to:

- the announcement of: information concerning the intention to implement projects in two national daily newspapers and on the Internet site of the MEPP; the decision stipulating the need for environmental impact assessment in two national daily newspapers, on the Internet site and on the notice board of the MEPP;



- the publishing of: information that the study of the environmental impact assessment has been elaborated and is accessible to the public in two national daily newspapers, on local radio and TV, while non-technical report is published on the Internet site of the MEPP; report on the adequacy of the study of the environmental impact assessment in two national daily newspapers and on the Internet site of the MEPP; the decision approving or rejecting the implementation of the project in two national daily newspapers and on the Internet site, as well as on the notice board of the MEPP; and the place and time of the public discussion on the study of the environmental impact assessment in two national daily newspapers, on local radio and TV.

### **c) Protection of the right under the integrated environmental permitting procedure**

According to the Draft Law on Environment the concerned legal entities and natural persons, as well as citizens' associations established for the purpose of environment protection and improvement, have the right to submit an appeal against the decision by which the A integrated environmental permit is issued, to the Commission of the Government of the Republic of Macedonia for settlement of administrative matters at second instance within 30 days of the issuance of the decision (Article 108 paragraph 5).

The concerned legal entities and natural persons, as well as citizens' associations established for the purpose of environment protection and improvement, have the right to submit appeal to the Commission of the Government of the Republic of Macedonia for settlement of administrative matters at second instance within 15 days of the day of publication of the decision for partial or full transfer of the A integrated environmental permit (Article 118 paragraph 4).

The right to appeal concerning the B integrated environmental permit is regulated in the same way as for the A integrated environmental permit, the only difference being that the first instance body in this case is the competent body of the local self-government unit, while the second instance body is the MEPP. After the decision of the MEPP had been taken, administrative dispute may be initiated.

The right to access to justice by organisations and individuals for the purpose of protecting their rights and interests, through administrative procedure, is regulated by separate environmental laws, such as: The Law on Air Quality ("Official Gazette of RM" No. 67/04), The Law on Nature Protection ("Official Gazette of RM" No. 67/04), The Law on Waste Management ("Official Gazette of RM" No. 68/04, 71/04), Draft Law on Waters and other laws regulating the rights of legal entities and natural persons in the area of the environment as well as other rights. The procedures specified in these laws are subject to the procedures stipulated in the Draft Law on Environment, as well as the Law on General Administrative Procedure so the aforementioned rules apply identically.

### **Protection of the rights of individuals and organisations by court procedures.**

The right of individuals and organisations to initiate procedure before court for the purpose of protecting their right or legally protected interest is regulated in laws containing substantial and procedural provisions on civil, criminal or administrative cases.

According to the Law on Civil Procedure ("Official Gazette of RM" Nos. 33/98, 44/02) (Article 71), a party in a procedure may be any natural person and legal entity. Specific regulations prescribe who can be a party in a procedure, apart from natural persons and legal entities. By means of legal remedy in a given procedure the litigation court may, as an exception, recognize the capacity of a party to such forms of associations that do not have the capacity of a party, provided that it finds, based on the subject matter of the dispute, that they meet the substantial conditions for acquiring the capacity of a party.

According to Article 16 of the Law on Criminal Procedure ("Official Gazette of RM" Nos. 15/97, 44/02, 74/04), the criminal procedure is initiated upon the request submitted by a private plaintiff or person whose personal or property right has been violated or threatened by the criminal action.

The Law on Administrative Disputes ("Official Gazette of SFRY" Nos. 4/77, 36/77 and "Official Gazette of RM" No. 44/02) stipulates that courts decide, through administrative disputes, on the legality of acts by which the state administrative bodies decide on the rights and obligations of citizens and organisations (Article 1). The administrative dispute is initiated by means of a lawsuit (Article 23) and according to Article 2 of the Law the right to initiate administrative dispute is entitled to an individual or a legal entity who is certain that the administrative act issued at second instance or the first instance administrative act against which no appeal is allowed (Article 7), infringes a certain right or direct personal interest provided for in the law. Through an administrative dispute the return of the dispossessed objects, as well as compensation for the damage suffered by the plaintiff by means of execution of the act subject to the dispute (Article 11), can be claimed.

A plaintiff in an administrative dispute may be an individual, legal entity, organisation, group of persons, settlements and others who are convinced that the administrative act has infringed a certain right or direct personal interest provided for in the Law (Article 12). A third party to which the abrogation of the administrative act subject to the dispute shall cause damage (concerned party) holds the position of a party in the dispute. The procedure of an administrative dispute concluded by a sentence or decision shall be repeated upon the request by the party (Article 52), provided there is reason for repetition.

The right of individuals and organisations to initiate procedure before court for the purpose of protecting their right or legally protected interest in the area of the environment is also regulated in the Draft Law on Environment. According to Article 158 of this Law section on liability for damage caused to the environment, a legal entity or natural person under a direct threat or suffering consequences from the occurred environmental damage has the right to request from the damage instigator to return the environment into its original state or claim compensation for the damage in accordance with the general legal rules for damage compensation.

In addition to the actions referred to in Chapter 22 of the Criminal Code of the Republic of Macedonia, private plaintiff may file a private lawsuit in the court competent for criminal actions regulated in separate environmental laws, including:

1. The Law on Nature Protection (Official Gazette of RM No. 67/04) stipulates the following criminal actions against nature: Extermination of indigenous species; Introduction of wild species in nature; Reintroduction of wild species in nature; Illegal taking and use of genetic and biological material; Illegal damaging and destruction of speleological structures; Damaging and destruction of mineral and fossil finds;
2. Draft Law on Waters prescribes the following criminal actions: Unauthorised use of water and Unauthorised extraction of ground water.

The Draft Law on Environment and the Draft Law on Waters are expected to be adopted by the end of the first quarter of 2005.

### **3. Do standardised systems or methods for gathering, transferring and reporting of data concerning the environment exist?**

The legal grounds for environmental data management are provided for in several legal acts stipulating the relevant systems and methods.

According to the Law on Environment and Nature Protection and Promotion ("Official Gazette of RM" No. 13/03 consolidated text) the Ministry of Environment and Physical Planning (MEPP) is responsible for the collection, processing and presentation of official (relevant, comprehensive and publicly accessible) data and information on the state and quality of the environmental media, nature, noise, ionising and non-ionising radiation and special natural heritage. All these are based on the data obtained from the monitoring and their appropriate processing, storage and use (Article 8 and Article 9).

According to the Law, legal entities and natural persons causing environmental pollution are obliged to submit to the MEPP the data they have and the data from their self-monitoring on a monthly basis.

The Draft Law on Environment takes over the current legal arrangement extended by adding the obligation to the MEPP to produce and disseminate the state of the environment report of the Republic of Macedonia, in cooperation with other state administrative bodies, every three years, and to submit it to the Assembly of the Republic of Macedonia.

The MEPP is responsible for submitting reports to international organisations in accordance with the ratified international conventions and obligations. According to the Draft Law on Environment the MEPP is obliged to develop and disseminate a report on the implementation of annual programmes for environment protection and improvement, as well as a report on the implementation of relevant planning documents. The said Draft Law stipulates that the monitoring of environmental media and areas, as well as the monitoring performed by legal entities and natural persons, is carried out in accordance with the methodology prescribed by the MEPP. The methodology specifies the procedures, manners, systems and methods of environmental data collection, transmission and submission in accordance with the laws regulating individual environmental media (Law on Ambient Air Quality ("Official Gazette of RM" No. 64/04), Law on Waste Management ("Official Gazette of RM" No. 68/04, 71/04), Law on Nature Protection ("Official Gazette of RM" No. 67/04) and the Draft Law on Waters). The methodology for environmental data collection, transmission and submission will be regulated through a Rulebook, for each individual environmental media and area, to be adopted by the end of 2005.

According to the Law on Hydro-Meteorological Matters ("Official Gazette of RM" No.19/92, 5/03), the hydrological observations are carried out on-line and represent the unique hydro-meteorological information system of the Republic of Macedonia. The hydro-meteorological information system is connected to the international hydrological information systems. According to the Law, the Hydro Meteorological Directorate performs the functions of the centre of hydro-meteorological information system of the Republic of Macedonia; establishes and develops banks of hydrological data and data on air and water quality recorded through the network of hydrological stations. According to the same Law, hydrological and meteorological data and information are public, except the data enjoying the status of a military and official secret. The Directorate disseminates data in appropriate yearly reports. The Directorate is obliged to inform the public, through public information media, on the state and development of water resources and issue warnings in case dangerous and harmful hydrological phenomena. All environmental data and information from the monitoring networks and from the self-monitoring by different institutions, legal entities and natural persons are submitted to the MEPP, i.e. to the Macedonian Environmental Information Centre (MEIC). This Centre has established and currently manages a base of relevant, properly processed (systematized and standardized), accurate, transparent and publicly accessible information on the status, quality and trends in all environmental domains (water, air, soil, noise, ionising and non-ionising radiation, and protected parts and objects of nature).

Since legal entities and natural persons lack appropriate information technology equipment, part of environmental data is received on paper and transferred/re-typed into an electronic format, thus creating a risk of errors. Certain data are received in Excel and Word format. Data comes in various structures and formats, depending on individual data collecting institutions. Therefore, the system needs to be upgraded to enable different ways of receiving and entering data.

There is appropriate communication and dataflow between the MEPP and other institutions, which should be further improved. At the same time, there is a need to improve data management through the establishment of comprehensive Register of all measured environmental parameters.

In the last years, significant progress has been achieved in the development of the Environmental Information System and it should be further developed in terms of establishing a system of integrated relational environmental database.

The development of the Environmental Information System commenced with the Project 1.8 (Development of National Environmental Information Systems in South Eastern European Countries)

under the Regional Environmental Reconstruction Programme (REReP). However, due to the limited resources, only part of the system has been developed. At present, the system is in a stage of configuration/parameters input and importing of old data. The remaining parts of the system will be developed additionally. These development phases are presented in the Step-by-Step Plan constituting a part of the Data Management Strategy developed in the framework of PHARE SOP 99. The Plan includes short-, medium- and long-term technical steps that need to be undertaken in order to finalize the system. Certain short-term activities have been envisaged for implementation under the European Partnership Action Plan.

Taking into account the fact that data is entered in different formats and collected through different methodologies by different institutions, the system has to provide for all possible ways of receiving and entering data. Due to this fact, different types of data delivery have to be implemented, such as: applications from clients, direct delivery – automatic stations, entry from Excel files, direct entry from web browser, e-mail, etc. Another key function of the Environmental Information System is to present the reports (automatic daily and monthly reports, provision of access to data through the Web Site of the MEPP ([www.moepp.gov.mk](http://www.moepp.gov.mk)), presentation of data in Word and Excel formats, "On-demand (custom.)" – reporting upon request by users).

Cooperation between the MEPP and the Ministry of Health is of vital importance for the proper conceptualisation and implementation of the policy related to the link between the environment and human health. The Ministry of Health, through the State Sanitary and Health Inspectorate (SSH) and the National Public Health Institute (NPHI), participates in environmental pollution monitoring, i.e. monitoring of air, water, food, of harmful effects of gases, ionising radiation and noise and in the protection of population against such harmful effects as well as in the surveillance of hygiene epidemiological status of the population. Public health care organisations involved in the monitoring are obliged to submit data to the MEPP on regular basis.

The National Public Health Institute and its 10 regional branches include services for hygiene and environmental health. They have established the monitoring of air pollution, health safety of drinking water and surface water. These activities are performed on the basis of harmonised methodology and schedule in accordance with the existing legislation and in a form of programme tasks. Regional branches of the Institute process and submit to NPHI the air, drinking water and surface waters monitoring data in a form of semi-annual and annual reports. Monthly reports are submitted to the MEPP. At the beginning of each year, the NPHI produces a summary report on the preceding year. All the data in the domains of environmental pollution and human health are processed and presented in this report. Annual reports are available to other state administrative bodies and public services, as well as to the public.

Through the cooperation between the MEPP and the Ministry of Health, reflected through the preparation of the 1999 National Environmental Health Action Plan (NEHAP) and 2002 Environmental Performance Review and CARDS projects, the need for the establishment of an integrated environmental health information system has been recognized with the purpose of establishing the links between environmental pollution, human exposure thereto and adverse health effects thereof.

The MEPP reports to the following international institutions and organisations: European Environmental Agency (EEA), United Nations Economic Commission for Europe (UNECE), EUROSTAT and World Health Organization (WHO). The MEPP carries out its reporting obligations through the MEIC, as follows:

- Monthly and annual reports are prepared on the basis of the processed data. Such reports are submitted to the relevant institutions. Reports are available to all stakeholders and to the public through the Public Relations Office (PRO) and through the MEPP Web Site.
- Data on air pollution and state of the environment reports are regularly disseminated on the MEPP Internet site;

- Regular annual reports are submitted to the EEA and the UNECE. For the purpose of harmonisation/synchronisation of air pollution data with the EEA, the Data Exchange Model (DEM) is used. This data is available in the EEA's air quality information system (AirBase).
- EIONET (CIRCA) is used for information exchange with the EEA. MEIC is trying to introduce the Macedonian EIONET node as a common information tool, for information exchange with all stakeholders, institutions, NGOs, etc.
- So far, three State of Environment Reports (SoER) have been produced and they are available at the MEPP's web site. According to the Draft Law on Environment (Article 45, paragraph 1), and the EEA recommendations, the SoERs will be prepared every three years.
- Reports to the EUROSTAT and the WHO are submitted upon request, prepared on the basis of Questionnaires.
- Data sets based on Questionnaires under the Convention on the Protection and Use of Transboundary Waterways and International Lakes (Helsinki) are processed in the framework of preparatory activities aimed at ratification.

**4. What are the provisions relating to public participation in decision making related to the environment? Are there requirements for public participation in the permitting activities likely to have significant environmental impact? Are there requirements for public participation in relation to plans and programmes and/or policies and/or legislation related to the environment?**

The public participation in the environmental decision-making process is regulated in the Draft Law on Environment.

One of the basic goals to be achieved by this Draft Law is "To inform the public and relevant institutions on the state of the environment and involve them in the protection thereof" (Article 4 paragraph 2 item 13).

The public participation in the environmental decision-making is defined in the Draft Law on Environment as a "Principle of public participation and public access to environmental information" specifying that "state administrative bodies and the bodies of the local self-government units, of the city of Skopje and of the local self-government units of the city of Skopje are obliged to provide all the necessary measures and prescribe procedures to provide for the right to public access to information and public participation in environmental decision-making, as well as to provide public consultation in such decision-making procedure".(Article 17).

Public participation is also provided for under the procedure for eco-labelling of products and services (Article 29 of the Draft Law on Environment).

In the procedure for environmental impact assessment of certain projects, public participation is provided in accordance with the EU Directive 85/337/EEC on environmental impact assessment (EIA). Article 90 of the Draft Law on Environment, stipulates the public availability of documents and information for environmental impact assessment. Public discussion for projects to be subject of environmental impact assessment is compulsory and it is generally described in Article 91 of the Draft Law on Environment and in more detail in the Draft Rulebook regulating the procedure of EIA performance. The Draft Rulebook is in a stage of consultation with relevant state bodies. Provisions concerning environmental impact assessment in transboundary context, in the case of participation of the Macedonian public (case where the Project will be implemented outside the territory of the Republic of Macedonia), and participation of the public of another state (case where the Project will be implemented within the territory of the Republic of Macedonia), are regulated in the same manner as the procedure carried out for national projects, specified in Article 93 and Article 94 of the Draft Law on Environment.

In the Integrated environmental permitting procedure, the public participation is provided through the obligation of the competent authorities to publish the application for integrated environmental permit, and to provide, at the same time, public access to available information needed to formulate opinions

and positions. Within 30 days the affected public may submit its opinions and positions in writing, with regard to the conditions for constituting a part of the Permit. Upon the request by the affected public the investor is obliged to organize public debate in 10 days after the expiry of this term.

A procedure for public consultation is provided for in case of addressing applications involving transboundary impacts when the installation is located within the territory of the Republic of Macedonia or in another state.

After the Draft Permit had been formulated, it is published, and the public may submit its comments within 14 days after the publication. Within 15 days after the its issuance, the permitting body (the Ministry of Environment and Physical Planning and local self-government units) is obliged to publish the integrated environmental permit on its Internet site and in two national daily newspapers and enable the affected public to have access to the permit data, as well as to the data on public participation in the permitting procedure, and on the opinions that have been taken into account and on the basis of which the permit has been issued.

According to the Draft Law on Environment the public also participates in the procedure for strategic environmental assessment (SEA) concerning certain strategies, plans and programmes, i.e. in the drafting and adoption of planning documents (strategies, plans, programmes), including the National Environmental Action Plan (NEAP) and Local Environmental Action Plans (LEAPs). In terms of procedure, this is also regulated in Article 69 - "Public Information and Participation". It establishes the obligation for each planning document developer to prepare a report on the impact of the document on the environment. Together with the draft planning document the report is made available to the public. In addition to this, the manner of and the time and place for the public review of the said document are announced. The state administrative bodies, bodies of the local self-government units, public and concerned legal entities and natural persons may, within 30 days after the publication of the document, express their opinion before the body responsible for document drafting, which is obliged to take into account the received opinions. In addition, there is a provision concerning the participation of the affected public of the Republic of Macedonia in consultations preceding the adoption of the planning documents by a neighbouring country, under the conditions and in a manner specified in international agreements and regulations of the other country.

Paragraph 2 of Article 56 of the Draft Law on Environment specifies that the state administrative bodies, the bodies of the local self-government units, legal entities and natural persons performing public authorisations in accordance with the law are obliged to provide for public participation in the process of drafting laws, regulations and other legal acts in accordance with the conditions, manner and procedure stipulated for public participation in the adoption of planning documents, as regulated in Article 64, paragraph 4 of the Draft Law.

As far as the current practice is concerned, the Ministry of Environment and Physical Planning has actively engaged the public in its decision-making processes, through organisation of workshops, debates and public presentations of adopted draft documents, as well as through the publication of brochures and the dissemination of information on the documents through public media. As exemplary, the procedure applied in the process of drafting and adoption of the five environmental laws, drafted through permanent consultation of and communication with the public and all stakeholders, including representatives of NGOs, local self-government units, business sector, industry, state administrative bodies and other public organisations and institutions directly in the relevant working groups should be pointed out. This practice has enabled the public to become acquainted with its rights to a great extent, resulting in more initiatives for its participation in the drafting of relevant documents in the area of the environment.

##### **5. Has your country ratified the Aarhus Convention on access to information, public participation and access to justice in environmental matters?**

Yes. On 01.07.1999, the Assembly of the Republic of Macedonia adopted the Law on Ratification of the Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus Convention) ("Official Gazette of RM" No. 40/99).

According to Article 118 of the Constitution of the Republic of Macedonia the Convention has thus become a part of the national legislation, which can not be amended by law, while courts judge on the basis of the Constitution, laws and international agreements ratified in accordance with the Constitution (Article 98, paragraph 2).

The Republic of Macedonia was among the first countries that have ratified the Aarhus Convention. The act of ratification has established a direct obligation for its implementation, and thus the Government appointed the Ministry of Environment and Physical Planning as a body responsible for the implementation of the Convention.

The past legislation provided only for partial implementation of the Convention. Thus, the Law on Environment and Nature Protection and Promotion ("Official Gazette of RM" No. 13/03 consolidated text) stipulated the data on the quality of the environment and on the events threatening the environment and nature, as public data.

The initiated process of the adoption of new environmental legislation, harmonised with the relevant EU Directives, has taken into account the international agreements ratified by the Republic of Macedonia. This has created suitable conditions for the full transposition of the provisions of the Aarhus Convention in the national legislation, which has been achieved in the Draft Law on Environment, the adoption of which is expected by the end of the first quarter of 2005.

Practical implementation of the principles of the Aarhus Convention commenced in 1999, with the establishment of the Public Relations Office (PRO) within the Ministry of Environment and Physical Planning (MEPP).

Through the Office, environmental information is distributed to the public as a public service providing easy access to environmental information. Citizens address the MEPP through this Office with their suggestions and complaints related to certain environmental problems and their resolution. The basic principle of this Office operation is interactive communication with the public, i.e. giving information to and receiving information from the public.

In order to enable the interested citizens to have access to the useful and new information, the Office has provided separate computers for public use. The Office also manages a thematic Library on environmental issues through which continuous cooperation with readers is accomplished by responding to the interest of the public in certain books, magazines, reports and other publications in the area of environment.

In the framework of PHARE SOP 99, the Environmental Awareness Strategy and the Communication Strategy were developed. In addition, public campaigns were carried out in the following domains: leaded petrol phasing-out, nature protection with focus on "Galicica" and "Mavrovo" National Parks, and waste management. The Office has organized public campaigns intended to increase the citizens' awareness of the process of adoption of new environmental laws: Draft Law on Waters, Law on Waste Management ("Official Gazette of RM" No 68/04, 71/04), Law on Ambient Air Quality ("Official Gazette of RM" No. 67/04), Law on Nature Protection ("Official Gazette of RM" No. 67/04), and Framework Law on Environment. This approach provided the possibility for the citizens to express their opinions, comments and remarks on the draft texts of the said laws. Almost all municipalities in the Republic of Macedonia have been involved in those campaigns.

A specific tool for communication with and approach to citizens is the Eco-Bus used as a mobile Public Relations Office through which activities at local level are carried out by visits paid to individual cities and towns in the Republic of Macedonia.

In the framework of the Regional Environmental Reconstruction Programme (REReP), project 2.2 "Support to Developing Strategies for Implementation of the Aarhus Convention financed by the Government of the Kingdom of Netherlands, the "Strategy for Aarhus Convention Implementation" was developed. At present, it is in the final stage of adoption.

Within the Strategy for Aarhus Convention Implementation, analysis of the following was carried out:

- Legal framework for the Aarhus Convention implementation;

- Institutional framework for the implementation of the obligations deriving from the Aarhus Convention;
- Needs for capacity building for the Aarhus Convention implementation; and
- Needs for distribution of information and public awareness raising with regard to the Aarhus Convention implementation.

In addition to the detailed analysis of the current state, the Strategy also contains guidelines for overcoming the obstacles and problems of its implementation, and the action plan.

Major part of the comments on the scope of the national legislation presented in the course of the Strategy development with regard to the Aarhus Convention have been addressed and solved through the Draft Law on Environment.

In the framework of the above project, training on Capacity building for the Aarhus Convention implementation in Macedonia was carried out for several target groups, including public administration, NGOs, representatives of the local self-government, judges and public prosecutors.

In addition, two Guides for the Aarhus Convention implementation were produced, intended for application by two target groups:

- Guide for the Aarhus Convention implementation for the public administration of the Republic of Macedonia, and
- Guide for the Aarhus Convention implementation for NGOs and for the public of the Republic of Macedonia.

The MEPP financed the printing of the translation of the Guide for the Aarhus Convention Implementation, issued by the United Nations Economic Commission for Europe (UN/ECE).

The adoption of the Draft Law on Environment will establish conditions for full implementation of the provisions of the Aarhus Convention, which will require further strengthening of the capacity of the public administration, including above all the strengthening of the ability for environmental information dissemination, as well as for establishing the practice of public participation in the processes of decision making and legislation adoption. The way in which the Ministry of Environment and Physical Planning implements and promotes the three pillars of the Aarhus Convention in national practice has been recognised at the level of the Government of the Republic of Macedonia.

**6. Has your country ratified the Espoo Convention on environmental impact assessment in a transboundary context, and, if so, how does it ensure that transboundary consultation is carried out? At national level, what measures are there for an environmental impact assessment of certain projects? At what stage of the project is such an assessment to be carried out? How often are projects turned down or amended as a result of these assessments?**

The Republic of Macedonia ratified the Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention) by the Law on Ratification ("Official Gazette of RM" No. 44/99) Thus the Convention became an integral part of the national legal system.

According to the Law on Environment and Nature Protection and Promotion ("Official Gazette of RM" No 13/03 consolidated text) environmental impact assessment is obligatory for investment projects listed in Annex I to the Convention, and the Ministry of Environment and Physical Planning (MEPP) is responsible for its implementation. Apart from this obligation, the Law does not specify environmental impact assessment (EIA) procedure in a transboundary context in detail.

The Espoo Convention has not in fact been implemented in the Republic of Macedonia, although studies on environmental impact of certain projects of transboundary dimension have been included in implementation procedures, including: the Study on the section Demir Kapija-Udovo-Gevgelia, as



part of Corridor 10; the Study on the heavy weight vehicles terminal Blace; and the Study on the gas pipe system of the Republic of Macedonia.

The requirements of the Espoo Convention concerning transboundary consultation have been fully transposed in the Draft Law on Environment (expected to be adopted by the end of the first quarter of 2005), which stipulates the procedure for environmental impact assessment (EIA) in a transboundary context for projects carried out in the territory of the Republic of Macedonia, projects that may have impact on the environment on the territories of other countries, and vice versa, projects carried out on the territories of other countries, that may have impact on the environment in the territory of the Republic of Macedonia.

In case of a project implemented in the territory of the Republic of Macedonia, which is according to the law subject to the EIA and may lead to significant impact on the environment in the territory of another country, the MEPP as a competent body for the procedure implementation is obliged to submit the necessary information on the project to the competent authorities in the affected country immediately after the commencement of the EIA procedure, and based on this, the competent body of the affected country is obliged to respond in terms of acceptance or refusal of the invitation for participation in the procedure within 30 days. In further course of the procedure, provided there has been an interest for participation, the MEPP is obliged to provide an equal treatment of the public of the affected country in terms of participation in the procedure, in the same manner as stipulated for the domestic public in accordance with the principle of reciprocity and in accordance with the procedures stipulated in relevant international agreements.

In case of projects implemented in the territory of another country, it is possible for the Republic of Macedonia to participate in the procedure in two ways:

- The competent body of the Republic of Macedonia is notified on the implementation of a project in another country that may have impact on the environment in the territory of the Republic of Macedonia. In such a case, the MEPP is obliged to immediately initiate the procedure aimed at assessing whether the Republic of Macedonia is affected by the implementation of the project concerned. If the assessment shows that the project may have significant impact on the environment, the MEPP should notify the competent body of the other country of the intention of the relevant institutions and the affected public of the Republic of Macedonia to be involved in the EIA procedure, in accordance with the legislation of the other country.
- The MEPP or another body or institution is informed that a project has been implemented in the territory of another country and that it may have significant impact on the environment of the Republic of Macedonia. In such a case, they are obliged, through the body responsible for foreign affairs, to immediately submit to the body of the other country responsible for the EIA procedure implementation a request (note) for involvement in the EIA procedure.

On the basis of the identified need for appropriate implementation of the Espoo Convention, the MEPP expressed an interest for participation in the regional project for harmonisation of EIA procedures in a transboundary context, carried out under the Regional Environmental Reconstruction Programme for South-Eastern Europe (REReP).

According to the current legislation, the requirements for the assessment of impacts of certain projects on the environment are not unified and are applied on the basis of several laws and rulebooks, including: The Law on Environment and Nature Protection and Promotion ("Official Gazette of RM" No 13/03 consolidated text), the Law on Spatial and Urban Planning ("Official Gazette of RM" Nos. 4/96, 8/96, 28/97, 18/99, 53/01, 45/02), Law on Construction of Investment Facilities ("Official Gazette of SFRY" Nos. 15/90, 11/91 and "Official Gazette of RM" No. 11/94, 18/99 and 25/99), Law on Mineral Resources ("Official Gazette of RM" Nos. 18/99, 29/02), Energy Law ("Official Gazette of RM" Nos. 47/97, 40/99, 98/00, 94/02, 38/03), Law on Concessions ("Official Gazette of RM" No. 25/02, 24/03), Law on Waters ("Official Gazette of RM" Nos. 4/98, 19/00), Rulebook on Standards and Norms for Space Development ("Official Gazette of RM" No. 2/02,

50/03), Rulebook on Standards and Norms for Buildings Designing ("Official Gazette of RM" Nos. 66/99, 102/00, 2/02).

The national EIA procedure applied at present consists of the following phases:

- Investment facility planning (in accordance with the Law on Construction of Investment Facilities) – in this phase the investor is obliged to obtain opinion from the MEPP, which will be taken into account while the body managing the building permitting procedure (the Ministry of Transport and Communications) formulates building conditions.
- Issuance of building permit (according to the Law on Environment and Nature Protection and Promotion and Law on Construction of Investment Facilities) – in this phase, the investor is obliged to carry out a Study on environmental impact assessment with regard to projects that may lead to or pose risk to environment or human health. The Study is considered a phase under the Main Design and is submitted to the MEPP for review and analysis. The evaluation and analysis of the Study is carried out by the Service for Environment, a body within the MEPP. On the basis of the completed review the consent to the submitted Study, accompanying documentation, is issued or refused.

The current Law on Spatial and Urban Planning provides for partial application of the EIA procedure, as required by the relevant Directive.

For the purpose of the approximation of national legislation to the EU legislation, the Draft Law on Environment has transposed in full the EU Directive amending and supplementing the Council Directive 85/337 on the assessment of the effects of certain public and private projects on the environment, and Directive 97/11 and Espoo Convention.

The Draft Law on Environment contains separate Chapter on Environmental Impact Assessment describing the environmental impacts assessment procedure (hereinafter: EIA). By means of a Decree to be adopted by the Government of the Republic of Macedonia (in working version at present), projects requiring compulsory implementation of the EIA procedure will be specified, as well as generally determined projects for which the requirement for EIA will be assessed on a case by case basis. For all other projects that will not be covered by the abovementioned an EIA elaborate will have to be prepared.

The EIA is initiated in the planning phase when the investor, intending to implement a project, is obliged to notify the MEPP of the intention to implement the project, as well as the opinion concerning the need for EIA. Having received the notification, the MEPP shall, by means of decision, notify the investor of the need for environmental impact assessment. The scope of the EIA study is determined with regard to the type of the project. The opinion shall also include alternatives with main reviews and surveys that need to be carried out, the methods, and the criteria applied to estimate the effects, the improvement measures that should be taken into account, legal entities that need to be consulted in the course of the EIA study development and the structure, contents and scale of environmental information. In case of projects requiring EIA, the investor is obliged to develop EIA study, which is then submitted to the MEPP. Once the study is submitted, a report on the acceptability of the EIA study is prepared.

On the basis of the EIA study, the report, public debate and opinions received from the public the MEPP issues a decision by which consent is awarded or the request for the project implementation is rejected. The decision remains in effect for a period of two years of its issuance, and its validity may be extended provided that no significant changes appear through project modification as a result of the conditions in the affected area, new knowledge related to the main contents of the study and development of new technology that could be used in the project.

The body responsible for the project implementation may not issue a decision/permit for the implementation of a project without the investor submitting a decision issued by the MEPP by which the implementation of the project is approved. There is also an obligation for the state body issuing

the permit for project implementation to notify the MEPP in case a request for project implementation has been submitted without completing EIA in advance.

During the procedure the MEPP consults the local self-government units in the territory of which the project is to be implemented, as well as the public and NGOs focusing their activities on environment protection and improvement, through forwarding and disseminating the relevant documentation, the organization of public debates and the presentation on the MEPP Internet site. The MEPP decision shall include the public opinions that have been taken into account, and explain opinions that have not been taken into account.

According to the Draft Law on Environment, the duration of the EIA procedure is specified to last 120 days, not including the period required for the EIA study development.

In the framework of CARDS 2004, an activity has been envisaged for the development of Administrative Guide for EIA procedure, as stipulated in the Draft Law on Environment.

In the last three years (2001-2004) the number of requests for carrying out environmental impact assessment annually submitted to the MEPP is approximately 250, on average (source: Service for Environment, body within the MEPP). Of this number, 120 are requests for opinion (phase – planning of investment facility) and 130 are requests for consent on the submitted EIA studies (phase – issuance of a building permit). So far, it has been concluded that only 10 % of projects need to be modified when the Study review process precedes the issuance of consent, while cases of rejected projects are rare.

**7. As a signatory to the SEA Protocol to the Espoo Convention, what steps are being taken to introduce environmental assessment of plans and programmes, and do they also extend to policies and legislation?**

The fact that the Republic of Macedonia is signatory to the Protocol on Strategic Environmental Assessment (SEA Protocol) to the Espoo Convention ("Official Gazette of RM" No 44/99) (Republic of Macedonia signed the Protocol in May 2003, in Kiev, Ukraine, during the 5 Ministerial Conference "Environment for Europe") confirms the commitment of the Government of the Republic of Macedonia to integrate environmental and human health issues in the processes of preparation and adoption of plans and programmes as well as legislation.

The Republic of Macedonia has undertaken the first steps towards the implementation of the SEA Protocol in terms of establishment of legal grounds for the SEA process. The existing legislation contains certain elements of the SEA process such as public participation in the process of plans and programmes adoption. However, full implementation of the SEA Protocol is not provided for.

The Draft Law on Environment, incorporates the requirements of the SEA Protocol to a large extent, especially through the requirements for strategic assessment, not only with regard to the environment and human health, but also with regard to the issues related to strategic assessment in a transboundary context. According to the Draft Law, the SEA process is carried out only for strategic planning and for programme documents prepared and adopted by the state administrative bodies and by the bodies of the local self-government units. This indicates that there is no legal obligation for the application of the SEA process with regard to legislation.

Full implementation of the SEA Protocol requires adoption of by-law arising from SEA, to incorporate all the elements of the Protocol. The adoption of specific by-law arising from SEA has been envisaged in the Programme for Approximation of the National Legislation to the Legislation of the European Union. It is also one of the priority measures under the European Partnership Action Plan. Its adoption is scheduled for 2006.

Although there is no legal obligation for the SEA process implementation with regard to legislation, certain mechanisms of its implementation have been carried out in practice. The Rules of Procedure

of the Government of the Republic of Macedonia ("Official Gazette of RM" No. 38/01, 98/02, 9/03, 47/03, 64/03, 67/03) stipulate a procedure on the basis of which all legislative proposals, including materials other than laws and regulations, submitted by the ministries and other state administrative bodies to the Government for consideration, review and adoption, depending on the nature of the material under consideration, shall be first forwarded to the competent, relevant and concerned state administrative bodies for an opinion. Thus, materials concerning the environment and physical planning shall be submitted to the Ministry of Environment and Physical Planning as a matter of obligation. This provision provides for the integration of environmental aspects in the processes of preparation, proposal and adoption of plans, programmes, policies and legislation.

The entry into force of the Draft Law on Environment and more detailed by-law of the SEA process are the main preconditions for the ratification of the SEA Protocol by the Republic of Macedonia.

## **8. What are the provisions relating to other global environmental issues?**

Republic of Macedonia is Party to three Rio Conventions and to the Convention on Persistent Organic Pollutants and the Vienna Convention on Ozone Layer Protection.

According to the Constitution of the Republic of Macedonia, international agreements ratified in accordance with the Constitution, constitute a part of the internal legal order and may not be modified by law (Article 118). Courts take their decisions on the basis of the Constitution, laws and international agreements ratified in accordance with the Constitution (Article 98 paragraph 2).

One of the principles upon which the Draft Law on Environment is founded is the principle of international cooperation in the area of environment protection and improvement.

### **Convention on Biological Diversity**

The Republic of Macedonia has developed the Strategy for Biological Diversity Protection and Action Plan in accordance with the provisions of Article 6 and Article 26 of the United Nations Convention on Biological Diversity (UNCBD) ("Official Gazette of RM" No. 54/97).

Development of the Strategy for Biological Diversity Protection and Action Plan was financed by the Global Environmental Facility (GEF), through the World Bank as the implementing agency.

For the purpose of monitoring the Convention implementation, the Government of the Republic of Macedonia established, upon a proposal of the Ministry of Environment and Physical Planning and by means of Decision, the National Committee for Biological Diversity ("Official Gazette of RM" No. 36/99). The Committee is composed of the representatives of the relevant competent state administrative bodies and experts from relevant scientific institutions. An implementation body has been established for the purpose of implementing the action plan of the Strategy.

Part of the Convention on Biological Diversity referring to the implementation of provisions on species, ecosystems and genetic diversity protection has been transposed in the Law on Nature Protection ("Official Gazette of RM" No. 67/04).

This Law provides for an integrated protection of nature through protecting biological and landscape diversity and conserving natural heritage, within and outside protected areas.

### **United Nations Framework Convention on Climate Change**

Republic of Macedonia is Party to the United Nations Framework Convention on Climate Change (UNFCCC) ("Official Gazette of RM" No. 61/97).

As a Party to the Convention, the Republic of Macedonia is obliged to submit to the Convention National Communications on regular bases. According to the Convention, the Republic of Macedonia belongs to the group of developing countries, i.e. non-Annex I group. The First National

Communication on Climate Change was developed with the financial support from GEF, through the United Nations Development Programme (UNDP) as the implementing agency. This Communication was submitted to the Secretariat of the Convention in March 2003 and presented before the Conference of the Parties (COP) at its 9 Session, held in Milan in December 2003.

The National Communication on Climate Change contains the Action Plan formulating recommendations and measures for the abatement of greenhouse gas (GHG) emissions, as well as measures for adaptation to future climate change in most sensitive sectors. The Plan lacks clear distinction of obligations, time frame and financial implications of the implementation of proposed actions. These deficiencies will be overcome in the Second National Communication on Climate Change with regard to which an application was submitted to the GEF to support its development. Its elaboration is expected to commence in the beginning of 2005.

The National Committee for Climate Change composed of representatives of government institutions, NGOs, private entities and scientific sector was established by the Decision of the Government ("Official Gazette of RM" Nos. 44/00, 79/03, 4/04) for the purpose of reviewing and approving the components of the National Communications prior to their submission to the Convention.

Republic of Macedonia ratified the Kyoto Protocol in 2004 ("Official Gazette of RM" No. 49/04). It belongs to the group of developing countries and has no obligation for GHG emission abatement. The initiative for the Protocol ratification was based on two main benefits for the Republic of Macedonia: contribution to the combat against global warming and access to financial mechanisms supporting projects and technology transfer. With regard to the implementation of the Clean Development Mechanism (CDM) as the only applicable mechanism for the Republic of Macedonia as a non-Annex I Party, responsible institution should be appointed and national capacities for CDM implementation need to be strengthened.

#### **United Nations Convention to Combat Desertification in Countries Experiencing Serious Drought and/or Desertification, particularly in Africa**

Republic of Macedonia is a Party to the United Nations Convention to Combat Desertification in Countries Experiencing Serious Drought and/or Desertification, particularly in Africa ("Official Gazette of RM" No. 13/02). According to the Convention, the Republic of Macedonia is obliged to develop the National Action Plan for Land Degradation, Desertification and Drought Reduction.

At present, the Republic of Macedonia is implementing the project "National Capacities Self-Assessment for Global Environmental Management" Its goal is to assess the capacities and possibilities for fulfilling the obligations under the three Rio Conventions and develop a Strategy and Action Plan for capacity building and achieving synergic effects. The project is supported by the GEF and implemented through UNDP. The extent of the project implementation is supervised by the Steering Committee composed of representatives of the relevant stakeholders from the governmental, non-governmental, and scientific and business sectors.

#### **Vienna Convention on Ozone Layer Protection**

Republic of Macedonia is Party to the Convention on Ozone Layer Protection ("Official Gazette of SFRY" No 1/90) and to the Montreal Protocol thereto ("Official Gazette of SFRY" No.16/90). It also ratified the London ("Official Gazette of RM" No 25/98), the Copenhagen ("Official Gazette of RM" No 25/98), the Montreal ("Official Gazette of RM" No 51/99) and the Beijing ("Official Gazette of RM" No 13/02) Amendment to the Montreal Protocol.

In order to establish control over the cross-border traffic in ozone depleting substances, the Ministry of Environment and Physical Planning has placed these chemicals under import and export permitting regime. Import of substances classified in the Annexes to the Montreal Protocol or of equipment containing such substances is regulated through permits issued by the Ministry of Environment and Physical Planning.

According to the provisions stipulated in the Montreal Protocol concerning the monitoring of import, export and consumption of ozone depleting substances, a system of continuous monitoring of the status of trade in these substances has been established.

### **Convention on Persistent Organic Pollutants (POPs Convention)**

Republic of Macedonia ratified the Convention on Persistent Organic Pollutants in March 2004 ("Official Gazette of RM" No. 17/04). According to the Convention, the Republic of Macedonia is obliged to develop a National Implementation Plan. In order to strengthen its national capacities related to the implementation of the obligations under the Convention, the Republic of Macedonia carried out the Project "Enabling Activities to Facilitate Early Action towards the Implementation of the Stockholm Convention on Persistent Organic Pollutants" through the financial support from the GEF, through United Nations Industrial Development Organization (UNIDO) as an implementing agency. The goals of this Project have been to strengthen national capacities and improve knowledge of the POPs, which contributed to proper development of the National Implementation Plan for POPs which was adopted in January 2005.

### **9. What are the national plans regarding bio-diversity?**

As a country of exceptionally rich ecosystem and species diversity of flora and fauna, the Republic of Macedonia pays particular attention to the planning of their use and protection.

The process of planning the use of ecosystems and species was initiated more than 50 years ago by the act on the designation of the National Parks "Pelister" (1948) and "Mavrovo" (1949), and later on by the designation of "Galicica" National Park of (1958). The planning was aimed at protecting biological and ecosystem diversity in those areas that are characterised by the presence of exceptional endemic and relict species.

In accordance with the Convention on Biological Diversity ("Official Gazette of RM" No. 54/97), the Republic of Macedonia developed the Strategy for Biological Diversity and Action Plan. In 2002-2004 period, project activities were financed by the Global Environmental Facility (GEF), resulting in the development of the following documents: National Study on Biological Diversity which was simultaneously the First National Report of the Republic of Macedonia to the Convention on Biological Diversity; Biodiversity Strategy and Action Plan of the Republic of Macedonia; and Clearing House Mechanism ([web portal-www.moe.gov.mk/chm/default.asp](http://web.portal-www.moe.gov.mk/chm/default.asp)). In the course of the implementation of the project and activities envisaged under the Project work programme, the Ministry of Environment and Physical Planning developed a wide cooperation with the scientific public, governmental, non-governmental and business sectors.

The Action Plan for biological diversity is based on the identified threats to biological diversity (elaborated in the Study on Biological Diversity) and strategic principles, establishing 11 approaches: in-situ conservation; ex-situ conservation; sustainable use of biological diversity; institutional development; research and monitoring; public awareness and education; impacts assessment; incentive measures; financial sources for the implementation of the Strategy and Action Plan, and coordination of their implementation. These approaches lead to a series of specific activities related to the required financial resources, the time frame and implementation priority. The implementation period covered by the plan is 2004-2008.

In January 2004 the Government of the Republic of Macedonia adopted the Strategy and Action Plan. The Government of the Republic of Macedonia has also confirmed the commitment for their appropriate implementation through the establishment of an implementation body. However, the lack of financial resources in the Budget of the Republic of Macedonia has posed an obstacle to the implementation of the planned goals and activities of the Strategy and Action Plan. We expect that this shortage will be covered through foreign donations on a bilateral basis or within the framework of international financial programmes.

The Spatial Plan of the Republic of Macedonia (2002-2020 development period), adopted by the Assembly of the Republic of Macedonia in 2004 ("Official Gazette of RM" No. 39/04), is an integrated development and management document defining the spatial organization of the country, the goals and the concepts of the spatial development of individual areas, as well as the conditions for their implementation. The document contains goals and determinants related to natural heritage, including the protection of ecosystems, flora and fauna, through protection of large spatial units and managed utilization of natural resources, in line with ecological conditions, as well as the preservation of genetic and ecosystem diversity.

The National Environmental Action Plan (NEAP) was developed with the financial support from GEF in 1996. In the framework of this document, the topic of biological diversity was analysed in terms of presence and the extent of protection, legislative and institutional frame for adequate protection of natural heritage and threats against biological diversity were identified, followed up by a plan of protection activities (Chapter: Biodiversity of the Republic of Macedonia). That was a new approach in the planning of the environment, including the area of biological diversity, and the NEAP served as a basis for the development of new planning documents in the domain of biological diversity protection in the period following its adoption.

In addition to the above, other plans for biological diversity protection exist, which are part of the spatial plans of national parks, as an obligation based on the Law on Nature Protection ("Official Gazette of RM" No. 67/04), as well as on the old Law on the National Parks Protection ("Official Gazette of SFRJ" No. 33/80, 10/90 and "Official Gazette of RM" No.62/93). Spatial plans of national parks define the protection zones and conditions, as well as possible development activities, taking into consideration the social and economic aspects. These plans remain valid for 20 years.

National Parks also developed separate programmes concerning forest improvement, protection and growing where other plant communities of the National Park were also discussed. The programme covered a period of 10 years. With the adoption of the Law on Forests ("Official Gazette of RM" Nos. 47/97, 7/00, 89/04 ) these programmes were renamed into Plans for forest improvement, protection and growing in national parks. With regard to fauna protection, the programmes for game improvement, protection and breeding are prepared. According to the Law on Nature Protection, National Parks are obliged to adopt National Park Management Plans to replace the above plans and provide an integrated management of the protected area. The Plans will stipulate specific measures and activities aimed at the protection of characteristic natural values and their original state, for the purpose of acquiring the status of natural heritage.

In accordance with the Fire Protection Law ("Official Gazette of SFRY" No. 43/86, 37/87, 51/88, 36/90 and "Official Gazette of RM" No.12/93) programmes for protection against fires within national parks are prepared.

The Law on Ohrid, Prespa and Dojran Lakes Protection ("Official Gazette of SFRJ" Nos. 45/77, 8/80, 51/88, 10/90 and "Official Gazette of RM" No. 62/93) provides grounds for the preparation of plans for the protection of lakes, including the components of biological diversity found there.

The new Law on Nature Protection ("Official Gazette of RM" No. 67/04) has attached a new dimension to biological and landscape diversity protection. It regulates the protection of species, habitats and ecosystems, and provides grounds for the entities holding competence for management activities to adopt management plans for the protected areas, and annual programmes for nature protection, which should be harmonized with the Spatial Plan of the Republic of Macedonia. The Law also provides grounds for the development of the National Strategy for Nature Protection.

**10. Does your country have in place a Regulatory or Sustainability Impact Assessment System that leads to an assessment of the economic, social and environmental impacts of major public policies in a single integrated process?**

The basis for the functioning of both assessment systems for the evaluation of public policies through a single integrated process have already been established in the Republic of Macedonia.

The system of regulatory impact assessment and the system of impact assessment in terms of sustainability have been specified in the Rules of Procedure of the Government of the Republic of Macedonia ("Official Gazette of RM" Nos. 38/01, 98/02, 9/03, 47/03, 64/03, 67/03).

The aforementioned Rules of Procedure establish the basis for the implementation and improvement of the system of public policies adoption and implementation. According to the Rules of Procedure, the General Secretariat of the Republic of Macedonia contributes to the decision-making process management in terms of the coordination of public policies, through the definition of rules and their application. The coordination of public policies – as a process – creates conditions for specific standardization of the decision-making process within the Government, by which a significant level of coordination within and between different sectors of the public administration is achieved. For example, when ministries and other state administrative bodies submit relevant documents to the Government of the Republic of Macedonia, such documents should be accompanied by standard package of documents, as a matter of obligation, which should include the following well elaborated elements:

- **Possible solutions considered** ("pro" and "contra" arguments): this segment lists possible options that have been considered, as well as arguments "pro" and "contra" for each option.
- **Results from the consultations carried out with the relevant ministries, other state administrative bodies and organisations** – this section names the ministries, non-governmental organizations and stakeholders affected by the given proposal. Entities consulted with regard to the proposal should be listed and their positions or comments of substantial relevance that have not been accepted in the consultation process should be indicated.
- **Recommended solution** – the recommended option is explained in this section, presenting the reasons for choosing that particular option in comparison to other options. In addition, the cost-effectiveness of the proposed option shall be stated, as well as the reflections it shall produce with the public opinion.
- **Fiscal implications** – each proposal undergoes compulsory procedure for the assessment of fiscal implications, stating the expected costs from the recommended proposal, as well as the source of financial resources. The proposal is approved by the Ministry of Finance.
- **Expected impacts** – a summary based on the analysis, and results from quantitative research are presented; it shall describe the impacts of the decision on the public, tax payers, economy, employment, the environment.
- **Level of compliance with EU legislation** – this part shall assess the relevance of the documents with regard to the approximation of the legislation of the Republic of Macedonia to the European legislation. In case the document is a law, it shall be stated whether it has been reviewed by the Secretariat of Legislation; the opinion of the Secretariat of Legislation with reference to the level of compliance of the draft law with the relevant EU legislation should be included.
- **Evaluation of the material by the Secretariat of Legislation** – this part contains the assessment by the Secretariat of Legislation examining whether the document is in accordance with the national legal framework, i.e. with the Constitution, laws and legal system in general.
- **Key elements for public information** – this part shall contain messages used by the government in public presentations and explanations of the proposal/conclusion and the reasons for which the Government has adopted a particular conclusion.

The General Secretariat examines whether the submitted documentation contains all accompanying documents and explanations (the standard package of documents). If the documentation submitted to the Government is incomplete, the General Secretariat is authorised to return it to the submitters (e.g.: the Ministry). In addition, it is checked whether the Ministry that has submitted the documentation has carried out consultation procedure and requested opinion of other affected ministries and external target groups (stakeholders) prior to the submission of the documentation to the General Secretariat. In case such opinions have not been obtained, the documentation concerned is not considered by the working bodies of the Government, unless the considered issues



allow postponement. In such cases, the ministries inform the Government of the reasons for which the relevant opinions have not been acquired.

According to the Rules of Procedure of the Government, the Ministries/state administrative bodies, in the processes of the definition of their policies, are obliged to cooperate, agree upon issues, and inform each other on the issues of common interest, especially through data, information and experience exchange, the organization of meetings and consultations and other expert gatherings for the purpose of reviewing certain issues related to the process of legislation drafting and establishment of opinions, particularly in the framework of policies harmonisation. If such bodies have substantive or other relevant remarks, the bodies drafting and implementing the legislation are obliged to take into account the remarks and present their own opinion on them. For example, the Rules of Procedure contain a provision on the basis of which all materials submitted by the ministries and other state administrative bodies to the Government for consideration, review or adoption shall be previously submitted for opinion to the competent, relevant and affected state administrative bodies, depending on the nature of the subject documentation. Thus, documentation related to the environment and physical planning is submitted to the Ministry of Environment and Physical Planning as a matter of obligation. This provision establishes a possibility for the integration of environmental issues as early as in the process of preparation and adoption of plans, programmes, policies and legislation.

However, there are cases in which the ministries initiate the process of law drafting directly, without a prior analysis and explanation of the impact of public policies. In certain cases, inter-sectoral consultations have taken place after the development of the draft of the respective legislation, and in such circumstances consultations are only formal. There are other cases in which comments refer only to technical or normative technical aspects of legislation drafting.

In order to overcome the abovementioned deficiencies, the reforms of the General Secretariat focus on the strengthening of the role of the General Secretariat with regard to policy analysis and coordination. According to the Rulebook on the Internal Organisation of the General Secretariat, two new Sectors have been established, as follows:

- Sector of strategic planning, programming and monitoring, and
- Sector of policies analysis and coordination.

The establishment of these two Sector will contribute to the achievement of harmonization of policies, i.e. policies need to be supportive of each other, and not to contain contrary and conflicting goals. Thus, the integrated and holistic approach in the process of policies creation shall be ensured, leading to improved coherence among policies in the areas of economy, social welfare and the environment, through reaching common solutions among different interests.

At present, the coordination of policies and the settlement of certain disagreements are managed by the General Collegium (Collegium of State Secretaries), which holds sessions every week, scheduled before the sessions of the working bodies of the Government and before the sessions of the Government. The working bodies of the Government also facilitate cooperation and adjustment of opinions among ministries and other state administrative bodies. For example, the basic commissions (as standing working bodies of the Government of the Republic of Macedonia) determine specific proposals on items (based on prior informed opinions of the ministries, the opinion of the General Collegium and other state administrative bodies) for the adoption of certain acts and for undertaking appropriate measures with regard to the issues falling within the scope of the competence of the Government. Within the Government of the Republic of Macedonia the following basic commissions function:

- Political System Commission considers issues referring to, inter alia, the following: the functioning of parliamentary democracy and the rule of law, legal system and legislation building, organisation and functioning of public bodies, implementation of the policy of enforcement of laws and other regulations of the Assembly of the Republic of Macedonia and

of the Government. It also communicates opinions and proposals to the Government with regard to addressing issues within the scope of its competence.

- Economic System and Current Economy Commission reviews issues referring to, inter alia, the following: development policy and measures related to its implementation, encouragement of sustainable economic development and balanced spatial and regional development, environment protection and sustainable development, finance, taxation policy, global integration processes, European integration processes, banking, credit and monetary policy, price market, etc. The Commission observes the overall economic trends and proposes economic policy measures through the adoption and implementation of macro-economic policy, observes the financial standing of the economy and public expenditure through adoption and implementation of the Budget of the Republic of Macedonia, programmes for financing individual activities of interest to the Republic of Macedonia, standard of living, tourism, etc. It issues opinions and proposals to the Government with regard to the settlement of certain issues within the scope of its competence, as well as other issues of interest in terms of the development of the above areas.
- Commission for Human Resources and Sustainable Development reviews issues referring to, inter alia, the following: science, education, health care, employment rate and employment, social security and social insurance, special child care. It communicates opinions and proposals to the Government with regard to the settlement of issues within the scope of its competence.

The planning of Strategic priorities as part of the governance is a key and substantial competence of the Government and the President of the Government. Strategic framework is the main tool for the achievement of policies coherence. Definition of strategic priorities, by rule incorporated in the Annual Work Programme of the Government, is the political responsibility of the Government. For this purpose, a Decision on methodology of Strategic Planning and Drafting of Government of Republic of Macedonia Annual Work Programme was adopted.

Preparation and implementation of the Annual Work Programme of the Government is a joint activity and task of all state administrative bodies. The General Secretariat plays the leading role in its compilation, while the Ministry of Finance takes into consideration the resources available for its implementation. In addition to this, the role of the General Secretariat with regard to strategic planning includes the creation of conditions for long-range analysis of overall economic, political, social and environmental conditions. The General Secretariat also provides for adjustment of strategic priorities to the strategic documents of the Government (e.g.: with the Strategy of the Republic of Macedonia for Integration into the European Union), economic and fiscal strategy and other reform strategies.

The decision-making system is based on the principle of dual liability. Each Minister within his/her Ministry is obliged to identify problems, initiate solutions (taking into account the consultations completed with other relevant Ministers and bodies), carry out analysis of the impacts of the proposed solutions and present solution or offer alternative options as possible solutions of the policy for which the Government takes a collective decision.

As far as public participation in policy creation/legislation drafting is concerned, according to the applicable legislation in the Republic of Macedonia, and for the purpose of improving the system of policies creation, as well as for the purpose of democratic processes promotion, the state administrative bodies assist public administration through the dissemination of information on the type, contents and terms of policies adoption, organisation of public debates and collection of opinions from interested civil associations, non-governmental organizations and other legal entities.

Apart from the abovementioned Ministers require additional assistance from experts outside the Ministry (scientific and/or expert institutions, academic and/or higher education institutions, etc.) or from a specific inter-Ministerial working group in case of complex issues. At the same time, the views of the public directly affected by the given issue are taken into account. Issues under consideration are analysed from all points of view, and particular analyses are made of analytical data (fiscal, economical, social, environmental, etc.), supporting the proposals of the Ministries.

It is of particular importance to point out that the Republic of Macedonia intends to develop a National Sustainable Development Strategy (NSSD) with Action Plan. In the process of its development, both systems (sustainability assessment system and regulatory impact assessment system) will be upgraded for the same purpose: achievement of higher consistency, coherence, coordination and equitable balance among public policies in different areas. The development of the NSSD is one of the priorities defined under the National Strategy of the Republic of Macedonia for Integration into the European Union, and its development is expected to begin in 2005, in accordance with the European Partnership Action Plan.

**11. Are there measures based on environmental liability aiming at preventing and remedying environmental damage? In the negative, is the adoption of such measures planned for the near future?**

**The Law on Environment and Nature Protection and Promotion** (Official Gazette of RM No. 13/03 consolidated text) stipulates measures based on obligations of environment protection aimed at preventing and removing damage caused to the environment. The Law prescribes the obligation for legal entities performing activities by which environmental degradation is caused, to undertake all the necessary measures, including additional research, to eliminate factors of environment and nature degradation. They are also obliged to return the environment to its original state and to prepare the relevant technical documentation to be approved by the Ministry of Environment and Physical Planning (MEPP).

The inspectors for environment may order, within their authorisations and within a specified period, the elimination of harmful impacts caused by environment and nature pollution or degradation and by taking measures in order to return the environment to its original state.

The basic principles on which the provisions of the Draft Law on Environment are founded include, inter alia, the following: principle of precaution, principle of prevention and polluter pays principle. The principle of precaution establishes the basis for undertaking necessary protection measures, in case of reasonable doubt of harmful impacts on the environment instead of availability of scientific evidence. The principle of prevention enables the undertaking of measures and activities for environment protection before harmful impacts occur. The polluter pays principle is intended to provide equitable compensation for the damage caused by polluters, in order to bring the environment into the state prior to the damage to the maximum extent possible.

The Draft Law on Environment incorporates the basic provisions of Directive 2004/35/EC of the European Parliament and of the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage, such as: liability of the operator for the damage caused, the principle of returning the environment into its previous state, compensation for the damage caused to the environment, as well as obligation to provide information on the damage caused to the environment.

Chapter 16 of the Draft Law on Environment on the Liability for damage caused to the environment specifies the cases in which the operator is liable to compensate for the damage in case of failure to undertake measures required by the Law for the elimination of danger of damage occurrence; failure to notify the competent body of the damage occurrence; and failure to undertake preventive measures in accordance with the acts specified by the competent body. In case the operator fails to undertake the required measures, such measures will be undertaken by the MEPP at the expense of the operator. In case damage is caused to certain good of general interest that enjoys special protection under the law, compensation for the damage may be claimed by the Republic of Macedonia or by the local self-government unit in the territory of which the good of general interest is located.

Any person endangered with or suffering from the damage caused to the environment is entitled to request the damage instigator to return the environment into its former state or claim compensation

for the damage caused thereby. In case there are no other persons entitled to compensation for damage in accordance with the provisions of this Law, the Republic of Macedonia retains the right to a compensation for damage. The holder of the right to a claim for compensation for damage caused to the environment has the right to request the court to order the defendant to provide information or enable information gathering from the source of pollution required to determine the scale of liability for the damage caused. In case the defendant fails to enable information gathering from the source of pollution, the competent body itself shall collect the data at the expense of the defendant.

Chapter 15 of the Draft Law on Environment on the prevention and control of industrial accidents involving hazardous substances stipulates the obligation for the operator to prepare a report on safety measures, including measures and activities to prevent industrial accidents. In case of occurrence of industrial accident, the operator is obliged to inform the Ministry on the measures envisaged to mitigate the impacts of the industrial accident and to prevent possible repetition of the accident.

The Law on Obligations ("Official Gazette of RM" Nos.18/01, 4/02, 5/03) stipulates that, in case of damage caused by facilities or activities resulting in increased danger of environmental damage, the offender will be deemed liable regardless of the guilt. The person that has caused damage to another person is liable to compensate the damage caused without a fault.

Article 143 of the Law on Obligations stipulates that anyone can require from another to eliminate the source of danger from which significant damage is posed to him/her or to the undetermined number of persons, as well as to abstain from activity leading to disturbance or danger of damage, if the occurrence of such disturbance or damage may not be prevented with appropriate measures. In this case, the court shall order, upon request received from the affected person, the undertaking of appropriate measures for prevention of damage occurrence or disturbance or for the elimination of the source of danger at the expense of the holder of the source of the danger, if he/she fails to do that. In case the damage occurs during the execution of a generally useful activity for which the competent body has issued a permit, compensation may be claimed for the damage exceeding normal limits, i.e. the undertaking of socially justifiable measures may be required in order to prevent the occurrence of damage or to decrease the damage.

The Law on Protection and Rescue ("Official Gazette of RM" No. 36/04, 94/04) contains a separate Chapter on the estimate of damage and assistance in eliminating the impacts of natural disasters, epidemics, epizoa, and other accidents. The estimate of the level of damage resulting from natural disasters and other accidents is carried out by commissions established by the Government of the Republic of Macedonia, Councils of the local self-government units, management bodies of trade companies, public enterprises, institutions and services, and other legal entities in the country, based on unique methodology for damage estimation adopted by the Government of the Republic of Macedonia. Identification of the level of damage commences immediately after the disaster occurs, and not later than 30 days after the end of the disaster. The Government of the Republic of Macedonia has established a commission for estimation of damage and determination of its level only in cases when the republic organizes or participates in the protection and rescue activities. The damage estimation and level determination include the type, scale and extent of damage expressed in kind and value indicators, by area, activity, property, ownership, time and reasons for the damage occurrence. The commission also determines and executes the scale and the extent of insurance to be exempted from the total damage estimated, in accordance with general and special rules of insurance.

## B. Air Quality

### 1. Do air quality limit values or target values exist for specific atmospheric pollutants? If so, what are these values?

Yes. In the Republic of Macedonia, air quality limit values for certain pollutants are regulated by the Law on Air Protection against Pollution ("Official Gazette of SRM" No. 20/74, 6/81, 10/90 and "Official Gazette of RM" No 62/93), Article 4, specifying that:

Industrial and other facilities and plants are not allowed to release in the air smoke darker than the second degree of the Ringelmann's scale for longer than three minutes in one hour. Ships in ports, locomotives at railway stations or while passing through populated areas, are not allowed to release smoke darker than the second degree of the Ringelmann's scale for longer than 14 minutes in eight hours or four minutes in one hour. Engines with internal combustion (petrol and diesel engines) are not allowed to release the following substances in the air:

- Petrol engines – carbon monoxide in quantity exceeding 4.5 volume % during off-load engine operation;
- Diesel engines – black smoke above the limits prescribed by separate regulation.

Industrial and other facilities and plants are not allowed to release harmful substances in the air in concentrations exceeding maximum permissible concentrations in populated areas, as presented in the Table below:

Table of air quality limit values			
Harmful substance	Maximum individual concentration in mg/m <sup>3</sup>	Maximum average concentration in mg/m <sup>3</sup>	daily
Sulphur dioxide	0.5		0.15
Sulphuric acid by H <sub>2</sub> SO <sub>4</sub> molecule, or H <sub>2</sub> SO <sub>4</sub> by hydrogen ion	0.3 0.006		0.1 0.002
Smoke	0.15		0.05
Lead and lead compounds except tetraethyl lead as Pb			0.0007
Lead sulphide			0.0017
Arsenic inorganic compounds except arsenic hydrogen calculated as arsenic			0.003
Carbon disulphide	0.03		0.01
Carbon monoxide	3.00		1.00
Nitrogen dioxide NO <sub>2</sub>	0.085		0.085
Fluorine compounds calculated as fluorine in gaseous state	0.02		0.005
Oxidants	0.125		
Hydrocarbons corrected on methane	0.125		
Ashes and inert dust up to 300 mg/m <sup>2</sup> /day			
Source: Official Gazette of SRM No. 20/74			
Comment: The above values for MPC will be used until the adoption of by-law on limit values pursuant to the new Law on Ambient Air Quality.			

The table above shows values of maximum permissible concentrations (MPC), which are the values used for the comparison of air pollution caused by individual pollutants.

However, the above specified MPC are not regulated at the level that would enable a detailed and integrated assessment of the ambient air quality. The values are general and the same values of MPC apply with regard to human health protection and ecosystem protection.

The Law on Ambient Air Quality ("Official Gazette of RM" No. 67/04) regulates the adoption of limit values, margins of tolerance, target values, upper and lower assessment thresholds for individual

pollutants, specified by the Framework Directive 96/62/EC. The Law establishes grounds for laying down ambient air quality limit values and alert thresholds, emission limit values for exhaust gases and vapours from stationary sources, emission limit values for exhaust gases from mobile sources, and contents of harmful substances in fuels.

The Ministry of Environment and Physical Planning (MEPP) has drafted the Decree on ambient air quality limit values, margins of tolerance and alert thresholds, which is expected to be adopted by the end of the first quarter of 2005. In addition, a Rulebook on ambient air quality assessment is being drafted.

Both the above mentioned secondary legislation acts are harmonized with the Framework Air Quality Directive 96/62/EC, as well as with parts of Directives 99/30/EC, 80/779/EEC, 85/203/EEC, 82/884/EC, 92/72/EEC, 2002/3/EC and 2000/69/EC.

In order to achieve full compliance with the relevant EU legislation in the domain of air quality and to complete the national legislation, the development of two regulations has been envisaged, namely: Rulebook on preliminary ambient air quality assessment and establishment of ambient air quality zones and agglomerations, and Rulebook on air pollution monitoring and reporting, as well as other regulations based on the Law on Ambient Air Quality. The Approximation of the secondary legislation in the area of air is carried out in accordance with the Programme for Approximation of the National Legislation to the Legislation of the EU, according to which their adoption is scheduled in 2005 and 2006. The adoption of the relevant secondary legislation based on the Law on Ambient Air Quality is part of the programme activities under CARDS 2004.

## 2. What is the relationship of the above with the WHO standards/guidelines?

In the Republic of Macedonia the existing standards on air quality date back to 1974 and they do not incorporate clearly the Guidelines on Air Quality of the World Health Organisation (WHO), i.e. both 1987 and 2000 "Guidelines on Air Quality in Europe", annexed to the target 10 under "Health for All" for the WHO European Region, adopted later on.

If the national existing standards and limit values are compared with those of the WHO, it may be concluded that there is a difference between the Maximum Permissible Concentrations (MPC) of pollutants prescribed in the Law on Air Protection against Pollution ("Official Gazette of SRM" No. 20/74, 6/81, 10/90 and "Official Gazette of RM" No. 62/93) and the Guidelines on Air Quality in Europe issued by WHO in 2000, as presented in the Table below.

Difference between MPC of pollutants in the Republic of Macedonia and values given in the WHO Guidelines				
	Republic of Macedonia		WHO	
1.	Carbon monoxide	3 mg/m <sup>3</sup>	Carbon monoxide	30 mg/m <sup>3</sup>
2.	Nitrogen dioxide	0.085 mg/m <sup>3</sup>	Nitrogen dioxide	0.200 mg/m <sup>3</sup>
3.	Sulphur dioxide	0.15 mg/m <sup>3</sup>	Sulphur dioxide	0.125 mg/m <sup>3</sup>
4.	Carbon disulphide	0.03 mg/m <sup>3</sup>	Carbon disulphide	0.02 mg/m <sup>3</sup>
5.	Fluoride	0.02 mg/m <sup>3</sup>	Fluoride	0.006 mg/m <sup>3</sup>
6.	Oxidants	0.125 mg/m <sup>3</sup>	Oxidants	0.120 mg/m <sup>3</sup>
Source: MEPP				

The WHO Guidelines have been taken into account in the development of the Law on Ambient Air Quality ("Official Gazette of RM" No. 67/04), which has been fully harmonised with the relevant EU Directives. The Guidelines will also be taken into account in the development of the secondary legislation to regulate air quality limit values.

With regard to health risk assessment, the 1987 WHO Guidelines are used in place of the national standards. The Guidelines have been used for combined exposure to sulphur dioxide (0.125 mg/m<sup>3</sup>) and smoke (0.05 mg/m<sup>3</sup>) for a one-year period, only for the cities of Skopje and Veles.

With regard to the assessment of health risk from environmental exposure to lead in Veles, identified as an environmental hot-spot in the Republic of Macedonia, the average annual recommended value of the WHO 2000 Guidelines is used (0.0005 mg/m<sup>3</sup>).

### 3. Is there a national programme for monitoring air quality?

There is no single National Programme for Ambient Air Quality Monitoring.

There are three ambient air quality monitoring networks in the Republic of Macedonia, as follows: the network of the National Public Health Institute (NPHI) and its regional branches located in major cities in the country; the network of the Hydro Meteorological Directorate (HDM) and the network of the Ministry of Environment and Physical Planning (MEPP). Each of the above monitoring networks operates on the basis of separate programmes under the annual work programme of each of the above mentioned institutions.

The Law on Ambient Air Quality ("Official Gazette of RM" No. 67/04) provides a basis for the establishment and operation of national ambient air quality monitoring network, which will integrate the three existing networks, as well as local ambient air quality monitoring networks to be established in certain local self-government units if a need is identified for additional or specific ambient air quality monitoring at local level. The activities, aimed at the establishment and operation of the national ambient air quality monitoring network have been envisaged under the European Partnership Action Plan.

The Law on Ambient Air Quality stipulates the adoption of annual programme for ambient air quality monitoring concerning the operation of the national ambient air quality monitoring network.

In the framework of PHARE SOP 99, the Environmental Monitoring Strategy was developed, including air monitoring. This Strategy contains guidelines for air quality improvement, as well as for the establishment of air quality zones and agglomerations.

Each of the existing monitoring networks performs measurements of concentrations of air pollutants in different places in the country. Brief description of individual monitoring networks is presented below:

#### 1. Monitoring network of the National Public Health Institute (NPHI):

- Institute for Health Protection – Skopje, has established a monitoring network for the measuring of concentrations of SO<sub>2</sub> and black smoke at seven measuring points in Skopje. The concentration of total inert dust and pH is measured on a daily basis at 30 measuring points in the city. The concentrations of CO are measured at four measuring points, the concentrations of lead and cadmium each at one measuring point in the city, and measured twice a year, in April and October.
- Institute for Health Protection – Veles performs daily measurements of SO<sub>2</sub> and black smoke at three measuring points in the city and daily measurements of dust and pH at eight measuring points.
- Institutes for Health Protection in Kumanovo, Kocani, Tetovo, Bitola, Ohrid, Prilep, and Stip carry out air monitoring of dust.

The air quality monitoring is carried out in accordance with the Annual Work Programme of RIHP and the Annual Work Programmes for individual RIHP's regional branches.

2. The monitoring network of the **Hydro Meteorological Directorate - HMD** performs measurements of SO<sub>2</sub> and black smoke at nine measuring points in Skopje and at one measuring point for NO<sub>2</sub> and O<sub>3</sub> respectively. SO<sub>2</sub> and black smoke measurements are also performed in 10 other cities in the Republic of Macedonia, namely in: Berovo, Bitola, Tetovo, Gevgelija, Kumanovo, Ohrid, Prilep, Stip, Veles and in the village of Lazaropole.

Air quality monitoring is carried out in accordance with the Annual Work Programme for air quality monitoring and measurement, adopted by the Hydro Meteorological Directorate (as part of the Work Programme of the Ministry of Agriculture, Forestry and Water Economy).

3. The monitoring network of the **Ministry of Environment and Physical Planning** is a National automatic ambient air quality monitoring network, managed by the Macedonian Environmental Information Centre (MEIC), as a Sector within the Ministry.

The designing of the network started with the establishment of four automatic air pollution monitoring stations in 1998 in Skopje, as a donation of the Japanese Government. The said stations were located in Skopje as a model city, on the basis of the Study on the Air Pollution Monitoring in the Republic of Macedonia, elaborated by the expert team of the Japanese International Cooperation Agency (JICA). This Study provided a solid basis for the further development of the monitoring network.

In the process of further development and operation of the automatic air pollution monitoring network, efforts have been made to achieve compliance with the requirements of EU Directive 99/30/EC, Decisions 97/101/EC and 2001/752/EC and Guidelines for implementation of the said Decisions, for the purpose of high quality and continuous performance of the network. The network is designed in a manner facilitating compliance with the relevant EU documents, taking also into account the requirements of Directive 96/62/EC with a possibility for the establishment of ambient air quality zones and agglomerations.

The Table below shows the distribution and number of monitoring stations of the National automatic ambient air quality monitoring system:

Number and distribution of automatic monitoring stations					
No.	Code	City/place	Type	Category	Start of operation
1	ST4	Skopje - Karpos	Fixed	Urban environment	04.1998
2	ST5	Skopje - Centar	Fixed	Urban environment	04.1998
3	ST7	Skopje – Gazi Baba	Fixed	Urban environment	04.1998
4	ST6	Skopje - Lisice	Fixed	Urban environment	04.1998
5	ST15	Skopje	Fixed	Traffic	11.2004
6	ST1	Kicevo	Fixed	Urban environment	12.2002
7	ST3	Kumanovo	Fixed	Urban environment	12.2002
8	ST2	Kocani	Fixed	Urban environment	12.2002
9	ST13	Village Lazaropole	Fixed	Rural environment	05.2004
10	ST8	Veles	Fixed	Urban environment	05.2004
11	ST9	Veles	Fixed	Urban environment	05.2004
12	ST10	Bitola	Fixed	Urban environment	05.2004
13	ST11	Bitola	Fixed	Urban environment	05.2004
14	ST12	Tetovo	Fixed	Urban environment	05.2004
15	ST14	Kavadarci	Mobile	Urban environment	11.2004
Source: MEPP; Data processed by the Macedonian Environmental Information Centre					

In 2002, three additional monitoring stations were installed in Kocani, Kumanovo and Kicevo, under the Project implemented in the framework of PHARE SOP 99. In the framework of the project carried out under CARDS 2001, the following stations were established: one additional mobile monitoring station in Skopje (measuring air pollution caused by traffic); two monitoring stations in Veles and Bitola respectively; one in Tetovo; one in the rural environment – village of Lazaropole located at the peak of a mountain to monitor transboundary air pollution in the framework of the EMEP Programme. The same project provided a mobile monitoring station covering urban areas for which no fixed air monitoring station has been envisaged. Within the project a Calibration laboratory was donated within the Central Laboratory of Environment under the MEPP.



The planned sites for the mobile air quality monitoring stations are presented in the Table below:

Schedule for the setting up of mobile air quality monitoring stations					
No.	Code	City/place	Type	Category	Period
1	ST14	Kavadarci	mobile	Urban environment	November 2004 - 2006
2		Prilep	mobile	Urban environment	December 2006 - 2008
3		Ohrid	mobile	Urban environment	January 2009 - 2011
Source: MEPP; Data processed by the Macedonian Environmental Information Centre					

The location and schedule for the setting up of mobile air quality monitoring stations to measure air pollution caused by traffic is presented in the Table below:

Location of the mobile traffic air quality monitoring station in Skopje					
No.	Code	Street / City	Type	Category	Start of operation
1	ST15	Street in the Centre of Skopje	Mobile - traffic	Urban environment	November 2004 - November 2008
Source: MEPP; Data processed by the Macedonian Environmental Information Centre					

The process of installation of 4 HVS PM<sub>10</sub> (high volume samplers) and 6 LVS PM<sub>10</sub> (low volume samplers) are underway. These samplers will be used for the sampling of suspended matter PM<sub>10</sub> and PM<sub>2.5</sub>. The planned locations for high volume samplers and low volume samplers are presented in the Table below:

Locations and schedule of installation of HVS and LVS samplers				
No.	City/place	Type	Category	Start of operation
1	Lazaropole	HVS	EMEP	November 2004
2	Kumanovo	HVS	Urban environment	November 2004
3	Kocani	HVS	Urban environment	November 2004
4	Bitola	HVS	Urban environment	November 2004
5	Kavadarci	LVS	Urban environment	November 2004
6	Veles	LVS	Urban environment	November 2004
7	Kicevo	LVS	Urban environment	November 2004
8	Jegunovce	LVS	Rural environment	November 2004
9	Skopje-Lisice	LVS	Urban environment	November 2004
10	Skopje – next to the traffic monitoring station	LVS	Urban environment	November 2004
Source: MEPP; Data processed by the Macedonian Environmental Information Centre				

Data from the monitoring stations are transmitted hourly by a telephone line (modem) to the central computer located in the MEIC of the MEPP.

### Parameters measured and measuring methods

Automatic air quality monitoring stations measure environmental and meteorological parameters.

The following **environmental parameters** are measured:

- CO- carbon monoxide expressed in milligrams per cubic meter (mg/m<sup>3</sup>)
- SO<sub>2</sub>- sulphur dioxide, expressed in micrograms per cubic meter (µg/m<sup>3</sup>)
- Nitrogen oxides, expressed in micrograms per cubic meter (µg/m<sup>3</sup>)
- O<sub>3</sub> - ozone, expressed in micrograms per cubic meter (µg/m<sup>3</sup>)
- PM 10 – suspended particulate matter in the area with diameter less than or equal to 10 micrometres, expressed in micrograms per cubic meter (µg/m<sup>3</sup>)
- Benzene

The same monitoring stations also measure the following **meteorological parameters**:

- Wind velocity, expressed in meters per second (m/s )
- Wind direction, expressed in degrees
- Temperature, expressed in degrees Celsius
- Humidity, expressed in %
- Pressure, expressed in hectopascals ( hPa )
- Global radiation, expressed in Watts per square meter ( W/m<sup>2</sup> )

Data from the automatic air quality monitoring system are collected daily and subjected to verification, validation and appropriate processing and analysis. The system produces 2000 environmental and 1800 meteorological data.

On the basis of the data from the automatic air quality monitoring system, concentrations of pollutants are observed. In case certain pollutant at some of the measuring points exceeds the average hourly maximum permissible concentration for three consequent hours, the State Environment Inspectorate is alerted and notified. Every day (from Monday to Friday), the City Centre for Warning and Information submits information on the quality of the air received from the automatic air quality monitoring system.

Reports on the quality of air are prepared annually and monthly. They include information on average daily concentrations of all pollutants monitored, presented in a tabular and graphical manner, as well as tables of meteorological data from all monitoring stations. The said reports are forwarded to the local self-government units where monitoring stations exist, as well as to the HMD, NPHI and Regional institutes for health protection.

In October each year, air quality monitoring data from the previous year is submitted to the European Topic Centre (ETC) for Air and Climate Change in DEM format (Data Exchange Module) provided by the European Environmental Agency (EEA), in order to be included in the air database (AIRBASE).

Data on ozone is processed in accordance with Directive 2002/3/EEC relating to ozone in ambient air, and sent to the European Topic Centre for Air and Climate Change.

Data is also submitted to the OECD, UN/ECE, and EUROSTAT.

Despite the fact that there is no unique national monitoring programme (its development is expected to commence in 2006), the automatic air quality monitoring is carried out through the already designed and planned work programmes. The development of the national programme, as well as the performance of tasks related to a modern automatic ambient air quality monitoring network assume continuous training of the staff and permanent upgrading of the system. The needs for training of the personnel in the calibration laboratory, as well as with regard to the maintenance of the central software for data verification, have been identified as well.

#### **4. Are there estimates of emissions of the major atmospheric pollutants?**

All possible pollutants have not been identified in the Republic of Macedonia yet. Due to this fact series of activities have been carried out, including the preparation of the Cadastre of Air Polluters and Pollutants by individual environmental areas, including the Cadastre and Maps of air polluters and pollutants in Skopje and in the Republic of Macedonia as a whole.

With the completion of the Cadastre of Air Polluters and Pollutants in the Republic of Macedonia, most of the possible air polluters, as well as individual air pollutants, will be identified. With regard to the Cadastre elaboration, data is collected from business entities and the following pollutants are measured: sulphur dioxide, nitrogen oxides, carbon monoxide, dust, quantity of exhaust gas-flow from outlets into the air, and heavy metals, where possible.

By the application of the CORINAIR (Core Inventory for Air Pollution) methodology and the SNAP (Selected Nomenclature for Air Pollution), the data measured by the Laboratory under the MEPP, the data obtained from individual major companies that monitor only air emissions and pollution, as well as data in the Statistical Year Book have been compiled for around 220 polluters in the Republic of Macedonia.

The compilation by the SNAP was completed upon recommendation and with the assistance of experts from the European Topic Centre for Air and Climate Change (ETC/ACC) of the European Environmental Agency (EEA). In this process, the measurements and estimates presented in the Guidelines of the CORINAIR have been used. The said compilation has not covered all 11 sectors proposed under the SNAP, due to the lack of data. Thus, 220 polluters have been designated to the sector 7.

Introduction of unique methodology of air pollution inventory at the national level is of high importance with regard to individual pollutants, recommended under the CORINAIR (Core Inventory for Air Pollution). The Republic of Macedonia has ratified the Convention on Long-range Transboundary Air Pollution and the EMEP Protocol (European Monitoring of Environment Programme) ("Official Gazette of SFRY" No. 11/86). The methodology will provide the data of the Republic of Macedonia to be compatible to and comparable with the relevant EU data.

Introduction of unique methodology of air pollution inventory (CORINAIR) and distribution of quantities of pollutants according to all 11 sectors in line with the SNAP, at the national level is planned for 2005 and 2006, through CARDS Regional Programme and European Environmental Agency (EEA).

Table below shows quantities of pollutants processed by sectors at the national level.

Quantity of air pollutant emissions according to 2003 data, in tonnes/year					
	Sector	SO <sub>2</sub>	NO <sub>x</sub>	CO	Dust
Sector 1	Combustion and power transformation in electricity generation plants	91.883.5	13.446.7	1.642	2.064.4
Sector 2	Non-industrial combustion facilities	6.298	1.130	1.846	326
Sector 3	Combustion in production industry	5.400	1.510	1.942	1.830
Sector 4	Production processes	30.880	6.221	5.267	24.312
Sector 6	Use of solvents and other products	3.980	1.420	16.594	145
Sector 7, 8	Transport	514	11.348	49.305	67
Total		138.974.5	35.045.7	76.596	26.744.4
Source: MEPP					

Each year, the above data/quantities are corrected in the table and the EMEP's questionnaire is filled in.

The Republic of Macedonia distributes with regard to the space the emissions of those pollutants on which data is available, and on the basis of this the EMEP Protocol incorporates the data into its spatial network of pollution distribution into 50 x 50 km<sup>2</sup> grids at European level.

After the completion of the Cadastre and Inventory in accordance with CORINAIR, Macedonia will be able to collect data on the quantities and type of air pollution. At the same time, potential polluters will be identified at the national level. The Cadastre will be used as a basis for developing plans, programmes and measures for pollution abatement.

The Cadastre will be completed according to the following schedule:

- The Cadastre of air polluters for Skopje is completed in December 2004.
- The Cadastre of air polluters for the Republic of Macedonia will be completed by the end of 2005.
- The introduction of the unique methodology of pollution inventory in accordance with the CORINAIR and SNAP is envisaged to take place in 2005 and 2006.

### **5. Are there national programmes or strategies for reducing emissions of atmospheric pollutants?**

At present, there is no integrated programme for the abatement of emissions of pollutants into the atmosphere in the Republic of Macedonia.

The Law on Ambient Air Quality ("Official Gazette of RM" No. 67/04) in its Article 23 defines the obligation for the adoption of the National Plan for Ambient Air Protection and Programme for ambient air pollution reduction and quality improvement.

According to the Law, the National Plan for Ambient Air Protection should provide, inter alia, the following:

- Maintenance of the ambient air quality in zones where air quality limit values are not exceeded;
- Improvement of the ambient air quality in zones where air quality limit values are exceeded;
- Undertaking of measures to reduce emissions from certain stationary sources of air pollution;
- Adoption of necessary measures to minimize and eliminate negative effects on ambient air quality.

The Plan is to be adopted by the Government of the Republic of Macedonia on a proposal by the Ministry of Environment and Physical Planning (MEPP), for a period of eight years. For the purpose of the Plan implementation, the Government of the Republic of Macedonia, on a proposal by the MEPP, adopts an annual programme of measures proposed for the purpose of achievement of the Plan goals, accompanied with financial plan for the programme implementation. The MEPP is the authority within public administration responsible for the implementation of the Plan on which it reports to the Government every two years.

The Law also stipulates an obligation for the adoption of programmes for pollution abatement and ambient air quality improvement in the territory of a local self-government unit, in the zones and agglomerations where one or more pollutants are found to be above the air quality limit values, plus margin of tolerance, or such values are between the air quality limit values and the air quality limit values, plus margin of tolerance.

According to the Law, the Plan and the programmes should be adopted within six years after the Law enters into force.

**6. In addition to the measures referred to under heading F “Industrial Pollution Control and Risk Management”, is there national legislation controlling emissions from mobile sources (cars, trucks, buses, etc.)?**

According to the national legislation, motor vehicles of categories M, N, O and L are subject to compulsory homologation of vehicle type and individual vehicles prior to the import and first registration of motor vehicles.

The obligation for vehicles homologation derives from the Law on Road Traffic Safety (“Official Gazette of RM” No. 14/98, 38/02, 38/04), as well as from the following regulations adopted on the basis of that Law:

- Order on Mandatory A-Testing (Homologation) of Vehicles on Wheels, Equipment and Parts that can be Built in and/or Used on Wheeled Vehicles (“Official Gazette of RM” Nos. 89/00, 95/01, 99/01, 45/02, 35/04, 83/04).
- Order on Mandatory A-Testing (Homologation) of Vehicles on Wheels, Equipment and Parts for Motor Vehicles (“Official Gazette of RM” Nos. 84/01, 21/02, 31/02, 52/02, 26/04, 35/04, 83/04).
- Rulebook on the Dimensions, Total Masses, and Axle Load of Vehicles and Basic Conditions to be Fulfilled by Vehicles Devices and Equipment in Road Transport (“Official Gazette of SFRY” No. 50/82 and “Official Gazette of RM” No. 21/01).
- Rulebook on Conditions, Manners and Procedure of Motor-powered Vehicles and Trailer Vehicles Testing (“Official Gazette of RM” No. 68/93).
- Rulebook on Technical Inspection of Motor Vehicles, Tractors and Rotary Cultivators (“Official Gazette of RM” No. 28/99).

Specific regulations stipulating compulsory A-Testing of vehicles in terms of provisions related to catalytic converters include:

- Order on Mandatory A-Testing (Homologation) of Vehicles with Minimum Four Wheels with regard to Noise (“Official Gazette of RM” No.16/97), and
- Order on Mandatory A-Testing (Homologation) of Diesel Motor and Diesel Motor Driven Motor Vehicles with regard to Gaseous Pollutants (“Official Gazette of RM” No. 16/97).

Heavy vehicles involved in international transport undergo inspection procedure in accordance with the Resolution of the Ministers of Transport CEMT/CM (97/20/Final, CEMT/CM (95)4/Final and CEMT/CM (96)/5/Anex I, as regulated in decisions for special inspection of these vehicles (“Official Gazette of RM” Nos. 37/96 and 8/99).

The quality of vehicles used for transportation of hazardous substances is regulated by the Law on Carriage of Dangerous Goods (“Official Gazette of SFRY” No. 27/90, 45/90 and “Official Gazette of RM” No. 12/93), and its Articles 64 and 71 provide for direct implementation of the provisions of the European Agreement on International Transportation of Hazardous Goods in Road Transport (ADR regulations).

The Law on Ambient Air Quality (“Official Gazette of RM” No. 67/04) establishes legal grounds for the stipulation of emission limit values for exhaust gases from mobile sources (Articles 9 and 14). According to the same Law, the technical inspection and registration of mobile sources of pollution includes compulsory regular control of the compliance of the emission levels from mobile sources of pollution with the specified emission limit values.

According to the Programme for Approximation of the National Legislation to the Legislation of the European Union and the European Partnership Action Plan, emission limit values for exhaust gases from mobile sources of pollution will be regulated by 2006, taking into account the relevant EU measures ( 31970L0220, 31997L0068, 31998L0070. 3199L012, 31999L0032, 32002D0159, 32002L0088).

Technical inspection and registration of mobile sources of pollution are carried out in accordance with the Law on Road Traffic Safety ("Official Gazette of RM" No. 14/98, 38/02, 38/04), and Rulebook on Technical Inspection of Motor and Trailer Vehicles, Tractors and Agricultural Tractors ("Official Gazette of RM" No. 28/99).

Article 43 of the Rulebook on Technical Inspection of Motor and Trailer Vehicles, Tractors and Agricultural Tractors stipulates the inspection of combustion gases outlet device at loaded motor, and the combustion gases emission is measured by a device for the measurement of volume percentage of carbon monoxide in exhaust gases of petrol driven vehicles and a device for opacity (degree of smoke) measurement of exhaust gases from diesel driven vehicles.

Technical inspections of vehicles are conducted on a regular (once a year, and for vehicles older than 15 years, twice a year) and on an extraordinary basis for vehicles for which technical inspection is needed according to the written order by the authorised official.

Article 20 of the Draft Law on Environment, which has been fully harmonized with the relevant EU legislation, stipulates the prohibition of production and import of transportation means that do not comply with the conditions specified for the emission of pollution and noise from mobile sources.

## **7. What arrangements are in place to monitor the quality of petrol, diesel, other gas oils and heavy fuel oil?**

The Law on Standardisation ("Official Gazette of RM" No. 54/02), Article 9, stipulates that, for the purpose of developing regulations to regulate technical requirements for products in order to ensure the safety of property and the protection of human life and health, and the environment and nature, the Institute of Standardisation prepares, adopts and publishes the relevant standards, on a request by the Government of the Republic of Macedonia.

The quality of liquid fuels is regulated by national standards for liquid fuels:

- MKS B.H. 2.220, motor petrol,
- MKS B.H. 2.210, unleaded motor petrol,
- MKS B.H. 2.410, fuels for diesel motors,
- MKS B.H. 2.331, fuels for jet motors, type 1 (JF-1), and
- MKS B.H. 2.430, heating oils.

The entry into force and mandatory application of the above standards are regulated by the Rulebook on the Quality of Liquid Fuels ("Official Gazette of RM" No. 72/03, 85/03, 23/04), adopted by the Minister of Economy on the basis of Article 4 of the Law on Stipulation of Technical Requirements for Products and Conformity Assessment ("Official Gazette of RM" No. 55/02).

The said Rulebook prescribes the quality of liquid fuels through the definition of the lowest/highest permissible quantity of sulphur, lead, olephines, aromates, benzenes, oxygen, oxygenates, etc., and the lowest/highest permissible value of other characteristics (parameters) of liquid fuels quality.

The term "other characteristics" means: octane number, distillation, steam tension, viscosity, cetane number, density at 15° C, filterability, water, etc.

The sampling for liquid fuels quality testing and the methods for the determination of limit values are implemented in accordance with the above standards.

In addition to the mentioned methods, the methods complying with the applicable international standards, such as the ASTM, ISO, EN and others, may be used.

Each delivery of liquid fuel intended for trade on domestic market should be accompanied by appropriate documentation and Certificate of quality compliance (Form JF-1) issued to the supplier by the producer, deliverer or accredited independent laboratory. With the certificate of quality compliance of liquid fuel, the deliverer guarantees that the liquid fuel complies with the limit values stipulated by the Rulebook.

At the request of the State Market Inspectorate, in case of doubt, the quality of the liquid fuel shall be inspected by an authorised independent laboratory, at the expense of the liquid fuel deliverer.

The Draft Law on Environment, Article 21, stipulates the prohibition of production, trade in and use of certain products, substances and the performance of certain activities and services in case there is evidence confirming that they endanger the environment and human health and do not comply with the applicable standards.

The Law on Ambient Air Quality ("Official Gazette of RM" No. 67/04) provides a legal basis for specifying limit values for the contents of harmful substances in fuels in order to avoid, prevent or reduce harmful effects on human health and the environment (Article 9). Limit values for the contents and types of harmful substances and other requirements for fuels quality are prescribed by the Ministry of Economy in consent with the Ministry of Environment and Physical Planning (Article 14).

National standards for liquid fuels are partially harmonised with Directive 98/70/EC on the quality of petrol and diesel fuels, due to the differences in permissible contents of lead and benzene in both types of petrol, as well as in permissible contents of sulphur in diesel fuels.

There has been no national quality standard adopted for LPG as fuel for automobiles.

The National Oil and Lubricants Technical Committee within the Institute for Standardisation has initiated the procedure for the transposition of the standards EN 228: 2004 and EN 590: 2004. The transposition of the said standards, as well as the standard EN 589: 2004 for fuel for automobiles, is scheduled for 2005.

In 2003, in the framework of PHARE SOP 99, the "Master Plan for Leaded Petrol Phasing Out" was developed through the participation of all relevant stakeholders. This strategic document has been developed by taking into account the Directive 98/70/EC on the quality of petrol and diesel fuels, EU Decision 2000/159/EC, and Directive 96/62/EC on air quality.

The Master Plan includes the time frame for the phased elimination of lead from petrol. The first phase, which has been completed, included: the reduction of the contents of lead from 0.6 to 0.15 g Pb/l by 2004. The second phase – full elimination of the lead to 0.013 g Pb/l shall be completed by 2006.

There is no accredited laboratory in the Republic of Macedonia for fuels quality testing. A legal ground for laboratory accreditation has been established in the Law on Accreditation ("Official Gazette of RM" No. 54/02).

## **8. What arrangements are in place to control Volatile Organic Compound (VOC) emissions from different sources?**

Volatile Organic Compounds (VOC) emissions are not controlled regularly in a manner stipulated by EU regulations. Estimates of VOCs emissions from mobile sources of pollution have been carried out periodically, for the purposes of projects or studies. However, such measurements and estimates cannot be regarded as established arrangements for VOC emission control.

The Law on Ambient Air Quality ("Official Gazette of RM" No. 67/04) establishes a legal basis for the adoption of by-laws on emission limit values from stationary sources and emission limit values for exhaust gases from mobile sources of pollution. According to the same Law, the technical inspection and registration of mobile sources of pollution includes compulsory regular control of the compliance of the emission levels from mobile sources of pollution with the specified emission limit values. According to the Programme for Approximation of the National Legislation to the Legislation of the European Union and the European Partnership Action Plan, the adoption of the relevant secondary legislation in this domain is scheduled by 2006. The Law, under separate Chapter, addresses the aspects of ambient air protection against pollution, including VOCs emission.

The Draft Law on Environment has transposed EU Directive 96/61/EC on Integrated Pollution Prevention and Control (IPPC). The Draft Law prescribes two groups of installations that shall apply to A or B integrated environmental permit. Installations that shall apply to the A integrated environmental permit perform the activities listed in Annex 1 of the IPPC Directive; these activities are specified in the Draft Decree on IPPC. Installations that shall apply to B integrated environmental permit perform the activities listed in Annex 1 of the IPPC Directive, but with lower thresholds.

Integrated environmental permits shall contain operation conditions and permissible emissions in all environmental media in accordance with the standards recommended in the Reference documents on the best available techniques (BAT). Taking into consideration the fact that the said standards are not binding, but recommend a frame within which emissions should be ranged, the Ministry of Environment and Physical Planning (MEPP) will define the BAT for each permit, depending on the geographical position of the site.

According to the above, installations with VOCs emissions shall have specified in their integrated environmental permit (A or B) the permissible VOCs emissions in ambient air, which shall not exceed the legal standards. In addition to this, the integrated environmental permit itself may specify standards that may be stricter than the legal ones. In all cases, the Operator of the installation shall be obliged to comply with the standards and with the schedule for VOC emission reduction described in the Permit.

The Operator of the installation shall be obliged to perform self-monitoring with regard to all parameters specified in the Permit. Data from the self-monitoring has to be submitted to the MEPP at intervals specified in the Draft Law or in the Permit.

With regard to the existing installations, the Draft Law on Environment introduces compliance permits, providing for gradual and planned fulfilment of standards, in order to acquire environmental permits.

According to the Draft Law on Environment, the State Environment Inspectorate is also obliged to carry out (at least once a year) inspection of the installation with the A integrated environmental permit.

## **9. What is the state of implementation of the UNECE Convention on long-range transboundary air pollutions and its protocol on SO<sub>2</sub>, Nox and VOCs?**

Republic of Macedonia has been a Party to the UNECE Convention on Long-Range Transboundary Air Pollution since its ratification by means of the Law on Ratification ("Official Gazette of SFRY" No. 11/86), taken over by means of succession on 17.11.1991.

As far as the Convention's Protocols on SO<sub>2</sub>, Nox and VOCs are concerned, the possibilities faced by the country in relation to their ratification have been analyzed in terms of available and required capacities for their implementation. Requirements contained in these Protocols shall be incorporated in the secondary legislation prescribed for adoption by the Law on Ambient Air Quality ("Official Gazette of RM" No. 67/04). The by-laws are in a process of drafting and their adoption is planned to take place by 2006.

The Law on Ambient Air Quality has been prepared through the participation of international expertise (GTZ). It has been fully harmonised with the requirements of the EU Directive 96/62, as well as in the UNECE Convention on Long-Range Transboundary Air Pollution.

Article 25, paragraph 1, of the Law stipulates the obligation for the development of the National Plan for Ambient Air Protection, providing, inter alia, the adoption of the necessary measures for minimization and full elimination of negative effects on the quality of ambient air in a transboundary context, as well as the fulfilment of the obligations undertaken through international agreements ratified by the Republic of Macedonia. According to Article 26, paragraph 6, the Law prescribes that, in case certain polluted zone and/or agglomeration covers territories of two or more countries, the



Programmes for air pollution abatement and ambient air quality improvement shall be developed in agreement with the involved countries. According to the Law, the said Plans and Programmes shall be adopted within six years after the entry into force of the Law (Article 78).

In order to identify the level of pollution within the context covered by the Convention, the Law in its Article 40, paragraph 1, stipulates the obligation for the measurements of transboundary transmission of air pollutants, as well as the measurements related to international obligations of the country. This Law in Article 43 appoints the Ministry of Environment and Physical Planning (MEPP) as an authority responsible for the monitoring and control of transboundary transmission of air pollutants. The MEPP is also responsible for the presentation of data on the ambient air quality and air emissions in the context of the implementation of the obligations deriving from ratified international environmental agreements (Article 44). The MEPP is obliged to inform the public, too. According to Article 50 of the Law, it is responsible to prepare reports on the ambient air quality for the purpose of implementing the obligations under the Law, as well as reports in accordance with the obligations under the ratified international environmental agreements.

The available data is submitted on regular basis, once a year according to the requirement, to the EMEP and UNECE, as well as to the European Environmental Agency (EEA).

### **C. Waste Management**

#### **1. What are the main features of the legislation concerning waste management (household waste, light office and commercial waste, industrial waste including hazardous waste and sludges from urban waste water treatment)?**

The basic legal framework for waste management has been established by the Law on Waste Management ("Official Gazette of RM" No. 68/04, 71/04).

The main features of the legislation concerning waste management are as follows:

- Full harmonisation with the relevant EU Directives, which have been transposed in the Law on Waste Management (hereinafter: LWM), taking also into consideration the local conditions;
- LWM incorporates the basic principles of waste management (principle of environmental protection in waste management - waste minimization, principle of precaution, closeness, service universality, polluter pays principle, system of deposit, etc.),
- Waste management, as a public service, is based on the principle of service universality (non-discrimination, sustainability, quality and efficiency, transparency, affordable price and full coverage of the territory).

The Law has transposed and provided for further transposition through secondary legislation the following Directives:

- Council Framework Directive on Waste (75/442)
- Council Directive on Hazardous Waste (91/689)
- Council Directive on Landfills (99/31)
- Council Directive on Waste Oils (75/439; 87/101)
- Council Directive on PCB/PCT (96/59)
- Council Directive on Incineration of Non-hazardous Waste (2000/76)
- Council Directive on Incineration of Hazardous Waste (94/67)
- Council Directive on Hazardous Substances Containing Batteries and Accumulators (91/157)
- Council Directive on Packaging and Packaging Waste (94/62)
- Council Directive on end-of life vehicles (2000/53)
- Council Directive on waste from the titanium dioxide industry (78/176)

Other important features of the LWM include:

- Waste management planning on national and local levels;

- Avoidance of waste generation and reduction of its hazardous properties;
- Sustainable development through rational use of natural resources;
- Waste utilization through its re-use, recycling and recovery by using waste as energy source;
- Establishment of integrated and effective system of waste management, in a manner safe for human health and for the environment;
- Prevention of waste disposal in a manner posing danger to human health and the environment and gradual elimination of existing sources of pollution;
- Waste treatment includes procedures and operations ranging from waste generation to waste disposal (collection, transportation, storage, treatment, processing and disposal), including control during the treatment, and human health and environment protection;
- Waste processing includes operations intended for the utilization of useful substances and components of waste, including waste re-use, recycling and recovery by using waste as energy source (operations marked "R");
- Waste disposal refers to operations intended for final disposal of waste that cannot be re-used or processed (operations marked "D").

Another fundamental feature of the LWM is the formulation of the rules of market economy in such a way that private initiatives evolve through the introduction of conditions for fair competition between public and private enterprises in all the segments of waste management.

The only exception from the abovementioned is the performance of the activity of "hazardous waste disposal", which is stipulated as a public service to be performed by the public enterprise established by the Government of the Republic of Macedonia.

The entities handling waste include: waste generator, owner, collector, transporter, processor and disposer. The Law also defines their obligations: records keeping, reporting, issuing of identification forms accompanying waste during transport, permits, inspection supervision, etc.

The LWM stipulates obligations enabling qualification and quantification of the entire waste life cycle, which has been identified as one of the weak points in the old legislation and an obstacle in the state analysis and planning.

The LWM specifies waste categories as basis for the adoption of the Lists of waste types, where hazardous wastes require specific labelling.

Waste types have been defined by their main features: municipal, commercial, hazardous, non-hazardous, industrial non-hazardous, inert waste and the details of their specific management have been prescribed, too.

The Law makes distinction between municipal and commercial waste, where commercial waste is waste generated in a different manner (in trade, administration, industry, etc.) and is similar by its nature to waste generated in households. This distinction enables the adequate application of the polluter pays principle with waste generators other than households.

The LWM defines industrial waste as industrial non-hazardous waste generated in production processes in industry, without hazardous features, and separates it from municipal waste by its properties, composition and quantity. The Law stipulates the rules for industrial waste handling, where the waste generator and/or owner is obliged to process the waste generated through the performance of its activities, in a manner specified by the Law.

Hazardous waste is defined as a waste containing substances with one or more hazardous properties, such as: explosiveness, reactivity (oxidants), inflammability, irritability, toxicity, infectiveness, cancerogenity, mutagenicity, toxicity to reproduction, eco-toxicity and property of toxic gases released in contact with water, air or acids. The Law also stipulates the rules for hazardous waste handling, such as general rules for hazardous waste handling, prohibition to combine it with non-hazardous waste, handling of combined hazardous waste, compulsory records keeping and classification of hazardous waste, as well as proper packaging and labelling, etc.

The Law defines specific types of waste, as well as the manner of their handling.

The LWM also provides grounds for the adoption of several secondary legislation acts, which may be divided into two main groups, as follows:

1. by-laws to regulate waste handling (waste removal, mainly through waste disposal and incineration/co-incineration, waste treatment, waste packaging and labelling, evaluation of wastes properties, waste import/export and transit), and
2. by-laws to regulate the management of individual waste types (packaging waste, waste oils, end-of-life vehicles, end-of-life batteries and accumulators, waste electric and electronic equipment, medical waste, asbestos containing waste, etc.).

With the adoption of the described by-laws, the national legislation on waste management shall be completed and structured in accordance with the EU legislation. The development of the said by-laws has been envisaged under the Programme for Approximation of the National Legislation to the Legislation of the European Union, as well as under the European Partnership Action Plan. It is planned that part of will develop under CARDS 2004.

The Law on Waste Management establishes relations with other laws, especially with the Draft Law on Environment. In this context, the LWM in general regulates the basic issues of the EU horizontal legislation (environmental impact assessment of certain plans, programmes or projects, integrated pollution prevention and control permits, measures undertaken in case of great danger (safety and protection in accidents) and refers to the relevant Chapter of the Draft Law on Environment.

The analysis of former legislation in the area of waste, including: Law on Communal Activities ("Official Gazette of RM" No 45/97, 23/99, 45/02, 16/04), Law on Public Cleanness Maintenance, Collection and Transport of Communal Solid and Technological Waste ("Official Gazette of RM No. 37/98), as well as the Law on Waste ("Official Gazette of RM" No.37/98), which preceded the new Law on Waste Management ("Official Gazette of RM" No. 68/04, 71/04) and the Law on Environment and Nature Protection and Promotion ("Official Gazette of RM" No. 13/03 consolidated text) showed a series of weaknesses.

The main weakness of the old legislation was its non-compliance with the EU requirements and standards, above all with regard to the concepts and definitions used therein, the priorities and hierarchy in waste management, including required permits, as well as the institutional overlapping and conflict of competences between responsible bodies. The lack of the relevant by-laws made the old legislation ineffective to a great extent.

In certain domains waste management is regulated through the application of international regulations, which have been accordingly transposed in the legislation, including:

- Law on the Ratification of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal ("Official Gazette of RM" No. 49/97),
- Law on the Ratification of the Amendment to the Basel Convention, Amendment to Annex I and Annex VIII and Annex IX ("Official Gazette of RM" No. 49/04), and
- Rulebook on the format and contents of the forms for transboundary movement of hazardous waste ("Official Gazette of RM" No. 37/03, 38/03).

The issue related to the management of sludge from urban wastewater treatment is regulated in the Draft Law on Waters.

The Draft Law, as a framework law, regulates the main principles of water management and transposes the relevant EU Directives in this area, including Directive 86/278/EEC on the protection of the environment, and in particular of the soil, when sewage sludge is used in agriculture. The Draft Law establishes a basis for the adoption of secondary legislation to regulate in details the issue of sludge use.

**2. Please provide basic information about facts and figures on waste generation and management:**

- a) Quantity, type (e.g. hazardous) and origin (industrial installations, agriculture, mining and quarrying, municipalities etc.) of waste generated per year;**  
**b) Waste treatment facilities: number and performance of treatment plants, composting and recycling plants, incineration facilities, landfill sites;**  
**c) Figures on export and import of waste (quantity, type).**

***a) Basic data on the quantity, type and origin of waste generated on annual basis in the Republic of Macedonia***

*Municipal waste:* Quantities of generated waste have been assessed on the basis of data provided by the State Statistical Office and on the basis of the analysis carried out under the Study on Waste Management in South-western part of Macedonia, developed by the ERM Lahmaeyer International GmbH (2002-2004), financed by KfW, EIB, Budget of the Republic of Macedonia and local contribution from the municipality in the region.

The Study on Waste Management in the South-western part of Macedonia presents indicators on municipal waste generation in the region concerned. According to the analysis carried out in the Ministry of Environment and Physical Planning (MEPP) on the quantities of generated municipal waste in other parts of the country, it can be concluded that the quantities are compatible with the results from the above stated Study and fully applicable to the whole territory of the country. Based on such results, daily generation of municipal waste per inhabitant has been defined, as follows:

- In urban areas (60% of the total population) – 0.7 kg/day;
- In rural areas (40% of the total population) – 0.5 kg/day.

Consequently, the total annual generation of municipal waste amounts to 470.000 tons, of which 322.000 tons are disposed of at municipal landfills, and 148.000 tons in rural areas in the vicinity of the settlements.

QUANTITIES OF DISPOSED OF WASTE		2001			
City	Waste removed in 2001 in tons			Waste disposal landfills	
	total	Disposed of	Other treatment	number	Area/m <sup>2</sup>
Berovo	3.270	3.250	20	1	3.000
Bitola	50.000	50.000		1	20.000
Blatec	240	240		1	600.000
Bogdanci	1.300	1.300		1	15.000
Valandovo	3.500	3.500		1	3.000
Veles	42.000	42.000		1	5000.000
Vinica	3.250	3.250		1	7.833
Gevgelia	10.000	10.000		1	10.000
Gostivar	20.600	20.600		1	40.000
Debar	300	300		1	30.000
Delcevo	5.400	5.400		1	20.410
Demir Hisar	5.000		5.000	1	30.000
Kavadarci	25.000	25.000		1	4.000
Karbinci	150		150	1	500
Kicevo	17.040	17.040		1	20.000
Kocani	8.200	8.200		1	16.000
Kratovo	1.525	1.525		1	1.000
Kriva Palanka	2.500	2.500		1	5.000
Krusevo	3.610		3.610	2	10.000
Kumanovo	66.000	66.000		1	130.000

Lozovo	300	300			
Makedonska Kamenica	360		360	1	18.000
Makedonski Brod	400	400		1	10.000
Negotino	13.450	13.450		1	81.753
Novo Selo	100	100		1	10.000
Oblesevo	288	288		3	500
Ohrid	80.000	80.000		1	20.000
Pehcevo	224	224		1	6.000
Prilep	55.000	55.000		1	55.000
Probistip	4.540	4.540		1	45.000
Radovis	7.200	7.200		1	80.000
Resen	7.900	7.900		1	3.000
Sveti Nikole	8.000	8.000		1	7.000
Skopje	107.029	107.029		1	800.000
Star Dojran	0				
Struga	41.915	41.915		1	15.000
Strumica	13.450	13.450			
Tetovo	20.000	20.000			
Stip	18.000		18.000	1	5.000
Source: State Statistical Office, Skopje					

Data on waste quantities in the Table above differ from the data available at the MEPP. The reason lies in the inadequate keeping of records by the Public Utilities, used as source data by the State Statistical Office.

**Waste from mining, metallurgical and energy sectors – source: 1996 National Environmental Action Plan (NEAP):**

- Flotation tailings: Waste material in quantities between 25 and 30.000.000 tons has been disposed of at waste disposal sites of the lead and zinc mines, and around 150 million tons have been disposed of at the copper mine Bucim.
- Waste generated through technological processes (Techno-gene waste): 80.000.000 tons of excavated soils have been disposed of at the site around the mine of Bucim, as well as around 52.000.000 tons of flotation tailings.
- Slag: More than 1.000.000 tons of slag from the lead and zinc production have been stored at the disposal site in Veles.
- Ferrous alloy: Quantities of disposed of ferrous alloy – 900.000 tons in Silmak, 4.000.000 tons in Feni, and 2.000.000 tons in the former Steel Works, or in total 6.900.000 tons of slag as waste material.
- Ashes and slag: Quantities of waste generated in mining and energy facilities amount to around 20.000.000 tons in a form of ashes and slag, without the excavated soil which is an inert material.
- Carbohydrate waste: within the site of Okta Oil Refinery, 10.000 tons of carbohydrate waste is stored.
- Polyacrylonitrile, polypropylene, PVC, polyethylene, polyvinyl acetate, chloride alkalis, detergents, etc.: generated and stored at the site of the Organic Chemical Industry “Ohis”-Skopje facilities, with total quantities of 4 tons/day. Production plant has been closed.
- Asbestos cement: waste from asbestos cement products – at the site of the USJE Cement Factory, 10.000 tons of such waste are disposed of. Production plant has been closed.
- Arsenic concentrate: 6.000 tons disposed of in the facilities of the Lojane Mine in the Municipality of Lipkovo. The mine and its auxiliary infrastructure have been closed.
- Waste from other industrial branches: stored mainly at the sites of production facilities, with estimated quantities of around 5.000.000 tons.

The Second NEAP and the Cadastre of polluters by solid and hazardous waste, currently under preparation, will produce relevant new data on the quantities of the waste generated in the Republic of Macedonia.

*Other types of waste – data from relevant institutions*

**Agricultural waste:** The answer refers to waste of animal origin only. There is no accurate (precise) data on generated waste due to the absence of organized collection of such waste. Data available is approximate and based on the number of slaughtered animals and animals destroyed within the context of the eradication measures carried out to combat communicable diseases in animals.

Slaughtered and disposed of animals in 2002 and 2003											
Year	Number of slaughtered animals							Number of animals destroyed through activities for communicable diseases combating			
	Bovine		Sheep-goat		Pigs		Poultry	Bovine		Sheep-goat	
	young	adult	young	Adult	young	adult	kilogram	Pit	Slaughtered	pit	slaughtered
2002	3.840	1.507	228.313	7.468	5.994	102.829	596.792	1	86	106	7978
2003	3.372	1.685	285.006	7.913	2.428	100.220	413.666	0	140	1024	2805
Source: Ministry of Agriculture, Forestry and Water Economy											

**Plastic waste:** In the Republic of Macedonia, a total of around 215.000.000 plastic bottles of various sizes are generated per year, which is around 40.000 tons or 400.000 m<sup>3</sup>, of which 9.000 tons or 180.000 m<sup>3</sup> is plastic wrapping material. Data have been taken from the Feasibility Study on Waste Management in South-western part of Macedonia (2002)

**Waste tires:** According to the data, around 1.500.000 tires of various vehicles are in permanent use in the Republic of Macedonia per year. Considering their life cycle and end-of-life period, around 400.000 pieces of used waste tyres are discarded in the country on an annual basis.

**Waste oils:** generation of waste oils has been estimated at 3.859 tons/year. There is no organized system of waste oils collection in the Republic of Macedonia.

**Waste generated through technological processes (Techno-gene waste):** at the site of the Organic Chemical Industry "Ohis" from Skopje, around 10.000 tons of organic chloride waste (hexachlorocyclohexane) is kept. The data has been taken from the UNEP Post-conflict Environmental Assessment in the Republic of Macedonia (2000)

**Packaging waste:** The quantity of packaging waste is not known.

**Medical waste:** The quantity of solid medical waste generated in hospitals and other institutions at the level of the Republic of Macedonia has been estimated at around 1.627 tons, out of which around 380 tons per year is hazardous solid medical waste. Only for Skopje this type of waste amounts to around 114 tons. The estimate of the total medical waste (solid and liquid) generated by health care institutions in the Republic of Macedonia is 2.178 tons in 2004.

Estimates of medical waste quantities in the Republic of Macedonia for 2004							
Infectious		Potentially infectious		Toxic		Corrosive	
solid (kg)	liquid (l)	solid (kg)	liquid (l)	solid (kg)	liquid (l)	solid (kg)	liquid (l)
Skopje							
114.000	45.000	387.000	66.870		38.890		635
Macedonia – total							
380.000	150.000	1.290.000	222.900		129.630		2.120
Drugs – solid state (pills, capsules, etc.)				Drugs – liquid state (infusions, solvents, etc.)			
2.500 kg				2.000 l			
Source: Ministry of Health							

b) *Waste treatment facilities:**Hazardous waste:*

There are no hazardous waste treatment plants, except for medical waste treated by incineration.

*Recycling:*

There are three waste plastics recycling facilities of different capacities, and their utilization rate is rather low due to the poor organization of the collection of such waste.

A facility for waste composting is being built in the vicinity of Kocani. It will be of low capacity and will only cover the local demand.

There have been periodical activities of waste lead recycling.

The Makstil Company (steel works) continuously produces steel sheets. The raw material used in the process is scrap iron collected in the territory of the Republic of Macedonia and from import. The designed capacity is 600.000 tons/year, with a utilization rate of around 50 % in 2002/2003.

The Komuna Company – Skopje, uses old paper (mainly cardboard) as a raw material. Its designed capacity is 20.000 tons/year. In 2002, 14.059 tons of paper were recycled.

The Batteries Company – MHK Zletovo from Veles has installed a plant for melting old batteries, but together with the smelter as a whole it is not operational.

*Disposal:*

Organised collection of medical waste is carried out only in the territory of the City of Skopje. The collected medical waste is incinerated in the only incinerator that has a capacity of 0.2 tons/hour. Around 1 ton of medical waste is incinerated per day.

Quantities of collected and incinerated waste in 2000-2003 period				
Year	2000	2001	2002	2003
Quantity/kg	114.900	231.190	248.600	255.000
Source: Ministry of Health				

Wastes of animal origin – carcasses, offal and remains of animal origin are disposed of at burial pits or buried in accordance with the conditions specified in the Rulebook on the manner of non-hazardous disposal of animal carcasses and animal offal and on the conditions to be complied with by facilities and equipment for animal carcasses and animal offal collection, non-hazardous disposal and for the identification of causes of death and for transportation means used to transport animal carcasses and animal offal ("Official Gazette of SFRY" No. 53/89).

*Municipal waste disposal:*

There is only one legal landfill in the Republic of Macedonia – "Drisla", in the vicinity of Skopje, at which no ground protection has been applied. This landfill does not comply with contemporary technical standards. The capacity of the landfill is 16.000.000 tons, and only 4 % of its designed capacity was used by 2002.

There are 32 municipal landfills, most of which are not fenced and guarded, and their constructive and operational performance is inappropriate. There are around 1.000 smaller illegal dumping sites in rural municipalities and settlements.

Disposal of industrial waste is carried out mainly on sites within the waste generating facilities, and certain quantities are disposed of at municipal waste landfills.

Landfills of techno-gene solid waste from mining and metallurgical facilities							
Company	Type of waste	Quantities at landfills (in tons)		Annual generation (in tons)			
		1996	2004	2000	2001	2002	2003
"Zletovo" Mines	Flotation tailings	12.500.000	13.453.220	161.216	155.322	62.461	0
"Sasa" Mines	Flotation tailings	10.500.000	12.205.668	337.980	291.400	136.253	
Mine of "Toranica"	Flotation tailings	1.500.000	2.500.000	166.540		0	0
Copper Mine "Bucim"	Excavated soil	80.000.000	113.034.000	2.763.000	2.996.000	2.027.000	551.000
	Flotation tailings	52.000.000	78.855.710	3.739.880	2.589.830	2.316.090	326.460
"Lojane" Mine	Arsenic concentrate	6,000	6,000	0	0	0	0
"Skopje" Steel Works	Iron slag	2.000.000	2.000.000	0	0	0	0
	Sylico-manganese slag	74.000	74.000	0	0	0	0
HEK "Jugohrom"	Ferrous chromium slag	460.000	460.000	0	0	0	0
	Chromate sediment	385.000	385.000	0	0	0	0
MHK "Zletovo"	Lead and zinc slag	790.000	1.162.150	58.140	53.070	39.060	11.260
	Phospho-gypsum		2.650.735	109.860	93.320	116.230	44.355
"Rzanovo" Mine	Excavated soil (m <sup>3</sup> )	50.000.000		0	511.650	2.617.000	3.464.000
FENI Industry	slag	2.200.000		0	310.390	587.780	617.500

Source: Ministry of Economy

## c) Data on specific types of waste imported in and exported from the Republic of Macedonia

Waste import in 2003	
Tariff Heading	Quantity in kg
Hard rubber (e.g.: ebonite) in any form, waste included	949
Wastes and residues of iron or steel, scrap ingots and other residues of iron or steel for re-melting, and other residues	15.300
Magnesium and magnesium particles, including wastes and residues: with magnesium contents per mass of no less than 99.8 %	44.850
Magnesium and magnesium particles	7.418
Magnesium and magnesium particles, including wastes and residues: turnings, sawdust and grains, sorted by size, dust	1
Magnesium and magnesium particles, including wastes and residues	215
Cobalt sediment and other semi-final products of cobalt metallurgy, cobalt and cobalt particles, including wastes and residues	29
Bismuth and bismuth particles, including wastes and residues	40
Titan and titan particles, including wastes and residues: raw titan, dust	49
Antimony and antimony particles, including wastes and residues	8.000
Vanadium: raw, wastes and residues, dust	25
Total:	76.876

Source: State Statistical Office, Skopje

Waste export in 2003	
Tariff Heading	Quantity in kg
Residues of processed fatty materials and wax of animal or plant origin: others	154.820
Ash and waste (iron or steel production excluded) containing arsenic, metals or metal compounds: containing mainly zinc: other	50.920
Ash and waste (iron or steel production excluded, containing arsenic, metals or metal compounds: containing mainly lead: other	1.570,40
Residues, sawdust, and waste of plastic mass, vinyl-chloride polymers	512.556



Residues, sawdust, and waste of plastic mass, other plastic mass, other	30.860
Residues, sawdust, and waste of leather or artificial leather unsuitable for leather products; leather particles, dust, and powder	8.458
Other wool waste or fine animal hairs: yarn waste	8.160
Yarn waste (including thread)	34.397
Cotton waste (including yarn plucked textile material waste): others	143.250
Residues (including short fibers obtained from combing, yarn residues and torn out residues) artificial or synthetic fibers: from synthetic fibers: acryl or non-acryl:	82.154
Residues (including short fibers obtained from combing, yarn residues and torn out residues) artificial or synthetic fibers: of synthetic fibers: others	3.641
Residues (including short fibers obtained from combing, yarn residues and torn out residues) artificial or synthetic fibers: of synthetic fibers: of artificial fibers	2.052
Other waste and residues containing precious metals/precious metals/precious metal compounds, mainly used for recovering precious metals: platinum, including platinized metals, but only residues containing other precious metals	26
Other waste and residues containing precious metals/ precious metals/precious metal compounds, mainly used for recovering precious metals: others	101
Cast iron waste and residues	273.940
Waste and residues from alloyed steel: stainless steel: volume per nickel mass from 8% or higher	133.620
Waste and residues from alloyed steel: others	353.820
Waste and residues from classified iron and steel	70.500
Chippings, shavings, cuttings and etc., including baled: cuttings, clippings and etc.: others	12.797,48
Waste and residues from iron or steel: waste ingots, slabs and other from iron or steel for melting: other waste and residues: others: baled	204.920
Waste and residues from iron or steel: waste ingots, slabs and other from iron or steel for melting: other waste and residues which are neither combed nor sorted	126.250
Waste and residues from iron or steel: waste ingots, slabs and other from iron or steel for melting: other waste and residues: others	7.709,31
Waste ingots, slabs and other for melting: others	5.265,08
Waste and residues from copper: from refined copper	321.757
Waste and residues from copper: copper alloys: copper-zink alloys: (brass)	354.428
Waste and residues from copper: copper alloys: others	389.094
Waste and residues from nickel: non-alloyed nickel	1.842
Waste and residues from nickel: alloyed nickel	15.138
Residues (including chippings, shavings, polishing refuse, sawdust, filings, residues of nonferrous coated sheet metal or armature residuals and foil of thickness not exceeding 2,2 mm (excluding the base)	13.990
Waste: others (including from the production process)	125.513
Waste and residues from aluminum: residuals	700.348
Lead waste and residues	370.464
Zink waste and residues	14.591
Zink dust	114.770

Magnesium and magnesium products, including waste and residues: others	2
Cadmium and cadmium products, including waste and residues: others	817.962
Waste and residues from primary cells, primary batteries and electric batteries: containing lead	2.816.387
Waste and residues from primary cells, primary batteries and electric batteries: run down primary cells and run down electric batteries: waste and residues from primary cells, primary batteries and electric batteries: others	54.520
Source: State Statistical Office, Skopje	

The export of hazardous waste is carried out in accordance with the provisions of the Basel Convention. This waste originates exclusively from the troops of the international forces stationed in the Republic of Macedonia.

### 3. Is there a general waste management policy (programme, strategy etc.) in place?

The general waste management policy in the Republic of Macedonia was defined with the adoption of the National Environmental Action Plan (NEAP) in 1996, which included, *inter alia*, the detailed analysis of the status of waste management. In this law the general policy is aimed at overcoming the current situation and the establishment of sustainable waste management.

For the purpose of implementing the general waste management policy, several planning documents have been developed, and others are being drafted. These include:

- **NEAP 1 – National Environmental Action Plan (1996)**

The priorities of the NEAP in the area of waste management include: definition of waste management goals and policies, establishment of sustainable waste management system, identification of the relevant stakeholders in the area of waste management, and integration of waste management policy in socio-economic programmes of the country.

This planning document has provided for the data systematisation in terms of quantities and types of generated industrial and mining waste. With regard to the planning solutions, the principle of regionalization was only mentioned, without specific elaboration.

- **NEAP 2 – National Environmental Action Plan (2004-2005) - CARDS 2001**

In the framework of CARDS 2001, the development of the Second NEAP has been initiated in relation to the implementation of policies, strategies and plans. The NEAP 2 will define the approach towards waste management through the incorporation of the main goals of legislation harmonized with the EU legislation. It will establish monitoring mechanisms, as well as economic instruments, for waste management implementation. It will further identify the relevant stakeholders in the area of waste management (especially in the context of overlapping responsibilities among the sectors). The process of decentralization and the need for institutional capacity building shall be taken into account, as well as the creation of conditions for appropriate financing of waste management in the Republic of Macedonia.

- **SECTORAL STUDY – ELABORATE ON SOLID WASTE IN THE REPUBLIC OF MACEDONIA - (under the Spatial Plan of the Republic of Macedonia)**

This Study complements the estimates of the quantities of generated waste foreseen in the NEAP 1, introducing 14 influence zones of one or two regional landfills in each (approximate identification of locations). The proposal for regionalization was elaborated without accompanying cost/benefit analysis. This general plan for the establishment of regions was further elaborated in later documents.

- **NATIONAL SOLID WASTE MANAGEMENT SYSTEM – KRÜGER (1999) (PHARE SOP 1997)**

The division into 14 influence zones has been further supplemented by the elaboration of sustainable systems for waste collection, transfer, transportation and disposal, within the eight proposed regions, including the area of Skopje. The principle of a minimum capacity of a regional landfill for around 300.000 inhabitants was introduced for the first time, in order to enable cost recovery for expensive landfill equipment maintenance through regular payment of bills by the population.

- **PRE-FEASIBILITY STUDY – SUBREGIONAL WASTE TREATMENT IN GEVGELIA-DOJLAN REGION (2001)**

Pre-feasibility Study was developed with regard to the Gevgelija - Dojran region in cooperation with experts from the Republic of Greece, analyzing the aspects of sub-regional waste treatment, to include the Municipalities of Gevgelija, Valandovo, Miravci, Bogdanci and Dojran. The implementation of this project is conditioned by the development of the relevant technical documentation and provision of the required financial resources.

- **FEASIBILITY STUDY - SOLID WASTE MANAGEMENT IN SOUTH-WESTERN PART OF MACEDONIA (2002)**

Feasibility Study with regard to the south-western part of Macedonia and a waste management concept have been developed. The Study covers the areas of 35 Municipalities, with 430.000 inhabitants. It indicates final specific solutions for a rational functioning of a regional waste management system, which can be applied and is feasible as a model in terms of organization and technical performance, as well as from the economic point of view. It is expected that from 2005, the preconditions for its implementation to be established, and thus the construction of the regional sanitary landfill is expected to start in 2007 in the territory of the Municipality of Topolcani.

- **NATIONAL WASTE MANAGEMENT PLAN (2004-2005) – CARDS 2001**

In the framework of CARDS 2001, the development of the National Waste Management Plan with feasibility studies is underway. The Plan is expected to be adopted in 2005. It includes the following activities:

- Analysis of waste at national level: municipal waste, hazardous waste, industrial waste, medical waste and agricultural waste;
- Construction of a pilot waste composting plant: analysis of composting alternatives, design and implementation of alternatives and recommendations concerning waste composting;
- Analysis of the market in terms of the most frequently demanded materials for recycling: current status, potential possibilities for processing and recycling; extension of the coverage of the waste recycling system and waste treatment system; proposals of legal, economic and financial instruments coordinated with the NEAP 2 Project; analysis of EU Directives relevant to waste processing and recycling.;
- Assessment of alternative economic and financial instruments through municipal financial support or other financial sources.

The Project consists of two components:

- First component: the development of the National Waste Management Plan that shall further play the role of a basic document.
- Second component: the development of a Feasibility Study on waste management in eastern and north-eastern parts of the Republic of Macedonia, covering the areas of Stip, Kocani, Sveti Nikole, Probistip, Malesevo and Pijan area, through Makedonska Kamenica and areas of Kriva Palanka, Kratovo, Kumanovo, and Lipkovo.

The Law on Waste Management ("Official Gazette of RM" No. 68/04, 71/04) stipulates the obligation for the development of National Waste Management Strategy, as well as waste management plans. The Strategy shall cover a period of 12 years, whereas National plans will be developed for a period of six years. The local self-government units are obliged to develop waste management plans for their respective territories, to cover a period between three and six years. For the purpose of the plans, annual waste management programmes shall be developed, including national programmes and programmes at the level of the local self-government units. Legal entities and natural persons generating waste above the quantity specified in the National waste management plan shall be obliged to develop waste management programmes and to report on the implementation of such programmes.

**4. Is there a legislative framework in place on the following topics:**

- a) Basic framework legislation (definition, hierarchy on waste treatment (prevention, re-use, recovery), authorisation schemes);**
- b) Framework legislation on hazardous waste;**
- c) Legislation on specific types of waste treatment (incineration, landfill);**
- d) Legislation on specific waste streams or types;**
- e) Legislation on shipment of waste.**

***a) Basic framework legislation***

The Law on Waste Management ("Official Gazette of RM" No. 68/04, 71/04) establishes the basic legal framework for waste management, including hazardous waste management.

The subject of this Law and its main features (for more details see [22 II C P1](#)).

- Definition:

Definitions used in the Law on Waste Management have been taken over from the European legislation and they are presented within the meaning of this Law. However, where necessary, specific formulations that may apply in a most appropriate manner in local circumstances and interpreted properly by those who use Law users, have been made.

The Law defines 42 terms, including the terms of general meaning, terms of specific meaning and terms related to specific waste types.

The Law on Waste Management in its Article 6 defines waste as "any matter or object that the generator or owner disposes of, intends to dispose of, or is requested to dispose of".

- Hierarchy in waste treatment

According to Article 7 of the Law on Waste Management, the hierarchy in waste treatment is set so as to require:

- Avoidance of waste generation and minimization of its harmful impacts.
- Waste processing by means of recycling, reuse or by another process for secondary raw materials extraction, or
- Waste recovery as energy source.

Priorities in waste management are stipulated by the subject of the Law and are particularly stressed with regard to production processes, as stipulated in Articles 8 and 48 of the Law on Waste Management.

The Law in its Article 28 provides for the possibility for the exemption of priorities application in waste management in cases in which waste processing compared to waste disposal may cause

threats to environment or human health or the costs of waste processing are extremely high and economically unjustifiable.

- Authorisation schemes

According to the Law on Waste Management, in general, authorisations for waste treatment can be divided into three groups:

- Permit for activity performance – license for legal entities and natural persons (collection, transportation, temporary storage, treatment, processing and disposal of hazardous or non-hazardous waste),
- Permit for operation of installations (waste temporary storage, treatment, processing and disposal) and
- Authorisation for waste manager.

The Ministry of Environment and Physical Planning is the competent body with regard to the entire authorisation scheme.

### **b) Framework legislation on hazardous waste**

The Law on Waste Management incorporates the general rules for controlled hazardous waste management, fully transposed from Directive 91/689/EEC on hazardous waste.

In this context, the Law on Waste Management in its Articles 57 to 59 prescribes general rules for hazardous waste handling, prohibits mixing of hazardous with non-hazardous waste or with another type of hazardous waste, prescribes the manner of mixed waste handling, as well as the conditions under which and manner in which exemptions from the above general rules may be allowed.

According to Article 60 of the Law on Waste Management, hazardous waste is subject to compulsory classification in accordance with the Lists of waste types, records keeping, identification and notification.

Explicit requirements for the manner of hazardous waste handling, identification, records keeping and notification will be specified in separate by-laws.

In the framework of PHARE SOP'99, the Draft Rulebook on hazardous waste handling and the Draft Rulebook on waste identification, notification and transportation within waste management have been prepared. The said Drafts are being consulted by the relevant stakeholders for adjustments.

The Draft Rulebook on hazardous waste handling specifies explicit conditions under which waste is categorized as hazardous, components with regard to which waste is characterized as hazardous, components with regard to which waste acquires properties of hazardous waste; stipulates the manner of hazardous waste packaging, hazardous waste labelling and assessment of waste properties, as well as explicit conditions to be met by installations for hazardous waste storage and processing. The List of waste types is a constituent part of this Rulebook.

### **c) Legislation on specific types of waste treatment**

The Law on Waste Management in its Chapters VI and VII contains provisions referring to specific operations of waste treatment (waste disposal, incineration or co-incineration).

Waste may be disposed of only in landfills intended for a certain type of waste.

Landfills are classified, as follows:

- Landfills for non-hazardous waste,
- Landfills for hazardous waste, and
- Landfills for inert waste.

The Law also specifies the types of waste that must not be disposed of at the landfill and those that are subject to a different procedure.

The Law prescribes the procedure for landfill construction, as well as the procedures for the issuance of the required permits that have to be provided prior to the commencement of the landfill construction. In addition, it stipulates the conditions to be met by legal entities performing the waste disposal activity of waste disposal, as well as the obligation for the development of operational plans by which the existing landfills, within specified term, will achieve compliance of their operation with the requirements and conditions stipulated in the Draft Law on Environment regarding the acquisition of integrated environmental permit.

The Law obliges the founder of a landfill to carry out post-closure activities, and to provide financial guarantee to cover the costs related to the post-closure activities for a period of at least 30 years.

The landfill operator is obliged to prepare a Programme for operation, monitoring and control of the landfill, to keep records during the landfill operation and to report to the Ministry of Environment and Physical Planning – Administration of Environment.

Local self government units may establish non-hazardous waste landfills, in accordance with the Waste Management Plan of the Republic of Macedonia. The establishment of hazardous waste landfills is under the competence of the Government of the Republic of Macedonia.

Waste incineration and co-incineration may be conducted only in specially constructed landfills, depending on the type of the waste.

For the purpose of constructing installations for waste incineration or co-incineration, a Study on environmental impact assessment has to be completed, and integrated environmental permit has to be acquired.

This area will be regulated in more detail as required by Directive 98/184, through secondary legislation.

#### **d) Legislation on specific waste streams or types**

With reference to specific waste streams, the Law on Waste Management, in Chapters IV2 and V2, regulates general rules regarding the handling of specific types of non-hazardous waste (waste from products and packaging), inert waste, industrial non-hazardous waste and specific types of hazardous waste (waste oils, PCBs), handling of used batteries and accumulators, waste from electric and electronic devices, end-of-life vehicles, medical waste, titanium dioxide, handling of asbestos waste and asbestos containing products and waste generated through scientific and research activities.

Explicit requirements for the handling of specific waste types will be specified in separate secondary legislation acts.

In the framework of PHARE SOP'99, a Draft Rulebook on waste oils management and a Draft Rulebook on the elimination of PCBs and PCTs were prepared in accordance with the requirements of the EU legislation. The said Drafts Rulebooks have transposed EU Directives 75/439 and 01/68.

#### **e) Legislation on shipment of waste**

According to Chapter VIII of the Law on Waste Management, the cross-border movement of waste consists of the following: import of waste originating from foreign state to the territory of the Republic of Macedonia, export of waste from the territory of the Republic of Macedonia to another foreign state and transit of waste through the territory of the Republic of Macedonia.

Import of waste intended for storage for the purpose of disposal or intended for disposal to the Republic of Macedonia is prohibited.

Import of hazardous waste mixed with non-hazardous waste or with other components reducing the harmfulness and hazards of waste is prohibited.

It is permitted to import waste that may be processed in a safe manner, without danger to the environment, human life and health, to be used as raw material or as energy source.

It is permitted to export waste that may be processed and disposed of without danger to the environment, human life and health in the import country.

Hazardous waste import, export and transit are carried out in accordance with the provisions of the Basel Convention.

The relevant secondary legislation act regulates the form and contents of the formats for transboundary movement of hazardous waste in accordance with the provisions of the Basel Convention ("Official Gazette of RM" No. 37/03).

The permit for the import, export and transit of waste is issued by the Ministry of Environment and Physical Planning.

The relevant by-law shall regulate the form and the contents of the format of the permit, types of waste, conditions of waste import, export and transit, methods of supervision over waste import, export and transit.

In the Republic of Macedonia, the "Decision for Classification of Goods with regard to Forms of Export and Import" ("Official Gazette of RM" No. 91/04) and the Guideline on precise data on issuance of permits for goods imported or exported under the D4 mark" ("Official Gazette of RM" No. 35/97), specify the goods requiring permit of the Ministry of Environment and Physical Planning in order to be imported or exported, as well as data required for the permit issuance (waste and waste residues, waste used goods, etc.).

Hazardous waste is transported in accordance with the Law on Carriage of Dangerous Goods ("Official Gazette of SFRY" Nos. 27/90, 45/90 and "Official Gazette of RM" No.12/93), as well as in accordance with international agreements regulating this area.

**The Law also regulates the internal movement of waste and establishes a basis for the adoption of the by-law.**

The elaborated Draft Rulebook on Identification, Transportation and Notification in Waste Handling precisely regulates the issues related to the documentation required for the purpose of full control over the waste movement. It contains forms and detailed description of procedures for the identification, transportation and notification. In this way the Framework Waste Directive 75/442 and its amendment 91/156 have been transposed.

**The relevant stakeholders are currently being consulted with regard to the Draft Rulebook.**

#### **5. Which instruments exist apart from legislation (e.g. economic instruments, waste management planning)?**

The Law on Waste Management ("Official Gazette of RM No. 68/04, 71/04), in its Chapter XI provides a basis for waste management financing, the manner of setting prices for the service provided, and the legal grounds for setting the fees and other sources of revenues for waste management.

Article 122 of the Law on Waste Management stipulates the grounds for waste management fees based on the principle of "producer's liability" for products and packaging that generate large amounts of waste after use. This type of fee is detailed in the Draft Law on Environment.

According to the Draft Law on Environment, fees shall be paid by legal entities and natural persons who:

- Burden the environment with waste,
- Import used products, and
- Produce or import products and goods that are harmful or contain substances harmful to the environment.

The amount of the fee is set by the quantity and type of generated waste (industrial non-hazardous waste and residues of petroleum or oils and waste oils), quantity of imported used products, type and quantity of imported and produced products, packaging of plastic mass, granulate, plastic mass, type and quantity of lead wastes and residues, waste ashes and residues containing mainly lead, wastes and residues of end-of-life primary cells, primary batteries and electrical batteries and imported lead containing wastes and residues.

The Draft Law on Environment contains provisions providing for the release from payment of part of the fee for legal entities that process waste or have transferred waste to legal entities and natural persons: possessing permit for waste processing; have an established system of collection and receipt upon return of used products and packaging; have exported waste or packaging of plastic mass or products packed in plastic mass; and for legal entities and natural persons that have made environmental investments for the purpose of implementing the operational plans under the compliance permits.

The funds collected on the basis of this Law are revenues of the Budget of the Republic of Macedonia. They shall be allocated on the basis of an annual programme for environmental investments developed in accordance with the National Environmental Action Plan of the Republic of Macedonia, Spatial Plan of the Republic of Macedonia, other strategies, programmes and acts in the area of environment, as well as in accordance with international agreements ratified by the Republic of Macedonia.

The said Programme is adopted by the Government of the Republic of Macedonia on the proposal by the Ministry of Environment and Physical Planning. The Programme funds shall be used for financing programmes and projects in a form of grants awarded through public competition.

In the area of waste management, such funds shall be used for the purpose of upgrading the overall waste management system, through infrastructure development, especially through landfills rehabilitation and construction, promotion of waste reduction, processing and selection.

At local level, Article 123 of the Law on Waste Management introduces a fee that may be specified by the local self government units, at the amount ranging between 1 % and 2 % of the price for the provided service of municipal waste collection and transportation, to be used for financing the purposes set in the waste management programmes at local level.

Article 121 of the same Law establishes a basis for setting incentive prices for households, legal entities and natural persons that reduce the total quantity of waste generated, on the basis of the established system of selection of waste intended for disposal.

According to Article 124, funds collected through the payments of fines for infringements of legal provisions during the inspection supervision performed by local inspectors, constitute additional revenues of the local self-government units.

The Law in Article 125 introduces a system of financial guarantees and securities aimed at covering the costs related to waste management, as well as costs related to the damage occurred.

In the area of environmental management, financial instruments applicable in waste management domain are in place, too.

The following may be mentioned as general instruments in the context of the above:



### 1. Customs/tax relief:

According to Article 183 of the Customs Law ("Official Gazette of RM" Nos. 21/98, 26/98, 63/98, 86/99, 25/00, 109/00, 31/01, 4/02, 55/02 and 42/03) and Article 2 of the Decree on the exercise of the right to exemption from customs duty payment ("Official Gazette of RM" Nos. 26/00, 68/00 and 26/01), legal entities and natural persons importing equipment intended directly for environment and nature protection purposes (including waste management), which is not produced in the Republic of Macedonia, are exempted from customs duties payment for the import completed on the basis of the certificate issued by the Ministry of Environment and Physical Planning.

The Law on Customs Tariffs ("Official Gazette of RM" Nos. 23/03, 69/04) stipulates higher customs duty rates for goods that burden the environment while in use (used tires, used passenger vehicles, road trailers, buses and trucks).

According to the Personal Income Tax Law ("Official Gazette of RM" No. 80/93, 3/94, 70/94, 71/96, 28/97, 8/01, 50/01, 52/01, 2/02, 44/02 96/04), revenues collected through sale of recoverable solid waste by natural persons are not subject to taxation.

According to Article 30 of the Profit Tax Law ("Official Gazette of RM" Nos. 80/93, 33/95, 43/95, 71/96, 5/98, 28/98, 11/01, 2/02, 44/02, 51/03), the tax base of taxpayer shall be reduced for the amount of funds invested into environment and nature protection. The taxpayer is also entitled to accelerate fixed assets depreciation in cases of achieved technological modernisation or procurement of means for environment and nature protection thereby.

Means for environment and nature protection, in the area of waste management, include, inter alia, resources intended for procurement of equipment, devices and instruments to serve pollution reduction, introduction of clean technologies and production of products from waste materials, collection and disposal of municipal waste and hazardous substances (Article 4).

2. Economic instruments of importance for environment protection policy, including waste management, are the Budget of the Republic of Macedonia, budgets of the local self government units, credits, donations, and other sources of financial resources.

The National Waste Management Plan (CARDS 2001) shall in a separate study, determine the possible financial instruments for funds allocation to finance the required infrastructure for the purpose of establishing a network of regional sanitary landfills.

3. In the framework of the Second National Environmental Action Plan (NEAP 2) (CARDS 2001), economic instruments in several areas, including waste management, shall be identified in general terms.

## **Waste management planning**

### **Planning in the area of environment, including waste management, is a legal obligation.**

The Law on Environment and Nature Protection and Promotion ("Official Gazette of RM" No. 13/03 consolidated text) and the Draft Law on Environment stipulate the obligation for the development of National Environmental Action Plan (NEAP) and Local Environmental Action Plans (LEAPs).

The First NEAP (1996) has formulated the policy and the activities required to solve the problems in the domain of environmental management, and set up directions for solid waste and hazardous waste management planning.

The main recommendations contained in this document include: development of legislation and standards in the domain of waste management, establishment of local, regional and national monitoring system, development of waste management plans, introduction of programmes for waste recycling and composting, and elaboration of programmes for landfills rehabilitation, etc.

The Law on Waste Management has introduced the obligation for the adoption and implementation of strategic, planning and programme waste management documents, such as:

- Waste Management Strategy, adopted by the Government of the Republic of Macedonia for a period of 12 years, determining the basic directions in all types of wastes management, improvement of the overall waste management status, defining the long-term needs of the Republic of Macedonia in the area of waste management, as well as required legislative measures for its implementation. The adoption of the Strategy has been envisaged under the National Strategy for EU Integration of the Republic of Macedonia, as follows:
- Waste Management Plan of the Republic of Macedonia, prepared for a period of six years, by the Ministry of Environment and Physical Planning.
- The local self government units adopt Waste Management Plans for a period of at least three years, and maximum 6 years and such plans should be in line with the Waste Management Plan of the Republic of Macedonia.
- Waste Management Programmes are adopted by the Ministry of Environment and Physical Planning and by the local self government units, for the purpose of the Plans implementation.
- Programmes are also adopted by legal entities and natural persons that manage waste, or generate waste above the threshold of quantities specified in the Waste Management Plan of the Republic of Macedonia.

Programmes are adopted for the purpose of the implementation of Waste Management Plan of the Republic of Macedonia.

Another instrument in waste management is the Cadastre of waste generators as part of the Cadastre of the Environment, which is under development.

Other documents of relevance for the area of waste management in the Republic of Macedonia also include the Spatial Plan of the Republic of Macedonia ("Official Gazette of RM" No. 39/04) and the National Environmental Health Action Plan (NEHAP), adopted by the Government of the Republic of Macedonia in 1999.

The Spatial Plan of the Republic of Macedonia as strategic document in the domain of spatial organisation of the territory of the Republic of Macedonia, in its section on environment protection and improvement, stipulates, inter alia, the system of measures and activities – solid waste management policy.

The National Environmental Health Action Plan addresses the impacts caused by municipal waste, industrial non-hazardous and hazardous waste on human health and the environment, with an emphasis placed on the handling of medical waste. One of the priority targets set in this document is the incineration of medical infective waste, which has in practice been implemented in Skopje and surrounding cities.

In the framework of PHARE SOP 99, initial analysis of the required economic, financial and administrative requirements in the context of EU approximation in the area of environment was completed. The document presents the preliminary assessment of the expenditures required for investment and provision of major investments related to the relevant EU Directives, as well as an indicative framework for expenditures planning in the context of EU approximation and financial implications on the environment. In the area of waste management, the EU Directive on landfills has been taken into consideration.

Some of the indicative tasks will be integrated during the development process of the National Waste Management Plan with feasibility studies (CARDS 2001). The Plan shall implement the concept of regionalization in municipal waste management as stipulated in the Spatial Plan of the Republic of Macedonia. At the same time, the Plan shall observe the formerly defined proposals for regionalisation implemented under the Project for Waste Management in South-western part of

Macedonia and the ongoing Feasibility Study for Waste Management in North-eastern and Central-eastern parts of Macedonia. Three influence zones have been integrated in each of them, as stipulated by the Spatial Plan of the Republic of Macedonia.

The planning in the domain of waste management takes into account the recommendations resulting from individual projects and documents, such as:

On the basis of the support provided by the European Commission through the Regional Environmental Reconstruction Project for South Eastern Europe (REReP), Project 1.2. "Regional Strategy for Hazardous Waste" resulted in a separate Study, presenting the status in the area of hazardous waste management, as well as recommendations for solving problems at the national level.

In the framework of the Project "Environmental Audits" funded by the Government of Norway, environmental audits have been carried out in selected loss-making companies included in the FESAL II Arrangement. One of the outstanding problems in these companies is related to the quantities of industrial waste/hazardous waste, i.e. historical pollution, waste disposed of at inappropriate sites and under inappropriate conditions. These environmental audits have identified future environmental liabilities of the involved facilities.

In the Republic of Macedonia, the activities of collection, treatment and trade in secondary raw materials are performed by especially established associations (the Macedonian Resource Association unites more than 80 companies participating in activities of collection, treatment and trade in secondary raw materials, including, for example, waste paper, scrap metal, plastics, etc.). The activities of this commercial sector, involving around 20.000 individuals, have been taken into account in the process of waste management planning.

**6. Is there an administrative infrastructure in place? If yes, on which level (national, regional, local)?**

The administrative structure in the Republic of Macedonia is organised on the following levels:

National level and  
Local level

On the national level, the Government of the Republic of Macedonia, as stipulated in Article 16 of the Law on Waste Management ("Official Gazette of RM" No. 68/04, 71/04), adopts Strategy for Waste Management and determines the strategic goals and main directions in the area of waste management.

The Ministry of Environment and Physical Planning, in accordance with Articles 17 and 19 of the Law on Waste Management, provides for the implementation of the determinants of the Strategy through the adoption of the Waste Management Plan of the Republic of Macedonia and Annual Programmes for its implementation.

The Ministry of Environment and Physical Planning carries out supervision over the implementation of the Law on Waste Management and of regulations adopted thereof, issues waste management permits, establishes conditions for permanent monitoring of waste management, as well as monitoring of the environment and impacts on persons, and establishes and manages waste management information system.

The Administration of Environment carries out hazardous waste management monitoring, establishes and manages the Cadastre of waste generators and performs other professional activities in the area of waste management. The Administration of Environment will be established with the Draft Law on Environment, which is expected to be adopted by the end of the first quarter of 2005.

According to Article 126 of the Law on Waste Management, the State Environment Inspectorate is responsible for inspection supervision over the enforcement of the law and of regulations adopted on the basis of this Law.

Due to its specific nature, the inspection supervision over the medical waste generation, selection and packaging is under the responsibility of the State Sanitary and Health Inspectorate.

The inspection supervision over the trade in products and packaging that are subject to compulsory labelling, returning and deposit of payment is under responsibility of the State Market Inspectorate.

Through the initiated process of decentralisation in the Republic of Macedonia and on the basis of the Law on the Local Self-government ("Official Gazette of RM" No. 5/02), the local self government units, are entitled to perform the activities of public interest of local relevance within their area, according to the principle of subsidiary.

According to the Law on Waste Management, the local self government units are responsible for maintaining public hygiene, selection of municipal and commercial waste and other types of non-hazardous waste, waste collection and transportation, as activities of public interest of local relevance. They are also responsible for undertaking and implementing measures and activities aimed at improving the overall state of waste management, in line with the standards and the National Waste Management Plan.

The units of the local self government, within the scope of their competencies, provide permanent waste management monitoring, environmental monitoring and monitoring of impacts on human life and health, maintain Cadastre in which non-hazardous waste generators are registered, as well as Waste Management Information System at local level.

The local self government units adopt Waste Management Plans for their areas, and programmes for the implementation of such plans.

With regard to activities under the competence of the local self-government units, the authorised local inspectors for the environment carry out inspection supervision over the enforcement of the law.

Several local self government units may, by means of mutual agreement, provide joint implementation of measures related to municipal and other types of non-hazardous waste management.

The State Statistical Office collects and processes certain data on waste.

A precondition for an effective enforcement of the Law is the necessity to strengthen administrative capacities through the completion of the process of establishment of relevant institutions and procedures, as well as capacity building with regard to inspectors to be involved in the implementation of the law, both at the national and local levels.

## ***D. Water Quality***

### **1. Could you describe the legislative basis for water protection and water resources management, in particular:**

- a) water quality and water quantity;**
- b) ground water and surface waters;**
- c) drinking water quality?**

In addition to the provisions of the Constitution of the Republic of Macedonia, water related legislation in the Republic of Macedonia consists of laws, international agreements and secondary legislation.

At the moment, **the Draft Law on Waters** is in the final stage of adoption, and according to the Programme of the Government of the Republic of Macedonia its adoption is expected by the end of the first quarter of 2005.

**The Law on Waters** ("Official Gazette of RM" No. 4/98, 19/00) provides a legal basis for water protection and management in the Republic of Macedonia. It regulates the manner of water resources use and exploitation, protection against harmful effects of water, protection of water against exhaustive water extraction and pollution, water resources management, sources for and manner of financing water management activities, concessions, transboundary water resources, and other issues of relevance with regard to the provision of a unique water use regime.

The provisions of this Law refer to spring waters, running waters, stagnant waters and ground waters; impounded storm water; drinking water; wastewater; beds and banks of watercourses and torrents, lakes and accumulations; as well as thermal and mineral waters. Waters have been defined as a good of general interest and are owned by the State.

Water management is carried out at the level of four river basins such as Vardar River Basin, Crn Drim River Basin, Strumica River Basin and Juzna Morava River Basin. However, except for drinking water, the Law favours water use issues to water protection. As a result of fragmented water management dispersed among different state administrative bodies, there is competence overlapping created by the Law itself.

In order to overcome the above deficiencies, and for the purpose of introducing the approach of an integrated water management and harmonisation of the national legislation with the relevant EU legislation, the development of a new Law on Waters has been initiated in 2003, to incorporate all the aspects of water management: water resource use and allocation; protection against and control of pollution; protection against harmful effects of water and sustainable water management planning. The draft of this Law has been elaborated within the framework of the PHARE SOP 99. The Draft Law on Waters has transposed the requirements of the following EU Directives in the domain of water resources management:

- Directive of the European Parliament and of the Council 2000/60/EC establishing a framework for Community action in the field of water policy;
- Directive of the European Parliament and of the Council 98/83/EEC on the quality of water intended for human consumption;
- Directive of the European Parliament and of the Council 76/160/EEC concerning the quality of bathing water;
- Directive of the European Parliament and of the Council 1991/271/EEC concerning urban waste water treatment;
- Directive of the European Parliament and of the Council 86/278/EEC on the protection of the environment, and in particular of the soil, when sewage sludge is used in agriculture;
- Directive of the European Parliament and of the Council 91/676/EEC concerning the protection of waters against pollution caused by nitrates from agricultural sources.

In addition to the above mentioned, this Law establishes a basis for the transposition of the requirements contained in other relevant Directives that will remain in effect after the adoption of the Framework Water Directive (FWD) 2000/60 within the period specified for each of them.

**The Draft Law on Waters** is a framework law and contains general standards and principles, rights, obligations and competences of the state administrative bodies, local self-government units, as well as the rights and obligations of legal entities and natural persons in the domain of water management.

The Draft Law regulates issues referring to all surface and ground waters, coastal areas and wetlands, water, coastal areas and wetlands management; water management facilities and services; organisational setup and water management financing, as well as conditions for, manner of and procedures for the use or discharge into water, and international cooperation in the area of water management.

The Draft Law on Waters refers to the provisions of the Draft Law on Environment, with regard to the regulation of the following issues: access to information, public participation, environmental impact assessment of certain strategies, plans and programmes; environmental impact assessment of certain projects; prevention and control of industrial accidents involving hazardous substances; liability for environmental damage caused, and integrated environmental permitting for the operation of installations, etc.

The Draft Law on Waters establishes legal grounds for the adoption of the relevant secondary legislation, which shall regulate in detail different conditions, procedures, standards and measures or on the basis of which the existing ones shall be revised, in order to achieve compliance with the new goals, standards and measures stipulated in the relevant EU Directives.

In addition to the Law on Waters and Draft Law on Waters, certain water related issues are regulated by the following laws:

- The Law on Environment and Nature Protection and Promotion ("Official Gazette of RM" No. 13/03 (consolidated text)). This Law treats waters as natural resources and establishes conditions for their protection as part of the environment.
- The Law on Ohrid, Prespa and Dojran Lakes Protection ("Official Gazette of SFRY" Nos. 45/77, 8/80, 51/88, 10/90, and "Official Gazette of RM" No.62/93). By this Law, waters, coastal areas, springs and water courses of Ohrid, Prespa and Dojran Lakes are proclaimed natural monuments and placed under special protection, due to their characteristics, features, values and economic relevance.
- The Law on Hydro-Meteorological Matters ("Official Gazette of RM" Nos. 19/92, 5/03). The subject of this Law concerns hydrological and meteorological matters and the manner of their performance.
- The Law on Mineral Resources ("Official Gazette of RM" No. 18/99, 29/02). This Law regulates the conditions for and the manner of geological research performance and exploitation of mineral resources. The Law treats geothermal and ground waters (thermal, thermo-mineral, mineral and drinking waters) as mineral resources.
- The Law on Inland Navigation ("Official Gazette of RM" No. 27/00). This Law regulates the inland navigation, inland navigation safety and the conditions that need to be met by vessels to comply with the technical requirements, including the requirements related to the protection of the environment and nature against pollution with hazardous and harmful substances (oils, waste liquid fuels and mixtures thereof, wastewater and other waste materials) that may be discharged into waters by vessels.
- The Law on Fisheries ("Official Gazette of RM" No. 62/93). This Law regulates the use of waters intended for fish breeding and fishing and other usable animals in such a way that sustainable reproduction and protection of fish stock is guaranteed. Within the meaning of the Law, the protection of fish stock assumes health, ecological and direct (physical) protection of fish and other usable animals and the maintenance of the biological balance of fish stock.

- The Energy Law ("Official Gazette of RM" No. 47/97, 40/99, 98/00, 94/02, 98/03). This Law regulates, inter alia, the conditions and the measures for the protection of water, as part of the environment and nature, against the operations of energy facilities, devices and plants.
- The Law on Safety of Foodstuffs and Products and Materials in Contact with Foodstuffs ("Official Gazette of RM" No. 54/02). The Law stipulates the conditions for ensuring the safety of food and the safety of products and materials that come in contact with food. The term "foodstuff" also includes drinking water from public drinking water supply systems, bottled drinking water intended for the market, and water intended for food processing.
- The Law on Sanitary and Health Inspection ("Official Gazette of RM" No.19/95). This Law regulates the surveillance of the safety of public water supply facilities with regard to the health and hygiene.
- The Law on Water Communities ("Official Gazette of RM" No. 51/03). This Law regulates the conditions, the manner and procedure of the establishment of water communities, registration and supervision over the operations and termination of operations. The term "water community" means the association of owners or users of agricultural land associated for the purposes of the use, management, maintenance, construction, rehabilitation and extension of small scale irrigation and/or drainage systems.
- The Law on Water Management Enterprises ("Official Gazette of RM" No. 85/03). This Law regulates the establishment, organisation, performance, financing, control and termination of the operation of water management enterprises. "Water management enterprise" is a legal entity sui generis, founded for the purpose of cost-effective management, use, functioning and maintenance of hydro-systems, irrigation systems and drainage systems.
- Law on Drinking Water Supply and Urban Wastewater Drainage ("Official Gazette of RM" No. 68/04). This Law regulates the conditions for and manner of providing water supply services in drinking water and foodstuff processing sectors, suspension of drinking water supply and drainage, treatment and discharge of urban wastewater with regard to the recipient.
- The Law on Nature Protection ("Official Gazette of RM" No. 67/04). According to this Law, waters and water habitats are a natural wealth and are preserved in their natural state. Water habitats include lakes, accumulations, marshes, swamps and other wetlands, as well as springs, streams, rivers and other watercourses and their coastal belt which shall not be smaller than 10 meters from the coast line defined at the highest water level. The Law prohibits the application of certain plants protection substances if they have adverse impact on the habitats and species within certain area.
- The Law on the Designation of the Ornithological Site "Ezerani" on Prespa Lake as a Strictly Protected Natural Reserve ("Official Gazette of RM" No. 37/96).
- The Law on the Designation of the Ornithological Site "Tikves" in the Crna Reka Gorge as Strictly Protected Natural Reserve ("Official Gazette of RM" No. 35/97).
- The Criminal Code of the Republic of Macedonia ("Official Gazette of RM" No. 37/96, 80/99, 4/02, 43/03, 19/04). This Law treats drinking water contamination and environment pollution as criminal actions for which criminal sanctions are stipulated.
- The Law on Concessions ("Official Gazette of RM" No. 25/02, 24/03). This Law regulates the procedure for and manner of awarding concessions, including concessions for water resources utilization for the purpose of electricity production, fish breeding in fish ponds and fish cages, lake traffic and tourist services.

The following acts of the secondary legislation apply in the area of water management:

- Decree on Categorization of Watercourses, Lakes, Accumulations and Ground Water Resources ("Official Gazette of RM" No. 18/99);
- Decree on Water Categorisation ("Official Gazette of RM" No. 18/99);
- Decree on the Basic Elements of the Plan for Protection of Affected Areas against Floods ("Official Gazette of SFRY " No. 15/84);
- Rulebook on the Contents and Manner of Administering the Book of Waters ("Official Gazette of RM" No. 2/99);
- Rulebook on the Contents and Manner of Records Keeping on Water Management Facilities and Plants ("Official Gazette of RM" No. 17/99);

- Rulebook on Reporting on the Status of Levels and Quantities in Accumulated Waters, as well as on Quantities of Waters Discharged therein ("Official Gazette of RM" No. 2/99);
- Rulebook on the Form and Manner of Records Keeping on Sand, Gravel and Stone Extraction ("Official Gazette of RM" No. 17/99);
- Rulebook on the Calculation of the Fee for the Water Used or Utilized by Electricity Generating Legal Entities ("Official Gazette of RM" No. 1/00);
- Rulebook on the Minimum Required Activities and Measures for Technical Monitoring of Dams ("Official Gazette of RM" No. 19/02);
- Rulebook on the Manner of Sediment Monitoring in Accumulations ("Official Gazette of RM" No. 4/99);
- Rulebook on the Manner of Determination and Maintenance of Protection Zones around Drinking Water Sources ("Official Gazette of SFRY" No. 17/83, 15/89);
- Methodology for Reporting on the Status of Levels and Quantities in Accumulated Waters, as well as on Quantities of Waters Discharged therein ("Official Gazette of SRM" No. 16/83);
- Rulebook on the Manner of Carrying out Disinfection, on the Scale, Type and Method of Drinking Water Testing, as well as on the Conditions to be Met by the Organisations of Associated Labour Performing Drinking Water Analyses ("Official Gazette of the Socialist Republic of Macedonia" No. 31/77);
- Rulebook on the Quality of Natural Mineral Water ("Official Gazette of SFRY" No. 58/78).
- Decision on the Determination of the Boundaries of Protection Zones around the Springs of "Rasce" and Protection Measures Stipulation ("Official Gazette SFRY" No. 36/90);
- Rulebook on Drinking Water Safety ("Official Gazette of RM" No. 57/04);
- Rulebook on the Implementation of Protection Measures in the Strictly Protected Natural Reserve "Ezerani" on Prespa Lake ("Official Gazette of RM" No.29/97);
- Rulebook on the Implementation of Protection Measures in the Strictly Protected Natural Reserve "Tikves" in the Crna Reka Gorge ("Official Gazette of RM" No. 44/97).

The international cooperation of the Republic of Macedonia in the area of water management includes cooperation with the neighbouring countries with regard to the issues of mutual importance to the countries. In this context, the Agreement on the Issues of Water Management between the Socialist Federal Republic of Yugoslavia and Republic of Greece of 04.06.1959 ("Official Gazette of SFRY" No. 20/59) is of relevance. In addition to this, the Republic of Macedonia carries out intensive cooperation with Republic of Albania and Republic of Greece with regard to the protection of the waters of Ohrid and Prespa Lakes. In this context, the Agreement between the Government of the Republic of Macedonia and the Council of Ministers of the Republic of Albania for the Protection and Sustainable Development of Lake Ohrid and its Watershed has been signed and its ratification is expected soon. The Draft Tripartite Agreement on the Protection and Sustainable Development of the Prespa Park Area between the Republic of Macedonia, Republic of Albania and Republic of Greece has been prepared, as well as the draft Agreement for the Establishment of Euro-Region.

#### **a) Water quality and water quantity**

The Law on Waters stipulates the maintenance and improvement of water regime and rational utilization of available quantities of water in accordance with the Water Management Master Plan of the Republic of Macedonia. The Water Management Master Plan is implemented through the issuance of water management permits or awarding water use concessions, specifying the manner of and the conditions for water use; the operation regime of water management and other facilities and plants having impact on water regime; the manner of and conditions for water discharge; wastewater and waste substances discharge, and the degree of wastewater purification.

The usability of water for different purposes is determined according to the classification of waters and the categorisation of watercourses, lakes, accumulations and ground water resources ("Official Gazette of RM" No. 18/99) with regard to which water is divided into various classes, depending on the level of pollution, and water characteristics are determined by classes and purposes for which water may be used. The Decree on Water Classification divides waters into five classes, depending



on the quality of the monitored indicators. The Decree on the Categorisation of Watercourses, Lakes, Accumulations and Ground Water Resources ("Official Gazette of RM" No. 18/99) specifies water quality by specific classes of water in the watercourse, the lake, the accumulation and the ground water resource. This Decree also determines five categories of watercourses with regard to the targets set for the water therein (for more details see [22 II D P3](#)).

In order to secure the maintenance of the quantity and the quality of water (water regime), the competent body issues a water management consent for the construction, reconstruction, connection or extension of facilities having impacts on waters and a water management permit to use them as a resource or as a recipient.

In circumstances of absence of emission norms on specific polluters and pollutants, the above mentioned documents are issued on the basis of specific expert assessments by the competent body, on a case-by-case basis, taking into account the principle of sustainable use of water resources and taking care of the quality of wastewater discharged, so that water does not exceed the quality standards applicable for the recipient.

The deficiencies of the Law on Waters, in terms of favouring water quantity to quality, are overcome through the Draft Law on Waters. The main focus of the protection in the **Draft Law on Waters** is put on water regime, interpreted as a set of parameters that define the quantitative and qualitative status of waters at a given place and in a given time.

The Draft Law stipulates that the water regime maintenance and improvement are carried out on the basis of River Basin Management Plans. Such Plans contain environmental goals, good status of surface water bodies (good quantitative and chemical status, including good ecological potential as well), and of ground water resources (good quantitative and chemical status).

River Basin Management Plans will be implemented through the issuance of water use permits, sand, gravel and stone extraction permits, and permits for discharge into water, in which the quantitative and qualitative requirements will be specified on a case-by case basis.

For the purpose of water quality maintenance and improvement and determination of water appropriateness for use for certain purposes, the Draft Law stipulates water classification and water bodies categorisation, as well as the determination of a deadline for achieving water quality targets for each water category and the determination of minimum water quality standards and environmental goals for all water bodies. With regard to each river basin, the Draft Law stipulates the adoption of Programme of measures for achieving environmental goals.

The Draft Law stipulates that, in case different legal provisions specify different measures, standards and environmental goals, the strictest shall apply in water management.

## **b) Groundwater and surface waters**

The provisions of the Law on Waters refer to spring waters, running waters, stagnant waters and groundwater; impounded storm water; drinking water; wastewater; beds and banks of watercourses and torrents, lakes and accumulations; as well as thermal and mineral waters, unless otherwise stipulated by a separate law. However, the integrated water management has not formed grounds for the drafting of this Law.

The Draft Law on Waters covers all surface waters and groundwater and water bodies and applies integrated management thereof.

The river basin management refer to areas consisting of the surface area of the land from which all surface runoffs flow through series of streams, rivers and lakes into a sea, into a river mouth, estuary or delta, including the affiliated ground and coastal waters. According to this, the entire contents of the River Basin Management Plans (characterisation, pressures, cartographic presentations and other information, protection zones, environmental goals and the programme of measures and

economic analysis, etc.) concern both surface waters and water bodies and ground waters and water bodies.

Environmental goals will be determined for surface and ground waters.

The permits, as instruments of plan implementation, address the activities having impact on surface and ground water regime and on the morphology of surface or groundwater body.

### **c) Drinking water quality**

According to the Law on Waters, spring waters, running waters, stagnant waters and groundwater are used primarily for the public water supply, for health care institutions and legal entities in the area of veterinary medicine, for the needs of defence, for the foodstuff production and processing industry and for livestock. Waters used or intended for public water supply, for industry requiring water of drinking water quality, and mineral waters used for drinking, must not contain substances that are harmful and hazardous to human health when found in quantities exceeding the prescribed limits, and they have to comply with the prescribed requirements, in terms of their physical, chemical, biological and radiological properties, based on the regulations on health safety of foodstuffs. Water quality and its availability from sources intended for use or used for the public water supply or foodstuff production and processing shall be protected by the establishment and maintenance of core and/or wider protection zones. The regime of activities within the protection zones shall be determined, too. The manner of protection zones determination and the conditions of land use within protected zones are regulated by the Rulebook on the manner of determination and maintenance of protection zones around drinking water sources ("Official Gazette of SFRY" Nos. 17/83, 15/89). The quality of surface waters that can be used for water supply purposes is determined by the Decree on Water Classification ("Official Gazette of RM" No. 18/99).

The first two classes are appropriate for human consumption:

- First Class water is very clean, oligotrophic water that may be used in its natural state with possible disinfection for drinking and for foodstuff production and processing and provides spawning and breeding grounds for noble species of salmonid fish. The self-purification capacity of the water is very good, water being constantly saturated with oxygen, having low nutrient and bacteria contents;
- Second class water is slightly polluted, mesotrophic water that may be used in its natural state for bathing and recreation purposes, for water sports, for other fish species-cyprinid breeding or that may be used for drinking and for foodstuff processing if subjected to common water treatment methods – conditioning (coagulation, filtration, disinfection, etc.). Water self-purification capacity and the level of saturation with oxygen are good throughout the year.

The Draft Law on Waters has retained the established principles. In addition, it stipulates that the classification determines specific conditions for the division of water bodies into three classes. Surface and groundwater resources the quantity and quality of which suffices and is suitable for human consumption should be used primarily for water supply and food production for the local population.

Within each river basin, water bodies from which more than 10 m<sup>3</sup> /day may be impounded for the purpose of human consumption or for water supply of more than 20 people shall be determined. Core and wider protection zones shall be established and maintained around such water bodies and regime of activities within such zones shall be determined. The Draft Law establishes grounds for the determination of drinking water quality standards and values and measures for the achievement of goals. It also establishes the obligation for the development and maintenance of efficient and cost-effective water supply system, to provide sufficient quantity of high quality drinking water to all eligible users, disinfection and purification of water intended for human consumption; measures to be undertaken in case of deviations from water quality standards and values, as well s measures for water sanitation and restriction in case of water shortage, including public information. The Draft Law prohibits the abuse and use of water for the purposes that have not been specified.

The Draft Law imposes the obligation for drinking water monitoring (regular, surveillance and control monitoring), including the monitoring of raw water in its original state, purified water after disinfection, and water in places from where it is supplied for human consumption.

With regard to any water impoundment and abstraction in quantity of more than 10 m<sup>3</sup>, but less than 10 m<sup>3</sup> if water is used for other purposes than fulfilling its own needs, the Draft Law specifies criteria for samples representatives, for the specification of measuring points, as well as the obligation of competent bodies to publish periodical reports on the status of water intended for man's consumption.

The quality of surface waters is monitored in accordance with the Programme for Preventive Health Care adopted on annual basis and published in the Official Gazette of the Republic of Macedonia. The surface water quality monitoring is carried out at points considered to be of health interest, in order to provide for the timely undertaking of measures to protect the population. Waters used as drinking water sources, for sports and recreation purposes and for primary agricultural production are of highest interest.

The conditions for and the manner of drinking water supply, as well as of suspension of drinking water supply, construction, maintenance and protection of water supply systems, are regulated in the **Law on Drinking Water Supply and Urban Wastewater Drainage** ("Official Gazette of RM" No. 68/04).

The **Law on Health Care** ("Official Gazette of SFRY" No 38/91, "Official Gazette of RM" 46/93, 55/95, 17/97, 10/04) stipulates that the Regional Institutes for Health Protection, coordinated by the Republic Institute for Health Protection are obliged to monitor and survey hygiene and other conditions related to drinking water protection, and to undertake measures for active protection of the population against communicable and other diseases of high social and health care relevance. These Institutes perform microbiological, parasitological, hygiene, toxicological and biochemical analyses within the scope of their activity.

The quality of drinking water is defined in the **Rulebook on Drinking Water Safety** ("Official Gazette of RM" No. 57/04). This Rulebook is fully harmonised with Directive 80/778/EEC relating to the quality of water intended for human consumption and Directive 79/869/EEC concerning the methods of measurement and frequencies of sampling and analysis of surface water intended for the abstraction of drinking water in the Member States. According to this Rulebook, drinking water is:

- Any water in its original state or after treatment, intended for drinking, cooking, food preparation or for other household needs, regardless its origin and regardless of whether it is supplied through water supply network, tank or bottled drinking water intended for the market;
- Water used in companies producing, processing, canning or sale of products or articles intended for human consumption, unless the competent body establishes that the quality of the water cannot affect the safety of food in its final form.

The above Rulebook stipulates the general and specific requirements concerning the safety of drinking water from the public water supply systems, bottled drinking water intended for the market and water intended for foodstuff production (drinking water), the limits concerning the permitted contents of harmful and hazardous substances (micro-organisms, biological matter, physical and chemical substances and radioactive properties harmful to people) in drinking water. It also specifies the scale, type and methodology of drinking water testing, the manner of disinfection application, as well as the relevant equipment and professional staff to carry out drinking water analyses.

The quality of natural mineral waters is defined by the **Rulebook on the Natural Mineral Water Quality** ("Official Gazette of SFRY" No. 58/78). It prescribes the minimum conditions concerning the quality of natural mineral waters, as well as the minimum conditions for natural mineral waters quality assurance and quality control during production and trade.

The legal basis for drinking water quality surveillance and control is contained in the **Law on Sanitary and Health Inspection** ("Official Gazette of RM" No.19/95). Surveillance over the safety of

water supply systems with regard to the health and hygiene issues is carried out throughout the year, at defined time periods.

For the purpose of protecting the springs of “Rasce” as the most important source of drinking water, the **Decision for the Determination of the Boundaries of Protection Zones around the Springs of Rasce and Determination of Protection Measures** (“Official Gazette of SRM” No. 36/90) has been adopted. The said Decision specifies the protection zones around the springs of “Rasce” (one core and three wider protection zones), with regard to which protection measures are specified for the land within the zones. According to the provisions of this Decision, the boundaries of protection zones are incorporated in the urban and spatial plans for the area concerned.

The “Spatial Plan for the Area of Protection Zones of “Rasce” Springs” (“Official Gazette of RM” No 98/02), regulates the planning and use of the land within the protection zones of the springs of “Rasce”. It specifies and dictates the spatial development of the area influencing the springs of “Rasce”.

## **2. Are waters subject to general protection or is this protection restricted to certain bodies of water or waters for certain use (e.g. drinking water extraction), or are there special protection areas apart from general provisions?**

Waters in the Republic of Macedonia are subject of both, general and special protection. The **Law on Waters** (“Official Gazette of RM” No. 4/98, 19/00) defines waters as a good of general interest to the Republic of Macedonia, enjoying special protection under the law. They are owned by the State. In addition, the Law specifies that waters are protected against pollution for the purpose of enabling safe and uninterrupted use of waters, protecting human health, as well as protecting the environment and nature, and flora and fauna.

The Law on Waters specifies special protection with regard to waters used for public water supply, water used in industry, and the quality of drinking water and mineral waters used for drinking. In order to achieve the prescribed protection, sources of the waters concerned are protected through establishment of protection zones, in a manner specified in the **Rulebook on Establishment and Maintenance of Protection Zones around Drinking Water Sources** (“Official Gazette of SFRY” No. 17/83, 15/89). Based on this Rulebook, protection zones are determined by the local self government units of the on the territory of which the water source is situated. Such protection zones have been determined for the springs of “Rasce”, by means of the **Decision on the Determination of the Boundaries of Protection Zones around Springs of “Rasce” and Protection Measures Stipulation** (“Official Gazette of SRM” No. 36/90). In addition to this, and for the purpose of dictating the spatial development of the area covered by the protection zones around the springs of “Rasce”, Spatial Plan for the Area of Protection Zones of “Rasce” Springs (“Official Gazette of RM” No.98/02) has been adopted.

The Draft Law on Waters has adopted the system of general protection of waters and the system of special protection of specified zones and areas. According to the Draft Law on Waters, each activity that pollutes or leads to pollution of waters is prohibited. As an exception, such activities may be performed only upon prior permit issued by the competent body in accordance with the River Basin Management Plans. Consequently, any discharge into waters is carried out in accordance with the water quality criteria and environmental goals specified in the permit for each individual case, taking into account the conditions and standards applicable with regard to protected zones and areas.

General water protection is provided through provisions by which performance of activities causing changes in water regime (set of parameters defining the qualitative and quantitative status of waters at a given place in a given time) is prohibited, i.e. the change in parameters (such as: water level, flow, flow direction, velocity, sediment transfer, physical, chemical and radioactive properties, hydro-biological composition of water and other parameters), contrary to the provisions of this Law, is prohibited. Water regime maintenance and improvement shall be carried out in accordance with the River Basins Management Plans.

The Draft Law on Waters provides for additional protection zones and areas and establishes grounds for determination of the regime of activities within such zones and areas. In addition to protection

zones of water bodies intended for human consumption, the following protection zones shall be determined as well:

- Protection zones of water bodies recognized as waters for recreation purposes, including bathing waters;
- Protection zones sensitive to nitrates;
- Protection zones of water bodies sensitive to urban wastewater discharge;
- Areas recognized as protected natural heritage, within which water status maintenance and improvement are significant factors; and
- Zones intended for the protection of flora and fauna species that live in or depend on water, and are economically important.

**The Law on Nature Protection** ("Official Gazette of RM" No. 67/04) addresses the subject of water protection, wetlands protection and ecosystems protection. According to this Law, waters and wetlands are natural resources and are preserved in their natural state. Wetlands include lakes, accumulations, swamps, marshes and other wetlands, as well as springs, streams, rivers and other watercourses, with their coastal areas that are not less than 10 meters in width from the coast line determined at the highest water level. For the purpose of biological and landscape diversity protection within wetlands, measures and activities are undertaken for the purpose of preventing the pollution of wetlands and incoming waters. The Law on Nature Protection establishes legal grounds for limiting the use of pesticides in certain areas determined by the Minister of Agriculture, Forestry and Water Economy and the Minister of Environment and Physical Planning.

Special protection has been established for the area of "Ezerani" on Prespa Lake, as a water dependent ornithological site, by the **Law on the Designation of the Ornithological Site "Ezerani" on Prespa Lake as a Strictly Protected Natural Reserve** ("Official Gazette of RM" No. 37/96).

Special protection has also been established for the area of "Tikves" in the Gorge of the river Crna Reka, as a water dependent ornithological site, by the **Law on the Designation of the Ornithological Site "Tikves" in the Crna Reka Gorge as a Strictly Protected Natural Reserve** ("Official Gazette of RM" No. 35/97).

Republic of Macedonia devotes particular attention to the protection of water of the three natural lakes and for that purpose it has adopted the **The Law on Ohrid, Prespa and Dojran Lakes Protection** ("Official Gazette of SFRY" Nos. 45/77, 8/80, 51/88, 10/90, and "Official Gazette of RM" No.62/93). By this Law, the Lakes have been proclaimed as monuments of nature of special importance, due to their outstanding natural features and values, as well as to their economic relevance. The Lakes have been recognised as a good of general interest, used in accordance with the regulations on natural rarities protection, environment protection, spatial and urban planning, fishery, waters and transboundary waters.

### **3. Does the existing legislation provide for principles such as prevention of pollution at source, emissions control and water quality standards?**

Yes. In order to prevent the entry of substances into the water that may cause changes in the chemical, physical, biological and radiological properties of waters, the **Law on Waters** ("Official Gazette of RM" Nos. 4/98; 19/00) stipulates that legal entities and natural persons that discharge wastewater are obliged to build wastewater treatment facilities and plants.

For the purpose of the protection of waters against pollution, the Law prohibits legal entities and natural persons to:

- Discharge substances that may cause communicable and parasite diseases into surface waters, lakes, accumulations and ground waters;
- Use abandoned wells as septic tanks;
- Throw mineral oils and mineral oils mixtures off vessels;

- Discharge wastewater into public sewerage which may affect wastewater treatment or damage the sewer;
- Discharge industrial and other polluted waters into the ground without prior treatment above the level specified in the permit;
- Discharge water of temperature higher than 27°C.

The quality of waters with regard to their use for specific purposes, according to the current **Law on Waters**, is determined through the classification of waters and categorisation of watercourses, lakes, accumulations and groundwater.

The **Decree on Water Classification** ("Official Gazette of RM" No. 18/99) classifies waters by the following indicators: organoleptic indicators, acidity - pH, oxygen regime, BOD5, mineralization, eutrophication, microbiological pollution, radioactivity and harmful and hazardous substances. Limit values have been specified for each of the above indicators, with regard to five water classes. These limit values apply to waters in watercourses with non-regulated flows, to waters in watercourses with regulated flows, to groundwater and to lakes.

The said water classes determine the purpose (option) of water use. Thus:

- First Class water is very clean, oligotrophic water that may be used in its natural state with possible disinfection for drinking and food production and foodstuffs processing, and provides spawning and breeding grounds for noble species of salmonid fish. The self-purification capacity of the water is very good, water being constantly saturated with oxygen, having low nutrient and bacteria content;
- Second class water is slightly polluted, mesotrophic water that may be used in its natural state for bathing and recreation purposes, for water sports, for other fish species-cyprinid breeding or that may be used for drinking and for food production and foodstuffs processing if subjected to common water treatment methods – conditioning (coagulation, filtration, disinfection, etc.). Water self-purification capacity and the level of saturation with oxygen are good throughout the year.
- Third Class water – moderately eutrophic water that may be used in its natural state for irrigation and, following the application of common water processing methods (conditioning), in the industry that does not require drinking quality water. The self-purification capacity of the water is poor, but acidity is still favourable for a number of fish species. Microbiological pollution and pollution caused by harmful substances is evident. The concentration of harmful substances ranges between natural levels and the levels of chronic toxicity for the water life.
- Fourth Class water is strongly eutrophic polluted water, that may be used for other purposes only after appropriate processing. The self-purification capacity of the water has been exceeded, resulting in higher acidity levels, thus affecting the development of fish progeny. Oxygen oversaturation with is present and so is "algae bloom". Anaerobic conditions and fish diseases may appear as well;
- Fifth Class water is extremely polluted, hypertrophic water, which cannot be used for any purpose in its natural state.

According to the **Decree on Categorization of Watercourses, Lakes, Accumulations and Ground Water Resources** ("Official Gazette of RM" No. 18/99), natural and artificial watercourses, sections of watercourses, lakes, accumulations and ground waters are divided into five water categories. The categorization is carried out in order to set norms on the construction of facilities and devices for pollution mitigation or for wastewater treatment, limitation of discharge or prohibition of discharge of wastewaters.

Categories from I to V consist of watercourses whose water has to comply with the requirements of each of the classes from I to V.

The Law stipulates the adoption of regulation on the quality of emissions (effluent norms), but it has not been adopted yet. Control over emissions is carried out through water management permit on the basis of the Water Management Master Plan. The water management permit specifies the operation

regime of water management and other facilities and plants that affect the water regime, the manner and the conditions of water discharge, polluted waters and waste substance discharge and the level of wastewater treatment. In the absence of emission norms for specific sources and pollutants, permits are issued on the basis of an expert assessment by the competent body, on a case-by-case basis, observing the principle of sustainable water use and taking into account the quality of the wastewater discharged, so that it does not exceed the standards applicable with regard to the quality of the recipient water. This Law lacks provisions on emission limit values, as well as on compulsory measures, in combination with instruments required to manage and control discharges into recipient water bodies.

The above deficiencies have been overcome in the **Draft Law on Waters** stipulating that water management is based on **the principle of pollution prevention at the source of its appearance**, in accordance with the long-term protection objectives and sustainable use of water.

By means of the establishment of environmental goals and quality standards that should be achieved, the Draft Law includes provisions on the manner in which such standards are to be achieved, through control over all discharges and through combined approach of controls over emissions and goals related to water quality. This provides for control over the cumulative loading of the recipient water body. This is ensured through mechanisms for control over the sources of pollution to recipient water bodies, on one hand, and through goals achievement with regard to water quality that should be achieved or maintained as a minimum standard, on the other hand. The application of such mechanisms must not result in an increased environmental pollution, or in decreased water quality, directly or indirectly. The strictest measures, standards and environmental goals shall apply in water management.

Standards for drinking water quality have been stipulated in the **Rulebook on Drinking Water Safety** ("Official Gazette of RM" No. 57/04). These standards have been fully harmonized with the European legislation. (for more details see [22 II D P1](#))

Any discharge into waters shall be carried out in accordance with the quality criteria and environmental goals, in a manner and under conditions specified in the permit issued for each specific case, on the basis of the respective river basin management plan.

As far as the control of emissions is concerned, the law stipulates that the control over discharge into surface waters shall be based on the combined approach of control over point and diffuse sources, through the application of the best available techniques, relevant emission limit values and best environmental practices. In addition to this, while carrying out control over discharge into surface waters, all relevant measures and criteria should be taken into account and implemented in order to fulfil the strictest requirements. This approach is of relevance for control measures to be specified with regard to set conditions with regard to permits for discharging and for the efforts to combat overall pollution originating from point and diffuse sources of pollution.

Instruments for the implementation of pollution prevention at the source and for emission control, as stipulated in the Draft Law on Waters, are the permits for discharge into waters. Permits specify the conditions for and the manner of discharging into waters, as well as the measures that should be undertaken to prevent pollution. With regard to certain installations and activities, the Draft Law on Waters refers to the Draft Law on Environment, concerning integrated environmental permits. Such permits, while addressing the aspects of water protection and water pollution control, shall in all cases apply stricter standards.

The Draft Law on Waters provides grounds for the adoption of the relevant secondary legislation that shall regulate explicitly the permit conditions and procedures, water quality standards and measures for their achievement, in line with the relevant European Directives. The drafting of secondary legislation on emission norms in accordance with the relevant EU Directives has been envisaged under CARDS 2004.

**The Draft Law on Waters** pays particular attention to the control over emissions of hazardous substances to water, through the establishment of a List of priority hazardous substances and adoption of secondary legislation to stipulate the requirements on their discharge and on the manner of managing installations that operate with such substances.

The Draft Law on Waters prohibits direct discharge of priority substances and polluting substances into ground waters.

Household wastewaters and industrial effluents will be collected, drained, treated and discharged. Conditions for the use of sludge obtained from wastewater treatment will be specified, too.

The Draft Law on Waters stipulates, *inter alia*, the following:

- Construction of wastewater collection systems in populated areas with more than 2000 population equivalents and appropriate wastewater treatment prior to its discharge into recipient waters, up to the level complying with the quality targets;
- Appropriate treatment of all wastewaters discharged from wastewater collection systems in populated areas with less than 2000 population equivalents inhabitants;
- Secondary (biological) wastewater treatment, or in correspondence to it, from wastewater collection systems in populated areas with less than 2000 population equivalents, in case wastewater is being discharged in areas sensitive to urban wastewater discharge.

The Draft Law on Waters stipulates the construction of the above mentioned systems in 15 years after the entry into force of the new Law on Waters. The fulfilment of this obligation will require the provision of additional financial resources and assistance.

The Draft Law on Waters also stipulates an obligation for the pre-treatment of industrial wastewaters prior to their discharge into the systems for the collection and treatment of urban wastewater.

#### **4. Is there a system of prior regulations and/or specific authorisation for water extraction from ground water and/or from surface waters?**

The system of prior regulations and authorisations for water extraction from groundwater and surface waters in the Republic of Macedonia consists of the following:

##### **1. Technical regulations and measures**

The technical documentation, which is a condition for the issuance of water management consent and water management permit, determines the parameters of water extraction, the manner for and conditions of the development and use of water management and other facilities, the impact of water use on water regime and on the environment.

Technical documentation is elaborated on the basis of the on-site and other surveys and in compliance with the Water Management Master Plan, the Spatial Plan and other planning documents related to water use, as well as technical standards and regulations for the execution of work.

##### **2. Legal authorisations**

According to the current legislation, authorisations for water use are awarded on the basis of the following regulations: Law on Waters ("Official Gazette of RM" No. 4/98, 19/00 Law on Drinking Water Supply and Urban Wastewater Drainage ("Official Gazette of RM" No. 68/04); Law on Mineral Resources ("Official Gazette of RM" No.18/99 и 29/02); Law on Construction of Investment Facilities ("Official Gazette of SFRY" No. 15/90, 11/91, and "Official Gazette of RM" No. 11/94; 18/99, 28/99) and other relevant regulations.

Prior regulations are in the form of:



- Water management consent;
- Construction approval;
- Water management permit;
- Water use concession.

The water management consent is issued on the basis of the Law on Waters ("Official Gazette of RM" No. 4/98, 19/00), Articles 9,10 and 11, as well as Articles 27 to 34, as a document required in the process of construction permit issuance, concerning the construction, extension or reconstruction of water management facilities and other facilities and plants that may have impact on water regime, as well as with regard to the performance of activities that may lead to temporary, occasional or permanent changes in the established water regime.

The water management specifies water management conditions that have to be accomplished in the course of the construction. Such conditions refer to: installation of measuring instruments to measure water quality and quantity, records keeping of certain data, dynamics of water use or exploitation and the time period for which the right to water extraction is awarded, as well as the time period for the completion of facilities and works. The water management consent is a precondition for acquiring the right to water use, based on the water management permit.

Construction approval is issued on the basis of the Law on Construction of Investment Facilities ("Official Gazette of SFRY" No.15/90, 11/91 and "Official Gazette of RM" 11/94, 18/99, 25/99), in accordance with Articles 18 to 21, that specify all the conditions that have to be complied with in the course of the construction of facilities, as well as the location, access, water use consent and other consents related to infrastructure installations.

The water management permit is issued on the basis of the Law on Waters, after the completion of the construction of a water management facility, in order to award the right to the investor to use the constructed water management and other facilities and plants that have impact on water regime, and to use or exploit water.

Water management consent is not required for the use of water from watercourses and lakes, if it is intended for drinking, bathing, livestock and other household purposes, watering, sports, recreation and other similar purposes, if these do not disturb water regime significantly.

Water from all watercourses, lakes and water collection facilities may be used without water management consent if intended for fire extinction and for undertaking the necessary sanitary and other measures in case of emergency or natural disaster.

Water from watercourses and lakes, as a natural resource, may be approved for use by concession, for a determined period, for the purpose of the performance of the following activities: electricity production, fish breeding in fish ponds and cages, lake traffic, and tourist services.

The Draft Law on Waters stipulates that the right to use water from water bodies and the right to extract sand, gravel and stone from the beds and banks of surface water bodies (a so called water right) are awarded on the basis of the permit. The permit provides for the implementation of the public interest in water use, as well as for the exercise of the rights and obligations of legal entities and natural persons to use water or to extract sand, gravel or stone from the beds and banks of surface water bodies. Water right is also acquired with regard to water use for the purpose of performance of a commercial activity (concession). The permit is required for the performance of activities in case they have impact or may have impact on water regime and/or on the morphology of the water body, especially in cases of impoundment, extraction, diversion, accumulation and use of water from surface and groundwater bodies.

For the purpose of the implementation of River Basin Management Plans, the above permits shall be issued in accordance with the relevant River Basin Management Plan.

The Draft Law on Waters stipulates that no water use permit is required for the general water use. General water use comprises, in particular, use of water for drinking, bathing and other similar personal hygiene purposes, for sports and recreation and for navigation by un-motorized vessels, or for the fulfilment of other personal needs, as well as for fire extinction and the undertaking of necessary and other measures in case of emergency or natural disaster; and other activities of public interest, if no construction of special facilities and plants subject to water use permits is required.

The use of water is also regulated in the Draft Law on Environment, through integrated environmental permitting procedure, under conditions and in a manner based on rules and conditions stipulated by the Law on Waters that shall integrate the water use permit.

According to the Draft Law on Environment, commercial activities that use water from surface and ground water bodies may be carried out on the basis of concession awarding. Concession is awarded for the following activities: electricity production, water bottling from groundwater resources intended for commercial purposes, fish and waterfowl breeding, lake traffic and the provision of tourist, sports and other recreational services by the building of permanent facilities.

Concessions for the detailed geological surveys and mineral resources exploitation, including geothermal waters and groundwater (thermal, thermo-mineral, mineral and drinking waters) will be awarded only upon prior permit acquired in accordance with the Draft Law on Waters.

**5. Does the existing legislation provide for objectives laid down in a “master plan”, also listing the measures to take for reaching these objectives?**

Yes. According to the **Law on Waters** (“Official Gazette of RM” No. 4/98 ,19/00), the basic document in the water management area is the Water Management Master Plan of the Republic of Macedonia. It is the Plan for water regime maintenance and improvement, for rational use of waters in the territory of the Republic of Macedonia and provides a basis for water management development. It contains objectives intended to be achieved in the area of water resource management and specifies measures for the achievement of such objectives. The Water Management Master Plan contains, in particular: current status of water regime and water balance, and water management facilities within a basin or part of a basin for a specified period; hydrological base; basic elements and conditions of water regime and water balance required to provide the most cost-effective technical and economic solutions concerning the protection against harmful effects of water; water protection against pollution; use and exploitation of waters within a basin or part of basin for specified period; basic criteria for water classification and watercourses categorization.

The Water Management Master Plan is prepared and adopted for the territory of the Republic of Macedonia. It is adopted by the Assembly of the Republic of Macedonia through a two-phase procedure – draft and proposal. It is revised every 10 years.

If required, Water Management Master Plan is prepared for a part of a basin. It is adopted by the Government of the Republic of Macedonia. The Water Management Master Plan for a part of the basin should be in accordance with the Water Management Master Plan of the Republic of Macedonia.

**The Draft Law on Waters** specifies that the basic documents for water planning and development shall include:

- National Strategy for Waters;
- Water Management Master Plan of the Republic of Macedonia;
- River Basin Management Plans.

**The National Strategy for Water** is adopted for a period of 30 years. It will provide for sustainable development of waters, through meeting the demands of all users, protection of water against pollution, protection and improvement of water ecosystems and protection against harmful impacts of waters. The Strategy is adopted by the Assembly of the Republic of Macedonia. Other strategic

documents, such as documents determining the policy and the objectives in the area of spatial use and planning, the objectives of economic development, as well as of utilization of natural resources and environment protection, shall take into account the objectives set in the Strategy for Water, as a matter of obligation. According to the Draft Law, the Strategy shall be adopted within four years after the entry into force of the Law.

**The Water Management Master Plan of the Republic of Macedonia** shall be elaborated and adopted for the purpose of integrated planning and implementation of water development programmes and measures, in accordance with the objectives of the national social and economic development. It covers a period of 30 years, and shall be revised every 10 years. The Water Management Master Plan of the Republic of Macedonia is adopted by the Assembly of the Republic of Macedonia, and it shall be adopted within four years after the entry into force of the Law.

**River Basin Management Plans** to be developed for the area of each river basin will contain:

1. List of environmental goals for each water body within the river basin, determined in accordance with the goals established for: surface waters, including artificial and strongly modified surface water bodies; groundwater; and the quality objectives in line with the water classification and water bodies categorization. The above goals are set on the basis of preliminary assessment of a river basin.

2. Under the Programme of measures for the achievement of the set objectives, the following measures shall be determined as basic:

- Measures for achievement of environmental goals and measures for prevention of deterioration of the status of surface water bodies;
- Measures for the protection, improvement and rehabilitation of all surface water bodies, measures against pollution of water with individual or a group of pollutants posing significant risk to water environment, and drinking water, including permits, controls and record keeping systems and measures for the point and diffuse sources of pollution;
- Measures specified in the Draft Law on Environment and Law on Nature Protection ("Official Gazette of RM" No. 67/04) and regulations adopted on the basis of these laws;
- Measures specified in the Law on Fisheries ("Official Gazette of RM" No. 5/93) and regulations adopted on the basis of this Law;
- Measures specified in the regulations concerning safety of water intended for human consumption, including the measures aimed at reducing the level of water purification applied in drinking water production;
- Measures for the maintenance of quantitative status of waters;
- Measures for protection against harmful impacts of waters;
- Measures undertaken in cases of accidents and force majeure;
- Measures for control over the exploitation surface water and groundwater;
- Measures for control over the size of water facilities constructed;
- Measures for setting the fees for the water use related costs;
- Measures for the promotion of the sustainable use of waters.

The River Basin Management Plans shall be adopted within 10 years after the entry into force of the Law.

The programme of measures shall also include, as its integral part, the implementation of a financial plan for specified measures and activities, developed in line with the River Basin Management Plan. The Programme of measures shall contain basic measures, and, if required, additional measures to be undertaken within the relevant river basin in order to achieve the set environmental goals. The Programme shall be updated every six years at minimum, and new or modified measures shall become operational with their introduction.

## 6. Is there a system for prior regulations and/or specific authorisation for storage and handling of substances endangering or potentially endangering waters?

The system of consents concerning the construction of facilities for storage or handling of hazardous substances is regulated in several legal acts.

According to the Law on Waste Management ("Official Gazette of RM" No. 68/04, 71/04), temporary hazardous waste storage and management is carried out on the basis of permit, specifying the conditions and measures for environmental protection, including water. The permit is issued by the Ministry of Environment and Physical Planning.

The Law on Protection from Explosive Materials ("Official Gazette of SRM" No. 4/78, 10/78, 51/88, 36/90, and "Official Gazette of RM" No. 12/93) regulates the production, transport, trade, use and storage of explosive substances for the purpose of protection of human life and health, the environment and physical assets. This Law prescribes specific technical requirements with regard to production, as an obligation for internal control, the obligation to construct the relevant facilities in areas specified in spatial plans, to prepare projects for fire and explosion prevention, and the obligation to be in possession of the equipment and devices for fire extinguishing and pollution prevention. Explosive substances may be stored in storage facilities approved and constructed especially for that purpose, including protection zones that have to be stipulated in the relevant urban plans.

The **Law on Storage and Protection against Inflammable Liquids and Gases** ("Official Gazette of the SRM" No. 15/76, 51/88, 19/90 and "Official Gazette of RM" No. 12/93), for the purpose of protection of human life and health, the environment and physical assets, regulates the storage of and storage related activities for inflammable liquids and gases, and the processing and transportation through pipelines. The Law also defines inflammable liquids and gases, as well as their storage and storage related activities.

The Draft Law on Waters contains, *inter alia*, provisions establishing the legal grounds for the adoption of the relevant secondary legislation to regulate the following:

- List of pollutants and priority hazardous substances, to be revised at regular intervals of no more than four years;
- Technical and other requirements with regard to the installation and operation of facilities that use hazardous substances in the processes of production, processing, filling and storage, that may affect the quality of water;
- Manner of testing facilities that use hazardous substances.

The Draft Law on Waters specifies facilities and plants that use hazardous substances in the processes of production, processing, filling and storage, including pipelines for the transport of such substances, which are constructed, located, operated and maintained in a manner that excludes any direct or indirect pollution of waters. In addition, they have to comply with the requirement for best available technologies.

In addition to the above, the said facilities may not be constructed, put into operation or proceed with the operations unless they acquire integrated environmental permits, through the relevant procedure stipulated in the Draft Law on Environment. The Draft Law on Environment contains provisions for the prevention and control of industrial accidents involving hazardous substances. With regard to such systems, operators are obliged to undertake all measures required to prevent industrial accidents and to mitigate the effects thereof, as well as to report on the safety measures to the Ministry of Environment and Physical Planning. The Draft Law on Environment also stipulates that operators of such installations are obliged to prepare internal emergency plans, and the local self-government units to prepare external emergency plans.

The Decision on the Determination of the Boundaries of Protection Zones around the Springs of "Rasce" and Protection Measures Stipulation ("Official Gazette of SFRY" No. 36/90) specifies the

measures aimed at the protection of this water source against hazardous substances. To be more specific, uncontrolled transportation, storage and use of liquids that are by their composition hazardous to ground aquifers (oil and oil derivatives, toxic substances, etc.) and discharges and storage of oils, toxic substances and radioactive substances, are prohibited within the first wider protection zone of “Rasce” springs.

## 7. Which are the responsible authorities for:

a) planning procedures?

b) prior regulation and/or specific authorisation procedures?

### a) Planning procedures

According to the **Law on Waters** (“Official Gazette of RM” No. 4/98, 19/00), the Water Economy Directorate as a body within the Ministry of Agriculture, Forestry and Water Economy, is the competent body with regard to the development and implementation of the adoption procedures of the **Water Management Master Plan of the Republic of Macedonia**. The Water Management Master Plan of the Republic of Macedonia is adopted by the Assembly of the Republic of Macedonia, at the proposal of the Government, for a period of 10 years.

Under the **Law on Spatial and Urban Planning** (“Official Gazette of RM” No.4/96, 8/96, 28/97, 18/99, 53/01, 45/02), the Ministry of Environment and Physical Planning is the competent body with regard to the development and implementation of adoption procedures of the Spatial Plan of the Republic of Macedonia. The **Spatial Plan of the Republic of Macedonia** is adopted by the Assembly of the Republic of Macedonia, at the proposal of the Government of the Republic of Macedonia.

The current setup of competences in the domain of plans adoption has been changed in the Draft Law on Waters, which achieves the integration of water planning and management. Under the Draft Law, the Ministry of Environment and Physical Planning is authority competent to develop the **National Water Strategy**, upon prior consent issued by other relevant state administrative bodies. At the proposal of the Government of the Republic of Macedonia, the Strategy is adopted by the Assembly of the Republic of Macedonia for a period of 30 years, and revised every 10 years. The National Water Strategy shall be adopted within 2 years after the entry into force of the Law.

Under the Draft Law on Waters, the Ministry of Environment and Physical Planning is the authority competent to develop the Water Management Master Plan of the Republic of Macedonia, upon prior consent issued by other relevant state administrative bodies. At the proposal of the Government of the Republic of Macedonia, the Water Management Master Plan of the Republic of Macedonia is adopted by the Assembly of the Republic of Macedonia for a period of 30 years, and revised every 10 years. The Water Management Master Plan of the Republic of Macedonia will be adopted within 4 years after the entry into force of the Law.

The Water Management Master Plan of the Republic of Macedonia is developed in two phases: draft and proposal. For the purpose of enabling public participation in the adoption procedure, the Draft Plan is subjected to professional discussion. The right of the public to access to information and environmental impact assessment of the plans shall be carried out under the conditions and in a manner stipulated in the Draft Law on Environment.

**River Basin Management Plans**, as basic planning documents concerning the management of an area of a river basin, are adopted by the Government of the Republic of Macedonia at the proposal of the Ministry of Environment and Physical Planning (MEPP) for a period of six years. They will be adopted in 10 years after the entry into force of the Draft Law on Waters. The MEPP is the authority competent for the development of the said plans and for the Councils for river basin management, for each individual basin, established within their frameworks. The Councils are composed of the representatives of the state administrative bodies, representatives of the local self government units in the territory of which the respective river basin is situated, consumer associations, water users,

industry, non-governmental organisations and other stakeholders. The Plan is developed in two phases: draft and proposal.

### **b) Prior regulation and/or specific authorisation procedures**

According to the Law on Waters, the Water Management Administration under the Ministry of Agriculture, Forestry and Water Economy is the body responsible for the issuance of water management consent for construction, reconstruction, connection or extension of water management facilities, water management permits for water use and water management facilities use, permit for extraction of sand, gravel and stone. Concessions are awarded by the Government of the Republic of Macedonia, on behalf of the Republic of Macedonia.

According to the Draft Law on Waters, the Ministry of Environment and Physical Planning is the body responsible for the issuance of water use permits, permits for sand, gravel and stone extraction from the beds and banks of surface water bodies, for water discharge, for the use of sludge produced by wastewater treatment, permit for reuse of treated wastewater, water management consent for the construction of new or reconstruction or extension of existing facilities that may affect the water regime, as well as the A integrated environmental permits. The B integrated environmental permits for certain facilities, as stipulated by the Draft Law on Environment, shall be issued by the local self government units.

Concessions for water use for certain purposes are awarded by the Government of the Republic of Macedonia. For the purpose of implementing the procedure for awarding concessions for the performance of commercial activities involving water use, the Government of the Republic of Macedonia establishes a Commission composed of the representatives of the competent state administrative bodies from the administrative area relevant for the concession project, representatives of the local self government unit on whose territory the concession project shall be implemented, and representatives of relevant scientific and expert organisations and institutions.

### **8. Is a system of River Basin Management being developed to ensure water quality improvements and if so, how?**

Yes. According to the Draft Law on Waters, the river basin area is defined as an area consisting of one or more adjacent river basins, including the affiliated ground waters and coastal waters. Water management is carried out in hydro-graphic units separated by the watercourse sections of river basins, taking into account the interconnection of surface and groundwater, where administrative and territorial boundaries will not pose any obstacles to the integrated management of river basin areas.

The territory of the Republic of Macedonia is divided into four river basins, namely Vardar River Basin, Crn Drim River Basin, Strumica River Basin and Juzna Morava River Basin. The Assembly of the Republic of Macedonia determines the boundaries of the river basin areas, at the proposal of the Government of the Republic of Macedonia.

Within the Ministry of Environment and Physical Planning, the Administration of Environment establishes a river basin management body separately for each river basin area. The Administration of Environment will be established with the Draft Law on Environment, which is expected to be adopted by the end of the first quarter of 2005.

With regard to each river basin area, a river basin management plan is developed for a six year period. The river basin management plans are developed in line with the Water Management Master Plan of the Republic of Macedonia.

The river basin management plan contains the following elements:

- Description of river basin characteristics;
- Presentation of significant pressures and impacts on the status of surface and groundwater resulting from human activities;

- Information and mapped outlines of registered protection zones;
- Information and mapped outlines of monitoring activities related to water status;
- List of environmental goals for each water body within river basin, including the information on deviations carried out in accordance with this law;
- Indication of artificial and strongly altered surface waters.

The subject plans contain information on the following aspects: planned and undertaken measures for the purpose of the improvement of water quality and achievement of environmental goals; economic analysis of water use, including report on the application of the polluter pays principle; Programme of measures for the achievement of environmental goals; detailed programmes and plans for water management in river basins and sub-basins; Programme for protection against harmful impacts of water, including basic measures for protection against floods; description of the activities of public participation in the plan development and results from such participation; a list of bodies and institutions competent for waters within the river basin; manner in which information and documents related to the plan development and implementation shall be made available to the public; implementation of the obligations arising from international agreements in the area of water management, ratified by the Republic of Macedonia.

For the purpose of the River Basin Management Plan development, a Council for the river basin area management is established within the body in charge of the river basin management.

The plans shall be implemented by permit issuance and concession awarding. Authorities and institutions that shall be conferred rights and obligations in the domain of water management within a river basin are obliged to comply with the river basin management plans.

The Ministry of Environment and Physical Planning prescribes the detailed contents and the manner of river basin management plans development, as well as the detailed contents and the manner of preparation of information and mapped outlines of monitoring activities related to water status, detailed programmes and plans for water management within river basins and sub-basins, and description of the activities and results of public participation in the plan development process.

The River Basin Management Plan is developed in two phases: draft and proposal. In order to enable public participation in the plan development process, the draft Plan shall be published and made available for review, with emphasis placed on the following data:

- Schedule and work programme of the Draft Plan development, including the statement (list) of consultation measures to be undertaken – at least three years before the commencement of the period that is subject of the plan;
- Overview of important water management issues identified within the river basin, at least two years prior to the commencement of the period that is subject of the plan; and
- The Draft Plan – copies of the River Basin Management Plan, at least one year prior to the commencement of the period that is subject of the plan.

At the request of the concerned public, the inspection of source documents and information used in the process of the plan drafting shall be enabled. On the basis of the opinions and comments collected through public inspection and expert debate of the Draft Plan, the proposal of the River Basin Management Plan is developed, and then submitted to the Government of the Republic of Macedonia for adoption. The Proposal is reviewed, amended and supplemented at least every six years, and at shorter intervals if necessary.

With regard to each river basin, the Ministry of Environment and Physical Planning, every six years carries out analyses of its characteristics, review of significant pressures and impacts of human activities, and economic analysis of water use, taking into account the user pays principle. The results of the assessment shall be an integral part of the river basin management plan.

For the purpose of river basins management, environmental goals in line with the criteria shall be determined and programmes of measures for their implementation shall be prepared, as a matter of

obligation. The process of determination of environmental goals and programme of measures preparation shall take into consideration the accomplished assessments of the river basin area, and the following shall be considered: type of the environmental goal in relation to the characteristics of the relevant water body, as well as exemptions applied; time, criteria, methods and procedure in setting environmental goals; the term within which an environmental goal should be achieved; type and term of measures included in the Programme, as well as methods and procedures to be observed in the development of Programme of measures, in order to achieve the set environmental goals.

The Programme of measures includes financial plan for the implementation of specified measures and activities, as its integral part. The process of the financial plan elaboration takes into consideration the economic analysis performed. The Programme of measures contains basic measures, and additional measures if required for the respective river basin for the purpose of achieving the set environmental goals. The Programme of measures is updated every six years, and new or amended measures become operational with their introduction.

The Ministry of Environment and Physical Planning, in cooperation with the state administrative body holding responsibility for the foreign affairs, undertakes activities aimed at establishing areas of international river basins with the respective neighbouring countries, concerning river basins existing in the territory of the Republic of Macedonia.

The management of transboundary waters is carried out on the basis of this Law and in accordance with the relevant international agreements ratified by the Republic of Macedonia. For the purpose of achieving the goals of this Law, the competent authorities shall coordinate the transboundary river basin management plans and the programmes of measures with the competent authorities of neighbouring countries located within the same river basin. The Ministry of Environment and Physical Planning is in charge of the activities regulated in this Article.

In case of a transboundary river basin whose area is situated in part in the territory of the Republic of Macedonia and in part in the territory of other country or countries, the Ministry of Environment and Physical Planning is obliged to cooperate with the competent authorities of the relevant countries for the purpose of developing a unique international river basin management plan. If an international agreement ratified by the Republic of Macedonia determines the area of the international river basin, the body in charge of the river basin management is obliged to ensure the management of the part of the area of the river basin situated in the territory of the Republic of Macedonia, in accordance with the law and with the relevant international agreement ratified by the Republic of Macedonia. In case the international river basin management plan has not been developed, the river basin management plan is developed for the part of the international river basin situated in the territory of the Republic of Macedonia, in accordance with this Law.

The implementation of the river basin management plans is carried out through the system of water rights (permits for water use; permits for sand, gravel and stones extraction) and permits for water discharge, i.e. integrated environmental permits, if the installation capacity is such that the integrated environmental permit is required. These instruments for the implementation of the plans contain compulsory conditions and the manner of water use, sand, gravel and stone extraction and water discharge, including the permitted quality and quantity parameters in each individual case, in line with the relevant River Basin Management Plan.



## ***E. Nature Protection***

### **1. Describe the legislative basis for the protection of nature, especially concerning species and habitats of conservation interest.**

One of the fundamental values of the constitutional order of the Republic of Macedonia is the space humanisation, and environment and nature protection and improvement. According to the Constitution of the Republic of Macedonia ("Official Gazette of RM" No. 52/91), everyone has the right to a healthy living environment and duty to protect and improve the environment and the nature. The State is obliged to provide conditions for the citizens' exercising the right to a healthy environment. In addition, the Constitution determines natural resources of the country, the flora and fauna, amenities in common use, as well as the objects and buildings of particular cultural and historical value determined by law, are goods of common interest enjoying specific protection.

The legislation preceding the new Law on Nature Protection ("Official Gazette of RM" No. 67/04), did not regulate the protection of the nature in an integrated manner. Namely, the Law on Natural Rarities Protection ("Official Gazette of SFRY" No 41/73, 42/76, 10/90, and "Official Gazette of RM" 62/93) referred in grate deal to the protected areas, in terms of biological diversity protection.

For the purposes of integrated nature protection, ratified international agreements implementation and transposition of the relevant EU legislation in the area of nature protection, the Assembly of the Republic of Macedonia adopted the new Law on Nature Protection ("Official Gazette of RM" No. 67/04). This Law has transposed the two key legal acts of the EU concerning nature protection, as follows: Council Directive 1992/43 on the conservation of natural habitats and of wild fauna and flora and Council Directive 1979/409 on the conservation of wild birds. The Law has also taken into account the Council Regulation 338/1997 on the protection of species of wild fauna and flora by regulating trade therein, establishing grounds for further legal regulation of the subject area. In addition, regulations concerning genetically modified organisms and their use have been taken into account.

The protection of nature is carried out through biological and landscape diversity protection and natural heritage protection, in and outside protected areas.

With regard to species, the Law contains provisions that regulate the issues of introduction of non-indigenous species in nature and reintroduction of extinct indigenous species; trade in endangered and protected wild species of plants, fungi and animals; protection of species enjoying protection under international agreements; keeping and breeding of wild animal species in captivity, as well as special protection of the designated wild species included in the Red Book and Red Lists.

The Law also regulates the temporary protection of endangered wild species until their designation, by the adoption of a separate act by the Ministry of Environment and Physical Planning. The Law specifies the prohibited activities related to strictly protected wild species. The protected wild species include: indigenous wild species that are endangered or rare, but not threatened with extinction in the territory of the Republic of Macedonia; wild species that are not endangered, but could easily be confused, due to their appearance, with certain endangered species; and wild species for which the relevant manner of protection is stipulated under international agreements. The use of protected wild species may be carried out in a manner and in quantity that will not put at danger the favourable status of their preservation.

The Law also regulates the protection of habitats and ecosystems, including provisions that shall provide for the favourable status of habitats preservation, habitats monitoring, preservation of environmentally important areas and establishment of environmental network. The protection of habitats and ecosystems is carried out through the measures and activities for nature protection, sustainable use of natural resources and space planning and development. The protection of

ecosystems is provided through habitat type protection, by the determination of the status of their preservation.

Nature protection is also regulated by the Law on Environment and Nature Protection and Promotion ("Official Gazette of RM" No. 13/03 consolidated text)), according to which the term *special natural wealth* is used for protected areas. Under this Law, all natural resources, items and parts of nature recognized through scientific and expert surveys as having particularly important natural values, enjoy special protection.

A legal ground for nature protection is also provided by international agreements signed or ratified by the Republic of Macedonia in the area of nature protection. Such agreements include: Convention on Biological Diversity (Rio)("Official Gazette of RM No. 54/97); Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar)("Official Gazette of the SFRY" No. 9/77). Convention on the Conservation of Migratory Species of Wild Animals (Bonn) ("Official Gazette of RM" No. 38/99); Convention on the Conservation of European Wildlife and Natural Habitats (Bern)("Official Gazette of RM" No. 49/97).; Convention for the protection of the World Cultural and Natural Heritage ("Official Gazette of SFRY" No.56/74); Convention on International Trade in Endangered Species of Wild Fauna and Flora ( "Official Gazette of SFRY" No. 82/99); European Convention for the Protection of Vertebrate Animals Used for Experimental and other Scientific Purpose **Official Gazette of RM"(13/02)**; Protocol of Amendment to the European Convention for the Protection of Vertebrate Animals Used for Experimental and other Scientific Purposes **Official Gazette of RM"(13/02)**; European Landscape Convention (**"Official Gazette of RM" No. 44/03**).; Agreement on the Conservation of Bats in Europe ("Official Gazette of RM" No. 33/99), Amendment of the Agreement on the Conservation of Bats in Europe (**"Official Gazette of RM" No. 33/99**); Agreement on the Conservation of African-Eurasian Migratory Waterbirds (Hague) (**"Official Gazette of RM" No. 32/99**); Cartagena Protocol on Biosafety to the Convention on Biological Diversity (signed), and Memorandum of Understanding on the Conservation and Management of the Middle-European Population of the Great Bustard (*Otis tarda*) (signed).

Part of the legal grounds applicable to nature protection is also established by laws regulating protection and use of certain natural resources, the most relevant of which include: Law on Fisheries ("Official Gazette of RM" No. 62/93), Law on Hunting ("Official Gazette of RM" Nos. 20/96, 26/96, 34/97, 69/04), Law on Forests ("Official Gazette of RM" Nos. 47/97, 7/00, 89/04), Law on Pastures ("Official Gazette of RM" Nos. 3/98, 101/00), Law on Plant Protection ("Official Gazette of RM" Nos. 5/98, 6/00), etc.

In addition to the laws, expert basis for nature protection is also provided in the Strategy for Biological Diversity Protection in the Republic of Macedonia and the Action Plan adopted by the Government of the Republic of Macedonia in January 2004. The Strategy defines integrated approach towards protection and sustainable use of the components of biological diversity, while the Action Plan presents specific actions that need to be implemented for the purpose of achieving the goals set in the Strategy.

## **2. What systems of protected areas exist for nature conservation and how complete are such systems?**

According to the Law on Nature Protection ("Official Gazette of RM" No. 67/04), there are six categories of protected areas, as follows:

- Strictly protected natural reserve - IUCN I
- National Park - IUCN II
- Monument of Nature - IUCN III
- Nature Park - IUCN IV
- Protected Landscape- IUCN V
- Multi-purpose Area - IUCN VI.

According to the Law, the first three categories are designated as protected areas by the Assembly of the Republic of Macedonia by law, while other categories of protected areas are designated by the Government of the Republic of Macedonia.

According to the Spatial Plan of the Republic of Macedonia for the 2002-2020 period ("Official Gazette of RM" No. 39/04), the network of protected areas in the Republic of Macedonia comprises 74 items of nature, covering a total area of 187.770 hectares or 7.30 % of the national territory. In the Spatial Plan it is envisaged that 11.6 % of the national territory will be placed under protection. It stipulates the designation of two additional national parks - Jakupica and Sar Planina.

Protected areas of internationally recognised status include:

- Monument of nature "Ohrid Lake" – World natural heritage (UNESCO);
- Monument of nature "Prespa Lake" – Ramsar Site;
- Monument of nature "Markovi Kuli" (*King Marco's Towers*) – World natural heritage (UNESCO's Preliminary List); and
- Monument of nature "Slatinski Izvor" (*Slatino Springs*) - World natural heritage (UNESCO's Preliminary List).

In 2002, the Republic of Macedonia initiated the establishment of the Emerald Network of areas of special conservation interest). In 2004, activities towards the development of indicative map of the Pan-European Environmental Network for South Eastern Europe, involving the Republic of Macedonia, commenced.

The Republic of Macedonia has expressed its interest in the establishment of transboundary protected areas with neighbouring countries. In 2000, the Prime Ministers of Republic of Macedonia, Republic of Greece and Republic of Albania signed the Declaration on the establishment of the first transboundary protected area in South Eastern Europe – Prespa Park.

The Law on Nature Protection stipulates a transitional period of three years after its entry into force when the re-evaluation of protected areas designated prior to its adoption will be completed, and new legal acts for their proclamation will be adopted in line with the new Law, thus rounding off the system of protected areas.

At present, the management of protected areas is partial, with the exception of National Parks, and is non-existent in certain cases.

### **3. What are the main (practical) nature conservation instruments (e.g. management contracts, conservation plans, compensation systems, etc.), land-use planning controls and enforcement measures that exist:**

- a) for protected areas;**
- b) for the conservation of nature outside of protected areas;**
- c) for protected species?**

#### **a) For protected areas**

According to the current legislation, the management of protected areas is carried out by the State in most cases. The State, on the other hand, exercises the right to manage protected areas through the establishment of specific institutions (Public National Parks Institutions), as well as through the delegation of the right of use to certain legal entities – local communities, public enterprises and non-governmental organisations (Monument of Nature "Prespa Lake" is managed by public enterprise; on the basis of Decisions taken by the Government of the Republic of Macedonia two Strictly Protected Natural Reserves have been delegated for management to non-governmental organisations; one Monument of Nature has been delegated for management to a non-governmental organisation by a Decision taken by a local self government unit , etc.). In most cases, the act of designation regulates the issue of protected areas management.

Under the new Law on Nature Protection (“Official Gazette of RM” No. 67/04), the entities in charge of the management and protection activities adopt management plans for protected areas and annual programmes for nature protection. Such plans shall contain measures for biological diversity protection, natural habitats preservation and characteristic landscapes conservation. The said management plans shall be in line with the Spatial Plan of the Republic of Macedonia.

The control over the implementation of protected areas management plans is carried out by the Service for Environment, a body within the Ministry of Environment and Physical Planning. According to the Draft Law on Environment, the Service for Environment shall be transformed into the Directorate for Environment. The direct protection of protected areas is performed by the ranger service established or appointed by the entities that manage the protected areas.

The land use within protected areas is regulated by the relevant management plans.

The compensation system is detailed by the Law on Nature Protection, which specifies the activities subject to compensation payment (e.g. entry into and visit of specific facilities within the protected area, shooting of wild animal species and gathering of wild plants and fungi species and other forest fruits, etc.). According to the Law, the levels of compensation are determined by the Government of the Republic of Macedonia. The revenues collected from compensations are the revenue of the Budget of the Republic of Macedonia, and are used for the purpose of performing the activities of nature protection and management within the protected area where such compensations have been collected.

#### **b) For the conservation of nature outside protected areas**

The conservation of nature outside protected areas, prior to the adoption of the Law on Nature Protection, was regulated by the following laws: Law on Fisheries (“Official Gazette of RM” No. 62/93), Law on Hunting (“Official Gazette of RM” Nos. 20/96, 26/96, 34/97, 69/04), Law on Forests (“Official Gazette of RM” Nos. 47/97, 7/00, 89/04), Law on Pastures (“Official Gazette of RM” Nos. 3/98, 101/00), Law on Plant Protection (“Official Gazette of RM” Nos. 25/98, 6/00), etc.

The Law on Nature Protection provides for integrated protection both inside and outside protected areas. Namely, the Law stipulates that the use of nature outside protected areas is prohibited when that causes damage or destruction of biological and landscape diversity; degradation of soil and loss of fertility; damage or destruction of surface or ground geo-morphological features; water pollution or change in water regime; and air pollution. The protection of protected species is performed in the same manner, regardless of the area they are found in.

According to the Law on Forests, forest protection and growing outside protected areas is carried out in accordance with specific plans for forest growing and protection. The control over the implementation of those plans is under the responsibility of the State Forestry and Hunting Inspectorate within the Ministry of Agriculture, Forestry and Water Economy.

According to the Law on Environment and Nature Protection and Promotion (“Official Gazette of RM” No. 13/03 consolidated text), the Ministry of Environment and Physical Planning carries out continuous measurement and monitoring of the state of the land within protected areas and outside protected areas. Inspection supervision over the implementation of the Law is performed by the State Environment Inspectorate as a body within the Ministry of Environment and Physical Planning.

#### **c) For protected species**

Under the preceding legislation, the protection of species has been regulated in the following laws focusing mainly on the use of species: Law on Fisheries, Law on Hunting, Law on Forests, and Law on Pastures.

The Law on Nature Protection provides for integrated protection of species. Under the assumption that the use of plants, fungi and animals is carried out on the basis of the natural resources management plans, they shall contain measures for the conservation of ecosystem features, protection of bio-geographical characteristics of species and preservation of abundance and density of the population. The measures are intended to ensure the maintenance of the favourable preservation status of wild species.

Extermination of indigenous wild species, introduction of wild species in nature and reintroduction of wild species are considered criminal acts against nature.

**4. What are the major differences between your existing nature conservation legislation and EC nature conservation directives and what are the major difficulties you foresee for the approximation process?**

There are no differences between the existing national legislation and the EC nature conservation Directives.

Most of the relevant legal acts of the European Union concerning nature conservation have been transposed in the new Law on Nature Protection ("Official Gazette of RM" No.67/04), and the full transposition shall be achieved by the development and adoption of by-laws and other enforcement regulations required thereby.

Major difficulties foreseen in the process of the harmonisation of legislation include:

- Further development of by-laws to enable the implementation of the Law on Nature Protection (e.g. non-existence of a Red Book and Red Lists, protected areas management plans, etc.);
- Lack of continuous monitoring of the state of nature, both inside and outside protected areas and the non-existence of the national database on natural heritage.

Specific difficulties related to the implementation of the Law to be faced also include:

- Other priorities outweighing nature protection;
- Insufficient financial resources at the central level for nature protection purposes;
- Insufficient human resources in the area of nature management and protected areas management.

**5. Is there a system in place for the systematic monitoring of the conditions of forests (especially in relation to the effects of natural and anthropogenic stress factors)?**

Systematic monitoring of the status of forests in the Republic of Macedonia concerning the effects of natural and anthropogenic factors has been in place since 1978. It was carried out by the Reporting, Diagnosis and Prognosis Service. The Reporting, Diagnosis and Prognosis Centre is located at the Faculty of Forestry. The structure of experts employed in this Centre includes two entomologists, three phytopathologists and one employee in charge of fire prevention.

Under the guidance of the Faculty of Forestry, the Department of Forests and Woods Protection, a network of the so called "bio-indication points" has been established in the whole territory of the Republic of Macedonia for the purpose of forest health status monitoring. The assessment of the health status of forests is carried out in accordance with the methodology established in Field book 12 – assessment of the tree status, prescribed by the European Commission on Forests. Through this methodology, assessment is made of almost all abiotic and biotic factors affecting the health status of forests. Bio-indication points were established in the Republic of Macedonia in 1988, and reviewed in 1991. The need for their review and establishment of regular (annual) practice of their monitoring the status has been recognised.

The Reporting, Diagnosis and Prognosis System comprises the Ministry of Agriculture, Forestry and Water Economy, as a competent state administrative body, and the Public Enterprise (PE) for Forest Management "Makedonski Sumi" which is responsible for the management of the state owned

forests in the Republic of Macedonia, as an authorised entity, through its branch offices. Each year, the Reporting, Diagnosis and Prognosis Service, in cooperation with the Ministry of Agriculture, Forestry and Water Economy and the PE for Forest Management "Makedonski Sumi", prepares a report on the status of forests in terms of the occurrence of pests, plant diseases and forests drying, and proposes appropriate measures.

For the purpose of fire prevention, the PE for Forest Management "Makedonski Sumi" prepares annual operational plans for fire prevention and submits an annual report on fires occurred and damage done thereby.

Forest protection is also performed by the State Forestry and Hunting Inspectorate and by the Forest Police, both under the Ministry of Agriculture, Forestry and Water Economy.

The monitoring of forest conditions is carried out on the basis of the following laws and secondary legislation:

- Law on Forests ("Official Gazette of RM" No. 47/97, 7/00, 89/04);
- Law on Plant Protection ("Official Gazette of RM" No. 25/98, 6/00);
- Rulebook on the Operations of the Forest Police ("Official Gazette of RM" No. 50/98, 10/02);
- Rulebook on Special Measures for Forest Protection against Forest ("Official Gazette of RM" No. 69/01) and
- Decision for Declaration of Rare Tree Species ("Official Gazette of RM" No. 23/98);

The Law on Forests regulates forest growing, use and protection, where the protection of forests is an integrated and indispensable segment of the overall forest management. Protection of forests includes protection against: illegal acquisition and use, illegal cutting, fires, plant diseases and pests, cattle grazing, acorn collection, illegal collection of other forest products, and other forms of damaging forests.

With regard to the state and private forest management, the Assembly of the Republic of Macedonia adopts a General Forests Management Plan for a period of 20 years. On the basis of this Plan, the entities in charge of forest management adopt separate forest management plans for a period of 10 years. The separate plans specify the intensity of forest use, the manner of their protection, as well as measures required to improve the forest status. The use of forests is carried out according to their purpose and in a manner providing for their lasting preservation and increasing forest value, constant increase of their growth and yield, as well as conservation and enhancement of their useful functions. Separate plans are approved by the Ministry of Agriculture, Forestry and Water Economy.

According to the Law, the entities in charge of forest management are obliged to monitor the health status of forests, to undertake preventive measures against plant diseases, harmful insects and other pests, and to eradicate them in case of occurrence, as well as to undertake measures aimed at forests protection against forest fires and natural disasters.

The Ministry of Agriculture, Forestry and Water Economy, in consent with the Ministry of Environment and Physical Planning, identifies the rare tree species in forests, by Decision for the designation of rare tree species, thus placing them under special protection.

## **6. Is there a centralised system in place for the collection of data on all forest fires? Is there a strategy for the prevention of forest fires?**

There is a centralised system for the collection of data on all forest fires in the Republic of Macedonia.

**The Law on Fire Fighting Services** ("Official Gazette of RM" No.67/04) regulates the establishment of voluntary fire prevention societies and forest fire extinction units. The Law also regulates the management of forest fire extinction interventions, which is under the responsibility of territorial fire prevention units and of the forests management entities, in line with their operational plans. The said

units are obliged to keep specific records on forest fires, and the Protection and Rescue Directorate is obliged to manage the unique centralised system of data on forests (Article 33).

The Rulebook on Records Keeping on Fires ("Official Gazette of SFRY" No. 9/89) regulates the keeping of records on forest fires, defines the format of records and their content for each forest fire and the manner of reporting thereon.

According to the Rulebook on Specific Measures for Forest Protection against Fires ("Official Gazette of RM" No. 69/01), the data on forest fires is collected by 30 regional offices of the PE for Forest Management "Makedonski Sumi" and the legal entities in charge of forest management on a special data collection format for each forest fire. The data is processed by the PE for Forest Management "Makedonski Sumi" and submitted to the Ministry of Interior, Sector responsible for protection against fires and explosions, which manages the Central Data Collection and Processing System, and to the Ministry of Defence, Sector of Civil Protection. Under the Law on Protection and Rescue ("Official Gazette of RM" No. 36/04, 49/04), the two mentioned Sectors shall be transformed into the Protection and Rescue Directorate.

The formats are distributed to all branch offices and legal entities. Each branch office is staffed with a forest protection officer, who is obliged to fill in the formats by recording each forest fire, together with the accompanying data set, as required. On the basis of the data received on all forest fires in the Republic of Macedonia, the Ministry of Interior/the Directorate carries out an analysis of the number of forest fires, surface area affected thereof, the damage occurred, etc.

At present, there is no strategy for forest fire prevention in the Republic of Macedonia.

The Law on Protection and Rescue stipulates the obligation for the development of a National Strategy for Protection and Rescue for a period of five years, to incorporate the protection of forests against fires (Article 8). This National Strategy is adopted by the Assembly of the Republic of Macedonia. The final deadline for its adoption, stipulated in the Law, is June 2006. The Law also defines an obligation for the Government of the Republic of Macedonia and for the local self government units, to adopt annual action programmes for protection and rescue, which also incorporate protection of forests against fires (Article 9).

The Law on Forests ("Official Gazette of RM" No. 47/97, 7/00, 89/04) stipulates the obligations of forest owners and of the forests management entities to undertake preventive measures related to forest fires, depending on the degree of threat from fires, based on separate plans for forest management.

On the basis of the above Law, the Rulebook on Special Measures for Forest Protection against Fires ("Official Gazette of PM" No. 69/01) has been adopted. It stipulates the criteria for determining the degree of threat to forests caused by fires (Articles 3 and 4), as well as the measures for fire prevention, such as: establishment of fire prevention belts, placement of prohibition and warning signs, organisation of monitoring and reporting service, safety belts along public roads, etc. The Rulebook defines the obligation of owners of forests larger than 100 ha and legal entities in charge of forest management to adopt an annual operational plan for forest protection against fires.

## F. Industrial Pollution Control and Risk Management

### 1. What are the main features of the legislation concerning industrial emissions of pollutants into the air, water and soil, particularly emissions from large combustion plants (power above 50 M Wth)?

The EU Directive 2001/80/EC on the limitation of emissions of certain pollutants into the air from large combustion plants – the LCP Directive), has not been transposed directly into the Macedonian legislation.

The control over the pollution from business entities, particularly from large combustion plants, is regulated by the Rulebook on Maximum Permissible Concentrations and Quantities and Other Harmful Substances that may be Released into the Air from Individual Sources of Pollution ("Official Gazette of SFRY" No 3/90).

The Rulebook regulates the maximum permissible concentrations (MPC) related to gas emissions from combustion in a combustion plant up to 100 MW; gas emissions from combustion in combustion plants used for building heating and process heat production or steam production; and MPC of harmful substances from burners using solid fuels, coal briquettes, coke, of heat power above 50 MW, as presented in the Table below.

Solid fuel combustion plants		1.1 Coal, briquettes, coke, MPC in mg/m <sup>3</sup> in 7 % O <sub>2</sub> vol.		
Emitted substance or reference value		Heat power of combustion plant in MW		
		1 - 50	50 - 300	above 300
Smoke opacity number by JUS M.P.020		30	30	30
Particulate matter mg/m <sup>3</sup>		50	50	50
Carbon monoxide (CO) mg/m <sup>3</sup>		250	250	250
Sulphur oxides expressed as SO <sub>2</sub> mg/m <sup>3</sup>		2000	400	400
Emission content of sulphur (of the total quantity from grid burners or burning by dust)			60	10
Emission content of sulphur of the total quantity for burning in fluidized layer (%)*		15	15	10
Nitrogen oxides (NOx) expressed as NO <sub>2</sub> (mg/m <sup>3</sup> )		500	400	300
Gases of inorganic fluorine compounds expressed as HF (mg/m <sup>3</sup> )		30	30	15
Gases of inorganic fluorine compounds expressed as HCl (mg/m <sup>3</sup> )		200	200	100
For boilers up to 1 MW – limitations under JUS M.E6. 110-1978 apply		1.2. Wood briquettes – MPC in mg/m <sup>3</sup> in 11 % O <sub>2</sub> vol. in smoke gas		
Emitted substance or reference value		Heat power of combustion plants in MW		
		1 - 50	50 - 300	above 300
Smoke opacity number by JUS M.P.4020*		30	30	30
Particulate matter mg/m <sup>3</sup>		50	50	50
Carbon monoxide (CO) mg/m <sup>3</sup>		250	250	250
Nitrogen oxides (NOx) expressed as NO <sub>2</sub> (mg/m <sup>3</sup> )		500	400	300
Organic matter expressed as total organic carbon mg/m <sup>3</sup>		50	50	50
For boilers up to 1 MW – limitations under JUS M.E6. 110-1987 apply		2. Liquid fuel combustion plants MPC in mg/m <sup>3</sup> in 3 % O <sub>2</sub> vol.		
Emitted substance or reference value		Heat power of combustion plants in MW		
		1 - 50	50 - 300	above 300
Smoke number by JUS B.H. 8,270 of heavy burning oil		2	2	2
For all remaining burning oils		1	1	1
Carbon monoxide (CO) mg/m <sup>3</sup>		170	170	170
Nitrogen oxides (NOx) expressed as NO <sub>2</sub> (mg/m <sup>3</sup> )		350	250	150
Sulphur oxides expressed as SO <sub>2</sub> mg/m <sup>3</sup> - applicable to burning oils in accordance with JUS BHO 500		1700	400	400
Emission content of sulphur (of the total quantity)*			60	15
Gaseous inorganic fluorine compounds expressed as HF (mg/m <sup>3</sup> )		5	5	5
Gaseous inorganic fluorine compounds expressed as HCl (mg/m <sup>3</sup> )				



Heavy burning oil must not be used for plants up to 5 MW For boilers below 1 MW limitations under JUS M.E6. 120-1987 apply	3. Gas combustion plants MPC in mg in 3 % O <sub>2</sub> vol.		
Emitted substances or reference value	Heat power of combustion plants in MW		
	1 - 50	50 - 300	above 300
Smoke number by JUS B H 8-270	0	0	0
Particulate matter mg/m <sup>3</sup>	0.5	0.5	0.5
Carbon monoxide (CO) mg/m <sup>3</sup>	100	100	200
Nitrogen oxides (NO <sub>x</sub> ) expressed as NO <sub>2</sub> (mg/m <sup>3</sup> )	200	200	200
Source: Ministry of Environment and Physical Planning			

\* Applies only to facilities when the required MPC can not be achieved technically

The Rulebook, by its contents, does not comply in full with the EU Directive 2001/80/EC.

The legal grounds for the transposition of the LCP Directive have been established in the Law on Ambient Air Quality ("Official Gazette of RM" No. 67/04), Article 8, which defines the following as sources of pollution: installations used in technological processes and energy facilities (stationary sources); engines with internal combustion and fuels. Article 9 of the Law provides legal grounds for adoption of by-law to specify limit values for exhaust gases and vapour emissions from stationary sources.

The Draft Law on Waters establishes grounds for adoption of by-law to specify the maximum permissible concentrations that may be released into waters.

According to the Programme for Approximation of the National Legislation to the Legislation of the European Union and European Partnership Action Plan, the mentioned secondary legislation has been scheduled for adoption in 2005, in the framework of CARDS 2004.

In addition to the above, Article 25 of the Law on Ambient Air Quality ("Official Gazette of RM" No. 67/04) stipulates the obligation for the development of a National Plan for Ambient Air Protection, which should *inter alia* provide the following:

- undertaking of measures aimed at reducing the emissions from certain stationary sources of pollution;
- adoption of the necessary measures for minimisation and full elimination of negative effects on the quality of ambient air;

The Plan is adopted by the Government of the Republic of Macedonia at the proposal of the Ministry of Environment and Physical Planning (MEPP) for a period of eight years. For the purpose of the Plan implementation, the Government, at the proposal of the MEPP, adopts annual programme of measures for the achievement of the goals set in the Plan, including financial plan for the programme implementation. The MEPP is the competent body for the Plan implementation, and it is obliged to report to the Government on the Plan implementation every two years.

The Law stipulates the obligation for the adoption of programmes for ambient air pollution reduction and for ambient air quality improvement in the territories of the local self government units, in the zones and agglomerations where the levels of one or more pollutants have been found to exceed the quality limit values plus margin of tolerance or the value is between quality limit values and quality limit values plus margin of tolerance.

The Law obliges legal entities and natural persons that own or use installations that are sources of ambient air pollution to apply and finance the measures for emissions reduction specified in the relevant programmes and plans.

In line with EU Directive 96/61/EC on Integrated Pollution Prevention and Control, as transposed in the Draft Law on Environment, two types of IPPC permits have been prescribed, namely the A integrated environmental permit for activities listed under Annex 1 of the Directive and the B integrated environmental permit for the same activities, but with lower capacity. Installations with

designed power above 50 MW have been recognised as activities subject to the A IPPC permits, whereas smaller ones are subject to the B IPPC permits.

According to the Draft Law on Environment, each existing installation in the Republic of Macedonia involved in the activities subject to the IPPC regime is obliged to develop operational adjustment plans for achieving compliance with the IPPC requirements, to include a schedule for achieving such compliance.

The operational plans represent a set of activities distributed yearly, specifying all measures to be undertaken by operators in order to meet the requirements under IPPC, with the ultimate objective of obtaining an integrated environmental permit.

The MEPP works on the development of a Decree on Determination of Activities to be Subject to Integrated Environmental Permit, and Time Schedule for Operational Plans Submission. The Decree shall include the List of activities to be subject to IPPC regime of operation, as well as the schedule of application for permit for the achievement of compliance on the basis of an operational plan. The Decree is intended to enable gradual achievement of compliance with the IPPC requirements, taking into account the social and the economic criteria and level of development of individual sectors and installations.

Permits shall define specific operation conditions for each installation, the levels and the quantities of emissions that may be released in environmental media until standards are achieved and the individual terms for standards achievement for each installation, as well as the limits for the operational plans implementation, are provided.

The MEPP has developed an Inventory of installations in the Republic of Macedonia to be subject to the A permits. The Inventory includes around 10 installations covered by the LCP Directive and subjected to the A permitting regime. This figure comprises all energy generation installations in the Republic of Macedonia. Activities envisaged in the framework of CARDS 2004 shall provide the inventory of installations to be subjected to the B permitting regime.

The MEPP is the body competent for the issuance of the A permits, while the issuance of the B permits will be under the competence of the local self-government units, in cooperation with the MEPP.

Application for compliance permits will start on 01.01.2006, and close on 31.12.2008. According to the above Decree, the schedule of application has been elaborated according to the industry type, in six-month periods (time window). The deadline for the achievement of compliance with the IPPC standards is 2014, with a possibility for extension by five years only for installations requiring major investments.

After the expiry of the deadline for the application (2008), it is expected that all obligations deriving from the LCP Directive in the Republic of Macedonia will be listed, including the estimates of costs related to its implementation.

The IPPC Directive sets stricter standards than the LCP Directive with regard to not only air emissions, but emissions to all environmental media. It takes into account all other harmful impacts, obliges the operators of installations to apply self-monitoring and relates directly to the manner of operation in the installations themselves.

In order to avoid the possible overlaps and the introduction of softer environmental standards, the Draft Law on Environment excludes the possibility that an installation which is by definition a LCP installation is not a subject to the IPPC, i.e. is not to apply for the integrated environmental permit. Article 2 of the Draft Law on Environment specifies that in case the provisions of this or other law or other regulations specify the measures, standards and goals of environmental protection and improvement, the measures, the standards and the goals providing for the highest level of environmental protection and improvement shall apply. This ensures the application of highest

environmental standards, and the application of the “Principle of high level of protection” as stipulated in the Draft Law on Environment.

## **2. Is there a system of integrated pollution prevention and control (IPPC)?**

The Republic of Macedonia has initiated the establishment of the System of Integrated Pollution Prevention and Control (IPPC) by the transposition of the EU Directive 96/61/EC on Integrated Pollution Prevention and Control (IPPC) in the Draft Law on Environment. Three Chapters of the Draft Law refer to:

- Integrated environmental permits concerning the operation of installations causing impacts on the environment;
- General environmental audit; and
- Compliance permits based on operational plans.

In addition to the above, two by-laws related to IPPC have been drafted and are currently in the process of harmonisation by the relevant stakeholders, as follows:

- “Draft Decree on Determination of Activities Subject to Integrated Environmental Permitting with Time Schedule for Operational Plans Submission”, which contains a list of activities that are subject to IPPC regime of operation, as well as the schedule of application for Compliance Permit aimed at obtaining the Integrated Environmental Permit. The aim of the Draft Decree is to enable gradual achievement of compliance with the requirements under IPPC, taking into account the social and economic criteria and the level of development of individual sectors and installations. The Draft Decree includes eco-form specifying the level of charges payable for the integrated environmental permit. The decree will be adopted by the Government of the Republic of Macedonia.

- “Draft Rulebook on the Regulation of the Procedure for the A Integrated Environmental Permit and Compliance Permit with Operational Plan Issuance”, defining the procedure for application for integrated environmental permit and for compliance permit. It includes the following attachments: Application for integrated environmental permit and the form of integrated environmental permit, as well as Application for the compliance permit. The Rulebook will be adopted by the Ministry of Environment and Physical Planning.

The Draft Law on Environment introduces two types of integrated environmental permits. The first type concerns new installations, where the procedure has been fully harmonised with the EU Directive 96/61/EC, whereas the second type is the compliance permit, which establishes a basis for gradual achievement of compliance with the requirements under the IPPC by existing installations in the Republic of Macedonia. The ultimate objective of the compliance permit is the achievement of environmental standards and obtaining integrated environmental permit. Procedures for both types of permits are identical, except that the latter includes additional stage of negotiation with the relevant authority.

In the course of the drafting of the Draft Law on Environment and the relevant by-laws, the economic ability of the industry in the Republic of Macedonia has been taken into consideration, resulting in the introduction of the model of compliance permits with operational plans, in order to allow an optimal time required to achieve compliance with the IPPC Directive requirements. This model shall enable the industrial sector pay greater attention to the aspect of compliance with environmental requirements, as well as a mechanism to monitor the achievements.

The Draft Law on Environment stipulates the issuance of the A integrated environmental permits and compliance permits for installations performing activities listed under Annex 1 of the IPPC Directive 96/61/EC, and the B integrated environmental permits and compliance permits for installations performing activities listed under Annex 1 of the IPPC Directive 96/61/EC, but of lower scale than the one specified in the Directive. The Ministry of Environment and Physical Planning (MEPP) is the

competent body with regard to the A permits issuance. The issuance of the B permits shall be under the competence of the local self government units, in cooperation with the MEPP.

Existing installations shall apply for compliance permits with elaborated draft operational plan. Such operational plan shall contain the planned activities to be implemented by the operator each year. The period for application is three years, starting from 01.01.2006, and closing on 31.12. 2008. After the application, the MEPP negotiates the obligations contained in the draft operational plan with the installation operator, resulting in the definition of a period within which the norms related to the best available techniques (BAT) will be achieved and in the final operational plan. After the completion of this procedure, the installation obtains a Compliance permit, which is a condition for the installation's continued operation. With regard to the installations that are subject to the B integrated environmental permits, the term within which they are to achieve compliance with environmental standards and norms, which are less strict than the BAT standards, is defined.

In brief, the procedure of integrated environmental permitting and compliance permitting consists of the following phases:

The operator of the installation applies for integrated environmental permit or for compliance permit by elaborating an operational plan. Within 15 days, the MEPP notifies the operator of the possible deficiencies and the operator supplements the application. Then, the MEPP disseminates the application in the daily newspapers, inviting the public to express its comments and remarks with regard to the application. The concerned public, including the local self government units, may express their comments and opinions within 30 days. Before the expiry of this term, the local self government units may organise public debate on the application.

When the application refers to a compliance permit, two rounds of negotiations between the operator and the MEPP are organised, concerning the conditions proposed in the draft operational plan prepared by the operator and the period of adjustment.

After the finalisation of the procedure, the MEPP issues the Integrated Environmental Permit in case of new installations or Compliance Permit for existing installations.

The compliance permit specifies the conditions for the operation of the installation, as well as the term and timescale for the achievement of the obligations contained in the operational plans. Additionally, the permit specifies the limits for the implementation of operational plans. Operational plans are integrated parts of permits.

The entire procedure lasts 127 days, not including the time for the potential public debate and the delivery of additional data, if required.

The deadline for the adjustment of installation is in line with the timescale determined for the fulfilment of the obligations of the Republic of Macedonia arising from the Stabilisation and Association Agreement. The Draft Law on Environment stipulates that the operators are obliged to implement the operational plans within individual periods specified for each installation in its compliance permit, but not later than on 01.04.2014. Only in exceptional cases, the Government of the Republic of Macedonia may allow additional period for the implementation of operational plans, but not be longer than five years.

At least six months before the expiry of the deadline specified for the fulfilment of the obligations under the operational plans, i.e. before the achievement of the standards required to obtain integrated environmental permit, the operator submits to the MEPP an application for integrated environmental permit.

According to the Draft Law on Environment, new installations that shall start operating in the period between 01.01.2006 and 31.06.2007 will be able to apply immediately for integrated environmental permit or for compliance permit. After 31.06.2007, all installations shall be obliged to provide

integrated environmental permit prior to the initiation of the activity, unless the term specified in the timescale for applying for compliance permits has not expired yet.

In the period following 2002, as well as in the coming years, the Ministry of Environment and Physical Planning intends to carry out a package of activities, under the CARDS 2004, to enable the implementation and enforcement of this EU Directive. Related activities have also been envisaged under the European Partnership Action Plan. However, major difficulties are expected with regard to the B integrated environmental permitting, mainly due to the weak capacity of the local self government units in the domain of environmental management, which requires strengthening.

The Ministry of Environment and Physical Planning carries out active preparations towards the IPPC implementation, and the following activities have been completed under PHARE SOP 1999 for that purpose:

- Brochure on IPPC was issued with the purpose of introducing IPPC to the operators and the public with regard to the new system of operation of installations that are subject to IPPC;
- National Inventory of IPPC installations has been developed and includes 151 installations;
- General Guide to IPPC, intended mainly for operators, has been produced;
- Workshops on IPPC have been organized for the MEPP staff, as well as for industry and NGOs.

Activities scheduled to be implemented in the forthcoming two years include:

- Establishment of IPPC Division within the Directorate for Environment (within the MEPP);
- Implementation of a training programme on IPPC for the future staff of the IPPC Division, the staff of the State Inspectorate of Environment and the employees of the local self-government units of the;
- Between two and four Pilot Integrated Environmental Permits;
- Preparations and negotiations with other installations concerning the Pilot Integrated Environmental Permits;
- Elaboration of a Guide on IPPC procedure.

Part of the listed activities shall be implemented in the framework of CARDS 2004.

With regard to the abovementioned activities, external assistance shall be necessary to support the work of the Ministry of Environment and Physical Planning aimed at strengthening its own capacities, as well as the capacities of the local self government units. At the same time, it is necessary to build the capacity of local consultants that shall be able to bear the burden of the elaboration of operational plans. Finally, the assistance targeted at business entities shall be required to enable them to fulfil the obligations specified in the relevant operational plans, in a form of soft credit lines or technical assistance, aimed at meeting the high BAT standards.

### **3. Are there provisions relating to the participation of public or private enterprises in environmental auditing schemes?**

Yes. The Law on Environment and Nature Protection and Promotion ("Official Gazette of RM" No. 13/03 consolidated text) includes environmental audit. More precisely, the Law provides a basis for the application of the audit schemes defining that the Ministry of Environment and Physical Planning prescribes the ways of voluntary participation of the companies from industrial and services sectors into the environmental management and audit system (EMAS).

The Draft Law on Environment also regulates this field and obliges the Ministry of Environment and Physical Planning to support legal entities and natural persons performing economic or other activities, scientific and educational organisations and institutions, as well as state administrative

bodies, which organise the protection of the environment on voluntary basis, in compliance with the European environmental management scheme and environmental audits.

The Draft Law foresees that the Ministry of Environment and Physical Planning adopts special regulations to define the environmental management scheme and environmental audits. The adoption of this regulation will reinforce the implementation of the EU legislation concerning the environmental management scheme and environmental audits.

In addition, the Institute for Standardisation of the Republic of Macedonia has set up a Committee responsible for the development and adoption of environmental management and environmental audit standards in compliance with the ISO 14000 standards. The MKS ISO 14001 and the MKS ISO 14050 standards have been developed and adopted so far. There are several companies in the Republic of Macedonia that have been certified by international certification companies in accordance with ISO 14001.

#### **4. Are there measures providing for an eco-labelling system?**

Yes. The Law on Environment and Nature Protection and Promotion ("Official Gazette of RM" No.13/03 consolidated text) prescribes adoption of special regulations to define the procedures and criteria on the basis of which certain products can be labelled as "eco-products" and sold as such. The by-laws have been drawn up and are now in the process of consultation with other authorities and stakeholders. They transpose the European Regulation No. 1980/ 2000 of the revised scheme for EU eco-labelling. This by-law does not refer to food products, drinks or pharmaceutical products.

In 2003, the Government of the Republic of Macedonia decided to introduce the eco-labelling in the Republic of Macedonia and authorised the Ministry of Environment and Physical Planning to set up a commission for eco-labelling and selection of the most suitable eco-label. The Government decided that the same eco-label will be used for organic products, only with different written message.

The Eco-Labelling Commission was set up within the Ministry of Environment and Physical Planning and is composed of the representatives of several Ministries, industrial sector, the Chamber of Commerce, research institutes and consumers. Eco-label will be awarded by the Ministry of Environment and Physical Planning, upon the proposal of the Commission.

The public tender was published in 2003 and the Ministry of Environment and Physical Planning and the Ministry of Agriculture, Forestry and Water Economy selected the eco-label logo. The logo will be awarded by the two Ministries, for organic products and for eco-products.

In addition, the Law on Organic Agricultural Production ("Official Gazette of RM" No. 16/04) regulates the admission of organic agricultural products, food products and feeding stuffs products. The Law also refers to the imported products labelled as organic, bio or eco, as well as domestic products produced in compliance with the organic production methods. These methods will be prescribed by means of special regulations based on this Law.

The Draft Law on Environment takes over the eco-labelling provisions from the old law and foresees the adoption of secondary legislation which will prescribe the procedure, the conditions for and the manner in which it will be awarded and used. The Draft Law also foresees the adoption of special regulations which will define the environmental criteria for certain groups of products.

#### **5. How is the issue of industrial risks and accidents dealt with and controlled by public authorities?**

The control of industrial risks and accidents is regulated by the Draft Law on Environment, the Chapter on Prevention and Control of Disasters Involving Hazardous Substances, in which the EU Directive 96/82/EC – SEVESO II has been transposed.

In this Chapter, the Draft Law on Environment defines the activities conducted in the production, transport and storage systems for which the operators are required to undertake all precautions necessary to prevent disasters and to control their effects on the environment and human health, as well as their obligation to inform the Ministry of Environment and Physical Planning (MEPP). By means of the adoption of the relevant by-laws, the Law authorises the MEPP to limit the presence of hazardous substances used in the above mentioned activities, as prescribed by Directive 96/82/EC.

Protection and rescue in the Republic of Macedonia are generally regulated by the Law on Protection and Rescue ("Official Gazette of RM" No. 36/04, 49/04), which defines protection and rescue as a unified system of detection and prevention of disasters and elimination of their consequences.

The activities that the competent authorities of the Republic of Macedonia may undertake in case of industrial risks and accidents may be classified in three groups:

- a) Preventive activities
- b) Control activities
- c) Activities during and after the disaster.

Preventive measures include the activities undertaken in the process of planning for protection against industrial risks and accidents, i.e. for protection and rescue.

According to the Draft Law on Environment, the operators are obliged to prepare a report for the MEPP on the systems involving hazardous substances three months ahead of their establishment and before the new systems are put into operation. On the other hand, with regard to the existing installations, these reports should be submitted no later than a year after the Draft Law becomes effective, including the reports on substantial changes in installations.

Operators are required to prepare reports on the safety measures, providing evidence for the MEPP that all necessary measures and activities for disaster prevention and safety system operation have been undertaken. The report should be made available to the public and it should be periodically analyzed and updated, at least every five years. As for the existing installations, safety measures should be prepared within two years after the entry into force of the Draft Law becomes.

The Draft Law on Environment also takes into account the cumulative effect. By means of the information presented by the operators the MEPP determines which systems are liable to disasters or in which systems the consequences of a possible disaster can become more serious due to their unfavourable location and their proximity to each other, or due to the amount of hazardous substances found therein. In such cases, the MEPP is obliged to facilitate the exchange of information so as to enable the system operators to take into account the nature and the possible extent of the whole disaster in the measures and activities for disaster prevention, the safety management systems, and the internal emergency plans.

The operator is obliged to prepare an Internal Emergency Plan which will incorporate all measures to be taken on the system itself in case of a disaster and to deliver it to the local self-government units (LSGU). The MEPP prescribes the contents of the said internal plans.

On the basis of the internal plan, the competent authority of LSGU prepares External Emergency Plan. The operators and the local self-government bodies are obliged to make the plans available to the public.

Preventive measures against industrial accidents and risks are also highlighted in point 13.1 of the Application for Integrated Environmental Permit, or Permit of Compliance with Operational Plans, which requires a description of the "Risk Prevention and Control System." Further on, according to 14.1.2 the "Measures for eliminating potential risks to environment pollution and human health caused by an installation after it has stopped operating are needed if such risks do exist." The Application form has been designed by the MEPP and has been submitted for discussion to all

relevant entities. This Application form is incorporated in the Rulebook (for more details see [22 II F P2](#)).

Measures envisaged in safety plans must be taken into account in the process of spatial and urban plans development.

The Draft Law also considers the problem of long-range transboundary pollution in case of disasters with regard to the systems located in the territory of the Republic of Macedonia in the vicinity of international borders. In that case the plans referring to those systems should be presented to the concerned states.

Article 2 of the Law on Protection and Rescue ("Official Gazette of RM: No. 36/04, 49/04) defines the term "other accidents" as disasters caused by certain negligence and errors during everyday business and other activities, as well as by the lack of attention in handling hazardous materials and substances during their production, storage and transportation. Article 39 of the Law requires that legal entities that may cause environmental disasters are obliged to assess the danger and design a protection and rescue plan, to establish and maintain a timely warning system, as well as emergency services and forces.

Article 24 of the Law on Protection at Work ("Official Gazette of RM" No.13/98, 21/98, 33/00, 29/02), obliges employers to legally regulate the evacuation and rescue procedure in case of disasters, explosions, etc. Article 26 requires the employers to provide theoretical training for workers on how to react in case of disasters.

Concurrently, the Law on Protection and Rescue requires that the Government of the Republic of Macedonia develops a protection and rescue plan which incorporates preventive and operational measures and protection and rescue activities and procedures. On the basis of this plan, the LSGU are obliged to adopt a protection plan for the area of their municipality. The two plans are to be developed on the basis of the risk assessment of exposure to accidents.

The plans under the Law on Protection and Rescue, the Law on Protection at Work and the emergency plans under the Draft Law on Environment are to be integrated in unified plans which will comply with the requirements prescribed by the three laws and will incorporate them in a single system for protection against accidents.

In order to ensure life and health protection, as well as the protection of the environment and material goods, the Law on Protection from Explosive Materials ("Official Gazette of SFRY" No. 4/78, 10/78, 51/88, 36/90 and "Official Gazette of RM" No. 12/93) regulates the production, transport, sale, use and storage of explosive materials. This Law defines the specific technical requirements to be met in the production process; the obligation to organise internal control; the obligation to construct the relevant facilities on sites designated in spatial plans; to develop projects for protection against fire and explosive materials, as well as to possess fire extinguishing equipment. Explosive materials can be stored in warehouses especially approved and constructed for this purpose, with designed protection zones, which must be identified in the relevant urban plans. The Ministry of Interior issues consents to all permits for warehouse construction.

In order to ensure life and health protection, as well as the protection of the environment and material goods, the **Law on Storage and Protection against Inflammable Liquids and Gases** ("Official Gazette of SFRY" No.15/76, 51/88, 19/90 and "Official Gazette of RM" No 12/93) regulates the storage and related activities and the production and transport of flammable liquids and gases through pipelines. The law also defines what liquids and gases are flammable and what activities should accompany storage.

The control activities of the authorities carried out at the time of industrial risks and accidents include the activities related to the control and revision plans, plans for the testing and organisation of exercises to ensure their successful implementation. These activities also include inspection supervision conducted by the authorities.



According to the Draft Law on Environment, the operator and the competent authorities are required to analyze and test internal and external plans at certain intervals, not longer than three years, and revise them, if necessary, taking into consideration the latest technological development.

According to the Law on Protection and Rescue, Protection and Rescue Directorate is established in the Republic of Macedonia, authorised to control and supervise the unified protection and rescue system.

The activities during and after the disaster refer to the organisational activities that the authorities carry out during and after the disaster.

The Directorate establishes General Headquarters to manage the protection and rescue activities in the Republic of Macedonia.

Specific activities are described which need to be implemented in order to ensure surveillance, reporting and organisation required to carry out the protection and rescue process. The operative functions, protection and rescue measures, as well as the activities for the elimination of the consequences are also defined.

The activities and measures that are to be undertaken by the state administrative bodies, the bodies of the LSGU, as well as by all legal entities and natural persons are identified by special protection and rescue plans.

The Law on Protection and Rescue requires that Protection and Rescue Forces are formed as national and local forces located in major towns of the Republic of Macedonia. These forces consist of permanent and reserve officers. The national protection and rescue forces are activated by means of a decision taken by the Government of the Republic of Macedonia, whereas the local forces by a decision taken by the LSGU.

The Draft Law on Environment defines the data that the Operator must present to the competent authority upon accident occurrence.

In accordance with the Law on Protection at Work, the employer is obliged to check and examine the work tools upon accident occurrence.

## ***G. Genetically Modified Organisms and Chemicals***

### **1. Describe your policy towards genetically modified organisms. What systems are in place to implement this policy? What are the main features of the legislation concerning biotechnology?**

There is no general law in the Republic of Macedonia which would regulate the field of genetically modified organisms.

The Ministry of Environment and Physical Planning is competent body for the implementation of the Convention on Biological Diversity (CBD) ratified by the Republic of Macedonia ("Official Gazette of RM" No. 54/97). As an obligation deriving from this Convention, the National Strategy and the Action Plan for Biological Diversity Protection have been developed (and adopted in January 2004). As for the genetically modified organisms, the Action Plan indicates the need for a specific Law on Genetically Modified Organisms and the ratification of the Cartagena Protocol on Biosafety, signed by the Republic of Macedonia in 2000.

In addition to the above, the preparation of the national frame for biosafety is considered a priority within the biodiversity and habitats section of the National Strategy for Integration of the Republic of Macedonia in the EU.

By financial support of the Global Environmental Facility (GEF), The Ministry of Environment and Physical Planning commenced the implementation of the Project on Development of National Framework for Biosafety in compliance with the Cartagena Protocol.

So far, the National Overview for Biosafety has been completed and a work group has been set up to prepare the Draft Law on Genetically Modified Organisms to incorporate issues considering the limited use of genetically modified organisms, intentional release into the environment, distribution for sale, import, export and production of genetically modified organisms and their products.

In compliance with the Programme for Approximation of the National Legislation to the Legislation of the European Union and the Action Plan for European Partnership, the adoption of the law on genetically modified organisms is envisaged for 2007.

There are several laws in the Republic of Macedonia which directly or indirectly regulate certain issues in the field of genetically modified organisms.

The genetically modified organisms are also discussed in the environmental information availability section of the Draft Law on Environment.

The Law on Nature Protection ("Official Gazette of RM" No. 67/04) defines the measures and activities necessary for preventing the negative impacts of the genetically modified organisms on the preservation and sustainable use of biological diversity, human health and the environment.

The Law on Safety of Foodstuffs and Products and Materials in Contact with Foodstuffs ("Official Gazette of RM" No. 54/02) describes the food which contains or consists of genetically modified organisms as "food produced by innovative technology, not available for wider consumption." The Law defines vegetable food and the products made of vegetable components the seeds of which have suffered genetic modification as unsafe. The Law prohibits the production and sale of unsafe food.

The Law on Pharmaceutical Drugs, Supplementary Treatment Substances and Medical Devices (Official Gazette of the RM No. 21/98) requires that the external packaging and labelling of the medicines containing genetically modified organisms bear instructions for use as well as a warning with regard to the degree of exposure of the health care personnel and other persons handling it. The instructions should be in compliance with the warnings related to the environment protection. Drugs containing genetically modified organisms should be kept in external packaging, ensuring safety during the storage period and especially after their being opened or reconstructed under aseptic conditions.

It is particularly important for the Republic of Macedonia that cooperation among different sectors is established and that an appropriate institutional system for legislation implementation is set up, both of which are to be regulated by the new law on genetically modified organisms.

There is no consistent documentation which would indisputably reflect the stand of the Republic of Macedonia on biotechnology.

Different aspects of biotechnology are treated in different acts, such as:

The Law on Plant Protection ("Official Gazette of RM" No. 25/98, 6/00) treats biotechnology as part of the integrated protection which entails the implementation of measures in the field of biotechnology, allowing for a minimum use of chemicals for plant protection, thus rendering damages caused by pests to an economically acceptable level.

With the aim of effectively implementing the measures for plant protection and the environment and nature protection, as well as preventing the appearance and spread of pests on plants, the plant owners are required to apply integrated protection, including biotechnology as its part.

The Law on Pharmaceutical Drugs, Supplementary Treatment Substances and Medical Devices (Official Gazette of the RM No. 21/98) provides for full application of the licensing procedure and distribution for sale of drugs obtained by biotechnology. With the aim of achieving a high level of safety when using additional medicines and medicine accessories, the competent administrative body may impose specific measures for examining drugs obtained by biotechnology.

The manufacturer, holder of the license to sell: the first series; every series of a drug liable to control, including products obtained by biotechnology; as well as every series of imported drugs, distributes the abovementioned on the basis of a license issued by the competent administrative body. Every series of drugs of biological origin (products obtained by biotechnology) is subject to specific control in the National Laboratory.

In order to ensure protection of seeds, planting material and propagating material, the Law on Seeds, Seedlings and Propagating Material and Sort Recognition, Approval and Protection ("Official Gazette of RM" No. 41/00) requires that several certificates are obtained: on quality, in compliance with the International Seed Testing Association (ISTA); on identity, in compliance with the conditions prescribed by the International Organization for Post-control Tests on Variety Identity (OECD), and on health appropriateness, in compliance with the conditions prescribed by the International Plant Protection Convention.

In this respect, the following are the priorities for the development of biotechnology and biosafety:

- amendment of the existing legislation
- development of national research institutes
- provision of means for incorporating the research committees, industry, legal entities and other relevant stakeholders into the biosafety system.

It is particularly important that further steps are undertaken in future to enhance the training of researchers by introduction of educational programmes and research projects.

## **2. What are the main features of the legislation concerning chemical substances?**

It is to be indicated at this point that the legislation of the Republic of Macedonia does not recognize the term "chemical" (nor chemical substance) as defined by the EU legislation. There is no framework law on chemicals in the Republic of Macedonia which would regulate the management of chemicals (including chemical substances) in line with the EU legislation.

The legislation of the Republic of Macedonia regulates the management of poisons, plant protection substances, fertilizers, explosives, flammable liquids and gases, hazardous substances and products, substances that deplete the ozone layer, persistent organic pollutants, etc.

The need for developing the Strategy for Management of Chemicals is defined with the National Strategy for Integration of the Republic of Macedonia into the European Union, while the adoption of the Law on Chemicals is in line with the Action Plan for European Partnership and the Programme for Approximation of the National Legislation to the Legislation of the European Union envisaged for 2007.

The primary preparatory activities for the Law on Chemicals began in November 2004 with a workshop on chemicals organized in the frameworks of the Regional Environmental Reconstruction Program (REReP). The aim of the workshop was to present the relevant EU legislation in the field of chemicals, as well as the experiences of EU Member States. Within the same project, the analysis of

the existing legislation of the Republic of Macedonia in this field will be carried out, and suggestions for its harmonization with the requirements of the EU Directives will be made.

Distribution of competences concerning the management of chemicals among the involved institutions is not clearly defined. The state administrative bodies competent for the management of chemicals in different phases of their life cycle, as well as those responsible for keeping records of their sale, import and export, carry out these activities with a low degree of integrity in their approach and their coordination and cooperation.

The existing Macedonian legislation in this field is not regulated in accordance with the requirements of the EU legislation. This situation will be eliminated with the adoption of the Law on Chemicals.

Macedonian legislation treats poisons in much more detail, although the term is not in conformity with the EU terminology.

The management of poisons is regulated by the following primary and secondary legislation acts:

- The Law on Poison Production ("Official Gazette of SFRY" No. 18/76)
- The Law on Trade in Poisons ("Official Gazette of SFRY No. 13/91)
- The Law on Carriage of Dangerous Goods ("Official Gazette of SFRY" Nos. 27/90, 45/90 and "Official Gazette of RM" No.12/93)
- The Law on Precursors ("Official Gazette of RM" No. 37/04)
- Rulebook on Technical, Sanitary and Hygienic Conditions of Organizations which Trade in Poisons ("Official Gazette of SFRY" No. 9/86)
- Rulebook on Labelling Toxic Substances Entering the Domestic Market ("Official Gazette of SFRY" No. 32/86)
- Rulebook on Criteria for Poisons Classification in Groups and Method for Determining Toxicity Level of Particular Poisons ("Official Gazette of SFRY" No. 79/91)
- Rulebook on the Manner of Destruction of Unused Poisons and Materials Used for Packaging Poisons and the Procedure of Poisons Withdrawing from Sale ("Official Gazette of SFRY" No. 7/83)
- Inventory and Organization for Toxicological Evaluation and Determination of Poisons Efficiency ("Official Gazette of SFRY" Nos. 57/82, 7/84, 58/85, 18/87, 43/88)
- Decision for Establishing the List of Poisons that can be Released for Trade ("Official Gazette of SFRY Nos. 59.82, 7/84, 9/86, 18/87, 33/88)

The above laws and regulations regulate the preparation, manufacturing, storage and transport of poisons, as well as their sale, prohibition of sale, and supervision of their manufacturing and trade.

With the aim of ensuring that precursors are not used for illegal production of drugs and psychotropic substances, and that life and health protection as well as environment protection against negative impacts of precursors are provided, the **Law on Precursors** ("Official Gazette of RM" No. 37/04) regulates the system for supervision and control of manufacturing and trade of precursors.

Plant protection materials used in agriculture are regulated with the following primary and secondary legislation acts:

- Law on Plant Protection ("Official Gazette of RM" No. 25/98, 6/00)
- Rulebook on Permit Issuing for Plant Protection Preparations Circulation ("Official Gazette of the Republic of Macedonia" No. 65/01 and 99/02)
- Rulebook on the Requirements for Legal Entities Concerning the Equipment, Tools and Premises Used for Plant Protection Substances Testing ("Official Gazette of the Republic of Macedonia" No. 54/01)
- Rulebook on the Requirements for Legal Entities Concerning the Tools, Equipment and Premises Used in Production, Wholesaling and Retailing of Plant Protection Chemicals and on Contents and Bookkeeping of the Register ("Official Gazette RM" No. 54/01)
- Rulebook on the Labelling Procedure for Plant Protection Preparations prior to Circulation and Use ("Official Gazette of RM" No. 54/01)

- List of Plant Protection Materials with Permits for Distribution ("Official Gazette of RM" No.58/98)

The **Law on Plant Protection** prescribes the monitoring and the measures for the prevention and control of pests, procedures for the allocation of funds for plant protection, and production, distribution, storage and control during distribution.

Preparation of a new Law on Plant Protection and Other Substances for Plant Protection, made possible with a financial support of the EU, is underway. It will be designed to fully regulate the distribution of plant protection materials, permitting, packaging, labelling, storage, sale and use of plant protection materials. This law will merge the provisions of the Law on Trade in Poisons (in the part on the estimations concerning active substances) and the Law on Food Safety (in the part on residues monitoring and the control of products of vegetable origin). This law is being prepared with the aim of ensuring harmonization with the provisions of the EU regulation 91/414/EEC. After the adoption of the Plant Protection Law, the relevant secondary legislation provisions will be prepared.

The **Law on Quality and Quality Control of Fertilizers** ("Official Gazette of SFRY" Nos. 10/73, 51/88, 20/90 and "Official Gazette of RM" No. 83/92) regulates the application of chemical compounds (organic and inorganic) and their mixtures, their distribution, declaration, storage and control, as well as the registration of fertilizers which are not on standard lists.

The Rulebook on Methods of Collecting, Preparing and Delivering Samples for Examination or Analysis, on Unified Methods of Examination or Analysis for the Register and for Declaration of Fertilizers ("Official Gazette of SFRY" No. 13/75) and the annexed List of Standard Fertilizers incorporated in the Rulebook are the secondary legislation acts additionally regulating this issue.

The Law on Pharmaceutical Drugs, Supplementary Treatment Substances and Medical Devices (Official Gazette of the RM No. 21/98) defines the conditions for and principles of registration – approval of pesticides in veterinary health care.

With the aim of ensuring life and health protection and protection of the environment and tangible goods, the **Law on Protection from Explosive Materials** ("Official Gazette of SFRY" Nos. 4/78, 10/78, 51/88, 36/90 and "Official Gazette of RM" No.12/93) regulates the production, transportation, distribution, use and storage of explosives.

With the aim of ensuring life and health protection and protection of the environment and tangible goods, the **Law on Storage and Protection against Inflammable Liquids and Gases** ("Official Gazette of SFRY" Nos. 15/76, 51/88, 19/90 and "Official Gazette of RM" No.12/93) regulates storage and storage related activities, production and transportation of flammable liquids and gases through pipelines. The Law also defines flammable liquids and gases, as well as storage and storage related activities.

The **Law on Trade in Explosives** ("Official Gazette of SFRY" Nos. 30/85, 6/89, 53/91 and "Official Gazette of RM" No 12/93, 31/93) regulates the sale of explosives.

The Law on Carriage of Dangerous Goods ("Official Gazette of SFRY" No. 27/90, 45/90 and "Official Gazette of RM" No 12/93) regulates the transport conditions and transport related activities for hazardous materials (preparation of materials to be transported, the loading, unloading and manipulation on the road) as well as supervision over the law enforcement.

By authorising the Ministry of Environment and Physical Planning to issue permits, the **Decision for Classification of Goods with regard to Forms of Export and Import** ("Official Gazette of RM" No. 91/04) regulates import and controls the use of substances classified in the Annexes to the Montreal Protocol, i.e. the equipment containing the same chemicals as well as other dangerous substances having negative impacts on the environment.

The **Draft Law on Environment** generally regulates the prohibition, limitation and control of export and import of certain hazardous substances and products that may have negative impact on the

environment. With respect to the collection of information on hazardous substances, the Draft Law on Environment in its Chapter on Prevention and Control of Accidents Involving Hazardous Substances requires that every person being an owner of hazardous substances or participating in activities in connection with the production, transport or storage of hazardous substances in the prescribed quantities, prepares a report on safety measures and emergency plan to specify the measures to be undertaken in case of an accident.

In addition, the Ministry of Environment and Physical Planning is obliged to keep a register of all pollutants and their characteristics.

The **Law on Nature Protection** ("Official Gazette of RM" No. 67/04), by means of a separate article, limits the use of plant protection substances.

The **Law on Waste Management** ("Official Gazette of RM" No. 68/04, 71/04) regulates the compulsory recording and classification of hazardous waste, as well as its appropriate packaging and labelling. A separate chapter defines the procedures for handling certain types of hazardous waste.

With the aim of reducing pollutants release and reducing or eliminating the release of priority pollutants, the **Draft Law on Waters** discusses emission control and water pollution in a separate chapter. Water protection, i.e. discharge of wastewater or other harmful materials and substances into the recipient media, is regulated by issuing permits for discharges into water under the conditions prescribed in this Law.

The Republic of Macedonia is signatory to the Vienna Convention on Ozone Layer Protection ("Official Gazette of SFRY" No. 1/90), the Montreal Protocol on Ozone Depleting Substances ("Official Gazette of SFRY" No. 16/90) and the four Amendments to the Montreal Protocol, the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal ("Official Gazette of RM" No. 49/97), as well as the Stockholm Convention on Persistent Organic Pollutants ("Official Gazette of RM" No. 17/04). According to the Constitution of the Republic of Macedonia, international agreements ratified in compliance with the Constitution constitute part of the internal legal order and cannot be changed with another law. Legal judgments are made in compliance with the Constitution, laws and international agreements ratified in accordance with the Constitution.

### **3. Is there an official register of chemicals which are on your market? Are the "new" chemical substances identified? Is there a Competent Authority planned for the notification of "new" substances?**

An official register of chemicals fulfilling the requirements of the European legislation has not been established in the Republic of Macedonia yet.

What is regulated in the Republic of Macedonia, however, is the registration of poisons. In accordance with Article 48 of the Law on Trade in Poisons ("Official Gazette of SFRY" No. 13/91), the Ministry of Health decides on the list of poisons to be released for trade in the Republic of Macedonia. Such a decision is published in the Official Gazette of the Republic of Macedonia.

In accordance with Article 47 of the Law on Plant Protection ("Official Gazette of RM" Nos. 25/98, 6/00), the Ministry of Agriculture, Forestry and Water Economy publishes the List of Plant Protection Materials approved for circulation on the territory of the Republic of Macedonia ("Official Gazette of the Republic of Macedonia" No. 17/99).

There has been no record in the Republic of Macedonia of any active substances – plant protection materials prohibited under the EU Directive 79/117/EEC. Therefore, the list does not contain any of those.

The Draft Law on Environment authorizes the Ministry of Environment and Physical Planning to establish and regularly update the unique register of pollutants and their characteristics.

As for the identification of “new” chemical substances, and in accordance with the existing legislation in the Republic of Macedonia, only identification of poisons is regulated, which is compulsory. Registration of poisons is approved by the Poisons Commission, under the Ministry of Health, which on the basis of previous laboratory analysis of poisons issues a decision on the categorization of the poisonous chemical substance in the poisons group.

There is no competent authority in the Republic of Macedonia for the notification of “new” substances.

The new Law on Chemicals will regulate the registration of “new” chemical substances, evaluation of new and the existing ones, administration of the register of chemicals, exchange of information thereon, production conditions, distribution for sale and use, classification, labelling and packaging of chemicals based on risk assessment as well as the conditions, responsibilities and measures for appropriate chemicals handling.

The National Strategy for integration of the Republic of Macedonia in the European Union prescribes that Strategy for Chemical Management is developed. On the other hand, the development of a new Law on Chemicals is planned for 2007, which is in line with the Action Plan for European Partnership and the Programme for Approximation of the National Legislation to the Legislation of the European Union

#### **4. Are there classification packaging and labelling rules for chemicals (for both substances and preparations)?**

The classification rules for packaging and labelling of chemicals in the Republic of Macedonia are not in conformity with the requirements of the EU regulations, primarily because the national regulations do not define the term “chemicals” in compliance with the EU terminology.

The national regulations regulate the classification rules on the packaging and labelling of poisons. They are based on two general laws: The Law on Poison Production (“Official Gazette of SFRY” No. 18/76) and the Law on Trade in Poisons (“Official Gazette of SFRY” No. 13/91).

The **Law on Poison Production** stipulates that produced poisons must have a declaration and each poison packaging must be accompanied by instructions on poison use, materials used for protection in case of poisoning, information on first aid methods and use of anti-dote in case of poisoning, as well as on destruction of packaging and unused poisons.

The **Law on Trade in Poisons** regulates the classification of poisons in three groups on the basis of their degree of toxicity (poison evaluation), as well as the declaration contents and instructions on use.

The **Rulebook on Labelling Toxic Substances Entering the Domestic Market** (“Official Gazette of SFRY” No. 32/86) prescribes the danger, warning and notification signs, and the type, shape, colour, dimensions, size and symbols used to label poisons.

The **Rulebook on the Way of Destruction of Non-used Poisons and Containers Used for Poisons Packaging and the Manner of Poisons Withdrawal from Trade** (“Official Gazette of SFRY” No. 7/83), regulates the destruction, i.e. removal of non-used poisons and packaging used for poisons, as well as poisons withdrawal from trade.

The **Law on Carriage of Dangerous Goods** (“Official Gazette of SFRY” No. 27/90, 45/90 and “Official Gazette of RM” No.12/93) regulates how hazardous materials are labelled for transport.

The **Draft Law on Environment** regulates the instructions on products concerning their impact on the environment. According to the Draft Law, all products, semi-products and raw materials, as well

as their packaging, may be released for trade only if their label states the risk of environmental pollution and negative effects on human health in compliance with the law. Distribution of hazardous chemical substances or products in packaging that is not solid or fully and appropriately closed or labelled is prohibited.

Before selling or importing the producers and importers of chemical substances or products are obliged to provide data on their characteristics and impacts on the basis of which they may be classified, packed and labelled in the manner prescribed by the Law or regulations adopted on the basis of the Law.

The Ministry of Environment and Physical Planning prescribes the methods of pollutants classification, their packaging form and structure and the materials compulsorily used for packaging, shapes and contents of labels, visibility of warning signs, and the contents of the declaration accompanying chemical substances and products.

The **Law on Plant Protection** ("Official Gazette of RM" No. 25/98 and 6/00) prescribes that plant protection materials may be put in circulation only in their original packaging provided by the producer, labelled in compliance with the regulations if they are classified as dangerous. The materials must bear instructions for use, methods of their destruction and destruction of their packaging, as well as measures for environment and nature protection. They must be accompanied by an appropriate declaration.

**The Rulebook on the Labelling Procedure for Plant Protection Preparations prior to Circulation and Use** ("Official Gazette of RM" No. 54/01) fully describes the provisions of the Law on Plant Protection concerning information on producers, permits, determination of degree of toxicity–classification, danger signs, precaution measures, concentration/ doses, and limits for proper use.

More precise rules on the classification, packaging and labelling of chemicals are to be prescribed in the new Law on Chemicals, planned to be adopted in 2007.

#### **5. Is there a registration/authorisation procedure for pesticides, i.e. plant protection products (agricultural pesticides) and/or biocides (non-agricultural pesticides)?**

Only officially registered plant protection products may be put into circulation in the Republic of Macedonia, in compliance with the registration/authorisation and circulation procedure applicable thereto. This procedure is regulated in the Law on Plant Protection ("Official Gazette of RM" Nos. 25/98, 6/02), while the classification of poisons and toxic products by their toxicity degree is determined by the Law on Trade in Poisons ("Official Gazette of SFRY" No. 13/91).

Registration of biocides and the conditions under which they are used for public hygiene purposes are regulated in the Law on Trade in Poisons. The Ministry for Health is competent for the classification of active substances and products.

The Ministry of Health and the Ministry of Agriculture, Forestry and Water Economy are the state administrative bodies competent to conduct the procedure for the registration of the plant protection products.

According to the existing regulations, the registration procedure is implemented in two phases. The Ministry of Health is competent for the first phase. In this phase, the registration is implemented in accordance with the provisions of the Law on Trade in Poisons and the Rulebook on Determination of Toxicity Degree-Classification ("Official Gazette of SFRY" No. 79/91). The Law regulates poisons and plant protection products classified as poisons. According to the Law, poisons cannot be put into circulation unless classified as poisons and enlisted as poisons put into circulation. After poisons have been examined by the institutions authorized by the Ministry of Health and after an expert commission composed of experts from related fields had launched their assessment/opinion, the Ministry of Health issues a decision for the classification of that plant protection product in/out of the poisons group.



The Ministry of Agriculture, Forestry and Water Economy is competent for the second phase, i.e. the phase in which plant protection products are registered and permits for their circulation and use are issued.

The registration procedure begins with issuing an import permit for the sample for official examination of the plant protection preparation. The applicant submits the plant protection preparation for examination of its physical and chemical characteristics and for vegetation tests concerning its biological efficiency (in compliance with the EPPO standards) conducted by research institutions authorised by the Minister of Agriculture, Forestry and Water Economy.

On the basis of the laboratory findings and reports on the efficiency of plant protection products, as well as on the basis of the evaluation of presented documents, the Commission for Plant Protection Products, as an expert advisory body, proposes that a permit for circulation and application of the plant protection product is issued. The permit is valid for five years, or ten years for a familiar active plant protection material-substance already in use for ten years which has proved efficient and has not caused any damage to plants, people or the environment.

The registration procedure for plant protection products have been described in detail in the following rulebooks:

- The Rulebook on Plant Protection Product Circulation Permitting ("Official Gazette of the Republic of Macedonia" Nos. 65/01, 99/02)
- Rulebook on the Requirements for Legal Entities Concerning the Tools, Equipment and Premises Used for Plant Protection Products Examination ("Official Gazette of the Republic of Macedonia" No. 54/01).
- Rulebook on the Labelling Procedure for Plant Protection Preparations prior to Circulation and Use ("Official Gazette of RM" No. 54/01)

## **6. Are there data collection and risk assessment procedures for chemicals?**

There is no unique data collection and risk assessment procedure for chemicals in conformity with the EU regulations.

In the Republic of Macedonia, the state administrative bodies participate in different phases of chemical management, while data collection for chemicals is carried out in different phases of their life cycle (release, consumption, control, registration, etc.). However, there is lack of integrated chemicals management.

The Draft Law on Environment prescribes that the Ministry of Environment and Physical Planning establishes and maintains a register of pollutants and their characteristics.

As for the risk assessment of chemicals, no national procedure has been prescribed.

The health risk assessment is regulated under the World Health Organization Guidelines of 2000.

The Law on Chemicals will specify more detailed rules for the data collection and risk assessment procedure and the establishment of a body competent for chemicals.

## **7. Is there an export notification scheme for banned or severely restricted chemicals?**

In the national legislation, there is no unique export notification scheme for banned or severely restricted chemicals in conformity with EU regulations.

National legislation regulates the poisons export procedure (the term "poison" is not in compliance with EU terminology), implemented in compliance with the Law on Trade in Poisons ("Official Gazette of SFRY" No. 13/91), by the issue of export permits. Export permits are issued by the Ministry of Health, upon prior granting of import permit by a competent institution of the country of import.

The Law on Trade in Poisons bans the sale and use of: aldrine, dieldrin, hexachlorobenzene, hexachlorocyclohexane, heptachlorine, chlordane, chlorodimeform, leptophos, sodiumfluorineacetate, lead arsenate, and their preparations, as well as benzene and preparations with benzene contents higher than 1 %.

The permit form contains the following information: import permit number and the issuing institution, the exporter, importer, poison quantity, transport operator, vehicle data, and route of the vehicle, including border crossings.

The precursors export and transport is identically regulated by the Law on Precursors ("Official Gazette of RM" No. 37/04)

The Rulebook on Plant Protection Product Circulation Permitting ("Official Gazette of the Republic of Macedonia" Nos. 65/01, 99/02) regulates export of banned or severely restricted plant protection pesticides (substances).

The Draft Law on Environment designates the Ministry of Environment and Physical Planning as the competent state administrative body for listing hazardous and harmful substances, as well as substances and products the import, export transit in/from/through the Republic of Macedonia of which is banned or stringently controlled.

The export notification scheme for banned or severely restricted chemicals will be regulated by the Law on Chemicals and the need for establishment of a notification competent body has already been recognized. The adoption of the Law is planned in 2007.

#### **8. When does the Republic of Macedonia expect to accede to the Rotterdam Convention on Prior Informed Consent (PIC) and the Stockholm Convention on Persistent Organic Pollutants (POPs)?**

Republic of Macedonia has not initiated the procedure for accession to the Rotterdam Convention. The accession of the Republic of Macedonia to the Rotterdam Convention on Prior Informed Consent is related to the preparation of the Strategy for Chemical Management and the adoption of the Law on Chemicals, which will provide legal framework for the implementation of the Convention provisions.

Completion of the Strategy for Chemical Management is foreseen in the National Strategy for Integration of the Republic of Macedonia in the European Union. The adoption of the Law on Chemicals, in accordance with the Action Plan on European Partnership and the Programme for Approximation of the National Legislation to the Legislation of the European Union, is envisaged for 2007.

Republic of Macedonia signed the Stockholm Convention in 2001. The implementation of the project "Enabling activities to facilitate early action on the implementation of the Stockholm Convention on Persistent Organic Pollutants (POPs) in the Republic of Macedonia," financed by the Global Environmental Facility and implemented through the UNIDO, is in its final stage.

One of the aims of the project was to accelerate the procedure for the ratification of the Convention and the Republic of Macedonia ratified the Convention on Persistent Organic Pollutants in March 2004 ("Official Gazette of RM" No.17/04).

#### **9. What is the state of implementation of the Montreal Protocol for the protection of the ozone layer?**

Having ratified the Vienna Convention for the Protection of the Ozone Layer ("Official Gazette of SFRY" No.1/90, taken over by means of succession in 1994) and the Montreal Protocol on Substances that Deplete the Ozone Layer ("Official Gazette of SFRY" No.16/90, taken over by means of succession in 1994), the Republic of Macedonia prepared the National Programme for the

elimination of substances that deplete the ozone layer (1996), thus undertaking first steps towards the reduction and/or elimination of substances that deplete the ozone layer.

The Programme is a strategic document with clearly defined guidelines for the reduction and final elimination of halogenated carbons.

By preparing the Programme the Government of the Republic of Macedonia demonstrated readiness to deal with global issues, in particular stratospheric ozone protection.

The Programme describes the existing use, consumption, import and export of substances in the Republic of Macedonia, inclusive of the year 1996.

The Programme identifies the priorities in the elimination of the ozone-layer depleting substances and the exact issues requiring urgent responses.

The National Programme also establishes the institutional coordination framework. The Ministry of Environment and Physical Planning is the executive body authorized to set up the National Ozone Layer Protection Office.

With the aim of implementing the Montreal Protocol, the Ozone Layer Protection Office was set up in 1997 with the financial support provided by the Multilateral Fund for Montreal Protocol through the UNIDO. The Office is responsible for the activities in the following fields:

- control and monitoring of import, export and consumption of ozone depleting substances;
- project preparation and provision of sufficient financial resources for the implementation of the national activities concerning ozone layer depletion;
- coordination of projects on replacement, reduction and elimination of ozone depleting substances;
- reporting to international organizations participating in the Protocol implementation on the advancement of the programme activities;
- initiation of legislation preparation in connection with control, reduction and elimination of import, export and consumption of ozone depleting substances;
- introduction of the relevant stakeholders and the public to the problem of ozone layer depletion and initiation of their involvement into the activities.

The Ministry of Environment and Physical Planning, assisted by the Ozone Layer Protection Office, has reduced more than 90 % of the consumption of ozone depleting substances in the Republic of Macedonia, thus fulfilling the Montreal requirements targeted for 2007.

ODSs*	ODP	ODP**tons/year								
		1995	1996	1997	1998	1999	2000	2001	2002	2003
CFC-11	1.000	464.80	420.00	418.00	7.00	8.80	7.12			
CFC-12	1.000	64.70	41.00	69.10	70.84	183.07	39.60	39.58	34.07	44.53
CFC-113	0.800						0.02			
CFC-115	0.600					0.03	4.53	11.84	0.07	8.01
Halons 1211	3.000			1.29						
Halons 1301	10.000	3.00	3.00	3.24						
CCl4	1.100		4.00	0.02	0.09	0.05	0.04		0.01	
HCFC-22	0.055	28.00	42.00	33.20	22.71	19.56	89.71	188.34	69.34	108.38
HCFC-141b	0.110		1.00		20.96	0.96	0.47		0.96	
MeBr	0.700		20.00	20.00	21.50	45.40	38.95	33.20	8.87	
Total (MT tons)		560.50	531.00	544.85	143.10	257.87	180.44	272.96	113.32	160.92
Total (ODP tons)		561.04	511.82	539.22	96.54	224.90	81.75	80.28	44.25	55.30

Source: Ministry of Environment and Physical Planning, -Ozone Layer Protection Office

\*ODSs (ozone depleting substances)

\*\*ODP tons – amounts of consumed substances that deplete the ozone layer (MT) multiplied by the value of the ozone depletion potential (ODP)

The Ozone Layer Protection Office conducted activities aimed at public awareness raising, thus making the public aware of the ozone layer depletion problem and directly involving certain groups.

In compliance with the Montreal provisions for monitoring the import, export and consumption of substances that deplete the ozone layer, a system for continuous monitoring of the sale of these compounds has been set up, for the purpose of which specific software has been developed. With this, the obligations imposed by the Protocol have been accomplished, conditions in the country are monitored, and the preparation of reports for the Multilateral Fund, the UNIDO, the Ozone Secretariat with UNEP and other international bodies is facilitated.

With regard to the cross-border distribution of ozone depleting substances classified in the Annexes to the Montreal Protocol, and to the equipment containing such substances, companies must obtain an import/export permit from the Ministry of Environment and Physical Planning.

The table below shows the ratified amendments to the Montreal Protocol.

Act	Adopted on	Ratified by the Republic of Macedonia	Official Gazette of the Republic of Macedonia
Vienna Convention	22 March 1985	Succession from SFRY	"Official Gazette of SFRY" 1/90
Montreal Protocol	16 September 1987	Succession from SFRY	"Official Gazette of SFRY" 16/90
London Amendment	27-29 June 1990	4 June 1998	"Official Gazette of RM" 25/98
Copenhagen Amendment	25 November 1992	4 June 1998	"Official Gazette of RM" 25/98
Montreal Amendment	15-17 September 1997	9 August 1999	"Official Gazette of RM" 51/99
Beijing Amendment	29.11-03.12.1999	23 January 2002	"Official Gazette of RM" 13/02

**10. Is there a scheme, including a national competent authority, for the protection of laboratory animals as required by Directive 86/609? Has the Council of Europe Convention ETS 123 on the protection of laboratory animals been ratified and implemented?**

The Republic of Macedonia has not established a complete system for protection of laboratory animals as required by Directive 86/609/EEC on the protection of animals used for experimental and other scientific purposes, nor has it designated a national competent authority for the protection of laboratory animals.

The European Convention for the Protection of Vertebrate Animals Used for Experimental and other Scientific Purposes ("Official Gazette of RM" No. 13/02) was ratified by the Republic of Macedonia in 2002, including the Amendment to the Protocol following its revision of 1998, adopted by the Council of Europe ("Official Gazette of RM" No. 13/03). The Republic of Macedonia was apprehensive of the implementation of certain articles of the Convention, in particular Article 17, paragraphs 1, 3 and 4 (animal marking procedures, keeping records of unmarked animals and procedure identification); Article 21, paragraphs 1 and 2 (application of the procedure for using the following animals: *Mus musculus*, *Rattus norvegicus*, *Cavia porcellus*, *Mesocricetus auratus*, *Canis familiaris* and animal care obligations, especially concerning primates); and Article 27, paragraphs 1 and 2 (collection of statistical data). The Convention entered into force in the Republic of Macedonia on 01.08.2004.

In accordance with the Law on Veterinary Health Care ("Official Gazette of the Republic of Macedonia" No. 28/98), the Veterinary Directorate as a body of the Ministry of Agriculture, Forestry and Water Economy, is authorized to ensure animal well-being (prevention of unnecessary suffering and torturing, protection against animal exposure to unnecessary pain and injuries). According to Article 24, paragraph 8, animal torturing is prohibited when they are bred, kept, used and trained. Paragraph 9 also specifies that scientific research on animals can be conducted only in health care institutions and medical centres, as well as in veterinary, pharmaceutical and other institutions, and only if animals are not exposed to torture.

At present, there is no specific legal act to regulate specific provisions ensuring animal well-being, corresponding to the European Union legislation, including the protection of vertebrate animals used for experimental or other purposes.

According to the Action Plan of the Republic of Macedonia for European Partnership, the Law on Animal Welfare is to be passed by the end of 2005, and the by-laws are to be adopted in 2006, which will ensure the regulation of this area.

The following institutions of the Ss. Cyril and Methodius" University use laboratory animals in their study programmes: the Faculty of Natural Sciences and Mathematics, the Institute of Biology, the Faculty of Medicine, and the Faculty of Veterinary Medicine in Skopje. The Ministry of Education and Science coordinates the activities on data collection concerning the number and type of laboratory animals used for experimental and other scientific purposes in scientific institutions of the Republic of Macedonia.

The Veterinary Institute of the Faculty of Veterinary Medicine, carries out all activities concerning the protection of animals used for experimental and other scientific purposes. The Faculty is authorised for the implementation of all activities in connection with the use of animals in experiments related to the development, manufacture, quality effectiveness and safety testing of drugs, foodstuffs and other substances or products, as well as the protection of the natural environment in the interest of human health and welfare.

The Institute for Cattle Breeding in Skopje, a public scientific institution, breeds vertebrate animals used for research purposes within the framework of the National Breeding Programme for developing nucleus for dairy breeds and for identification and collection of indigenous domestic animals (cows and sheep). The research is carried out as a part of domestic projects, financed by the Ministry of Agriculture, Forestry and Water Economy in the Republic of Macedonia. Common standards and procedures are used in these types of research.

## **H. Noise**

### **1. Is there a general noise abatement act or policy? What are the main features of the noise control policy (emission standards, planning standards)?**

In the Republic of Macedonia, the noise control is regulated by several laws and by-laws:

- **Law on Harmful Noise Prevention ("Official Gazette of SFRY" No. 21/84, 10/90 and "Official Gazette of RM" No.62/93)**

This is the general law regulating protection against noise. Article 4 of the General Provisions and Chapter 2 "Conditions and Measures for Noise Prevention" of this Law determine the rights and obligations of legal entities and natural persons in terms of protection against harmful noise, as well as the conditions and measures for noise prevention and its abatement in the living environment.

Noise prevention and abatement are ensured by spatial and urban plans, selection of technology, preparation of investment plans and technical documents for the construction of facilities, installations and devices that produce noise.

The Law does not include specific standards for the maximum permissible noise level in the living environment.

The Law does not regulate emission standards or standards on harmful noise planning for different noise sources, such as motor vehicles, aircrafts, rail traffic, construction machines, household appliances and other noise sources.

- **Decision on Determining the Cases of and Conditions for Regarding the Harmful Noise as Disturbing to Citizens (“Official Gazette of RM” No. 64/93)**

This Decision was adopted on the basis of the Law on Public Peace and Order Disturbance (“Official Gazette of SFRY” Nos. 25/72, 29/83, 34/83, 51/88, 19/90, and “Official Gazette of RM” No. 26/93).

Article 3 of the Decision stipulates the maximum permissible noise level in the premises of buildings in which peace and order are required during night and day, while Article 4 stipulates the maximum permissible noise level in areas where peace and order are required during night and day.

- **Order on Compulsory A-Testing of Motor Vehicles with Minimum Four Wheels (Homologation) with regard to Noise (“Official Gazette of RM” No. 16/97)**

The Order is in line with Article 21 of the Law on Regulation of Technical Requirements for Products and Conformity Assessment (“Official Gazette of RM” No.55/02).

Item 5 of the Order contains a table of permissible noise levels caused by different types of vehicles subject to homologation.

- **Rulebook on General Measures and Norms for Protection at Work against Noise in Working Facilities (“Official Gazette of SFRY” No. 29/71)**

The Rulebook determines the permissible noise levels, values of the sound pressure level of the noise and the permissible time of exposure to noise.

- **Rulebook on Standards and Norms for Spatial Planning (“Official Gazette of RM” No. 2/02, 50/03)**

Article 49 of the Rulebook defines the distance from the edge of the road to the residential area (green belt). In order to ensure protection against noise and air pollution, when planning new roads, residential areas are to be built away from roads, the minimum distance from the side of the road to the residential area being:

- |                            |                   |
|----------------------------|-------------------|
| - National roads           | 50 meters (20 m.) |
| - Regional roads           | 40 meters (15 m.) |
| - Local roads              | 20 meters (10 m.) |
| - Main streets             | 20 meters (5 m.)  |
| - Venue streets            | 20 meters (3 m.)  |
| - Service streets          | 10 meters (3 m.)  |
| - Residential area streets | 5 meters (3 m.)   |

The values in brackets denote distances in cases of urban revitalization, i.e. road reconstructions.

In cases of existing structures and facilities, when the provision of green belts for noise protection is not possible, noise reduction fences should be planned.

- **The Law on Tourism and Catering Industry (“Official Gazette of RM” No. 23/95, 33/00, 25/02, 48/02, 38/03)**

According to Article 5 of the Law, the providers of catering and tourist services must present evidence of the fulfilment of requirements related to noise protection conditions.

- **Rulebook Amending the Rulebook on Minimum Technical Requirements for Catering and Tourist Operations and Requirements for Classification of Tourist Facilities (“Official Gazette of RM” No.59/95, 19/96, 38/97, 57/97, 41/04)**

According to Article 15-v, disco clubs may play music with the maximum noise level of 35 decibels after 1 a.m.

- **Law on Catering Industry (“Official Gazette of RM” No. 62/04)**

Article 6 of this Law prescribes that the fulfilment of the conditions for noise protection prescribed in the Law is necessary for performing catering services.

- **Law on Sanitary and Health Inspection (“Official Gazette of RM” No. 19/95)**

According to the provisions of this Law, the State Sanitary and Health Inspectorate is competent to supervise all noise sources which could be harmful to human health and to undertake appropriate measures, such as:

- ban on the construction, extension and reconstruction of building structures or on use of noise sources unless appropriate conditions for noise protection have been fulfilled;
- order on the elimination of faults of noise sources followed by a request for the initiation of misdemeanour procedure before competent body if the order is not observed;
- provision of prevention measures for noise elimination.

The following standards are used for noise measurement and noise protection:

Noise and noise insulation are measured and demonstrated through prescribed methods and instruments for sound level measurements and appropriate filters in accordance with the requirements of the International Electro technical Commission IEC – publications 179, 225, 651 and 804, as well as ANSI S 1.4 standards.

ISO 3746 standard is also used.

The existing national standards (measuring methods) are not harmonized with the European norms.

The spatial planning standards described in “The Environment” part of the Spatial Plan of the Republic of Macedonia, require that, in accordance with the planning provisions, the renovation, revitalization of regions and noise prevention are to be facilitated with specific plans and programs for noise protection.

The Draft Law on Environment, which is a framework law, regulates noise in several of its parts:

- Protection of the media and the areas of the environment is achieved by undertaking measures and activities for protection from harmful impacts, including noise and vibrations;
- The right to access to environmental information is exercised with reference to all information in written, visual, audio, electronic or any other form, in which noise is included.
- The National Environmental Action Plan addresses noise protection issues.
- The Local Environmental Action Plans address protection against noise and vibrations resulting from business and other activities.
- Within its supervision the State Environment Inspectorate has the right to verify whether transportation means that do not fulfil the requirements prescribed for emissions of mobile sources of pollution and noise are manufactured or imported.
- Inspectors of the Environment supervise the implementation of protection measures against harmful noise.

The Programme for Approximation of the National Legislation to the Legislation of the European Union and the Action Plan for European Partnership foresee adoption of the Law on Harmful Noise Prevention and by-laws for noise control. These activities are coordinated by a work group established within the Ministry of Environment and Physical Planning. The law will incorporate EU Directives referring to noise, in which the Council Directive on the Assessment and Management of Environmental Noise 2002/49/EC of 25 June 2002 is of primary importance. So far, the analysis of differences between the existing national legislation and EU legislation has been completed.

The Law on Harmful Noise Prevention and the secondary legislation acts on noise control, as well as emission and planning standards, are to be adopted by the end of 2006.

**2. Which noise sources are covered by this legislation, in particular what is the situation as regards road, rail, aircraft, construction plant and equipment, industry?**

Article 2 of the Law on Harmful Noise Prevention ("Official Gazette of RM" No. 21/84, 10/90 and "Official Gazette of RM" No. 62/93 ) covers all types of noise: all installations, devices, machines, transportation means and appliances producing noise in the environment. However, it does not contain precise provisions for their control and treatment.

The Order on Compulsory A-Testing of Vehicles on Four Wheels (homologation) with Respect to Noise ("Official Gazette of RM" No. 16/97) defines the limit levels of noise for all vehicles with minimum four wheels.

In compliance with Article 143 of the Draft Law on Air Aviation, an aircraft using the Macedonian air space must hold a Noise Loudness Certificate during take-off, flight and landing, issued by the Civil Aviation Authority on the basis of a previously obtained opinion by the Ministry of Environment and Physical Planning (MEPP). A foreign aircraft will not be allowed to use the Macedonian air space if noise loudness certificates and gas emission certificates cannot be presented. The maximum allowed level of noise during take-off, flight and landing is prescribed by the Ministry of Environment and Physical Planning.

The future Law on Harmful Noise Prevention will cover all sources of noise, provide foundations for by-laws on noise control standards and create an institutional framework.

***I. Civil Protection***

**1. Which administrative bodies (Ministries, agencies, etc.) are responsible for developing the civil protection policy?**

According to the existing laws and regulations, the following administrative bodies are competent for developing civil protection policy: The Assembly of the Republic of Macedonia, the Government of the Republic of Macedonia, the Ministry of Defence and the bodies of the local self-government units. At present, there is a special Sector within the Ministry of Defence responsible for the implementation of the civil protection policy.

According to the Law on Protection and Rescue ("Official Gazette of RM" No. 36/04, 49/04), protection and rescue are assigned a special status, beyond the authority of the defence. Under the Law, the Protection and Rescue Directorate is established as an independent state administrative body authorized to prepare, organize and implement the policy and activities for protection and rescue of people and material goods in the country. According to the Law, the Protection and Rescue Directorate takes over the Civil Protection Sector within the Ministry of Defence and the Fire Protection Sector within the Ministry of Internal Affairs.

According to the Law on Protection and Rescue, the Assembly of the Republic of Macedonia, adopts the National Protection and Rescue Strategy of the Republic of Macedonia for a period of 5 years, upon the proposal of the Government of the Republic of Macedonia.

The Government of the Republic of Macedonia adopts the Annual Protection and Rescue Action Programme including general procedures for implementing the National Protection and Rescue Strategy. The Government also adopts the Protection and Rescue Plan, including the preventive and operational measures and activities, as well as the protection and rescue procedures. This Plan is



founded on the Assessment of Danger Posed by Natural Disasters, Epidemics, Epizootologic, and other disasters.

The bodies of the local self-government units, in cooperation with and upon prior obtained opinion by the Protection and Rescue Directorate, adopt protection and rescue plans for their territory. The role of the Directorate is to ensure harmonization of these with the protection and rescue documents prescribed under the national plan.

The remaining state administrative bodies, as well as some other agencies and bodies, within their basic competences and activities, play a logistic role and participate in planning and organizing the civil protection, in compliance with the Civil Protection Plan and the current needs. The competences of these bodies are founded by certain laws, such as: the Ministry of Interior (The Law on Fire Fighting Services – “Official Gazette of RM” 67/04, the Law on Storage and Protection against Inflammable Liquids and Gases – “Official Gazette of SFRY” No. 15/76, 51/88, 19/90, and “Official Gazette of RM” 12/93, and the Law on Protection from Explosive Materials – “Official Gazette of SFRY” No. 4/78, 10/78, 51/88, 36/90 and “Official Gazette of RM” 12/93), the Ministry of Environment and Physical Planning (Draft Law on Environment), and the Ministry of Agriculture, Forestry and Water Economy, the Ministry of Transport and Communications, and the Ministry of Health. The system also includes other agencies and legal entities, such as: Hydro Meteorological Directorate, Institute for Earthquake Engineering and Engineering Seismology, Republic Institute for Health Protection, Red Cross of the Republic of Macedonia, certain public enterprises and faculties within the Universities in the Republic of Macedonia.

## **2. What is the general approach and organisation as regards civil protection?**

The general approach to and organisation of the civil protection so far has been regulated by the Defence Law (“Official Gazette of RM” No. 42/01, 5/03), following the principles of massiveness and engagement of all state administrative and business entities, including citizens, with the obligation of establishing appropriate units for civil defence.

These units were non-operational and inert and were activated by a mobilization procedure. They were effective only in cases of very serious accidents. The National Headquarters of Civil Protection and the respective Regional Headquarters of civil protection established cooperation and acted simultaneously with line ministries, the Army and other entities. In order to ensure protection and rescue, manage and direct the activities of all participants during the application of the protection and rescue measures, the Headquarters conduct data collection and analysis and report on the consequences of accident and the measures undertaken for their elimination.

Currently, the civil defence consists of professional and reserve structures.

The general approach towards the civil protection and its organisation in the Republic of Macedonia is determined by the Law on Protection and Rescue (“Official Gazette of RM” No. 36/04, 49/04), which reforms the current civil protection system.

According to the Law on Protection and Rescue, protection and rescue are of public interest and are to be organised as a single system for detecting and preventing disasters, as well as eliminating their consequences.

Apparently, in order to ensure protection and rescue, protection and rescue units are formed as Protection and Rescue Forces. The Protection and Rescue Forces include the National and Territorial Protection and Rescue forces. National forces are formed to operate in a region of a certain number of self-government units, which according to their natural and geographical features constitute a unit. National forces as regional cover 30 regions. The national protection and rescue forces are composed of quick response teams founded by the Protection and Rescue Directorate. The teams are formed in accordance with different specialization fields, and their type, number, personnel, and equipment are determined by means of a decision of the Government of the Republic of Macedonia. The teams are composed of the Directorate employees, experts from the state

administrative bodies and other public offices and citizens – experts, who sign contracts for participating in the work of the teams.

The Territorial Protection and Rescue Forces are formed to operate in the territory of self-government units and are formed by self-government units, trade companies, public companies, institutions and services in their territories.

The National forces are formed by the Government of the Republic of Macedonia.

The type, size and organisation of the protection and rescue forces are determined by the Government of the Republic of Macedonia.

The protection and rescue forces are composed of a permanent and a reserve structure. Permanent structure is composed of the employees of the Protection and Rescue Directorate and municipal professional fire units.

Reserve structure consists of the military reservists, unless engaged in army activities, as well as citizens who must participate in the activities of the protection and rescue forces.

The methods of supplying staff for the reserve structure of the protection and rescue forces and the equipment requirements are to be regulated by the Government of the Republic of Macedonia by means of a decree.

The protection and rescue forces are mobilized on the basis of a decision made by the Director of the Protection and Rescue Directorate. The mobilization includes activities and procedures that put the organised protection and rescue forces in state of emergency.

The Director of the Directorate decides whether the national protection and rescue forces will be engaged. The territorial forces, on the other hand, are under the authority of the respective self-government unit.

In cases of disasters and other accidents, the Protection and Rescue Forces operate as a single protection and rescue system, activated by their founding body.

The Protection and Rescue Forces are managed by protection and rescue headquarters. The Protection and Rescue Directorate sets up the General Headquarters consisting of experts appointed by the Government, which is under the authority of the Director of the Directorate. The General Headquarters reports to the Government of the Republic of Macedonia. The Directorate also organises the work of regional organisational units with regional headquarters managing the regional national protection and rescue forces. The methods of work and decision making of the General Headquarters are regulated by the Government of the Republic of Macedonia, while regional headquarters are regulated by the Director of the Protection and Rescue Directorate.

### **3. Are there specific measures aiming at protecting the environment in the case of a disaster?**

Environment protection is incorporated in the protection and rescue system of the Republic of Macedonia and is regulated by the Law on Protection and Rescue ("Official Gazette of RM" No. 36/04, 49/04). According to this Law, protection against natural disasters, epidemics, epizootics, epiphytotics and other disasters is accomplished by undertaking certain organisational, technical and other measures, and application of technical and other means for immediate individual and collective protection of people, animals, plants, estates, cultural heritage and the environment against their consequences. Simultaneously, rescue is defined as the undertaking of measures and activities for protecting people at risk, animals, plants, estates and cultural heritage against the consequences of accidents. The protection and rescue activities are applied in the process of citizens' protection, as well as the protection of natural resources, flora and fauna, goods of public welfare and objects and buildings of special cultural and historical importance.

The Chapter on Prevention and Control of Disasters involving Hazardous Substances of the Draft Law on Environment defines in detail the environment protection in case of disaster, for the purpose of which the EU Directive 96/82/EC, known as SEVESO II, has been transposed.

The Draft Law on Environment determines the manufacturing, transport and storage activities with regard to which installation operators are obliged to undertake all the measures necessary for disaster protection and control of their impacts on the environment and human health, as well as their obligation to inform the Ministry of Environment and Physical Planning thereon. The law authorizes the Ministry to prescribe the quantities of hazardous substances by means of a separate act, in compliance with EU Directive 96/82/EC.

Operators are required to prepare an internal emergency plan prescribing measures that are to be undertaken within the system in case of a disaster and to deliver it to self-government units. The content of internal plans is prescribed by the Ministry of Environment and Physical Planning.

On the basis of the internal emergency plan, the competent body of a self-government unit elaborates the External Emergency Plan. The operators and self-government units are obliged to make these plans available to the public.

The protection and rescue plans adopted by the competent bodies stipulate measures for environment protection during accidents, depending on the risk assessment and the anticipated conditions, to be undertaken by the entities involved in the protection and rescue system.

According to the Law on Protection and Rescue, legal entities whose activities may endanger the environment are obliged to set up and maintain, on their own expenses, an early warning system and emergency services and forces, and to proportionally finance the training of the self-government units, depending on the scale and level of risk caused by their business activity.

The Fire Protection Law ("Official Gazette of the Republic of Macedonia" No. 67/04) prohibits devices, equipment and fire protection means using substances harmful for the environment and the ozone layer. The Ministry for Environment and Physical Planning, in cooperation with the Protection and Rescue Directorate publishes a list of substances, as well as the criteria for application, storage, release and destruction of the substances used for fire protection, which endanger the environment and the ozone layer.

Segments of the Spatial Plan of the Republic of Macedonia also encompasses the environment with respect to protection and rescue of people and material goods.

#### **4. Does the civil protection organisation include a component for international co-operation and if so, what is the nature of this?**

The protection and rescue system in the Republic of Macedonia set up with the Law on Protection and Rescue ("Official Gazette of the Republic of Macedonia" 36/04,49/04) includes aid delivery to other countries struck by major natural disasters, epidemics, epizootics, epiphytotics and other accidents, as well as receiving aid from other countries.

The international cooperation of the Republic of Macedonia is accomplished by sending humanitarian protection and rescue aid to other countries and by organising training, exercises and humanitarian activities for the protection and rescue forces abroad.

The international cooperation includes receiving humanitarian aid and help from the protection and rescue forces of other countries. With the aim of eliminating the impacts of major disasters that cannot be prevented and the impacts of which cannot be mitigated by national protection and rescue forces, the Government makes a decision to engage international protection and rescue forces or the

forces of the collective safety and defence system at the request of the Commander of the General Headquarters.

In their protection and rescue activities, local self-government units may establish cross-border cooperation with municipalities they share borders with. The manner of this cooperation is determined by the Government of the Republic of Macedonia.

The same Law authorises the Protection and Rescue Directorate to plan and conduct the international protection and rescue cooperation, and to organise exercises and participation in collective protection and rescue systems outside the territory of the Republic of Macedonia.

So far, the international civil protection cooperation has developed through the Individual Partnership Programme of the Republic of Macedonia with NATO (NATO-IPP Individual Partnership Programme), as well as within the Third Working Table of the Stability Pact, in which the Republic of Macedonia is a part of the Disaster Preparedness and Prevention Initiative for SEE (DPPI).

Within the framework of the SEDM process – Southeastern Europe Defence Ministerial Process for Defence Cooperation in Southeastern Europe, the Republic of Macedonia actively participates in the SEESIM (South Eastern Europe Simulation Network) project by taking part in the joint exercises. In addition, it is a signatory to the Agreement on founding the CMEP – Civil Military Emergency Planning ratified by the Assembly of the Republic of Macedonia in 2004. This cooperation enables the improvement of standard operative procedures used when requesting or offering international aid.

In addition to the above, the international cooperation includes contribution to the Committee of Challenges of Modern Society within NATO (CCMS – NATO) and, as a member of the group of Southeastern European Defence Ministers (SEDM), participation in the South East European Simulation exercises (SEESIM).

Additional cooperation has been established with: UNICEF, Senior Civil Emergency Planning Committee (SCEPC – EAPS format), NATO – Civil Protection Committee (CPC), especially in the fields of warning and detection systems (GOEWDS – Group of Experts on Warning and Detection System) and aid cooperation in humanitarian and natural disasters (EADRCC - Euro Atlantic Disaster Response Coordination Centre).

## **5. Are there specific strategies or measures aimed at protecting the population from disasters?**

The national protection and rescue concept is regulated by the Law on Protection and Rescue ("Official Gazette of RM" No.36/04, 49/04). The Law foresees the development of Protection and Rescue National Strategy which is now in its preparatory phase. Other complementary protection and rescue documents to be drawn up include the Action Programme, Assessment, Plan as well as methods of implementing the organisation and the capacities of the protection and rescue forces and resources.

Guidelines on the population protection against disasters are also presented in the Spatial Plan of the Republic of Macedonia ("Official Gazette of RM" No. 39/04), under the following expert studies:

- Guidelines for protection against war destructions,
- Protection measures against natural disasters,
- Protection measures against technical and technological accidents,
- Conditions concerning the occurrence of seismic and technical and technological disasters and other accidents and protection against those.

The Law on Protection and Rescue determines the protection and rescue measures encompassing measures for the accommodation of endangered and injured population. This includes the reception,

accommodation and provision of basic existential conditions for endangered and injured population that the country and the local self-government units are to provide at their own expenses.

### ***J. Nuclear Safety: Radiation Protection***

**1. What is the status of compliance with the Euratom Treaty and Euratom acquis provisions concerning radiation protection? In particular:**

**a) Is there an active network of measuring stations to monitor environmental radioactivity?  
b) Regarding environmental assessment and review of the licensing of new sites and nuclear installations, please state if your country's present legislation provides for environmental assessment requirements and public participation/review during the licensing process.**

a) The continuous monitoring of radioactive contamination of the environment in the Republic of Macedonia is carried out in compliance with the Law on Ionizing Radiation Protection and Safety ("Official Gazette of RM" No.48/02), the Rulebook on Locations and Time Intervals for Systematic Examination of Contents of Radionuclide in Environment with Early Detection and Notification of Environmental Radioactive Contamination ("Official Gazette of SFRY" No.84/91) and the Rulebook on Maximum Limits of Environmental Radioactivity Contamination and Decontamination ("Official Gazette of SFRY" Nos. 8/87, 27/90).

Locations and time intervals of the systematic examination of contents of radionuclide in the air, soil, rivers, lakes, solid and liquid precipitation, drinking water and foods and feedingstuffs, as well as the notification system of radioactive contamination are determined on the basis of the Rulebook on Locations and Time Intervals for Systematic Examination of Contents of Radionuclide in Environment with Early Detection and Notification of Environmental Radioactive Contamination.

The Republic Institute for Health Protection (RIHP) of the Republic of Macedonia is authorised to carry out the monitoring of radioactive environment contamination, i.e. measure radionuclide in the air, soil, water and food.

With the aim of assessing the risk of radiation the population in the Republic of Macedonia is exposed to, the following parameters are examined: total beta and total alpha radioactivity, presence of fission products with gamma spectrometric analysis and concentrations of natural uranium in different environmental media.

The contents of radionuclide are measured in accordance with the prescribed dynamics and methods:

- The air in Skopje and Gevgelia, continuously 24 hours a day;
- The atmospheric sediments in Skopje on a daily basis, 24 hours a day, and in Gevgelia and Ohrid on a monthly basis;
- The soil in Skopje and Stip, untilled and tilled, every year in April and October;
- The waters of the rivers Vardar and Lepenec, on a daily basis, while the waters of the Ohrid Lake at St. Naum location are examined by specific measuring of  $\text{Sr}_{90}$  in total quarterly samples;
- The water of the water supply facilities, and mineral waters, as well as feedingstuff (grass and straw stacks) in the regions of Skopje, Gevgelia, Mavrovo, Ohrid and Prilep;
- A regular systematic examination of the outdoor radiation is continuously carried out in Skopje.

With the aim of early detection and notification of radioactive environment contamination as a result of transboundary transport, the Hydro Meteorological Directorate measures the absorbed dose of gamma radiation in the air in Lazaropole and Berovo, at the time and with methods

prescribed by the Rulebook on Network Determination and the Programme on the Performance of Meteorological Stations of National Interest ("Official Gazette of SFRY" No. 50/90), and inform the authorised bodies thereof.

b) The Spatial Plan of the Republic of Macedonia adopted by the Assembly of the Republic of Macedonia ("Official Gazette of RM" No. 39/04) and its part on energy sources and infrastructure do not foresee a construction of a nuclear installation.

According to the Law on Environment and Nature Protection and Promotion ("Official Gazette of RM" No.13/03 consolidated text), investors are obliged to prepare an environmental impact assessment study for projects hazardous to the environment and human health.

Directive 97/11 amending and supplementing the Council Directive 337/85 on environmental impact assessment of particular public and private projects and the Convention on Environmental Impact Assessment in a Transboundary Context have been completely transposed in the Draft Law on Environment.

The Draft Law regulates the procedure for environment impact assessment (EIA). The by-laws, which are currently in preparatory phase, will determine the projects for which this procedure is compulsory, as well as the criteria for generally approved projects for which the necessity of EIA will be determined on a case-by-case basis. All other projects not included in the above regulation will be subject to an environmental impact assessment study.

The body authorised for the implementation of the Project cannot issue a permit for the project implementation unless the investor presents a prior acquired approval of the environmental impact assessment study by the Ministry of Environment and Physical Planning.

While the EIA procedure is in process, the authorised body consults the concerned local self-government units, the public and the environment protection and improvement NGOs by providing the required documents, publishing announcements and launching public debates on the web site of the Ministry.

**2. What is the status of the legislation in the area of radiation protection in your country? Please provide a copy of existing legislation together with relevant regulations or government decrees in the following areas:**

- a) Health protection of the population;**
- b) Health protection of workers;**
- c) Medical applications of ionising radiation;**
- d) Emergency preparedness and information;**
- e) Contamination of foodstuffs and feedingstuffs;**
- f) Shipments of radioactive waste;**
- g) Management of high activity sealed sources and orphan sources.**

By adopting the Law on Ionizing Radiation Protection and Safety ("Official Gazette of RM" No. 48/02), see [22 Annex 06](#), the Republic of Macedonia has to a great extent harmonised its legislation on ionizing radiation protection with international safety standards by which the Council Directive 96/29/Euratom, the Council Directive 97/43/Euratom and the Basic Safety Standards are transposed, as recommended by the International Atomic Energy Agency.

The aim of this Law is to improve the degree of human health protection from harmful effects of ionizing radiation, as well as to provide maximum safety during radiation sources operation. The Law regulates the control system of all ionizing radiation sources and provides for human and environment protection against exposure to ionizing radiation.

The following are the main principles regulating environmental legislation:

- Protection of humans against adverse impacts of ionizing radiation;

- Provision of safety for the ionizing radiation sources;
- Justification of the use of ionizing radiation sources;
- Optimum exposure of people and the environment;
- Limitation of all types of activities with ionizing radiation sources;
- Environment protection against the adverse impact of ionizing radiation; and
- Safe storage of spent ionizing radiation sources.

The Law foresees the establishment of Radiation Safety Directorate as an independent body in charge of administrative and technical matters which will report to the Government of the Republic of Macedonia. The Directorate will set up a Radiation Safety Commission as an advisory body staffed with officials of different ministries. Until the establishment of the Directorate, the Ministry of Health is in charge.

The activities of the Radiation Protection Center are performed by the Republic Institute for Health Protection under the conditions stipulated by the Directorate. In order to enforce the aforementioned law, the Directorate may also request professional services from other authorised professional institutions, see [22 Annex 07](#).

The Law on Ionizing Radiation Protection and Safety stipulates the conditions under which ionizing radiation sources may be used. Legal entities may commence an activity only upon prior acquisition of the relevant permit (import, export, distribution, transport, storage, disposal, renting and other activities in connection with the ionizing radiation sources) of the Radiation Safety Directorate. At present, the conditions for distribution and usage of radioactive materials, X-ray apparatus and other devices emitting ionizing radiation and the protection measures in relation to these sources are prescribed with by the Rulebook on Placing on the Market and Using Radioactive Materials above the Defined Limit of Activity, X-ray Apparatuses and Other Apparatuses that Produce Ionizing Radiation as well as on the Protective Measures Against Radiation of those Sources ("Official Gazette of SFRY" No. 40/86, 45/89), see [22 Annex 08](#).

The Law specifies the conditions under which people are considered to be exposed to ionising radiation and classifies them as: exposure of population, occupational exposure (persons under the age of 18, pregnant women and persons suffering from diseases contraindicated to ionising radiation sources) and medical exposure.

This Law provisions are also applied in cases of: potential exposure, exposure during radiation accidents and extended radiation.

#### **a) Health Protection of the population**

Health protection of the population against serious harmful effects of ionizing radiation is regulated by the Law on Ionizing Radiation Protection and Safety, see [22 Annex 06](#), and the Law on Environment and Nature Protection and Promotion ("Official Gazette of RM" No.13/03 consolidated text).

With respect to protection of the population in normal conditions, the legal entity using ionizing sources is obliged to adhere to the rules prescribed in the Law on Ionizing Radiation Protection and Safety, and the corresponding provisions. If the source operation causes release of radioactive substances in the environment, thus causing a significant adverse impact on human health and the environment, the legal entity is obliged to remunerate the damages. The legal entity is also obliged to monitor and control the approved releases of radioactive substances in the environment and to notify the Directorate and the Ministry of Environment and Physical Planning.

This Law also foresees the adoption of the Programme and time intervals for systematic examination of all release points, on the proposal of the Directorate.

Protection of the population against ionizing radiation is also regulated by the Law on Environment and Nature Protection and Promotion. This Law regulates the rights and obligations of the Republic of Macedonia, local self-government units, and the rights and obligations of legal entities and natural

persons in providing conditions for nature and environment protection and improvement, including ionizing radiation protection.

Maximum limits of environmental radioactivity contamination are prescribed by the Rulebook On Maximum Limits of Radioactive Contamination of Environment and on Decontamination ("Official Gazette of SFRY" Nos. 8/87, 27/90) , see [22 Annex 09](#). This Rulebook determines the maximum limits of radioactive contamination for air, drinking water and human foodstuffs specified by the annual intake limits of radionuclide in human body by inhalation and ingestion and through derived concentrations.

The individual annual intake for a group of individuals must not exceed 1/10 of the limit of the annual intake for persons working in the conditions of ionizing radiation, and the average annual individual intake must not exceed 1/100 of the annual intake limits of radionuclide in a human body. This Rulebook determines the annual intake limits of radionuclide in a human body through inhalation and ingestion and through the derived concentrations in the air and drinking water.

The monitoring of concentration of radionuclide in the environment (air, residential rooms, drinking water, foodstuffs and cattle feed) and the manner of early notification of environmental radioactive contamination (in emergency situations) are specified in the Rulebook on the Places and Time Intervals for Systematic Testing of the Radionuclide Contents in Environment by Early Detection and Notification of Radioactive Contamination of the Environmental ("Official Gazette of SFRY" No.84/91), see [22 Annex 10](#),.

The Rulebook on the Limits Over which the Population and Persons Working with Sources of Ionizing Radiations must not be Exposed to Radiation, on Measuring the Extent of Exposure to the Ionizing Radiations of the Persons that Work with the Sources of those Radiations and Testing the Contamination of the Working Environment ("Official Gazette of SFRY" Nos. 31/89, 63/89), see [22 Annex 11](#), specifies the radiation limits used as a basis for the protection of the population and individuals working with ionizing radiation sources.

Chapter 3 of this Rulebook specifies the dose limits for the population. So, for individuals in the population, an individual annual effective dose is 1mSv, in case of equal exposure of the whole body.

For a limited period of several years, it can be 5mSV, but only if the average annual effective dose during the person's life does not exceed the basic limit of 1mSv.

For individuals in the population, an individual annual equivalent dose for a certain body organ or tissue is 50mSv.

The total collective dose of the population must not exceed the value resulting from the total number of population multiplied by individual effective dose for the population.

#### **b) Health Protection of Workers**

The Law on Ionizing Radiation Protection and Safety, see [22 Annex 06](#), specifies the profiles of persons who can work with ionizing radiation sources on the grounds of their qualifications and health status.

Persons under 18 years of age, pregnant women, and persons suffering from disease with contraindications to ionizing radiation sources are not allowed to work with ionizing radiation sources. This also refers to breastfeeding women working with open ionizing radiation sources.

In addition, the health protection of workers is regulated by several rulebooks.

One of the segments is regulated by the Rulebook on Professional Education, Health Conditions and Medical Examinations of the Persons that can Work with Sources of Ionizing Radiation ("Official Gazette of SFRY" No. 40/86), see [22 Annex 12](#).



This Rulebook specifies that only persons with appropriate professional education may work with ionizing radiation sources and perform tasks in relation to the protection against ionizing radiation.

The details for the medical check-ups of persons involved in these activities before their employment, while working with ionizing radiation sources, as well as the time intervals for the medical check-ups are specified in the same Rulebook, which incorporates the provisions of Directive 96/29/Euroatom in Chapter III on health monitoring of occupationally exposed workers.

In compliance with the same Directive, the provisions of Chapter VII on significant increase of exposure to natural sources radiation are not in force in our country simply because the places of increased radiation from natural sources have not been registered in the Republic of Macedonia.

With respect to the aircraft crew protection, our flying companies do not organise intercontinental flights and because of that the exposure of crews to radiation is within limits.

The limit concentrations for persons exposed to ionizing radiation at work are specified in the Rulebook on the Limits Over which the Population and Persons Working with Sources of Ionizing Radiations must not be Exposed to Radiation, on Measuring the Extent of Exposure to the Ionizing Radiations of the Persons that Work with the Sources of those Radiations and Testing the Contamination of the Working Environment ("Official Gazette of SFRY" Nos. 31/89, 63/89), see [22 Annex 11](#).

As prescribed in Article 11 of this Rulebook, the annual effective dose in case of equal exposure of the whole tissue of persons working with ionizing sources is 50mSv.

According to the provisions of this Rulebook, the persons working with ionizing radiation sources are divided in two categories, A and B, depending on the working conditions concerning those sources. Category A includes individuals for whom the annual exposure may exceed 3/10 of the effective dose limits, and category B includes individuals with low possibility of exceeding 3/10 of the effective dose limits.

The radiation dose limits per individuals taking part in the elimination of accident consequences and emergency activities with ionizing radiation sources are prescribed by the provisions of this Rulebook.

### **c) Medical Application of Ionizing Radiation**

According to the Law on Ionizing Radiation Protection and Safety, see [22 Annex 06](#), the application of ionizing radiation has to be justified, considering both benefits and risks, with respect to the alternative techniques available, and not including medical exposure.

The Rulebook on the Conditions for Application of Ionizing Radiation Sources in the Medicine ("Official Gazette of SFRY" No. 40/86, 10/87), see [22 Annex 13](#), is the by-law regulating the application of ionizing radiation in medicine, i.e. the protection of patients against ionizing radiation during medical exposure.

The doctor prescribing diagnostic or therapeutic procedure is obliged to estimate the medical justification for the application of ionizing radiation.

Medical justification for the application of ionizing radiation for diagnostic or therapeutic purposes is estimated on the grounds of the type, stage and seriousness of the illness, patient's age, sex, life and health risk assessment, envisaged benefits for the patient, as well as the possible adverse impact of the procedure on the patient and the rest of the population.

This Rulebook specifies the conditions under which open radiation sources can be used in nuclear medicine, conditions for X-ray apparatus diagnostics, as well as the recommended activities for different doses of radiopharmaceutical preparations.

The methods of handling and maintaining ionizing chambers, technical prerequisite measures, procedures for and manner of obtaining certain performance, as well as the contents of the technical instructions for the ionizing chambers are regulated by the Rulebook for the Technical Norms for Ionizing Chamber Used in Radiotherapeutic Dosimetry ("Official Gazette of SFRY" No. 36/86), see [22 annex 14](#).

#### **d) Emergency Preparedness and Information**

In compliance with Article 3 and Article 25 of the Law on Ionizing Radiation Protection and Safety, see [22 Annex 06](#), the Government of the Republic of Macedonia, at the proposal of the Directorate, is preparing the National Action Plan for protection of the population against harmful impacts of ionizing radiation in case of a radiation accident, which implements the provisions of Directive 89/618/Euroatom of 27<sup>th</sup> November 1989 on informing the general public about health protection measures to be applied and steps to be taken in the event of a radiological emergency.

Preparedness for emergency cases in the Republic of Macedonia is regulated by the Rulebook on the Places and Time Intervals for Systematic Testing of the Radionuclide Contents in Environment by Early Detection and Notification of Radioactive Contamination of the Environmental ("Official Gazette of SFRY" No.84/91), see [22 Annex 10](#).

Chapter B of this Rulebook specifies the conditions for and methods of examination when emergency is suspected and during the emergency, and of notification. If the level of the absorbed dose of the gamma radiation increases by 20-100 % above the specified upper limit, the authorized institution in the country declares itself to be in the state of emergency and is obliged to determine the causes of the occurrence, and then to notify the competent bodies.

Republic of Macedonia is signatory to the Convention on Early Notification of a Nuclear Accident of 1986, ratified by means of the Law on Ratification published in the "Official Gazette of SFRY" No. 15/89. The Convention was accepted on 20.09.1996 by means of succession, and entered into force on 17.11.1991.

Republic of Macedonia is signatory to the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency of 1986, ratified by means of the Law on Ratification and published in the "Official Gazette of SFRY" No. 4/91). The Convention was accepted on 20.09.1996 by means of succession and entered into force on 17.11.1991.

#### **e) Foodstuffs and Feedingstuffs Contamination**

In the Republic of Macedonia, foodstuffs and feedingstuffs are regularly tested for radioactive contamination. According to the Law on Foodstuffs and Product and Materials in Contact with Foodstuffs ("Official Gazette of RM" No. 54/02), see [22 Annex 15](#), foodstuffs containing radionuclides above the specified limit or irradiated above the level specified with the provisions are considered unsafe.

The Rulebook on the Places and Time Intervals for Systematic Testing of the Radionuclide Contents in Environment by Early Detection and Notification of Radioactive Contamination of the Environmental ("Official Gazette of SFRY" No.84/91), see [22 Annex 10](#), includes provisions on the examination of radionuclide concentration in drinking water, as well as methods of radionuclide concentration examination in foodstuffs and feedingstuffs.

The radionuclide concentration is examined in different samples of foodstuffs. The sampling locations, sampling methods, number of samples of specific foodstuffs and sampling schedules are specified in the Annual programme for radionuclide concentration examination in foodstuffs with the aim of calculating the annual dose for the population.

The radioactive contamination of feeding stuffs is regulated by the provisions of the Rulebook on Maximum Permissible Limits of Radionuclides Contained in Livestock Feed, in Raw Materials for Manufacturing Fodder Mixtures for Animal Feed and in the Water for Supplying Animals, as well as on the Conditions under which they can be put on Sale and Used for Animal feed if the Content of

Radionuclides is Above the Defined Limits of Activity ("Official Gazette of SFRY" No. 16/92), see [22 Annex 16](#).

This Rulebook prescribes the maximum permissible levels of radionuclides of  $^{137}\text{Cs}$  and  $^{90}\text{Sr}$  in feedingstuffs, water for cattle, and the conditions under which they may be distributed for sale for animal nutrition.

This Rulebook specifies that the maximum allowed radionuclide concentration in feedingstuffs made of ingredients for forage mixtures and in water for cattle is 5 Bq/kg for  $^{137}\text{Cs}$  and 1 Bq/kg for  $^{90}\text{Sr}$ .

According to the Rulebook on Way of Conducting the Veterinary – Sanitary Examination and Check up of the Animals before Slaughtering and of the Products of Animal Origin ("Official Gazette of SFRY" No. 43/86), see [22 Annex 17](#), radionuclide concentration test is performed at the request of the importing country or in emergency.

In the Republic of Macedonia, radionuclide concentration tests are regularly performed on deliveries of animal origin for export in compliance with the Council Regulation 737/90.

#### **f) Radioactive Waste Shipments**

In the Republic of Macedonia transport of radioactive materials is performed in compliance with the provisions of the Law on Carriage of Dangerous Goods ("Official Gazette of SFRY" No. 27/90, 45/90 and "Official Gazette of RM" No 12/93), see [22 Annex 18](#). Permits for hazardous material transport are issued by the Ministry of Health, upon prior consent issued by the Ministry of Interior.

This Law specifies the conditions under which hazardous materials may be transported and the related activities (preparation of the materials to be transported, packaging, loading and unloading). Permits for hazardous materials, according to this Law, are classified in class 7. The Law also determines the conditions which must be fulfilled for issuing permit for transport of radioactive materials.

Republic of Macedonia is signatory to the 1957 European Agreement Concerning International Carriage of Dangerous Goods by Road, ratified by the Law on Ratification ("Official Gazette SFRY" No. 59/72). The Agreement was accepted by means of succession and entered into force on 17.11.1991.

The Republic of Macedonia is signatory to the Convention on Physical Protection of Nuclear Material, which was ratified by the Law on Ratification ("Official Gazette of SFRY" No. 9/85), adopted on 20 September 1996 by means of succession, and entered into force on 17.11.1991.

According to Article 68, line 6, of the Constitution of the Republic of Macedonia, the Assembly of the Republic of Macedonia ratifies, by means of a law all international agreements of the Republic of Macedonia. By ratification, the international agreements are incorporated in the internal law and cannot be further changed with another law. Accordingly, the ratification incorporates the international agreements into the internal legal system of the Republic of Macedonia.

Article 25 of the Law on Environment and Nature Protection and Promotion prohibits import of radioactive waste for release, storage, use and disposal in the territory of the Republic of Macedonia.

#### **g) Management of High Activity Sealed Sources and Orphan Sources**

The ionizing radioactive sources that are in use in the Republic of Macedonia are of low and medium activity. In case a permit for high activity sources is requested, the procedure is in compliance with the Law on Ionizing Radiation Protection and Safety, see [22 Annex 06](#).

If storage of such sources is necessary, the legal entity is obliged to reduce the volume and activity of any waste resulting from the operation of the source with a permit to the lowest possible level and to handle the waste in the manner prescribed by the Law on Ionizing Radiation Protection and Safety and the derived regulations.

The Rulebook for the Way of Keeping Sources of the Ionising Radiation and Radiation of the Population and the Persons that are Exposed to the Effects of the Ionised Radiation During Work ("Official Gazette of SFRY" No. 40/86), see [22 Annex 19](#), requires legal entities to keep records of and measure the level of radiation exposure; to keep records of the people exposed to radiation at work; to keep records of the patients exposed to ionizing radiation; to examine radioactive materials in the vicinity of nuclear facilities and to systematically monitor the environment contamination with radioactive materials.

In cooperation with the International Atomic Energy Agency, the Republic of Macedonia is currently implementing the project MAK/4/002 "Management and Disposal of Low and Intermediate Level Waste". The aim of this project is to provide for the storage of spent sources of ionizing radiation in a central storage facility, especially constructed for this purpose and in compliance with the recommendations of the International Atomic Energy Agency and EU.

Radioactive waste management is currently regulated by the Rulebook on the Manner of Collecting, Recording, Processing, Keeping, Final Storage and Release of Radioactive Waste in the Environment ("Official Gazette of SFRY" No. 40/86), see [22 Annex 20](#), which will remain in force until the new rulebook enters into force.

The existing regulation does not include provisions for managing orphan sources. Such sources have not been reported or discovered in the territory of the Republic of Macedonia.

### **3. What is the timetable for compliance with Euratom Treaty and derived legislation provisions on radiation protection? Please provide any draft amendments or draft new legislation under consideration for the future.**

The process of approximation of the Republic of Macedonia to the international standards for ionizing radiation protection began with the adoption of the Law on Ionizing Radiation Protection and Safety ("Official Gazette of RM" No. 48/02).

It is of primary importance to found a Radiation Safety Directorate for the purpose of approximation of the by-laws on ionizing radiation protection to the provisions of the Euroatom Treaty. The establishment of this Directorate has been envisaged for 2005.

The by-laws are being prepared on the basis of the model -rulebooks of the International Atomic Energy Agency published in the Basic Safety Standards of 1994, the Council Directive 96/29/Euroatom, the stands on transboundary effects, and the provisions of international conventions.

Thanks to the technical support of the International Atomic Energy Agency, three rulebooks have been drafted so far:

1. Draft Rulebook for Limitation of Exposure to Ionizing Radiation, Conditions for Exposure in Special Circumstances and Carrying out Interventions in Emergency Cases, see [22 Annex 21](#),
2. Draft Rulebook for the Conditions and Measures for Protection against Ionizing Radiation for Performing Works with Radioactive Sources, see [22 Annex 22](#),
3. Rulebook on Conditions and Measures for Protection against Ionizing Radiation in Operation of X-ray Apparatuses, Accelerators and other Devices arising from Ionizing Radiation, see [22 Annex 23](#),

In order to cover the whole field, the Law on Ionizing Radiation Protection and Safety foresees the drafting of rulebooks relating to the following fields:

- Air, soil, drinking water, foodstuffs and feedingstuffs;
- Construction materials, items of general consumption, tobacco and processed tobacco products, drugs and additional medicines, cosmetic preparations and products for personal hygiene;
- Rulebook on derived action levels in foodstuffs (both for children and adults) following a nuclear accident (Directive 3954/87/Euratom)
- Rulebook on exemption levels and activities;
- Rulebook on clearance levels and activities;
- Rulebook on continuous exposure; and
- Decree issued by the Government for the implementation of the National Emergency Plan, which will implement the provisions of Directive 89/618/Euratom on informing the general public about health protection measures to be applied and steps to be taken in the event of radiological emergency.

The by-laws, which will bring about harmonisation with the relevant EU directives, are to be adopted in 2007. Technical assistance of the International Atomic Energy Agency is expected in the preparation of the remaining documents.

## ***K. Climate change***

### **1. Is there a national climate change office or similar for developing climate change policy? What government agencies are involved in this process? Has any national action plan or any other policy document been adopted with respect to climate change?**

The Ministry of Environment and Physical Planning is the national focal point for climate change issues and the body responsible for policy making with regard to the implementation of the provisions of the United Nations Framework Convention on Climate Change ("Official Gazette of RM" No 61/97).

In January 2000, the first project office was set up within the Ministry of Environment and Physical Planning, when the work on the First National Communication on Climate Change began with the financial support provided by the Global Environment Facility (GEF). The Office was established with the aim of strengthening the national capacities in the implementation of the obligations taken over with the ratification of the United Nations Framework Convention on Climate Change. The Office is strengthening the system for development and periodical upgrading of national inventories of anthropogenic emissions, as well as the system for formulation, implementation, publishing and regular upgrading of the national programme containing the measures of climate change mitigation and adaptation.

Before being delivered to the highest body of the Convention (Conference of Parties), the components of the National Communications are reviewed and approved by the National Climate Change Committee established on the basis of the Decision of the Government of the Republic of Macedonia ("Official Gazette of RM" Nos. 44/00, 79/03, 4/04) and composed of the representatives of

governmental institutions, non-governmental organisations, private entities and a research department.

The following governmental institutions contribute to the work of the National Climate Change Committee:

- Ministry of Environment and Physical Planning (Vice President of the Committee)
- Ministry of Economy
- Ministry of Transport and Communications
- Ministry of Education and Science
- Ministry of Agriculture, Forestry and Water Economy
- Ministry of Finance
- Ministry of Health

The National Committee is an advisory body in the policy making process of the Republic of Macedonia with respect to climate change issues.

The Republic of Macedonia prepared the First National Communication on Climate Change, which was adopted by the Government of the Republic of Macedonia. It was submitted to the Secretariat of the Convention in March 2003 and presented to the highest body of the Convention at its ninth Conference (Milan, December 2003).

The First National Communication on Climate Change incorporates the Action Plan, which includes recommendations and measures for greenhouse gas (GHG) effects abatement, as well as measures for adaptation to future climate change in the most sensitive sectors. The plan lacks precise specification of the obligations as well as time framework and cost estimates for the implementation of the proposed activities. These shortcomings are expected to be eliminated in the Second National Communication on Climate Change, for which preparation a project proposal has been submitted to the Global Environment Facility.

## 2. Is there a completed national inventory of greenhouse gas (GHG) emissions for 1990 and for any later years?

The First National Communication on Climate Change contains a national inventory of greenhouse gas (GHG) emissions and sinks for the following gases: CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, for the 1990-1998 period, with 1994 as a baseline year.

The inventory was developed in compliance with the methodology of the Intergovernmental Panel for Climate Change (IPCC) for the non-Annex I Parties to the United Nations Framework Convention on Climate Change.

Table: Greenhouse gas emissions in kt for each sector										
	Sector	1990	1991	1992	1993	1994	1995	1996	1997	1998
CO <sub>2</sub>	Energy	8.769,96	8.234,05	7.727,42	8.227,08	8.016,41	8.244,52	8.160,77	8.591,50	9.189,06
	Industry	1.561,86	1.299,22	1.236,26	1.049,91	888,84	796,98	841,94	1.038,60	995,32
	Agriculture	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
	Forestry	83,64	6,48	136,31	209,41	84,22	1,52	14,24	51,32	27,44
	Waste	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
	Total	10.415,46	9.539,75	9.099,99	9.486,40	8.989,47	9.043,02	9.016,95	9.681,42	10.211,82
CH <sub>4</sub>	Energy	84,67	78,75	76,74	78,73	82,96	85,64	81,89	86,68	93,98
	Industry	0,01	0,01	0,01	0,01	0,01	0,01	0,00	0,00	0,00
	Agriculture	38,14	37,36	38,03	38,16	38,07	37,45	35,99	35,17	33,17
	Forestry	0,23	0,02	0,37	0,57	0,23	0	0,04	0,14	0,07
	Waste	48,93	50,31	50,12	50,26	47,58	48,03	49,41	49,49	50,95
	Total	171,98	166,46	165,27	167,72	168,84	171,13	167,34	171,48	178,17
N <sub>2</sub> O	Energy	0,15	0,14	0,14	0,14	0,14	0,14	0,13	0,13	0,13
	Industry	0,23	0,23	0,14	0,18	0,33	0,16	0,17	0,20	0,22
	Agriculture	3,95	3,77	3,77	3,68	3,8	3,63	3,26	2,99	2,84
	Forestry	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
	Waste	0,46	0,47	0,47	0,47	0,44	0,45	0,45	0,46	0,46
	Total	4,79	4,61	4,52	4,47	4,71	4,38	4,01	3,78	3,65

CO <sub>2</sub> -eq	Energy	10.595,51	9.932,20	9.381,81	9.925,08	9.801,81	10.085,98	9.921,41	10.451,24	11.203,71
	Industry	1.632,34	1.371,42	1.281,22	1.104,53	991,55	847,84	894,82	1.101,52	1.063,63
	Agriculture	2.025,44	1.953,26	1.967,33	1.942,16	1.977,47	1.911,75	1.766,39	1.665,47	1.576,97
	Forestry	88,47	6,90	144,08	221,38	89,05	1,52	15,08	54,26	28,91
	Waste	1.170,13	1.202,21	1.198,22	1.201,16	1.135,58	1.148,13	1.177,11	1.181,89	1.212,55
	<b>Total</b>	<b>15.511,89</b>	<b>14.465,99</b>	<b>13.972,66</b>	<b>14.394,31</b>	<b>13.995,46</b>	<b>13.995,22</b>	<b>13.774,81</b>	<b>14.454,38</b>	<b>15.085,77</b>
CO <sub>2</sub> -eq [%]	Energy	68,31	68,66	67,14	68,95	70,04	72,07	72,03	72,31	74,27
	Industry	10,52	9,48	9,17	7,67	7,08	6,06	6,50	7,62	7,05
	Agriculture	13,06	13,50	14,08	13,49	14,13	13,66	12,82	11,52	10,45
	Forestry	0,57	0,05	1,03	1,54	0,64	0,01	0,11	0,38	0,19
	Waste	7,54	8,31	8,58	8,34	8,11	8,20	8,55	8,18	8,04
	<b>Total</b>	<b>100,00</b>	<b>100,00</b>	<b>100,00</b>	<b>100,00</b>	<b>100,00</b>	<b>100,00</b>	<b>100,00</b>	<b>100,00</b>	<b>100,00</b>

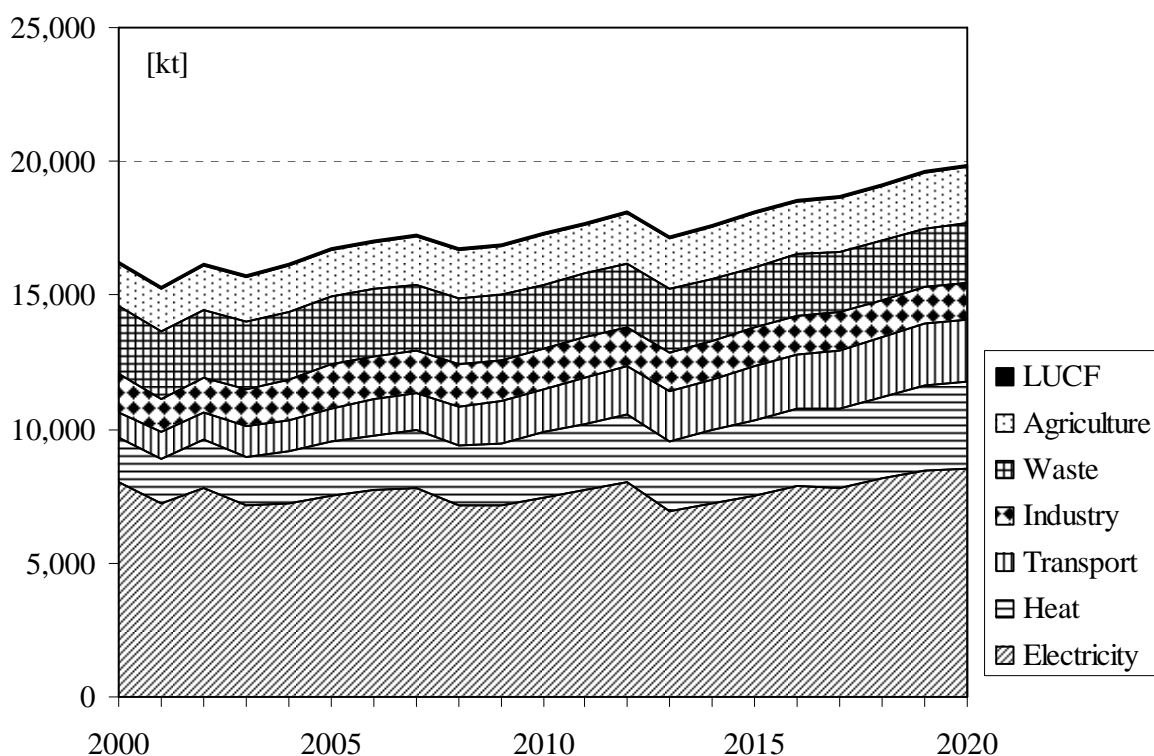
Source: Ministry of Environment and Physical Planning, First National Communication of the Republic of Macedonia to the United Nations Framework Convention on Climate Change, 2003

### 3. What are the expected GHG emissions until 2012 compared to 1990?

According to the baseline scenario, in comparison to the greenhouse gas emissions in 1990 (15.511,80 kt CO<sub>2</sub>-eq), the projected emissions will rise by 17 % in 2012 (18.136,00 kt CO<sub>2</sub>-eq), and by 28 % in 2020 (19.851,00 kt CO<sub>2</sub>-eq) ,

The values for 2012 emissions are based on the emission decrease study prepared as part of the First National Communication of the Republic of Macedonia under the United Nations Framework Convention on Climate Change. The study has been made for the following sectors: electricity production, heat production, transport, industry, waste, agriculture and forestry.

The Vienna automatic system planning for the development of the electricity system until 2030 was used for the electricity production sector (comprising 50 % of the total emissions). The estimations of the projected emissions for other sectors have been made on the basis of experts' opinions.



Projections of greenhouse gas emissions (expressed in CO<sub>2</sub>-eq) for each sector until 2020.

Source: Ministry of Environment and Physical Planning, First National Communication on Climate Change under the United Nations Framework Convention on Climate Change, 2003.

**4. Has your country submitted any national communication according to the United Nations Framework Convention for Climate Change (UNFCCC)? If so, when was it submitted?**

The Republic of Macedonia has prepared the First National Communication on Climate Change, which was adopted by the Government of the Republic of Macedonia on its 16 Session on 03.02.2003.

The Communication was submitted to the Secretariat of the Convention on 25.03.2003. It was presented to the highest body of the Convention, the Conference of the Parties, on its ninth assembly held in Milan in December 2003.

The Communication is available on the website of the United Nations Framework Convention on Climate Change ([www.unfccc.int](http://www.unfccc.int)), as well as on the national website ([www.unfccc.org.mk](http://www.unfccc.org.mk)).

**5. At which stage is your country in ratifying the Kyoto Protocol?**

The Republic of Macedonia ratified the Kyoto Protocol in July 2004 ("Official Gazette of RM" No. 49/04).

**6. Do any countries, UN organisations or other donors fund capacity building activities for the UNFCCC and Kyoto Protocol in your country?**

Republic of Macedonia prepared its First National Communication on Climate Change with the financial support provided by the Global Environment Facility (GEF), implemented through the United Nations Development Programme.

The Global Environment Facility submitted a draft project for preparation of the Second National Communication on Climate Change with the UNDP as the implementation agency. The Government of the Republic of Macedonia has also allocated funds for this project.

Republic of Macedonia participates in the regional project "Capacity building for improving the quality of the national GHG inventories" (Europe/ CIS region), financed by GEF and implemented by UNDP, 2003-2006.

Republic of Macedonia has also expressed interest in participating in the project "Financing Energy Efficiency and Renewable Energy Investment for Climate Change Mitigation" which is planned for implementation in selected countries of South Eastern and Eastern Europe and the independent countries of the Commonwealth. The following UN agencies have been recommended: UN-ECE, Energy Efficiency 21 Project ESCAP, UNDP-GEF, resident UN-ECE coordinators coordinating relevant UNFCCC activities.

The implementation of the Sustainable Energy Programme is underway in the Republic of Macedonia, which was made possible with the financial support from GEF through the World Bank as an implementation agency. The project contains two components: Design of Project Development Assistance Facility and Design of Sustainable Energy Financing Facility.

Underway are initial negotiations with the UNDP Regional Office in Bratislava and the UNDP Office in Macedonia concerning implementation of activities for strengthening capacities for implementing a Clear Development Mechanism (CDM), applicable to countries like the Republic of Macedonia which do not belong to the Annex I group of countries as well as establishment of competent institutions to coordinate these activities.

Republic of Macedonia has already organised some activities with the aim of preparing recommendations for strategic regional programming of CARDS Assistance 2005-2006 in the Region of West Balkans, and towards the implementation of the liabilities imposed by environmental acquis, and in connection with the Kyoto Protocol and the regional energy market in South Eastern Europe.



The International Finance Corporation/ Southeast Europe Enterprise Development has also expressed interest for conducting activities in the region in connection with awareness raising and capacity strengthening for ratification/ implementation of the Kyoto Protocol, depending on the stage of the Protocol implementation the countries are at in the region where SEED have their offices.