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Conference of European Statisticians

Sixty-fifth plenary session
Geneva, 19-21 June 2017

Report of the sixty-fifth plenary session of the Conference of European Statisticians

Contents

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I. Introduction

A. Attendance

1.   The Conference of European Statisticians (CES) held its sixty-fifth plenary session in Geneva, from 19 June to 21 June 2017. It was attended by representatives from Albania, Argentina, Armenia, Australia, Austria, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Brazil, Bulgaria, Canada, Chile, Croatia, Colombia, Costa Rica, Czechia, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Ireland, Israel, Italy, Japan, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Luxembourg, Malta, Mexico, Moldova, Montenegro, Netherlands, New Zealand, Norway, Poland, Portugal, Republic of Korea, Romania, Russian Federation, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Tajikistan, Ukraine, United Kingdom of Great Britain and Northern Ireland, United States of America and Uzbekistan.

2.   The Conference was attended by representatives of the European Central Bank (ECB), European Commission (Eurostat), Eurasian Economic Commission, European Free Trade Association (EFTA), Food and Agriculture Organization of the United Nations (FAO), Inter-American Statistical Institute (IASI), International Monetary Fund (IMF), Interstate Statistical Committee of the Commonwealth of Independent States (CIS-STAT), Organisation for Economic Cooperation and Development (OECD), United Nations Economic and Social Commission for Western Asia (ESCWA), United Nations Statistics Division (UNSD), United Nations Women and the World Bank.

3.   The following private sector organizations and academia were represented: Bocconi University (Italy), Celgene International, Ecole Polytechnique Fédéral de Lausanne (Switzerland) and Ecole nationale de la statistique et de l'analyse de l'information (ENSAI, France).

B. Agenda and procedure

4.   The provisional agenda (ECE/CES/92) was adopted.

C. Opening statements

5.   Ms. M. Bruun, Chairman of the Conference of European Statisticians (CES), chaired the CES plenary session. Ms. O. Algayerova, UNECE Executive Secretary, opened the meeting and welcomed the participants.

II. Matters arising from the 48th session of the United Nations Statistical Commission and the 67th session of Economic Commission for Europe

Documentation: ECE/CES/2017/1

6.   Mr. S. Schweinfest, UNSD, informed the Conference about the outcomes of 48th session of the UN Statistical Commission (UNSC):

(a)   The Fundamental Principles of Official Statistics developed under CES and endorsed by the General Assembly in 2014 are a great example of the key role the Conference plays in advancing statistical work in the region and beyond;

(b)   The Statistical Commission adopted the resolution on the *Work of the Statistical Commission pertaining to the 2030 Agenda for Sustainable Development*, including the global SDG indicator list, in March 2017. In June 2017, it was adopted by the Economic and Social Council (ECOSOC) and in July by the UN General Assembly;

(c)   UNSC considered the statistical work in the UNECE region, including the outcomes of work on the value of official statistics, statistical legislation, climate change, extreme events, poverty, global production, and modernisation of official statistics. The CES Recommendations on human capital and business registers were sent for global consultation due to their high relevance to countries beyond UNECE region. There is good cooperation between UNECE and UNSD, and in several areas the UNECE work provides a starting point for the global work.

7.   Ms. L. Bratanova, UNECE, informed the Conference of the outcomes of the April 2017 session of UNECE and the first UNECE Regional Forum on Sustainable Development.

(a)   The first UNECE Regional Forum on Sustainable Development on 25 April 2017 included a round table discussion on "Data and Monitoring". The discussion focused on the role and limits of official statistics, cooperation between policy makers and statisticians, strengthening statistical capacity and the need for coordination and cooperation between the different actors involved in the reporting on Sustainable Development Goals (SDGs).

(b)   The UNECE Commission session gave a new mandate to UNECE to engage with the United Nations Committee on Global Geospatial Information Management in Europe (UN-GGIM: Europe) (for more detail, see item V of the present report).

(c)   The Commission session asked UNECE to provide a platform for greater economic integration, strengthening of collaboration between countries and support for the implementation of the 2030 Agenda for Sustainable Development. Joint work with key partners will be crucial for success in this work.

1.   Action taken by the Conference

8.   The Conference reaffirmed the decisions of the 48th UNSC session that have implications for its work, as presented in document ECE/CES/2017/1, including:

(a)   The Conference took note of the resolution on the *Work of the Statistical Commission pertaining to the 2030 Agenda for Sustainable Development* adopted by UNSC and subsequently by ECOSOC and the UN General Assembly. Further, the UNSC decision 48/104 (e) "recognized the importance of collaboration among the Regional Commissions to address shared development challenges, in particular those related to the need to strengthen statistical systems in the context of the 2030 Agenda for Sustainable Development";

(b)   The Conference requested strengthening the collaboration between UNSD and the Regional Commissions, which is especially important in the context of statistics for SDGs, for example, in clarifying the issue of data flows;

(c)   Switzerland, vice chair of UNSC, reminded of the results of the internal audit of the statistical work of the United Nations in 2016 that called for exploring the possibility of designating a senior official as a United Nations Chief Statistician;

(d)   The Conference noted the conclusion of the first UNECE Regional Forum on Sustainable Development stating that "national statistical offices will have a key coordinating role in generating, disseminating and administering SDG-related data" and that it is consistent with the *Declaration on the role of national statistical offices in*

measuring and monitoring SDGs, adopted by the 2015 CES plenary session (ECE/CES/89/Add.1);

(e) The Conference noted the conclusion of the 67th UNECE Commission session that "The statistical work carried out by UNECE is high-quality, well-appreciated and widely-used, including beyond the region, as it is essential for advancing measurement for informed decision-making". The Commission session further stated that "Monitoring SDG implementation requires strengthening statistical capacity" and in this regard "UNECE can play an important role in the provision of technical expertise and capacity building".

III. Measuring poverty

A. Introduction

9. The seminar was chaired by Mr. J. Santaella, Mexico, and organized in collaboration with Austria and Israel. In the opening remarks, Mr. Santaella noted that poverty reduction is one of the most important themes in the 2030 Agenda for Sustainable Development. Addressing the challenges in poverty measurement is therefore vitally important.

10. In the keynote speech, Mr. J.P. Azevedo, World Bank, emphasized the need for reliable and actionable information on the well-being of population. Some groups in society benefit less than others from economic growth and are affected more in times of crisis. For an appropriate policy response, it is important to address the growing demand for data and use new technologies to improve the statistical processes.

B. Methodological challenges in poverty measurement

Documentation: ECE/CES/2017/19-20, 28-30

11. The session was organized by Mr. Y. Finkel, Israel. It was based on papers by Israel, Mexico, Poland, Slovakia and Switzerland. The session organizer introduced the wide range of methodological issues addressed in the papers, such as the scope of measurement, capturing of the top and bottom of the income distribution, and taking into account taxes, social transfers, savings and pensions in poverty measurement.

12. The following issues were raised in the discussion:

(a) When defining official national poverty measures, it can be considered good practice to identify some key poverty indicators using the best quality data sources available. A nationally representative poverty measure should be selected in consultation with stakeholders, such as policymakers, researchers and statisticians, and be based on a commonly agreed approach;

(b) Different population groups can be vulnerable depending on the poverty concept used. It is therefore important to use a set of indicators to identify the different risk groups;

(c) Different sources and data collection methods are needed to produce a nationally representative poverty measure. Statistical offices should play a key role in coordinating and integrating the data sources to ensure coherence and a certain level of harmonization;

(d) The multiple dimensions of poverty make it challenging to communicate the data and indicators. While advanced analysis is useful for experts and policymakers,

measures based on simple definitions are more appropriate for the public and media. Data visualization tools are essential for communication with diverse user groups.

C. Comparability of poverty measures across countries and over time

Documentation: ECE/CES/2017/21-22, 31, 33

13. The session was organized by Mr. K. Pesendorfer, Austria. It was based on papers by Austria, the Russian Federation, CIS-STAT and Eurostat.

14. The session organizer noted the challenge that changing policy needs pose for poverty measurement. At present, countries use a variety of approaches and the degree of harmonization varies. Comparability over time is needed to analyse the development of poverty and evaluate effectiveness of policies. At the same time, changes are necessary because societies change and data sources and methodologies evolve.

15. The following issues were raised in the discussion:

(a) There is no one-size-fits-all approach in measuring poverty. To be meaningful in a country context, a poverty measure should consider national characteristics, cultural differences and data availability. At the same time, harmonized definitions and methodologies are necessary for international comparability. A good balance should be found between national specificities and cross-country comparability;

(b) Harmonization is important both on the input side (e.g., when data comes from administrative sources, such as income) and on the output side (e.g., when national contexts vary greatly, such as in material deprivation);

(c) Introducing new measurement methods affects the stability of the measurement framework. Appropriate statistical methods should be used to link the past and the present when methods are changed. Users need to get accustomed to flash estimates and releases of provisional data.

D. The way forward

Documentation: ECE/CES/2017/32

16. The panel discussion on the way forward was chaired by Mr. J. Santaella. Mr. A. Surinov, Russian Federation, Ms. L. Ivančíková, Slovakia and Ms. M. Durand, OECD participated as panellists. The following issues were raised:

(a) Further work is needed to identify population groups at a higher risk of poverty, and address the problems of measuring the bottom end of income distribution;

(b) Additional methodological work is required to better understand the income components, such as social transfers in-kind and imputed rents, which are useful for policymaking, cost of living adjustment and measuring economic well-being;

(c) It is important to explore the longitudinal perspective of poverty;

(d) While poverty levels change over time, the spatial distribution of poverty tends to be quite persistent. It is important to capture this heterogeneity better. High-quality comparable statistics are needed at sub-national level;

(e) A more comprehensive measure of poverty should include wealth to complement the usual income measure. Developing further guidance on combining income and wealth measures of poverty is needed;

(f)   Subjective measures of poverty could contribute greatly to the understanding of poverty and complement the objective measures of poverty.

1.   Action taken by the Conference

17.   The Conference recognized the high policy importance and growing demand for measuring poverty as a complex and multidimensional social issue. It recommended national statistical offices to involve relevant stakeholders in deciding on concepts and definitions used for compiling national poverty estimates.

18.   The Conference discussed the following possible actions for the way forward:

(a)   Strengthen efforts to harmonize poverty statistics and develop standards to enhance international comparability within existing quality assurance frameworks;

(b)   Ensure transparency of methodological approaches, concepts and definitions, clear and coherent reporting on indicators and clear explanations in case of deviations from standards, methodological changes or breaks in the time series;

(c)   Develop methodological approaches for measuring poverty in hard-to-reach population groups, such as internally displaced and the homeless;

(d)   Undertake methodological work to broaden the income definition used for poverty analysis to include imputed rent and social transfers in kind, which have high policy relevance in many countries. This work would have to address the challenge of communicating indicators based on the different income measures;

(e)   Undertake methodological work on complementing income poverty with a measure of asset-based poverty, which would greatly improve understanding of poverty and vulnerability to poverty;

(f)   Develop robust statistical measures for subjective perception of poverty.

19.   The Conference asked the Secretariat and the CES Bureau to follow up on the issues raised during the seminar. The CES Bureau will discuss at its next meeting how to implement the proposed follow-up actions, including those highlighted in the *Guide on Poverty Measurement*. The Conference encouraged CES members to use the rich resource of papers and ideas produced by the seminar.

IV.   The next generation of statisticians and data scientists

A.   Introduction

20.   The seminar was chaired by Ms. M. Bruun, Finland, and organized in collaboration with Eurostat. In the opening remarks, Ms. M. Kotzeva, Eurostat, noted the importance of strategic planning of staff resources and skills needed in the future.

21.   In the keynote speech, Mr. M. Marcellino, Bocconi University, emphasized that data is a commodity and many university students are now being trained in the technology and techniques to analyse it.

B.   How can an official statistician become a data scientist?

Documentation: ECE/CES/2017/23

22.   Mr. D. Buono, Eurostat and Ms. R. Mäkinen, Finland, gave an overview of the topic based on a joint paper by Finland and Eurostat. They emphasized the new capabilities and

skills needed to use new data sources. These new skills can be used across the statistical production process.

23. These new skills will not be found in one staff member. Statistical organizations should consider building and maintaining collaborative and multidisciplinary data science teams. The teams should be able to understand the relevant mathematical and statistical tools, have programming skills and data storage know-how, domain knowledge and soft skills related to collaboration and teamwork, and also possess the ability to communicate and visualize data compellingly.

C.   The future roles of statisticians

Documentation: ECE/CES/2017/24, 26-27

24. Mr. T. Laitila, Sweden, presented the skills and competence requirements placed on staff by the statistics production system 4.0. The session was based on papers by Germany, Sweden and Ireland with the High-level Group for the Modernisation of Official Statistics (HLG-MOS).

25. The panel discussion focused on future roles and priorities of official statisticians. Mr. A. Arora, Canada, Mr. P. Dalton, Ireland, and Ms. S. von Oppeln-Bronikowski, Germany, participated in the panel discussion, facilitated by Mr. E. Baldacci, Eurostat. The following issues were raised in the discussion:

(a) There has been a shift in what statistical organizations do. This requires a change in the organizational culture which can include building partnerships with academia, creating communities of practice, internal development programs, promotion at schools as well as talent and performance management. It is important to be proactive about the changing role of statistical organizations and the required skills;

(b) Leaders of statistical organizations should provide a framework for innovation. Innovation programmes and labs should be encouraged and it is useful to mix risk adverse staff with innovators;

(c) Producing more user-oriented statistical products requires new skills, such as recognizing patterns and stories from numbers and using geospatial data.

D.   Are universities training students to work in national statistical offices?

Documentation: ECE/CES/2017/25

26. Mr. Y. Finkel, Israel, gave an overview of the emerging topics for the training of statisticians with a focus on statistical skills, based on the paper by Israel.

27. The panel discussion focused on the challenges of recruiting new staff. Mr. L. Sandberg, Norway, Mr. D. Kalisch, Australia and Mr. F. Coquet, ENSAI University, participated in the panel discussion, facilitated by Mr. F. Alsuhail, Finland. The following issues were raised in the discussion:

(a) The core statistical skill sets should be maintained;

(b) Many challenges facing statistical organizations require a different skill set, including skills to communicate, engage with people outside the statistical organization, ensure good governance and combine new data sources with new technologies;

(c)   It is a challenge for statistical organizations to hire the people possessing the necessary skills as such people are in high demand. Statistical organizations often are not able to pay the cost of the right staff due to limited budgets;

(d)   Universities are increasingly offering data science and business analytics programmes. Statistical organizations can benefit from close collaboration with these study programmes and can provide employment opportunities. Engaging students at different stages of their training by providing internships, organizing hackathons and other opportunities to use data would be beneficial;

(e)   Talented new graduates are interested in self-development, learning opportunities, fully utilizing their potential and the societal impact their work may have. Statistical organizations can stress these points to attract data scientists.

E.   Summary and conclusions

28.   The key points discussed at the seminar were summarized in a 2-pager.

1.   Action taken by the Conference

29.   The Conference recognized the importance of the skills and capabilities needed to address the challenges that statistical offices face.

30.   The Conference discussed the following possible actions for the way forward:

(a)   Identify strategies to create an innovative culture where experimental activities are encouraged and rewarded, while addressing behaviours that suppress innovation;

(b)   Investigate how to build capacity in soft skills, for example communication, and how to build teams with a mixture of competencies;

(c)   Exchange experiences where partnerships and collaboration with academia, other government organizations and the private sector have supplied the needed skills for statistical organizations;

(d)   Explore possibilities of how statistical organizations can develop a reputation of being an attractive workplace for talented individuals.

31.   The Conference endorsed a 2-pager reflecting the conclusions of the seminar (provided as Annex to the present report). The Conference asked the Secretariat and the CES Bureau to follow up on the issues raised. The Conference encouraged CES members to use the rich resource of papers and ideas produced by the seminar.

V.   Integrating geospatial data and official statistics

Documentation: ECE/CES/2017/12

32.   The Secretariat informed the CES plenary session of the developments in the area of geospatial information management. The following issues were raised in the discussion:

(a)   The activities of the regional committees of the United Nations Global Geospatial Information Management (UN-GGIM) initiative are increasingly integrated with those of the United Nations regional commissions. There is already full integration in Africa and Latin America. Closer integration would be welcome in Europe;

(b)   As the work of the statistical and geospatial communities is converging, chief statisticians were encouraged to reach out to their national counterparts in mapping and

geospatial agencies, to explore areas of common interest. Some examples were given of where this is already happening, and of the results achieved;

(c)   Capacity building in areas relating to the integration of statistical and geospatial information should be a priority.

1.   Action taken by the Conference

33.   The Conference noted the decision C (67) of the UNECE Commission session, in April 2017, on strengthening institutional arrangements on geospatial information management, as a follow-up to the ECOSOC resolution (E/RES/2016/27).

34.   The Conference recognized the importance of joint work between statisticians and geospatial experts. Areas highlighted for collaborative activity included the development and implementation of statistical geospatial frameworks, small-area estimation, integration of standards, geospatial information as a tool for integrating administrative and statistical data, and developing a better understanding of confidentiality issues. This work will be important to support the 2020 round of population and housing censuses, and the measurement of progress towards SDGs.

35.   The Conference welcomed the agreement that all UNECE member countries will be able to participate in the future work of the UN-GGIM: Europe group. Capacity building activities will be needed to support this wider participation, as well as the areas for collaborative activities identified above.

36.   The Conference supported greater collaboration between UNECE and UN-GGIM: Europe, and the development of a concrete proposal for joint work, for a decision by the UNECE Executive Committee.

VI.   Work of the High-level Group for the Modernisation of Official Statistics

Documentation: ECE/CES/2017/11

37.   Mr. P. Dalton, Ireland, chair of the High-level Group for the Modernisation of Official Statistics (HLG-MOS), presented the annual report of the Group including its main achievements and forthcoming priorities. He also presented for endorsement the models and frameworks developed by HLG-MOS.

38.   Mr. C.S. Cho, the Republic of Korea, introduced the outcomes of the High Level Seminar on Process Oriented Approach to Statistical Production, held in April 2017.

39.   The following issues were raised in the discussion:

(a)   The importance of collaboration under HLG-MOS and the community that surrounds it was recognized;

(b)   HLG-MOS provides a forum to discuss innovative topics such as how to go beyond traditional statistics with limited funding, how to organize a statistical office and how to engage with users to remain relevant, etc.;

(c)   The very useful models and frameworks developed by HLG-MOS should continue to be updated to match the progress in official statistics.

1. Action taken by the Conference

40.   The Conference approved the annual report of the High-Level Group for the Modernisation of Official Statistics (HLG-MOS), including the outcomes of the activities carried out in 2016 and plans for the rest of 2017 (ECE/CES/2017/11).

41.   The Conference strongly supported the continuation of the work on modernization of official statistics. National and international statistical organizations were invited to support the HLG-MOS work programme and to become partners in the Statistical Modernization Community.

42.   The Conference endorsed the models and frameworks developed under HLG-MOS, namely the Generic Statistical Business Process Model (GSBPM), the Generic Statistical Information Model (GSIM), the Common Statistical Production Architecture (CSPA), and the Generic Activity Model for Statistical Organisations (GAMSO).

VII.   Reports, guidelines and recommendations prepared under the umbrella of the Conference

A.   Guide on poverty measurement

Documentation: ECE/CES/2017/5, 5/Add.1

43.   The Conference discussed the *CES Guide on Poverty Measurement*. The Guide provides recommendations for improving the international comparability and availability of poverty statistics and the related metadata. Prior to the CES plenary session, the Secretariat conducted an electronic consultation of the *Guide* with the CES members. The comments by countries and organizations showed strong support to the Guide.

1.   Action taken by the Conference

44.   The Conference supported the *CES Guide on Poverty Measurement*. The Conference asked the Task Force on Poverty Measurement to revise the Guide to reflect the comments made in the electronic consultation and the discussion at the CES plenary session. The Task Force will submit the revised Guide and the plan for further work to the October 2017 meeting of the CES Bureau.

B.   Statistics for Sustainable Development Goals – Road Map

Documentation: ECE/CES/2017/2, 2/Add.1

45.   The Conference discussed the *CES Road Map on Statistics for Sustainable Development Goals* which was developed by a Steering Group co-chaired by Switzerland and the United States. The Road Map presents a strategy on how to provide statistics for SDGs, and guides the CES members in implementing the *Declaration on the role of national statistical offices in measuring and monitoring SDGs.* An electronic consultation of the Road Map was carried out prior to the CES plenary session. The responding countries and organizations showed strong support to the Road Map.

46.   Mr. B. Rothen, Switzerland, co-Chair of the Steering Group on statistics for SDGs, informed the Conference about the outcomes of the Regional Forum on Sustainable Development, which took place in Geneva on 25 April 2017, and its roundtable on data and monitoring.

47.   Ms. J. Park, United States, co-Chair of the Steering Group on statistics for SDGs, informed the Conference about the outcomes of the Expert Meeting on Statistics for SDGs, which took place in Geneva on 10-12 April 2017, and its follow-up actions.

48.   Ms. R. Bielak, Poland, Chair of the Task Force on Reporting SDG indicators using National Reporting Platforms, informed the Conference about the Task Force's current work.

49.   The following issues were raised in the discussion:

(a)   The Conference supported the Road Map as a comprehensive and well-structured document, covering the strategic areas related to statistics for SDGs and providing concrete recommendations and actions;

(b)   The Conference welcomed the piloting of data flows to be conducted by the Steering Group on statistics for SDGs. The pilot will inform IAEG-SDGs and its drafting group preparing guidelines on data flows;

(c)   Participants emphasized the importance of enhancing national statistical offices' role as national coordinator on data provision with respect to the Agenda 2030;

(d)   The Road Map should be a living document and incorporate in the next editions future developments at international level.

1.   Action taken by the Conference

50.   The Conference endorsed the first edition of *the CES Road Map on Statistics for Sustainable Development Goals*.

51.   The Conference asked the UNECE Steering Group on Statistics for SDGs to continue coordinating the work on statistics for SDGs under CES ensuring full consistency with IAEG-SDGs and HLG-PCCB. The Steering Group should facilitate the implementation of the Road Map, in particular by developing guidance on national reporting platforms, clarifying the capacity building needs in the context of SDGs, and sharing experience at future expert meetings. The Conference encouraged countries to develop national Road Maps for statistics for SDGs.

52.   The Conference requested the Secretariat to share the Road Map with other Regional Commissions.

C.   Set of key climate change-related indicators

Documentation: ECE/CES/2017/3, 3/Add.1

53.   The Conference reviewed the report of a Task Force, chaired by Italy, which developed an *Initial Set of Key Climate Change-related Statistics and Indicators*. The report defines an initial set of internationally comparable key climate change-related indicators that are aligned with SDGs, the Sendai Framework for disaster risk reduction and can be derived largely from System of Environmental-Economic Accounting (SEEA) and other statistical frameworks. Prior to the CES plenary session, the Secretariat conducted an electronic consultation of the report with the CES members. Countries and organizations made many useful comments for the refinement of the indicator set and supported the methods used for the indicator selection. The Conference emphasised the need for further work to refine the initial indicator set, to develop common methodologies and improve the availability of data.

1. **Action taken by the Conference**

54.   The Conference endorsed the Report of the Task Force on an *Initial Set of Key Climate Change-related Indicators using the System of Environmental-Economic Accounting*, subject to reflecting the comments received during the electronic consultation.

55.   The Conference agreed that the initial set of key climate change-related indicators form the basis for pilot testing, and asked the involved countries to share the outcomes.

56.   The Conference extended the mandate of the Task Force to refine the initial set of key climate-change related indicators based on the outcomes of the pilot testing, and to develop methodologies, data sources and guidance for implementation.

D.   Value of official statistics

Documentation: ECE/CES/2017/4, 4/Add.1

57.   The Conference discussed the *CES Recommendations on Promoting, Measuring and Communicating the Value of Official Statistics*, developed by a Task Force chaired by the United Kingdom. Prior to the CES plenary session, the Secretariat conducted an electronic consultation on the Recommendations with all CES members. The replies by countries and organizations showed strong support to the Recommendations and to the proposals for further work.

58.   The following issues were raised in the discussion:

        (a)   In the 'post truth' era, more than ever before, statisticians need to increase the awareness of the high quality of official statistics and the unique value they offer;

        (b)   Statistical offices are encouraged to build their communication strategies on the Recommendations. The branding of official statistics and trust in official statistics go hand in hand with the value of official statistics;

        (c)   Statisticians should measure the value of their own work. Concrete monetary measures of the value of official statistics have already proven effective in convincing decision makers that official statistics are worth their investment. The measurement approaches proposed in the Recommendations will need to be tested in practice;

        (d)   The Task Force has created a wiki of innovative practices in enhancing and communicating the value of official statistics. As good examples accumulate, the wiki could help to identify best practices that can be applied across the statistical community;

        (e)   The Recommendations should be utilized in internal communication with staff to increase understanding of how statistics inform important policy and business decisions. This understanding can be critical especially for staff engaging with respondents in households and businesses.

1. **Action taken by the Conference**

59.   The Conference endorsed the *CES Recommendations on Promoting, Measuring and Communicating the Value of Official Statistics*, including the related measurement framework.

60.   The Conference welcomed the UNECE wiki platform on best practices in the value of official statistics, developed by the Task Force, and invited countries and international organizations to continue to share their innovative practices through the wiki.

61.   The Conference agreed with the proposals for further work, including taking stock of the best practices shared in the wiki and discussing the value of official statistics regularly at future expert meetings.

62.   The Conference asked the Secretariat to launch the pilot testing of the framework for measuring the value of official statistics, and follow up with the outcomes to further develop the framework.

63.   The Conference urged countries to use the Recommendations internally within national statistical offices amongst staff, and externally to increase the understanding of the value of statistical work.

E.   Unpaid household work

Documentation: ECE/CES/2017/6, 6Add.1

64.   The Conference reviewed the *CES Guide on Valuing Unpaid Household Service Work,* developed by a Task Force chaired by the United Kingdom. The Guide discusses concepts and definitions, measurement approaches and valuation techniques of unpaid household service work, which is an emerging area for the statistical community.

1.   Action taken by the Conference

65.   The Conference endorsed the *CES Guide on Valuing Unpaid Household Service Work*. The Conference agreed with the need for further work in this area, and encouraged countries to compile household satellite accounts, as recommended in the Guide.

66.   The Conference asked the UNECE Group of Experts on National Accounts to follow up on the implementation of the Guide.

F.   Communicating population projections

Documentation: ECE/CES/2017/7, 7Add.1

67.   The Conference reviewed the *CES Recommendations on the Communication of Population Projections,* developed by a Task Force chaired by Canada. The recommendations promote the sharing of good practices on communicating population projections, and suggest mechanisms for collecting and disseminating metadata on national and international population projections.

68.   The following issues were raised in the discussion:

        (a)   UNECE plans to collect from countries metadata on population projections based on the variables included in Appendix C to the Recommendations, and make them available in a new database on the UNECE Wiki platform;

        (b)   Countries were invited to implement the Recommendations, and report back on their implementation in future.

1.   Action taken by the Conference

69.   The Conference endorsed the *Recommendations on the Communication of Population Projections,* subject to reflecting the comments received during the electronic consultation.

VIII. Coordination of international statistical work in the United Nations Economic Commission for Europe region

A. Outcomes of the in-depth reviews carried out by the Bureau of the Conference of European Statisticians

Documentation: ECE/CES/2017/8-9 and addenda

70.   The CES plenary session was informed about the outcomes of the recent in-depth reviews on measuring governance and data integration, conducted by the CES Bureau in October 2016 and February 2017 respectively. The Secretariat carried out an electronic consultation on the results of the reviews prior to the CES plenary session. All responding countries and international organizations supported the outcomes of the reviews. The Conference encouraged the active use of in-depth review papers as a unique information resource on progress in selected statistical areas.

1. Action taken by the Conference

71.   The Conference endorsed the outcomes of the in-depth reviews of data integration, based on a paper by UNECE and HLG-MOS, and of measuring governance, based on a paper by Mexico, Turkey and OECD, and noted that all in-depth review papers are available at: www.unece.org/stats/ces/reviews.html

72.   The HLG-MOS project on data integration will continue in 2017. The CES Bureau will decide in February 2018 on possible follow-up to the review, taking into account the outcomes of the HLG-MOS project.

73.   The Conference emphasized the importance of measuring governance, a novel issue that requires greater attention. The Conference agreed that further work in this area may be needed in follow-up to the Praia City Group on governance statistics and taking into account relevant OECD work in this area.

B. Exchange and sharing of economic data

Documentation: ECE/CES/2017/10, 10Add.1

74.   The CES plenary session was informed about the outcomes of the in-depth review on exchange and sharing of economic data conducted by the CES Bureau in October 2016 and the terms of reference of the newly established Task Force on this topic. An electronic consultation on the result of the review was carried out prior to the CES plenary session. All responding countries and international organizations supported the outcome of the review, and some provided advice for further work.

75.   The following points were raised in the discussion:

(a)   To ensure acceptance of data sharing and develop a feasible solution, the purpose of data sharing should be clearly identified;

(b)   National accountants need to have access to all the data required for a complete and accurate picture of the activities of multinational enterprises within the national borders. The first priority is to compile nationally consistent data on large multinational enterprises across statistical domains. Sharing inconsistent data may create confusion instead of solving discrepancies;

(c)   There is a great value in sharing data even at the aggregated level. However, statistical offices need to find solutions for sharing granular data as long as confidentiality

and trust of respondents can be guaranteed. Policy makers ask for more granular data. If official statistics are not able to provide the detail, they will use data from other sources;

(d)   Innovative solutions, where the data are collected in a consistent manner once and then used for different purposes, need to be developed. Bringing together legal experts, IT-experts and statisticians may help to advance this work;

(e)   Pilot exercises could help identifying which data should be shared internationally and how it can be done in practice;

(f)   Visiting companies can help to resolve inconsistencies between data from different sources. Company visits may also allow to access data that do not necessarily exist nationally but have to be retrieved from other parts of the multinational enterprise.

1.   Action taken by the Conference

76.   The Conference endorsed the outcome of the in-depth review of the exchange and sharing of economic data, based on a paper by Finland. The Conference asked the Task Force on exchange and sharing of economic data to take into account the points raised in the discussion.

77.   The Conference emphasized the urgent need for and importance of sharing data to improve quality of statistics while fully respecting the confidentiality of respondents' data. The Conference noted that it is essential to first reconcile data at national level, and agreed that establishing special units on large and complex enterprises at national statistical offices is a prerequisite for having consistent data. The Conference expressed support for creating an international network of experts dealing with such enterprises' data.

78.   The Conference welcomed the establishment of the Task Force on Exchange and Sharing of Economic Data, and underlined the need to utilize the advantages of working in collaboration with other international and national organizations. The Conference asked the Task Force to report to the Conference early in its mandate to support statistical offices in addressing asymmetries in cross-border flows arising from the globalization of production, trade and financing. The Conference asked the Task Force to develop innovative ways of data exchange and pilot test how these could work in practice.

IX.   Programme of work of the Statistics subprogramme of the United Nations Economic Commission for Europe

A.   Reports on the work of the Conference of European Statisticians, its Bureau and Teams of Specialists

Documentation: ECE/CES/2017/15 and addenda

79.   The Conference welcomed the work undertaken by the UNECE Statistical Division in implementing the Statistical Programme for 2016.

1.   Action taken by the Conference

80.   The Conference confirmed the decisions of the CES Bureau as reflected in their meeting reports, and approved the report on the implementation of the 2016 UNECE Statistical Programme (ECE/CES/2017/15).

B. **Programme planning documents for the Statistics subprogramme of the United Nations Economic Commission for Europe**

Documentation: ECE/CES/2017/13, 14

81.   The Conference reviewed the UNECE Statistical Programme for 2017 and the programme planning documents of the Statistics subprogramme prepared in the context of the United Nations Secretariat's biennial planning and reporting cycle. The documents were agreed by the CES Bureau at its meetings in October 2016 and February 2017.

1. **Action taken by the Conference**

82.   The Conference adopted the UNECE Statistical Programme for 2017 (ECE/CES/2017/14) including the list of planned meetings, and the Programme of Work for 2018-2019 including the Publication Programme (ECE/CES/2017/13).

83.   The Conference emphasized the importance of issuing as official documents and translating into the three official languages of UNECE (English, French and Russian) the main documents for the CES plenary session and its meetings in 2017-2018 in the following areas:

(a)   Environment and multi-domain statistics;

(b)   Demographic and social statistics (gender statistics, population and housing censuses);

(c)   Economic statistics (national accounts, global production, business registers, consumer prices and quality of employment);

(d)   Statistical modernization (human resources management and training);

(e)   Statistics for Sustainable Development Goals.

84.   The main documents include the provisional agenda, the report and one main document for each sub-item on the agenda. For the CES plenary session, the main documents include in addition six documents for each sub-session.

X. **Selection of topics for seminars to take place during the 2018 plenary session of the Conference of European Statisticians**

Documentation: ECE/CES/2017/17

85.   Taking into account the results of the survey carried out among the CES members in March-April 2017 and the recommendation by the CES Bureau, the following topics were selected for seminars at the CES plenary session in 2018:

A. **Measuring what matters – broadening official statistics**

Seminar organizers: Poland in collaboration with Israel, New Zealand and Slovakia

Papers offered by: France (tbc), Israel, Italy, Netherlands, New Zealand, Romania, Slovakia (tbc), Sweden (tbc), United States, Eurostat and IMF (tbc).

B. Getting our message across: Strategic reflections on modernizing statistical communication

Seminar organizers: Montenegro in collaboration with Albania, Mexico and Netherlands

Papers offered by: Australia, Belgium, Croatia (tbc), Germany, Israel, Netherlands, Norway, Sweden, United States, Eurostat and OECD.

86.   The CES Bureau will discuss the format and organization of the seminars at its October 2017 meeting.

IX.   Election of the Conference of European Statisticians Bureau

Documentation: ECE/CES/2017/18

87.   According to the rules governing the work of the Conference and based on the proposal put forward by Ms. A. Zigure, the most senior Chief Statistician present at the Conference and previous Vice-Chair of the Conference, the Conference elected the following members to serve on the Bureau for the 2017-2019 term of office:

Ms. M. Bruun (Finland) as Chairperson;

and the following Vice-Chairpersons of the Bureau:

Mr. S. Mnatsakanyan (Armenia);

Mr. K. Pesendorfer (Austria);

Mr. A. Arora (Canada);

Mr. M. Kristof (Croatia);

Mr. J. Santaella (Mexico);

Ms. L. MacPherson (New Zealand);

Mr. J. Pullinger (United Kingdom).

XI.   Other business

88.   The 2018 CES plenary session will take place on 18-20 (a.m.) June 2018 in Geneva, back-to-back with the meeting of the OECD Committee on Statistics and Statistical Policy.

Annex

Seminar on the next generation of statisticians and data scientists

Note by Session organizers (Finland and Eurostat)

1.   The CES plenary session discussed the skills and capabilities needed to address the challenges arising from the new data-driven world where statistics should be better integrated to support policy and decision making. The seminar used twitter to engage with participants and supplement the panel discussions.

2.   The key outcomes of the seminar were:

(a)   In order to remain competitive and credible as the official data providers statistical organizations are required to significantly invest in modern statistical skills. The data revolution generates new user needs, and stiffer competition from the private sector;

(b)   Advances in the statistical tools for (big) data analysis have allowed increased value to be added to data. The value added can be related to timeliness, improved precision, and coverage of "old" statistical output (economics, business, etc.), but also to new indicators;

(c)   The combination of administrative, survey, geospatial, and new (big) data sources can add significant value, when successfully incorporated into statistics production systems;

(d)   Statistical organizations adopting Big Data should critically assess the reliability and usefulness of the new data sources and applied methodology. Particularly, issues related to collection and management of big data for official statistics, big data privacy and protection, increasing data accessibility but maintaining privacy and confidentiality need to be addressed;

(e)   Successfully developing the next generation of official statisticians will be one of the most critical objectives for the coming years;

(f)   The skills that are impacted most by the emergence of new data sources are (i) statistical skills, (ii) IT (management) and (iii) other skills, including leadership, creativity and communication;

(g)   These new skills will not be found on just one staff member. Statistical organizations should consider building and maintaining collaborative and multidisciplinary data science teams. Data science teams should be able to understand the relevant applied mathematical and statistical tools, have programming skills and data storage know-how, domain knowledge and soft skills related to collaboration and team work, and also possess the ability to communicate and visualize data compellingly;

(h)   Statistical organizations can benefit from the network of peers by sharing best practices. The UNECE High-Level Group for the Modernisation of Official Statistics (HLG-MOS) proposed a common competency framework of skill development that serves as a blueprint for all the statistical organizations looking to develop the data science toolbox;

(i)   There are important examples of collaboration with the higher education institutions that could be emulated elsewhere. Some universities have masters programs in official statistics, and tight links to the statistical organizations;

(j)   Universities are increasingly offering data science and business analytics programs. Statistical organizations can benefit from close collaboration with these study programs and can provide employment opportunities (internships, and other forms of practical training) for the students at different levels;

(k)   Talented new graduates are interested in self-development, learning opportunities, fully utilizing their potential, and the societal impact they may have. Statistical organizations can stress these points when recruiting and attracting data scientists;

(l)   Statistical organizations can communicate the importance of statistics in the "post-truth" era;

(m)   Statistical organizations can pay particular attention to user needs that have evolved by the increased sophistication of data users. There is a demand for statistical output that are based on elaborate models and big data, if the corresponding statistical uncertainty is appropriately reported;

(n)   The sophisticated user can be allowed to challenge common practices in statistical organizations, by allowing access to databases and codes that are used in the statistics production process (for instance, as a part of a scientific research project).

3.   This conference has progressed towards that goal by delineating the necessary skills in order to produce high-quality statistics in the future, and discussed how statistical organizations can acquire, develop and maintain them. In particular, statistical institutions are encouraged to work more closely together, invest in key priority areas, and develop stronger links to educational institutions to ensure that the needed skills are available.

4.   Further work in this area could include:

(a)   Sharing country experiences in how to create an innovative culture where experimental activities are encouraged and rewarded;

(b)   Investigating how capacity in new competencies (including soft skills) can be built in statistical organizations. A particularly useful avenue can be to build teams with both soft and hard skills. Even though the technical abilities will be increasingly important with the data revolution, the subject matter expertise should always be a core competence in a successful team;

(c)   Sharing experiences in how to actively seek partnerships and other types of collaboration with the academic community, other government agencies, and private sector. Especially examples of partnerships that have supplied the needed skills for statistical organizations;

(d)   Exploring possibilities of how statistical organizations can develop a reputation of being an attractive workplace for talented individuals;

(e)   Strengthening the collaboration with universities by making formal high-level agreements;

(f)   Statistical organizations can propose educational programs that directly serve the needs of official statistics. These programs could include the relevant data science courses;

(g)   Engaging students at different stages of their training by providing internships, organizing hackathons and other opportunities to use data.