



**SIXTH MINISTERIAL CONFERENCE**

**“ENVIRONMENT FOR EUROPE”**

BELGRADE, SERBIA  
10-12 October 2007

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**FROM INTENTIONS TO ACTIONS: OVERCOMING BOTTLENECKS**  
**CRITICAL ISSUES IN IMPLEMENTATION OF ENVIRONMENTAL**  
**POLICIES HIGHLIGHTED BY THE UNECE ENVIRONMENTAL**  
**PERFORMANCE REVIEW PROGRAMME**

submitted by

the UNECE Committee on Environmental Policy

through the Ad Hoc Working Group of Senior Officials



UNITED NATIONS





**Economic and Social  
Council**

Distr.  
GENERAL

ECE/BELGRADE.CONF/2007/13  
17 July 2007

Original: ENGLISH

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**ECONOMIC COMMISSION FOR EUROPE**

Sixth Ministerial Conference  
“Environment for Europe”  
Belgrade, 10-12 October 2007  
Item 2 (b) of the provisional agenda

ASSESSMENT AND IMPLEMENTATION

IMPLEMENTATION OF MULTILATERAL ENVIRONMENTAL AGREEMENTS AND  
FINDINGS OF UNECE ENVIRONMENTAL PERFORMANCE REVIEWS

**FROM INTENTIONS TO ACTIONS: OVERCOMING BOTTLENECKS  
CRITICAL ISSUES IN IMPLEMENTATION OF ENVIRONMENTAL POLICIES  
HIGHLIGHTED BY THE UNECE ENVIRONMENTAL PERFORMANCE REVIEW  
PROGRAMME**

CONTENTS

	<i>Paragraphs</i>	<i>Pages</i>
RECOMMENDATIONS .....		3
I. STRENGTHENING POLITICAL SUPPORT FOR ENVIRONMENTAL IMPROVEMENT .....		4
A. Progress achieved and problems encountered .....	1-11	4
B. Challenges ahead .....	12-15	7
II. BUILDING COMPETENT AND EFFECTIVE ENVIRONMENTAL INSTITUTIONS .....		8
A. Progress achieved and problems encountered .....	16-25	8
B. Challenges ahead .....	26-27	10

## CONTENTS (continued)

	<i>Paragraphs</i>	<i>Pages</i>
III. MOBILIZING FINANCING FOR ENVIRONMENTAL PRIORITIES.....		11
A. Progress achieved and problems encountered .....	28-36	11
B. Challenges ahead .....	37-39	13
IV. MONITORING ENVIRONMENTAL PROGRESS AND READJUSTING TARGETS .....		14
A. Progress achieved and problems encountered .....	40-46	14
B. Challenges ahead .....	47-48	16
V. INTEGRATING ENVIRONMENTAL POLICY INTO SECTORAL POLICIES .....		16
A. Progress achieved and problems encountered .....	49-59	16
B. Challenges ahead .....	60-61	19

## RECOMMENDATIONS

Five major bottlenecks are highlighted in this document that are considered critical in the implementation of environmental policies in the countries of Eastern Europe, Caucasus and Central Asia (EECCA) and South-Eastern Europe (SEE). Five recommendations to overcome them are proposed as a logical conclusion of the respective subsections of this document. They are listed here below for easy reference.

*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 and reinforce implementation in order to promote a more sustainable approach to economic progress, to raise and harmonize their levels of environmental practices and legislation over the UNECE region, and fulfill international obligations under multilateral environmental agreements they are parties to. They should also strengthen the role of civil society in environmental decision-making.*

*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, and should consolidate and empower enforcement structures, in particular at the subnational level. They should also clarify institutional task sharing by assessing the role of environmental bodies and should improve institutional coordination mechanisms, both horizontally (between sectoral authorities, between divisions of the same ministry) and vertically (between the national and subnational levels).*

*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. Governments should foster cooperation with the private sector with a view to develop innovative instruments for the financing of environmental infrastructure.*

*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.*

*Recommendation 5: Governments in all EECCA and SEE countries should institutionalize the integration of environmental policy into sectoral policies, and should promote 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) to support a broad and effective integration of environmental policies into sectoral policies, and should introduce specific tools and mechanisms (including, as appropriate, strategic environmental assessment, environmental impact assessments, environmental management systems, national environment and health action plans, market-based tools, etc.) integrating environmental requirements into transport, energy, agriculture and other key sectors.*

## I. STRENGTHENING POLITICAL SUPPORT FOR ENVIRONMENTAL IMPROVEMENTS

### A. Progress achieved and problems encountered

#### *Environmental priorities on the political agenda*

1. Virtually all reviewed countries have drafted environmental strategies, programmes and plans and have set ambitious environmental targets with a view to following the practices used in European Union (EU) member countries. Since the first round of EPRs, national environmental strategies (NES) and national environmental action plans (NEAPs) have been readjusted to fit new situations and objectives in some countries, increasing their implementation benefits. For example, the policy for waste management defined in the first NEAP (1996) of The former Yugoslav Republic of Macedonia is expected to be further developed in the second NEAP in order to comply with EU waste management practices. Serbia is expected to adopt a NES in the course of 2007 pursuant to the requirements of the 2004 Law on Environment, and related implementing NEAPs are being developed.

2. Despite the overall progress in developing environmental strategies and programmes, most of the reviewed countries have not yet prepared specific implementation plans including priority actions, timetables and financial requirements. In many cases, international cooperation is influencing policymaking at the national level. In 2004, the enlargement of the EU to include 10 new countries led to the preparation of a European Neighbourhood Policy (ENP) Action Plan with the new neighbouring countries. In Ukraine, for example, the European Commission supported the implementation of the 2005 Neighbourhood Action Plan, provided benchmarks for assessing progress and helped Ukraine to achieve concrete, realistic and measurable results, including on environmental issues. In addition, EECCA countries developed and adopted (at the fifth "Environment for Europe" conference in Kiev in 2003) a subregional environmental strategy covering the most important related issues. Also, new strategies and legislative instruments for reducing and preventing environmental pollution and degradation are being put in place in the framework of international and regional conventions; examples include the UN Framework Convention on Climate Change, the UN Framework Convention to Combat Desertification and UNECE Conventions.

#### *Development and implementation of legal instruments*

3. Reviewed countries usually have environmental framework laws in place which serve as the legal basis for subsidiary legislation. However, often the subsidiary legislation is missing or incomplete and implementation and enforcement are weak. In many cases, laws incorporate a large number of environmental standards, which makes implementation and enforcement even more difficult. Pressured by the international community, many countries have thus made significant efforts to strengthen implementation mechanisms. A good example is the implementation of Armenia's Water Code (adopted in 2002), which was promoted by the subsequent establishment of the Agency for Water Resources Management in the Ministry of Nature Protection. The Water Code provided for a National Water Council chaired by the Prime

Minister. The Code also has provisions ensuring the participation of public organizations in the protection and use of water resources.

4. In recent years, most of the reviewed countries have made considerable progress in harmonizing 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 the reviewed countries (e.g. Bosnia and Herzegovina, Montenegro, Serbia, The former Yugoslav Republic of Macedonia) there is no applicable EIA system in place for the simple reason that procedural details have not been regulated. The other problem is that the 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 sublaws to make it fully applicable in practice. In Serbia, for example, an IPPC law was adopted in 2004, but the drafting of related sublaws is still in progress as of 2007.

5. Another serious drawback of secondary environmental legislation, and one common to all reviewed countries, is that it does not follow the primary laws precisely, 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 government resolutions or by order of a ministry. Moreover, the secondary legislation is not enacted together with the law, so the practical enforcement of the law can be delayed 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 basis, which can lead to problems in court cases (including infringement procedures).

#### *Implementation of multilateral environmental agreements and compliance with their provisions*

6. Political will is vital for promoting implementation of and compliance with multilateral environmental agreements (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 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 conferred by multilateral agreements. Inadequate legislative frameworks 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 to address this issue.

7. 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 implementation of MEAs. For instance, Armenia and Belarus recently prepared implementation plans for the Stockholm Convention on Persistent Organic Pollutants. Kazakhstan and Kyrgyzstan have developed a pilot project applying the provisions of the UNECE Convention on EIA in a Transboundary Context (Espoo Convention) to the transboundary impacts of a gold mine. Kazakhstan has acceded to the Basel Convention on Transboundary Movements of Hazardous Wastes and has 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 UNCCD and has developed a desertification control programme for the period 2005–2015. In 2003, Moldova established a national commission for implementation of the UNFCCC and its Kyoto Protocol.

8. Nevertheless, there are still major shortcomings related to the enforcement of MEAs.<sup>1</sup> Enforcement is usually ensured by 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 be developed prior to ratification (or accession). A country is then better able to identify gaps, duplication or contradictions in the 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 can be improved. However, what often happens is that legislation is developed after ratification without assessing the need for capacity-building, including staffing and financial resources.

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

9. Civil society's participation in environmental decision-making is gradually increasing in most of the reviewed countries. In Armenia, for example, there are public hearings concerning draft laws in the National Assembly. Armenia has also strengthened the role of public participation in its new law "On Ecological Expertise". All ministries of environment except Tajikistan's have created websites where they publish information materials (Rio + 10, Kiev Report, National Environment Reports), publications in the framework of agreement implementation, various workshops, articles, and the like which have helped increase public awareness of environmental issues.

10. 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 "Aarhus" information centres. For instance, Armenia has six Aarhus Centres on its territory. Environment ministers in Azerbaijan, Kazakhstan and Ukraine recently launched regular meetings with the public, and public advisory

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<sup>1</sup> See document on the implementation of UNECE Conventions (ECE/CEP/2007/5), which has been prepared to the Belgrade Conference.

councils involving NGOs have been established in Belarus, Kyrgyzstan and Ukraine. Recently, water consumer associations were involved in river basin councils in Kazakhstan and Uzbekistan. On the other hand, Bosnia and Herzegovina has no legal provisions regarding public participation and public access to information related to environmental matters, and it has not yet acceded to the Aarhus Convention.

11. NGOs are currently considered 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 decision-making board (collegium) of the Ministry of Environment Protection. In Montenegro, NGOs successfully conducted various activities and campaigns (e.g. for the protection of the Tara River from the construction of a large hydroelectric power plant). Also, many environmental NGOs, such as ECO-Forum, the World Conservation Union (IUCN) and WWF are active in reviewed countries, as are Regional Environmental Centres (RECs). Nevertheless, overall financing for public participation initiatives is insufficient, and sometimes complex and time-consuming registration procedures for NGOs, combined with difficulties in accessing sensitive environmental information, hamper further action.

## **B. Challenges ahead**

12. The lack of political support for environmental problems and priorities, combined with a resource-intensive economy, has contributed to continuing environmental degradation in reviewed countries. While economic activity declined steadily during the 1990s, pressures on the environment did not decrease proportionately. Also, new problems have arisen during the transition, triggered by the lack of financial resources and the reduced capacity to enforce environmental legislation. In this transition phase, national agendas have emphasized economic growth at the expense of environmental protection.

13. Virtually all countries have developed environmental policies and legislation or revised inadequate legal procedures. However, there is a need to reconsider and strengthen the implementation mechanisms of 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 generally lack consistency and coherence, and secondary laws and enforcement mechanisms still need to be developed and/or simplified.

14. 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 that reviewed countries comply with their obligations under international agreements. Also, the lack of financial commitment, clear project identification and prioritization, institutional and human capacity and experience hinders the enforcement of MEAs.

15. In recent years, the participation of civil society in environmental decision-making has been strengthened through improvements in public access to information in almost all reviewed countries. Enhanced public awareness of environmental issues has led civil society organizations

to push governments to act more effectively and responsibly regarding environmental protection. However, some countries still face serious obstacles in raising public awareness and building partnerships for better environmental management.

## **II. BUILDING COMPETENT AND EFFECTIVE ENVIRONMENTAL INSTITUTIONS**

### **A. Progress achieved and problems encountered**

#### *Institutional capacity for environmental management*

16. Governments in most reviewed countries have established environment ministries and regional or local authorities; only a few State Committees for Nature Protection are still in place (e.g. in Uzbekistan and Tajikistan). However, ministries of environment generally are not in a strong enough position to ensure that environmental issues get high priority on the government's political agenda. Also, the ministries' power and efficiency is undermined by the fact that environmental functions are sometimes associated with other functions (e.g. tourism in Montenegro), which causes 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, while the Ministry's Department of Environmental Protection had 41 staff. With the creation of a new Ministry of Ecology and Natural Resources in 2005, the total number of staff members dealing with environmental protection in the country was reduced to only 25, and in 2006 to 18.

17. 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 the effectiveness of enforcement, depends on the number of staff (which is insufficient in many cases), as well as on their competence, which is evolving from a policing role towards an advisory role. For instance, the functioning of the current compliance monitoring system in Moldova is undermined by the weak capacities of the laboratories and the small 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.

18. In addition, environmental authorities in most of the 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 Kyrgyzstan the figure is 95%. This leaves almost no resources for operational expenses and often none for investments. For example, Tajikistan's Hydrometeorology Agency and State Epidemiological Service are currently suffering from a lack of funds to maintain or replace equipment, a reduction in staff and a decline in laboratory inspection standards.

#### *Institutional task sharing and coordination*

19. The frequent restructuring and/or fragmentation of functions among several institutions without a clear division of responsibilities for their implementation has caused a general lack of continuity in environmental policymaking. Political instability has in many cases 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 hamper the development of inter-ministerial coordination mechanisms. A key problem is that in almost all reviewed countries, coordination mechanisms between ministries, whether formal or informal, are rather weak.

20. 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 the reviewed countries. Similarly, 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 non-comprehensive inspection, or sometimes to a few enterprises' being "over-visited", and to duplication and ineffective use of resources. Moreover, there is practically no coordination among environmental public authorities regarding the location of monitoring stations, sampling or data exchange. However, some countries have made considerable efforts to solve these problems. Estonia, like other former EU candidate countries, restructured and clarified task sharing with regard to water management before acceding to the EU.

21. Vertical coordination within ministries of environment and 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 creates 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 laws.

#### *Compliance and enforcement issues*

22. In most of the reviewed countries, mechanisms to ensure compliance with and enforcement of environmental policies and legislation are weak and need to be strengthened. This is a result of several factors, including gaps in environmental laws/regulations, frequent restructuring of environmental institutions, insufficient availability of financial resources for enforcement purposes (training, staffing, technical equipment) and weak monitoring systems, especially at the subnational level.

23. 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 causes difficulties in 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 on them. The relationship 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 of new laws and other developments are not broadly used. Where there is a system of environmental tax rebates for the investments that operators make for pollution abatement, as in Belarus and Moldova, the rebates are not usually big enough to ensure the introduction of best available techniques, which are relatively expensive. In addition, both permitting authorities and operators generally suffer from the administrative burden resulting from the failure to prioritizing among pollution sources. A major obstacle to an effective permitting system is the use of maximum allowable concentrations (MACs) alone, without taking into account the limitation of quantities of pollution discharged.

24. In many countries' environmental agencies, policymaking functions are not separated from enforcement tasks, even though international practice suggests that separating the issuance of permits from enforcement makes both processes more effective and prevents conflicts of interest. For instance, Belarusian environmental inspectorates are involved in controlling and monitoring the environment and issuing permits, while also developing environmental legislation and instruments for its implementation. In Estonia, by contrast, environmental inspectorates now check compliance with environmental permits and enforce the law, whereas previously inspections were carried out by the staff of the county environmental departments, which also issued environmental permits. Political instability also weakens institutional compliance and enforcement. Frequent restructuring of ministries of environment and other environmental institutions is a major impediment for policy enforcement. These changes have a negative effect on enforcement functions, as it occurs in Montenegro, Serbia, Ukraine and others.

25. Another major enforcement issue in most of the reviewed countries is connected with the lack of financing for environmental activities and initiatives. Overall, allocated resources are not enough to replace obsolete monitoring and other equipment 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, Georgia and Tajikistan. 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, staff are not receiving the necessary training to deal with new rules and techniques.

## **B. Challenges ahead**

26. Institutional reforms have been undertaken in reviewed countries, though the measures are partial and progress is very uneven, with some progress at the national level but little at the 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, outdated management and decision-making practices, scarcity of human and financial resources, high turnover of professionals and frequent restructuring.

27. 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 a 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 practices call for the development of new competencies within the environmental authorities and their bodies through training and retraining. Training should therefore be a key component of any improvement strategy.

### **III. MOBILIZING FINANCING FOR ENVIRONMENTAL PRIORITIES**

#### **A. Progress achieved and problems encountered**

##### *Financing environmental priorities*

28. Almost all reviewed countries have developed environmental policies and strategies, although many of these documents do not contain priority actions or indicate the financial resources needed 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. Also, the lack of deadlines and concrete targets makes it hard to assess progress in policy achievement.

29. Political will to finance environmental protection is generally weak in most of the reviewed countries. Regular cuts in budgetary funding indicate 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 national environmentally-related expenditures are generally spent on maintenance and operation of existing, often obsolete and inefficient equipment and installations; very few resources are put into introducing new, environmentally sound technologies. In addition, environmental expenditures of government offices are usually insufficiently coordinated. However, some countries, such as Kazakhstan, Moldova, Montenegro and Serbia, have shown progress in the management of public resources by implementing results-oriented budgeting, developing medium-term expenditure frameworks and better controlling budgetary resources.

30. The implementation of preventive policy measures for operating activities is unsatisfactory in almost all reviewed countries. Several examples have demonstrated that the annual costs of implementing such measures are lower than the costs of environmental remediation in case of contamination. In recent years, the public and private sectors have carried out some remediation activities. However, it is often unclear where the liability for environmental damage lies, and the costs of remediation are high. Consequently, 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 to cost 62 million EUR, while the annual costs of current security measures to contain contamination in the same mine amount to about 2 million EUR.

*Financial mechanisms for environmental protection*

31. In the 1990s, following the advice of the international community, most of the reviewed countries introduced a number of economic instruments (pollution charges, taxes on the use of natural resources, user charges for the provision of municipal environmental services, etc.) to raise revenues for environmental expenditures. However, in most cases, economic instruments have not been designed as incentives but rather 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 contributed to making such instruments generally ineffective.

32. Environmental taxation and utility pricing can be key tools for moving towards sustainable development, as they can have positive effects on the environment by stimulating innovation and efficiency when properly designed and applied. In reviewed countries, however, environmental charges are quite low and sometimes poorly enforced. Electricity, heating, water supply and waste disposal tariffs often remain below cost levels, and users are not encouraged to save natural resources or energy. In addition, as in these countries enterprises do not usually operate 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 subsidies, the incentive effect of the pollution charge system is undermined. Many subsidies are hidden and take the shape of, for example, tax rebates. 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. 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.

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

34. 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 credits, accelerated depreciation, debt-for-nature swaps) are still not broadly used in reviewed countries. Debt-for-environment-swaps initiatives have started in Georgia, following the example of Bulgaria.

35. Environment protection funds also play a significant role in financing environmental expenditures in reviewed countries, virtually all of which have established environmental funds. While the funds' revenues have generally grown in recent years, the expenditure management side remains weak. In a few countries, a large share of 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, often there is no estimate of financial needs in the area of environmental protection, and procedures for accessing environmental funding for project financing are too complex.

#### *Mobilizing international donors*

36. Reviewed countries urgently need foreign contributions in order to sustain environmental protection and amelioration. However, most of them have not included the environment as a priority in their strategies and plans to attract international donors, which has resulted in low levels of environmental financing. Moreover, they have not fully explored possibilities for attracting foreign assistance. Overall, national institutions do not effectively 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 (i.e. project management units) to deal with international institutions and project preparation. In addition, the general lack of communication between the authorities and donors and the continual institutional restructuring have contributed to reducing international environmental cooperation in many countries.

#### **B. Challenges ahead**

37. Political and institutional obstacles in the financing of environmental projects persist in reviewed countries. Economic instruments currently in use have often been designed more to raise revenue than to encourage changes 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) and build effective environmental taxation mechanisms (taxes on pollution, products, land use and natural resources) in order to move towards sustainability.

38. At the same time, the political will to allocate the necessary funds for environmental purposes is weak, and there is not enough public awareness regarding environmental issues to push governments to act more effectively. Investment in environmental infrastructure remains low, as does the understanding of the advantages of better environmental management. A well-functioning environmental infrastructure has numerous benefits, not only for the environment and human health but also for the economy. When governments are not fully convinced of the importance of protecting their environment, it is difficult to attract international technical assistance or make optimal use of financial resources.

39. 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, the procedures for obtaining project financing from environmental funds are too complex and selection criteria are unclear, which hampers the financing of environmental priorities and stringent monitoring of performance in the use of the funds.

#### **IV. MONITORING ENVIRONMENTAL PROGRESS AND READJUSTING TARGETS**

##### **A. Progress achieved and problems encountered**

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

40. Today all reviewed countries prepare various types of environmental assessments and reports with differing scopes, levels of detail and periodicities (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 a descriptive nature and lack indicators. When indicators are used, they are not standardized and frequently represent bulky figures (i.e. tons and cubic meters) that do not help decision makers and the general public to understand the causes and effects of environmental conditions, to link these with economic and social developments, to assess the cost-effectiveness of policy implementation or to make comparisons with other countries.

41. Regular assessment of the environmental situation is difficult in most of the reviewed countries due to the absence of efficient monitoring networks and modern equipment to improve the quality of data collection, processing and reporting. For example, existing air quality monitoring networks in EECCA countries were generally established in the 1970s and 1980s according to Soviet standards. Some countries have recently updated and supplemented such standards. However, comprehensive and regular control of current standards is extremely difficult and costly owing to an overly large number of substances to be monitored (a legacy of the past). In addition, monitoring is usually based on manual sampling; there are very few automated monitors. As a consequence, both monitoring and enforcement by environmental authorities remain unmanageable tasks.

42. Overall, the results of environmental monitoring are not efficiently used to assess 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, developing 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 use as a basis for law- and policymaking. In Ukraine, national reports on the state of the environment were formerly published annually in Ukrainian and English, but since 2002 none has been published.

43. Another key obstacle to monitoring environmental progress in most of the countries is the lack of a fully developed reporting system covering both financial reporting and performance results. This hampers broader assessment of 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 are 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 consistency because they are based on environmental indicators and data generated using different methodologies across different monitoring areas, and national environmental standards and classification systems are often incompatible with international ones.

44. Despite such deficiencies, some progress has been achieved in monitoring. Armenia and Azerbaijan are making active efforts to establish and upgrade monitoring networks. Exchange of environmental data and information is improving, for example, as in Belarus and Ukraine, where interagency monitoring commissions have been established. Moldova has made some progress in improving air pollution monitoring methods. 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 in Kazakhstan’s 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.

*The importance of independent assessments in monitoring progress*

45. Among the most important independent environmental assessments carried out in EECCA and SEE countries are the UNECE Environmental Performance Reviews (EPRs). The EPR is an important instrument for strengthening national environmental governance. It includes a broad analysis of the environmental activities in a country and contributes to enhancing cooperation between various national sectors of the economy. It also includes an independent analysis by international experts, providing an outside perspective on national environmental problems. Ministries of environment use these reviews as a reference during consultations, negotiations and the preparation of project proposals, strategies and programmes. 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 recommendations have strengthened the capacities of relevant stakeholders, including environmental authorities, government institutions, the expert community and NGOs. Overall, countries use EPRs as sources of information for state institutions, environmental organizations (governmental and non-governmental), the business sector and the general public. Broader publicity on the reviews’ launching at the national level combined with the availability of reports in national languages (to date in Belarus, Moldova, Ukraine, Serbia and Montenegro) have supported the practical application of recommendations as well as increased involvement of civil society in the process.

46. 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 on 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 (WGEMA). In 2002, the European Commission and the European Environment Agency (EEA) concluded a grant agreement 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”. 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 policymaking and public awareness. Other independent assessments, such as the World Bank Country Environmental Analysis and assessment reports by EEA, in collaboration with WGEMA, for the fifth and sixth Ministerial Conferences “Environment for Europe” have also contributed to a more accurate appraisal of the environmental situation in the region.

## **B. Challenges ahead**

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

48. Another major issue relating to monitoring environmental progress is the weakness of national reporting systems, including systems for reporting by enterprises to the authorities. The overall lack of regular assessment reports and lack of 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.

## **V. INTEGRATING ENVIRONMENTAL POLICY INTO SECTORAL POLICIES**

### **A. Progress achieved and problems encountered**

#### *Environmental policy integration*

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

50. Regional awareness of the need for sectoral integration and related tools has been steadily growing thanks notably to the “Environment for Europe” process and EU accession requirements. In this context, the implementation of the EECCA Environmental Strategy (2003) represents a step towards better integration of environmental concerns into sectoral policies throughout the region. In parallel, national sectoral strategies and programmes to improve environmental protection are increasingly being adopted, notably for energy, forestry and waste

management. For example, Serbia adopted a National Waste Management Strategy in 2003 and Montenegro developed an Energy Efficiency Strategy for 2005–2006.

51. Environmental policy integration can also be driven by sustainable development strategies, which provide tools for sectoral integration. In 2002, the World Summit for Sustainable Development 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 implementing these strategies by 2005. In reviewed countries, sustainable development strategies are being developed (e.g. in Croatia, Montenegro, Serbia, Slovenia, Tajikistan, The former Yugoslav Republic of Macedonia and Ukraine) or implemented (e.g. in Belarus, Bulgaria, Estonia, Kazakhstan, Latvia, Lithuania, Moldova, Romania and the Russian Federation). Exceptions are Armenia, Azerbaijan, Bosnia and Herzegovina, Georgia and Kyrgyzstan, where there is no strategy at all, and Turkmenistan and Uzbekistan, which did not provide information on such strategies.

#### *Implementation tools*

52. Traditional regulatory instruments are still widely used in most of the reviewed countries. The environmental impacts of 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, strategic environmental assessment, environmental management systems and market-based instruments.

53. Environmental impact assessment (EIA), which is usually applied 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. Many countries in the UNECE region have ratified the UNECE Espoo Convention. Also, the EU EIA Directive (85/337/EEC), introduced in 1985 and amended in 1997, has been transposed by new EU member countries and accession countries.

54. 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, agriculture and industry. SEA is not mandatory and is undertaken much earlier in the decision-making process than EIA. The Protocol on Strategic Environmental Assessment to the Espoo Convention has been signed by all countries in the region, except Azerbaijan, Belarus, the Russian Federation and the Central Asian States. To date, only a few countries outside the EU have implemented 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-Eastern and Eastern Europe as well as in the Caucasus subregion are now developing capacity in SEA with a view to making it a legal requirement.

55. Environmental management systems (EMS) are also important instruments for achieving integration in the business sector, as they allow managers to identify new opportunities, introduce cleaner technologies and cut production costs. The use of such systems is becoming more popular, and the number of enterprises with environmental certification (ISO 14000, EMAS) is increasing steadily 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, some reviewed countries are developing national policy and legal frameworks in line with IPPC requirements. New EU member countries in the region have already harmonized their frameworks with the requirements.

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

57. In addition, there has been little integration of environmental considerations into legislative and policy documents on privatization. Only a few reviewed countries have succeeded in ensuring compliance with environmental requirements during this process. A good example was Estonia's privatization 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 mostly used to finance projects for environmental rehabilitation and construction of industrial wastewater treatment plants and landfills. Similarly, Bulgaria has prominently integrated environmental policy objectives into the industrial privatization process. However, this approach is not yet systematic. For instance, Montenegro, which initiated privatization in 2005, has not incorporated environmental requirements into the process. Nevertheless some foreign companies have undertaken independent environmental audits before purchasing objects in the country, thus assuming environmental commitments under the privatization contract.

#### *Institutional cross-sectoral instruments*

58. Institutional weakness remains a major issue for integrating environmental policies into sectoral policies in most of the reviewed countries. To address this issue, governments are making efforts to introduce institutional instruments for environmental policy integration, such as environment units in sectoral ministries (agriculture, transport, energy, industry) and inter-ministerial commissions for consultation during the development of legislation and strategies. 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.

59. Many governments have also created sustainable development bodies (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: they comprise the three pillars of sustainable development. But often national commissions on sustainable development do not have enough political weight (e.g. in Armenia, Azerbaijan) or are non-operational (e.g. in Georgia, Moldova and Ukraine). For example, Armenia established its National Council on Sustainable Development in 2002, but the Council does not have an active

role in the political process. In Ukraine, the National Commission on Sustainable Development, which was created in 1997, is chaired by the Deputy Prime Minister and involves a number of government agencies, has met only once and become non-operational shortly after 1999, as no resources had been allocated for its secretariat or its functioning. Ukraine's National Council on Sustainable Development was established in 2003, but again no resources have been earmarked for preparing documentation and analysis or for management functions. In Azerbaijan, a government Commission on Sustainable Development has been created but has not thus far proven politically influential.

## **B. Challenges ahead**

60. Integration of environmental concerns into sectoral policies remains a challenge for reviewed countries and for the whole UNECE region. As countries finish their transition towards a market economy and their economies gather steam, new strains on the environment are emerging. Therefore, more explicit environmental policy integration is needed at the policy, institutional and sectoral levels. However, governments generally lack the necessary institutional and regulatory frameworks for environmental policy integration into policymaking and are not widely using market-based instruments that reinforce integration through market mechanisms.

61. Sectoral integration requires that environmental authorities be stronger in relation to other parts of government as well as 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 for overcoming resistance from some economic sectors. Thus, both the private sector and civil society should be involved, not just through the regulatory framework but also through market incentives and 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 these instruments also have to work effectively in practice.

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