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CONFERENCE OF EUROPEAN STATISTICIANS

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Item 2 (e) of the Provisional Agenda

SELECTION OF TOPICS FOR IN-DEPTH REVIEWS IN 2015-2016

Note by the Secretariat

The Bureau selected ***topics A, C and E to be reviewed in-depth in 2015-2016 and nominated countries or international organizations to prepare a paper for the reviews.*** *Furthermore, the Bureau* ***selected the topic of labour mobility and globalisation for discussion at the CES 2015 plenary session*** *to get input from all countries to the in-depth review.*

I. BACKGROUND

1. The Bureau of the Conference of European Statisticians (CES) regularly undertakes in-depth reviews of selected statistical areas to coordinate statistical activities in the region, avoid duplication of work and address emerging issues. The aim is to identify issues and challenges and propose possible follow-up actions to address them.

2. Guidelines for in-depth reviews are provided in ECE/CES/BUR/2012/FEB/5/Rev.[1] and an updated template for papers is in ECE/CES/BUR/2014/JAN/7.

3. In order to facilitate the discussion, the Secretariat has prepared a list of potential topics that could be reviewed. Some of the topics deal with subject-matter issues and others relate to the organisation and management of statistical production.

4. The Bureau may select in-depth review topics from the annexed list, or propose any other topic. The topics are often linked to the statistical areas listed in the Classification of Statistical Activities (www.unece.org/disa), but not limited to those topics. Annex 1 provides a list of topics that have been reviewed since 2010. Annex 2 provides the Classification of Statistical Activities.

5. The Bureau may also decide to revisit the topics that have been reviewed earlier where actions were put on hold, such as housing statistics (reviewed in 2009), or education statistics (reviewed in 2012).

[1] www.unece.org/fileadmin/DAM/stats/documents/ece/ces/bur/2012/05Rev-Organization_of_in-depth_reviews.pdf

II. LIST OF POSSIBLE TOPICS FOR IN-DEPTH REVIEWS

A. Diversification of population census methodology and sources
B. Defining the units: A growing challenge for economic statistics
C. Developing geospatial information services based on official statistics
D. Data revolution – integrating statistics into decision making by means of new technology
E. Strategic partnerships with stakeholders in the information industry
F. Harnessing modernisation of statistical production for reporting of Sustainable Development Goals (SDGs)

III. EXPLANATORY NOTES TO THE TOPICS

A. Diversification of population census methodology and sources (DISA 1.1 Population and migration)

6. The 2010 round of population censuses has just ended in 2014, and the information available shows that there were significant changes compared to the previous rounds, particularly with regard to census methodology. In the UNECE region, there was a substantial increase in the use of alternative census methods, based in most cases on the use of registers and on multiple response channels. Internet data collection was adopted in a significant number of countries, and in some cases it was the main data collection method.

7. The preparations for the 2020 round of censuses started already in 2012 and are progressing at the national and international level. The new CES Recommendations for the 2020 round are being finalized, and are expected to be considered for adoption at the June 2015 CES plenary session. At the global level, the Principles and Recommendations for population and housing censuses have also been revised (in close cooperation with the revision of the CES Recommendations) and are expected to be considered for adoption by the UN Statistical Commission in March 2015.

8. **While there is significant international cooperation with respect to population censuses and the preparation of relevant recommendations, an independent high-level review of the various changes in methodology, sources and technology is worthwhile.** A survey on national census practices carried out by UNECE in 2013 showed that the current trend on increasing use of registers and multiple response channels (namely the internet response) is likely to continue in the 2020 round. A challenge for the statistical community is represented by the need to take into account the diversification of the census methods used, and to ensure as far as possible the international comparability of the census results considering that countries will use very different methods and data sources.

9. A suitable timing for the in-depth review could be October 2015. By that time, both the CES recommendations and the global Principles and Recommendations for the 2020 census round will be available and countries will be considering different methodological solutions for their implementation. The in-depth review could provide useful input for this.

B. Defining the units: A growing challenge for economic statistics

(DISA 2: Economic Statistics)

10. The concept of a business, the basic unit of economic statistics, has often caused problems, particularly in relation to the need for internationally comparable data. With businesses constantly finding new ways of operating, often linked to the growing economic globalisation, these problems are only increasing. The interest in integrating or streamlining the production of economic statistics and in exploring new data sources, including "big data", is adding further dimensions of complexity. **These developments call into question whether the traditional units of economic statistics, the enterprise and the establishment, are still the most relevant for measuring economic development.**

11. **For at least twenty years, different expert groups have tried to understand and resolve the "units problem", but have done so from different perspectives** (national accounts, business registers, classifications, structural business statistics etc.) However, partial approaches risk that the issues are not considered from a sufficiently strategic and cross-cutting perspective. This may explain why progress in this area has been limited. Currently, several initiatives deal with the “units problem”, including the Eurostat Task Force on Statistical Units, the ISWGNA Task Force on statistical units (to consider their use in supply and use tables and institutional sector accounts which is being established), and the European Network for Better Establishment Statistics (ENBES).

12. The aim of this in-depth review would be to review the different initiatives to solve the "units problem" and consider alternative approaches to define the basic units of economic statistics. Specific topics to be considered could include:

a) What are the current and future user needs, what needs to be measured and what types of statistical units can meet these needs? Could units be defined "on the fly", as needed and according to specific requirements of different types of statistics?
b) The statistical units are the basic building blocks in economic statistics. What definitions would facilitate integration of the statistical production process and development of new statistics by combining information about the economic units with information from other sources (administrative data, surveys or statistical registers)?
c) Why the statistical view of a business structure needs to be so different to the legal / administrative view(s) and the views of the business itself.
d) The extent to which it remains relevant to define business units in the context of national boundaries.
e) How would the official statistics community design the economic units if it started with a blank sheet of paper? Would it be feasible to move towards such a solution over the next one or two revisions of the SNA and other relevant standards?
f) To get a strategic and cross-cutting view, should efforts to resolve the "units problem" be overseen by a small group of chief statisticians, following a similar model to that introduced by the Bureau for the area of statistical modernisation?

C. Developing geospatial information services based on official statistics (DISA 4.4 Data editing and data linkage)

13. Numerous policy initiatives, e.g. on climate change and disaster preparedness, stress the benefits of linking environmental and socioeconomic data to location attributes. However, the response by official statisticians has been slow. In addition to improving the quality of the unit level spatial referencing, NSOs would need to significantly improve access to spatial statistical information and develop ways of sharing it to more effectively serve policy needs. Development may have been held back by data confidentiality and privacy concerns, but also due the lack of common tools and approaches.

14. In 2013, the UN Statistical Commission (UNSC) carried out a programme review of statistical-spatial frameworks based on a paper by the Australian Bureau of Statistics which reported the results of a survey of 52 countries. Almost 90% of countries indicated that they link a geospatial reference to the unit level information from which they generate statistics. However, this reference often links to an area instead of a specific coordinate. Nevertheless, this practice indicates that **NSOs would be in a great position to improve the geospatial element of statistics.**

15. To bring the work forward at the UNECE region, the issues to be discussed in the in-depth review may include:

a) Analysing the current state of affairs with geospatial information services using official statistics, using the UNSC survey results as a starting point;
b) Identifying good practices to be recommended to NSOs for developing services around geospatial data and making spatial information more accessible to users;
c) Exploring examples of effective partnerships for advancing the development of geospatial information services to add value to official statistics;
d) Considering what are the main obstacles for developing geospatial information services using official statistics;
e) Designing a possible course of action for development of geospatial information services at statistical offices in the UNECE region.

D. Data revolution – integrating statistics into decision making by means of new technology (related to DISA 5.5 Management and development of technological resources, but not limited to that)

16. The Report of the High-Level Panel of Eminent Persons on the Post-2015 Development Agenda[2] notes that "The revolution in information technology over the last decade provides an opportunity to strengthen data and statistics for accountability and decision-making purposes. There have been innovative initiatives to use mobile technology and other advances to enable real-time monitoring of development results. But **this movement remains largely disconnected from the traditional statistics community at both global and national levels**."

17. The report continues: "A true data revolution would draw on existing and new sources of data to fully integrate statistics into decision making, promote open access to, and use of, data and ensure increased support for statistical systems." The review would consider what could be done e.g. by HLG to improve the situation.

[2] www.un.org/sg/management/pdf/HLP_P2015_Report.pdf

18. The issues to be discussed in the in-depth review may include:
   a) Considering what is meant by “data revolution” and how it relates to official statistics;
   b) Taking stock of international work and countries’ innovations related to data revolution;
   c) What kind of new products and services have been developed to integrate statistics better into decision making?
   d) What is the role of statistical offices in the data revolution and what should it be in the future?

E. Strategic partnerships with stakeholders in the information industry (related to DISA 5.1 Institutional frameworks and principles; role and organization of official statistics, but not limited to that)

19. **National statistical offices are increasingly building partnerships with other organisations in the information industry.** For example commercial organisations’ strengths in data collection, dissemination, technologies and visualisation can be used to support and promote official statistics. As more data becomes available in societies, it will become ever more important for statistical offices to fulfil their obligations in this regard.

20. The issues to be discussed in the in-depth review may include:
   a) Investigating how statistical offices could create environments to encourage third parties to add value to statistical products and services;
   b) Taking stock of the kind of partnerships formed by statistical offices, such as partnerships for using statistical data to develop services for mobile applications;
   c) Considering the links of wider use of statistical data to the issue of “Open Data and rights” – the right to information, the right to privacy etc;
   d) How statistical offices could both fulfill and protect these rights while using Open Data and providing more statistical data for new purposes.

F. Harnessing modernisation of statistical production for reporting of Sustainable Development Goals (SDGs) (related to DISA 5.5 Management and development of technological resources and DISA 3.3.6 Sustainable development, but not limited to those)

21. The Report *A World That Counts* recommends that we should "urgently leverage emerging data sources for SDG monitoring through an SDG data lab" and "develop systems for global data sharing". The High-Level Group for the Modernisation of Statistical Production and Services has worked over the last four years to rethink statistical production by developing common standards that harness technological advances, new types of data such as Big Data and enhance statistical services. The High-Level Group would be well placed for identifying areas and measures for using common infrastructures and tools to report on the various indicators related to SDGs, help solve countries' capacity problems and produce efficiencies when national statistical offices, for their part, are facing the huge reporting challenge.

22. One suggestion of the Report was to develop a "world statistics cloud" to store data and metadata produced by different institutions but according to common standards, rules and specifications. **To bring these ideas closer to reality, a review should be done on what national statistical offices and the international statistical community could realistically do in terms of technologies they could use and mechanisms they could provide for SDG reporting.**

23. The issues to be discussed in the in-depth review may include:

a) What kind of a technical solution or mechanism could be envisaged for SDG reporting by official statisticians?;
b) Which existing standards, technologies and tools used by official statisticians could be helpful in the SDG reporting?
c) How could statistical offices contribute to creating a mechanism for SDG reporting and what should be their role in that?;
d) What should be the role of the international network of official statisticians in a possible global "Network of Data Innovation Networks" foreseen by the Report?;
e) What are the biggest obstacles for realising an efficient SDG reporting system?

ANNEX 1

Topics reviewed in-depth since 2010

- The use of secondary and mixed sources for official statistics (Jun 2010, paper by UNECE)
- Time-use surveys (Nov 2010, paper by Germany)
- Measuring the information society and statistics on science, technology and innovation (Nov 2010, paper by Australia)
- Education statistics (Nov 2011, paper by Australia)
- Global manufacturing (Nov 2011, paper by the Netherlands)
- Household survey methods (Nov 2011, paper by Canada)
- Banking, insurance and financial statistics (Nov 2012, paper by IMF)
- Poverty statistics (Nov 2012, paper by Ukraine and Eurostat)
- Statistics related to population ageing (Nov 2012, paper by UNECE)
- Political and other community activities, incl. volunteering (Feb 2013, paper by Mexico, notes by ILO and Eurostat)
- Entrepreneurship (Oct 2013, paper by OECD and Eurostat, note by UNECE)
- Big Data (Oct 2013, paper by UNECE with input from a Task Team on Big Data)
- Social protection (Jan 2014, paper by UNECE)
- Leading, composite and sentiment indicators (Jan 2014, paper by UNECE)
- Population projections (Oct 2014, paper by the United Kingdom and Canada)
- Measuring extreme events and disasters (Oct 2014, paper by Mexico)
- Process oriented approach to statistical production (Feb 2015, paper by Turkey)
- Labour mobility and globalisation (Feb 2015, paper by Austria)

ANNEX 2
Classification of International Statistical Activities
(DISA classification, Rev. 1 - October 2009)

Domain 1: Demographic and social statistics

1.1 Population and migration
1.2 Labour
1.3 Education
1.4 Health
1.5 Income and consumption
1.6 Social protection
1.7 Human settlements and housing
1.8 Justice and crime
1.9 Culture
1.10 Political and other community activities
1.11 Time use

Domain 2: Economic statistics

2.1 Macroeconomic statistics
2.2 Economic accounts
2.3 Business statistics
2.4 Sectoral statistics
2.4.1 Agriculture, forestry, fisheries
2.4.2 Energy
2.4.3 Mining, manufacturing, construction
2.4.4 Transport
2.4.5 Tourism
2.4.6 Banking, insurance, financial statistics
2.5 Government finance, fiscal and public sector statistics
2.6 International trade and balance of payments
2.7 Prices
2.8 Labour cost
2.9 Science, technology and innovation

Domain 3: Environment and multi-domain statistics

3.1 Environment
3.2 Regional and small area statistics
3.3 Multi-domain statistics and indicators
3.3.1 Living conditions, poverty and cross-cutting social issues
3.3.2 Gender and special population groups
3.3.3 Information society
3.3.4 Globalisation
3.3.5 Indicators related to the Millennium Development Goals
3.3.6 Sustainable development
3.3.7 Entrepreneurship
3.4 Yearbooks and similar compendia

Domain 4: Methodology of data collection, processing, dissemination and analysis

4.1 Metadata
4.2 Classifications
4.3 Data sources
4.3.1 Population and housing censuses; registers of population, dwellings and buildings
4.3.2 Business and agricultural censuses and registers
4.3.3 Household surveys
4.3.4 Business and agricultural surveys
4.3.5 Other administrative sources
4.4 Data editing and data linkage
4.5 Dissemination, data warehousing
4.6 Statistical confidentiality and disclosure protection
4.7 Data analysis

Domain 5: Strategic and managerial issues of official statistics

5.1 Institutional frameworks and principles; role and organization of official statistics
5.2 Statistical programmes; coordination within statistical systems
5.3 Quality frameworks and measurement of performance of statistical systems and offices
5.4 Management and development of human resources
5.5 Management and development of technological resources (including standards for electronic data exchange and data sharing)
5.6 Coordination of international statistical work
5.7 Technical cooperation and capacity building

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