



ECONOMIC COMMISSION FOR EUROPE

COMMITTEE ON ENVIRONMENTAL POLICY

Ad Hoc Working Group on Environmental Monitoring

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(Item 3 (a) of the provisional agenda)

ENVIRONMENTAL INDICATORS

Note by the secretariat

Introduction

1. At the Aarhus conference, the Environment Ministers requested the European Environment Agency (EEA) to produce a new report on the state of the environment in Europe based on indicators before their next conference in Kiev. The Working Group will support the preparation of this report. The indicators proposed for the Kiev assessment report will be included in the revised draft list of content (CEP/AC.10/2001/5) and draft guidelines for data collection (CEP/AC.10/2001/6). Once the Working Group has clarified the key pan-European issues to be addressed in the report and has discussed the list of indicators and data sets needed, it will consider the most efficient and effective mechanism to facilitate national data reporting.
2. The Kiev report will cover both environmental issues and human activities with an impact on the environment. By synthesizing complex data, the indicators will communicate essential quantified information in a simplified form. They will help to describe the state of Europe's environment, evaluate environmental performance in ECE countries, highlight linkages between economic changes and the environment, and focus the attention of policy makers, international institutions and the public on environmental issues, economy/environment interactions, the opportunities for policy integration and the trade-offs.
3. The indicators for the Kiev report will draw on the work done at the international level (see annex below).

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4. The work on the indicators for the Kiev report provides an opportunity to improve and streamline the development and use of environmental indicators in countries in transition, particularly those not covered by EEA networks. It also challenges relevant international organizations working on environmental indicators in the ECE region to better coordinate their activities and to improve their reporting on environmental quality changes and the effectiveness of their policies.

I. INTER-AGENCY CONSULTATION

5. An inter-agency consultation on environmental indicators for countries in transition was held in London on 1 March 2001 at the initiative of the European Bank for Reconstruction and Development (EBRD). Representatives of the EEA, the Organisation for Economic Co-operation and Development (OECD), ECE, the United Nations Environment Programme's Global Resource Information Database (UNEP/GRID) in Arendal (Norway), EBRD and the Regional Environmental Center for Central and Eastern Europe (REC) took part.

6. The consultation noted that general and specific environmental indicator initiatives were carried out in the region by EBRD, EEA, OECD, ECE, the World Bank, the World Health Organization (WHO), REC, the Baltic Environmental Forum (BEF) and other organizations and institutions. Some of the work on environmental indicators in countries in transition was explicitly aimed at the next "Environment for Europe" ministerial conference in Kiev in May 2003. These efforts should be coordinated to make the work on environmental indicators as effective as possible and to create synergies.

7. The consultation proposed that joint action should be taken to focus on the development of a limited set of "headline" or core indicators, which would be specifically useful for countries in transition and relevant international organizations. These headline indicators should be based on the existing OECD and European Union (EU) headline indicators, while recognizing critical social, economic and environmental diversities in countries in transition. The headline environmental indicators for these countries need to be internationally comparable indicators and pay specific attention to the linkages between economic transition and environmental changes.

II. PROPOSED JOINT ACTIVITIES

8. To prepare such headline indicators, the following activities were envisaged at the London consultation:

(a) A Workshop on environmental indicators would be organized for countries in transition in mid-January 2002 back to back with the second session of the Ad Hoc Working Group on Environmental Monitoring. The workshop would discuss and develop a preliminary set of headline or core environmental indicators for countries in transition and proposals for follow-up. The Japan Special Fund at REC would be requested to fund the participation of the REC member countries in the workshop;

(b) As input to this workshop, a synthesis paper would be prepared on the existing environmental indicator work undertaken at the international level. The paper would propose a set of headline or core environmental indicators for countries in transition and recommendations to governments on the use of these indicators;

(c) A consultation might be organized in autumn 2002 by the participating international organizations and institutions with some national experts. The final headline environmental indicators and guidelines for their use would be submitted to the Working Group on Environmental Monitoring for endorsement and further submission to the ECE Committee on Environmental Policy and possible transmission to the Kiev Ministerial.

III. POSSIBLE ACTION BY THE WORKING GROUP

9. The Working Group may wish to discuss and agree on its active involvement in the proposed joint activities by the international organizations and institutions concerned. It may consider, inter alia, how to use such initiative:

(a) To assist newly independent States and other countries in transition to better understand the indicators that are used within EEA, OECD and other international organizations and institutions, and to introduce in their national practice a set of internationally agreed indicators that would improve both national environmental reporting and pan-European assessments;

(b) To facilitate data collection and reporting within relevant international conventions and institutions, and to contribute to the overall goal of harmonizing monitoring and reporting systems in Europe.

Annex

MAJOR ACTIVITIES ON ENVIRONMENTAL INDICATORS AT THE INTERNATIONAL LEVEL

1. *OECD* has been prominent in developing a framework and common indicators for its member countries. The OECD framework is based on the pressure-state-response (P-S-R) model, combining indicators of pressures on the environment, its state, and society's response. The core set includes some 50 indicators describing major environmental concerns, and it provides a broad overview of conditions and trends. OECD has also developed several sets of sectoral indicators to describe the interactions between the environment and trends in policies in key sectors such as energy, transport and agriculture. Environmental indicators are also derived from the OECD work on environmental accounting focusing on physical natural resource accounts and environmental expenditure. OECD produces a biannual publication "Environmental Indicators". The OECD indicators have been widely used for national state-of-the-environment reports and for international comparison and analysis, for instance in the OECD environmental performance reviews and its compendiums of environmental data. Some 10 environmental headline indicators extracted from the core set will be published in May 2001.

2. *Eurostat*, the EU statistical body, has prepared a set of European pressure indicators, using data from EU countries. It regularly reports and disseminates environmental statistics together with its member States, the European Free Trade Association (EFTA) and applicant countries using a joint Eurostat/OECD questionnaire and in close cooperation with EEA. EEA has developed environmental indicators using a five-part framework: driving forces, pressures, state, impacts and responses. It has also developed sectoral indicators, together with the necessary reporting structures - initial work has focused on indicators for transport and environment, and energy and environment. EEA has recently presented, jointly with the *European Commission*, a set of headline indicators to EU member States covering 10 environmental issues. EEA is also preparing pan-European environmental indicators for the Kiev assessment report.

3. *EBRD* developed environmental transition indicators for countries in transition (which have been incorporated into its Transition Reports) with specific focus on environmental efficiency. The EBRD environmental transition indicators pay specific attention to the linkages between economic transition and environmental changes and focus on environmental sustainability, environmental efficiency and civil society participation. EBRD is developing a more comprehensive set of environmental transition indicators to provide inputs to its country strategy work and project screening. In the future, specific attention will be paid to the preparation of indicators of the efficiency of natural resource use, privatization and environmental liability, and civil society participation.

4. In October 1999, the Japan Special Fund at *REC*, in collaboration with EBRD and OECD, organized a workshop on environmental indicators for transition economies in Szentendre, Hungary. The headline indicators proposed at Szentendre covered a few key environmental issues – air pollution, climate change and drinking water quality - as well as three sectors – energy, industry and transport. As a follow-up, the *Baltic Environmental Forum* (BEF) organized a workshop on environmental transition indicators for the three Baltic countries, jointly with REC, in Jurmala (Latvia) in January 2001.

5. In October 2000, the *Task Force for the implementation of the Environmental Action Programme for Central and Eastern Europe* requested its secretariat to include in its work programme for 2001-2003 a project on indicators for environmental policies in the newly independent States. The activities under the project would include identifying environmental indicators that are relevant to the Task Force's work and that could be used for its reports to the Kiev Conference. Recommendations would also be developed for the steps needed to generate those indicators and to promote their use in environmental policy development and implementation in the newly independent States.

6. The *Interstate Statistical Committee of the Commonwealth of Independent States* (CIS-STAT) collects, compares, analyses and disseminates information on the state of the environment and the sustainable use of natural resources in its member countries on the basis of agreed indicators. In addition to special reports, statistical and analytical materials on various environmental issues are published periodically in CIS statistical bulletins.

7. The *ECE Working Group on Environmental Monitoring* serves as an instrument for member States to provide recommendations, to propose action plans, and to strengthen international initiatives within the region in the area of environmental monitoring and related areas. Working on integrated indicators is one of the Working Group's priorities. ECE has developed standard statistical classifications for the environment and uses these for its environmental performance reviews (EPRs) of countries in transition. The Parties to the Convention on Long-range Transboundary Air Pollution report periodically on their anthropogenic emissions of specific air pollutants according to a set of indicators. ECE produces regular assessments of Europe's forest resources as well as studies of Europe's timber trends and prospects, jointly with the Food and Agriculture Organization of the United Nations (FAO). These publications, together with ECE Forest Fire Statistics, provide indicators of sustainable forest management. ECE publishes annual bulletins of transport statistics and of road traffic accidents in Europe and North America. At its next session in November 2001, the ECE Committee on Sustainable Energy will discuss, categorize and select sustainable energy indicators.

8. *UNEP/GRID Arendal* mobilizes environmental data and information in countries in transition and distributes this to the public and policy makers. It has been helping these countries to strengthen their capacities to manage environmental information. UNEP/GRID Arendal has assisted 27 countries to place their state-of-the-environment reports on the Internet and compile them on CD-ROMs. Last year it supported ECE Environmental Performance Reviews and UNEP Balkan Task Force Assessments with updated state-of-the-environment reports. For

2001, UNEP/GRID Arendal will help to prepare a regional report on the Caspian Sea and plans to assist Central Asia in contributing to the Kiev assessment report.

9. *WHO Regional Office for Europe* is developing a set of indicators covering health, environment and safety management in enterprises (HESME). The indicators cover input, processes, output, outcomes and infrastructure to be used for assessing good practice in HESME. The draft document is expected to be adopted in May 2001. In addition, the WHO European Centre for Environment and Health – Bonn Office is developing a core set of environmental health indicators valid for countries of the WHO European Region. The indicators cover air quality, noise, wastes, sanitation and water quality, radiation, food safety, chemical emergencies, traffic accidents, housing, and the workplace. The system should provide a basis for a comprehensive summary assessment of environmental health situation in Europe, and allow comparisons between and within countries. Most of the indicators address exposure, effect and action parts of the framework. To the extent possible, existing databases and data collection systems are to be used in generation of the indicators. A feasibility study, using a standardized protocol, is currently running in a number of countries of the Region to test data availability and practicality of the proposed indicators. Based on the results of this stage, a pilot implementation of the system is planned for 2001/2002. WHO consultation held in October 2000 recommended that the indicators developed by the project should be used for the assessment report to be prepared for the fourth Ministerial Conference on Environment and Health (Budapest, 2004).

10. The *United Nations Statistics Division* (UNSD) has two on-going indicator activities related to the environment. First, the Development Indicators project for the follow-up of Global Conference and Summits. In 2001 a technical evaluation of all conference indicators, including the environmental indicators on the list of the Commission on Sustainable Development, the Habitat II list and the development indicator list of the OECD Development Assistance Committee will be conducted in close cooperation with countries and other United Nations agencies. In addition, the project will prepare proposals for a limited list of indicators and for the revision mechanism of the future indicators. The results will be reported to the Economic and Social Council of the United Nations in spring 2002. The second UNSD activity related to the list of environmental indicators developed in collaboration with the Inter-governmental Working Group on the Advancement of Environment Statistics and approved by the Statistical Commission in 1995. UNSD work on the environmental indicators involves data collection from countries, further development of the UNSD Environment Statistics Database as well as the planned UNSD Compendium on Environment Statistics and Indicators. The next data collection will take place in late spring 2001 in non-OECD countries. The main themes of the UNSD questionnaire 2001 on environment Indicators include air emissions and air quality, water resources, water use and water pollution, waste generation and management as well as land use and land degradation.

11. The *United Nations Commission on Sustainable Development* developed a set of 58 sustainable development indicators, based on Agenda 21. These focus on four areas: economy; society; environment; and institutions. Sustainable development indicators remain closely connected to environmental indicators.

12. The *World Bank* is contributing to the development of core environmental indicators for monitoring progress toward the international development goals. It updates its environmental database for the environmental section of its World Development Indicators (WDI). WDI is an annual compendium of development data on people, environment, economy, States and markets, and global linkages. In 2000, a set of selected environmental indicators was published.