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Economic Commission for Europe**Committee on Environmental Policy****Conference of European Statisticians****Joint Task Force on Environmental Indicators****Second session**

Geneva, 1–2 September 2010

**Report of the second session of the Joint Task Force on
Environmental Indicators****Note by the secretariat***Summary*

This document presents the outcomes of the meeting of the Joint Task Force on Environmental Indicators that took place on 1 and 2 September 2010 in Geneva. At its second session the Task Force: (a) approved amendments to five indicators that were discussed at the two previous meetings on environmental indicators; (b) reviewed in detail five further indicators from the “Guidelines for the Application of Environmental Indicators in Eastern Europe, Caucasus and Central Asia”;¹ (c) had a second reading of the energy and environment indicators not covered by the Guidelines, and agreed on the texts of two of these additional indicators; (d) discussed general principles related to the production of environmental indicators; and (e) recommended the extension of its mandate through the 2011–2012 biennium.²

¹ Available from the United Nations Economic Commission for Europe website at <http://www.unece.org/env/europe/monitoring/Belgrade/CRP1.Indicators.En%20edited.MK..pdf>.

² Meeting documentation, including national reviews and presentations are available online from a dedicated UNECE website at <http://www.unece.org/stats/documents/2010.09.enviro.htm>.

I. Introduction

A. Background

1. The second session of the Joint Task Force on Environmental Indicators was held in Geneva on 1 and 2 September 2010.

B. Attendance

2. Environmental experts and statisticians from the following United Nations Economic Commission for Europe (UNECE) member States took part in the second meeting: Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Finland, Georgia, Kazakhstan, Kyrgyzstan, Montenegro, Norway, Republic of Moldova, Russian Federation, Serbia, Tajikistan, the former Yugoslav Republic of Macedonia and Ukraine.

3. Representatives of the European Environment Agency (EEA) attended the meeting. Representatives of the International Energy Agency (IEA), the World Health Organization (WHO) European Centre for Environment and Health (ECEH), and the research institute “Cadastre” of the Russian Federation were also in attendance.

C. Organizational matters

4. In the absence of the Joint Task Force Chair, the session was chaired by Mr. Svein Homstvedt (Norway), Vice-Chair. In this task he was assisted by Ms. Valentina Vasylenko (Ukraine), Vice-Chair.

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

A. Approval of amendments to indicators that were discussed at the two previous meetings on environmental indicators

5. The Joint Task Force reviewed the revised texts of the following five indicators discussed at the two previous meetings — emissions of pollutants into the atmospheric air; greenhouse gas emissions; household water use per capita; land uptake; and water use and recycling — as contained in document ECE/CEP-CES/GE.1/2010/8. It agreed on the revised texts contained in the above document, with amendments proposed by the Russian Federation to the indicators for emissions of pollutants into the atmospheric air and for greenhouse gas emissions (see annex to the present report).

B. Review of additional indicators from the Guidelines

6. The Joint Task Force discussed five further indicators from the Guidelines for the Application of Environmental Indicators in Eastern Europe, Caucasus and Central Asia. The discussion focused on the use of statistical classifications, data-collection methods and procedures for the production of indicators. Prior to the session members of the Joint Task Force from countries of Eastern Europe, the Caucasus, Central Asia and South-Eastern Europe had submitted national reviews of the application of the indicators in question in

their countries. Reviews had been prepared on the basis of a questionnaire circulated by the secretariat. They contained time-series data on the indicators for 2003–2009, described inter-agency cooperation mechanisms to produce each indicator, explained procedures applied to ensure data quality assurance and control and provided information on the publication of indicators in statistical compendiums and state-of-the-environment reports.

1. Reuse and recycling of freshwater

7. The secretariat made a presentation on the indicator on reuse and recycling of freshwater on behalf of the United Nations Statistics Division (UNSD). The difference between the concepts of reuse and recycling was highlighted. It was recommended that the indicator should cover only recycling of water within establishments to reflect technological savings of water. The name of the indicator in this case should be “recycling of freshwater”. It was proposed to add the International Recommendations for Water Statistics (RWS) and the questionnaire of the Organization for Economic Cooperation and Development (OECD)/Eurostat to international references, as well as to update information on data sources and reporting in the indicator description.

8. A consultant to the secretariat presented a summary of national reviews on this indicator: five countries did not provide data; not all countries reported data on all parameters of the indicator; and the overall proportion of reused and recycled water in the total volume of freshwater used in different countries ranged significantly.

9. In the discussion, it was pointed out that the data reported by countries was not appropriate for cross-country comparisons due to different interpretations of the description of the indicator. A more concrete and precise description was needed, taking into account the conceptual issues discussed in the presentation. Moreover, it was important to specify what the actual use of water was, e.g., in hydropower 30–40 per cent of the water used was used for production needs and it was reused many times.

10. In some cases, big data variations within the same countries for the period from 2003 to 2009 were noted. It was also mentioned that data quality was insufficient, especially in the area of agriculture (irrigation), and therefore some countries had not submitted data. Sound and good data was difficult to compile also because sometimes the collection of data on water was spread among several institutions. Further work was needed to harmonize the definitions between countries.

2. Polluted (non-treated) wastewaters

11. The secretariat made a presentation on the indicator for polluted (non-treated) wastewaters on behalf of UNSD. It was pointed out that the definition of this indicator should clarify whether non-treated water included all non-treated wastewater or only non-treated wastewater that was polluted. In case polluted non-treated water was the chosen option, then the term “polluted” should be defined. It should also be made clear whether the indicator referred to all wastewater generated or only to the part that was delivered to wastewater treatment plants. Another issue was the efficiency of treatment plants. Wastewaters discharged by a treatment plant might remain untreated because of insufficient capacity or inefficient use of the plant. To evaluate the quality of water processing it might be necessary to introduce a separate indicator. A formula for non-treated wastewater was proposed as a share of water returned to the environment without treatment or with insufficient treatment in the total volume of wastewater generated.

12. A consultant to the secretariat presented a summary of national reviews on the indicator: the proportion of untreated wastewater discharged into water bodies ranged significantly between different countries; data on wastewater by economic activities was

often incomplete or missing; and not all countries had data on wastewater discharged by households.

13. Participants appreciated the questions raised by UNSD on the distinction between polluted and non-polluted non-treated wastewaters. It was pointed out, however, that that was only part of the problem. The definition of non-treated wastewater needed to be further clarified. It should determine, in particular, whether rainwater was included as non-treated wastewater or not. It was mentioned that water balance data was difficult to produce and that the calculation of surface water was complex and based on models that were not easily accessible. The issue of the inefficiency of treatment plants was also considered important. It was proposed to have a separate (new) indicator on treated but not sufficiently cleaned wastewater. Finally, it was noted that there were substantial variations between countries and within countries across years. Further work was thus needed both on the quality of the data and the definitions.

3. Forest and other wooded land

14. A representative of the UNECE Trade and Timber Division made a presentation on the indicator on forest and other wooded land. Multiple roles of forests, including those related to biodiversity and climate change, were highlighted. Specific sub-indicators on forest and other wooded land were also presented. The existing reporting of data on forest was relatively good, unlike the data reporting on other wooded land. Data collection on forests at the international level (the Food and Agriculture Organization of the United Nations (FAO) Global Forest Resources Assessment and the State of Europe's Forests) were also presented. It was noted that classifications of forest areas differed significantly between countries and work on harmonization of those classifications was under way.

15. A consultant to the secretariat presented a summary of national reviews on the indicator: data presented in the national reviews was relatively complete; in six countries the forest area was increasing and only in one was decreasing; in most countries that reported on protected forest, the percentage of protected forest in the total forest stock was relatively high; in two countries the protected forest was a very small percent of total forest; and some countries reported that there was no information on data quality and assurance procedures applied to forest data submitted.

16. A member of the Joint Task Force from the Russian Federation pointed out difficulties in reporting data when producing the national review. The guidelines in the national legislation did not match international standards. The reporting process was also affected by changes in the structure of Government institutions responsible in the area. In the past, forest data reporting in the country was done every five years. Since 2008, data had been reported yearly.

17. It was pointed out in the discussion that the interpretation of protected forest might vary depending, for example, on whether the definition was set out in legislation or whether parks and protected areas with forests were also counted. The definition of forests undisturbed by humans (primary forests) did not exist in all countries; instead there were definitions of reserve forest or forest that was closed for economic activities. The biodiversity of forest was mentioned as an important sub-indicator. Tree species composition and forest naturalness should allow for characterizing that facet of forests. It was mentioned that in some cases the FAO methodology on forest indicators was not compatible with a pan-European one. The overlap between the two reporting systems was noted as counterproductive. Participants appreciated progress made in harmonizing those systems so far and supported further work to achieve a complete harmonization of the two reporting systems in the near future.

4. Energy intensity

18. The consultant from the secretariat made a presentation on the energy intensity indicator and noted that the gross domestic product (GDP) in constant prices should be used as denominator when calculating the indicator. The consultant proposed that the indicator description be amended in the Guideline sections on the unit of measurement, data collection and reporting, and references at the international level. The speaker illustrated the recent developments on the energy intensity indicator, which showed a decreasing trend. The reason was that the real GDP was growing faster than energy consumption. Another graph showed that the households sector was the sector with the highest energy intensity, followed by transport; services, agriculture and other; and industry.

19. A representative of IEA made a presentation on energy-efficiency data collected and published by IEA. The energy intensity indicator provided information on how much energy was saved across sectors and helped to analyse efforts to reduce greenhouse gas emissions. Data collected from countries were used by IEA to produce energy-efficiency indicators in different sectors (industry, services, residential sector, transport and electricity generation). IEA was also preparing a manual on end-use energy consumption data that would present best practices from country examples.

20. A consultant to the secretariat presented a summary of 14 national reviews on the indicator: half of the countries did not report data; only three countries reported the publication of indicators in statistical compilations and reports on the state of the environment; and in all countries the statistical agencies were responsible for reporting data on this indicator.

21. In the ensuing discussion progress made in the development of definitions and models in the area of energy efficiency was mentioned. Participants highlighted problems with differences across countries with the use of units of measurements, difficulties in calculating energy balances and unavailability of or incomplete data on energy consumed by some economic sectors.

5. Composition of road motor vehicle fleet by fuel type

22. The secretary to the UNECE Working Party of Transport Statistics made a presentation on the indicator for composition of road motor vehicle fleet by fuel type. He noted that the availability of data on road vehicles was very low, especially in countries of Eastern Europe, the Caucasus, Central Asia, South-Eastern Europe and North America. The speaker presented examples of countries' reporting on stock of lorries by fuel type, new car registrations by fuel type and engine capacity. He reported on ongoing activities by transport statisticians including a pilot questionnaire on road traffic performance (vehicle kilometres), data collection on goods vehicles ventilated by tonnage and fuel type and on buses and coaches ventilated by fuel type, as well as on the elaboration of definitions of vehicle energy types, e.g., biofuels, flex fuels and hybrids.

23. In the follow-up discussion the need for an improved indicator, one which would better demonstrate the impact of transport on environment (e.g. the amount of fuel used by transport), was stressed. Private transport was also mentioned as an area where data was difficult to obtain. Railroad and water transport data should also be used to evaluate the transport impact on the environment. Other types of transport, like agricultural vehicles, should also be taken into consideration. In response to queries, it was clarified that urban transport was not covered in the indicator under discussion. It was recommended to continue the work on indicators on transport by identifying further data sources available and by specifying the purpose which the indicator should serve.

III. Second reading of energy and environment indicators not covered by the Guidelines

24. The consultant to the secretariat made a presentation on energy-related environmental indicators contained in a paper on energy and environment indicators (ECE/CEP-CES/GE.1/2010/5). The consultant proposed to add to the energy-related environmental indicators covered by the Guidelines the following indicators: final electricity consumption; gross electricity production; and efficiency of conventional electricity and heat production.

25. In the ensuing discussion, participants stressed the importance and relevance of the first two of the proposed additional indicators. They considered it premature, however, to recommend at the present stage the use of the third indicator. A proposal was made, in particular, to consider developing an indicator which would allow assessing progress in using the new technologies for fuel combustion at power stations.

26. The Joint Task Force agreed on the texts of the indicators of final electricity consumption and gross electricity production, as contained in document ECE/CEP-CES/GE.1/2010/5.

IV. Discussion of general principles related to the production of environmental indicators

27. The member of the Joint Task Force from Norway presented general principles related to the production of environmental indicators as used in his country's statistical activities. The member from Norway explained basic differences between indices, indicators, statistics, variables, parameters, items and accounts; and recommended the use of indicators that are understandable, communicative and comparable between countries. Developments regarding environmental status reporting, the municipality-governmental reporting scheme and indicators for sustainable development in Norway were also presented.

28. The representative of the UNECE Statistical Division made a presentation on the implementation of the Fundamental Principles of Official Statistics in the UNECE region³ in the context of environmental indicators. The importance of adhering to the principles of independence, professionalism and confidentiality was underlined.

29. In the ensuing discussion the role of indicators as mixes of data and assessments emanating from specific policy questions was stressed. Some interest was expressed towards developing environmental indices (aggregate indicators) although a note of caution was raised with regard to their limited applicability and the early stage of development in many countries of such indices.

V. Reporting to the Committee on Environmental Policy and the Bureau of the Conference of European Statisticians

30. The secretariat reported to the Joint Task Force preliminary results of responses to an evaluation questionnaire that the secretariat had circulated among the session participants at the request of the Joint Task Force on the first day of the meeting. Participants generally highly appreciated the quality, content and conduct of the meeting.

³ Available at <http://www.unece.org/stats/archive/docs.fp.e.htm>.

Most of them had stressed that they had acquired substantive knowledge and that the issues discussed at the meeting were useful for their future work. Everybody had voiced the need to continue a discussion between statisticians and environmental experts on environmental indicators. Many participants had proposed to focus future work on clarification of definitions and development of detailed guidance, possibly in the form of data tables, on the production of indicators. It had been stressed that there was a need for more time to be allocated to the discussion of individual indicators. Continuation of data reporting on indicators had been considered of high importance for identifying gaps and opportunities for filling those gaps.

31. A representative of EEA stressed the need to supplement methodological work by actual data production on indicators. The participants were informed about a project that EEA was launching in autumn 2010 under the European Union's European Neighbourhood Policy (ENP) and the strategic partnership with the Russian Federation. The project aimed at gradually extending principles and related systems of the Shared Environmental Information System to the ENP Eastern and Southern neighbours and the Russian Federation. One of the project tasks would be to help Armenia, Azerbaijan, Belarus, Georgia, the Republic of Moldova, the Russian Federation and Ukraine to produce data on a selected number of environmental indicators. A high-level meeting was planned to be held with the project participation countries on 11 and 12 November 2010 in Brussels to discuss priorities for the development of their environmental information systems. The Joint Task Force was also informed that Eurostat was considering providing support.

32. The Joint Task Force recommended that the Committee on Environmental Policy and the Bureau of the Conference of European Statisticians extend the mandate of the Joint Task Force for two more years. It invited the Bureau of the Joint Task Force to report to the two parent bodies about the results of its activities in 2009–2010 and to submit to those bodies an updated mandate for the period 2011–2012 for approval.

VI. Other business

33. The Joint Task Force thanked the Governments of Finland, the Russian Federation and Switzerland for providing travel funds for entitled members of the Joint Task Force.

Annex

Amendments to the texts of two indicators

The agreed amendments to the texts of indicators as contained in document ECE/CEP-CES/GE.1/2010/8 are as follows:

I. Emissions of pollutants into the atmospheric air

In paragraph 1, *after* NO_x *insert* in terms of nitrogen dioxide

In paragraph 12, the second and third sentences *should read*

Data on emissions from mobile sources are frequently calculated based on the number of vehicles by mode of transport, their age, distance run, quantity and quality of used fuel. Aggregated data are published in annual national environmental and official statistical publications.

II. Greenhouse gas emissions

In paragraph 15, *for* environment *read* climate

In paragraph 16, first sentence, *delete* global temperature

In paragraph 16, second sentence, *after* in decoupling CO₂ *insert* and other GHG

In paragraph 17, *delete* regular

In paragraph 18, *for* by the period *read* on average during
