

RECOMMENDATIONS ON STRENGTHENING NATIONAL ENVIRONMENTAL MONITORING AND INFORMATION SYSTEMS IN COUNTRIES OF EASTERN EUROPE, THE CAUCASUS AND CENTRAL ASIA¹

In the light of the discussion of the situation with environmental monitoring and information capacities in countries of Eastern Europe, the Caucasus and Central Asia and specific activities undertaken under the UNECE Working Group on Environmental Monitoring so far, it is recommended that the central public authorities that are responsible for environmental monitoring and information in these countries should implement the following measures:

Policy context

1. Promote a continuous dialogue between policy makers and those who design and implement monitoring systems;
2. Elaborate priorities for environmental monitoring activities on the basis of data collection and reporting requirements established in national laws and regulations, environmental action plans and programmes, and requirements emanating from international commitments. Set monitoring priorities with the central administrations concerned and make these priorities available to all in a document and electronically;
3. Regularly review environmental monitoring systems based on the assessment of their benefits in supporting decision-making, the prioritization of new information needs, and the economic evaluation of their costs;

Institutional framework

4. Develop legislation to regulate data management, and designate or establish a lead central environmental monitoring agency responsible for core monitoring activities and coordination with all other administrations, research institutes, regional environmental centres and NGOs, collecting and processing environmental data;
5. Establish or improve a workable institutional structure for inter-ministerial cooperation and coordination as well as a network of experts responsible for specific monitoring and information activities;
6. Delegate authority to specialized institutions and regional and local bodies for relevant monitoring and information activities. Provide regional and local bodies with advice and support;

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7. Secure data analysis protocols when changing administrative settings and facilitate the cooperation between analytical laboratories;

Funding

8. As monitoring is by definition a continuous activity, give particular attention to the continuity of financing of core activities from public funds;

9. Develop a mix of funding sources and mechanisms to ensure an appropriate level of investment in basic environmental monitoring infrastructure, in particular, into raw data collection (networks), processing capacities (human resources) and equipment (computer hard and software). Raise external financial support, when necessary;

10. Ensure that major polluters regularly monitor their emissions and waste flows, and that central, regional or local public authorities periodically check compliance with emission standards and other environmental regulations. Share the costs of environmental monitoring at the local level with polluters, to the extent possible;

Information and reporting

11. Progressively (resources permitting) make greater use of computer networks to facilitate environmental information flows within and between institutions, to promote the use of common databases and software at all levels of government, and to facilitate access to information;

12. Improve information quality, giving priority to the development of sets of environmental indicators, using international experience, particularly indicators for measuring progress in environmental performance with respect to national objectives and international commitments; improve compatibility between national and international environmental indicators;

13. Improve state-of-environment reporting to decision makers, the scientific community and the general public by the implementation of Guidelines on the Development of State of the Environment Reports prepared by the Working Group;

14. Make environmental data collected with public funds freely available and use modern information technologies to facilitate access to these data;

15. Produce, at regular intervals, compact, easy-to-read products such as booklets presenting key environmental data, indicator reports and thematic leaflets or brochures produced, and make them available on the Internet;

16. Support actively the cooperation on environmental reporting and information management between countries at pan-European level as well as joint efforts to enhance cross-border comparability of the information, in particular, on air emissions, urban air quality, transboundary inland water pollution, marine pollution, hazardous waste, waste management, and biodiversity;

17. Improve reporting under the applicable multilateral environmental agreements to comply with international commitments and to cover existing gaps in international environmental databases;

Specific monitoring activities

18. Harmonize definitions, classifications and monitoring protocols with international standards, starting with those established under applicable international environmental agreements;

19. Where the original monitoring networks have substantively degraded over past years, undertake their restoration by focusing monitoring activities initially on a limited number of major pollutants and major pollution sources using the inventory of pollution sources as a basis. Aim at establishing a minimal

network of stationary sampling sites to monitor discharges from these sources into air and water bodies. Develop practical approaches to extending monitoring activities, step by step to soil, waste, biodiversity and chemicals in ecosystems and foodstuffs;

20. Ensure continuity in the monitoring of “traditional” parameters to assess long-term environmental trends;
21. Improve biodiversity monitoring by measuring land-degradation indicators, key species that are representative of ecosystem status and introducing biodiversity elements into aquatic monitoring;
22. Supplement air-pollution emission data collected by statistical services with data collected by environmental control authorities and establish a central air databank;
23. Strengthen the role of environmental administrations in the collection and harmonization of waste management data in cooperation with statistical services and industry;
24. Promote, step by step, integrated data collection covering quality, quantity, biodiversity and ecosystem aspects;
25. Extend monitoring and assessment activities to measure the effectiveness of environmental policies (“Responses”), and use wider long-term environmental trends data for this purpose;
26. Make use of modelling, where appropriate, to reduce information gathering as such and reduce environmental pollution monitoring costs.

Supporting the Working Group on Environmental Monitoring

27. Participate actively in the activities of the Working Group, particularly those under the Tacis project on strengthening environmental information and observation capacity in the twelve EECCA countries. This should include, in particular, designation of experts and lead organizations, provision of information, hosting project meetings, and effective follow-up to planned activities that are aimed at:

1. Inland surface water monitoring

(a) Preparation of an in-depth study of the monitoring situation in inland surface waters, and the drawing-up of proposals for a basic EUROWATERNET network for each country of operation;

2. Air pollution monitoring

(b) Strengthening the capacity of new Parties to the Convention on Long-range Transboundary Air Pollution to comply with their data collection and reporting obligations under the Convention, including practical knowledge of ways and means to develop air pollution inventories, to apply measurement techniques and emission modelling for major pollutants, and to establish transboundary monitoring stations;

3. Waste classifications and inventories

(c) Strengthening national capacity to collect and assess data on waste generation, recovery and disposal, and to introduce into national information systems indicators on waste and material flows that are compatible with those applied in EEA countries;

4. Environmental indicators and reporting

(d) The application of a core set of environmental indicators used in EEA countries and the production of state-of-the-environment reports using the guidelines developed by the Working Group;

5. Environmental information systems

(e) Establishing, at the national level, Internet-based inter-connected environmental information systems, including reference centres, by using tools and guidelines applied within the EEA;

6. Remote sensing

(f) Identification and mapping of a key set of indicators, derived from remote sensing for environmental assessments in selected Eurasian regions and marine basins, and the development of proposals for a follow-up programme involving a demonstration exercise, an awareness campaign for potential end-users and training activities;

7. National Focal Points

(g) Strengthening technical and communication capacities of national focal points in the Working Group by the organization of training workshops and the provision, where necessary, of computer equipment and telecommunication means.