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REPUBLIC OF MOLDOVA

Second Review
Synopsis



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NOTE

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Preface

The second Environmental Performance Review (EPR) of the Republic of Moldova began in November 2004, with the preparatory mission, during which the final structure of the report was discussed and established. Thereafter, the review team of international experts was constituted. It included experts from Belarus, Estonia and Lithuania with experts from the secretariats of the United Nations Economic Commission for Europe (UNECE) and the Organisation for Economic Cooperation and Development (OECD).

The review mission took place from 12 to 19 April 2005. A draft of the conclusions and recommendations as well the draft EPR report were submitted to the Republic of Moldova for comments in July 2005. In October 2005, the draft was submitted for consideration to the Ad Hoc Expert Group on Environmental Performance. During this meeting, the Expert Group discussed the report in detail with expert representatives of the Government of the Republic of Moldova, focusing, in particular on the conclusions and recommendations made by the international experts.

The EPR report, with suggested amendments from the Expert Group, was then submitted for peer-review to the UNECE Committee on Environmental Policy on 10 October 2005. A high-level delegation from the Government of the Republic of Moldova participated in the peer review. The Committee adopted the recommendations as set out in this report.

The report takes stock of the progress made by the Republic of Moldova in the management of its environment since the country was first reviewed in 1998, in particular in the implementation of the recommendations of the first review. It also covers eight issues of importance to the Republic of Moldova, concerning policy-making, planning and implementation; the financing of environmental policies and projects; and the integration of environmental concerns in economic sectors and promotion of sustainable development. Among the issues receiving special attention during the review were compliance and enforcement mechanisms; economic instruments and environmental funds; and environmental management in agriculture and forestry and in industrial activities.

The UNECE Committee on Environmental Policy and the UNECE review team would like to thank both the Government of the Republic of Moldova and its experts who worked with the international experts and contributed with their knowledge and assistance. UNECE wishes the Government of the Republic of Moldova further success in carrying out the tasks before it to meet its environmental objectives and policy, including the implementation of the conclusions and recommendations in this second review.

UNECE would also like to express its deep appreciation to the Governments of Hungary, the Netherlands, Norway, Switzerland and the United Kingdom for their support to the Environmental Performance Review Programme, and to the United Nations Development Programme for their contributions to the work in the Republic of Moldova and the preparation of this report.

Executive summary

This second Environmental Performance Review (EPR) of the Republic of Moldova was carried out seven years after the first Review in 1998. It intends to measure the progress made by the country in managing its environment since then, and in addressing upcoming environmental challenges.

Overall context

The Republic of Moldova is emerging from a long economic recession...

The economic crisis bottomed out in 1999. Since then, the Republic of Moldova has shown signs of a slow economic recovery although in 2005 it still had the lowest GDP amongst European nations. Despite this crisis a significant restructuring of the economy and administration has taken place, and this has had repercussions on the management of the country's environment.

...from the privatization process...

Privatization is almost complete and currently the private sector accounts for 80 per cent of GDP. With the exception of the largest enterprises, nearly all agricultural land, 80 per cent of housing stock and all small and medium-sized enterprises are private. In the countryside, organization of rural life and of agricultural practices has been changed fundamentally by the privatization process. Land ownership is now spread among a multitude of small farmers and municipalities that have yet to gain experience in land management and environmental protection. Industry and energy sectors are in a dire economic situation and are not working to full capacity due to high depreciation on the value of capital, a degradation of fixed assets, and lack of investment. In such a context, environmental economic incentives and enterprise management systems are for the most part ineffective.

...from administrative restructuring...

Since 2001, the country has been divided into 32 local districts (rayons), two administrative units (Gagauz Yeri and Transnistria) and three urban municipalities (Chisinau, Balti and Bender). This restructuring reduced the financial autonomy of the municipalities and affected the environmental protection institutions. Some environmental competencies, previously at municipal level (e.g., solid waste management, drinking water supply and wastewater management) were recentralized into the territorial administrative structures of the ministry of environment.

...and wants now to adjust to EU practices.

Another important development that will affect environmental management is the Republic of Moldova's intention to integrate into the European Union (EU). With Romania's forthcoming accession to the EU, the country will become an EU neighbour, and as such is entitled to benefit from the EU Neighbourhood Policy. The joint EU-Moldova Action Plan (2005) contains environmental and sustainable development objectives and prepares the Republic of Moldova for the introduction of EU requirements.

POLICY-MAKING, PLANNING AND IMPLEMENTATION

Legal and policy-making framework

The policy framework has greatly improved...

The environment management system has acquired real strengths since the first review. The policy base was developed extensively by the introduction of a number of new environmental laws, strategies, programmes and plans. The establishment of the Ministry of Environment in 1998 improved the structure and standards of environmental institutions.

...but the legal basis is slow to develop and is still media specific.

After an active period of enacting legislation, not much has happened since 1999 although a number of recent policy concepts and action plans have called for new or adjusted environmental legislation. While the organizational principles for environmental management are rational, the excessively narrow scope of

the legislation, which deals separately with every environmental media (air, water, soil, waste, etc.), is of concern. Each law tends to specify its own implementation regime, which makes it difficult to move forward to an integrated management approach. Measures need to be taken to ensure equivalence of practice across all media and to promote a holistic approach to environmental management.

...and has to evolve towards EU practices...

The 2005 EU-Moldova Action Plan envisages the adoption of additional legal acts for key environmental sectors, based on EU environmental *acquis*. To that end, emissions limit values should be revised and streamlined gradually, and technical and performance requirements considered at the project design stage. As a first step, main principles should be established and enterprises should be given time to implement these new measures. Also, there is very little common approach across sectors between environmental management and the management of other economic sectors. This common approach will need to be improved and developed further.

...with the help of a strengthened staff of professionals.

There is a need for sufficient, competent and professional staffing in the environment administration. Currently the level of staff is critically low and is too limited by far to cope with these new tasks or to acquire the knowledge and advanced competencies that are necessary for dealing with integrated and crosscutting issues. Therefore, to enable the country to fully implement adopted environmental policies and strategies and to further develop related legislation, it is necessary to strengthen institutions and improve administrative capacity. Staff training will also be necessary.

Compliance and enforcement mechanisms

Environmental permits are not integrated...

Environmental permits cover all environmental areas (air, water, waste, soil) separately. They regulate too many substances through permitting rules that are the same for all polluters, irrespective of their size and their environmental impact. This makes it difficult for the small number of inspectors to monitor and enforce permit compliance effectively. It also places a heavy administrative burden on environmental agencies and enterprises. An integrated permit limited to industrial installations with significant environmental effects would be more efficient.

...but the enforcement tools are more transparent.

The Republic of Moldova has made progress in terms of greater transparency in environmental assessment. However, more emphasis could be put on the use of environmental assessment instruments, i.e., Environmental Impact Assessment (EIA), State Ecological Expertise (SEE) and Public Ecological Expertise (PEE), especially for those projects with significant environmental impact. Industrial enterprises are not attaining a sufficient level of compliance with their environmental obligations, and their compliance should be monitored and promoted. In addition, inspectors are not using feedback from their inspection findings for the improvement of the overall enforcement process.

However, the overall system of sanctions is still inefficient.

The State Environment Inspectorate (SEI) possesses a variety of enforcement tools, but it cannot impose sanctions directly. Penalties and fines for administrative violations go through a court procedure (except for water-related violations), which takes a long time and results in negligible penalties for the violator. Courts are not competent enough to deal with environmental offences and the rate of fines is too low to have any deterrent effect. The percentage of penalties paid is very low. All actions related to sanctions should be carried out with increased SEI transparency and accountability.

Information, public participation and education

Environmental monitoring has improved...

The observation network for surveying the quality of the environment has been enlarged, covering more territory, more media and new chemical components. However this is still not enough to meet national legislation requirements and international obligations. Monitoring does not fully cover groundwater pollution, diffuse pollution of surface waters or background pollution. There is no comprehensive

nationwide monitoring programme and the integrated environmental monitoring system is not operational.

... but still covers too many pollutants.

With the exception of drinking water, lists of ambient quality parameters have not been revised since independence. Due to an excessively large number of regulated pollutants, unrealistic monitoring and enforcement requirements are imposed on public authorities. Yet, at the same time, some hazardous substances remain unregulated. A number of standards are below the threshold of analytical detection.

Environmental information has improved unevenly ...

Some institutions have increased the number of indicators in their environmental databases and have improved their management and reporting of environmental information. However, modern information technologies have not been introduced into all sectors and information is not easily accessible to decision-makers and the public.

... as has public participation in environmental decision-making.

The Ministry of Ecology and Natural Resources (MENR) uses plans and programmes to invite the public to participate in decision-making on policies. Nevertheless, the legal and regulatory framework needs to be elaborated further to implement more effectively the public participation requirements of the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (which the country ratified).

Environmental education is handled seriously.

This is the case, demonstrated by a comprehensive and well-thought-out system in pre-school, primary and secondary schools, and higher education. However there are no permanent environmental training courses for public officials and there is almost no environmental education for adults.

International agreements and commitments

The tremendous progress made in international cooperation...

The Republic of Moldova has actively participated in most global and regional environmental events. It has ratified most environmental agreements of regional and global importance and is implementing them by preparing national contributions and adjusting existing or drafting new national policies on various environmental subjects. It has also hosted a series of international meetings and conferences that have helped the country to raise its profile and attract international resources and assistance to help solve national environmental problems. It has continued to develop bilateral relations with neighbouring countries.

... has been hampered by weak implementation...

At the same time, implementation of the ratified agreements and commitments remains rather weak and poorly coordinated. International support is often donor-driven and does not always address the real needs of the country. The MENR lacks the capacity to inform potential donors of the country's needs and priorities for investments and environmental assistance. The country is not concentrating its efforts on these agreements even though they have the potential to benefit the country greatly: it is neither following ongoing projects nor streamlining its priorities.

MOBILIZING FINANCIAL RESOURCES FOR THE ENVIRONMENT

Economic instruments and environmental funds

Market-based instruments are more effective than before, although their role as an incentive is not strong.

The effectiveness of market-based instruments used in the country has improved considerably since the 1998 EPR. Excise tax on imported fuel and cars, introduced in 1996, and the new 2003 tax on environmentally harmful products form an essential part of environmental fund revenues. However, numerous tax exemptions diminish the solid revenue performance of these environmentally related taxes. The system of emission charges remains inefficient and plays a negligible role. The incentive to reduce

emissions to which pollution charges apply could be enhanced considerably by raising charges and imposing them on just a few major sources with easily measurable emissions.

Better pricing is reflecting true costs...

While significant advances towards cost-reflective pricing has taken place in transport and energy sectors, the pricing of water services remains less satisfactory as it neither covers operating costs, nor capital-cost recovery. Further reforms in existing market-based instruments are needed for a more comprehensive and efficient reduction of pollution discharges and decoupling of environmental pressures from economic growth.

...and environmental funds are much stronger.

Both the financing and the functioning of environmental funds (national and local) have improved considerably since 1998. Since 2000, revenues have increased substantially. Nevertheless, the management of funds and their operational efficiency still fall short of internationally recognized good practice. Actual evaluation of the effectiveness and impact of fund-financed projects is rarely done. The increasing carryover amounts in national and local fund budgets mean that existing resources are not fully utilized. The introduction of output-oriented budgeting could improve the effectiveness of spending of available financial resources and their allocation to priority environmental projects.

Expenditure on environmental protection

Revenue has increased and environmental expenditure has developed in parallel...

However, both revenue and expenditure remain low in absolute and per capita terms, as well as in terms of share of GDP. With a very limited contribution of financial resources from abroad (less than ten per cent), State funding still predominates and environmental funds have become the main source of funding since 2000. Eighty per cent of environmental expenditure is spent on operating expenses; the rest is spent on investments.

...but environmental priorities for financing are not being clearly targeted...

At the same time, the country has developed many new policy documents for environmental improvement, but they often do not contain clear measurable targets and do not indicate the necessary financial resources to achieve their objectives. The Government tends to change its priorities and does not provide all necessary funding, which hampers implementation of these environmental programmes. The *Economic Growth and Poverty Reduction Strategy Paper (2004-2006)* is an exception and unique, as it lists environmental protection among the priority areas and sets clear corresponding funding requirements.

...and the precise amount of environmental expenditure is unknown.

Total expenditure for environmental protection is about 0.8 per cent of GDP. This may be underestimated because certain environmentally related expenditure is not included in the reporting. Sectoral ministries and other governmental agencies may have expenditure that includes environmental components but they do not account for it separately. Information on environmental expenditure by the private sector is scarce. Neither the National Bureau of Statistics, which collects and processes statistical reporting forms on environmental expenditure, nor the Ministry of Ecology and Natural Resources, attempt to identify all environmentally related expenditure.

INTEGRATION OF ENVIRONMENTAL CONCERNS INTO ECONOMIC SECTORS, AND PROMOTION OF SUSTAINABLE DEVELOPMENT

Environmental management in agriculture and forestry

Agriculture exerts a high amount of pressure on the environment, ...

With 20 per cent of the labour force and a 19.2 per cent GDP contribution, agricultural production is still a dominant economic activity, but it is not very profitable. On the one hand agriculture is very damaging to all environmental media: soil erosion is on the increase, soil fertility is decreasing, green protection belts have shrunk because of land privatization and consolidation, pasture is overgrazed, and the meagre

forest coverage has not significantly increased. On the other hand, the economic crisis has had positive a side effect with a drastic reduction in the use of fertilizers, pesticides and irrigation water.

... although there have been serious attempts to improve agricultural practices.

In spite of tight financial resources, efforts are being made to minimize negative environmental effects: extension services have been developed to help new inexperienced farmers, diffuse pollution is being combated, and organic agriculture and good agricultural practices are being promoted. With the economic situation improving and with agriculture continuing to be an essential contributor to the economy – it is the basis of a profitable food-processing industry – farming practices are becoming more intensive again. In this context of tight profitability, it is not easy to introduce elaborate schemes for environmental protection.

Water quality, pasture and ecosystems are still strained.

Pasture that is now owned by municipalities is overgrazed; improving its management would bring economic as well as environmental gains. A law on soil and a regulation on pasture have been developed but are still waiting for official approval. Another serious problem is the quality of drinking water, as water uptakes are in general not protected. Ecosystems have been degraded and dismantled by intensive agricultural activities, and their continuity should be re-established. The country should improve protection of its biodiversity and work actively towards establishing a National Ecological Network.

Land privatization has brought major changes...

The distribution of small plots and livestock to initially inexperienced farmers has profoundly modified farming and agricultural practices. This new state of affairs exerts different environmental pressures from before. To introduce measures to combat land degradation successfully, and to improve land management, good information on the land is necessary together with the integrated effort of farmers, municipalities, scientific institutions, extension services, and competent authorities over all the territory. The country lacks a geographical information system, which would ease joint efforts on land management and protection. Scientific and educational capacity is well developed but should focus more on improving practices such as counteracting soil erosion, re-establishing integrated crop management, making forecasts for plant diseases and giving advice on the efficient use of pesticides and fertilizers.

Forest needs to be better protected.

The country is working to increase forest acreage, which currently covers only 11 per cent of land. This would improve land and soil protection, prevent diffuse pollution and protect biodiversity. Four out of the existing five strictly protected nature reserves (scientific reserves located in forest zones) are managed by the forestry sector, and not by authorities able to ensure their protection. There is a need for a better-balanced share of responsibilities between the authorities that manage forest resources and those who are entrusted with their protection; a concern still unresolved since the first review.

Environmental management in industrial activities

Data on industrial pollution are far from sufficient.

Industrial production increased by about 30 per cent from 1998 to 2003. The analysis of the little data available on environmental pollution in industry shows that water use, waste generation, greenhouse gases emission and atmospheric pollution are gradually reducing while economic activity is picking up (i.e., positive decoupling trends). Other information about the environmental impact of industry is very limited and does not allow for the setting of targets for emissions reduction or for the identification of priorities and measures to achieve these targets.

Sectoral environmental policies are not well implemented.

Since 1998 the country has elaborated various environmental strategies, action plans and programmes covering the most important environmental issues relevant to industrial activities. The liberalization of the energy sector and the setting of cost-reflective energy prices have had a positive impact on energy efficiency and have mitigated the environmental impact of the sector. The waste management strategy, cleaner production centres and cleaner production pilot projects for each of the main industrial sectors have produced successful results. However, implementation of environmental policies in industry needs

to be improved regarding their priorities and targets, their monitoring and the weak coordination between responsible ministries. The lack of appropriate economic incentives and financing mechanisms has compromised expected improvements.

Environmental standards should be streamlined.

Environmental emissions standards inherited from the Soviet past are too numerous and are unrealistic. Air emission limit values for major pollutants should be introduced step-by-step, starting with large thermo power installations and extending gradually to other sources and pollutants. In addition, pollution charges have no incentive effect and are applied to too many emission standards. They should therefore be revised. Taxes should be increased and only main pollutants should be subject to charges. An approximation to the Integrated Pollution Prevention and Control (IPPC) Directive should be considered as the long-term target and its gradual implementation should be started soon.

Conclusions and recommendations

Chapter 1: Legal and policy-making framework

The Republic of Moldova's environmental management system has real strengths, especially the well-developed strategic base and the dedication of its current staff. The issues that have been raised above do not put these into question and do not necessarily foresee the need for any significant structural change. However, the number of staff is already at the lowest critical level. Some institutional strengthening and raising of administrative capacity is necessary to ensure that the country can continue to move towards the effective practical implementation of its environmental policies and strategies.

Although the organizational principles for environmental management are rational, there is one area of significant concern, which is the excessively single-media orientation of the legislation. The problem is perhaps not that there is one law for air and separate legal acts for water and waste, for example, but rather that each of these laws tends to specify its own implementation regime, which introduces differences in practice that in turn makes an integrated approach to management difficult or even impossible. Measures need to be taken to reduce the gap, firstly by ensuring the equivalence of practice across all media. Subsequently, legislative adjustments would promote a holistic approach to management. There is a need to introduce advanced regulation mechanisms on environmental protection by establishing emission limit values in legal acts directly and combining this approach with an environment quality-based approach.

In a similar manner as ensuring that all cross-media problems are addressed, more attention should also be paid to strengthening the cross-sectoral approaches between environmental management and the management of other economic sectors.

The elaboration of a legislation based on EU environmental *acquis* would help the country to fulfil its wish to move towards EU practices. This does not mean that everything should be done at once, and that strict limit values or Best Available Techniques (BAT) requirements should be immediately implemented, but rather that principles should be established and the regulated community should get some time and transitional periods to implement the new measures.

Every change in practice, whether introducing new requirements or improving existing practice, calls for development of new competencies in the environmental authorities and their bodies through training and retraining. Training therefore should be a key component of any improvement strategy.

Recommendation 1.1:

Following the 2005 EU-Moldova Action Plan, the Government should acknowledge environmental protection of natural resources as a national priority. For this purpose, it should strengthen the capacity of the environmental authorities and their bodies at national, territorial and local level, so that they are able to perform their functions and adequately respond to environmental priorities expressed in the policy papers. To facilitate the convergence to the EU environmental legislation, a new legal EU harmonization department should be established

Recommendation 1.2:

The Government should strengthen the Ministry of Ecology and Natural Resources to ensure that it fulfils main functions such as implementing international environmental commitments and collecting, managing and disseminating environmental information including the annual State of the Environment report and other reports.

Recommendation 1.3:

The Ministry of Ecology and Natural Resources should use new approaches in the development of environmental legislation, including convergence with key pieces and approaches to EU framework legislation, and identify ways of overcoming the gaps between strictly single-media oriented environmental laws. It should develop guidance documentation, best practice notes or other information on appropriate working methods.

See also Recommendation 2.1.

Recommendation 1.4:

The Government should ensure the effective functioning of the National Council of Sustainable Development and Poverty Reduction by including the Ministry of Ecology and Natural Resources as a member of this Council in order to improve integration of environmental considerations into other policy sectors, mainly agriculture, energy, industry, regional development and transport.

Chapter 2: Compliance and enforcement mechanisms

Environmental permitting is still based on single-media regulation that makes compliance difficult, places a heavy administrative burden on environmental agencies and the regulated community, and hampers public participation. The large number of regulated substances and uniform permitting rules for all polluters, irrespective of their size and impact, makes it difficult to monitor and enforce compliance with permits effectively. These kinds of difficulties could be solved with the adoption of an integrated permitting system that would be implemented in stages, and would be limited to industrial installations with significant negative effects on human beings or the environment. Initial steps in introducing BAT-based integrated permitting could be taken already in the short term (up to three years), including:

- Agreeing on the scope of the future integrated permitting system (in terms of industrial sectors and production capacity thresholds, if appropriate) and adopting an overall strategy for the transition and implementation plan;
- Drafting a new law on environmental permitting and amendments to the existing legislation to enable the reform, as well as developing implementing regulations;
- Making institutional changes to reflect the needs of the new system; and
- Launching pilot permitting projects for industry and training for permitting officials.

The current compliance monitoring system generally corresponds to the recommended EU Minimum Criteria for Environmental Inspection (2001/331/EC). However, its functioning is undermined by the low number of SEI laboratory and inspection staff.

Regarding environmental assessment, the Republic of Moldova has made progress in terms of greater transparency. However, more emphasis could be put on the use of environmental assessment instruments, i.e. the EIA, SEE and PEE, in particular for those projects with significant environmental impact. For example, proposed production techniques for new projects should already be assessed against best available techniques (BAT) at the design stage. EIA and SEE recommendations on mitigation of environmental impacts should be used as decision-making tools when setting conditions in environmental permits, and should help to define the corresponding long-term environmental management implications. Public participation in EIAs and SEEs should be further improved by providing full public access to documents and inviting their comments. It is essential that the environmental management mechanism is used to its full potential.

Sanctions against environmental violators are not efficient enough yet. They should push towards a better and more effective enforcement. The SEI should obtain the right to impose directly, without going through a court procedure, all fines for administrative violations (as it is presently the case only for water-related violations). The rates of the fines should be increased to enhance their deterrent effect. Costs for restoring damage to the environment should also be estimated and compensation mechanisms ruled by law. All this should be done in conjunction with increased SEI transparency and accountability. At the same time, an operator should have the right to appeal the sanction in court.

Therefore, the following recommendations are addressed to the Republic of Moldova:

Recommendation 2.1:

The Ministry of Ecology and Natural Resources should in the short term:

- *Draft legislation and necessary by-laws to introduce an integrated permitting system for installations having significant impact on the environment, following the approach of the EU IPPC Directive as a benchmark;*
- *Ensure that self-monitoring requirements for enterprises are included in the permits; and*
- *Institute a simplified permitting scheme for other installations.*

See Recommendation 1.3

Recommendation 2.2:

Building on actual partial compliance with the EU Minimum Criteria for Environmental Inspection, the Ministry of Ecology and Natural Resources should:

- *Improve the operational and human resources management of the State Ecological Inspectorate, including staff training, and upgrade its technical capabilities;*
- *Streamline the instruments used to achieve compliance and enforcement. A first step would be to identify particular groups of the regulated community and their impact on ambient environment conditions. Further priorities should then be set among the most problematic geographic areas and the most polluting installations, and enforcement tools selected that will effect the most appropriate enforcement response; and*
- *Improve the existing set of indicators, which currently falls short of measuring both environmental improvements (e.g., pollution reduction amounts) and enforcement results (e.g., compliance rates and timeliness of compliance actions), so that the effectiveness of enforcement can be assessed more accurately.*

Recommendation 2.3:

The Ministry of Ecology and Natural Resources should improve the use of the three existing environmental assessment instruments (SEE, EIA and PEE) by linking them closer to the principles to EU EIA Directive and to other compliance assurance mechanisms and increasing public involvement in environmental assessment decisions.

Recommendation 2.4:

The Government should propose and submit for legislative approval important changes in the application of sanctions against environmental violators by:

- *Allowing administrative imposition of fines;*
- *Increasing the level of fines and indexing them to inflation;*
- *Making managers responsible for infringements; and*
- *Introducing environmental damage assessment based on actual remediation costs.*

Chapter 3: Information, public participation and education

The Republic of Moldova has made some progress in observing its environment. It increased its surface water quality observation network and started monitoring some heavy metals and POPs in sediments, soil and in the atmospheric precipitation. It reactivated its only transboundary air-monitoring station. Nevertheless, the current monitoring networks remain insufficient to meet the requirements of the national legislation and international obligations of the Republic of Moldova. Monitoring does not cover several important point sources of groundwater pollution, diffuse pollution of surface waters is not measured and there is not a single background monitoring station in the country.

The lists of ambient quality parameters have not been revised or harmonized with international standards since Moldova received independence, except the drinking water quality parameters that are under revision to meet WHO requirements. An excessively large number of regulated pollutants impose unrealistic monitoring and enforcement requirements on public authorities. Some of the Moldovan standards are below the threshold of

detection, so it is impossible to know whether they are being achieved or not. At the same time, some hazardous substances are unregulated.

No real progress was made towards the creation of a comprehensive nationwide monitoring programme. Individual ministries and departments develop their own, while decentralized databases of relevance to the environment follow their own technical protocols and procedures. The integrated environmental monitoring system is not operational in spite of the adopted regulation and the donor support provided.

Some institutions in the Republic of Moldova enlarged their environmental databases and improved environmental information management and reporting. For instance, today, statistical data collection covers 17 environment-related areas. Important databases, however, especially those on emissions and discharges, water quantity, groundwater quality, forests and environment statistics, are not managed by modern information technologies and are not easily accessible to decision-makers and the general public. The environmental reports are largely descriptive.

The Republic of Moldova was among the first States to ratify the Aarhus Convention. It adopted a series of legal and regulatory documents broadening the rights of citizens to have access to environmental information and to ensure public participation in environmental decision-making. It has still to elaborate its legal and regulatory framework further to more effectively implement the requirements of the Aarhus Convention.

Procedures are not sufficiently detailed enough to make general legal provisions that ensure public participation in environmental decision-making concerning laws, regulations, standards, permitting, plans and programs applicable in practice. The public does not generally participate in the State ecological expertise. The Regulation on public participation in the preparation and adoption of environmental decisions of 2000 is not being enforced.

The MENR frequently invites the public to participate in decision-making on policies, plans and programmes. An NGO representative, elected by NGOs themselves, is sitting on the Administrative Council of the Environmental Fund. The Environmental Fund provides NGOs with financial support, although the artificial limitation of the amount of grants to individual NGOs restricts considerably the true potential of this financial source for supporting civil society's environmental initiatives. The public is not represented in the Inter-Ministerial Committee on Sustainable Development and Poverty Reduction and in the National Commission on Environmental Policy.

The Republic of Moldova signed the PRTR Protocol to the Aarhus Convention that was adopted in Kiev in 2003. It is presently attempting to establish a national PRTR for the energy sector. Preparations for the protocol ratification need to be intensified by involving key monitoring institutions, compliance authorities, sectoral ministries, business and industry, and NGOs in the development of a plan of action to set legal, institutional and technical frameworks for establishing a national PRTR.

The Republic of Moldova is promoting environmental education covering the pre-school, primary and secondary, and higher education. A comprehensive and well-thought system of environmental education has been established for schools by integrating environmental issues into mandatory curricula. There are no permanent environmental training courses for public officials and judges, however. Non-formal and informal environmental education of adults is practically absent in the country.

Therefore, the following recommendations are addressed to the Republic of Moldova:

Recommendation 3.1:

The Ministry of Ecology and Natural Resources, jointly with the Ministry of Health and Social Protection and in cooperation with the Department of Standardization and Metrology, should review the national monitoring parameters and environmental quality standards:

(a) To limit substantially the number of regulated parameters by making the remaining ones consistent with international standards and guidelines;

(b) *To introduce additional parameters and standards monitoring that are required by multilateral environmental agreements and EU environmental directives, and to set time schedules for phasing in those new parameters and standards that could not be introduced immediately; and*

(c) *To focus on a core set of parameters and standards when planning the upgrading of monitoring stations, equipment and devices, and analytical laboratories including relevant staff retraining.*

(See also recommendation 1.3)

Recommendation 3.2:

The Ministry of Ecology and Natural Resources, in cooperation with the Ministry of Health and Social Protection, the Ministry of Agriculture and Food Industry, the National Bureau of Statistics, the Agency for Forestry “Moldsilva”, the State Water Concern “Apele Moldovei”, the Agency for Geology “AGeoM” and other institutions concerned, should review the achievements and failures in the implementation of the 1998 Regulation on Establishing of an Integrated Environmental Monitoring System. On the basis of this review they should prepare a decree for Government adoption for the establishment of an institutional structure for inter-ministerial coordination on environmental monitoring and information. The proposal should envisage, among other things:

a) A leading role for the Ministry of Ecology and Natural Resources in this institutional structure together with operational support by a monitoring centre to be established by the Ministry on the basis of its existing observation and information units and additional resources, as appropriate; and

b) The preparation by this institutional structure, taking into account environmental monitoring and information provisions in various national strategies and programmes and international commitments, of a time-bound and consistent set of practical actions aimed at expanding observation networks and the number of parameters measured; improving data collection and exchange; harmonizing reporting with international requirements; and facilitating public access to environmental information.

Recommendation 3.3:

The Ministry of Ecology and Natural Resources, in cooperation with the National Bureau of Statistics, the Agency for Forestry “Moldsilva”, the State Water Concern “Apele Moldovei”, the Agency for Geology “AGeoM”, should re-assess the effectiveness of their environmental reporting policies to ensure the publication and uploading onto the Internet of environmental information collected by these institutions, and to make them publicly accessible through Internet, free of charge on a regular basis and in a user-friendly form and

Recommendation 3.4:

To further improve the participation of public in environmental decision-making, the Ministry of Ecology and Natural Resources should initiate:

- Implementing fully the 2000 governmental Regulation on Public Participation in the Elaboration and Adoption of Environmental Decisions;*
- Supplementing the Law on Environmental Protection with including relevant detailed provisions on public participation in environmental permitting, environmental standards setting, and development of laws, regulations, strategies, plans and programmes affecting the environment, taking into account provisions of the applicable multilateral environmental agreements; and*
- Including civil society representatives into governmental commissions or committees on environmental policy and sustainable development.*

Recommendation 3.5

The Ministry of Education, Youth and Sports, in cooperation with the Ministry of Ecology and Natural Resources and other stakeholders concerned, including NGOs and the mass media, should consider the establishment of a council on education for sustainable development. This body should help promote and facilitate the implementation, at the national level, of the UNECE Strategy for Education for Sustainable Development, paying particular attention to non-formal and informal education of adults (including education on citizen rights) and to the training of policy-makers and judges.

Chapter 4: International agreements and commitments

Since the first Environmental Performance Review, the Republic of Moldova has made a tremendous step forward in international cooperation. It has a) actively participated in most big international environmental events, b) ratified most of the environmental agreements of regional and global importance, c) tried to go forward in their implementation by preparing national contributions and adjusting existing or drafting new national strategies on various specific subjects, and d) hosted a series of international meetings and conferences that helped the country to raise its profile and attract international resources and assistance for solving national environmental problems.

At the same time, regardless of its efforts to fulfil all relevant obligations, the practical level of implementation remains rather low and efforts poorly coordinated. For implementing most of the ratified conventions and protocols, the country mostly relies on international support, which in many cases remains donor-driven and does not always address the real needs of the country. It is important that the MENR be organized in such a way that it can inform potential donors of the needs and priorities of the country for investments and assistance in environment, and follow the projects that are ongoing, keeping track of the situation.

The country is preparing for and considering the ratification of several more environmental conventions and protocols and is conducting some work to bring national legislation in line with international agreements, and the shrinking number of staff at the Ministry. However, the work is far from being complete, mostly due to the constantly growing number of different policy and strategy papers, action plans and national programmes that are requested for the implementation of these international agreements. The country should streamline its priorities and concentrate its efforts on those agreements, related documents and actions that can bring the most to the country.

Some attempts to become more focused and coordinated in international cooperation have been undertaken recently. First of all the EU-Moldova Action Plan has been approved, and second of all the corresponding National Implementation Programme is being put together. This will help to streamline future joint activities and target EU assistance to the country that better fits its real needs. Also the recently adopted EGPRSP is in line with provisions of the EU-Moldova Action Plan and it highlights European integration as a fundamental focus of the country's long term development objectives. Now, the challenge will be to ensure that the activities under these two programmes do not duplicate but rather strengthen each other.

In the review period the Republic of Moldova continued to participate and implement policy directions provided by international intergovernmental organizations such as UNEP, UNECE, UNDP, WHO, WB, OECD and the governing bodies of international environmental agreements. It also continued to develop bilateral relations with neighbouring as well as other, mostly European, countries. Since 1998, due to a lack of resources, a lack of coordination on different levels, and numerous changes in the Government and in the Ministry, earlier bilateral agreements have not been very successfully implemented. However, after the recent elections and the reconfirmation of the Government of its strong aspiration to approximate EU practices, the Republic of Moldova hopes for closer cooperation with the EU and sees it as a way to increase momentum and move forward with other bilateral agreements.

Overall, the Republic of Moldova has to start thinking of streamlining its activities on international cooperation and should try to concentrate on those problems that are the most important for the country, and not necessarily just rely on what donors are proposing. The EECCA Environmental Partnership Strategy adopted in Kiev at the fifth Ministerial Conference "Environment for Europe" in 2003, is a good framework for deciding on priorities because it has been elaborated by the EECCA countries themselves. The seven goals spelled out in it are quite concrete and the country can choose those that are of highest importance for itself. The Strategy has strong political support from Ministers, and donors are increasingly requesting to use the Strategy as a benchmark. The donors' use of the Strategy is a good way to bring together the country's priorities and donor possibilities.

Recommendation 4.1:

In order to improve implementation of the ratified international agreements, the Ministry of Ecology and Natural Resources should:

- *Establish clear mandates to the Working Groups for agreement implementation, coordinate their work and report about their results to the Government;*
- *Strengthen synergies between relevant Working Groups and avoid duplications of activities developed under the agreements; and*
- *Seek resources necessary to fulfil obligations under these agreements by all means including organizing donors' meetings.*

Recommendation 4.2:

The Ministry of Ecology and Natural Resources should analyze the results of implementation of environmental bilateral and multilateral agreements and other forms of bilateral and multilateral cooperation. Based on this analysis, it should identify the priorities for cooperation and concentrate its resources on them. It should integrate this analysis into its annual report on cooperation with international organizations to the Ministry of Foreign Affairs and European Integration.

Chapter 5: Economic instruments and environmental funds

Since the 1998 EPR the authorities improved the environmental policy-making process, introduced new taxes on environmentally harmful products and applied the existing legislation more effectively. This progress was reflected in the partial decoupling of economic and environmental trends, especially during the 1998-99 recession. Real GDP growth continued uninterruptedly since 2000 while environmental pressures associated with air pollution by road transport and water pollution by insufficiently treated sewage increased. These contradictory trends reflect the peculiar nature of consumption-driven growth and institutional shortcomings, including inconsistent legislation and an opaque business environment that discourage stronger participation of foreign investors and international financial institutions in economic restructuring, particularly in the critical water services sector.

Aside from more effective regulation and law enforcement, further reforms of the existing market-based instruments are needed than hitherto for a more comprehensive decoupling of environmental pressures from economic growth. Abolishing numerous tax exemptions could further enhance the solid revenue performance of environmentally related taxes. In contrast, the system of emission charges remains inefficient while playing a negligible revenue role. The incentive function of environmental taxes could be improved by a closer alignment with international best practice, particularly in the area of excises on motor fuel. The incentives associated with pollution charges could be enhanced considerably by imposing them only on a few major sources with easily measurable emissions. Whereas significant advances towards cost-reflective pricing took place in transport and energy sectors, the pricing of water services remains less satisfactory. Given the unwillingness of many municipalities to authorise operating cost-recovery tariffs, the prices of water supply and sewerage services ought to be set by the independent energy regulatory agency. In order to reduce the political interference in price setting, the autonomy of the agency could be enhanced by reducing the Government's role in the appointment of regulators and allowing the regulatory agency to finance itself rather than relying on the state budget.

Last but not least, the chapter concludes that both the financing and the functioning of environmental funds have improved considerably since 1998. Nevertheless, the managerial system and operational efficiency still fall short of good international benchmarks. The rapidly rising carryover amounts in budgets of the national and local funds imply that an introduction of output-oriented budgeting could improve the allocation of the available financial resources to priority environmental projects, providing that environmental objectives of the nation's Economic Growth and Poverty Reduction Strategy Paper become real priorities rather than empty declarations.

The recommendations listed below should be implemented to consolidate the Republic of Moldova's significant achievements of integrating environmental costs into economic decision-making and to assure further progress.

Recommendation 5.1:

The Ministry of Finance in cooperation with the Ministry of Economy and Trade, and the Ministry of Ecology and Natural Resources, should assure the realization of the Republic of Moldova's Millennium Development

Goals objectives pertaining to sustainable development. The environment should be made a priority area in both the Government's medium-term budget framework and related annual budgets to assure financing of the key environmental actions specified in the national Economic Growth and Poverty Reduction Strategy Paper.

Recommendation 5.2:

The Ministry of Finance and the Ministry of Ecology and Natural Resources should increase the "ad quantum" excise tax rates on petrol and diesel while differentiating them according to environmental characteristics with the objective to significantly increase the price of diesel versus petrol to reflect its environmental impact. At the same time, they should phase out the "ad valorem" excises on imported fuel.

Recommendation 5.3:

The Ministry of Ecology and Natural Resources and the Ministry of Finance should streamline the system of pollution charges, introducing a small number (less than ten) on measurable priority pollutants and eliminating all other charges. It should set the rates of the new charges at levels that will influence the polluters' behaviour significantly.

Chapter 6: Expenditures for environmental protection

Since the first Environmental Performance Review the Republic of Moldova has improved the situation with expenditures for environmental protection. This progress, however, was inconsistent. The country has developed new and modified existing laws and elaborated numerous strategies, concepts, programmes and action plans aimed at improving environmental management and the state of the environment. Unfortunately, many of the policy documents do not contain clear measurable targets and do not indicate the necessary financial resources to achieve their objectives. In some cases, when the funding requirements are identified, the Government has other priorities and does not provide all the necessary funding, which hampers implementation of the programmes. The 2004-2006 *Economic Growth and Poverty Reduction Strategy Paper* lists environmental protection as a priority and sets clear funding requirements for it. It may serve as a good practice example when elaborating new or revising existing policy documents.

State funding remained prevalent in the country's environmental expenditures. Environmental funds (National Environmental Fund and four Local Environmental Funds) became the main source of funding in 2000 due to a substantial increase in their revenues. Unfortunately, insufficient capacity and sub-optimal management practices make their performance less effective than it could be. Environmental expenditures have increased in the reviewed period but remain low in absolute and per capita terms, as well as share of GDP compared not only to OECD countries but also to many other countries with economies in transition. At the same time environmental fund revenues continue to be significantly higher than their expenditures, which means that even existing resources are not fully utilized. Assessment of implementation of projects funded by the environmental funds is usually based on self-reporting by the grantee. The actual evaluation of their effectiveness and impact is rarely done.

Total expenditures for environmental protection may also be underestimated because of the existing methodology for data collection and reporting. Certain expenditures that may be considered environmentally related, such as for developing water supply and wastewater disposal systems are not included in this reporting. Sectoral ministries and other governmental agencies may have expenditures that include an environmental component but they do not account for them separately. Neither the National Bureau of Statistics (former Department of Statistics and Sociology), which collects and processes statistical reporting forms on environmental expenditures, nor the Ministry of Ecology and Natural Resources attempts to identify all environmentally related expenditures.

Foreign financial resources constituted a relatively small share of all environmental expenditures (less than 10 per cent). Environmental protection has not become one of the main areas for which international funding is requested. The Ministry of Ecology and Natural Resources does not have comprehensive information on financing for environmental protection from international sources and capacity to analyze their utilization. This limits the potential to attract additional resources as well as to coordinate the use of available resources with domestic funding on similar activities. The positive experience of some projects, such as Moldova Social

Investment Fund, could be applied to such domestic institutions involved in expenditures for environmental protection as National and Local Environmental Funds.

Recommendation 6.1:

The Ministry of Ecology and Natural Resources should identify the priority environmental issues among the already approved national strategies, programmes and action plans. These issues should be consistent with the relevant priorities of the 2004-2006 Economic Growth and Poverty Reduction Strategy Paper, the EECCA Environmental Partnership Strategy and the EU-Moldova Action. The Ministry should set clear measurable targets with related actions for their realization and provide justification of necessary financial resources. The Ministry, in cooperation with other relevant ministries and other governmental agencies, should identify sources of financing that may include the State budget, the National Environmental Fund and external funding by development partners.

Recommendation 6.2:

The Ministry of Ecology and Natural Resources should restructure the management of the National and Local Environmental Funds in line with the recommendations of the 2002 Performance Review of the funds. In particular:

- *The capacity of the secretariats of the funds should be expanded to assure proper assessment of the project proposals and evaluation of the quality of implemented projects. The expanded secretariats should be funded from the revenues of the funds.*
- *The Administrative Councils of the environmental funds should set guidelines for appraisal of project proposals, ranking in accordance with priority and expected environmental benefits. The Administrative Councils should ensure that the funds' available resources are utilized to the maximum possible extent, and that annual expenditures of the funds are equal or close to annual revenues; and*
- *The Ministry should consider introducing best practices of the Moldova Social Investment Fund into the management of the National and Local Environmental Funds and into the procedure of selecting projects for funding.*
- *The Administrative Councils of the environmental funds should increase the capacity of the National Environmental Fund to prepare project proposals for external funding, coordinate fundraising activities, and monitor project implementation.*

Recommendation 6.3:

The National Bureau of Statistics, in cooperation with the Ministry of Ecology and Natural Resources and other relevant governmental agencies, should review the current system and methodology of defining and accounting for environmentally related expenditures in the context of best international practices. The improved accountability might serve as a basis for the Ministry to solicit the Government to increase the level of state environmental funding.

Chapter 7: Environmental management in agriculture and forestry

Agriculture and land use

Agricultural production in the Republic of Moldova is in a difficult situation. With very restricted resources at its disposal, the sector has to adapt to a dramatically changed structure of production and new markets. Nevertheless efforts are being made to minimize negative environmental effects from agriculture. The awareness of the importance of land and soil protection in the country, its only real natural resource, is high. Several of the steps that were taken with the support of donors can be commended:

- The development of extension services,
- The projects aiming at decreasing diffuse pollution from agriculture,
- The promotion of organic agriculture, and
- The promotion of Good Agricultural Practice.

In the current difficult economic situation, and in the perspective of an ongoing consolidation of agricultural production, it is not easy to introduce elaborate schemes on environmental protection in the agricultural sector. New or changed practices are only likely to be introduced successfully if they also contribute to improved production and an improved standard of living in the countryside. More productive agriculture with an improved economy would have a positive impact on soil and land management and on the efficiency of the use of agricultural inputs.

In the development of agricultural policies, the size and design of agricultural subsidies can have serious effects on the environment. Product and price subsidies are almost always negative for the environment in the long term, and should be avoided also for economic reasons. The review of agricultural subsidies, which is planned, should take into account their possible adverse effects on the environment.

Extension services and training are key instruments in the development of private agriculture, and should help to communicate the cause-effect linkage between agriculture, environment and health. An important task for the extension services is to promote agricultural practices that will decrease erosion, and a safe and efficient use of pesticides and fertilizers. To do this, they need a solid scientific basis and an educational capacity, and increased financing. Applied agricultural research is a weak area that needs to be developed. Good Agricultural Practice should always be the core of attention for the extension services.

For all land management, the local population and decision makers should be involved in the design and implementation of programmes. Efforts are being made, but this work needs to be intensified. It is a drawback that the municipalities are too small and poor in resources to take on greater responsibility for environmental issues and land management.

No single institution is able to carry out measures to combat land degradation successfully. Only joint and integrated efforts, based on good information, can promote cost-efficient measures and achieve their targets. The development of a national Geographic Information System is one important step to facilitate planning and cooperation. The planned UNDP-GEF project “Integrated and Sustainable Land Management through Community Based Approach” is an opportunity to find synergy in the coordinated action of several authorities and administrative levels, and to stop the propagation of non-funded and unrealistic programmes and action plans.

There are two categories of land that need particular attention: the pasture owned by the municipalities and the water protection zones. Two draft legal acts, both important as a basis for improved land management, a Law on Soils and a Regulation on Pasture, have been developed but are not yet approved by Parliament. Improving management of pasture will provide economic as well as environmental gains. It is crucial that a country with as high a proportion of arable land as the Republic of Moldova actively protects its waters by establishing water protection zones. The National Ecological Network of Moldova will provide another important aspect of land management – the establishment of ecological corridors. This is a difficult challenge in a landscape so dominated by agriculture.

Drinking water quality is a serious problem in the countryside. Efforts by the MoH to improve the information available on water quality are important, and should lead to a better awareness in the municipalities on the action needed. Improved handling of manure and other waste, and improved protection of the wells used are key measures.

Forestry

Moldovan forests are under considerable pressure. The present work to increase the acreage of forests is important as it serves to improve land and soil protection. It further prevents diffuse pollution and protects biodiversity.

As in many other countries there is a heated debate and a frequent lack of understanding between the forestry sector and environmental authorities and activists. There are two aspects of this lack of understanding. On the one hand, efforts must be made on both sides to improve the dialogue. On the other hand, based on other countries' experience, it takes a long time of joint work in projects, working groups, seminars, to create a better

understanding, a basis for an improved dialogue and ultimately better forestry and environmental policies. Afforestation of water protection zones, NEMN and the new GEF project on sustainable land management are opportunities to establish joint work and a constructive dialogue.

The other aspect is more serious. At present “Moldsilva” is an agency that is essentially self-regulating. The key instrument for its economic activity is the ten-year forestry management plans developed by its own Institute for Forestry Research and Management. These management plans are not assessed by any outside authority. The management of four scientific reserves according to the 1998 Law on Protected Areas also demonstrates the shortcomings in the regulation of the forest sector. This issue needs to be resolved urgently and in the short term.

Recommendation 7.1:

The Ministry of Agriculture and Food Industry in cooperation with the Ministry of Ecology and Natural Resources should, as a priority, develop a programme for implementing Guidelines for Good Agricultural Practices that should be used as a key instrument to guide policy development and extension services in the agricultural sector. Advising farmers on how to counteract erosion efficiently and effectively should be one of the central components of this implementation programme.

Recommendation 7.2:

The Government should delegate the lead role to the Ministry of Ecology and Natural Resources for, in coordination with the Ministry of Agriculture and Food Industry, the Agency for Forestry “Moldsilva”, the State Water Concern “Apele Moldovei” and the Agency for Land Relations and Cadastre with the active involvement of farmers, NGOs, and municipal and district authorities, elaborating all ongoing and planned land management and afforestation programmes. These efforts should in particular focus on achieving the following important objectives:

- *Improvement of the management and protection of pasture;*
- *Establishment of water protection zones according to the existing laws and regulations; and*
- *Establishment of the National Ecological Network of Moldova.*

Recommendation 7.3:

The Agency for Land Relations and Cadastre and the Agency for Forestry “Moldsilva” should develop a national Geographical Information System (GIS) in order to provide uniform presentation of topographic information and information on real estate (cadastre), which would facilitate all spatial planning purposes and related decision-making.

Recommendation 7.4:

The Ministry of Agriculture and Food Industry should ensure long-term financing under the aegis of scientific institutions with the objective to using the results of applied research and introducing environmentally friendly technologies and practices in agriculture.

Recommendation 7.5:

The Government should make a proposal to amend the Forest Code in order to give to the Ministry of Ecology and Natural Resources the authority to approve the forestry management plans, transferring to it the structure responsible for developing them. It should improve the supervision of forest exploitation and should be authorized to impose higher fines. Capacity building and its staffing should be adjusted adequately.

See also Recommendation 1.1.

Chapter 8: Environmental management in industrial activities

The country has implemented almost all recommendations relevant to the industrial and energy sectors proposed in the first Environmental Performance Review. The most positive results regarding the industry sector were achieved by the elaboration and implementation of a waste management strategy, the establishment of a cleaner production centre and the implementation of pilot cleaner production projects for each of the main industrial sectors. Some of them for energy (liberalization of energy sector and getting energy prices right) had

also a positive impact on energy efficiency and mitigated the environmental impact of the sector. However others were only partly implemented: improvements were anticipated in the elaboration of an energy saving programme and establishment of energy savings funds but there were neither economic incentives nor appropriate financing mechanisms in place, so the objectives were not fully realized

Not all results envisaged by these recommendations were successfully achieved. Some very important and still relevant recommendations were not implemented: the development of modern instruments for waste management, the development of relevant fiscal instruments, particularly profit taxes and import duties to encourage cleaner production, and the development of economic instruments (tax reduction, exemptions from profit taxes) for energy savings.

Since 1998 the country has elaborated various environmental strategies, action plans and programmes covering the most important issues relevant to industrial activities: waste management, water resources, POPs, environmental safety, environmental hygiene and clean production. In all documents the integration of environmental policies into sectoral strategies is stated and preparation as well as implementation of sectoral strategies for the implementation of specific environmental programme is being foreseen in these documents.

However implementation of sectoral environmental policies needs improvement. The sectoral programmes above-mentioned need to be further implemented. Some programmes in energy efficiency and waste management were elaborated. However, their implementation is being poorly monitored because of the lack of indicators and weak coordination between ministries responsible.

Information about the environmental impact of industries is very limited. Therefore it is difficult to analyze the situation in this sector or to set targets for emission reduction, or to identify priorities and measures needed to achieve these targets. The programmes for development of industries declare that environmental issues should be integrated but do not give any priorities or environmental impact reduction targets and do not provide any capacity for their monitoring. The environmental standards inherited from the Soviet past are too numerous and unrealistic. The IPPC Directive should be considered as the long-term target and its implementation should be started gradually but without delay.

Weak implementation of environmental policies in industries is also caused by an institutional framework for the regulation of industrial activities being shared between several responsible institutions. Clearly there is insufficient coordination. Nevertheless a positive trend can be noticed towards the promotion of cleaner production as a result of the establishment of Cleaner Production and Energy Efficiency Centre (CPEE) and its successful operation since 1999. The CPEE Centre could use the Polish Clean Production Programme as an example for its own involvement in the implementation of IPPC Directive requirements in the country.

However the main obstacle for a successful implementation of environmental policies in industries is the lack of economic incentives. Pollution taxes and user charges are low and imposed based on calculations instead of actual emission monitoring. They therefore do not stimulate implementation of pollution abatement measures. Economic measures for the promotion of cleaner production and the implementation of energy saving measures and waste recycling were not concretely introduced though they were stipulated in the relevant programmes.

The Ministry of Ecology and Natural Resources in cooperation with the Institute of Ecology and the CPEE Centre should elaborate emission limit values for the major pollutants (NO_x, SO₂, CO and particulates matters) starting with large combustion installations. Limit values should be implemented gradually for other sources and other pollutants, based on the experience of other countries that inherited similar systems from their Soviet pasts. The results of the Tacis project "Preparatory EU Approximation Work of the Republic of Moldova in IPPC and Waste Management" and other relevant studies should be used for the further work. The Ministry should initiate the revision of pollution taxes in combination with emission standards. Taxes should be increased and only principal pollutants should be taxed. Other pollutants can be grouped according their toxicity into the four toxicity classes and the same tariff per class should be applied. The studies elaborated by the Energy Institute and the State Institute of Economy and Information can be used for setting rates for pollution taxes. (See Recommendation 5.3)

Recommendation 8.1:

The Ministry of Ecology and Natural Resources in cooperation with the Ministry of Industry and Infrastructure and other relevant stakeholders should develop an integrated system of indicators for monitoring the environmental impact of industries. This system should enable the establishment of targets that would be used for setting priorities for environmental impact mitigation in industrial development strategies.

Recommendation 8.2:

The Ministry of Economy and Trade should coordinate relevant institutions more effectively, monitor the implementation of sectoral programmes, and ensure that environmental issues are integrated effectively into these programmes.

Recommendation 8.3:

The Ministry of Industry and Infrastructure should initiate the restructuring of the National Energy Conservation Agency and the National Fund for Energy Conservation based on the experience of other countries on energy savings and energy efficiency improvements.

Recommendation 8.4:

The Ministry of Economy and Trade in collaboration with the Ministry of Finance and the Ministry of Ecology and Natural Resources should improve economic incentives (for instance, reduction of profit taxes and other taxes for industrial production based on waste recycling and reuse, reduced charge rate for enterprises reducing their waste, etc.), elaborate measures for promoting recycling and disposal of waste; stimulate energy efficiency improvements; and enhance clean production methods based on related national programmes.

Implementation of 1st EPR recommendations

PART I THE CONDITIONS OF ENVIRONMENTAL POLICY AND MANAGEMENT

Chapter 1: Legislative and institutional framework

Recommendation 1.1:

The National Strategic Environmental Plan should be entirely overhauled in order to provide an integrated programme of linked and phased activities, which can easily be put into operation by ministries and departments in their respective sectors. Specific targeted policies should be meshed with current sectoral actions.

There was a need to implement a unified policy on the environment and use of natural resources that integrated environmental requirements into the process of national economic reform. This, coupled with the political desire for integration to the EU, has resulted in reviewing the existing environmental policy and developing a new policy concept.

The 2001 *Concept of Environmental Policy* replaced the action plans and concepts that had been in force since the mid 1990s. It covers the adjustment of the major environmental policy objectives to take into account social and economic changes, as well as incorporating regional and global programmes and trends to protect the environment. Environmental requirements have also been integrated into sectoral policies.

Since 1998 other environmental strategies and programmes have been elaborated, providing a basis for environmental protection and legislation. The very large number of these strategies, concepts, programmes and plans has not resulted in their practical implementation due to the lack of human and financial resources and administrative capacity. The list of these documents is given in Annex III.

Recommendation 1.2:

Lawmakers should focus on reviewing existing environmental laws to identify overlap, contradictions and gaps amongst them all; amendments should be proposed accordingly.

Although the Ministry of Ecology and Natural Resources (MENR) is reviewing legislation and amending legal acts, the existing legal acts are largely based on early 1990's principles and methodologies and some areas are still unregulated. The strictly sectoral (i.e., single-media such as air, water and waste) character of environmental laws and their prescriptive nature mean that there is no synergy between sectors and no holistic view of environmental problems, or of their solution. This is likely to increase difficulties in moving towards the implementation of an integrated pollution prevention and control system as there is still little experience of cross-media and cross-sectoral practice.

Recommendation 1.3:

The DEP should be raised to the level of ministry as a result of the necessary restructuring and integration of governmental decision-making and management in the areas of environment, use of natural resources and, possibly, physical planning.

To take environmental decisions at a higher level the Department of Environmental Protection was lift up to a Ministry of Environment in 1998, and then restructured several times till becoming the Ministry of Ecology and Natural Resources in 2004 with extended rights and responsibilities. Four territorial environmental agencies have been created, with their own field laboratories.

Recommendation 1.4:

A national steering committee for sustainable development should be created with broad governmental and non-governmental participation. This committee should also ensure effective coordination and implementation of environmental policies across the sectors.

By the Decision of the President of the Republic of Moldova N 996-III on 3.12.2002, the National Council on Sustainable Development and Poverty Reduction was established in 2004 and a regulation on the Council was issued. In compliance with the regulation, the Inter-Ministerial Committee for Sustainable Development and Poverty Reduction was additionally set up to coordinate activities related to strategic planning in the socio-economic policy. This was intended to be oriented towards the sustainable development of the country and improvement of the quality of life of the population. However, as of early 2005, the Council has not been operational.

Recommendation 1.5:

The responsibilities of local authorities regarding environmental management should be reviewed, clarified and strengthened and the necessary resources allocated accordingly.

The 1998 *Law on Local Public Administration* established the competences of each territorial unit of the first and second level of administration, and gave them competences in environmental protection. After the 2003 revision, environmental functions were recentralized and the financial autonomy of local administrations reduced. As a result of the 2005 election, the environment management will be decentralized again.

Recommendation 1.6:

Environmental policies should be formulated, with authoritative support, at the highest government level to direct and coordinate the activities of the ministries, departments and agencies involved in agriculture, forestry, water and land use.

The main objective of the 2001 *Concept on Environmental Policy* is to coordinate the environmental State policy priorities with socio-economic changes in the country, in line with global and regional trends, programmes and plans. The 2004 *Economical Growth and Poverty Reduction Strategy* represents a key-factor in strategic coordination of different sectors of the national economy. The Government and the Parliament have also drawn up a number of other specific documents containing environmental policy objectives. For instance, the coordination with other relevant institutions is obligatory and foreseen in the following regulations: Government Decision № 699 *on approval of rules regarding the elaboration of the projects of normative acts*, of 1994, which describes the process of elaboration and coordination; Government Decision *on approval of Rules regarding the elaboration of departmental normative acts*, which covers the coordination of projects within an institution or interested organizations; provisions in the statute of the Ministry of Ecology and Natural Resources; and Law № 317-XV *on normative acts*, of 2003.

In spite of all these mechanisms, coordination can still be characterized as inefficient, because the Ministry of Ecology and Natural Resources is not involved early enough in the elaboration of plans, programmes and laws. The Ministry only receives final versions of documents, a step at which introducing some changes is becoming quite difficult.

Recommendation 1.7:

Capacity-building activities should be implemented in the “non-environmental” agencies to sensitize senior decision makers to environmental concerns and to train operational staff in appropriate environmental issues, approaches and techniques. Financial assistance for environmental capacity building should benefit not only bodies involved in environmental issues at the national level, but also local governments and the environmental NGO community.

The MENR introduced courses on environmental protection to the non-ecological profiles in university faculties. To improve the professional skills of office employees and local administration authorities in the Presidential Academy of Public Management, a course on environmental protection is envisaged. The National Environmental Fund (NEF) finances NGOs in the implementation of environmental education and public awareness projects. NGOs and specialists from other Ministries and Departments are invited by the MENR to be involved in the elaboration of strategic documents on environmental protection.

Recommendation 1.8:

Revised procedures of public involvement should include:

- *Announcing the commencement of State Ecological Expertise (SEE) and Environmental Impact Assessment (EIA) processes in the local press;*
- *Inviting individuals, organizations and communities to submit written comments and participate in public meetings relating to (i) identifying the issues to be considered in the SEE/EIA investigations; and (ii) the contents of SEE/EIA reports;*
- *Requiring all SEE/EIA reports to have non-technical summaries;*
- *Placing copies of reports in local libraries; and*
- *Specifying rules governing the conduct of public meetings and the methods by which the results are conveyed to the proponent and other decision makers and how they will be used in decision-making.*

To contribute to public awareness and to facilitate access to environmental information, the Environmental Information Centre was established within the MENR. Despite stipulations in the laws, the State Ecological Inspectorate (SEI) is not proactive in seeking public comments as part of the State Ecological Expertise (SEE), and usually disregards “public environmental review” (PER) conclusions. Project proponents themselves do not share their documentation with the public, using commercial confidentiality concern as an excuse.

Recommendation 1.9:

The instrument of environmental impact assessment should be more systematically used at all levels of government: national, regional and local. The official attitude to public participation in EIA projects should take into account the high value of such participation, as demonstrated in all European countries.

The Republic of Moldova signed the Protocol on Strategic Environmental Assessment (SEA) to the Espoo Convention at the Fifth “Environment for Europe” Ministerial Conference in 2003. Under the regional UNDP project “Strategic Environmental Assessment: Promotion and Capacity Development” (covering Armenia, Belarus, Georgia, Republic of Moldova and Ukraine), a manual is being developed for all governmental and non-governmental stakeholders on the implementation of this Protocol. However, assessments of government programmes and strategies are not performed systematically, while the Environmental Impact Assessment (EIA) on projects is usually limited to the old-style formalistic State Ecological Expertise.

Chapter 2 Integration of environmental and economic decisions

Recommendation 2.1:

The scope, sources of finance and purposes of the national and local environmental funds should be reconsidered between all levels of administration involved and clearly delimited. Additional funds might be forthcoming for environmental protection, if percentages of economic aggregates like GNP were earmarked for environmental protection in national budgets. The strengthening of environmental funds operations should be extended also to training for local staff to manage local funds.

The legislative basis and financing of environmental funds have improved since the 1998 EPR. The NEF is financed mainly by levies on imported fuel (introduced in 1998) and other environmentally harmful products (since 2003). Local funds are financed by pollution charges, if they are actually levied. Some training for staff at territorial environmental agencies, which manage local funds, has been provided since the late 1990s but most local funds are in practice unimportant. Although environmentally related revenues were solid in recent years, averaging three per cent of GDP, the amounts spent from the NEF on environmental protection are significantly lower.

Recommendation 2.2:

Project assessment and monitoring of project implementation should be part of a transparent administration of the National Environmental Fund. Financial analysis should be integrated with environmental audit, impact assessment, and the work of the inspectorates. Successful experiences in managing environmental funds in other countries in transition should be retained.

The secretariat of the Administrative Council of the NEF was appointed in December 1998. It commissions outside experts to evaluate projects prior to funding. Some know-how from the Polish environmental fund was passed on with the aid of the Eco Fund Project. The SEI and territorial environmental agencies of the Ministry of Ecology and Natural Resources monitor the execution of projects. The State Ecological Inspection and

territorial environmental agencies managed and controlled the implementation of projects. However, good practices for managing environmental funds were implemented only partly.

Recommendation 2.3:

The IPPC Directive of the EU should constitute a long-term target for pollution prevention and control. It should be included in the Partnership and Cooperation Agreement.

There have been several EU-sponsored attempts in recent years to study and plan a transition to integrated permitting. In 2001, a law on integrated environmental permitting was drafted but not approved by the government due to its poor preparation and opposition from key stakeholder ministries. However, permitting reform is part of the 2005 EU-Moldova Action Plan.

Recommendation 2.4:

Fines for environmental pollution should be indexed to quarterly inflation figures (CPI) as published by the Department for Statistics.

Pollution fines have remained unchanged in nominal terms since 1998.

Recommendation 2.5:

Environmental liability issues should be included permanently in privatization laws, requiring an adaptation of the resources of the legal expertise of the DEP.

The authorities are convinced that the environmental liability issues related to privatization are satisfactorily dealt with by existing legislation, the 1991 Law on Privatization. In the case of large asset sales, a resolution of environmental liability issues is specified in the privatization contract. In other cases, existing legislation enables the buyer of State assets to demand compensation for undisclosed environmental liabilities within one year of the sale.

Recommendation 2.6:

An initiative by a competent authority to promote the development of insurance schemes against environmental risks could possibly contribute to improving the handling of liability issues for environmental damage in an industrial context.

In 1999, the Ministry of Environment drafted an act on environmental insurance, which was not promulgated due to the unwillingness of the legislature to impose new financial obligations on firms. The country signed the Protocol on Civil Liability and Compensation for Damage Caused by the Transboundary Effects of Industrial Accidents on Transboundary Waters.

In 2004 several environmental-damage-related guidelines and pieces of legislation were drawn up and published: Temporary methodology on the environmental damage valuation, as a result of violation of water legislation; Instruction on the environmental damage valuation of soil resources; Instruction on the estimation of damage from pollution of the air by stationary sources; Instruction on estimation of environmental damage caused as a result of non-compliance of natural resources legislation; and Instruction on the air damage payments as a result of using salvage and consumption waste.

Recommendation 2.7

A method should be implemented that prevents real revenues from the water tax from falling due to inflation.

The principal water tax rate remained unchanged at 1.8 lei per ten m³ from 1998 to 2002. The rate was increased to five lei per ten m³ in 2003 and remained fixed in the following years. The consumer price index increased by 165 per cent between 1998 and 2004.

Chapter 3: International cooperation

Recommendation 3.1:

The Department for Environmental Protection's capacities for project management, including cooperation with international funding partners, need strengthening. Among the necessary remedial measures, staff should receive language training, as well as intensive training in substantive aspects of environmental policy, management and enforcement.

With the purpose of strengthening the potential of European integration and cooperation with international partners, the MENR created the Division of Science, Technical Assistance and European Integration. Under the Ministry of Foreign Affairs, courses were organized on foreign languages and European integration matters, which were attended by ministry employees.

To raise the level of management in Government, special courses were taught with the participation of representatives from other Ministries and Departments. A number of employees get post-graduate education on environment and international relations at the Academy of Public Administration.

Recommendation 3.2:

The role and resources of the National Commission for the Implementation of International Environmental Conventions should be strengthened.

Each international environmental agreement has a working group that includes the MENR and other representatives from Ministries, Departments and NGOs. For example, the Parliament Regulation Nr.504 XIV on 14.07.99 created the National committee for the implementation of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). However, these WGs neither have legal nor binding powers, nor any clearly identified plans, procedures or mandates for their work. These procedures are referred to as "non-written". The WGs meet no more often than once every two months. This does not provide any systematic approach for assessing the progress on agreements implementation. The Ministry's experts recognize that the enforcement section in conventions implementation is severely lacking and needs to be strengthened.

Recommendation 3.3:

The Basel Convention should be ratified, related national legislation established and specific training for the staff organized. Likewise, the ratification of the Danube Convention and other relevant intergovernmental treaties should be promoted.

Since 1998 the Republic of Moldova has become party to 11 new agreements, including the Basel Convention in 1998 and the Danube Convention in 1999. As of today, it is party to 19 international environmental conventions, four protocols and a signatory to five more. Each international environmental agreement has its National focal point.

Recommendation 3.4:

The responsibility for the implementation of the Espoo Convention should be assigned to the institution that assesses environmental impacts.

The SEI within the MENR is the focal point for the implementation of the Espoo Convention. It is also the body responsible for the State Ecological Expertise and the Environmental Impact Assessment.

Recommendation 3.5:

To control transboundary air pollution, additional air monitoring stations should be installed on the borders with Ukraine and northern Romania. "Hydrometeo" should be fully equipped for the analysis of all samples obtained from transboundary air pollution monitoring.

The State Hydrometeorological Service (HMS) restored the air monitoring station for transboundary air pollution in the town of Leova. The station is not able to report fully on daily situations so it is necessary to establish additional observation stations. The number of samples and monitored pollutants has increased. The

station also performs the monitoring of some persistent organic pollutants (POPs) and heavy metals in atmospheric precipitations that have a transboundary aspect.

PART II: MANAGEMENT OF POLLUTION AND OF NATURAL RESOURCES

Chapter 4: Air Management

Recommendation 4.1:

The recent adoption of the Law on Air Protection requires the preparation of implementing regulations that should benefit from contemporary European practices and experience, in particular as regards standards for ambient air quality and deposition levels.

The elaboration of instructions, built on the approach of contemporary European methods and practices (for example determination of emissions under the methodology EMEP/CORINAIR and others, elaborated by the European Ecology Agency) is included partially in a long-term ecological programme – “Programme on environmental security” adopted by a Government Regulation in 2003. The legal acts are still based on previous Soviet Union practices. The air quality standards in force (still more than 1,000) have not been changed and also date from the same period. The principles of a combined approach to establishing requirements are not used i.e., in addition to existing air quality limit values there are no emission standards set directly by legal acts. Emission limit values in permits are still based on pollutant dispersion calculations.

Recommendation 4.2:

The administrative authority for setting environmental standards relevant for air management should be streamlined in such a way that it clarifies responsibilities and enforces appropriate coordination mechanisms between the sectoral interests involved. The new set of standards should become the basis for strict enforcement in the very near future.

In 2000, the National Ecological Institute has created a committee for the elaboration of standards in the field of air quality protection. Practical results in this field have not yet been obtained.

Recommendation 4.3:

The future development of the energy economy should be steered in such a way that the use of cleaner fuels and of cleaner technologies is promoted through the introduction and application of market-oriented instruments.

The recommendation has been partly implemented. There is a tax differentiation on imported fuels: one per cent of the customs value on leaded petrol and diesel and 0.5 per cent on the value of unleaded petrol. The authorities have addressed the air pollution problem with a number of regulations, including restrictions on imports of old cars and stricter norms for imported fuels that promote the use of unleaded petrol and desulphurized diesel. The decrease of energy demand and the replacement of solid and liquid fuels by natural gas in combustion units also contributed to lower emissions.

However, there are no tax reductions or exemptions on energy saving investments or other economic tools for the promotion of energy efficiency improvements and cleaner production. In addition, pollution taxes and user charges are low and are imposed based on calculations instead of actual emission monitoring. Therefore they do not stimulate the implementation of pollution abatement measures and acquisition of offsets for pollution taxes as stipulated by the 1998 *Law on Payments for Environmental Pollution*.

Recommendation 4.4:

In accordance with the recently adopted Law on Payments for Environmental Pollution, the charges and fines used to combat air pollution should be enforced without delay in the country as a whole.

The enforcement rate of existing pollution charges has improved to about 50 per cent in recent years though the charge rates have remained stable since 1998. The enforcement of fines remains more limited.

Recommendation 4.5:

The existing inventory, monitoring and reporting systems for air pollution should be expanded with regard to the most important air pollutants.

The statistical reporting on air pollution has been enlarged to include the following pollutants: aromatic polycyclic hydrocarbon, heavy metals, and persistent organic pollutants. HMS stations measure a limited number of meteorological and chemical parameters (SO₂, NO_x, dust, CO, B(a)P and Pb) in urban air. Several chemical parameters required by national standards (Cu, Cr, Ni, V and Co) are not measured, and neither are air concentrations of NH₃, VOC (except B(a)P), O₃, PM₁₀, Hg and POPs. Since 2004, measurements have been made of aerosols, some POPs and some heavy metals (Cd, Hg and Pb) in precipitation at one station in Chisinau and at the Leova station.

Reporting on emissions of pollutants in the atmosphere under the Secretary of the Convention on Long-range Transboundary Air Pollution and its authorized bodies was enlarged and improved.

Recommendation 4.6:

The gradual implementation of a comprehensive nationwide monitoring programme should begin with the drawing-up of a programme of required investments and lead to the installation of continuous measuring and sampling devices, especially in urban areas. See also Recommendations 2.3 and 2.4.

The HMS has set some measures to update the system of climate monitoring. For that, six automatic stations for monitoring parameters linked to climate were installed in 2004. This is the first prerequisite for integration with the European Observation System.

Recommendation 4.7:

In the immediate future, air management authorities should focus on the control of: (a) emissions from road vehicles, preferably in accordance with relevant UNECE regulations; and (b) emissions of nitrogen and particulates in human settlements. Moldova should consider acceding to the 1994 Sulphur Protocol to the Convention on Long-range Transboundary Air Pollution.

Annually, the Ministry of Ecology and Natural resources estimates vehicle emissions using the elements of COoRdinated INformation AIR (CORINAIR) methodology. In 2001, the Government approved the *Programme for Reduction of Motor Vehicle Emissions*, which prescribes the method and priority actions for reducing pollution. Several towns are taking stock of air pollution, including of solid particles and nitrogen dioxide.

The Republic of Moldova is not planning to comply with the 1994 Oslo Protocol on Further Reduction of Sulphur Emissions. The country signed the 1999 Gothenburg Protocol to Abate Acidification, Eutrophication and Ground-level Ozone in 2000. In the Protocol's Addendum II the country's obligations on reducing the emissions of sulphur until 2010 are included. The country intends to ratify the Gothenburg Protocol in the near future.

Chapter 5: Water management**Recommendation 5.1:**

The existing water supply programmes should be updated, alternative sources of supply should be included, and the involvement of local authorities should be increased.

The 2001 Complex Scheme on public water supply and water disposal until 2010 contains an alternative water supply for those localities that do not have access to high quality drinking water. The scheme foresees the construction of corresponding new supply systems and water abstraction (at present the layout has been examined and has to be approved by the Government).

The 2002 *Programme of Water Supply and Sanitation for Municipalities until 2006* contains a complete list of water supply systems that must be modernized and enlarged for a better supply of high quality drinking water.

According to the Programme projects are to be financed from the State Budget, World Bank, Denmark and the NEF.

The Department for Construction and Planning Area coordinates the issues related to water supply policy development.

Recommendation 5.2:

The assessment of the costs of water abstraction and supply, wastewater collection, treatment and discharge should be seen as a priority for Moldova's water resource management. It is essential for revising the national water tariff policy. The assessment should include all economic costs related to the operation of all relevant technical installations, their maintenance and their replacement.

In 2000 the Danish Environmental Protection Agency performed a cost assessment for water abstraction and supply in the framework of a technical co-operation project. In the following years, further cost calculations were done by the Association Moldova "Apa Canal" (AMAC) and the National Agency for Energy Regulation (ANRE). Water tariffs continue to be heavily influenced by social considerations.

Recommendation 5.3:

As a precondition for the implementation of effective cooperation between all administrations involved, water management should be represented at ministerial level as part of overall environmental management. Separating policy authority from actual exploitation activities is advisable. River basin administrative units should be created for each basin. Cooperation should be extended to NGOs in the context of EIAs. See also Recommendation 1.3.

The State authority on water management is the MENR, which coordinates its own activity with the Republican Concern for Water Administration "Apele Moldovei". River basin administration bodies have not been created yet. But the Parliament Regulation Nr 325-XV of 18.07.03 foresees the delimitation of river basins and the creation of their management bodies. Joint arrangements with NGOs have been organized with the aim of raising the population's sense of duty and civil liability for the protection of water resources, as well as encouraging the cleaning of waterside protection zones from any source of pollution.

Recommendation 5.4:

The necessary streamlining of the monitoring system between the different partners should, among other results, lead to more reliable and more complete monitoring data.

The HMS facilitated the procedure of data control with the approval of the MENR. Data control is systematically made based on the approved monitoring scheme. Monthly information about the state of the environment is disseminated to all interested organizations.

Recommendation 5.5:

The enforcement of bilateral water treaties with neighbouring countries should lead to common monitoring systems, specifications for the use of common water resources during droughts, as well as for detailed limit values for the water parameters to be aimed at by the partners in the treaties.

Under bilateral and trilateral agreements with Romania and Ukraine, a working group is going to be established. All aspects of environmental protection will be taken into account, particularly under the agreements with Romania. The HMS is implementing a joint sampling programme with the IASI Environmental Protection Agency of Romania on the Prut River. Agreements on Use of Fish Reserves were prepared and approved by the Government of the Republic of Moldova and the Romanian Government.

The Danube Convention proposes to draw up a joint plan for Prut River management. An information exchange is being carried out on monitoring and sewage purification technologies. The agreement with Ukraine sets water levels in the case of spring floods and emergency situations.

The OSCE project, in which Ukraine and the Republic of Moldova participate, foresees recommendations for the improvement of environmental conditions of the Dniester River, including establishing joint monitoring and water distribution systems.

Recommendation 5.6:

The supply of safe drinking water to the rural population should be ensured with the help of a legal and administrative (including budgetary) framework that enables local authorities to control and enforce effectively all relevant water quality standards and the implementation of related water policies. See also recommendation 1.5 and recommendations 11.3, 11.4 and 11.5.

Public health and environmental protection authorities are engaged in monitoring the quality of water sources in rural localities. The SEI made an inventory of 2259 artificial water objects in March 2002, 4520 wells that were finished in April 2003 and 310 wastewater disposal facilities in June 2004.

For the implementation of the 2004 Presidential Decree on Clean Water Week “Water-source of life”, National and local Action Plans were drawn up. As a result of a nation-wide inventory of wells (draw-wells) and springs, 69744 wells and 1343 springs were equipped with modern amenities. A National contest was held with the theme “The best equipped with modern amenities water source in localities”.

Recommendation 5.7:

The water management authorities should avoid all unnecessary delays in the introduction of appropriate metering systems as a prerequisite for the recovery of water costs. See also recommendation 9.5.

A gradual installation of metering systems started in 1998. The majority of residential buildings and more than 30 per cent of apartments are equipped with water consumption meters. However, there are large measurement discrepancies (around 15 per cent of the water supplied to households is not accounted for) due to unreliable equipment and meter tampering by a non-negligible proportion of households.

Chapter 6: Nature conservation, forest and biodiversity management

Recommendation 6.1:

The envisaged comprehensive national biodiversity strategy should be finalized as a matter of priority. It should be supplemented with an action plan including specific projects, coordinated with all other relevant sectoral strategies, notably those governing the development of sustainable agriculture.

The Parliament approved the *National Strategy and Action Plan on Conservation of Biodiversity* in 2001. The State Agency for Land Relation and Cadastre receives suggestions annually for amendments to the Land cadastre concerning the inclusion of new areas protected by the State, although the area of protected territories have not increased since 1998 (1.96%).

Recommendation 6.2:

Competing claims on land should be coordinated in the context of territorial planning at all levels of government (national, regional and local). The coordination should involve public participation. It may result in the identification of areas to be excluded from the privatization process in accordance with the national biodiversity strategy.

The principles of this recommendation were not sufficiently applied during the privatization. Privatization took place before the adoption of key documents such as the 1998 *Law on the Fund of State Protected Natural Areas* and the 2001 *National Strategy and Actions Plan on Conservation of Biodiversity*. Some claims on land-for-land or water protection were not taken into consideration during the privatization. As an example, due to lack of coordination between the different authorities, there were difficulties in establishing the Moldovan National Ecological Network. It is positive that municipalities can to some extent influence land use and land distribution.

Recommendation 6.3:

A long-term programme should be developed to define (explain and justify) what natural habitats and ecosystems will need future protection, under what regimes and in what specific geographic zones. The planning at an early stage of a future ecological network would facilitate the setting of priorities. Environmental bilateral agreements with neighbouring countries (Romania and Ukraine) should include the protection of transboundary aquatic habitats, and their ecosystems and species; the continuity of transboundary ecological corridors/networks; and agreement on objectives and harmonized programmes for the management of protected transboundary zones.

Based on the 2001 *National Strategy and Action Plan on Biodiversity Conservation* and the 2001 *Strategy for Sustainable Development of the Forestry Fund*, the *General Action Plan on Introduction of the Strategy for Sustainable Development of Forestry Fund* and the *State Programme on Forest Fund Areas Regeneration and Forestation for 2003-2020* were approved by the government in 2003.

Also the *Concept for the Development of a National Ecological Network*, the drafting of a *Law on the National Ecological Network* (ready for adoption) and the mapping of the National Ecological Network were elaborated. The country is implementing the Kiev Resolution on Biodiversity, adopted during the fifth Kiev Ministerial Conference "Environment for Europe".

Recommendation 6.4:

The Law on the Protection of Riparian Zones (1995) should be enforced, starting in priority regions, i.e. where vegetation cover is poor and water ecosystems and resources are threatened. Actions should involve the national as well as the local level and could include:

- *Informing of local and regional levels of their tasks,*
- *Requesting municipalities to identify problems on their territory, priorities and resources needed,*
- *Requesting municipalities to issue and enforce the necessary municipal decrees, and*
- *Ensuring that the necessary resources (from national and local sources) are made available at the local level to fulfil these tasks.*

The recommendation has not been implemented. Even though the Government adopted the 2001 Decision "Arrangements on Establishing of Coastal River and Water Reservoirs Protection Zones", its implementation is very slow due to lack of finances and a low commitment from other involved authorities. Furthermore, these zones are not clearly demarcated. The realization of this decision has also been hampered by the privatization of water protection zones in some localities. Nevertheless, the legislation has restricted agricultural activity in water protection zones and prohibited the use of pesticides and the settlement of livestock farms, oil product deposits and others in these zones.

Recommendation 6.5:

A separation of policy authority and actual exploitation of forest is advisable.

The recommendation has not been implemented.

Recommendation 6.6:

A national strategic forest action plan should be developed as a basis for the management of the forest resources as a whole. It should take relevant aspects of the Pan-European Ecological Network and the Pan-European Strategy on Biodiversity and Landscape Protection into account. The action plan should address the question of forest management regimes and should be fully coordinated between the national government (i.e. Moldsilva) and local authorities. A programme for the extension of forest area should be included in the strategic forest action plan.

The 2001 *Strategy for Long-term Development of the National Forestry Fund*, the 2003 *General Action Plan on Introduction of the Strategy for Sustainable Development of Forestry Fund* and the 2003 *State Programme on Forest Fund Areas Regeneration and Forestation for 2003-2020* include an extension of the forest area and conservation of biodiversity, but do not include details such as the establishment of an National Ecological Network. The National Ecological Network of Moldova is still at a conceptual stage.

Recommendation 6.7:

All laws prohibiting the cutting of trees, catching of fish or hunting should be properly enforced.

The *Law on Environmental Protection* prohibits the felling of trees and bushes without permission from appropriate official bodies. The SEI as well as Moldsilva has established a subdivision to fight illegal felling and poaching. Hunting and fishing in natural reservoirs are allowed with a special permit from the MENR. The existent laws and regulations are sufficient but the level of their observance is low, even where sanctions were increased and hardened to encourage adherence. It is necessary to increase the involvement of legal bodies on all levels and of local authorities. Cases of illegal hunting and fishing in scientific reserves such as “The lower Prut” and “Padurea Domneasca” (the Princely Forest) were registered.

Chapter 7: Waste management and cleaner productionRecommendation 7.1:

The necessary translation of broadly formulated general policy objectives into concrete action plans should start from NEAP. The totality of action plans should be comprehensive to the extent that it constitutes a waste management strategy. It should result in enforceable actions and improved legal instruments, which should explicitly replace all existing action plans in the respective areas of concern.

The 1997 *Law on Municipal and Industrial Waste* requires the Government to develop a National Waste Management Programme. The 2000 *National Programme on Management of Industrial and Domestic Wastes up to 2010* sets priorities and establishes main actions for industrial waste management. The main targets of the Programme are: waste disposal and utilization; reduction of waste accumulated; reduction of hazardous waste and its toxicity before its withdrawal from technological processes; and implementation of separate waste collection principles. The legislative framework in relation to waste was also amended.

The 2003 Regulation on the Control of Transboundary Transport of waste products and their utilization includes the principles of the Basel Convention, as well as parts of the European Directive on Waste. The *Law on Environmental Protection* obliges Local Governments to develop local Environmental Protection Plans that when developed include plans for local waste management. In addition to the existing National Programme no waste management plans have been developed yet on regional (*rayon*) level.

Recommendation 7.2:

A plan is required for the provision of resources for the acquisition of waste treatment technologies, training of staff at all levels of waste management, and the development of an adequate information system. All three aspects are expensive. The plan should therefore take into account the fact that successful waste management will increasingly become an instrument for the achievement of export growth.

The 2000 *National Programme on Management of Industrial and Domestic Wastes up to 2010* is based on the principles of waste minimization and the inclusion of waste in economic turnover (processing and utilization). It details the implementation of measures and actions and the authorities responsible for their execution. Its main goals are:

- To use and neutralize existing waste, and reduce waste accumulation;
- To reduce the volume and toxicity of waste until it is eliminated from the technological process;
- To strictly avoid the use of toxic raw material; and
- To develop clean industrial technologies, based on the rational utilization and reduction of raw material and energy until the complete cessation of industrial waste generation is achieved.

No financial plan was developed to define the resources necessary for the implementation of the related actions, including the acquisition of waste treatment technologies and the development of adequate information systems.

Recommendation 7.3:

Moldova should ratify the European Agreement concerning the International Carriage of Dangerous Goods by Roads (ADR). An implementation programme, including an analysis of costs and training for the staff involved in its implementation, should be established. See also Recommendation 3.2.

The country has ratified the *Agreement on the International Carriage of Dangerous Goods by Roads* by Parliament Decision in 1998. But no cost analysis for implementation was performed. Nevertheless the certification procedures and related capacities were developed and training programmes for drivers carrying dangerous goods were carried out. Five training centres were created. To date, 383 drivers for the carriage of dangerous goods have been trained.

Recommendation 7.4:

Technological change for the purposes of cleaner production should be promoted through the creation of a centre for cleaner production, including the preparation of the national programme for the phase-out of ODS. The centre should be jointly supported by the Government and the representative industrial organizations. It should be responsible for the promotion of the ISO 14000 series among Moldovan enterprises.

In 1999 the Centre for Prevention of Industrial Pollution as a non-governmental non-commercial organization was established. Norway and the NEF finance its activities. The Centre started a 4-year Programme "Cleaner Production and Energy Efficiency in Moldova". Four combined training and project development programmes on Cleaner Production and Energy Efficiency in Moldovan industry have been completed in four cities: Balti, Chisinau, Comrat and Tiraspol. A Revolving Fund for Cleaner Production and Energy Efficiency projects was established and managed by the Centre. A training programme on Environmental Management Systems (EMS) and the promotion of ISO 14000 series among enterprises have been completed.

Recommendation 7.5:

The relevant fiscal instruments, particularly profit taxes and import duties, should be used to encourage cleaner production by removing any disincentive to the installation of cleaner technologies, and by introducing appropriate depreciation schemes.

The improvement of the legal basis and the introduction of measures stimulating waste recycling and usage of secondary materials were foreseen in the *National Programme for the Use of Industrial and Domestic Wastes*. This Programme stipulates the introduction of profit tax exemptions for secondary materials collection and supply, and tax exemptions and soft loans for persons using waste as raw materials. However these measures were not implemented.

Recommendation 7.6:

The development of an action plan to reduce the volume of municipal waste for final disposal, destruction (with energy recovery where applicable) or reuse should be started without delay. The first step should be the drawing-up of a study on the installation of treatment facilities, including their costs, the possibility and costs of separate collection and pretreatment of different types of municipal waste, the need and possible success of public education programmes for waste separation in cooperation with NGOs, and the possible scope of markets for recycled materials.

The recommendation has not been implemented. Management of Municipal Solid Waste (MSW) is a big problem in Moldova. Currently about 1,750 MSW landfills are located throughout the territory. The non-observance of waste disposal and accounting rules leads to soil and river contamination. There is neither study on the installation of waste treatment facilities nor is there the development or implementation of an action plan to reduce the volume of MSW by separate collection and destruction, with energy recovering where applicable. The *National Programme on Management of Industrial and Domestic Wastes up to 2010* includes an action plan with concrete measures for MSW; however the cost of these measures was not assessed. There is no separate MSW collection or pre-treatment in Moldova.

Recommendation 7.7:

An inventory should be established of industrial wastes of high potential hazard, which are either stored on industrial premises or were (or continue to be) dumped on landfill sites, including information on the site where

they might have been discharged, whether legally or illegally. The inventory should be the basis for urgent clean-up or decommissioning, as the case may be.

On the basis of the 1997 *Law on Utilization of Industrial and Domestic Waste*, the Department of Statistics and Sociology evaluates the production, utilization and neutralizing of industrial wastes, including toxic wastes. In 1997 the Statistical Waste Classifier (CS001-96) was introduced and includes all types of waste. In 2003 local authorities together with the SEI made an inventory of dangerous wastes and technologies processed in the country. Also the 2004 National Implementation Plan for Persistent Organic Pollutants (POPs) establishes priority actions such as establishing an inventory of industrial waste of high potential hazard that is stored on industrial premises or dumped on landfill sites. Due to limited financial means, the processing and neutralization of these wastes are not possible at this stage.

PART III: ECONOMIC AND SECTORAL INTEGRATION

Chapter 8: Environmental concerns in agriculture

Recommendation 8.1:

A policy programme aiming at sustainable agriculture should be developed as a matter of top priority. The programme should deal with soil conservation as one main focus. It should be implemented simultaneously with agrarian reform, with measures that focus initially on research, training and the creation of extension and technical advisory services. It is also important to remove obstacles to the full and rapid implementation of land privatization.

The recommendation has been partly implemented, but not as a consolidated programme. Arable land has been fully privatised and achievements have been made with regard to the development of extension services. Several land protection programmes have been developed. The 2000 *National Concept on Organic Farming, Production and Marketing of Organic and Genetically Unmodified Products* is being implemented.

Recommendation 8.2:

Programmes to control the introduction of foreign species should be developed.

The Government had approved the Procedure on permitting import and export of birds and plants, including birds and plants covered by the CITES Convention. It is still questionable as to whether the procedure is being properly enforced.

Recommendation 8.3:

A comprehensive system for territorial planning should be introduced at all levels of government (local, regional, national). It should be based on: (a) the need to respect environmental objectives in land-use decisions, and (b) the requirement to provide the necessary infrastructure and communal services for all types of land use. See also recommendation 6.2.

The 1996 *Law on Urbanization and Areas Planning Principles* stipulates that environmental requirements have to be taken into account in the elaboration of territorial planning at all levels. The Government has approved the *State Programme on Town Construction and Planning Activities*.

Recommendation 8.4:

Soil conservation as an aim in itself should be the subject of special legislation. It should concentrate on vulnerable soils and protect the endemic xerophyte forest chernozem. Soil conserving measures should be envisaged for all agricultural practices (crop patterns, land use, vegetation cover, machinery used, production techniques, etc.). Economic instruments should be developed and used to make soil conservation economically viable for all types of farm management.

The recommendation has not been implemented. A draft law on soil protection and a draft regulation on the management of pasture have been developed, but none of them has reached Parliament. The Government approved in 2003 the *Programme on New Land Use and Improvement of Soil Fertility for 2003-2008*.

Recommendation 8.5:

Farm management practices should systematically be aligned with soil conservation targets, primarily by changing crop patterns and production techniques, and by promoting organic farming methods.

The recommendation has been partly implemented in that organic farming is being promoted with some success in the framework of the *Improving Agricultural Productive Process through an Environmental Sustainable Approach*, as well as during the period when Tacis gave education support in 2002. Nothing has been achieved with regard to crop patterns and production techniques.

Recommendation 8.6:

A programme for the reduction of water pollution from agricultural sources should be developed and implemented. It should introduce water protection objectives into the designation of agricultural lands (e.g. river banks), the suitability of water for use in irrigation, and the handling and application of agro-chemicals. The programme should also provide effective mechanisms for the dissemination of information on the use of pesticides to all farmers.

The recommendation has been partly implemented. Efforts to decrease run-off from animal production are being made within the 2004 project “Agricultural Pollution Control Project”. Extension services provide information on the use of pesticides to farmers. Water protection zones have been introduced, but their establishment is slow.

Recommendation 8.7:

The agricultural and environmental information systems should be rapidly adapted to the transition conditions, so that a comprehensive agricultural information system becomes available for decision-making. The funds required in this context could perhaps be mobilized partly through international cooperation projects.

The 2000 *Law on Access to Information* regulates principles, conditions, methods and procedures for access to official information. A Centre for Environmental Information has been established to give public access to environmental information (see implementation of recommendation 1.8). Agricultural information will be added in the future.

Chapter 9: Environmental concerns in energyRecommendation 9.1:

The policy for the de-monopolization of electricity generation, and the electricity and gas acts should be implemented as a matter of priority.

The market-oriented legal framework on laws on energy, electricity and gas was passed in 1998. In 1997 the country vertically integrated the electricity monopoly “Moldenergo”, which was unbundled into five distribution companies, four generation companies, and a separate transmission and dispatch company, Moldelectrica. The country’s district heating networks were transferred from the State to the municipal governments. Three of the five electricity distribution companies were sold in February 2000 to Union Fenosa, a Spanish international investor and electricity operator. The remaining generation and distribution companies were all announced for full privatization at a later stage.

Recommendation 9.2:

The envisaged national agency for energy regulation should be created so that it can deal with the full range of tasks entrusted to it. It should have sufficient resources to ensure programme delivery.

The National Agency for Energy Regulation (ANRE) was established in December 1997 as an independent authority to support the introduction of market mechanisms in the energy sector, while protecting the interests of consumers and investors. It issues licenses, regulates electricity and natural gas prices, and establishes energy pricing principles and calculation methodology. The tariff setting for heat supply was transferred from ANRE to municipalities in 1999. Prices of centralized heating and hot water supply are set by the suppliers in coordination with agencies of local governments based on a methodology prepared by ANRE. ANRE is setting

tariffs for steam and hot water supplied by the State-owned Combined and Heat Power (CHP) plants. ANRE has started to regulate tariffs for technical water.

Recommendation 9.3:

The timely introduction of integrated energy resource planning should be seen as a matter of urgency, calling for the rapid development of appropriate demand-side management techniques and cost-benefit analyses, as well as the training of staff at all levels.

Although the heating sector has been transferred from the State to municipal governments, there are no evident examples of demand-side management techniques or other integrated resource management schemes being implemented on behalf of municipalities.

Recommendation 9.4:

A programme for energy efficiency and the increased use of renewable forms of energy should be developed and implemented.

The *Law on Energy Conservation* was adopted in 2000. The implementation of the 2003 *Energy Conservation Programme* faces many difficulties because of the evident lack of economic incentives to introduce energy saving measures in industries. The *National Programme for Use of Renewal Source of Energy until 2010* is under adoption by the Government. Also, in the frame of the Secretariat of Energy Charter a detailed review of policies and programmes on energy efficiency is carried out. Under the UNDP/GEF project “Climate Change: Enabling Activity”, two studies were conducted:

- Technology Needs and Development Priorities - a national report on the technology needs for the reduction of GHG emissions; and
- Renewable Energy Feasibility Study, assessing the technological, economic and environmental needs regarding the implementation of Renewable Energy Sources in the country.

Recommendation 9.5:

Initiatives are required to facilitate the creation of national production facilities for energy metering equipment. Administrative procedures and related practical routines for the installation of the required production capacity that could interest joint ventures (particularly between SMEs) should be reviewed to make them as attractive as possible (simplicity of regulations; realistic taxation of profits).

The country is elaborating the National Calculation System for Natural Gas and Electric Power Consumption for the promotion of national production facilities for energy metering equipment.

Recommendation 9.6:

A complete and detailed inventory of environmental effects of the production and use of energy should be developed, and lead to an action plan to mitigate the negative effects, including the installation of desulphurization and denitrification equipment at energy plants. The setting of priorities should make use of a general method, in which damages are assessed.

The inventory has not been completed. However some progressive steps in this area can be noticed. The Energy Institute at the Academy of Sciences is involved in the preparation of a scientific programme on the evaluation of the impact of energy generating sources on human health, crops, etc. The results of this study will further be applied for drafting an action plan to mitigate negative effects and will assist in setting more realistic pollution taxes for pollutants emissions. The National Institute for Economy and Information in cooperation with the Energy Institute is involved in reviewing real pollution costs and identifying accurate future levels of fees and fines.

Recommendation 9.7:

The tool kit of economic instruments for the environmental management of the production and use of fuels should be revised and applied, as appropriate. Particular attention needs to be paid to the introduction of instruments that are capable of producing the envisaged results, including possibly tax reductions and/or exemptions for investments that are instrumental in energy savings.

To stimulate economic agents to use ecological fuel, differential payment for utilization of oil depending on its sulphur content was introduced in 2003. Otherwise, there are no tax reductions or exemptions on energy saving investments or other economic incentives for energy efficiency improvements.

Chapter 10: Environmental concerns in transport

Recommendation 10.1:

A working group on sustainable transport development should be established. It should consist of experts, be headed by the Ministry of Transport and involve all relevant public institutions (DEP, Ministry of Finance, Department of Standards, Department of Energy, and others). The group should set relevant objectives for sustainable transport, time schedules for legislative and investment activities, and measures to encourage public participation.

Under the Ministry of Transport and Communication a working group on sustainable transport development was created. This group consisted of experts from eight Ministries and Departments, representatives of the Association of New Road Motor-Vehicle Importers, and Motorists and Road – a workers Union. The State Environment Inspectorate was never invited. At the time of this review, it is difficult to have a real picture of the group's current work.

Recommendation 10.2:

A master plan for the training of (a) the members of the sustainable transport group, and (b) environmental managers of transport activities, should be developed and implemented.

The Ministry of Transport and Communication organizes courses for managerial authorities and other categories, where its department staff gives lectures on standardization, environmental protection, sustainable development of transport and introduction of technological innovation.

Recommendation 10.3:

The selection of road vehicle standards for imported cars should be reconsidered and possibly adapted to advanced EU legislation.

At present, the above-mentioned standards are not adapted to European Union legislation.

Recommendation 10.4:

Fuel standards that are aligned on European practices should be introduced in accordance with a clear programme. The use of unleaded petrol for all cars should be promoted in all possible manners.

The Department of Standardisation and Metrology (DSM), starting with the specification of new motor fuel norms in 2002 and continuing with their amendment in 2004, gradually brought fuel standards closer to EU practices. The latest standards, effective as of January 2005, specify content limits of benzene, lead and sulphur in motor fuels. The use of unleaded petrol became increasingly dominant, accounting for some 99 per cent of domestic consumption by 2003.

Recommendation 10.5:

The full range of economic instruments should be developed to meet environmental objectives. Preferential import duties and other taxation should be levied on road vehicles incorporating advanced technology to reduce air emissions.

Emission trading has not yet been developed. Eco-taxes on imported fuel were introduced in 1998, the relevant excise tax rate on leaded petrol and diesel being twice as high as that on unleaded petrol. Since 2003, import duties on cars are differentiated according to the engine size and age of the vehicle. However, imports of used cars from the CIS region predominate and there are no reduced duties for the models incorporating advanced emission controls. Trucks and tractors continue to be exempt from excise taxes.

Recommendation 10.6:

A new system of vehicle emission control under the exclusive authority of the Ministry of Transport should be implemented and enforced.

In 2001 the Government approved the *Programme on Reduction of Air Pollution by Motor Vehicles*. It foresees the testing of all vehicles. The MENR and the Ministry of Internal Affairs approved a joint order to guide a State action twice a year on "Clean air", and every year "The town without my vehicle" action. At present 12 vehicle-testing stations are open. It is expected that 12 more will be opened by 2006.

Recommendation 10.7:

A comprehensive policy encouraging the use of public transport and rail goods traffic should be developed and implemented. It should be well coordinated with urban development and other forms of spatial planning. The policy should include provisions enabling the licensing institution to control the implementation of environmentally sustainable provisions for transport.

The recommendation has not been implemented. Issues are still pending since the first EPR review, especially on ecological transport safety. In practice, rail and air transport is not under ecological control. Road transport is partially controlled. Transport authorities have no staff responsible for environmental matters and lack mobile stations to police toxic substance emissions into the air. The quota of transport discharges account for 85-90 per cent of total emissions. To enforce environmental requirements in transport, the country has to enforce compliance with related normative acts.

Recommendation 10.8:

The economic restructuring of municipal public transport companies, as well as the modernization of their vehicle fleets, have become top priorities. To avoid major disruptions in public transport systems, provisions for improved market access by competitors of the public companies have to be complemented by the implementation of adequate financial safety provisions for the public companies.

The prices for State-owned and private public transportation are equal (30% of public transportation belongs to the State; the other 70% is private). A renewal of the car fleet is being carried out both in the public and the private sector. An open competitive market exists between companies.

Recommendation 10.9:

The possible future role of inland waterway transport should be explored.

The country intends to effectuate transportation by inland waterway. There are some harbours, but there is not a full coastal transport infrastructure (berths, storage and port facilities, and cranes). The issue requires further examination.

Recommendation 10.10:

The air emission inventory should be revised for reliability and completeness, making use, to the extent possible, of CORINAIR practices. The implications of this task are such that the producers of environment, transport and energy data should cooperate in it.

The air emissions inventory is still under revision and is yet to be completed. For air emissions the elements of CORINAIR methodology were included in the calculations. Data exchange is also performed with the energy and transport sectors.

Chapter 11: Environmental pollution and human health**Recommendation 11.1:**

The drafting of the national environment and health action plan should be finished, taking into account the work already completed under the National Environmental Action Plan. Both plans should be implemented in close coordination.

The 2001 *National Environment and Health Action Plan* (NEHAP) is supplementing the 1995 National Environment Action Plan (NEAP).

A Presidential Decree proclaimed 2004 as the Year for Health. A specific *Programme of Measures* then was approved. The same year, the MENR in collaboration with the Ministry of Health conducted a conference “Children’s Health and Environment” for the fifth Conference of Health Ministers and prepared a joint report “Children’s Health and Environment”. The 2004 *Economic Growth and Poverty Reduction Strategy Paper* envisages targets in health protection and environment.

Recommendation 11.2:

National capacities should be developed for applied health research, into the quality of the environment and the effects of pollution.

Among the targets specified in the National Environment and Health Action Plan, harmonization and improvement of the collection of environmental data were achieved. Data are used for the development and assessment of the national health policy, as well as for scientific targets. This will have an influence on public health.

Recommendation 11.3:

The enforcement of the options of existing programmes for the supply of safe drinking water should be the main management concern once they are selected. It is necessary to reduce the population’s exposure to fluoride in drinking water so as to eliminate fluorosis, observed in large parts of the population living in high-risk areas.

The Government’s priority issue is the extension of the population proportion that receives high quality water. These priorities are determined in basic strategy documents, such as the *Economic Growth and Poverty Reduction Strategy Paper* and the Programme “*Economy Revival- Country Revival*”. The 1999 *Law on Drinking Water* regulates water supply, inspection and responsibility for drinking water supply.

The 2002 *Concept on the organization and functioning of social and health monitoring* was approved with a view to preventing the unhealthy influence of risk factors on people’s health. Alternative water supplies, such as deep underground waters and water from the Prut and Dniester rivers, are utilized to reduce the risk of using water containing excessive fluorine.

Recommendation 11.4:

Improving the microbiological quality of drinking water should be recognized as a top priority. Nitrate pollution is another priority concern.

See Implementation of recommendation 11.3. A regular control on drinking water was also implemented according to available funding and is functioning. Wells and springs were inventoried and as a result arrangements were made for the amelioration of water source conditions. The 2005 National Programme “*Moldovan Village*” foresees the extension of public access to high quality drinking water.

Recommendation 11.5:

Surface and ground waters should be better protected from contamination by communal sewage and run-off from agricultural land.

Regular samples of surface water have been taken. In 2001, with a view to preventing surface and subsoil water pollution, a Government Decision “*Arrangements for Establishment of Protection of River and Reservoir Frontiers*” was approved. Economic activity, use of pesticides, livestock farms layout, oil-products terminal stores and others are prohibited in protected water zones. Some reconstruction and regular maintenance has been carried out in these zones since 2001. Nevertheless, the process is rather slow.

Recommendation 11.6:

The air quality monitoring system should be reviewed and modified to better assess the health risks and better control pollution.

Since 2004, the HMS has enlarged the scope of its air quality monitoring by starting measurements of aerosols, some POPs and some heavy metals in precipitation at one station in Chisinau and at the Leova station.

Recommendation 11.7:

A system for controlling the quality of food consumed by the population should be improved and should include the control of food produced by suppliers without special licences.

In 2003, to improve the system of management for quality of products and goods and to establish a legal framework for consumer rights, the Government approved the *Law on Consumer Protection*, which makes clear the responsible authorities and their function to protect consumers. Two laboratories are responsible for food analysis. One is under the Department of Standardization and Metrology and the other within the National Scientific Centre of preventive medicine of the Ministry of Health. Regular checks are done; for example, an every day control is done in Chisinau market.