United Nations ECE/CEP-CES/GE.1/2011/4

Economic and Social Council

Distr.: General
21 December 2011

Original: English

Economic Commission for Europe

Committee on Environmental Policy Conference of European Statisticians

Joint Task Force on Environmental Indicators

Fourth session
Geneva, 18–20 October 2011

Report of the fourth session of the Joint Task Force on Environmental Indicators

Note by the secretariat

Summary

This document presents the outcomes of the fourth session of the Joint Task Force on Environmental Indicators, which took place from 18 to 20 October 2011 in Geneva. At its fourth session the Task Force: (a) reviewed six indicators of the *Guidelines for the Application of Environmental Indicators in Eastern Europe, the Caucasus and Central Asia*;[1] (b) undertook a second reading of proposed additional indicators on inland water and seawater not covered by the Guidelines; (c) considered biodiversity indicators not covered by the Guidelines; and (d) discussed developments and plans for future work on the indicators under a project of the European Community "Shared Environmental Information System" in the European Neighbourhood countries and the Russian Federation.

[1] United Nations Publication, Sales No. No. E 07.II.E.9. Available from the ECE website at http://www.unece.org/env/documents/2007/ece/ece.belgrade.conf.2007.inf.6.e.pdf.

Contents

I. Introduction

A. Background

1. The fourth session of the Joint Task Force on Environmental Indicators was held in Geneva, Switzerland, from 18 to 20 October 2011.

B. Attendance

2. Environmental experts and statisticians from the following United Nations Economic Commission for Europe (ECE) member States attended the meeting: Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Finland, Georgia, Kazakhstan, Kyrgyzstan, Montenegro, Republic of Moldova, Russian Federation, Tajikistan, the former Yugoslav Republic of Macedonia, Ukraine and Uzbekistan.

3. Representatives of the Republic of Korea participated under article 11 of the terms of reference of ECE.

4. Representatives of the statistical office of the European Union (Eurostat) and the European Environment Agency (EEA) also attended the meeting.

5. In addition, representatives of the following intergovernmental organizations participated in the meeting: the United Nations Environment Programme (UNEP) secretariat of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (Basel Convention), the UNEP Regional Office for Europe, the United Nations Statistics Division (UNSD), the Interstate Statistical Committee of the Commonwealth of Independent States, the Russian Regional Environmental Centre, the Regional Environmental Centre for Central Asia and the Regional Environmental Centre-Moldova.

6. Representatives of non-governmental organizations (NGOs) attending the meeting included Zoi Environmental Network, the Cadaster Institute of the Russian Federation, and the International Office for Water.

C. Organizational matters

7. The Joint Task Force adopted the agenda for its fourth session as contained in document ECE/CEP-CES/GE.1/2011/3.[2]

8. The meeting was chaired by Ms. Irina Komosko (Belarus).

9. The Joint Task Force adopted the report of its third session, contained in document ECE/CEP-CES/GE.1/2011/2.

[2] Meeting documentation, including national reviews and presentations are available online from a dedicated ECE website (http://www.unece.org/stats/documents/2011.10.environ.html).

II. Review of the Guidelines for the Application of Environmental Indicators

10. The Joint Task Force discussed six further indicators from the *Guidelines for the Application of Environmental Indicators in Eastern Europe, the Caucasus and Central Asia* (ECE Guidelines). The discussion focused on the use of statistical classifications, data-collection methods and procedures for the production of the discussed indicators.

11. Prior to the session, all members of the Joint Task Force from countries of Eastern Europe, the Caucasus, Central Asia and South-Eastern Europe submitted national reviews on the discussed indicators. The reviews were prepared on the basis of a questionnaire drafted by the secretariat. The questionnaire included time-series data for the period 1990, 1995 and 2000–2010. The questionnaire also included an evaluation of the indicators in terms of effective inter-agency cooperation mechanisms, data quality assurance and control procedures for the production of the indicators and publication of the indicators in statistical compendiums and state-of-the-environment reports.

A. Waste generation

12. A representative of Eurostat made a presentation on the indicator on waste generation. Waste indicators used in the European Union (EU) comprise municipal waste generation and treatment, generation and recycling of packaging waste, and non-mineral waste generation. Eurostat has been collecting data on waste generation since the early 1990s. Recently, Eurostat developed a manual on waste statistics, which is available online at http://ec.europa.eu/eurostat/waste.

13. Municipal waste consists of waste collected by or on behalf of municipal authorities and disposed of through the waste management system. The majority of that waste comes from households, though "similar" wastes from sources such as commerce, offices and public institutions are also included. Municipal waste treatment is further broken down according to the modes of treatment, i.e. landfill, incineration, recycling and composting. There is a large difference between the 27 EU countries, both in terms of the quantity and the manner of treatment of municipal waste. The difference is partly explained by the way the municipal waste is defined: it gives some freedom to countries to include or exclude certain materials and sources, and also to decide on whether to include or exclude packaging waste. During the meeting, several areas where problems for reporting exist were given as an example, in particular, the treatment of mechanical biological treatment, accounting for import/export of waste in a small EU country, and measuring the efficiency of recycling.

14. The EU regulation on waste statistics is the main source for developing indicators in the EU countries. In practice, the total waste is dominated by the mineral wastes, and therefore, the evaluation of non-mineral waste has received less attention. Nevertheless, Eurostat has developed an indicator on non-mineral waste, in particular by excluding specific sectors like mining (40 per cent of the mineral waste) and construction (50 per cent of the mineral waste). In some countries, where significant amounts of hazardous waste are not reported, this approach led to certain distortions, for example in the case of non-accountable contaminated soils in Germany. The indicator on non-mineral waste generation is taken up as a sustainable development indicator by the EU.

15. The hazardous waste treatment indicator is another indicator that has been developed by Eurostat, and covers waste from households and all economic sectors. The indicator also includes secondary waste, which makes its interpretation dubious: a positive trend might show an increase in generated hazardous waste but might also show that more of the

hazardous waste (including secondary waste) is being treated. The development of that indicator is still in progress. Other indicators that Eurostat plans to develop concern waste recycling and landfilling of waste.

16. In response to a question on the quality assurance procedures, the Eurostat representative explained that the data is validated on a regular basis. If a break in the series is found, Eurostat contacts the country for further information. For example, in the case of Bulgaria, a waste indicator had showed more than a tenfold increase, which was explained to be due to the inclusion of the mining industry in 2008.

17. In the discussion, Eurostat informed that the waste indicators are also used to monitor targets, for example targets on the increase in recycling of construction and demolition and household waste. Currently, Eurostat considers the inclusion of the indicator on municipal waste to monitor progress towards a target. In the future, Eurostat is planning to cover mineral waste as part of their regular waste statistics.

18. A representative of the UNSD provided an analysis of the indicator on waste generation as described in the Guidelines. Attention was advised when analysing the waste by origin: by main economic activities (International Standard Industrial Classification of All Economic Activities (ISIC)) or by sectors, i.e. “industrial” and “municipal” (which were not ISIC categories). Household waste is in general classified as municipal waste, however the municipal waste has a much larger scope. It was also noted that, while the Guidelines briefly described municipal waste in the section on data collection, there is no description for industrial waste. There are also problems with data; for example, data are rarely available for total waste generation, while they are available for selected industries or waste types/streams. The speaker warned that varying waste definitions and varying coverage might cause big differences and affect comparability.

19. In the discussion, participants confirmed that definitions and units of measure are of great importance and create the most problems when compiling waste statistics. The best national practices should be collected to establish international methodologies based on clear standards. It was pointed out that, while it is important to clarify methodologies, some basic data should be improved, for example discrepancies due to underreporting of the actual waste generated by enterprises for tax reasons. Methodologies are available for estimation of waste generated in places, where there is no waste collection. Those methodologies have been developed by waste experts and are described in the literature. Consideration of waste generated by the agricultural and forestry sectors was mentioned as important.

20. A consultant to the secretariat presented a summary of national reviews on the indicator on waste generation. Twelve countries have reported on that indicator. All countries, except one, have reported data on municipal waste. Two countries have presented data on waste generation. Most of the countries have data on municipal waste; however, only Armenia, Kazakhstan, Kyrgyzstan and Tajikistan have data on waste generation in households. Four countries have no data related to economic activities of companies. In one country information on waste generation is not published.

21. The Joint Task Force recommended further work to develop methodological and other work related to waste statistics.

B. Final waste disposal

22. A representative of the UNSD presented an analysis of the indicator on final waste disposal as described in the Guidelines. The indicator cover the total amount of waste generated, broken down by sector (industrial and solid municipal waste), by negative impact (hazardous waste) and by type of disposal: incineration (without energy recovery or

use as a fuel) or landfilling on a controlled site. It was noted that it is important to clarify whether hazardous waste is included or excluded from the total disposed waste and from disposed waste according to sectors. It was advised to account for both controlled and non-controlled landfills (non-controlled landfills are such that are not properly equipped with safety facilities). Waste incinerated at the place of generation is not mentioned in the description of the indicator; however, it should be included in the calculation of total incinerated waste.

23. In the following discussion, it was noted that information on the indicator on final disposal of industrial non-hazardous waste is not readily available at internationally level. Standard definitions are not provided in the questionnaires developed by the Organization for Economic Cooperation and Development (OECD) and UNSD. Transboundary movements of hazardous waste are also not covered in detail in the questionnaires.

24. Eurostat noted the difficulty in making the link between the source where the waste is generated and the way in which it is disposed. It is almost impossible to say which material generated from a certain manufacturing sector is the material that is treated in a certain way. The UNSD has tried to collect data on final disposal of industrial non-hazardous waste. However, countries do not collect this type of data and very often final disposal of industrial non-hazardous waste ends up either included as final disposal of hazardous waste or as municipal waste.

25. A consultant to the secretariat presented a summary of national reviews on the indicator on final waste disposal. That indicator is closely linked to the indicator on waste generation, and therefore, similar reporting problems have been identified. Nine countries have provided data on disposal of municipal waste and industrial non-hazardous waste. Most of the landfills where municipal waste is disposed are being monitored. Two countries have not provided information on industrial non-hazardous waste. Some countries have provided data on waste generation of certain types of waste but have not provided data on their disposal.

26. In the discussion, some countries reported that there are no particular requirements, i.e. sanitary requirements applied to landfills, and therefore, it is difficult to provide data on non-controlled landfills. Countries managed to prepare the indicators in the requested unit of measurement and did not report problems in switching from cubic meters into tons.

27. The Joint Task Force decided to update the questionnaire in light of the discussions held. The Joint Task Force asked the countries to make a new submission. The updated questionnaire will allow the countries to submit data on municipal waste collection in cubic meters rather than in tons, if such data is available. The questionnaire will also include a line on hazardous municipal waste.

C. Transboundary movements of hazardous waste

28. The UNEP secretariat of the Basel Convention, in its presentation, noted that the overarching objective of the Basel Convention is to protect human health and the environment against the adverse effects of hazardous waste. The Convention covers a range of wastes defined as “hazardous”, based on their origin, composition and characteristics, as well as two types of “other wastes” - household waste and incinerator ash. Hazardous waste is further grouped into waste streams, e.g. clinical wastes from medical care in hospitals, and waste having specific chemicals (copper compounds, mercury, etc). The Basel Convention defines hazardous and non-hazardous waste, while it allows for the countries to adapt its legislation to its national needs. For example in the case of the transboundary movement of waste, some countries place a greater emphasis on the import side since it is easier to account for revenues from waste import, and less on the export side.

29. Every year, Parties are obliged to submit to the secretariat of the Convention a report on the previous year. The national reporting format includes formal reporting as well as statistical information, which has to be updated every year, including data on hazardous waste and non-hazardous waste. Important challenge is to have an information system in place and compile the data from different sources. For that purpose, the secretariat of the Convention has established an inventory. Unfortunately, the record of national reporting to the Convention is irregular: for example, 108 parties reported in 2001, while only 70 parties reported in 2006.

30. In the discussion, UNEP noted that quality checks on compliance with the reporting requirements are not yet carried out on a continuous basis. Cross-checking of transboundary movement data with other statistics, e.g. statistics from customs, could be useful. Eurostat, for its part, affirmed that they conduct cross-checks on the data and that mismatches are frequently found, in most cases due to problems with classifications. The Eurostat representative gave a positive assessment of the quality of the data on base materials collected under the Basel Convention; however, the representative noted that there are problems with waste data collected from trade statistics, for example problems with accounting for waste shipped for recycling. It was noted that the Convention does not include radioactive waste.

31. A consultant to the ECE secretariat presented a summary of national reviews on the indicator on transboundary movements of hazardous waste. Although all the countries reporting to the Joint Task Force are parties to the Basel Convention, only eight countries have presented information on that indicator (Armenia, Azerbaijan, Belarus, Kazakhstan, Republic of Moldova, Russian Federation and Ukraine). A few countries reported either import or export data on hazardous waste. Some countries do not report information on how the imported waste is treated in the country.

32. The Joint Task Force considered that only two countries (Belarus and the Russian Federation) have provided a complete response to the indicator on transboundary movements of hazardous waste. Countries reported difficulties in identifying whether imported and/or exported waste contains hazardous waste. The Joint Task Force recommended that countries that are parties to the Basel Convention should use data from the national reports submitted to the secretariat of Basel Convention (see http://www.basel.int, select “Countries”, select “Reporting database”) to provide data on the discussed indicators.

33. The Joint Task Force decided to update the questionnaire with regard to the transboundary movement of hazardous waste according to the discussions and asked the countries to make new submissions in line with the updated questionnaire.

D. Ambient air quality in urban areas

34. A consultant to the ECE secretariat presented the experience of the Czech Republic in air quality monitoring and assessment. The legal background in the Czech Republic comprises the EU directives on air quality, data quality objectives, assessment thresholds, location of sampling points, minimum number of sampling points, and reference methods. With regard to air quality standards, the Czech Republic has set targets, including limit values and target values for the following pollutants with a negative impact on human health:

(a) Limit values (mandatory with deadlines): coarse particulate matter (PM_{10}), fine particular matter ($PM_{2.5}$), sulphur dioxide (SO_2), nitrogen dioxide (NO_2), carbon monoxide (CO), benzene and lead (Pb);

(b) Target values (to be achieved where possible with deadlines): $PM_{2.5}$, ozone (O3), arsenic (As), cadmium (Cd), nickel (Ni) and Benzo(a)pyrene (BaP).

35. Alert thresholds are defined for O3, NO_2, SO_2 and PM_{10}. In addition, long-term objectives and thresholds are set for ozone levels. The speaker noted that the increase in ozone is a pan-European problem and could not be solved by one country only. The Czech Republic applies special standards for $PM_{2.5}$. The monitoring network is extensive: in total, it comprised 212 stations on air quality, including 126 automated stations. Most of the stations are operated by the Czech Hydrometeorological Institute. There are stations either operated by corporations — including some 12 stations operated by the Czech power companies — or owned by corporations but operated by the Hydrometeorological Institute. Other services (e.g. the health service) also monitor air quality, for example in cities, to assess impact of polluted air on human health. The Czech Republic is a small country and does not have municipal networks as, for instance, the Russian Federation does.

36. In the discussion, it was further clarified that manual monitoring stations are used along with the automated stations. The data collected at the manual and automated stations are correlated. The Czech statistical office is a user rather than a producer of data on air quality. While the data is collected by the Ministry of Environment, the statistical office has a more active role in supplying data on emissions, such as emissions from small stationary sources (e.g. emissions from household heating with coal). The representative of the UNSD stressed the important role of statistical offices in providing methods to transform and aggregate monitoring data into meaningful statistics on air quality.

37. Furthermore, a consultant to the secretariat presented a summary of national reviews on the indicator on ambient air quality in urban areas. The majority of counties reported good quality data on air monitoring. All countries measure SO_2 and NO_2. Most countries measure the content of CO and dust. In recent years, Armenia, Belarus, Bosnia and Herzegovina, Montenegro, Serbia and the former Yugoslav Republic of Macedonia, have introduced routine measurement of PM_{10} by means of automatic monitoring stations. Except for two countries, all others regularly publish data on air quality monitoring. In most countries, the hydrometeorological institutions are responsible for measuring air quality.

38. The Joint Task Force decided to update the questionnaire with regard to ambient air quality in urban settings in accordance with the discussions, and asked the countries to make a new submission in line with the updated questionnaire.

E. Threatened and protected species

39. A representative of UNEP made a presentation on the indicator on threatened and protected species. The Convention on Biological Diversity has identified 17 headline indicators from seven focal areas for assessing progress towards the 2010 target at a global level. The focal area “Status and trends of the components of biodiversity” includes five headline indicators:

(a) Trends in the extent of selected biomes, ecosystems and habitats;

(b) Trends in abundance and distribution of selected species;

(c) Coverage of protected areas;

(d) Change in the status of threatened and/or protected species;

(e) Trends in genetic diversity.

40. Each headline indicator contains composite indicators. Many of the biodiversity indicators are fully developed and ready for immediate use at the global scale, while others required further improvement and testing. Under the headline indicator “Change in status of

threatened and/or protected species", UNEP uses the Red List Index for European species. To date, the Red List Index has been calculated only for bird species at a European level. Data from NGOs, e.g. bird-watching organizations, are also used. One of the UNEP objectives is to improve biodiversity monitoring and encourage monitoring at a national level in order to make possible the analysis at a pan-European level. In that connection, the 2010 Biodiversity Indicators Partnership (2010 BIP) — a global initiative, funded by the Global Environmental Facility (GEF) — brought together over 40 international organizations to develop biodiversity indicators and assess biodiversity loss. The 2010 BIP secretariat is hosted by the UNEP-World Conservation Monitoring Centre. Further information on global biodiversity indicators and trends can be found at http://www.bipindicators.net/.

41. A consultant to the secretariat presented a summary of national reviews on the indicator on threatened and protected species. Eleven countries (Armenia, Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, Republic of Moldova, Russian Federation, Serbia, Tajikistan, the former Yugoslav Republic of Macedonia and Uzbekistan) have submitted data on that indicator. The most complete submissions have been received from the Russian Federation, Belarus, Kazakhstan, Kyrgyzstan, and partly from Tajikistan. Armenia, Belarus, Kazakhstan, Kyrgyzstan, the Republic of Moldova, the Russian Federation and Serbia have analysed the dynamics of change in the number of protected and endangered species. Information in some form is published in all countries.

42. In the discussion, it was noted that inventories of species are produced every 5 or 10 years. Some countries remarked that, while in the past the inventories have been carried out on a regular basis, more recently they have not been maintained. The countries considered the indicator on total number of species and total number of endangered species as the most important biodiversity indicators.

43. The Joint Task Force decided to update the questionnaire according to the discussions on threatened and protected species and asked the countries to make a new submission in line with the updated questionnaire.

F. Trends in the number and distribution of selected species

44. A representative of UNEP explained that, under the headline indicator "Trends in abundance and distribution of selected species", UNEP uses an indicator on abundance and distribution of selected species. Currently, the indicator focused on bird species and butterflies. In addition to trends, the indicator also gives the opportunity to make an assessment of set-aside policies. Conservation measures adopted under the EU Birds Directive[3] have proven to some extent effective in the recovery of bird populations. For example, the agri-environmental measures have been shown to reverse bird declines at local levels. Data are also collected from NGOs and other institutions, e.g. the association "Butterfly Conservation Europe".

45. A consultant to the secretariat presented a summary of national reviews on the indicator on trends in the number and distribution of selected species. Ten countries have provided information on that indicator; however, only two countries (Kazakhstan and the Russian Federation) have provided information that met the requirements of the indicator. Other countries need to significantly adjust their data collection and consider publishing data on that indicator.

[3] Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds.

46. In the discussion, it was noted that focusing on a few indicators would help prioritize and improve the data quality. The countries should use innovative ways of collecting information and work together with other organizations collecting data outside official statistics. Currently, the information on biodiversity is sporadic, collected in an inconsistent manner and not well coordinated on the national level. Biodiversity is complicated to measure and most often data on biodiversity is collected only in relation to protected areas. Developments in biodiversity beyond protected areas, however, also need special attention. Areas of forestry, fisheries, etc. are strongly affected by economic activities and should be included in the monitoring system.

47. The Joint Task Force decided to update the questionnaire according to the discussions on trends in the number and distribution of selected species and asked the countries to make a new submission in line with the updated questionnaire.

III. Second reading of indicators on inland water and seawater not covered by the Guidelines

48. The Joint Task Force, at its third session, has held a preliminary discussion of an informal paper on indicators for inland water and seawater not covered by the Guidelines prepared by a consultant to the secretariat. The proposed indicators included:

(a) Total water use;

(b) Water supply industry;

(c) Population connected to wastewater treatment;

(d) Wastewater treatment facilities;

(e) Concentration of pollutants in seawater and sediments (except nutrients).

49. The Joint Task Force thanked Armenia and the Russian Federation for the useful comments on the proposed additional indicators.

50. The representative from the UNSD made a presentation on the indicators in the context of the water indicators already covered by the ECE Guidelines. Those indicators are renewable freshwater resources, freshwater abstraction, household water use, water losses and reuse and recycling. The speaker continued with a discussion on the proposed new water indicators to be added to the Guidelines, as set out below.

A. Proposed new water indicators

(a) Total water use

51. The value added of the indicator on total water use accounts for water sources other than abstraction from freshwater resources such as exports/imports, desalination and reuse of water. It was proposed to construct the indicator of total water use by economic activity related to the value added produced by that activity.

52. In the discussion that followed, it was clarified that in water statistics terminology, “consumed” water representes that part of the water that is not available anymore for “use” because it has evaporated, or has been incorporated into products. The terms “water consumption” and “water use”, therefore, have two different meanings.

(b) Water supply industry

53. The suggested indicator "Water supply industry" covers two different indicators: "total supplied water by supply categories" (self-supplied water and water supplied by the public water supply industry); and "Population connected to the water supply industry". The first indicator does not add new information to the indicator on freshwater abstraction already covered by the Guidelines, nor does it fit into the title of the suggested indicator. It was therefore proposed to introduce the following two new indicators to measure the effectiveness of the water supply industry:

(a) "Population connected to the water supply industry";

(b) "Water supplied by the water supply industry to economic activities and households".

(c) Population connected to wastewater treatment

54. The speaker underlined that the indicator on "Population connected to wastewater treatment" contains important information and can complement well the indicator on population connected to the water supply industry.

55. The Joint Task Force expressed concerns in obtaining information on the population connected to wastewater treatment facilities. Information on population having access to sanitation system is available; however, additional indicators are needed to assess how the wastewater produced by the households is treated.

(d) Wastewater treatment facilities

56. The suggested new indicator on wastewater treatment facilities is a measure of the capacity of the existing infrastructure for wastewater treatment. Currently, the existing indicator in the ECE Guidelines is the volume/share of non-treated wastewaters. The speaker noted that in order to provide a full picture on wastewater treatment, the indicator on wastewater treatment facilities can be constructed using a measure on volumes of treated wastewater and the volume of the removed biological oxygen demand (BOD).

57. The consultant to the secretariat specified that the indicator is closely related to the way the wastewater is treated, i.e. mechanical as opposed to biological treatment. The applied measures include the BOD and chemical oxygen demand (COD) emissions as parameters for water quality. It was specified that the BOD emissions are a better indicator for municipal wastewater, while COD emissions are a better indicator for industrial wastewater treatment.

(e) Concentration of pollutants in seawater and sediments (except nutrients)

58. No significant comments were made on the proposed indicator on the concentration of pollutants in seawater and sediments (except nutrients). The Joint Task Force asked countries to provide information in order to estimate the usefulness of the indicator based on the available data.

B. Conclusion of the Joint Task Force on new indicators related to water

59. In conclusion to the discussion on the proposed new indicators related to water, the Joint Task Force:

(a) Accepted the proposal for the indicator "Total water use";

(b) Agreed to develop the indicators on "Population connected to water supply industry" and on "Water supplied by the water supply industry to economic activities and

households". The Joint Task Force asked the ECE consultant to work further on those indicators;

(c) Requested the ECE secretariat to clarify the definition and the exact description of the indicator on "Wastewater treatment facilities";

(d) Agreed to invite countries to provide written comments on the indicator "Concentration of pollutants in seawater and sediments (except nutrients)".

IV. Consideration of biodiversity indicators not covered by the Guidelines

60. The Joint Task Force discussed proposals for additional indicators on biodiversity prepared by a consultant to the secretariat. The consultant gave an overview of the international state-of-play on biodiversity indicators. At present, the biggest and most advanced international system of biodiversity indicators — Streamlining European 2010 Biodiversity Indicators — is developed by EEA. It contained 26 indicators. EEA also maintains three more biodiversity indicators as part of its "Core set of indicators". OECD and Eurostat have developed seven biodiversity indicators related to "Wildlife". The ECE Guidelines now comprise eight indicators that covered protected areas, forests and other woodlands, threatened and protected species, trends in the number and distribution of protected species, land uptake, BOD and concentration of nutrients in rivers, nutrients in freshwater and nutrients in coastal seawaters.

61. The new proposed indicators on biodiversity include:

(a) Biosphere reserves and wetlands of international importance (state);

(b) Catches of fish and other aquatic animals and products (state and pressure);

(c) Invasive alien species (pressure).

62. The selected indicators were based on the work of OECD.

63. In the discussion, it was stressed that the indicators should measure the extent of the impact. It was noted that biosphere reserves and wetlands are different natural resources and it was proposed to address the two issues by separate indicators.

64. With regard to the indicator on catches of fish and other aquatic animals and products, it was proposed to consult with the guidelines of the International Council for Exploration of the Sea. The guidelines are currently being developed and discuss how to measure maximum sustainability yield for each aquatic species (see http://www.ices.dk). The measurement of sustainability of the catch levels of fish was noted as a crucial issue, also in relation to the Millennium Development Goals.

65. Furthermore, participants discussed in depth the indicator on invasive alien species and the meaning of "invasive". Invasive species are considered species that affect the biodiversity that was already in place. Species could be considered invasive if they are introduced by chance or on purpose to the ecosystem. Invasive alien species might cause damage with an economic impact, e.g. on food availability, etc. The indicator on invasive alien species is considered to be an important one, in particular in the context of climate change.

66. The Joint Task Force took note of the proposal for new biodiversity indicators. It agreed to continue discussing those indicators during its next meeting. The participants were invited to consult with their national biodiversity experts in preparing written comments.

V. Discussion of developments and plans for future work on indicators under a project for countries in Eastern Europe, the Caucasus and the Russian Federation

67. The Deputy Director of EEA, co-Chair of the session under the agenda item on discussion of developments and plans for future work on indicators under a project for countries in Eastern Europe, the Caucasus and the Russian Federation, outlined recent developments under the Shared Environment Information System (SEIS) project, financed under the European Neighbourhood and Partnership Instrument (ENPI).

68. The co-Chair provided information on the *Europe's Environment — an Assessment of Assessments* report, which EEA had prepared for the Seventh "Environment for Europe" Ministerial Conference held in September 2011 in Astana. In preparing the report, EEA had reviewed more than 800 documents covering national and multinational assessments within the pan-European region with relevance to water quality/management and green economy/resource efficiency.

69. The co-Chair also briefed participants on the recent meeting and further progress on the pan-European initiative, Streamlining European 2010 Biodiversity Indicators. The objective of the meeting had been to take stock of the development of pan-European standards in the area of biodiversity.

70. Since the third session of the Joint Task Force, the EEA team, together with an ECE representative, visited the Republic of Moldova (6–7 September 2011) and Belarus (13–14 September 2011). The team had met with the National Focal Points, various national actors and decision makers in the environmental field. The country visits aimed to engage experts in identified priority areas for the initial phase of cooperation, as well as to identify country-specific issues, relevant data flows, and regional priorities that should support the development of SEIS across the ENPI East region. Following the country visits, Country Reports on the state of play will be prepared together with action plans for the next phase of work.

71. The National Focal Points from the Republic of Moldova informed about the discussions during the visit. The experts from the Republic of Moldova had reported on their present and future priorities on environmental observations and data collection, and on ways to strengthen the cooperation between the statistical office and the Ministry of Environment. Issues concerning waste and water statistics, among others, were actively discussed.

72. A representative of Belarus also made a brief presentation of the visit. A national seminar had been organized with the participation of some 40 representatives of national agencies and the statistical office, including also NGOs, research institutes and monitoring centres. The participants had represented all the regions of the country. Concrete steps were identified to enhance the monitoring system in the country included developing guidelines and ensuring joint use of environmental data, training staff, and modelling environment projects. One of the priorities mentioned by Belarus was to adapt the information so that it could easily reach the public at large. At present, Belarus is preparing a Country Report, which is expected to be ready by the end of October 2011.

73. The Country Report for Armenia had been finalized and published on the project website;[4] the Country Reports from the visits to Georgia, Azerbaijan and the Republic of Moldova and Belarus will be available shortly.

[4] http://enpi-seis.ew.eea.europa.eu/project-activities/country-report/copy_of_country-report.

74. Country visits to Ukraine and the Russian Federation are planned to take place in November 2011.

75. Several participants pointed out that indicators produced during the work of the Joint Task Force are now included in national statistical compilations. Representatives of Belarus and the Republic of Moldova reported on new indicator-based publications. Armenia has integrated the production of indicators from the ECE Guidelines in its national statistical reporting. The Russian Federation collects data on an environmental expenditure indicator.

76. A consultant from Zoi Environmental Network showed an example of a consolidated indicator on waste calculated for the entire West Balkan region. A pocket book with a set of West Balkan indicators will be produced in the near future.

77. Participants discussed the state of development of the environment indicators already reviewed by the Joint Task Force. It was proposed to make a survey on how the indicators already reviewed through the Joint Task Force meetings are currently being developed, updated and used in the countries for environmental reporting. Work on identifying suitable indicators to be compiled in a small set of indicators, based on the review in the Joint Task Force, will be also part of the upcoming ENPI-SEIS project activities in 2012.

78. The meeting of the Steering Committee of the ENPI-SEIS project that EEA is organizing on 24-25 November 2011 in Copenhagen will consider, inter alia:

(a) Which nationally produced indicators in the ECE Guidelines are now ready (compatible, available, etc.) for inclusion in a set of indicators compiled across the seven ENPI-SEIS project countries?

(b) Which indicators in the ECE Guidelines should be considered by the Joint Task Force in 2012?

(c) What type of possible support from Joint Task Force and/or the ENPI-SEIS project might be needed to help the countries to develop, regularly update and effectively use those and other indicators?

VI. The way forward

79. The Joint Task Force agreed to review at its next meeting the indicators that had been discussed at the introductory session of the Joint Task Force, but for which data had not yet been provided. Those are: emissions of pollutants into the atmospheric air; greenhouse gas emissions; household water use per capita; and waste reuse and recycling. The Joint Task Force will also review at its next meeting the indicator on water losses, which has not yet been discussed.

80. The Joint Task Force agreed on the following next steps:

(a) The secretariat will prepare a revised questionnaire on the six indicators reviewed during the meeting, and will send it to countries. The deadline for completion of the revised questionnaire is **15 January 2012**;

(b) Biodiversity indicators for areas beyond protected areas, like forestry and fisheries, should be developed and included in national monitoring systems. The Joint Task Force invited countries to submit written comments on the additional biodiversity indicators discussed during the meeting by **15 January 2012**;

(c) The proposal for inclusion of additional indicators on inland water and seawater not covered by the Guidelines will be revised according to the discussions made during the meeting. Those indicators include: total water use; public water supply;

connection to public water supply; population connected to wastewater treatment; wastewater treatment facilities; and concentration of pollutants in coastal seawater and sediments (except nutrients). Written comments by countries on those indicators should be submitted to the secretariat by **15 January 2012**. The Joint Task Force will consider the adoption of the revised proposal during its next meeting.

VII. Other business

81. The Joint Task Force thanked donor Governments and EEA for providing travel funds for entitled members of the Joint Task Force.