

Economic and Social Council

Distr.: General 10 February 2015

Original: English

Economic Commission for Europe

Committee on Environmental Policy

Working Group on Environmental Monitoring and Assessment

Fifteenth session

Geneva, 6 and 7 November 2014

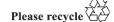
Report of the Working Group on Environmental Monitoring and Assessment on its fifteenth session

Contents

			Paragraphs	Page
I.	Intr	oduction	1–6	3
	A.	Background	1–2	3
	B.	Attendance	3–4	3
	C.	Procedural matters	5–6	3
II.		comes of the twentieth session of the Committee on Environmental Policy of cern to the Working Group	7–11	3
III.		pport to establishing a regular process of environmental assessment and eloping the Shared Environmental Information System	12–32	4
	A.	Latest activities to develop a Shared Environmental Information System and related changes in environmental monitoring, institutional and regulatory mechanisms and infrastructure	13–18	4
	В.	Progress in the activities of the Joint Task Force on Environmental Indicators	19–20	5
	C.	Preparation of indicator-based environmental assessment reports	21–25	6
	D.	Practicalities of using the methodology of the "Europe's Environment — An Assessment of Assessments" reports at the national level	26–32	7
IV.		sessment and data-collection activities in other forums of relevance to the		
	Wo	rking Group	33–39	7
V.	-	er business	40–43	8
02201	(E)		回為	200

GE.15-0







ECE/CEP/AC.10/2014/2

VI.	Closure of the meeting	44	9
Annex			
	Summary of the latest developments in environmental monitoring and assessment between October 2013 and October 2014 in countries of Eastern and South-Eastern		
	Europe, the Caucasus and Central Asia		10

I. Introduction

A. Background

- 1. The Working Group on Environmental Monitoring and Assessment was established by the United Nations Economic Commission for Europe (ECE) Committee on Environmental Policy (CEP) in September 2000 with the objective to support and strengthen the capacities of the countries of Eastern and South-Eastern Europe, the Caucasus and Central Asia (target countries) in the field of environmental monitoring, assessment and reporting. The Working Group's 2013–2014 activities are governed by its mandate for that period as approved by the parent body (see ECE/CEP/2012/6, annex).
- 2. The fifteenth session of the Working Group on Environmental Monitoring and Assessment was held on 6 and 7 November 2014 in Geneva, Switzerland.

B. Attendance

- 3. The session was attended by representatives of ministries of environment and statistical offices from the following target countries: Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Montenegro, Republic of Moldova, Russian Federation, Tajikistan, the former Yugoslav Republic of Macedonia, Ukraine and Uzbekistan. Representatives from Finland and Switzerland also participated in the session.
- 4. In addition, representatives of the following organizations and forums participated: the European Environment Agency (EEA); the Interstate Statistical Committee of the Commonwealth of Independent States; the Cadaster Institute of the Russian Federation; the Regional Environmental Centre for Central Asia; and the non-governmental organization, Zoï Environment Network. Representatives of the team implementing the European Union (EU)-financed project, Forest and Biodiversity Governance including Environmental Monitoring in Central Asia (FLERMONECA), and the United Nations University (UNU) also attended the meeting.

C. Procedural matters

- 5. The Working Group adopted the agenda for its fifteenth session, as set out in document ECE/CEP/AC.10/2014/1. It agreed to cancel the elections of its Chair and Vice-Chairs for 2015 at the current session and to move them to the first session in 2015.
- 6. The Working Group adopted the report of its fourteenth session (Geneva, 7–8 November 2013) contained in document ECE/CEP/AC.10/2013/4.

Documents and other materials from the session are available on the ECE website from http://www.unece.org/index.php?id=36193#/.

II. Outcomes of the twentieth session of the Committee on Environmental Policy of concern to the Working Group

- 7. The secretariat informed the Working Group about the decisions taken at the twentieth session of CEP (Geneva, 28–31 October 2014) of concern to the Working Group. At that meeting CEP had renewed the mandate for the Working Group for one year, until the twenty-first session of CEP in October 2015. The 2015 mandate, based on document ECE/CEP/2014/11, added to the Working Group's standing tasks the responsibility to oversee and manage the process aimed at establishing a Shared Environmental Information System (SEIS) across the pan-European region. The process was to be managed as per the targets and performance indicators for SEIS adopted by CEP at the same session (ECE/CEP/2014/8). The Working Group had been further requested to report back to CEP in October 2015 on the progress achieved.
- 8. CEP had also adopted the Guidelines for Developing National Strategies to Use Soil Contamination Monitoring as an Environmental Policy Tool for Countries of Eastern Europe, the Caucasus and Central Asia, as well as interested South-Eastern European Countries (ECE/CEP/2014/14), as submitted by the Working Group. CEP had expressed its appreciation to the Working Group, and had invited the target countries to implement the Guidelines.
- 9. In the context of the SEIS work and the crucial tasks given to the Working Group in that regard, CEP had discussed ways to strengthen the body by streamlining the activities covered by the programme on the environmental monitoring and assessment. CEP had concluded that an informed decision required a discussion paper to be prepared that would introduce possible ways for strengthening the Working Group, taking into consideration comments by delegations, including a request to consider the pros and cons of merging the Working Group with the Joint Task Force on Environmental Indicators. The secretariat had been tasked to prepare such a paper.
- 10. Finally, the secretariat also informed the Working Group that it had been agreed to hold the Eighth Environment for Europe (EfE) Ministerial Conference in June 2016 in Batumi, Georgia.
- 11. The Working Group took note of the relevant decisions taken by CEP. It welcomed the adoption of the 2015 mandate and the new responsibilities it contained. It also welcomed the readiness of CEP to strengthen the Working Group; however, it questioned the suggestion to merge the Working Group with the Joint Task Force on Environmental Indicators as the way to do that. In that regard, the Working Group requested a careful consideration by CEP of the advantages of such a merger.

III. Support to establishing a regular process of environmental assessment and developing the Shared Environmental Information System

12. The Working Group continued to discuss the work done in the target countries to strengthen or to contribute to the development and establishment of a regular assessment and reporting process, including the work on SEIS establishment, as decided by ECE ministers at the Seventh Environment for Europe Ministerial Conference (Astana, 21–23 September 2011).

A. Latest activities to develop the Shared Environmental Information System, and related changes in environmental monitoring, institutional and regulatory mechanisms and infrastructure

- 13. The Working Group exchanged information on the latest developments in monitoring, including: (a) modernization and upgrading of national monitoring networks, in particular those on air, water and soil; (b) development of biodiversity monitoring; (c) development or improvement of inventories; (d) improvements in data quality assurance and control, as well as the management of databases; (e) improvements in institutional and regulatory mechanisms related to monitoring, including technical solutions for data exchange between ministries of environment, their agencies and services and other ministries (e.g., agriculture, energy, health, industry, transport and water) and for online data sharing with the public.
- 14. The exchange of information was supported by national submissions on major actions initiated since November 2013 submitted by all the target countries attending the session (see annex for an overview of progress made).
- 15. In addition, representatives of Belarus and the Russian Federation made presentations to provide more details on their latest developments. There had been a number of improvements to the national monitoring system in Belarus: the air monitoring network had been further automated and additional pollutants had been included; the water monitoring network was being reorganized to adhere to newly adopted water legislation; and for soil, work was focusing on implementation of the ECE Guidelines for Developing National Strategies to Use Soil Contamination Monitoring as an Environmental Policy Tool (ECE/CEP/2014/14). Belarus was also applying SEIS principles and international standards for environmental data management.
- 16. The representative of the Russian Federation presented progress in the development of the integrated environmental monitoring system in the city of Moscow, including networks for monitoring ambient air quality, noise, industrial emissions, surface water, soil and green spaces.
- 17. In addition, the representative of the UNU Institute for the Advanced Study of Sustainability gave a presentation on e-waste and, in particular, its formal and informal recycling and the impact on health and environment, as well as the role of government and private sector involvement in reducing e-waste and its impacts effectively.
- 18. The Working Group welcomed the new developments in environmental monitoring, data handling and assessment, and invited all the target countries to continue that work. It also agreed to continue sharing information on new developments at future sessions.

B. Progress in the activities of the Joint Task Force on Environmental Indicators

- 19. The Vice-Chair of the Joint Task Force on Environmental Indicators informed the Working Group about the discussion at and outcomes of the ninth session of the Joint Task Force (Geneva, 3–5 November 2014), including:
- (a) **Progress in the production and sharing of indicators**: 13 of the 17 target countries now produced and shared data for the majority of the eight core indicators in

accordance with the revised ECE Guidelines for the Application of Environmental Indicators in Eastern Europe, the Caucasus and Central Asia (Indicator Guidelines);²

- (b) **Extending the core set of indicators**: the Joint Task Force had agreed to extend the core set by an additional six indicators from the ECE Indicator Guidelines. As a consequence the activities in 2015 would focus on the production and sharing of 14 indicators;
- (c) **Revision of the Indicator Guidelines**: the Joint Task Force had welcomed the changes introduced aimed at harmonizing the Guidelines with the terminology and definitions used by other relevant organizations, as well as at improving their clarity and user-friendliness. The Joint Task Force had also agreed to further discuss the indicators on waste, preferably at a dedicated workshop;
- (d) A **workshop on emissions into the atmospheric air** had been held as part of workshop series aimed at further assisting the target countries in improving the production of environmental indicators in accordance with the accepted international methodologies. The workshop had focused on quality assurance and quality control of air-related data used to produce air-related indicators.
- 20. The Working Group took note of the activities of the Joint Task Force. It welcomed the decision to broaden the core set of environmental indicators, which was crucial in the context of the preparation of the environmental indicator-based assessment reports both on the national and regional levels.

C. Preparation of indicator-based environmental assessment reports

- 21. At its fourteenth session, the Working Group had discussed and welcomed several recommendations to countries for further enhancing the content of their environmental assessment reports, so as to make them more useful to policymakers and better understood by the general public. Furthermore, it had agreed that the countries should be supported in their efforts, through capacity-building, and had invited the secretariat to explore possibilities with partners and donors to do so. In response to that request, a special segment was organized within the fifteenth session, in cooperation with partners and donors, on writing environmental assessment reports. It was conducted as a hands-on training comprising numerous case studies, with the application of check-lists for the assessment reports.
- 22. The training started with more general case studies on the structure and content of a typical assessment report, covering, inter alia: (a) adherence to the principles of indicator-based reporting and the actual use of indicators; (b) structuring the report to answer policy-significant questions, such as identifying critical changes and trends and possible responses to them; (c) provision of key messages in the report and their clarity, including vis-à-vis policy targets; (d) the use of visual material, its quality, richness and readability; and (e) the clarity of geographic and temporal coverage.
- 23. The training continued with reports presenting assessments in the field of air pollution. The texts and visuals were studied to identify their strengths and weaknesses. In particular, participants considered whether the case study reports provided a proper application and interpretation of the indicators, and whether the text was user-friendly and interesting to read and presented clear key messages to the targeted audience or audiences.

The revised Guidelines, which also include countries in South-Eastern Europe, are available in the form of an online database from http://www.unece.org/env/indicators.html.

- 24. The training and its interactive format was highly appreciated by the participants, as it gave them a concrete picture of what information should be included in the assessment report from the standpoint of the target audience, what writing style should be used and what types of visuals should support the written text.
- 25. The participants further requested that training on writing for and preparing assessment reports should continue, preferably at the subregional level, to further discuss specific chapters of the reports and what style and format to use in presenting the information. Organizing the training at the subregional level should make it possible to involve more national experts, which would be greatly appreciated.

D. Practicalities of using the methodology of the "Europe's Environment — An Assessment of Assessments" reports at the national level

- 26. At its fourteenth session, the Working Group had discussed two reports from the pilot projects on Assessment of Assessments (AoA) undertaken by the Regional Environmental Centres: in Kazakhstan and Kyrgyzstan by the Regional Environmental Centre for Central Asia; and in the Republic of Moldova by the Regional Environmental Centre Moldova. The reports provided insight into shortcomings in the national systems of the three countries in terms of environmental monitoring, data handling and reporting, as well as recommendations on how to address those shortcomings.
- 27. The representatives from Kazakhstan and the Republic of Moldova presented progress achieved in implementing the recommendations contained in the respective AoA reports. The representatives of Kyrgyzstan were not in position to report on progress at the meeting.
- 28. In Kazakhstan, progress had been made in implementing recommendations on: (a) establishing regular data and information flows under the National Fund of Environmental Information; (b) developing green indicators and improving waste statistics; and (c) strengthening inter—agency collaboration for the exchange, storage and analysis data.
- 29. Kazakhstan had achieved that progress by carrying out legislative and institutional reforms to ensure that necessary data and information was contained in the National Funds of Environmental Information, and that various relevant institutions improved the exchange of information. Actions had also been taken to improve environmental statistics by implementing internationally accepted standards and methodologies.
- 30. Representatives of the Republic of Moldova reported on implementation of the recommendations on: (a) improving cooperation between national actors involved in environmental monitoring and assessment; (b) developing methodologies and procedures for the collection, sharing, processing and management of environmental data; and (c) enhancing SEIS establishment.
- 31. The key developments concerned institutional and legal reforms in the Republic of Moldova. A national environmental agency was being established to assume the responsibilities for coordinating the environmental monitoring and assessment processes. In the legal field, the national legal framework for environment was being harmonized with the EU *acquis communautaire*, and methodologies and procedures were being introduced to improve data management and enhance SEIS establishment.
- 32. The Working Group welcomed the work done by Kazakhstan and the Republic of Moldova to implement the tailor-made recommendations, and through it further improving their procedures for environmental monitoring and assessment.

IV. Assessment and data-collection activities in other forums of relevance to the Working Group

- 33. Representatives of EEA and the Environmental Monitoring in Central Asia (MONECA) component of the FLERMONECA project reported on the latest developments with regard to ongoing and planned environmental assessments and data-collection activities of relevance to the Working Group.
- 34. The EEA representative noted that the next state-of-the-environment report (SoER) for the EU region and cooperating countries would be launched in March 2015. It would also be submitted as a contribution to upcoming regional and global events and assessments, like the EfE Ministerial Conference in Batumi in 2016, the Sixth Global Environment Outlook (GEO-6) in 2017 and the pan-European Environmental and Health Ministerial Conference in 2017. Furthermore, the priority for EEA for 2015 would be to present and promote that SoER at the national level, to ensure the understanding of its key findings.
- 35. The EEA representative also reported on the annual environmental indicator report, which included a selection of indicators similar to those contained in the ECE Indicator Guidelines. The thematic focus of the 2014 report was green economy.
- 36. She also provided information on the ongoing revision of EEA environmental indicators so that they would respond to the latest policy developments and needs and on the discussion among EEA member States and cooperating countries on how to move forward to share information and connect networks more effectively and make better use of modern technology.
- 37. EEA welcomed strengthening cooperation with the United Nations Environment Programme (UNEP) and ECE, which it considered important, and highly appreciated partners for bringing regional and global environmental monitoring and assessment processes together. The EEA representative also mentioned the World Health Organization as a crucial partner, since the human-health aspect definitely would be considered a priority in the upcoming years.
- 38. The representative of the MONECA project noted that activities of the Joint Task Force on Environmental Indicators and the Working Group on Environmental Monitoring and Assessment played a significant role in helping to achieve the project's goals in Central Asia. The project itself prioritized work in Tajikistan, Turkmenistan and Uzbekistan to assist those countries to achieve comparable results to Kazakhstan and Kyrgyzstan in the field of environmental data production and sharing and the elaboration of assessment reports. While the project would end in October 2015, it was planned to formulate recommendations for submission to the Batumi Conference in 2016, in particular on how to further advance SEIS in Central Asia. In the remaining project time period, activities should still include relevant study tours and national workshops.
- 39. The Working Group took note of the information provided and agreed that synergies should be exploited to the maximum extent regarding both the regular work as well as that focused on capacity-building.

V. Other business

- 40. The Chair asked what progress had been made in assessing countries' implementation of the biodiversity guidelines.³ It was noted that the issue had not been included on the agenda of the current session. The secretariat explained that the activity had been postponed until funding was available to carry it out.
- 41. The representative of the Russian Federation expressed appreciation for the thematic workshops on quality assurance and quality control for the production of environmental data, referring in particular to the workshop held as part of the ninth session of the Joint Task Force. She suggested that the national experts directly involved in the data management process of the particular field such as air, water or waste should be brought to the workshops.
- 42. The Working Group supported the suggestion of the Russian Federation and invited the secretariat to explore the opportunities for ensuring the participation of national experts specializing in the specific workshop themes.
- 43. The secretariat further informed the Working Group that the next meeting would be organized earlier than usual possibly in March or April 2015 primarily owing to the need to discuss the SEIS reporting mechanism. It was proposed to hold the meeting back to back with the UNEP regional meeting for GEO-6, in order to bring the existing regional networks related to environmental assessments into the GEO-6 process and to better exploit synergies between two international processes that were closely related to one another.

VI. Closure of the meeting

44. The Working Group thanked donors, in particular the European Union, Norway, Switzerland and the Russian Federation, for the financial contributions provided to support the activities of the ECE Programme on Environmental Monitoring and Assessment.

³ Guidelines for developing national strategies to use biodiversity monitoring as an environmental policy tool for countries of Eastern Europe, the Caucasus and Central Asia, as well as interested South-Eastern European countries (ECE/CEP/2013/7).

Annex

Summary of the latest developments in environmental monitoring and assessment between October 2012 and October 2013 in countries of Eastern and South-Eastern Europe, the Caucasus and Central Asia

Country	Modernization and upgrading of national monitoring networks: air, water, soil	Development of biodiversity monitoring	Development or improvement of inventories	Improvements to data quality assurance and control, as well as database management	Improvements in institutional and regulatory mechanisms and technical solutions for data exchange and online sharing
Armenia	Air	No specific changes	Created an interactive database on	No specific changes	New law to empower local self-government to monitor flora, fauna, forests and pollution of land
	Introduced new parameters for measuring air quality		environment open to the public		
			Developed software for enabling online registration to follow		The creation of a single electronic database for Lake Sevan
			statistical reports		Implementation of the "2015 annual programme on restoration, protection, reproduction, natural development and use of Lake Sevan ecosystem" as part of an ENPI-SEIS project
Azerbaijan	Air	on the development of a national biological diversity monitoring system	environmental	No specific changes	No specific changes
	Installation of new measuring stations				
	Water				
	Implementation of the project "Providing clean water for the population"				
	Soil				
	Implementation of a project on the "Sustainable management of lands and forests on the landscape of the greater Caucasus"				

20141 45		The specific changes	Systematic natural	epgraded software		
	Installation of automatic monitoring stations (to prevent accidental pollution)		resource accounting, maintenance of 13 State inventories	for calculating background air pollution	norms for surface water monitoring	
	Soil			Upgraded software for surface water monitoring		
	Implementation of a project on "Rules and procedure of works on contaminated land (including soil)"					
Bosnia and Herzegovina	No information provided					
Georgia	Air	Review of National Biodiversity Monitoring System	Implementation of improvements to data processing, sharing and digitalization	No specific changes	Preparation of law on water	
	Introduced measuring of a new				resource management	
	parameter: lead (Pb)	2,500			Preparation of waste management code	
	Water				0	
	Introduced measuring of the new parameters, (a) total nitrogen concentration and (b) total phosphorus concentration, in the major water bodies				Preparation and approval of National Biodiversity Strategy and Action Plan of Georgia, 2014–2020	
	Expanded monitoring network					
	Soil					
	Carried out soil pollution monitoring in 12 cities and settlements, in particular to determine heavy metals concentrations					

Development or

improvement of inventories

Systematic natural

Development of biodiversity

No specific changes

monitoring

Improvements to data

quality assurance and

database management

Upgraded software

control, as well as

Improvements in institutional and

solutions for data exchange and

Introduction of technical

online sharing

regulatory mechanisms and technical

Modernization and upgrading of

water, soil

Water

Country

Belarus

national monitoring networks: air,

Published an annual booklet on soil contamination on the

Country	Modernization and upgrading of national monitoring networks: air, water, soil	Development of biodiversity monitoring	Development or improvement of inventories	Improvements to data quality assurance and control, as well as database management	Improvements in institutional and regulatory mechanisms and technical solutions for data exchange and online sharing
	territory of Georgia, status as of 2013				
Kazakhstan	Air	Implementation of the	Implementation of the	No specific changes	Preparation of a law for
	Extension of the automatic air monitoring network by 10 per cent		project/State programme: "Information Kazakhstan — 2010"		integrating all environmental information under the State Fund of Environmental Information
	Introduction of new parameters for measurement at a number of air monitoring stations: arsenic (As) and cadmium (Cd)				
Kyrgyzstan	Water	Implementation of a project: "Forest management and biodiversity"	Implementation of the FLERMONECA project	No specific changes	No specific changes
	Implementation of a project: "Water quality monitoring in the Kyrgyz Republic"				
Montenegro	Air	. i i 1 1	nges Launch of publishing real-time air quality information as of February 2014 by the Environmental Protection Agency of Montenegro	Implementation of waste statistics validation regulations by knowledge-based service	No specific changes
	Adoption of air quality plan for the city of Nikšić				
	Water				
	Preparation of water monitoring programme				
Republic of	Air	No specific changes	Published a data book	No specific changes	Implementation of a project: "Increased collaboration with EEA and further implementation of SEIS in
Moldova	Implementation of a pilot project on persistent organic pollutants		"Regions of Moldova", which contains an environment section with information on indicators on air, water and waste at the regional level		
	Water				interested ENP countries (Jordan, Israel, Republic of
	Implementation of a joint project of the National Bureau of Statistics and the Statistical				Moldova, Morocco and Palestine) — InSEIS."

		(GIS) on water				
Russian Federation		Air	conservation of rare, database software for creation threatened and endangered verifying data environn species of animals, plants quality of surface and fungi in the Russian Federation	Approved workplan for the		
	Federation	Implementation of a project: "Protection of Lake Baikal and socioeconomic development of the Baikal natural territory for 2012–2020"		database	verifying data quality of surface	creation of a State fund for environmental data
		Introduced new parameters for measuring PM_{10} and $PM_{2.5}$				
		Introduced new methods for analysing air pollutants				
		Water				
		Implementation of "Protection of Lake Baikal" project (see above)				
		Soil				
		Implementation of a research programme for 2014–2016 focused on the development of a guidance methodology for soil contamination monitoring				
Serbia	Serbia	Air Implementation of a	÷	No specific changes	Declared poultry and pig farms as PRTR facilities	No specific changes
		Introduced accreditation according to ISO 17025 for	project: "Waste Flow Monitoring in Serbia"			

Development or

improvement of inventories

Development of biodiversity

monitoring

Improvements to data

quality assurance and

database management

control, as well as

Improvements in institutional and

solutions for data exchange and

Strengthened collaboration

with EEA on further

implementation of SEIS

online sharing

regulatory mechanisms and technical

Modernization and upgrading of

Office of Sweden for

water, soil

Country

national monitoring networks: air,

improving the data-collection

geographic information system

PM₁₀ and heavy metals in PM₁₀

system and introducing a

Country	Modernization and upgrading of national monitoring networks: air, water, soil	Development of biodiversity monitoring	Development or improvement of inventories	Improvements to data quality assurance and control, as well as database management	Improvements in institutional and regulatory mechanisms and technical solutions for data exchange and online sharing
	Water				
	Introduced new parameters for measuring PCBs and the following metals in sediment samples: Al, As, B, Cd, Co, Cr, Cu, Fe, Mn, Ni, Pb and Zn.				
	Soil				
	Introduced new parameters for measuring pesticides, PAH and PCBs.				
	Implementation of a project: "Designation of sensitive areas and vulnerable zones according to the EU Nitrates and Urban Waste Water Directives"				
Tajikistan	No information provided				
The former	Water	Implementation of the	Implementation of the	No specific changes	Implementation of the
Yugoslav Republic of Macedonia	Implementation of the project: "Technical Assistance for Strengthening the Institutional	project, "Support to the former Yugoslav Republic of Macedonia for the	project: "First biennial update report for climate change"		project: "Capacity-building to put the Aarhus Convention into Action and Support
	Capacities for Approximation and Implementation of	revision of the National Biodiversity Strategy and	Implementation of the project:		Development of PRTR Systems in SEE Countries"
	Environment Legislation in the Area of Water Management"	Action Plan and preparation of the Fifth National Report to the Convention on Biodiversity", with corresponding workshops	"Development of Macedonian National Environmental Information System Plan"		Revision of soil laws
Turkmenistan	No information provided				

Œ
\Box
₹
\mathbf{C}
臣
×
, 2
5
5
2
4
r2

Country	Modernization and upgrading of national monitoring networks: air, water, soil	Development of biodiversity monitoring	Development or improvement of inventories	Improvements to data quality assurance and control, as well as database management	Improvements in institutional and regulatory mechanisms and technical solutions for data exchange and online sharing
Ukraine	Air	Implementation of a project to monitor the environment using Earth remote-sensing data	No specific changes	Implementation of a	Reform of the system of the
	Introduction of automated environmental monitoring stations			project to create an integrated system of statistical data processing	executive authorities, which will entail adjustments to the regulatory mechanisms for data exchange
	Launch of a long-term programme for the solution of ecological problems in Kryvbas and improvement of the environment in 2011–2022				
	Implementation of a plan of action for the establishment of a system of monitoring the content of PM _{2.5} , PM ₁₀ and ozone in ambient air				
	Water				
	Preparation of a proposal for automated information- measuring system "Ukraine"				
	Implementation of an automated information-measuring system "Tisa", which consists of 50 automated gauging stations				
Uzbekistan	Air	No specific changes	No specific changes	No specific changes	Approval of law "Introducing
	Developed method for determination of respirable and fine particulate matter (PM_{10} and $PM_{2.5}$) in atmospheric air				amendments and addenda to the Regulations of the State environmental monitoring in the Republic of Uzbekistan"

Country	Modernization and upgrading of national monitoring networks: air, water, soil	Development of biodiversity monitoring	Development or improvement of inventories	Improvements to data quality assurance and control, as well as database management	Improvements in institutional and regulatory mechanisms and technical solutions for data exchange and online sharing
	Water Introduced new parameters for				Implementation of project on the "Creation of an
	measuring molybdenum and Fe Soil				information base of the State environmental monitoring (based on environmental
	Introduced new parameters for measuring Cu and Mn				indicators) using GIS technologies"

Abbreviations: Al = aluminium; Aarhus Convention = Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters; As = arsenic; B = boron; Cd = cadmium; Co = cobalt; Cr = chromium; Cu = copper; ENP = European Neighbourhood and Partnership; ENPI = European Neighbourhood and Partnership Instrument; EU Nitrates Directive = Council Directive 91/676/EEC of 12 December 1991 concerning the protection of waters against pollution caused by nitrates from agricultural sources; EU Urban Waste Water Directive = Council Directive 91/271/EEC of 21 May 1991 concerning urban waste-water treatment; Fe = iron; GIS = geographic information system; ISO = International Organization for Standardization; Mn = manganese; Ni = nickel; PAH = polycyclic aromatic hydrocarbon; Pb = lead; PCBs = polychlorinated biphenyls; PM_{2.5} = particles with a diameter of 2.5 micrometres or less; PM₁₀ = particles with diameter of 10 micrometres or less; PRTR = pollutant release and transfer register; SEE = South-Eastern Europe; Zn = zinc.