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Report of the Joint Task Force on Environmental Indicators on its ninth session

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I. Introduction

A. Background

1. The Joint Task Force on Environmental Indicators was established by the United Nations Economic Commission for Europe (ECE) Committee on Environmental Policy and the Conference of European Statisticians to support the countries of Eastern and South-Eastern Europe, the Caucasus and Central Asia¹ (the target countries) in improving their environmental statistics and in producing agreed indicators. The work aims in the long term to strengthen environmental reporting and make environmental statistics available and comparable throughout the pan-European region. The Joint Task Force's activities in 2013–2014 were governed by its mandate for that period, as approved by the parent bodies (see ECE/CEP/2012/2, annex IV).

2. The ninth session of the Joint Task Force was held in Geneva, Switzerland, on 4 and 5 November 2014. Prior to the meeting, a workshop on air-related indicators was held on 3 November 2014.

B. Attendance

3. Environmental experts and statisticians from the following countries attended the meeting: Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Georgia, Kazakhstan, Kyrgyzstan, Montenegro, Republic of Moldova, Russian Federation, Serbia, Tajikistan, the former Yugoslav Republic of Macedonia, Ukraine and Uzbekistan.

4. Representatives of the European Environment Agency (EEA), the Interstate Statistical Committee of the Commonwealth of Independent States and the European Union-sponsored project on Environmental Monitoring in Central Asia (MONECA) also attended the meeting.

5. The non-governmental organizations, Cadaster Institute, Regional Environmental Centre for Central Asia and Zoï Environmental Network were also represented at the meeting.

C. Organizational matters

6. The Joint Task Force adopted the agenda for its ninth session, as contained in document ECE/CEP-CES/GE.1/2014/5.² The report of the seventh session (ECE/CEP-CES/GE.1/2013/2) was also adopted. The Russian version of the report of the eighth session was not ready at the time of the meeting, and therefore its adoption was postponed to the tenth session.

¹ The countries of Eastern Europe, the Caucasus and Central Asia include Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, the Republic of Moldova, the Russian Federation, Tajikistan, Turkmenistan, Ukraine and Uzbekistan. The countries of South-Eastern Europe include Albania, Bosnia and Herzegovina, Montenegro, Serbia and the former Yugoslav Republic of Macedonia.

² Meeting documentation, including national reviews and presentations, are available online from a dedicated ECE website (<http://www.unece.org/stats/documents/2014.11.enviro.html>).

7. Ms. Aigul Yepbayeva (Kazakhstan) chaired the meeting.

II. Input from the workshop on air-related indicators

8. A series of thematic workshops had been initiated to assist experts from the target countries in further improving the production of environmental indicators in accordance with the accepted international methodologies.

9. Participants at the first thematic workshop, held back to back to the ninth session, had discussed four of the initial set of eight core indicators related to air quality and air emissions. In particular, the workshop had focused on quality assurance and quality control of air-related data, which was used as the basis for the production of those indicators.

10. Participants also considered, to the extent possible, the review process for data on emissions of pollutants into the atmospheric air under the Convention on Long-range Transboundary Air Pollution, and took a closer look at the quality assurance and quality control procedures promoted under the United Nations Framework Convention on Climate Change. The workshop further covered the data reporting discrepancies under the Montreal Protocol on Substances that Deplete the Ozone Layer due to terminology used on the consumption of ozone-depleting substances (ODS).

11. The workshop also looked at the importance of applying the same methods in air quality measurements between countries and regions. Examples were given of notable differences in measurements observed either side of a national or regional border, and good practice examples from Austria of air data quality assurance were presented. Participants were also informed about the two databases maintained by World Health Organization (WHO) containing data on exposures to high air pollution concentration (data on coarse particulate matter (PM₁₀), fine particulate matter (PM_{2.5}) and ozone) and that the WHO air quality guidelines on reducing the health impacts of air pollution were being revised.

12. Countries stressed the need to maintain the continuity of data measurements of air quality, and in particular in the case of manual data recording. Participants proposed that another seminar on air-related indicators be held to further discuss issues concerning air quality measurements.

III. Implementation of recommendations for the production and online sharing of environmental indicators

13. Further to its decision at its eighth session (Geneva, 13–15 May 2014) (see ECE/CEP-CES/GE.1/2014/2), the Joint Task Force reviewed the progress made by the target countries on the implementation of the recommendations on the production and online sharing (ECE/CEP-CES/GE.1/2014/4)³ of the indicators selected from the Guidelines for the Application of Environmental Indicators in Eastern Europe, Caucasus, Central Asia and South-Eastern Europe⁴ (Indicator Guidelines). The following indicators were reviewed: (a) emission of pollutants into the atmospheric air (A1);⁵ (b) ambient air quality in urban areas (A2); (c) consumption of ozone-depleting substances (A3); (d)

³ Proposal for tailor-made recommendations to countries of South-Eastern and Eastern Europe, Caucasus and Central Asia for the production and sharing of Environmental Indicators.

⁴ The revised Indicator Guidelines are available on the ECE website from <http://www.unece.org/env/indicators.html>.

⁵ The letters and numbers in parentheses (A1, B3, etc.) refer to the Indicator Guidelines.

greenhouse gas emissions (B3); (e) biochemical oxygen demand and concentration of ammonium in rivers (C10); (f) nutrients in freshwater (C11); (g) protected areas (D1); and (h) waste generation (I1).

14. The Joint Task Force also reviewed the progress made on implementing the recommendations between its May and November 2014 meetings based on the updated analytical paper (ECE/CEP-CES/GE.1/2014/8). The analysis had been prepared using the data and information provided on the national web pages, the links to which had been shared by 13 target countries (Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Georgia, Kazakhstan, Kyrgyzstan, Montenegro, Republic of Moldova, Russian Federation, Serbia, the former Yugoslav Republic of Macedonia and Ukraine) (the reporting countries).

15. Country experts reported on further progress in country-specific presentations. Albania, Tajikistan and Uzbekistan had not shared any data and, therefore, their indicators were not analysed. Turkmenistan did not participate at the meeting and had not provided the secretariat with any links. The four countries were therefore urged by the Joint Task Force to take the necessary efforts to produce and share indicators without any further delay.

A. Progress in producing the eight core environmental indicators

1. Emission of pollutants into the atmospheric air (A1)

16. As for the previous session in May 2014, 12 of the 13 countries sharing links (except for Bosnia and Herzegovina) had provided data on the required two core parameters for indicator A1: sulphur dioxide (SO₂) and nitric oxide and nitrogen dioxide (NO_x). Moreover, as had been noted also in May, in several cases (Azerbaijan, Kazakhstan, Montenegro, Serbia and the former Yugoslav Republic of Macedonia) certain sub-indicators had not been presented or certain data —e.g., from mobile sources— were missing. Those countries were therefore encouraged to take further efforts to ensure that the requirements in the Indicator Guidelines were fully met. A representative of Bosnia and Herzegovina informed the Task Force about the country's continuing efforts to address difficulties in producing indicator A1.

17. Furthermore, following the recommendation of the previous session to share additional parameters for indicator A1, all of the 12 countries had produced and shared at least four of the seven additional parameters: non-methane volatile organic compounds (NMVOCs), ammonia (NH₃), carbon monoxide (CO), hydrocarbon (CH), persistent organic pollutant (POPs), heavy metals and particulate matter (PM). Four countries (Belarus, Kazakhstan, Montenegro and the Russian Federation) had provided data for all seven parameters.

18. The representative from Tajikistan reported on the production of several additional parameters, but provided no evidence in that regard by sharing the links to websites where the data on the parameters were published.

19. The Joint Task Force welcomed the production and sharing of additional parameters and invited the countries that had not done so to follow the example of those that had produced and shared all of the required additional parameters.

2. Ambient air quality in urban areas (A2)

20. As in May 2014, data for the indicator on concentration of nitrogen dioxide (NO₂) in urban areas had been provided by 12 countries. Ukraine indicated that data on that indicator were available, but provided no links.

21. Six of the 12 countries (Armenia, Georgia, Montenegro, Republic of Moldova, Serbia and the former Yugoslav Republic of Macedonia) had also provided links to two additional parameters for indicator A2, as recommended for production at the previous session, namely SO₂ and ozone (O₃). The other six countries had provided links for SO₂ only, and were therefore encouraged by the Joint Task Force to provide O₃ data too. In addition, Tajikistan and Ukraine informed the Task Force about the availability of data on SO₂, but provided no links.

3. Consumption of ozone-depleting substances (A3)

22. As in May 2014, the majority of the 13 reporting countries had provided data that fully met the requirements of the Indicator Guidelines. Armenia and Belarus had provided data on the consumption of hydrochlorofluorocarbons (HCFCs); Kazakhstan and the Republic of Moldova on chlorofluorocarbons (CFCs) and HCFCs; Georgia, Kyrgyzstan, and the former Yugoslav Republic of Macedonia on CFCs, HCFCs and methyl bromide. Montenegro had published data on consumption of CFCs, tetrachloromethane and HCFCs. Serbia had shown data for the consumption of halons, carbon tetrachloride, trichloroethane (methyl chloroform), HCFCs and methyl bromide.

23. The Joint Task Force recommended that Azerbaijan distinguish between the different ozone-depleting substances and make a reference to their ozone-depleting potential (ODP), while the Russian Federation was encouraged to provide data on ODS total consumption in addition to data on ODS production, export and import. The Joint Task Force further encouraged Ukraine to submit links to data on indicator A3.

4. Greenhouse gas emissions (B3)

24. Data had been provided by all 13 countries for indicator B3, with the data from 5 countries (Bosnia and Herzegovina, Kazakhstan, Republic of Moldova, Russian Federation and the former Yugoslav Republic of Macedonia) fully meeting the requirements of the Indicator Guidelines.

25. The Joint Task Force encouraged Armenia, Georgia, Montenegro, Kyrgyzstan and Ukraine to provide data on land use, land-use change and forestry (LULUCF). Other countries were encouraged to show the sub-indicators (Serbia and Ukraine), or to do it in the required unit of measurement (Azerbaijan and Belarus).

5. Biochemical oxygen demand and concentration of ammonium in rivers (C10)

26. Except for Ukraine, the reporting countries had provided data that fully met the Indicator Guidelines requirements for indicator C10.

27. Progress was noted on the part of Bosnia and Herzegovina and the Republic of Moldova, both of which had not provided data in May.

28. In addition, the Joint Task Force welcomed that Armenia, Azerbaijan, Bosnia and Herzegovina and Georgia had provided information not only on mean annual, but also maximum and minimum, concentration values for every sampling point. Other countries were invited to follow that example.

6. Nutrients in freshwater (C11)

29. Significant progress was noted on indicator C11 as compared with May 2014, as seven additional reporting countries had provided data: Armenia, Azerbaijan, Bosnia and Herzegovina, Georgia, Kazakhstan, Montenegro and Republic of Moldova. In addition, Kyrgyzstan had progressed from “not meeting” to “partially meeting” the requirements. Ukraine was the only country to not provide any data at all. Serbia had provided data, but

had provided no links, so it was no longer meeting the Indicator Guidelines requirement for indicator C11.

30. Ukraine clarified that indicator C11 was produced mostly for rivers, and much less for lakes.

31. In terms of the additional data sets that should gradually be produced for indicator C11, nitrates in rivers had already been provided by 12 countries (Ukraine did not report), phosphates by 11 (Kazakhstan and Ukraine did not report) and nitrates in groundwater by nine countries (Georgia, Kazakhstan, Kyrgyzstan and Ukraine did not report).

7. Protected areas (D1)

32. As at the previous session, 12 countries had provided data on indicator D1, with Ukraine not reporting. For several cases, however, the share of protected areas in the country total area was missing (Republic of Moldova and Russian Federation) or only the share value had been provided (Belarus and Kyrgyzstan).

8. Waste generation (I1)

33. Armenia, Azerbaijan, Bosnia and Herzegovina, Kazakhstan, Kyrgyzstan, Montenegro, Serbia, the former Yugoslav Republic of Macedonia and Ukraine had provided data on indicator I1, including on total and per capita waste generation.

34. The Joint Task Force recommended that Georgia provide data on waste generation and that the Republic of Moldova provide a breakdown of its total waste generation.

B. Progress in online sharing of the eight core environmental indicators

35. Armenia, Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, Montenegro, Republic of Moldova, the Russian Federation and the former Yugoslav Republic of Macedonia had provided links to websites of national agencies for all eight core indicators. Bosnia and Herzegovina, Georgia and Serbia had provided links for seven indicators, and Ukraine for three indicators only.

36. Overall, progress had been made by the target countries in the online sharing of the indicators since the May 2014 session. In particular, since the last session, countries had submitted numerous new links, as follows: Armenia had submitted a link to indicator A3; Azerbaijan links to A3 and C10; Bosnia and Herzegovina a link to D1; Georgia links to A1, A2, A3, B3, C10, C11, and D1; the Republic of Moldova to A3, C10, C11 and D1; and Serbia to B3 and C11.

1. Availability of the information

37. Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina and Kazakhstan collected data from various sources and had a dedicated web page on their National Statistical Office (NSO) website containing information on the eight core indicators. Except for Armenia, which published the data in an interactive format, the information was published in Excel format using the tables from the Indicator Guidelines. The relevant methodological explanations were also available on the websites.

38. Georgia published the data on seven of the core indicators on the website of the Ministry of Environment and Natural Resources Protection. The data were available in Excel format following the requirements of the Indicators Guidelines. The data on those indicators were also published on its NSO website under the PC-AXIS database, but in a different format (with interactive menus and choice of time period, but with less data details).

39. Kyrgyzstan, Montenegro, Serbia and the former Yugoslav Republic of Macedonia published the majority of indicators on the website of their environmental ministries or agencies.

40. The Republic of Moldova, the Russian Federation and Ukraine published the indicators on the website of various agencies, including specialized ones. At the same time, the Republic of Moldova detailed efforts to develop a unified information system, bringing together all the environmental data.

41. Tajikistan informed the Task Force that a website on indicators was being constructed, and would include information on waste water and water quality.

42. The Joint Task Force noted that in a number of cases the information on the indicators could be difficult to find, as it was published on websites of various agencies including sometimes specialized ones, without providing a central access point.

43. The Joint Task Force agreed that the two State bodies represented at the meeting — the NSOs and the ministries of environment — should work together to identify ways of providing easy access to the indicators published. A single, central access point linking to the various web pages with the indicators was a possible solution. In that context, the Joint Task Force requested the secretariat to provide a presentation at the next session on the solutions available for publishing data online, including within the Statistical Data and Metadata Exchange (SDMX) framework.

2. Official data and authorization to post them

44. The target countries exchanged experience about the authorization procedures for sharing information on the various websites, including whether they had national legislation in place to indicate those procedures and what government body, if any, currently authorized online sharing.

45. In cases where the data were collected by the ministry of environment, it was the ministry that was the responsible body for data accuracy. Several countries indicated, as a second step in the process, the communication of the data to the NSO, which undertook statistical verification and data validation before publishing the information (e.g., the former Yugoslav Republic of Macedonia). If needed, the NSO contacted the ministry of environment for clarification.

46. Azerbaijan and Kazakhstan provided examples where the references to the relevant legal regulatory acts were presented either together with the published indicators or as footnotes. Ukraine described the process that had led to the establishment of the regulatory framework needed for publishing the indicators. Those examples were considered to be good practices.

3. Website interactivity, user-friendliness, and data access

47. One web page per indicator or per thematic area was provided by Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Georgia, Kazakhstan, the Republic of Moldova, Serbia, the former Yugoslav Republic of Macedonia and Ukraine. Montenegro and the Russian Federation presented more than one web page per indicator.

48. Armenia was the only country that presented all eight indicators in interactive file format, followed by the Russian Federation and Serbia, which presented five indicators in an interactive format. Belarus and Kyrgyzstan presented three and two indicators, respectively, in an interactive format.

49. The Joint Task Force noted that interactive techniques should be made available to facilitate users' access to information. Azerbaijan, Kazakhstan and Kyrgyzstan presented a

very good example of websites in terms of user-friendliness and data access. Many countries produced graphs as a visual representation of the indicators.

50. Some countries (Montenegro, the Russian Federation (for certain indicators) and the former Yugoslav Republic of Macedonia) published their data in PDF files, which limited its user-friendliness, and therefore, it was noted as a point for improvement. The Joint Task Force agreed that data provided in PDF files was a case where they were available but not easily accessible.

51. The Joint Task Force recommended that data should be possible to download in various formats and, in particular, that target countries should provide information in Excel format using the tables from the Indicator Guidelines.

4. Language

52. The language in which the indicators were made available was noted as an important feature of accessibility. To improve accessibility, the Joint Task Force recommended making data available in English and/or Russian in addition to the national language.

53. Regarding the language of data publications, Kazakhstan, the Republic of Moldova and Ukraine had published available data in all three languages: the national language, English and Russian. The websites of Armenia, Azerbaijan, Bosnia and Herzegovina, Serbia and the former Yugoslav Republic of Macedonia provided the choice of the national language and English. Belarus and Kyrgyzstan shared their data in national languages and Russian. The Russian Federation and Montenegro published data only in their national language. Georgia published in the English language only.

5. Regular update of data on the websites

54. The target countries agreed that “regular update” meant making available the most recent information. In the Russian Federation, the data update was linked not only to the annual update, but also to the updating of interactive time series on a more regular basis. Kazakhstan reported that the frequency of data update depended on the frequency of data received from producers. As many environmental statistics were collected annually, the data update should be done at least once a year.

55. A question regarding the recalculation of gross domestic product in purchasing power parity (PPP) terms was raised. Until now 2005 prices had been used. As the PPP in 2011 prices had recently become available, it was recommended that all countries use 2011 as the PPP base year to recalculate the indicators.

IV. Selection of additional indicators from the Indicator Guidelines for production and online sharing

56. The Joint Task Force agreed that the ambition was to gradually produce and share all the environmental indicators from the Indicator Guidelines. To that end, the focus in 2015 for production and sharing should be expanded by a few more indicators and help the target countries to develop and extend their national environmental information system in line with the Shared Environmental Information System (SEIS) principles.

57. In that context, the secretariat had prepared a proposal for the consideration of the Joint Task Force on a few additional indicators from the Indicator Guidelines to supplement the eight core indicators (ECE/CEP-CES/GE.1/2014/7). The additional indicators proposed were well suited for the analysis of a theme such as green economy, which had been proposed along with clean air as one of the themes for the next Environment for Europe ministerial conference. The proposal suggested 14 additional indicators, including

indicators related to water (5), biodiversity (1), land and soil (1) agriculture (1), energy (4) and transport (2).

58. The Joint Task Force, after careful consideration, agreed on six further environmental indicators to be included in the extended core set, namely: renewable freshwater resources (C1), freshwater abstraction (C2), total water use (C3), threatened and protected species (D4), fertilizer consumption (F2) and passenger transport demand (H1).

V. Further revision of the Indicator Guidelines

59. The revision of the majority of the indicators from the Indicator Guidelines had been finalized. A new layout for the Indicator Guidelines proposed at the eighth session had been applied and the structure simplified to improve clarity and user-friendliness. The consistency of the terms and definitions had been checked and compared to the terminology used by other relevant organizations and divisions (such as the United Nations Statistics Division, the United Nations Environment Programme, EEA, the Food and Agriculture Organization of the United Nations (FAO) and the Organization for Economic Cooperation and Development). References provided with the Indicator Guidelines had been harmonized and made available in a new format. The definitions and abbreviations in the glossaries had also been checked and new ones added, as relevant.

60. The secretariat informed countries in detail regarding the latest revision, including structure, format and terminology.

61. Several parameters had been added under different indicators, e.g.: “outflow of surface and groundwaters to the sea” to “renewable freshwater resources” (C1); “trolleybuses” to “composition of road motor vehicle fleet by fuel type” (H3); and “number of sampling sites” to “drinking water” (C9).

62. Several parameters had been excluded from the indicators, e.g.: “species of international significance” from “trends in the number and distribution of selected species” (D5), due to lack of clarity and overlap with the other categories; and “total erosion” from “area affected by soil erosion” (E2), as it was unclear how the area affected by water erosion and wind erosion could be aggregated.

63. Terms had been harmonized with those used by other international organizations. The term “agricultural area” in the indicators “area affected by soil erosion” (E2), “fertilizer consumption” (F2) and “pesticide consumption” (F4) had been brought into line with the definition used by FAO. It was also proposed to rename “total energy consumption” (G2) as “total primary energy supply” and to change the terminology of the energy sources (coal, crude oil and natural gas) to bring them into line with the terms used by the International Energy Agency.

64. Two indicators had been merged: “public water supply” (C5) and “connection of population to public water supply” (C6). The new indicator was named “water supply industry and population connected to water supply industry” (C5).

65. Regarding “nutrients in coastal seawaters” (C12), a more detailed table had been prepared, which facilitated the recording of measurements from the sampling points.

66. The English title of “forests and other wooded land” (D3) indicator had been unified to “forests and other wooded land” for all files in order to be consistent with the Russian title. Furthermore, forest classification categories had been revised in accordance with the Global Forest Resource Assessments (FRA 2015).

67. The format of the indicator “threatened and protected species” (D4) had been rearranged to distinguish “animals” (D-4a) and “vascular plants, mosses, lichens, fungi and algae” (D-4b) in separate tables.

68. The title of the indicator “average age of road motor vehicle fleet” (H4) had been changed to “age of road motor vehicle fleet”, in order to indicate the various age classifications of the vehicles.

69. The Joint Task Force welcomed the revision on the indicators. Countries further requested the secretariat to make additional changes. Belarus asked that the “fertilizer consumption” (F2) indicator be clarified and, in particular, that it specify whether fertilizer consumption was calculated on the actual fertilizer usage or on the fertilizer sales. The Russian Federation requested a clear definition for “trucks” for the indicators “composition of road motor vehicle fleet by fuel type” (H3) and “average age of road motor vehicle fleet” (H4). Serbia made a request to align “management of hazardous waste” (I2) with the reporting requirements of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal.

70. The secretariat made a proposal to separate the current indicator “final waste disposal” (I4) into two new indicators — “management of municipal waste” (I3) and “management of non-hazardous manufacturing waste” (I4) — both including exports and imports of the respective wastes. Additionally, it was suggested to change the term “industrial waste” to “manufacturing waste”. The countries asked to further discuss the proposal at the next session or a dedicated workshop.

VI. Other business

71. The secretariat informed the Joint Task Force about the progress made by the ECE Transport Statistics Programme in the formulation of definitions for road motor vehicles by energy type. Definitions had been agreed for the various energy types, e.g., hybrid, electric, diesel, natural gas, compressed natural gas and hydrogen. It had further been agreed to run a pilot project to collect data on the road vehicles, disaggregated by their energy type. The Joint Task Force had been invited to follow up on the matter, and look at opportunities for cooperation in the future.

72. The secretariat presented a draft online glossary of English and Russian terms in the area of environmental indicators. The Joint Task Force was requested to test the glossary and provide feedback before the end of November 2014.

73. The participants were informed about the high-level meeting of the United Nations Special Programme for the Economies of Central Asia (SPECA) countries,⁶ held from 25 to 27 June 2014 in Baku, where the role of the environmental indicators in developing the System of Environment-Economic Accounting had been discussed. Countries noted the need for capacity-building in that area.

⁶ I.e., Afghanistan, Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan.