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### Committee on Environmental Policy

#### Working Group on Environmental Monitoring and Assessment

##### Twelfth session

Geneva, 20 and 21 October 2011

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

### Note by the secretariat

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## **I. Introduction**

1. The twelfth meeting of the Working Group on Environmental Monitoring and Assessment was held on 20 and 21 October 2011 in Geneva.

### **A. Attendance**

2. The meeting was attended by delegations composed of representatives of ministries of environment and statistical offices from the following member States of the United Nations Economic Commission for Europe (ECE): Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Finland, Georgia, Hungary, Kazakhstan, Kyrgyzstan, Montenegro, Republic of Moldova, Russian Federation, Switzerland, Tajikistan, the former Yugoslav Republic of Macedonia, Ukraine and Uzbekistan.

3. Representatives of the European Environment Agency (EEA) also attended the meeting. From the United Nations system, a representative of the United Nations Statistics Division attended.

4. Representatives of the Interstate Statistical Committee of the Commonwealth of Independent States were also present, as were representatives from three Regional Environmental Centres (RECs): the REC for Central Asia (CAREC); the REC for the Republic of Moldova (REC-Moldova); and the REC for the Russian Federation (REC-Russia).

5. Representatives of Cadaster Institute of the Russian Federation and of Zoi Environment Network also took part in the meeting.

### **B. Organizational matters**

6. The session opened with a welcome address by the Director of the Environment Division of ECE, who began by recalling that the Committee on Environmental Policy had paid tribute to the highly valuable work of the Working Group on Environmental Monitoring and Assessment at its seventeenth session in November 2010. At its special session in May 2011, the Committee had approved the Guidelines for developing national strategies to use water quality monitoring as an environmental policy tool for the countries of Eastern Europe, the Caucasus and Central Asia, as well as interested South-Eastern European countries (ECE/CEP/S/2011/5), and had called upon these countries to implement them. The Working Group should continue its activities to strengthen countries' environmental assessment and monitoring capacity. It should also continue to enhance its cooperation with the governing bodies of the ECE multilateral environmental agreements (MEAs), in particular by providing its expertise to support efficient national reporting established under the MEAs. In addition, the Working Group needed to engage in fulfilling the relevant decisions of the Seventh "Environment for Europe" (EfE) Ministerial Conference (Astana, September 2011), such as the establishment of a regular assessment and reporting process, including developing the Shared Environmental Information System (SEIS).

### **C. Adoption of the agenda**

7. The Working Group adopted its agenda, as set out in document ECE/CEP/AC.10/2011/1.<sup>1</sup>

### **D. Adoption of the report of the eleventh session**

8. The Working Group adopted the report of its eleventh session, as contained in document ECE/CEP/AC.10/2010/2.

### **E. Election of officers**

9. The meeting re-elected its Bureau as follows: Ms. Svetlana Utochkina (Belarus) was elected as Chair and Mr. Tihomir Popovic (Serbia) and Mr. Yuri Tsaturov (Russian Federation) as Vice-Chairs. After the extension of the Working Group's mandate by the Committee on Environmental Policy at its session in April 2012, the next election of officers would be held at the thirteenth session of the Working Group.

## **II. Outcomes of the Seventh “Environment for Europe” Ministerial Conference of concern to the Working Group**

10. The secretariat presented the outcomes of the Astana Ministerial Conference, as contained in the following documents: the Ministerial Declaration (ECE/ASTANA.CONF/2011/2/Add.1); the Chair's Summary of the Conference (ECE/ASTANA.CONF/2011/2/Add.2); and a factual report of the Conference (ECE/ASTANA.CONF/2011/2).<sup>2</sup>

11. The main outcome related to the activities of the Working Group contained in the Ministerial Declaration was the Ministers' decision to establish a regular process of environmental assessment and to develop SEIS across the region in order to keep the pan-European environment under review. Those actions should serve multiple policy processes, including MEAs, and include capacity-building of countries in Eastern Europe, the Caucasus, Central Asia and South-Eastern Europe to monitor and assess their environment. The Ministers had invited EEA and its partners to develop an outline for how those actions could be performed and to present it to the Committee on Environmental Policy.

### **A. Europe's Environment — An Assessment of Assessments**

12. The representative of EEA briefed the Working Group on the Conference outcomes related to the Europe's Environment — An Assessment of Assessments (EE-AoA) report (see summary report, ECE/ASTANA.CONF/2011/8). The EE-AoA had proven to be a valuable support to the substantive discussions of the Conference. The Conference had welcomed the EE-AoA, as an assessment that clearly demonstrated the linkages and gaps

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<sup>1</sup> Documents and other materials from the session are available on the ECE website from [http://www.unece.org/env/europe/monitoring/12th\\_mtg.html](http://www.unece.org/env/europe/monitoring/12th_mtg.html).

<sup>2</sup> These document and other materials from the Astana Ministerial Conference are available from <http://www.unece.org/env/efe/astana/welcome.html>.

between the challenges that existed in the field of environmental assessment and the means to evaluate and address them.

13. Some of the key features and findings of the report included:

(a) A balanced geographical coverage and scale had been achieved during the review process of individual assessments. The review of individual assessments had involved more than 50 experts across the pan-European region, who had screened a total of 424 assessment reports. A main finding with regard to scope was that information should be managed as close as possible to its source;

(b) The review process of individual assessments had focused on recently released reports. Some 67 per cent of the reviewed reports had been published over the period 2009–2011, and less than 2 per cent had been published before 2005. A main finding with regard to timing was that information needed to be readily available to public authorities to enable them to assess the state of the environment, as well as the effectiveness of their policies, in a timely manner;

(c) The assessment process was weakly driven by reporting obligations. Eastern Europe and the Russian Federation had the highest share of assessments required by a piece of legislation, with 31 per cent and 24 per cent, respectively. Recommendations to address that concern included improving the linkage and use of assessments in the policy processes and promoting national state-of-the-environment reports. For reporting, main findings were that information should enable public authorities to easily fulfil their reporting obligations, as well as allow for the public's right to access to environmental information;

(d) The share of integrated assessments was limited (40 per cent) across the pan-European region. The most common assessments were thematic (75 per cent) and status and trends (71 per cent) reports. In the Russian Federation, 95 per cent of the reports reviewed were classified as integrated, while in EEA member countries, 40 per cent of the reports were integrated. Strengthening of integrated assessment was required to address that gap;

(e) Consultation during the preparation of the assessments had not been regularly carried out (or acknowledged) across the pan-European region. Only 40 per cent of the assessments had involved a consultation process. Eastern Europe, South-Eastern Europe and EEA member countries had low consultation rates (25, 27 and 32 per cent, respectively). It was found that providing for the public's right to participate in environmental decision-making needed to be strengthened.

(f) Some countries in the ECE subregions had received substantial support for undertaking the assessments. Support for capacity development and technical assistance represented more than half of the cost of the assessments in the following areas: 66 per cent in Eastern Europe; 76 per cent in the Russian Federation; and 96 per cent in the Caucasus.

14. The main findings of the EE-AoA chapter on water comprised the following: (a) a multitude of national water assessments were available; (b) increased use of indicators had led to targeted and compact information; (c) data and information were quite recent (only a few years old); (d) timelines of the relevant water information had improved; (e) the thematic policy and legal issues had been included in assessments; (f) the transboundary issues and hot spots had been the least addressed; (g) assessments had mostly included the traditional issues, such as the water quality, and lacked information on emerging issues, such as the vulnerability of water resources, and the impacts of hazardous substances and extreme weather events; and (h) the link between socio-economic activities, the status and trends, and measures — the most informative issues for the decision-makers — was lacking or missing altogether.

15. The two main recommendations of the EE-AoA chapter on water were to ensure exchange of data and information to develop SEIS for water reporting, and to conduct integrated assessments for an improved regular reporting process.

16. The main findings of the EE-AoA chapter on greening the economy included: (a) a lack of an agreed definition of “green economy”; (b) no national assessments on green economy, with the exception of one assessment produced by the United States; (c) a lack of clarity in institutional arrangements; (d) a lack of defined objectives for assessments; and (e) a lack of assessments focused on greening the economy.

17. The main recommendations on greening the economy included: (a) to extend the use of economic instruments as a means of supporting progress towards a green economy and resource efficiency; (b) to improve consistency in data and information availability; (c) to develop indicators in the context of a green economy; and (d) to produce focused assessments addressing policy questions in broad areas.

18. The way forward towards improving national information and observation capacity could encompass: (a) improving the linkage and use of assessments in the policy cycle (starting from the commissioning of new reports); (b) initiating a new generation of state-of-environment (SoE) reports and integrated assessments as part of a sustainable regular reporting process to keep the pan-European environment under continuing review; and (c) developing and extending SEIS across the entire ECE region.

19. In the ensuing discussion, delegates addressed the possible future role of the Working Group in developing SEIS and establishing a regular reporting process. The next steps following the EE-AoA process were to focus on the substantive analysis of the collected information in order to support decision makers and policymakers. Also, since the lack of comparable data collection and sharing continued to be one of the main bottlenecks, the streamlining of the environmental monitoring and assessment process at the national level was required. Some delegations stressed the additional value of preparing the EE-AoA, as it helped to identify gaps and problems in data at the national level. It also helped to identify gaps in the national SoE reports and would help to improve those reports in future.

20. The three RECs and EEA then presented the main findings and recommendations of the EE-AoA for Eastern Europe, including the Russian Federation, the Caucasus and Central Asia. Overall, the findings were similar to those identified for the pan-European region.<sup>3</sup>

21. Delegations highlighted the important role of the Working Group as a multi-stakeholder forum of experts developing valuable products to support countries to improve the national SoE reporting and to support the policymaking process. Nonetheless, it was stressed that more efforts should be made at the national level to promote and implement on the ground the environmental indicators and other tools developed by the Working Group.

22. Also, several delegations supported the idea of producing non-technical summaries of the SoE reports for a broader dissemination. The scarcity of adequate data to support the preparation of an indicator-based SoE was also emphasized. The frequency of publication of such reports, as well as their structure and content to support the policymaking process, was also discussed.

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<sup>3</sup> The subregional assessments, as well as the presentations by the RECs and EEA, are available on the ECE website as “informal documents” ([http://www.unece.org/env/europe/monitoring/12th\\_mtg.html](http://www.unece.org/env/europe/monitoring/12th_mtg.html)).

23. It was suggested that an efficient approach to improve national SoE reporting might be the establishment of a task force — composed of managers in charge of production of national SoE reports — who would meet once a year with the EEA representatives to share their experience and work on a revised structure for the SoE report and the better use of indicators. In that connection, it was stressed that there was a need to enhance the practical use at the national level of the Kyiv and Belgrade Guidelines on SoE reporting. It was also recalled that all recent Environmental Performance Reviews had recommended that national SoE reports follow an indicator-based format.

## **B. *Second Assessment of Transboundary Rivers, Lakes and Groundwaters in the ECE region***

24. The secretariat of the Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Water Convention) gave a presentation on findings related to monitoring of water resources from the *Second Assessment of Transboundary Rivers, Lakes and Groundwaters*, which covered the ECE region and had been prepared for the Astana EfE Ministerial Conference. The following common concerns were observed across the region: (a) an uneven level of transboundary cooperation and related deficiencies; (b) weak policy integration; (c) diffuse pollution and water use in the agriculture sector; (d) hydromorphological changes; and (e) climate change.

25. In Western and Central Europe, the water monitoring was guided by the European Union (EU) Water Framework Directive, which envisaged consistency in the monitoring approaches and respectively required changes in the national monitoring. However, there were still many differences and problems of comparability and intercalibration that remained to be resolved, including the issue of the comparability with historical data as well as the monitoring of hydromorphological characteristics. The large number of modified rivers and artificial water bodies remained a key concern that needed to be addressed.

26. In South-Eastern Europe, all countries had in place a certain level of monitoring of surface waters. At the same time, the quality and/or quantity monitoring needed to be improved, and in some countries it still needed to be established. In the subregion, there was a lack of information about aquifers in general and about the quality of groundwater in particular. In many countries, the ongoing reform of approximation to EU legislation provided a good opportunity to improve the coordination between sectors and to strengthen the environmental monitoring. Key challenges in relation to monitoring of transboundary waters were the lack of joint monitoring and assessment, as well as the lack of harmonization in production of data and a weak information exchange between riparian countries.

27. In Eastern and Northern Europe, there was a better developed exchange of data where joint water management bodies had been established. At the same time, the harmonization of monitoring approaches remained a challenge in many cases. The monitoring of transboundary waters between EU countries and their eastern neighbours was particularly challenging because of different monitoring approaches. A weak exchange of data between different national authorities remained a concern that needed to be addressed. Also, while the emphasis was put on physical and chemical monitoring, biological monitoring was less developed. Flooding in recent years had drawn special attention to flood prediction measures, and had led to an enhanced cooperation between some of the affected countries sharing rivers.

28. In the Caucasus, some progress could be observed in water monitoring. Among the remaining key challenges were biological monitoring, a weak integration of groundwaters

and surface waters, as well as the need for quality assurance in sampling, processing and analytical analysis and data comparability. Also needed were an enhanced exchange of information and increased cooperation outside of international projects.

29. Central Asian countries generally had a weak monitoring and assessment set-up, with some exceptions. The monitoring of water quality was almost non-existent in some countries. Gaps in monitoring of groundwaters, glaciers and snow cover needed to be addressed. Information exchange, where it took place, was not effective. Also, forecast capabilities needed to be strengthened.

30. Overall, the cost of and access to information was identified as a major constraint to effective assessment in many countries of the region covered by the Second Assessment. Information at the basin level was commonly not available. Intersectoral cooperation, with implications for data access, was limited. On the positive side, the preparation process for the Second Assessment had promoted information exchange and cooperation, as well as contributed to the development of capacity in that area. Such common transboundary water assessments served as an effective tool towards harmonization of approaches to monitoring and assessment of water resources across the region.

31. The production of the next extensive regional assessment of transboundary waters was envisaged in 8–10 years, with a special edition to come out within four years. The special edition would have a different focus and approach. It would, for example, focus on a specific pressure factor affecting waters (agriculture or hydropower), a cross-cutting theme (climate change and extreme events or ecosystems and biodiversity), or a response measure (river basin management plans or monitoring and assessment systems). A possible approach would also be an assessment limited to a representative number of basins. These options would be discussed by the Meeting of the Parties to the Water Convention in November 2012.

32. The Working Group took note of the information presented. EEA highlighted that efficient ways should be sought by the Committee on Environmental Policy and the Meeting of the Parties to the Water Convention with a view to preparing the next transboundary water assessment based on a regular reporting through SEIS.

### **C. Development of the Shared Environmental Information System**

33. The representative of EEA informed the Working Group about the development of SEIS in the EU and on progress made under an EU project on SEIS in the European Neighbourhood Policy (ENP). To improve the collection, exchange and use of environmental data and information across Europe, in 2008, the European Commission had proposed a solution in a Communication entitled “Towards a Shared Environmental Information System”.<sup>4</sup> SEIS aimed to create an integrated web-enabled environmental information system by simplifying and modernizing existing information systems and processes.

34. In the EU, the implementation of SEIS in the short term was based on the existing EU financial instruments such as Life+,<sup>5</sup> the thematic programme for environment and sustainable Management of Natural Resources including Energy (ENTRP)<sup>6</sup> and the

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<sup>4</sup> Available from

[http://europa.eu/legislation\\_summaries/environment/general\\_provisions/l28204\\_en.htm](http://europa.eu/legislation_summaries/environment/general_provisions/l28204_en.htm).

<sup>5</sup> See <http://ec.europa.eu/environment/life/funding/lifeplus.htm>.

<sup>6</sup> See [http://ec.europa.eu/europeaid/how/finance/dci/environment\\_en.htm](http://ec.europa.eu/europeaid/how/finance/dci/environment_en.htm).

European Neighbourhood and Partnership Instrument (ENPI).<sup>7</sup> A SEIS draft implementation plan was undergoing a European Commission inter-service consultation during 2011. EEA was a leading proponent of SEIS, and played a crucial role in collecting and providing environmental information through the European Environment Information and Observation Network (EIONET).<sup>8</sup>

35. Since 2007, EEA had conducted SEIS country visits to 36 of its 38 member and cooperating countries to explain SEIS, encourage implementation and identify existing SEIS activities at the national level. As a result of the visits, it was found that some countries were fairly advanced in implementing SEIS principles, while others needed to take significant steps. Most countries were up to date concerning new opportunities offered by modern information and communications technology (ICTs). However, cooperation between institutions needed to be strengthened in some countries. Also, the benefit of having access to European-level information within a national context was recognized only vaguely within many countries.

36. A recent EEA success story with SEIS had been the completion of the Shared European and National State of the Environment (SENSE)<sup>9</sup> project. Since December 2010, SENSE had established an automated process for 13 countries to report online their SoE information from national websites to the EEA European Environment — State and Outlook web pages for country assessments.<sup>10</sup> Ongoing European initiatives contributing to SEIS were the following: Infrastructure for Spatial Information in Europe (INSPIRE); Global Monitoring for Environment and Security (GMES); the Group on Earth Observation (GEO); the Water Information System for Europe (WISE); OzoneWeb;<sup>11</sup> and the Biodiversity Information System for Europe (BISE).

37. Furthermore, EEA was managing a project (2010–2014) to extend SEIS principles to the ENP East and South neighbours (16 countries).<sup>12</sup> At the time of the Working Group's meeting, country visits had been made to five countries, i.e., Armenia, Azerbaijan, Georgia, the Republic of Moldova and Belarus. Visits to Ukraine and the Russian Federation were under preparation. Country reports and other relevant information, including regular newsletters, had been made available on the ENPI/SEIS website.<sup>13</sup> Also, the preparation of the SEIS "Cookbook"<sup>14</sup> was well under way. The annual Steering Committee of ENPI/SEIS was scheduled to take place on 24 and 25 November 2012 in Copenhagen.

38. Overall, the framework for SEIS implementation was directed towards improving the quality of assessments by reducing the burden of reporting. At the national level, SEIS principles needed to be applied in all relevant projects and initiatives. The production of the SoE reports (e.g., the content, the network involved, assessment frameworks and indicators) needed to be revisited in the light of the EE-AoA findings. A regular sharing of assessments by updating the AoA portal needed to be maintained. Also, a compulsory effectiveness evaluation step as a prerequisite for starting new processes needed to be put in place.

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<sup>7</sup> Available from [http://ec.europa.eu/world/enp/funding\\_en.htm](http://ec.europa.eu/world/enp/funding_en.htm).

<sup>8</sup> <http://www.eionet.europa.eu/>.

<sup>9</sup> The SENSE project is a part of the stepwise implementation of the SEIS with a focus on implementing an approach for online reporting and sharing of national and European information on state and outlook of the environment.

<sup>10</sup> <http://www.eea.europa.eu/soer/countries>.

<sup>11</sup> EEA portal for sharing ozone information.

<sup>12</sup> More information on the project, Towards a SEIS in the European Neighbourhood, is available from <http://enpi-seis.ew.eea.europa.eu/>.

<sup>13</sup> <http://enpi-seis.ew.eea.europa.eu/>.

<sup>14</sup> <http://www.zoinet.org/web/seis-cookbook>.

39. At the ECE level, the work of the Joint Task Force on Environmental Indicators was regarded as a crucial contribution to establishing a revised set of indicators with a view to streamlining the preparation of national SoE reports, as well as improving their quality. In that regard, there was a need to develop a mechanism for quality checking. Furthermore, the national reporting under the MEAs, as well as the third cycle of Environmental Performance Reviews, needed to be adjusted in order to comply with SEIS principles. Monitoring networks should be gradually involved in capacity-development activities related to SEIS.

40. At the EEA level, the AoA portal would be maintained as a future State of the Environment Reporting Information System (SERIS) upgrade and EEA tools such as AoA, Reportnet<sup>15</sup> and Eye on Earth<sup>16</sup> would be made available for national and local use. The EEA would look into connecting its work on indicators with the related activities in the ENPI and Central Asian subregions. Furthermore, EEA would facilitate and contribute to strengthening networking, capacity development and sharing of good practices, including through the SEIS Cookbook and SEIS country visits and workshops.

41. The secretariat presented the report on the current situation and specific needs of countries in Eastern Europe, the Caucasus and the Russian Federation with regard to the main SEIS components.<sup>17</sup> Following up on the decision of the Astana Ministerial Conference, a proposal on SEIS development needed to be prepared for the consideration of the Committee on Environmental Policy at its eighteenth session in April 2012.

42. The report was based on the available Environmental Performance Reviews (for Azerbaijan, Belarus, Georgia, Republic of Moldova and Ukraine) and on documentation of the Joint Task Force on Environmental Indicators, as well as on the results of the mission to Armenia and consultations with the Russian Federation. The relevant available literature had also been used for preparing the report.

43. The study showed that a State environmental institutional framework was present in all countries. At the same time, some of the environmental mandates were in other ministries (e.g., water management was often in the competence of the ministry of agriculture and in two countries the hydrometeorological services were under the ministry of emergencies). Also, the statistical services played an important role in collecting, processing and publishing environmental data.

44. Data management governance, including the legal framework and specialized institutions, was well established in all countries, with more centralized systems in Azerbaijan, Belarus, the Russian Federation and Ukraine and less centralized systems in Armenia, Georgia and the Republic of Moldova. In all countries, basic statistical and monitoring data were available for greenhouse gases, air, water, waste, soil, forests, protected areas and biodiversity. Quality, completeness and time coverage varied between countries, however. Furthermore, certain important parameters (e.g., “coarse” and “fine” particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>)) were not covered, except in Belarus and in large cities of the Russian Federation. Moreover, an advance use of ICTs was lagging behind in many countries and most countries lacked established procedures for data exchange.

45. All countries had governmental environmental and statistical web portals. A diversity of environmental reports were published by all countries, including national SoE

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<sup>15</sup> <http://www.eionet.europa.eu/reportnet>.

<sup>16</sup> <http://www.eyearth.org/>.

<sup>17</sup> The report and individual country profiles, which had been prepared under the ENPI/SEIS project, were available from the Working Group’s web page for the meeting ([http://www.unece.org/env/europe/monitoring/12th\\_mtg.html](http://www.unece.org/env/europe/monitoring/12th_mtg.html)).

reports, environmental statistical yearbooks and thematic reports (e.g., for air, water, biodiversity). Most of those reports were focused on data presentation rather than on data interpretation and assessment. Use of environmental indicators was in its infancy. None of the countries had produced an indicator-based assessment report at the time of the study. All countries were parties to the main global MEAs, and most of them were parties to the regional and subregional MEAs. The reporting under the MEAs, however, was often inconsistent and incomplete, and depended on donor support.

46. Overall, the study had identified the following clusters of gaps and bottlenecks:

(a) Most countries did not have integrated monitoring systems in place; the monitoring generally did not take into account agreed international standards, methodologies and procedures; the available monitoring equipment was often insufficient or obsolete; the number of automated monitoring stations was very limited; and data quality control was often insufficient;

(b) There was no fully integrated environmental information system; the various institutions under different ministries, collecting environmental data, lacked efficient coordination and data sharing; certain data were missing or were incomplete; self-monitoring by enterprises was rare; and data was generally reported on the basis of simple calculations;

(c) Data transfer from monitoring stations and laboratories to the analytical centres was often done via telephone or as hardcopies; typically, environmental reports presented data and measured values without detailed interpretation and assessment; and the application of environmental indicators was just starting.

47. SEIS development required addressing the above gaps and bottlenecks. The study provided a series of respective recommendations for mitigating those problems, as follows:

(a) Internationally recognized methodologies should be implemented for measurements, data collection and validation, calculations and modelling. The systems of collection of environmental statistical data should be improved and harmonized with international classifications and definitions. The legal requirements concerning self-monitoring and reporting by enterprises should be introduced or strengthened. Data collection on certain air and water parameters, soil quality, forests and biodiversity should be improved;

(b) All environmental data should be available in electronic form (in accordance with the internationally agreed data standards). Integrated environmental databases and information systems should be established. Provisions for environmental data sharing should be stipulated by legislation. Both hardware and software for the operation of databases and information systems should be modernized;

(c) Analytical centres for environmental information should be established and existing ones should be strengthened. The use of indicators and production of indicator-based assessments should be initiated, and should continue in those countries where that work had commenced. Adequate training on the use of modern ICTs should be provided for the information management staff. The related environmental portals and websites should be modernized and expanded.

48. The Working Group considered the information provided. Ukraine indicated its readiness to receive a SEIS country mission in November 2011. Armenia said that it planned to develop a framework law on environmental information and monitoring in 2012. Some delegations shared their plans for implementing the ENPI/SEIS project and their expectations: the process would involve informing all the relevant ministries and institutions about the project and coordinating with them with a view to embarking on the production of the necessary indicators and respective data for input into SEIS. Concerning

streamlining the reporting under the MEAs and harmonizing it with SEIS requirements, it was emphasized that it was up to the participating countries to request/bring about the necessary changes in the mandatory national reporting under each of the MEAs.

49. Some delegations suggested using the findings from and lessons learned in preparing the AoA more extensively in order to identify efficient ways to develop SEIS. In that context, the RECs expressed their gratitude for being involved in preparing the subregional components of the EE-AoA, because the acquired experience was extremely valuable for their future work. The Group would continue the work related to SEIS development during its next mandate, in accordance with the relevant decision of the Committee on Environmental Policy to be taken at its next session.

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

50. The Joint Task Force on Environmental Indicators had held its third and fourth sessions from 11 to 13 July and from 18 to 20 October 2011, respectively.<sup>18</sup> Since the last meeting of the Task Force had taken place back to back to the Working Group's present meeting, the members were well informed on the work accomplished and therefore decided to turn directly to consideration of developments in other forums.

51. The representative of the United Nations Statistics Division, sharing some recent activities related to the work of the Working Group, highlighted work undertaken to revise and update the global Framework for the Development of Environmental Statistics (FDES), originally published in 1984, into an organizing framework for a multi-purpose information system serving different objectives and users. The revised FDES would cover a wide spectrum of environment-related information and would serve as a database for: (a) preparing national SoE reporting; (b) supporting the indicator work for informed policymaking; (c) fulfilling the national obligations to MEAs; and (d) working on integrated environmental economic accounts. In that regard, the Statistical Commission would review the work done on FDES at its meeting in February 2012 and, provided it was adopted, the revised FDES would then guide the development of the environment statistics.

52. In addition, the Systems for Environmental Economic Accounts (SEEA) were under revision and were nearing finalization after a six-year revision process. The revised SEEA, to be adopted by the Statistical Commission in February 2012, would serve as a new international standard in that area. The new SEEA covered a large part of environmental information and, thus, would contribute to the new FDES.

53. Concerning data collection, the joint Statistics Division-United Nations Environment Programme questionnaire was used for that purpose. In 2012 a new round of data collection was planned, with a limited focus on water and waste to avoid duplication in data collection with other international agencies. There were plans to revise the questionnaire to simplify it with a view to circulating it to countries at the end of April/beginning of May 2012. In that respect, countries of Eastern Europe, the Caucasus and Central Asia had the best performance in participating in the Statistic Division data collection exercise, and they were encouraged to continue with that good work.

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<sup>18</sup> See the respective meeting reports (ECE/CEP-CES/GE.1/2011/2 and ECE/CEP-CES/GE.1/2011/4), which are available on the ECE website from <http://www.unece.org/fileadmin/DAM/stats/documents/ece/ces/ge.33/2011/3.e.pdf> and [http://www.unece.org/fileadmin/DAM/stats/documents/ece/ces/ge.33/2011/mtg2/ECE.CEP-CES.GE.1.2011.4.edited.ae\\_final.pdf](http://www.unece.org/fileadmin/DAM/stats/documents/ece/ces/ge.33/2011/mtg2/ECE.CEP-CES.GE.1.2011.4.edited.ae_final.pdf).

54. With regard to the capacity-development activities, a new two-year project on measuring green growth and green economy was under development the representative of the Statistics Division said. The project would be implemented in partnership with all the United Nations Regional Commissions. The scope of the project was relatively limited, with a focus on analysing the already existing statistics from national statistical offices in the field of energy, industry, trade, agriculture, etc., from the perspective of green economy and how they could contribute to the development of green economy indicators. Furthermore, the existing statistical classification would be reviewed to better respond to current needs and make it more inclusive in the context of green economy.

55. The Working Group considered the information provided. In the ensuing discussion it was emphasized that there was a need to continue strengthening the cooperation between the national environmental authorities and the statistical offices, as well as to enhance the development of capacity, in particular in the field of SEEA.

56. The representative of EEA informed the meeting about ongoing and planned activities related to assessment and data collection. The information provided was complementary to the EEA presentations made earlier on the EE-AoAs and on SEIS. Within EEA core activities, a five-year cycle of environment state and outlook reporting had been completed in 2010. In 2011, EEA had been reflecting on the next cycle of activities until 2015. The establishment of a regular assessment process for the pan-European region was a priority within that cycle. It was expected that decisions on the way forward for the EEA member countries' reporting cycle, as well as on the pan-European reporting, would be made in 2012.

57. The traditional ways of collecting data (e.g., through specific questionnaires, surveys and forms developed for each report) for preparing reports at different geographical scales (e.g. national, European and pan-European) were being revisited in light of SEIS establishment (e.g., regular updates of data and indicators on an annual and 3-, 5-, 10-year cycles, as appropriate). Regardless of the selected themes for the next pan-European assessment, in the next reporting period the following regular data and indicators would be needed: on air quality, air emissions, water quality, waste and biodiversity, as well as on sectors that impacted heavily upon the environment, such as energy, transport and agriculture. For that purpose, the development and maintenance of the core set of indicators was a prerequisite for maintaining the state of the environment under continuous review at all levels. Countries needed to ensure a continuous monitoring and data collection to support the population of the core set of indicators.

58. The Working Group considered the information provided. Further work was required to develop the necessary indicators related to green economy. Many countries were working on developing sustainable development indicators. An analysis of those indicators could be made with a view to identify appropriate indicators to measure the green economy. Also, the existing work of green economy carried out by the Organization for Economic Cooperation and Development and other organizations, as well as by countries (e.g. the Statistics Netherlands' indicator-based report on green economy), should be used for that purpose.

#### **IV. Latest developments in environmental monitoring and assessment at the national, subnational and company levels**

59. The Working Group considered developments since its last meeting in September 2010 concerning major ongoing activities in countries, as well as any new plans, to modernize and upgrade national monitoring networks; develop inventories of air emissions,

wastewater discharges and waste; expand monitoring of biodiversity; improve data handling; enhance institutional mechanisms for data sharing and exchange; and publish environmental assessments.

60. The secretariat had developed and circulated a template to streamline the reporting by countries on latest developments in environmental monitoring and assessment. Twelve countries<sup>19</sup> had submitted written reports following that template. The reports had been circulated among the members of the Working Group and made available on the website<sup>20</sup> prior to the meeting.

61. According to the reports, some countries had progressed well in establishing the necessary policy and legislative framework to support monitoring networks (e.g., Belarus, Bosnia and Herzegovina, the former Yugoslav Republic of Macedonia, Uzbekistan). A few countries had focused on expanding and modernizing monitoring networks, mostly for air quality monitoring (e.g., Azerbaijan, Montenegro, the Russian Federation, Serbia, the former Yugoslav Republic of Macedonia, Ukraine, Uzbekistan). Some countries (e.g., Kazakhstan), planned to enhance monitoring networks in 2012–2013, while others had encountered challenges in maintaining efficient monitoring networks, mainly due to financial constraints and the lack of technical expertise (e.g., Armenia).

62. Bosnia and Herzegovina, Serbia and Uzbekistan had made progress in the development of inventories of wastewater discharges, while Ukraine had improved the preparation of waste inventories. Belarus had performed inventories of air emissions, wastewater discharges and waste on a regular basis. At the same time, some countries (e.g., Kazakhstan and Kyrgyzstan) completely lacked such inventories. Some countries had developed policy tools to support the development of such inventories (e.g., Armenia) and a few countries worked on developing inventories on project-based activities (e.g. Azerbaijan and Ukraine).

63. In the area of expanding monitoring of biodiversity significant progress was achieved in many countries (e.g., Belarus, Bosnia and Herzegovina, Kazakhstan, Montenegro and Uzbekistan). Kyrgyzstan did not have biodiversity monitoring in place, except for forests. Belarus planned to organize an international scientific conference on the assessment and monitoring of the plant world in 2013.

64. Data handling and data quality assurance, as well as the enhancement of institutional mechanisms for data sharing and exchange, were two areas that still required better efforts by countries. Generally, limited progress had been achieved in the improvement of data handling and data quality assurance. Some progress had been observed in the former Yugoslav Republic of Macedonia, the Russian Federation, Ukraine and Uzbekistan. Most countries were progressing slowly in the area of enhancement of institutional mechanisms for data sharing and exchange.

65. Good progress had been made in many countries concerning publication of environmental assessments, in particular making them available on the Internet. Some countries had advanced in using environmental indicators for preparing environmental assessments (e.g., Serbia and the former Yugoslav Republic of Macedonia). Kyrgyzstan had commenced the preparation of an indicator-based national SoE assessment report.

66. The Working Group took note of the information provided.

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<sup>19</sup> Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Kazakhstan, Kyrgyzstan, Montenegro, Russian Federation, Serbia, the former Yugoslav Republic of Macedonia, Ukraine and Uzbekistan.

<sup>20</sup> [http://www.unece.org/env/europe/monitoring/12th\\_mtg.html](http://www.unece.org/env/europe/monitoring/12th_mtg.html).

## **V. Activities of the Working Group in the next biennium**

67. Based on the achievements during the period 2009–2011, the Working Group considered priorities for its work in the next biennium (2012–2013). The Working Group agreed to continue focusing on the main areas covered by its current terms of reference. At the same time, participants highlighted that the future work should be aligned with the decision of the Astana Ministerial Conference and should focus on the development of SEIS. The development of SEIS could be supported through project-based activities and the Working Group could be used as a platform to oversee those activities.

68. A few delegations proposed the Working Group continue the valuable work of developing methodologies and guidance documents (e.g., on biodiversity, chemical contamination of soil) to support informed policymaking, similar to those developed on air quality and on water. Also, if feasible, it should consider broadening the scope of activities to include capacity development on the use of different modern ICTs for SoE monitoring, modelling and scenarios. The issue of remote and space monitoring also needed to be given due consideration.

69. Some delegates emphasized the need to review the current guidelines for SoE assessments, as well as to consider developing a set of criteria for quality validation of national SoE reports. Generally, it was proposed to gradually review the outcomes of the Working Group produced thus far with a view to revising them, as necessary. Furthermore, organizing regular meetings and capacity-development workshops for experts involved in preparing national SoE reports needed to be explored. Work also needed to be undertaken to build synergies and strengthen links with the reporting process under MEAs.

70. The Working Group requested the secretariat, in consultation with the Bureau of the Working Group, to revise the Group's Terms of Reference with a view to submitting them to the Committee on Environmental Policy for an extension of the Working Group's mandate beyond 2011.

## **VI. Other business**

71. The Working Group noted that its next meeting was scheduled to be held in Geneva on 1 and 2 November 2012.

## **IX. Closure of the meeting**

72. The Working Group invited its Chair to report the results of its twelfth session to the eighteenth session of the Committee on Environmental Policy.

73. The Working Group requested its Bureau and the secretariat to follow up on the decisions of the meeting.

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