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**SIXTH MINISTERIAL CONFERENCE “ENVIRONMENT FOR EUROPE”**

Draft Category I document for consideration by the Executive Committee

**FROM INTENTIONS TO ACTIONS: OVERCOMING BOTTLENECKS**

**Critical issues in implementation of environmental policies highlighted by the  
UNECE Environmental Performance Review (EPR) Programme**

Submitted by the UNECE secretariat

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## **Introduction**

There are still many barriers to progress in environmental management in EECCA and SEE countries. The most critical of these have been identified through the EPR programme. At the thirteenth session of the Committee on Environmental Policy (CEP) and the third meeting of the Working Group of Senior Officials (WGSO), the secretariat introduced a note proposing a paper for the “Environment for Europe” Conference in Belgrade to highlight these issues and address a set of recommendations for further action to overcome bottlenecks and promote the convergence of environmental policies in the UNECE region as a whole.

The CEP and WGSO delegates expressed their support for the further elaboration of such a paper, and for the five critical issues identified in the note. They also suggested that the document include concrete examples and case studies, and they recommended that these case studies strike a balance between describing positive achievements and highlighting areas needing improvement. The case studies are presented in the annex to this report. Although the secretariat called for case studies, to date replies have been scarce, in particular from Central Asian and Caucasus countries. Therefore in the current draft the geographical coverage of the case studies is not balanced.

The secretariat invites:

- The CEP and WGSO delegates of Central Asian and Caucasus countries to propose case studies (in writing) that could be included in the text, on the condition that the requested information reaches the secretariat by **15 February 2007**.
- Members of the EPR Expert Group, the CEP and the WGSO to transmit their written comments on the present draft paper and its recommendations to the secretariat during the CEP and Executive Committee meetings on **13–14 February 2007** or by email to [Catherine.masson@unece.org](mailto:Catherine.masson@unece.org) by **15 February 2007**.

Owing to technical reasons and time constraints, the secretariat will not be able to take into consideration comments submitted after this date.

## **1. Strengthening political support for environmental improvements**

### ***1.1. Progress achieved and problems***

#### *Environmental priorities in the political agenda*

Virtually all reviewed countries have drafted environmental strategies, programmes and plans and have set ambitious environmental targets in view of following the same practices used in European Union (EU) member countries. National environmental strategies (NES) and national environmental action plans (NEAPs) have been readjusted to new situations and objectives since last EPRs in some countries increasing their implementation benefits. For example, the policy for waste management defined in the first NEAP (1996) of former Yugoslav Republic of Macedonia is expected to be further developed in the second NEAP in order to comply with EU waste management practices. A National Environmental Strategy of Serbia is to be adopted by the end of 2006 pursuant to the requirements of the 2004 Law on Environment.



**National Environmental Strategy of Serbia: positive aspects and drawbacks**  
(see Box 1.1 in annex)

Despite the overall progress on the development of environmental strategies and programmes, most of reviewed countries have not yet prepared specific implementation plans with their respective priority actions, timetables and financial requirements. In many cases, international cooperation is giving an impulse to policy making at national level. In 2004, the enlargement of the European Union by ten new countries led to the preparation of a European Policy Action Plan (EPAP) with the new neighbouring countries. In Ukraine, for example, the European Commission prepared an implementation tool to support the implementation of the 2005 Neighbourhood Action Plan, provided benchmarks for assessing progress and helped Ukraine to achieve concrete, realistic and measurable results. As the EPAP has proved to have positive results in the countries' national policy implementation process, environmental issues must be further highlighted in such a Plan in the future. In addition, EECCA countries have developed and adopted at the 5<sup>th</sup> Conference Environment for Europe in Kiev (2003) a sub-regional Environmental Strategy covering the most important related issues. Also, new strategies and legislative instruments aimed at reducing and preventing environmental pollution and degradation are being put in place in the framework of international and regional conventions, as for example, those related to the UNFCCC, UNFCCD and UNECE Conventions.

*Development and implementation of legal instruments*

Reviewed countries usually have environmental framework laws in place which serve as the legal basis for subsidiary legislation. However, subsidiary legislation is often missing or incomplete and implementation and enforcement weak. In many cases, a large number of environmental standards are integrated in such laws, which makes their implementation and enforcement even more difficult. Pushed by the international community, many countries have thus applied significant efforts to strengthening implementation mechanisms. A good example is the implementation of the Armenia's Water Code (adopted in 2002), which was promoted by the subsequent establishment of the Agency for Water Resources Management within the Ministry of Nature Protection. Within the Water Code provisions, the National Water Council chaired by the Prime Minister was established. The Code also stipulates provisions ensuring the participation of public organizations in the protection and use of water resources.

In recent years, most of reviewed countries have made considerable progress in order to harmonize their legislative basis with the EU environmental *Acquis Communautaire*. In Serbia, for example, a number of laws in line with EU practices were adopted in 2004, such as the Environment, Integrated Pollution Prevention and Control (IPPC), Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA) laws. However, these new laws generally lack fundamental elements such as definitions compliant with EC requirements, precise rights and obligations for legal and natural persons, clear legal competences of authorities, standards to be achieved and thresholds to be complied with. They fall short of determining procedural stages and are sometimes vague and inconsistent. One example of incomplete law in many countries is the EIA legislation. Though EIA has been a primary target of legal drafting activities in recent years, in most of reviewed countries there is no applicable EIA system in place for the simple reason that procedural details have not been regulated (e.g. Bosnia and Herzegovina, former Yugoslav Republic of Macedonia, Serbia, Montenegro, etc.). The other problem is that types of projects or activities subject to EIA have not been clearly determined. Such determination could be done in technical annexes to the law. Instead, most primary laws refer to subsidiary legislation still to be drafted. Another example is the IPPC law, which requires a number of sub-laws to make it fully

applicable in practice. In Serbia, for example, the IPPC law was adopted in 2004, but the drafting of related sub-laws was still in progress in 2006.



**Political support to the adjustment of national environmental legislation with the EU  
*Acquis Communautaire* in Estonia (see Box 1.2 in annex)**

Another serious drawback of secondary environmental legislation, which is common to all reviewed countries, is that it does not follow exactly the primary laws, as the provisions of the latter are too general and do not provide clear requirements for the by-laws. This might cause inconsistencies with normative acts approved by governmental resolutions or order of a ministry. Moreover, the secondary legislation is not enacted together with the law, so the practical enforcement of the law can be ineffective for a long time. For instance, the establishment of secondary legislation (e.g. regulations on permitting) in Belarus is not always based directly on the law but often has a vague legal base, which can lead to problems in court cases (including infringement procedures).

*Implementation of MEAs and compliance with their provisions*

Political will is of vital importance for promoting implementation of and compliance with the MEAs. Raising the profile of regional and international conventions and protocols among governments in order to secure stronger political support and commitment remains an issue in most of reviewed countries. In recent years, many international and regional conventions, protocols and agreements have been signed and ratified by all reviewed countries, and related plans developed and implemented. However, most of these countries still cannot completely fulfill the obligations within multilateral agreements. Inadequate legislative frameworks in place combined with the lack of institutional capacity and financial resources are the main barriers to compliance with provisions. For example, the current legal basis in the former Yugoslav Republic of Macedonia provides only for a partial implementation of the UNECE Convention on Access to Information, Public Participation in Decision-making, and Access to Justice in Environmental Matters (Aarhus, 1998). New national legislation has been drafted in order to address this issue, though.



**Breaches in the Espoo Convention: the Cernavoda unit 2 (Romania) and the Bystroe Canal (Ukraine) cases  
(see Box 1.3 in annex)**

Many countries have developed their national strategies and plans for the management of biodiversity, watersheds, persistent organic pollutants, hazardous waste, desertification, climate change and other important environmental issues in the framework of MEAs implementation. For instance, Belarus and Armenia have recently prepared implementation plans for the Stockholm Convention on Persistent Organic Pollutants (POPs). Kyrgyzstan and Kazakhstan have developed a pilot project focused on applying the provisions of the UNECE Convention on Environmental Impact Assessment (EIA) in a Transboundary Context (Espoo, 1991) to the transboundary impacts of a gold mine. Kazakhstan has acceded to the Basel Convention on Transboundary Movements of Hazardous Wastes and introduced new customs rules on declaring hazardous wastes, thereby preventing the import of such wastes into its territory in the form of secondary raw materials and products. Kazakhstan has also ratified the UN Framework Convention to Combat Desertification and developed a desertification control programme for the period 2005-2015. In 2003, Moldova has established a national commission for implementation of the UN Framework Convention on Climate Change and its Kyoto Protocol.

Nevertheless, there are still major shortcomings related to the enforcement of MEAs<sup>1</sup>. Enforcement is usually assured by a well-developed national legislation that enables national inspectors and enforcement officers to act and courts to respond appropriately. In both UNEP (2001) and UNECE (2003) guidelines for enforcement of and compliance with MEAs, it is recommended that legislation should be developed prior to ratification (or accession). In this manner, a country is better able to identify gaps, duplication or contradictions in responsibilities and management practices of ministries, government agencies and local authorities and consistency with obligations related to MEAs. Thus, both national legal and institutional capacities could be improved. However, what usually happens is that legislation is often developed after ratification and capacity building is not fully assessed, including staffing and financial resources.

#### *Involvement of the civil society in environmental decision-making*

The civil society participation in environmental decision-making in most of reviewed countries has started to increase gradually. In Armenia, for example, there are institutions of independent experts and public hearings of draft laws in the National Assembly. Armenia has also strengthened the role of public participation in its new law “On Ecological Expertise”. Virtually all Ministries of Environment have created their web sites (excepting Tajikistan) with publication of information materials (Rio+10, Kiev Report, National Environment Reports), publications within the framework of the implementation of agreements, various workshops, articles, etc., which have contributed to better public environmental awareness.

The ratification and implementation of the Aarhus Convention significantly stimulated the democratic process of public participation in environmental decision-making and sustainable development in the region. Many countries have established information centers called “Aarhus Centre”. Environment ministers in Azerbaijan, Kazakhstan and Ukraine have recently launched regular meetings with the public, and public advisory councils involving NGOs have been established in Belarus, Kyrgyzstan and Ukraine. Recently, water consumers associations were involved in river basin councils in Kazakhstan and Uzbekistan. Bosnia and Herzegovina, however, has no provisions in the law regarding public participation and public access to information related to environmental matters, and has not yet acceded to the Aarhus Convention.



**Low level of public participation in environmental decision-making in Belarus**  
(see Box 1.4 in annex)

NGOs are currently considered to be important environmental stakeholders in reviewed countries. In Ukraine, for example, NGOs participated in the preparation of draft laws on Environmental Audit (2003) and representatives of NGOs sat on the MEP’s decision-making board (collegium). In Montenegro, NGOs successfully conducted various activities and campaigns such as the one for the protection of the Tara River from the construction of a large hydro-electrical power plant. Also, many environmental NGOs, such as ECOFORUM, IUCN, and WWF are active in reviewed countries, as well as Regional Environmental Centers (RECs). Nevertheless, overall financing available for public participation initiatives is insufficient and, sometimes, complex and time-consuming registration procedures for NGOs, combined with difficulties to access sensitive environmental information hamper further environmental action.

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<sup>1</sup> See document on the implementation of UNECE Conventions which has been prepared to the Belgrade Conference.



**Montenegrin civil society halts plans to flood the Tara Gorge, a World Heritage site  
(see Box 1.5 in annex)**

## ***1.2. Challenges ahead***

The lack of political support for environmental problems and priorities combined with a resource-intensive economy contributed to a continuing environmental degradation in reviewed countries. The economic activity dropped steadily during the 90's, but the pressures on the environment did not decrease by the same levels. Also, new problems have arisen in the transition, triggered off by the lack of financial resources and the reduced capacity to enforce environmental legislation. In this transition phase, national agendas have given much higher priority to economic growth compared to environmental protection.

Virtually all countries have developed environmental policies and legislation or revised inadequate legal procedures. However, there is a need to reconsider and strengthen implementation mechanisms of the existing legislation. Recently, emphasis has shifted from developing new laws to drafting lower-level regulations, government decisions, and methodological and procedural documents which provide better guidance for interpreting, implementing and enforcing existing laws. But environmental laws and regulations are generally lacking consistency and coherency between them. In addition to that, secondary laws and enforcement mechanisms still need to be developed and/or simplified.

While significant progress has been achieved in ratification, major challenges in implementation of and compliance with MEAs remain. National legislation in many areas is lacking or is insufficient to ensure reviewed countries compliance with their obligations under international agreements. Also, the lack of financial commitment and a clear project identification and prioritization, institutional and human capacity and experience hinders the enforcement of MEAs.

In recent years, the participation of civil society in environmental decision-making has been strengthened through improvements in the public access to information in almost all reviewed countries. Enhanced public awareness on environmental issues has led civil society organizations to push governments to take actions in a more effective and responsible manner regarding environmental protection. However, some countries still face serious obstacles in raising public awareness and building partnerships for a better environmental management.

### ***Recommendation 1:***

***Governments in all EECCA and SEE countries should strengthen their political support to resolving persistent environmental problems. They should streamline environmental priorities, rationalize environmental legislation, reinforce implementation, and strengthen the role of civil society in environmental decision-making.***

## **2. Building competent and effective environmental institutions**

### ***2.1. Progress achieved and problems***

#### *Institutional capacity for environmental management*

Most of governments in reviewed countries have established environment ministries, regional or local authorities, with only few State Committees for Nature Protection still in place (i.e. in Uzbekistan and Tajikistan). However, the position of the Ministry of Environment is generally not enough strengthened in order to ensure that higher priority is given to environmental issues on the government's political agenda. Also, Ministry's power and efficiency is undermined by the fact that environmental functions are sometimes associated

with other functions, such as tourism in Montenegro, causing conflicts of interest. Moreover, institutional capacity in this field is relatively weak. In Moldova, for example, the Ministry of Ecology, Construction and Territory Development functioned with a total staff of 105 persons in 2003. The Ministry's Department of Environmental Protection accounted for 41 staff. With the creation of a new Ministry of Ecology and Natural Resources in 2005, the total staff dealing with environmental protection in the country was reduced to only 25 persons, with a further reduction to 18 in 2006.



**Institutional strengthening for environmental protection in Estonia and Romania**  
(see Box 2.1 in annex)

At present it is difficult to recruit highly qualified staff because salaries are low and the public authorities are not held in high esteem. However, the capacity of inspectorates, and therefore effectiveness of enforcement, depends on the number of staff, which is insufficient in many cases, as well as on their competence, which evolves towards a more advisory than a police role. For instance, the functioning of the current compliance monitoring system in Moldova is undermined by the weak capacities of the laboratories and low number of inspection staff of the State Environmental Inspectorate. In Georgia, there is a significant lack of capacity at the regional inspection offices due to insufficient and under-qualified staff.



**Insufficient administrative capacity in the field of environmental protection in Bosnia and Herzegovina, Former Yugoslav Republic of Macedonia and Tajikistan**  
(see Box 2.2 in annex)

In addition, environmental authorities in most of reviewed countries generally have very limited financial resources to carry out their duties. In many cases, budgets cover little more than personnel costs. For example, environmental authorities in Armenia devote 70% of their budgets to pay salaries, and in the Kyrgyzstan the figure is 95%. This leaves almost no resources for operational expenses and often none for investments. For example, the Tajik Hydrometeorology Agency and the State Epidemiological Service are currently suffering from the lack of funds for maintenance or replacing equipment, reduction in staff and decline in laboratory inspection standards.

*Institutional task sharing and coordination*

The frequent restructuring and/or fragmentation of functions amongst several institutions without a clear division of responsibilities for their implementation caused a general lack of continuity in environmental policy-making. Political instability, in many cases, has led to repeated reorganizations of national, regional and local environmental structures. The ensuing changes in geographical coverage and the consequent transfers of files, changes in staff, leadership and priorities do not facilitate the development of inter-ministerial coordination mechanisms. A key problem is that in almost all reviewed countries, coordination mechanisms between ministries, either formal or informal, are rather weak.



**Frequent reorganization of Ukrainian environmental institutions**  
(see Box 2.3 in annex)

In addition, there is overlapping of mandates of institutions for the management, inspection and control of the environment. Biodiversity protection and sustainable use of natural resources, for example, are managed and controlled by a number of institutions in most of reviewed countries. Similarly, the legal competences in the field of water management are divided among a number of ministries (e.g. five ministries in the case of the former Yugoslav Republic of Macedonia). Another related problem is the lack of coordination between

environmental inspectorates and other Ministries' inspectorates. In general, different inspectorates plan their visits in isolation, which often leads to inefficient and not comprehensive inspection, or sometimes, to a few enterprises being "over visited", and duplication and ineffective use of resources. Moreover, there is practically no coordination among environmental public authorities on the location of monitoring stations, sampling or data exchange. However, some countries have made considerable efforts in order to solve these problems. Estonia, for example, restructured and clarified the task sharing on water management during the EU pre-accession process.



**Imbalance and unclear institutional task sharing in Belarus**  
(see Box 2.4 in annex)

Vertical coordination within the Ministries of Environment and its local environmental protection agencies also requires attention. In Tajikistan, for example, there appears to be little exchange of knowledge or experience between the two. This raises problems, in particular regarding inspections because there is a lack of clarity and consistency regarding who initiates and carries out an inspection: the central office or the staff of the local committees. In Ukraine, the governance system reform in the late 1990s resulted in the allocation of some environmental responsibilities to the oblast and municipal councils. For the time being, however, the distribution of these responsibilities is not clearly determined. This negatively influences relations between the two structures and prevents efficient enforcement of the laws.

*Compliance and enforcement issues*

In most of reviewed countries, mechanisms to ensure compliance and enforcement of environmental policies and legislation are weak and need to be strengthened. This is a result of a combination of several factors, including gaps in environmental laws/regulations, the frequent restructuring of environmental institutions, low financial resources allocated for enforcement purposes (i.e. training and number of staff, technical equipment) and weak monitoring system, especially at the sub-national level.

The ineffectiveness of compliance and enforcement mechanisms is generally connected with an incomplete legal basis and insufficient institutional capacity. Contradictory legislation together with ambiguous definitions also cause difficulties for implementation. In some countries, enforcement officers lack sufficient legal powers to apply adequate sanctions and unannounced environmental inspections are not possible without a court order for on-site inspections. There is still a strong focus on command-and-control mechanisms instead of compliance assistance and promotion and the combined use of incentives/economic instruments. The result is that operators are not encouraged to implement any environmental protection measures unless these are imposed upon them. Interrelation between enforcement tools (binding tools) and compliance assistance and promotion tools (soft tools) is rather weak. Proactive approaches like information campaigns, seminars and training activities to inform the regulated community on new laws or other developments are not broadly used. Where there is a system of environmental tax rebates for the investments that operators make, such as in Belarus and Moldova, they are not usually big enough to ensure the introduction of best available techniques, which are much more expensive. In addition, both permitting authorities and operators generally suffer from the administrative burden due to the lack of prioritising between the pollution sources. A main obstacle for an effective permitting system is the single use of maximum allowable concentrations (MACs) instead of the limitation of quantities of pollution discharged.

In many countries, policy-making functions are not separated from enforcement tasks within the responsibilities of environmental agencies. However, international practice suggests that separating the issuance of permits from enforcement makes both more effective and prevents

conflicts of interest. For instance, Belarusian environmental inspectorates are involved in controlling and monitoring the environment and issuing permits, and at the same time, they develop environmental legislation and the instruments for its implementation. In Estonia, environmental inspectorates check compliance with environmental permits and enforce the law, a positive modification, while previously inspections were carried out by the staff of the County Environmental Departments that also issued environmental permits. Political instability also weakens institutional compliance and enforcement. Frequent restructuring of Ministries of Environment and other environmental institutions are key obstacles in the policy enforcement process. These changes generally indicate a disturbing tendency in enforcement functions, such as in Albania, Serbia, Montenegro, Ukraine and others.

Another major enforcement issue in most of reviewed countries is connected with the lack of financing available for environmental activities and initiatives. Overall, allocated resources are not enough to replace obsolete monitoring and other equipments to reinforce institutional capacity in this area. For example, the lack of vehicles and communication tools makes last minute inspections impossible in many countries such as Azerbaijan, Tajikistan and Georgia. The Moldovan State Environmental Inspectorate falls short in accomplishing the necessary sampling and analyses for emissions control due to the lack of financial support and up to date equipment. In addition, there's a general lack of staff training to deal with new rules and techniques.



**Staff quality is enhanced by effective training in Belarus**  
(see Box 2.5 in annex)

## ***2.2. Challenges ahead***

Institutional reforms have been undertaken in reviewed countries, though the measures are partial and progress is very uneven, with some progress at national level and little progress at local level. In general, compliance with environmental regulations focuses on the quantity of enforcement actions taken rather than on achieving environmental targets. Weak institutions do not have the incentives or means to achieve environmental objectives. They still suffer from weak authority, out-dated management and decision-making practices, scarcity of human and financial resources, high turnover of professionals and frequent restructuring.

The economic, social and other problems associated with the transition period make the practical and immediate implementation of and compliance with the newly adopted legislation, norms and standards difficult. In practice, only few countries have strengthened their enforcement mechanisms and ensured efficient institutional task sharing and cooperation. Overall, the organization and effectiveness of environmental inspectorates remain weak. Enforcement structures need to be better consolidated and empowered, and financial resources allocated for these purposes. In addition, introducing new requirements or improving existing practice call for development of new competencies within the environmental authorities and their bodies through training and retraining. Training therefore should be a key component of any improvement strategy.

### **Recommendation 2:**

***Governments in all EECCA and SEE countries should urgently address the serious bottlenecks caused by weak environmental institutions. They should strengthen the level, mandate and capacities of the environmental authorities to make these more competent and effective, clarify institutional task sharing, and consolidate and empower enforcement structures, in particular at the subnational level.***

## **3. Mobilizing financing for environmental priorities**

### ***3.1. Progress achieved and problems***

### *Financing environmental priorities*

Almost all reviewed countries have developed environmental policies and strategies, although many of these documents do not contain priority actions nor indicate the necessary financial resources to achieve objectives. In some cases, when the funding requirements are identified, the government has other priorities and does not provide all the necessary funding for the implementation of programmes. Additionally, the lack of deadlines and concrete targets makes it hard to assess progress in policy achievement.



**Lack of priorities in programmes and strategies hinders the efficient use of environmental funds in Ukraine**  
(see Box 3.1 in annex)

Political will to finance environmental protection is generally weak in most of the reviewed countries. Regular cuts in budgetary funding prove that environmental protection receives little attention. In some cases, the allocated funds are not even enough to ensure the normal functioning of State agencies. Also, the level of environmental investment in reviewed countries is usually low. Most of the national environmentally related expenditures are generally spent on maintenance and operation of existing, often obsolete and inefficient, equipment and installations and very few resources are put into introducing new, environmentally-sound technologies. In addition, environmental expenditures of governmental offices are usually insufficiently coordinated. However, some countries, such as Kazakhstan, Serbia, Montenegro and Moldova have shown progress in the management of public resources by implementing result oriented-budgeting, developing medium-term expenditure frameworks and better controlling budgetary resources.



**Financial planning for implementation of the Waste Management Strategy in Serbia**  
(see Box 3.2 in annex)

The implementation of preventive policy measures for operating activities is unsatisfactory in almost all reviewed countries. Several examples have demonstrated that annual costs of implementation of such measures are lower than the costs of environmental remediation in case of contamination. In recent years, some remediation activities have been carried out by the public and the private sectors. However, it is often unclear where the liability for environmental damage lies and the costs of remediation are high. As a consequence, a heavy burden falls on public budgets, while there is insufficient funding for remediation of orphan sites. For example, the clean-up of a single mining site in Kazakhstan has been estimated at 62 million EUR, while the annual costs of current security measures for the containment of contamination in the same mine amount to about 2 million EUR.

### *Financial mechanisms for environmental protection*

In the 1990's, following the advice of the international community, most of reviewed countries introduced a number of economic instruments (i.e. pollution charges, taxes on the use of natural resources, user charges for the provision of municipal environmental infrastructure services, etc.) to raise revenues for environmental expenditures. However, in most cases, economic instruments have not been designed for incentive purposes but rather to raise revenue to finance general reforms and budget deficits. The lack of monitoring and transparency in the implementation of economic instruments, the low collection rates and inefficient economic incentives for environmental commitment have also led to a general ineffectiveness of such instruments.



**Ineffective economic incentives to reduce pollution in Moldova**  
(see Box 3.3 in annex)

Environmental taxation and utility pricing can be an important tool for moving towards sustainable development as it can have positive effects on the environment by stimulating innovation and efficiency when properly designed and applied. In reviewed countries, however, the levels of environmental charges are quite low and sometimes poorly enforced. Electricity, heating, water supply and waste disposal tariffs often remain below the cost levels and users are not encouraged to save natural resources and energy. In addition, as in these countries enterprises are not usually operating in market-based competitive conditions with tight constraints on production costs and as they still benefit from a number of protection measures, including some exemptions and subsidization, the incentive effect of the pollution charge system is undermined. Many subsidies are hidden and take the shape of, for example, tax rebates. In Bulgaria, for instance, tax rebates on company cars favour big polluting cars whereas there are no fiscal incentives for purchasing cleaner cars. In addition, current environmental tax systems are in general difficult and expensive to monitor and enforce as they do not focus on the biggest polluters only. The number of substances covered by the pollution charges is very high, payment is usually based on permitted emissions, not on actual emissions, and the number of enterprises liable to pay such taxes is theoretically too high to be properly managed by the administration.

In recent years, some countries have improved their environmental tax systems. For example, Armenia has reformed its system by the adoption of the Law on Nature Protection and Nature Use Charges and related by-laws, which had positive effects so far. In 2001, Belarus began establishing emission limits based on the actual production of enterprises rather than their nominal capacity (a traditional practice all over reviewed countries), which resulted in more realistic figures and thus an increase in charges and fines for excess pollution.



**Raising revenues for environmental purposes in Belarus**  
(see Box 3.4 in annex)

Other market-based economic instruments such as tax differentiation, green public procurement, emissions trading and fiscal incentives (income tax deductions for environmental investments, investment tax credit, accelerated depreciation, debt-for-nature swaps) are still not broadly used in reviewed countries. For instance, debt-for-environment-swaps initiatives have started in Georgia, following the well-known example of Bulgaria.



**Financial schemes to assist enterprises in complying with environmental legislation in Bulgaria**  
(see Box 3.5 in annex)

Environment protection funds also play a significant role in financing environmental expenditure in reviewed countries. Virtually all of them have established environmental funds. The funds' revenues have been usually growing during the last years, but the expenditure management side remains weak. In a few countries, a large share of the expenditures is spent for purposes other than the environment. In general, there is little transparency in the way the funds operate, including how decisions on distribution of funds are made and how priorities are set. In many cases, no advice is sought from other stakeholders, including enterprises, scientific organizations, environmental NGOs and the general public on the most efficient use of environmental funds. Also, still often there is no estimate of the financial needs in the area of environmental protection, and procedures to accede to the environmental funds for project financing are too complex.



**Impact of economic instruments on the environment: the Estonian experience**  
(see Box 3.6 in annex)

*Mobilizing international donors*

Reviewed countries significantly need foreign contribution to sustain the environmental protection and amelioration. However, most of them have not included environment as a priority in their strategies and plans to attract international donors, resulting in a low level of environmental financing. Moreover, they have not fully explored the possibilities for attracting foreign assistance. Overall, national institutions do not efficiently use the different financial instruments and mechanisms available for funding environmental projects, such as the funds available under the new EU neighbourhood programmes, the Global Environment Facility (GEF) umbrella and the Kyoto Protocol's flexible mechanisms. Another problem in accessing international funds is the unavailability of professional resources to deal with international institutions and project preparation. In addition, the general lack of communication between the authorities and donors and the continual restructuring of the governments has contributed to reducing international environmental cooperation in many countries.



**Environmental protection not listed as a priority for international financing in Moldova**  
(see Box 3.7 in annex)

**3.2. Challenges ahead**

Political and institutional obstacles in the financing of environmental projects persist in reviewed countries. Economic instruments currently in use have often been designed more as means to raise revenue than to encourage a change in environmental behaviour. Recent economic growth has generated new opportunities to mobilize internal resources, but national systems of environmental charges continue to be inefficient. There is a general need to broaden the use of market-based instruments (e.g. greening of public procurement, tax differentiation, fiscal incentives, etc.) and build an effective environmental taxation (on pollution, products, land use and natural resources) in order to move towards sustainability.

At the same time, political will to allocate the necessary funds for environmental purposes is weak and there is an insufficient level of public awareness on environmental issues to push governments to act more effectively in this field. Investment in environmental infrastructure remains low and so does the understanding of advantages from a better environmental management. A well-functioning environmental infrastructure has numerous benefits, not only for the environment and human health, but also for the economy. As governments are not fully convinced of the importance of protecting their environment, there are difficulties in attracting international technical assistance and making the best use of financial resources.

Although progress has been achieved in establishing environmental funds in virtually all countries, their management is not efficient enough to manifestly improve environmental protection. In general, procedures to apply to the environmental funds for project financing are too complex and selection criteria are not very clear, hampering the financing of environmental priorities and a stricter accounting of the performance in the use of the funds.

**Recommendation 3:**

*To increase the effectiveness of environmental financing, Governments in all EECCA and SEE countries should review procedures, improve institutional capacity, and make proper use of economic instruments. A more solid foundation for identification of projects and prioritization of spending of environmental funds should be developed, and transparency, financial planning and project-cycle management should be introduced systematically. Investments in environmental infrastructure should be increased.*

#### **4. Monitoring environmental progress and readjusting targets**

##### **4.1. Progress achieved and problems**

###### *Assessing progress in the national environmental situation*

All reviewed countries prepare today various types of environmental assessments and reports with a different scope, level of detail and periodicity (i.e. state of the environment reports, environmental statistics reports, reports on sectoral environmental issues, national reports on the implementation of specific MEAs, etc.). Most are of descriptive nature and lack indicators. When indicators are used, they are not standardized and represent frequently bulky figures (i.e. tons and cubic meters) that do not help decision makers and the general public to understand the cause and effect of environmental conditions, to link these with economic and social developments, to assess the cost-effectiveness of policy implementation and to make comparisons with other countries.



**Developing environmental indicators to monitor the state of the environment in Uzbekistan**  
(see Box 4.1 in annex)

Regular assessment of the environmental situation is a hard task in most of reviewed countries due to the absence of efficient monitoring networks and modern equipments to improve the quality of data collection, treatment and reporting. For example, existing air quality monitoring networks in EECCA countries were generally established in the 1970s and 1980s according to the soviet standards. Some countries have recently updated and supplemented such standards. However, comprehensive and regular control of current standards is extremely difficult and costly due to a too large number of substances to be monitored, a heritage of the past. In addition, monitoring is usually based on manual sampling, with very few automated monitors. As a consequence, both monitoring and enforcement by environmental authorities remain unrealistically large and therefore weak.



**Ukraine's regional environmental monitoring programme: the Zaporizhzhia Oblast case**  
(see Box 4.2 in annex)

Overall, the results of environmental monitoring are not efficiently used to assess the environmental conditions, the driving forces behind changes in the environment, and the effectiveness of environmental protection measures, nor are they used effectively for making decisions, elaborating policy or enhancing public awareness. In addition, information gaps are widespread due to the lack of regular national environmental monitoring and reporting. Thus, parliaments and governments do not receive state-of-the-environment reports to serve as a basis for law- and policy-making. In Ukraine, national reports on the state of the environment were published annually in Ukrainian and English, but since 2002 none has been published.

Another key obstacle for monitoring environmental progress in most of countries lies in the lack of a fully developed reporting system covering both financial reporting and performance results. This hampers a broader assessment of the environmental improvements, including

those resulting from the subsidies provided by the environmental protection funds. Also, self-monitoring by industrial enterprises remains weak and voluntary company reporting has rarely been introduced. Often an ideal self-monitoring system cannot be established for reasons such as lack of financial resources or suitable instruments. In Moldova, for example, as long as not all polluters submit reports, data on waste handling is incomplete. Moreover, environmental information reporting does not usually follow international indicators and guidelines for its preparation, such as the “Guidelines for the Preparation of Governmental Reports on the State and Protection of the Environment” endorsed by the Kiev Ministerial Conference “Environment for Europe” (2003). Reports generally lack of uniform methodologies across different monitoring areas, and national environmental standards and classification systems are often incompatible with international ones.



**Russian experience on environmental and social reporting**  
(see Box 4.3 in annex)

Despite such deficiencies, some progress has been achieved in monitoring. Armenia and Azerbaijan are making active efforts in establishing/upgrading monitoring networks. Exchange of environmental data and information is improving, such as in Belarus and Ukraine, where interagency monitoring commissions have been established. Moldova has made some progress on improving air pollution monitoring methods. The Government of Uzbekistan and UNDP are developing a joint project on environmental indicators to monitor the state of the environment in the country. An Environmental Protection Monitoring Committee and an environmental information centre have been established within the Kazakhstan Ministry of Environmental Protection as part of the institutional reform to modernize the country’s environmental monitoring system. The Ministry has also established a Regional Centre for Monitoring of the Caspian Sea region.



**Upgrading environmental monitoring through the project “Joint river basin management for the Kura River” in Georgia, Armenia and Azerbaijan**  
(see Box 4.4 in annex)

*Importance of independent assessments in monitoring progress*

Among the most important independent environmental assessments carried out in EECCA and SEE countries, there is the UNECE Environmental Performance Review (EPR). EPR is an important instrument for strengthening national environmental governance. The Review comprehends a broad analysis of the environmental activities in the country and contributes to enhance cooperation between various national sectors of the economy. It also provides an independent expertise (i.e. analysis given by international experts), allowing for an external approach and view of the national environmental problems. Ministries of Environment use these reviews as a reference during consultations, negotiations, preparations of project proposals, strategies and programs. The EPR reports and their recommendations are also important tools for the development of environmental policies, harmonization with EU standards and requirements, and integration of environmental policy into sectoral policies. In Armenia, for example, various programmes undertaken in line with EPR’s recommendations have strengthened the capacities of relevant stakeholders, including environmental authorities, different governmental institutions, expert community, and NGOs. Overall, all countries use EPRs as sources of information to state institutions, environmental organizations (governmental and non-governmental), business sector and the public in general. A broader publicity on the reviews’ launching at the national level combined with the availability of reports in national languages (i.e. Belarus, Moldova, Ukraine, Serbia, and Montenegro) have favored the practical application of recommendations as well as an increased involvement of the civil society in the process.

Assessments carried out by the OECD's Non-OECD Member Countries Division, and especially by the "Task Force for Implementation of Environmental Action Plans" (EAP TF), have had a positive influence in the countries' environmental policy development. Also, reviewed countries are taking advantage of opportunities to build monitoring and reporting capacities in the framework of the UNECE Working Group on Environmental Monitoring and Assessment. In 2002, a grant agreement was concluded between the European Commission and the European Environment Agency (EEA) on strengthening environmental information and observation capacity in EECCA. To implement a part of this agreement, UNECE and EEA set up a project "Support to the activities of the UNECE Working Group on Environmental Monitoring and Assessment (WGEMA)". Its objective was to strengthen environmental information and observation capacity and networks in order to provide reliable and relevant information on the state of the environment as a basis for improved policy making and public awareness. Other independent assessments, such as the World Bank Country Environmental Analysis and the EEA assessment reports, in collaboration with the UNECE Working Group on Environmental Monitoring, for the Fifth and Sixth Ministerial Conference "Environment for Europe" have also contribute to a better appraisal of the environmental situation in the region.

#### ***4.2. Challenges ahead***

Although significant progress has been achieved in some countries, the state of monitoring and information management remains critical in reviewed countries. Most of them redesigned their monitoring systems, but lack of funds has inhibited any major progress. Outdated standards and measuring methods and obsolete equipment are still widely in use. In many cases, monitoring is under the control of different authorities with often poorly defined responsibilities and/or quite different functional competences. In addition, most of reviewed countries need to strengthen their self-monitoring systems. Improved self-monitoring in industries often results in better process performance and more environmental-friendly production, which pay off in economic terms.

Another major issue for monitoring environmental progress lies in the weakness of national reporting systems, including systems of reporting by enterprises to the authorities. The overall lack of regular assessment reports and trends in the main environmental indicators makes it difficult to track and evaluate policy implementation in many countries. As a result, national targets and priorities have not been properly updated and readjusted.

#### **Recommendation 4:**

*Governments in all EECCA and SEE countries should conduct an overall review of their environmental monitoring systems, including readjusting their targets so as to better understand actual environmental priorities and develop more realistic environmental programmes and strategies for their effective funding. To that end, focused environmental indicators should be selected, monitoring equipment modernized and data collecting, processing and reporting improved. Environmental authorities should enforce self-monitoring in enterprises.*

## **5. Integrating environmental policy into sectoral policies**

### ***5.1. Progress achieved and problems***

### *Environmental policy integration*

Environmental policy integration is still at an early stage and addressed in a fragmented way across reviewed countries. There has been only limited progress with developing and implementing concrete initiatives for sectoral integration to date. The economic crisis resulting from the transition reduced the pressures of key sectors (i.e. energy, transport, industry, agriculture) on the environment in the last decade of 20<sup>th</sup> century. This trend is starting to be reversed and, in the meantime, policies have not been adequately reformed to integrate environmental considerations.

Regional awareness of the need for sectoral integration and related tools has been steadily growing thanks notably to the “Environment for Europe” process and the EU accession requirements. In this context, the implementation of the EECCA Environmental Strategy (2003) represents a step towards a better integration of environmental concerns into sectoral policies throughout the region. In parallel, national sectoral strategies and programmes to improve environmental protection have increasingly been adopted, notably for energy, forestry and waste management. For example, Serbia adopted a National Waste Management Strategy in 2003 and Montenegro has developed its Energy Efficiency Strategy for 2005-2006.

Environmental policy integration can be also driven by sustainable development strategies (SDS), which provide tools for sectoral integration. In 2002, the World Summit for Sustainable Development (WSSD) urged States not only to take immediate steps to make progress in the formulation and elaboration of national strategies for sustainable development, but also to begin their implementation by 2005. As a response, sustainable development strategies in reviewed countries are under development (e.g. Ukraine, Serbia, Croatia, Montenegro, Former Yugoslav Republic of Macedonia, Slovenia, Tajikistan) or being implemented (e.g. Russian Federation, Belarus, Bulgaria, Romania, Moldova, Estonia, Latvia, Lithuania). Exceptions are Kazakhstan, Kyrgyzstan, Albania, Bosnia and Herzegovina, Armenia, Georgia and Azerbaijan, where there is no strategy at all, and Uzbekistan and Turkmenistan, which did not provide information on such strategies.

### *Implementation tools*

Traditional regulatory instruments are still largely used in most of reviewed countries. Environmental impacts caused by economic development and general patterns of production and consumption are typically not taken into account. More appropriate tools to deal with such impacts and promote environmental policy integration include environmental impact assessment (EIA), strategic environmental assessment (SEA), environmental management systems (EMS) and market-based instruments.



**Integrating environmental protection goals into other sectors in Romania  
(see Box 5.1 in annex)**

Environmental impact assessment (EIA), which is usually directed to private sector projects, can be an important tool for integration of environmental considerations into economic decisions. Virtually all reviewed countries have already adopted their own EIA schemes. The UNECE Convention on Environmental Impact Assessment in a Transboundary Context (Espoo, 1991) has been ratified by many countries in the region. Also, the EU EIA Directive, introduced in 1985 and amended in 1997, has been transposed by new EU member and accession countries.

Strategic environmental assessment (SEA) is seen as a key instrument for sectoral integration, providing for extensive public participation in government decision-making in numerous development sectors, from land-use planning to transport and from agriculture to industry. The application of SEA is not mandatory and is undertaken much earlier in the decision-making process than EIA. The Protocol to the Espoo Convention on Strategic Environmental Assessment (Kiev, 2003) was signed by all countries in the region, excepting Russian Federation, Belarus, Azerbaijan and Central Asia States. To date, only few countries outside the EU have implemented strategic environmental assessment (SEA) in line with the UNECE Protocol on SEA and the EU SEA Directive (2001/42/EC). Many obstacles are hindering the proper implementation of SEA throughout the region. For example, there is a delay on approving/ publishing the SEA related legislation in Romania due to the difficulties on the identification/setting up of structures responsible for its implementation. However, many countries in South East and East Europe as well as in the Caucasus are now developing capacity in SEA with a view to making it a legal requirement.



**The Bulgarian experience on Strategic Environmental Assessment (SEA) as a tool for integration of environmental considerations into sectoral planning**  
(see Box 5.2 in annex)

Environmental management systems (EMS) are also important instruments for the process of integration in the private sector as they allow managers to see new opportunities, introduce cleaner technologies and to cut production costs. The use of such systems is becoming more popular and the number of enterprises with environmental certification (ISO 14000, EMAS) has steadily increased throughout reviewed countries. Also, in most of these countries, the industrial sector's environmental performance can be drastically improved with the gradual implementation of integrated pollution prevention and control principles based on the EU IPPC Directive (96/61/EC). In this context, national policy and legal frameworks in line with IPPC requirements are being developed in some reviewed countries or have been already harmonized (i.e. in new EU member countries).



**Integration of environmental concerns in industry: some examples from EECCA and SEE**  
(see Box 5.3 in annex)

Market-based instruments (e.g. environmental taxes, emissions trading, public green procurement, fiscal incentives, tax differentiation, etc.) and economic instruments that send market signals about products through labels or information rather than prices (e.g. eco-labels, voluntary agreements) are being introduced by many countries, but at a slow pace.

In addition, there has been little integration of environmental considerations into legislative and policy documents on privatisation. Only few reviewed countries have succeeded to ensure compliance with environmental requirements during this process. A good example is given by the Estonian privatisation procedure, which included environmental requirements in its schemes. From 1996 to 1999, a government decision specified that 5% of the funds from the sale of an enterprise were to be devoted to the environment. The collected money was used to finance projects regarding environmental rehabilitation and construction of industrial waste water treatment plants and landfills. Similarly, Bulgaria has also integrated environmental policy objectives in the industrial privatisation process at a prominent level. However, this approach has not yet become systematic. For instance, Montenegro, which initiated privatisation in 2005, has not incorporated environmental requirements in the process. Even though, some foreign companies have undertaken independent environmental audits before purchasing objects in the country, leading to environmental commitments under the privatisation contract.

### *Institutional cross-sectoral instruments*

Institutional weakness remains a major issue for integrating environmental policies into sectoral policies in most of reviewed countries. In order to address this issue, Governments are making efforts to introduce institutional instruments for environmental policy integration, such as environment units into sectoral ministries (i.e. agriculture, transport, energy, industry) and inter-ministerial commissions for consultation during the development of legislation and strategies (e.g. Romania, Belarus and Serbia). At present, however, interaction between environment and sectoral ministries usually takes place merely at the communication level and often at a late stage of the consultation process.



**Weak inter-sectoral cooperation for water management in Tajikistan  
(see Box 5.4 in annex)**

Many governments have also created sustainable development bodies (i.e. National Councils or Commissions on Sustainable Development) to improve policy coordination and cross-sectoral cooperation. The advantage of these bodies lies in their cross-sectoral nature as they comprise the three pillars of sustainable development. A problem is that national commissions on sustainable development have not enough political weight (e.g. Armenia, Azerbaijan) or are non-operational (e.g. Georgia, Moldova and Ukraine). For example, Armenia has established its National Council on Sustainable Development in 2002, but the Council does not have an active role in the political process. Another example is the Ukraine's National Commission on Sustainable Development created in 1997, which is chaired by the Deputy Prime Minister and involves a number of governmental agencies. This commission met only once and, shortly after 1999, become non-operational, as no resources had been allocated for its secretariat or for its functioning. In 2003, Ukraine's National Council on Sustainable Development was established, but again no resources have been earmarked for preparing documentation and analysis or for management functions. In Azerbaijan, a governmental Commission on Sustainable Development has been created, but has not demonstrated its political weight so far.

### **5.2. Challenges ahead**

Integration of environmental concerns into sectoral policies remains a challenge for reviewed countries as much as for the whole UNECE region. As countries finish their transition towards a market economy and economy is picking up, new strains on the environment are emerging. Therefore, more explicit environmental policy integration is needed at a policy, institution and sector level. However, governments are generally lacking institutional and regulatory frameworks for environmental policy integration in policy making and are not broadly using market-based instruments that reinforce integration through market mechanisms.

Sectoral integration calls for stronger environmental authorities, both in relationship to other parts of government and the private sector. Integrating environmental considerations means that all ministries and government agencies must accept responsibility. It is not sufficient for Ministries of Environment to act alone; all parts of government need to be actively involved. Political will is also indispensable so as to face the resistance coming from some economic sectors of society. Thus, both private sector and civil society should be involved, not just through the regulatory framework, but also by using market incentives as well as voluntary approaches. The recent emergence and establishment of new institutional and political cross-sectoral instruments, such as sustainable development state bodies and strategies is encouraging for integration, but they also have to work efficiently in practice

**Recommendation 5:**

***Governments in all EECCA and SEE countries should institutionalize the integration of environmental policy into sectoral policies, and ensure involvement of the private sector and effective public participation in the policy integration process. In particular, they should ensure the implementation of related instruments (e.g. a sustainable development strategy, a poverty strategy, the Millennium Development Goals) to support a broad and effective integration of environmental policies into sectoral policies, as well as introduce specific tools and mechanisms (strategic environmental assessment, environmental impact assessments, environmental management systems, market-based tools, etc.) integrating environmental requirements into transport, energy, agriculture and other key sectors.***

## Annex

### Case-studies on implementation of environmental policies in countries reviewed under the UNECE EPR Programme

#### 1. Strengthening political support for environmental improvements



##### **Box.1.1. National Environmental Strategy of Serbia: positive aspects and drawbacks**

The National Environmental Strategy (NES), which was developed with the objective to guide the development of modern environmental policy in the Republic of Serbia over the next decade, was adopted in 2006 by the Government, but not yet by the Parliament. The NES is to be implemented through Action Plans and remediation plans adopted by the Government for the period of five years.

The Strategy has been prepared in a consultative way involving many institutions and national as well as local people. It covers environmental issues and the different economic sectors and their impact on the environment. The NES also define precise targets and is accompanied by a financial assessment of its related costs. It also incorporates principles of sustainable development, sectoral integration, polluters and users pays, access to information and public participation, among others.

However, this document calls for the elaboration of 16 specific Action Plans that are currently being drafted. Developing such a large number of Action Plans is a heavy task and may lead to difficulties into their future implementation.



##### **Box 1.2: Political support to the adjustment of national environmental legislation with the EU *Acquis Communautaire* in Estonia**

The environmental-related laws introduced in the mid-nineties in Estonia were rather general, laying down the main principles, but lacking implementing regulations. Once Estonia had made the decision to join the European Union, it also faced its new obligations to adjust to EU legislation, introduce new environmental laws in fields not previously covered and amend those laws that were introduced in the mid-nineties but were not fully compliant with EU requirements. The Environment Chapter of the negotiations for EU accession was opened in December 1999. In the following year, the Government submitted a position paper regarding the EU environmental *acquis*. Implementation plans for sectoral directives on air, waste, radiation, nature protection and industry were also issued in 2000, accompanied by the related financing strategies; and in 2001, on urban waste water, drinking water, nitrates, ozone depleting substances, large combustion plants, air quality, sulphur content of liquid fuels, landfills and packaging waste. Transitional periods were requested, in particular for those directives involving substantial investment in infrastructure (drinking water, waste water, landfills) or related to biodiversity protection (birds and habitat directives).



##### **Box 1.3: Breaches in the Espoo Convention: the Cernavoda unit 2 (Romania) and the Bystroe Canal (Ukraine) cases**

- In the late 90s, the Romanian government decided to complete the second reactor of the Cernavoda nuclear power plant, although the numerous objections aroused by the project. The cost of completion of Cernavoda unit 2 was estimated at \$750 million. In 1991, Romania, Bulgaria, Hungary, Ukraine and Moldova signed the UNECE Espoo Convention on Environmental Impact Assessment (EIA) in a Transboundary Context, which entered into force in 1997. The Cernavoda nuclear power plant is located less than 100 km from the Bulgarian border and Bulgaria has expressed its concern about the completion of unit 2. The Espoo Convention requires that project information be made public and in particular made available to the competent authorities of all affected parties before project approval. Bulgaria was the only country to receive Cernavoda unit 2

EIA documentation in December 2002, a year after consultations took place in Romania, while the Convention is clear that notification of the concerned parties should come “*as early as possible as and no later than when informing its own public about that proposed activity*”. The report on Environmental Impact Assessment sent to Bulgarians failed to give the minimum information as requested under the Espoo Convention. For example, potential environmental impacts under severe accident conditions were not evaluated, impacts on air quality were not adequately assessed and potential impacts during decommissioning were not covered at all. In addition, Ukrainian authorities have never received the EIA documentation on Cernavoda.

- For instance, Ukraine fell short in conducting the requirements of the Espoo Convention for the reconstruction of the Danube - Black Sea shipping channel, the so-called “Bystroe Canal”, in the Danube River. In July 2006, the UNECE Inquiry Commission concluded that Danube - Black Sea Canal is likely to have significant adverse transboundary effects on the environment and thus the provisions of the Espoo Convention apply. This means that Ukraine is expected to send a notification about the canal to Romania and that the procedure imposed by the Convention should start. There should be consultation between the Parties, Romania should be given an opportunity to comment on the project, and public participation in the two countries should be ensured. It also means that the final decision about the project should be submitted to Romania.



#### **Box 1.4: Low level of public participation in environmental decision-making in Belarus**

Belarus does not yet have a good track record in developing its legislative basis to provide mechanisms for greater public involvement and information sharing within the framework of its environmental legislation. The current provisions on State Ecological Expertise (SEE) do not provide for real public participation in the most important environmental decision-making. Also, the legal framework for the Public Ecological Expertise (PEE), as contained in the Law on Environmental Protection, is too general and not applicable because of a lack of detailed rules and procedures. The Law on Local Administration and Self-Governance (1991, with latest amendments 2000) establishes the right of citizens and representatives of public groups to participate in consultations on draft laws or normative acts. However, even though information on new draft laws is available on the Government’s website, consultations with the general public are rare. As in many EECCA countries, there are serious gaps between the legislative framework and actual practice. A key gap is the lack of information available to the general public on how it can exercise the right to access environmental information and participate in decision-making on environmental matters. Although constantly improving, the environmental legislation remains too declarative and does not set concrete mechanisms to enable individual citizens to assert their right to obtain environmental information, to take part in decision-making and to be compensated for damage suffered as a result of violations of environmental legislation. As Belarus has recently approved the Aarhus Convention on public access to environmental information and participation in environmental decision-making, the Government is committed to developing an operational regulatory framework to ensure the effective implementation of all its provisions.



#### **Box 1.5: Montenegrin civil society halts plans to flood the Tara Gorge, a World Heritage site**

In 1991, Montenegro added a special decree to its constitution which defines the nation as an Ecological State. However, Montenegro has ratified in April 2004 an agreement with Bosnia and Herzegovina concerning the construction of a hydroelectric power plant that would flood the Tara Gorge, a World Heritage site. The Tara Gorge, the deepest and steepest canyon in Europe and the second deepest in the world, is cut by the Tara River. It stretches through the Durmitor National Park (a World Heritage site) and the Tara River Biosphere Reserve. Following the agreement, a tender was opened for the construction of the “Buk Bijela” hydroelectric power plant in the Drina River (formed by the Tara and Piva Rivers). Information about the dam project was very scarce and only appeared in tiny articles in daily newspapers. The principles contained in the Aarhus Convention about providing access to information concerning environmental matters have been completely ignored. No information whatsoever could be obtained from Ministries or any other governmental agency. The situation resulted in a strong civil society pressure calling for the protection of the site. Opponents of the project collected more than 10,000 signatures against it in one day - a huge amount for a country of roughly half a million people. Several parties then joined hands to force a parliamentary debate on the project, which is expected to end in deputies voting for a declaration that demands legal protection for the canyon. The

plans to build a dam that would flood part of the Tara Gorge were abandoned in April 2005, thanks to the action carried out by civil society organizations for the preservation of the canyon.

## 2. Building competent and effective environmental institutions



### Box 2.1: Institutional strengthening for environmental protection in Estonia and Romania

- Prior to 1991, the Ministry of Environment in Estonia had no offices at local level, environmental management and protection being the responsibility of counties with special environmental offices. After 1993, these offices started to be administered by the Ministry, but still financed by local budgets. In such circumstances, it was difficult for the Ministry to ensure that national environmental strategies were implemented according to the priorities defined at national level. The restructuring of 2000 therefore put the county environmental authorities under the direct responsibility and budgeting of the Ministry of Environment. These offices are implementing agencies that deal with EIA, issue permits for natural resource use and pollution discharge, and manage the 290 local and regional protected areas. They are also required to work out county waste management plans.
- The central body for environmental governance in Romania, the Ministry of Environment and Water Management (MEWM), was re-organized in 2005. The main responsibility of the ministry related to horizontal legislation concerns the development of environmental legislation in line with the EU environmental *acquis*. The National Environmental Protection Agency (NEPA) was also reorganized in 2005. It represents the national executive level subordinated to the MEVVM in charge of the coordination of regional and local environmental bodies. Specific functions of planning approvals and reporting control are also attached to the NEPA, together with the development of secondary legislation for implementation and enforcement. The Regional Environmental Protection Agencies (REPAs) were established in 2004 within the boundaries of the existing eight development regions. The REPAs are responsible for the work coordination of Local Environmental Protection Agencies (LEPAs), which were reorganized in 2005. LEPAs are in charge of the implementation and enforcement of environmental legislation at the county level. There are 42 LEPAs at present, one for each County, plus the Danube Delta Biosphere Reserve Administration. In addition, the National Environmental Guard (NEG) was set up in 2005 as a specialized body subordinated to the MEWM by merging the forestry and hunting territorial inspectorates. The staff from the former inspection bodies of the ministry and local environmental agencies also merged into the NEG. The county branches of NEG are working closely to the LEPAs, carrying out the control functions.



### Box 2.2: Insufficient administrative capacity in the field of environmental protection in Bosnia and Herzegovina, Macedonia and Tajikistan

- Bosnia and Herzegovina's institutional structure in the environment field is complex and there is a lack of central coordination and implementation even for international agreements. Capacity at the State level is particularly weak. There is a gap between attribution of environmental responsibilities and means to fulfill them. The number of vacant posts is significant and administration development is limited. The low number of environmental specialists has led many officials to be multifunctional in order to cover this lack.
- The Macedonian MEPP has insufficient staff and, in particular, lacks specialised staff in areas such as environmental impact assessment, monitoring, integrated pollution prevention and control, and climate change. The State Environmental Inspectorate (8 inspectors in mid-2005, of whom 4 in Skopje), which operates within the MEPP, supervises the implementation of laws and other acts, as well as enforcement of and compliance with the conditions stipulated in individual permits. The number of inspectors is clearly insufficient while the number of prosecutions for breaches of environmental law indicates that enforcement level is very low. This can be attributed to various factors, such as the lack of human and financial resources, the weakness of the legal and judiciary systems, and deficiencies in the legislation.
- The Tajik environmental institutions have restraint capacities due to the lack of staff and limited salaries. For instance, the staff in Dushanbe's Committee for Nature Protection and Forestry consists of 29 persons paid from the Committee's budget (including eight in four rayon committees). The

average salary is 20 somoni per month (less than US\$ 7). Low salaries are one of the main reasons for the high turnover of inspectors and other staff, particularly in the *rayon* and small town committees. Moreover, the Department for Land Use, with a staff of only three, is responsible for issues related to the sustainable use of agricultural land.



#### **Box 2.3: Frequent reorganization of Ukrainian environmental institutions**

Over the last five years, a number of steps have been taken to build and strengthen the institutional system for environmental management in Ukraine. However, these actions may not have achieved the expected results because of the too frequent reorganizations of environmental authorities. These frequent changes of the Ministry of Environmental Protection leadership have led to the dilution of the strategic vision and its coherence and have resulted in weakening the efficiency of staff's work, scattering of technical and human resources and inefficient use of financial resources.



#### **Box 2.4: Imbalance and unclear institutional task sharing in Belarus**

Environmental permitting, inspection and enforcement operate simultaneously at three levels: national, regional and local. The responsibilities of staff at all these levels are not clear and the use of existing resources is not optimal. Within the Ministry of Natural Resources and Environmental Protection, there is a certain imbalance between the tasks related to the use and protection of natural resources and those related to environmental protection. There is only one department (geology) with direct functions related to the use of natural resources (mineral resources). The Ministry does not have departments responsible for water use or forestry for instance, although some of these functions are under the responsibility of the respective specialized inspectorates. There is also a separate Ministry of Forestry. In addition, it is not clear which body is responsible for water use and water management. The Central Research and Development Institute of Water Resource Use is subordinated to the Ministry of Natural Resources and Environmental Protection and paid from its budget, but its main purpose is scientific research and it is not a Ministry department.



#### **Box 2.5: Staff quality is enhanced by effective training in Belarus**

In 2004, the State introduced a system of control of environmental activities under all ministries and in all enterprises separate from the inspectorates. Under this system, in each ministry and enterprise, there is a person or persons responsible for ensuring compliance with environmental legislation through staff training, distribution of relevant information and notification of new guidelines. The Ministry of Natural Resources and Environmental Protection facilitates this programme by providing training and methodological assistance. It has also proposed to the Government to initiate a programme to assess the knowledge of all enterprise managers on environmental legislation and regulations. At the same time, the training programmes for inspectors are used quite effectively. The Ministry often invites external experts, including specialists from universities, to give lectures. Programmes are organized for new inspectors, as well as for experienced staff who have a possibility of enhancing their qualifications.

### **3. Mobilizing financing for environmental priorities**



#### **Box 3.1: Lack of priorities in programmes and strategies hinders the efficient use of environmental funds in Ukraine**

As a result of the increase in revenues, the average size of the projects financed by the NEF increased almost fivefold between 1998 and 2003, more than twice as fast as the Consumer Price Index (CPI). However, priorities appear too vague to provide strict guidance for the projects to be financed. More narrowly defined priorities would reduce the flow of unsuitable demands, thus facilitating the appraisal process. At the oblast level, a review conducted by DANCEE in 2001 found most of the funds in violation of the Saint Petersburg Guidelines on Environmental Funds in the Transition to a Market Economy. Expenditures were not targeted precisely enough to meet environmental objectives, and there were no clear procedures for project selection or management.



### **Box 3.2. Financial planning for implementation of the waste management strategy in Serbia**

Serbia has adopted a National Waste Management Strategy in 2003 and a new Law on Waste Management in line with EU directives has been submitted for adoption. The financial planning for implementation of the Strategy and, later on, the Law includes the financing and co-financing of projects by the Directorate for Environmental Protection, the Environmental Fund and the National Investment Programme (financed by Serbia's privatization revenues).

During 2004, the Directorate for Environmental Protection has financed and co-financed several activities totaling 800.000 EUR. These included the development of technical documentation for sanitation and remediation of existing dumpsites for 19 municipalities, the sanitation and remediation of existing dumpsites in 4 municipalities and the development of technical documentation for construction of 7 regional landfills for 38 municipalities. In 2005, the Directorate for Environmental Protection co-financed 24 projects (total value 300.000 EUR). The projects involved the development of technical documentation for construction of 3 regional landfills for 16 municipalities and for sanitation, closure and rehabilitation of existing dumpsites for 22 municipalities.

Since 2005, the Environmental Fund has co-financed a series of important projects in regional and municipal waste landfilling, some of them on the basis of public tender. The share of co-financing was between 40% and 60% of total values of the projects.

Within the National Investment Programme, 4 projects regarding waste management were selected to be financed in the period 2006-2007 (total value of 20 Mln EUR). These projects include the support to local self governments for construction of regional landfills (4.300.000 EUR) and collection of communal waste (2.000.000 EUR), detailed PCBs inventory and replacement of devices that contains PCBs and their export for treatment (2.040.000 EUR), and sanitation and recultivation of existing dumpsites (2.700.000 EUR).



### **Box 3.3: Ineffective economic incentives to reduce pollution in Moldova**

The national pollution tax system needs improvement in order to work effectively as an economic incentive to reduce pollution. Due to the diminished level of pollution taxes, the offsets for pollution taxes for enterprises investing in pollution abatement technologies included by the 1998 Law on Payments for Environmental Pollution have never been applied. For instance, the Moldovan enterprise Macon, having implemented some pollution reduction measures in the framework of the Tacis Pilot Project on Cleaner Production and satisfied the criteria according to the Law on Payments for Environmental Pollution, was entitled to receive offsets. However, the company did not negotiate these offsets with local authorities as they only pay US\$ 4,000 pollution taxes per year and with such a high company turnover, what they would receive was not worth their while to negotiate.



### **Box 3.4: Raising revenues for environmental purposes in Belarus**

In Belarus, the resources available in the Environment Fund were insufficient for implementing the 2001-2005 National Action Plan for Rational Use of Natural Resources and Environmental Protection and its action plans at national and regional levels. As a result, charges have been raised in real terms over several years, incrementally, for water extraction, wastewater discharge, air emissions and waste disposal. One indicator of the success of this action was an increase in the revenues of the Environment Protection Fund (now a budgetary fund) by a factor of 13, from US\$ 9.5 million in 2000 to about US\$ 125 million in 2004. This has resulted in a better financing of environmental priorities.



### **Box 3.5: Financial schemes to assist enterprises in complying with environmental legislation in Bulgaria**

Financial assistance schemes have been successfully applied in Bulgaria to assist enterprises in limiting emissions of major air pollutants and to support the introduction of new technologies in the energy, industry and transport sectors. The financial schemes used are:

- No-interest loans and cash grants from the National Environment Protection Fund: financial sources are pollution charges, taxes, 5 per cent of privatization revenues from the privatization of State enterprises, etc.
- Grants from the EU PHARE programme: the Governments of Denmark, Germany, and the Netherlands, among others, grant significant financial assistance under bilateral agreements for the implementation of joint projects.
- Charge write-offs: by amendment of the Regulation on Charges for Environmental Damage (SG 34/1997), 80 per cent of an emission charge may remain in the company for investing in pollution abatement and achieving permissible emission limit values. An implementation control and supervision procedure was also drafted.
- Value Added Tax (VAT) exemption: by amendment of the Environment Protection Act (SG 62/1998), goods and services imported on international grant agreements are VAT exempt. An example is the Grant Agreement with the World Bank, amounting to 10.5 million US dollars, for procurement of equipment and technologies for the phasing out of ozone-depleting substances.
- Low-interest loans and accelerated write-off allowances: such loans, amounting to 80 million US dollars, were received from Japan for the reconstruction of the non-ferrous metals plants in Plovdiv and Eliseina.
- Charge write-offs upon agreement: to invest in technological reconstruction and achieving permissible emission limit values for a period not longer than five years are provided for in the Regulation on Temporary Emission Limit Values (SG 51/1998). The technological reconstruction of the non-ferrous metals plant in Pirdop, owned by the Belgian company Union Minière, was negotiated in this way.



### **Box 3.6: Impact of economic instruments on the environment: the Estonian experience**

In Estonia, environmental taxes have been used since 1991. During 15 years (1991-2005) the amounts of money received from environmental taxes are constantly growing, but still not in proportion with the growth of rates. This is due to the stimulating role of environmental taxes on environmental protection. If entrepreneurs take efficient environmental protection measures, their amount of payable environmental taxes decreases.

Environmental taxes received in the state budget have been used for financing environmental protection and nature conservation activities in the whole 15-year period. From 1991 to 1999, the money was used through the Environmental Fund outside the state budget, and since July 1999, it is used via the Environmental Investment Centre operating under the state budget. Previously, state functions, such as environmental inspection and development of information technology, were also financed through the Fund. In recent years, financing of those activities has been shifted more and more to the state budget. Current financing is project based. The projects are grouped into programmes according to priority sectors to be financed. The money is not redirected to the sector from where it was received, but to where it is the most beneficial for Estonia from the environmental protection point of view. According to this principle, more than 40% of finances have been allocated to the water sector, a priority for Estonia, although the sector itself has given only 15% of the money received.

The impacts of economic instruments in reducing environmental pollution have been remarkable during the last 15 years. For example, the water pollution load has decreased substantially, in particular that of organic pollution (by more than 7 times), emission of suspended solids (by almost 7 times), total phosphorus and oil pollution (by 4 times). Reduction in total nitrogen pollution has been the lowest (by 3 times). In 2005, Estonia decided to increase the effect of economic instruments in place by strengthening the regulatory framework for nature use and protection. The adoption of the Environmental Tax Act (2005) called for a dramatic rise of a great majority of environmental tax rates (even up to 100% in certain cases). The objective was to give a clear signal, both to the business and the public sectors, on the willingness of the state to use its natural resources and the environment in a sustainable manner.



### **Box 3.7: Environmental protection not listed as a priority for international financing in Moldova**

In the reviewed period, the Government of Moldova did not include environmental protection as one of the main priority areas when requesting international technical assistance. As a consequence, the country assistance strategies or their equivalents of international financial institutions (IMF, WB, EBRD), international organizations (EC, UNDP) and bilateral donors that are active in the country do not list environmental protection as a priority. If the EBRD and World Bank projects, whose primary purpose was other than environmental protection, are excluded, the total amount of external financial resources in the country for the period 1998-2003 could be estimated at around US\$ 7 million compared to the domestic expenditures of around US\$ 81 million. While this corresponds to the trends in other countries in the EECCA region, where domestic environmental expenditures are significantly higher than foreign ones, the Republic of Moldova has the potential to attract more external sources of financing. A step in the right direction is the National Programme of Technical Assistance for 2005-2006, which was developed in support of the poverty reduction strategy (EGPRSP, 2004-2006). The projects outlined in the Programme corresponding to EGPRSP priority areas have a better chance of attracting attention from potential donors.

## **4. Monitoring environmental progress and readjusting targets**



### **Box 4.1. Developing environmental indicators to monitor the state of the environment in Uzbekistan**

The project "Environmental Indicators to Monitor the State of the Environment in Uzbekistan" is part of a broader initiative for the development of a national environmental information management system, the so-called Atruf-Muhit Environment Programme of the State Committee for Nature Protection of Uzbekistan, supported by the United Nations Development Programme (UNDP). The main objective of this project component is to develop indicators for monitoring a number of selected environmental parameters in the country.

In order to identify and define an appropriate suite of environmental indicators for Uzbekistan, the project has adopted an extensive participatory process, including official levels, technical and scientific circles, NGOs and local community groups.

After establishing the set of indicators, the project has developed a monitoring strategy for each indicator, the protocols for managing the data and a database to store, process, and analyze the data, and an environmental information system to share it.

The Environmental Information System (EIS) is one of the outputs of the project. The data stored in the EIS database comes from 91 environmental indicators monitoring the state of the environment in Uzbekistan at national, regional and local levels. Each indicator monitors a different aspect of the environment, such as, for instance, air pollution or land salinization. The data is available online on internet via a standard web browser. The EIS allows querying, analyzing and displaying environmental data online.



### **Box 4.2: Ukraine's regional environmental monitoring programme: the Zaporizhzhia Oblast case**

In 2001, the Zaporizhzhia Oblast Council adopted an environmental monitoring programme for the oblast for 2001–2010. Developed in collaboration with all oblast governmental bodies, major polluting enterprises and local NGOs and with support from the regional environmental fund, the programme is based on a format and procedure for data submission managed by Ecocentre. This company operates an Internet-based database to manage data inputs from all of the oblast's monitoring networks, including those of Hydromet, the Ministry of Health and the State Committee for Water Management and emissions data from polluting enterprises. Implementation is monitored by a regional interdepartmental commission led by a vice-head of the oblast administration. Some Hrv 16 million from various sources

have been earmarked for the programme's implementation. It has served as a basis for developing other regional programmes, such as a programme to resolve environmental crises in Zaporizhzhia for 2001–2010 that has involved some 100 polluting enterprises; a programme on environmental protection, rational use of natural resources and environmental security for Zaporizhzhia Oblast for 2003–2010; a programme for rehabilitation of mining sites; and a programme for handling hazardous wastes.



#### **Box 4.3. Russian experience on environmental and social reporting**

Based on the world experience and starting serious large-scale corporate social responsibility (CSR) and sustainability reporting to present their economic, environmental, and social performance, 41 Russian companies have issued their non-financial reports as of July 2006. Fourteen of them are included as sections into their annual reports; seventeen are prepared in the form of social reports, six as sustainability reports, and four as environmental reports. At the same time, eleven companies have prepared their reports with application of the Guidelines of Global Reporting Initiative (GRI) and AA1000S Process Standard for Report Preparation methods and performance indicators. Among them are JSC Norilsk Nickel, JSC LUKOIL, JSC Unified Energy System of Russia, JSC Tatneft, JSC YUKOS, Ilim Pulp Corporation, JSC Northwest Timber Company, NOVOGOR-Prikamie LLC, EvrazHolding Ltd, Shell, and BP. RUSAL has prepared its non-financial report in compliance with ten principles of the UN Global Compact.

The four Russian companies which present their environmental policy in the form of special environmental reports are JSC Gasprom, JSC Ryazan State District Power Plant, JSC Arkhangelsk Pulp and Paper Factory, and JSC Northwest Timber Company. Although small in number, these environmental reports are highly transparent in most aspects of environmental responsibilities. The systems of environmental management applied by these leading Russian companies meet the ISO 14001 requirements.



#### **Box 4.4. Upgrading environmental monitoring through the project “Joint river basin management for the Kura River” in Georgia, Armenia and Azerbaijan**

The project “Joint River Basin Management for the Kura River”, funded by the EU Tacis Programme, includes several sub-projects being carried out by national technical working groups in Georgia, Armenia and Azerbaijan. These groups meet in plenary workshops, allowing country-to-country interaction. Steady progress is being made to upgrade technologies and monitoring of water quantity and quality in the Kura Basin, all with an eye towards consistency within and across countries, and data sharing. Transboundary reviews and management can be done only when all three countries have a sound understanding of conditions and threats, and this project is making important progress in this direction. Capacity-building components include reviews of water management practices, raising of public awareness, and early stages of pollution “hot spot” identification through improved monitoring. Broader political concerns mean that a formal basin-wide steering group, international commission, or other high-level and politically endorsed entity is not possible now. Nevertheless, all three countries are clearly supporting and will benefit from technical cooperation.

## **5. Integrating environmental policy into sectoral policies**



#### **Box 5.1: Integrating environmental protection goals into other sectors in Romania**

The main policy objective in Romania, as spelled out in the National Development Plan, is to integrate environmental protection goals into other sectors. In this context, the Romanian Government is strengthening efforts to provide a more consistent framework for implementing Strategic Environmental Assessment (SEA) in the country and establishing a wider set of factors in decision-making that shall be set up for each relevant category of plans and programmes likely to have an environmental impact. Human resources capacity for implementing the EU SEA Directive will be reinforced by hiring 5 persons at the Directorate for Horizontal Legislation and Regulations within the Ministry of Environment and Water Management (MEWM) in 2007. As the Ministry's staffs have not enough experience for implementing the SEA and Reporting Directives, training sessions and logistical equipment supply (PCs and database) will be provided. In parallel, implementation guidelines for SEA will be drafted. In addition, training of representatives of sectoral ministries and the general public

will be provided, leading to a better knowledge of the requirements and application of the SEA legislation to national plans/programmes.



**Box 5.2: The Bulgarian experience on Strategic Environmental Assessment (SEA) as a tool for integration of environmental considerations into sectoral planning**

In Bulgaria, legal requirements on the Strategic Environmental Assessment (SEA) as a tool for integration of environmental considerations in sectoral planning and programming have been enforced since July 2004. The national SEA legislation follows the principles and the provisions of the EU Directive 2001/42/EC on the Assessment of the Effects of Certain Plans and Programmes on the Environment (SEA Directive). Up to date, some SEAs for programmes in the energy and transport sectors have been carried out. However, the number of SEA procedures carried out to date is not high enough to take lessons from the process. Two recent examples of SEA for energy and transport programmes are given below:

- *National Long-term Programme for the Development of Renewable Energy Sources*

After screening, the Ministry of Environment and Water (MoEW) has issued a decision on the need of strategic environmental assessment for the programme. The Ministry has issued some guidelines on the scope of the SEA in which attention is drawn on specific issues such as the assessment of the impact of wind farms development on birds migration on Via Pontica at the Black Sea coast, and assessment of the likely impact on the waters (changes in the water shed and the water flow) as a result of the water use. Currently, the SEA report for this programme is under preparation.

- *Sectoral Operational Programme “Transport”*

The Ministry of Environment and Water has screened and issued a decision on the need of SEA for such a programme, as part of the assessment. Within the assessment preparation, consultations on its scope have been carried out with environmental authorities (MoEW, Basin Directorates) and NGO's. Public access to the draft of the SEA was granted in order to gather public opinions. The documentation has been submitted to the MoEW and the Ministry has expressed its written opinion on the SEA report, with some remarks to be reflected in the final draft of the assessment. The final draft is expected to be presented to the Ministry in order to follow the last step of the procedure - the statement of approval of the program.



**Box 5.3: Integration of environmental concerns in industry: some examples from EECCA and SEE**

- In Ukraine, the first steps towards the introduction of an integrated permitting system have been taken in 2005 and a National Strategy to Introduce Cleaner Production has recently been drafted. However, the development of a policy and legal basis, a BAT database, technical guidance on sectoral and horizontal BAT, and training on procedural and technical aspects of BAT are still needed to ensure the effective implementation of integrated permitting in Ukraine.
- Belarusian enterprises have begun to request ecological certification (ISO 14000). In 2003, six enterprises were certified and two of them have international certificates. National standards for ecological certification based on ISO 14000 series have been published. This process is promoted by legislation that states that enterprises that go through certification for the first time will get a 10% reduction in pollution charges during three years. Currently, the implementation of a pilot project in the Grodno oblast is establishing an integrated approach to environmental permitting. The experience acquired from this project can be used for the establishment of a nationwide integrated permitting and enforcement system.
- In Azerbaijan, environmental requirements were not introduced and the Ministry of Ecology and Natural Resources (MENR) was not involved in decision-making during the privatization process. However, the system for oil and gas exploration under the new production sharing agreements is performing well. Now, before a well can be drilled, an environmental impact assessment (EIA) has to be approved by the Ministry of Ecology and Natural Resources. Drilling cuttings may no longer be dumped on the seabed (until recently a common method in many places in the world), nor is it permitted to dump drilling mud into the sea or to discharge associated water (properly treated), not even if the only problem is a salt content higher than that of the Caspian Sea.
- In Bosnia and Herzegovina, as the environment is not seen as a priority in privatization, the Directorate for Privatization does not insist on environmental investments when negotiating with

potential investors. However, some investors in the country have voluntarily taken environmental measures and curbed pollution. The case studies of such companies may be instrumental in developing policies to encourage new owners to invest in pollution prevention and resource-saving technologies.

- In Georgia, there are no enterprises with ISO 14000 certificate and EMS, BAT, environmental audits as well as environmental insurance have not yet been implemented.



**Box 5.4: Weak inter-sectoral cooperation for water management in Tajikistan**

Water, as a strategic economic asset, has many uses and users. Its management is shared among a number of ministries and bodies, as defined in the 2002 Government Resolution on the Division of Authority to Regulate the Use and Protection of Waters among the Specially Authorized State Bodies. This fragmented water management necessitates good relationships among the various ministries and bodies in charge of parts of the system. However, to date, there is little collaboration on this issue among the ministries, departments and municipal bodies. This hampers progress toward integrated water resources management, which is necessary to improve the situation. One example is the total absence of data exchange between the State Committee for Environmental Protection and Forestry, which is in charge of measuring water quantities and quality through its Hydrometeorological Agency, and the Ministry of Land Reclamation and Water Resources, which needs such data for managing the water resources for irrigation.

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