Summary

The document presents the key outcomes of the Workshop on Statistics for Sustainable Development Goals, which took place from 17 to 18 April 2019 in Geneva. The meeting was organized following a decision of the Conference of European Statisticians in June 2018 and the recommendation of the previous Expert Meeting on statistics for SDGs, held from 18 to 19 April 2018.
1. Attendance

1. The workshop was attended by Albania, Andorra, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Canada, France, Georgia, Ireland, Israel, Italy, Kazakhstan, Kyrgyzstan, Malta, Montenegro, North Macedonia, Poland, Republic of Moldova, Russian Federation, Serbia, Sweden, Tajikistan, Turkey, Ukraine, the United States of America, and Uzbekistan.


II. Organization of the workshop

3. The workshop sessions were chaired as follows: Session 1 – M. Gandolfo (Italy); Session 2 – G. Todradze (Georgia); Session 3 – A. Safyan (Armenia); Session 4 – E. Kukharevich (Belarus).

4. The following substantive topics were discussed:
   - Session 1: Setting the stage: statistical capacity development in EECCA and SEE regions;
   - Session 2: Geospatial data and methods for statistics for SDGs;
   - Session 3: Data disaggregation for SDGs;
   - Session 4: Capacity development priorities related to data disaggregation and geospatial data.

5. All documents for the workshop are available at:

III. Setting the stage: statistical capacity development in Eastern Europe, Caucasus and Central Asia and South-East Europe

6. The session was chaired by M. Gandolfo (Italy), co-chair of the Task Team on Capacity Development. An overview of SDG related statistical capacity development initiatives of selected international organizations in UNECE region was presented.

7. UNSD presented a summary of capacity development activities at the global level. The projects include the UN Development Account 10th tranche Programme on Statistics and Data, the joint UNSD-UK Department for International Development (DFID) project on SDG monitoring (the target countries from the UNECE region are Kyrgyzstan and Tajikistan), capacity building to support a Federated Information System for SDGs (FIS4SDGs), and workshops supporting the Voluntary National Review (VNR) process.

8. An important issue to make the capacity development more efficient is coordination between different actors. Coordination is required at all levels: national (between producers of official statistics and of other types of data) and international level (between countries, international/regional organizations, donor community, etc.). It is good to coordinate initiatives already in the planning stage and to undertake joint projects.
9. To have a good basis for identifying needs for capacity development, UNECE, Eurostat and EFTA are jointly carrying out Global Assessments of statistical systems in countries of Easter Europe, Caucasus and Central Asia (EECCA). The assessments are always carried out at the request of a country with the aim to strengthen its legal and institutional frameworks in line with the Fundamental Principles of Official Statistics, standards and recommendations for official statistics and good practices. The assessments are done by multidisciplinary teams who review the situation and provide information on the state of development of official statistics in the country. The assessments target and reach out to different stakeholders of official statistics: the national government, members of the national statistical system, users, and specialized international organizations and donor community. The reports are widely disseminated and are often used as a basis for planning capacity development activities. The more recent assessments have also provided recommendations on SDG statistics.

10. UN WOMEN presented the joint Mainstreaming, Acceleration and Policy Support (MAPS) missions which are another good example of a coordinated approach. The MAPS missions have been carried out in 14 EECCA and Balkan countries jointly by several UN regional agencies. The MAPS missions focus mainly on policies but cover also the data issues. The results show that national coordination mechanisms, roles and responsibilities for data producers, and stages of development of national monitoring systems for SDGs are different. The experience from countries concerning coverage of statistics in the missions varies from non-inclusion (e.g. Belarus) to good coverage and impact (e.g. Kyrgyzstan).

11. The MAPS mission results show that national statistical offices are often recognized as key agencies for SDG indicators. A task force or working group for SDG data has been established in several countries. All NSOs face coordination challenges within the statistical system. Adequate funding for official statistics is often not secured and data disaggregation is a primary concern for all countries. Within NSOs, limited resources are devoted to SDGs and other cross-cutting data: only four countries have established specialised organizational units responsible for such data. The insufficient technical capacity and statistical expertise often limits the statistical offices’ possibilities to explore non-traditional data sources and modernize statistics.

IV. Geospatial data and methods for statistics for SDGs

12. The Session was chaired by G. Todradze (Georgia) and included presentations by Albania, Georgia, Ireland, Kazakhstan, Portugal, Turkey, Eurostat, FAO, UN Environment and WHO.

13. Sweden presented progress of work of the IAEG-SDG working group on geospatial information. The group’s aim is to ensure that the ‘leave no-one behind’ principle is implemented from the geographic perspective. The group works in two streams: (i) data disaggregation by geographic location and aggregation of geocoded unit record data, and (ii) application of ‘production ready’ satellite-based observation data. The group has identified the SDG indicators that could be produced using geospatial information. To ensure comparability, such geospatial data should be provided in a harmonized way regarding spatial resolution, thematic detail, accuracy and temporal periodicity. Cooperation and coordination is required both at the national and international level, including among UN-GGIM, UN Global Working Group on Big Data, Expert Group on the Integration of Statistical and Geospatial Information and Group on Earth Observations.

14. UN Environment estimates that for about 68% of the environment related SDG indicators there is insufficient data to assess progress towards SDGs, including for geospatial analysis. This makes it very difficult to understand the challenges facing ecosystems or the relationship between the environment and people. There is an urgent need to invest in national statistical systems, build national capacity for monitoring the environment and to prioritise the development of disaggregated and geospatial information.

15. Goal 12 (Sustainable Consumption and Production) is key to attainment of the other Goals but it has the least data availability, and lowest level of funding and priority from Member States. Another priority area for measurement is fresh water which is essential for
all aspects of life and sustainable development. An example of an indicator where geospatial data can provide important information is 6.6.1 ‘Change in the extent of water-related ecosystems over time’. There are significant reporting challenges due to lack of data, reporting burden and complexity of the indicator. Global satellite-based data and national in situ data must be combined to calculate the sub-indicators of 6.6.1. UN Environment brought examples of calculation of this indicator in different countries.

16. A joint UNSD/UK-DFID Federated Information System for SDGs (FIS4SDGs) project aims to disseminate integrated statistical and geospatial data through data hubs. Setting up the data hubs is envisaged to be a country led and owned process, using open data standards and principles for data interoperability. Currently data hubs of five countries are linked to the system, including Ireland and Mexico.

17. FAO is using geospatial data and tools for the direct measurement of some agricultural variables (including SDG indicators) and for production of disaggregated data, as well as to improve survey and sample design. FAO has supported about 70 countries in using EO data and developed several handbooks in this area. It has also developed a project that can create an EO database for a country based on freely available data. FAO is developing a methodology and guidelines on using EO and GIS tools for SDG indicators. The guidelines will be validated through field testing with the aim to build national capacity in selected 12 countries for the use of the guidelines.

18. Eurostat presented the SDG indicators in EU indicator set related to land-cover and land-use that can be calculated using geospatial data. The main issues with geospatial data are geographical coverage and comparability between countries. The differences in similar concepts used in EO data pose a big problem for deriving comparable data (e.g., definitions of ‘artificial’, ‘built up’ or ‘urban’ areas). Converting data from images to statistics has a strong risk of bias as current Earth observation products often do not provide error estimates for area statistical. The two main sources for geospatial data are the LUCAS sample survey and EO data. Both have their advantages and disadvantages related to coverage, accuracy, comparability, flexibility, timeliness, size of output areas, etc.

19. A statistical geospatial framework for Europe (GEOSTAT3) is under development covering the key aspects of statistical integration. An implementation guide and good practice cases are available (see: https://www.efgs.info/geostat/geostat-3/).

20. The Coordinating Committee of Statistical Activities (CCSA) is carrying out a a stocktaking exercise on the use of geospatial data in statistics to establish an inventory of geospatial tools/applications for statistics used by international organizations, and to collect experiences in building country capacities in this area. The results are expected to be available in September 2019.

21. Presentations from international organizations outlined the importance of innovative approaches and solutions. Although use of geospatial and Earth observation data and tools require additional resources and investments, it is an unavoidable step towards future. It allows to produce new kinds of data, link data from different subject-matter areas, and to improve the traditional statistical surveys. For example, using geospatial data in combination with statistical surveys for agriculture and environment results in better geolocated data and represents a source for further surveys and sample frames.

22. Active involvement and participation of the National Statistical Institute (INE) of Portugal and the Central Statistics Office (CSO) of Ireland in UN-GGIM: Europe has led to impressive outcomes in producing and disseminating geographically disaggregated SDG indicators. The UN-GGIM work plan until 2020 includes promoting the benefits of integration of statistical and geospatial data to policy makers and analysing how to provide a territorial dimension in SDG indicators. The indicators covered include 11.2.1 ‘Proportion of population that has convenient access to public transport’ (indicator coordinator: Austria), 11.3.1 ‘Ratio of land consumption rate to population growth rate’ (coordinator: Portugal), 11.7.1 ‘Average share of the built-up area of cities that is open space for public use’ (coordinator: Sweden), and 15.1.1 ‘Forest area as a proportion of total land area’ (coordinator: Italy).
23. Ireland presented an innovative approach using geospatial visualisation tools for SDGs. The Irish SDG platform (http://irelandsdg.geohive.ie/) includes over 200 indicators and 100 spatial datasets. It is built to provide UN, EU and national SDG indicator values. The hub is developed in cooperation with Ordnance Survey Ireland in the framework of UNSD/Esri Research Exercise. A national UN SDG Indicators Data Governance Board is established that includes relevant government departments and agencies. This Board is responsible for metadata, business glossaries, lifecycle management and data quality. Prior to release, the story maps are presented to a SDG Civil Service Senior Official group for feedback, especially if the narrative has a policy aspect. Ireland is ready to share with other statistical offices the codes that can be used by NSOs for storytelling and story maps behind the SDG indicators. The detailed steps and guidance from CSO of Ireland are available on UNECE wiki on Statistics for SDGs.

24. In addition, Ireland has a census open data site that links geography and statistics using the 2016 census datasets and an electronic publication of regional SDGs in Ireland (https://www.cso.ie/en/releasesandpublications/ep/p-rsdgi/regionalsdgsireland2017/).

25. Portugal is working actively on the use of geospatial data: defining priority user needs, reviewing interoperability frameworks, methods for data integration and use of data from multiple sources. Portugal demonstrated use cases on accessibility to schools (relevant for SDG4), and potential territorial coverage of broadband internet access (SDG 9).

26. Turkey presented its work on the indicator 15.4.2 ‘Mountain Green Cover Index’. FAO calculates the indicator using an open source tool (Collect Earth) and a map of mountains by the FAO/Mountain Partnership Steering Committee. FAO also provided technical assistance which was very important for the success of the exercise. Turkey produced the indicator based on FAO data allowing a more detailed and targeted analysis. This required identifying a focal point in the country (Ministry of Agriculture and Forestry) and cooperating with different agencies. The exercise resulted in refining survey methodology in Turkey and improving the quality of the data by substantially increasing the number of sample points used. The Ministry is following up to test the methodology using less sample points.

27. Albania presented their plans to set up a SDG dashboard with geospatial data. A short list of indicators that can benefit from geospatial information has been prepared. A major challenge is lack of data sources. A geoportal of Albania is available at: https://instatgis.gov.al/#/prefectures/population/prefpop1 that presents data from the population census. The work on this portal showed how important for the successful outcome is cooperation between statistical and geospatial experts and organizations.

28. Kazakhstan also presented examples of linking geospatial data with statistics, e.g. crime statistics done under the General Prosecutor’s office, and implementation of a Smart City project in Nur-Sultan by using different data sources on housing construction and urban development.

29. Georgia demonstrated their Geographic Information System (GIS) that allows to create statistics at different spatial levels (national, regional, local). It allows to save resources, improve data collection, data accuracy and quality, visualize survey results and make spatial analysis. This would be a good tool also for SDG data. The challenges are lack of data sources, non-availability of disaggregated data, data quality and insufficient resources in the statistical office. Capacity development is needed.

30. Participants discussed the challenges and solutions to stimulate the use of geospatial data and tools for producing SDG indicators. The most urgent issues mentioned were the availability and access to geospatial data and tools; lack of clear vision and strategies in NSOs to move forward in this area; lack of necessary expertise in NSOs; and staff turnover – building new capacities requires time.

31. Linking geospatial and statistical data should start from what are the questions that need to be answered. It requires collaboration with other agencies, especially the national mapping agencies. It is important to involve experts from different areas and try to find solutions together.
32. Earth observation (EO) data remain largely outside the national ownership – such data and information are produced mostly by space agencies or international organizations. Although the EO data are openly available, the country capacities are limited in using and interpreting the data for producing statistical indicators. Capacity development (human resources and institutional) is needed to be able to apply the open source tools and applications. Countries often cannot validate the data produced by international organizations using EO tools as they do not have enough knowledge of the methodology for EO data production.

33. It would be useful to have a platform for sharing experience in combining statistical and geographic data. Workshop participants strongly emphasised the need for further capacity development on geospatial tools and data both for technical and IT specialists. Pilot projects are very useful.

V. Data disaggregation for SDGs

34. The session was chaired by A. Safyan (Armenia) and included presentations from Belarus, Canada, Kazakhstan, Kyrgyzstan, Tajikistan, UNICEF, UNSD and WHO.

35. As an introduction to the session, C. Williams (Canada) presented the activities of the IAEAG-SDG workstream on disaggregation. The group has produced a list of minimum disaggregation dimensions, an overview of their availability in the global SDG database and of existing standards for data disaggregation. A matrix comprising disaggregation dimensions explicitly referenced in an SDG target or indicator name, the recommended categories for each dimension, data availability or custodian agencies’ plans for data availability, as well as other existing and future disaggregation dimensions and categories are available at https://unstats.un.org/sgds/iaeg-sdgs/disaggregation/ (a summary was presented to the UNSC 50th session, see: https://unstats.un.org/unsd/statcom/50th-session/documents/BG-Item3a-Data-Disaggregation-E.pdf). The IAEAG-SDG meeting in March 2019 decided to develop methodological guidelines and tools for data disaggregation.

36. As a further step, IAEAG-SDGs has asked major groups and international organizations to identify a minimum set of policy priorities related to vulnerable groups (such as, poor, women, children, elderly, international migrants, forcibly displaced people, persons with disabilities), and provide recommendations which data disaggregations are required.


38. The workshop documents provide input for a Handbook on data disaggregation which is under development. The Handbook is planned to provide guidelines for compiling, analyzing, reporting and using disaggregated data, targeting experts from NSOs and line ministries.

39. WHO presented its Health Inequality Monitoring and Health Equity Assessment Toolkit (HEAT) that uses publicly available data to produce highly granular information. HEAT is among the largest global databases on health including about 30 indicators disaggregated by age, sex, economic status, education, place of residence and subnational region. The quality and available detail in source data have an impact on what disaggregations can be provided. Data production is therefore combined with capacity development in countries to improve the source data.

40. UNICEF demonstrated using disaggregated data to identify the problematic groups, localities and situations, helping to target policy interventions. UNICEF is working on harmonizing the definitions of child protection, access to justice and violence against children used in administrative data, to help standardize and operationalize indicator definitions.
41. UNICEF informed about an *Inclusive data charter* – an initiative of the Global Partnership for Sustainable Development data. The charter is a multi-stakeholder mechanism with a core group of governments, international organizations, and civil society organizations that commit to leaving no-one behind and aim to mobilise political commitments to deepen disaggregation (http://www.data4sdgs.org/inclusivedatacharter).

42. Belarus, Kyrgyzstan, Kazakhstan and Tajikistan presented their work on disaggregation of SDG indicators. All these countries have analysed the availability of disaggregated data for global SDG indicators. Belarus made an assessment of the availability of data on gender, disability status and geographic regions. In Kyrgyzstan, from the 60 SDG indicators available, around half can be disaggregated by geography and sex, and about one third by age. No indicators are disaggregated by ethnicity or disabilities. In Kazakhstan the available disaggregations are gender, age, ethnicity, geographic location (urban/rural) and income level. In Tajikistan the sex and urban/rural breakdown are available for some SDG indicators.

43. The workshop participants considered the challenges in producing disaggregated data. The data sources and their (un)suitability for statistical purposes, and insufficient human and financial resources were mentioned among the most challenging issues. Both NSOs and the agencies responsible for maintaining administrative registers need (financial) support for collection of more detailed data, especially in countries with developing statistical systems.

44. In some cases, disaggregation may not be necessary at the global level but important at the national level and therefore only general recommendations can be given at the global level. Countries are in the best position to decide about their vulnerable groups. This should be done in consultation with policy makers to take into account the policy priorities of which vulnerable groups are targeted. This will help to prioritise the needs for the required disaggregations as resources are always limited. For example, in Kazakhstan, improvement of quality of life and advancement of vulnerable groups (disabled, PLWHA, refugees and migrants) are considered national policy priorities. User needs should be an important guiding principle. First, an assessment needs to be done to analyse which disaggregations would be available from which sources. This requires cooperation with other national ministries and agencies.

45. Guidance is also needed about how the country relevant disaggregations will be presented in global and regional reports, and how to make international comparisons when different sources and definitions are used.

46. Many new disaggregations are required, such as migrant status, disability, HIV status, race. To obtain disaggregated data on new topics can be done by running new surveys (which is expensive), adding modules or questions to already existing surveys or censuses, or using administrative registers. For example, the most recent population census questionnaire in Kyrgyzstan included questions on disability and migration status. In Belarus, questions were added to household surveys to assess the situation of persons with disabilities.

47. The sources for disaggregated data are censuses, sample surveys, administrative data and statistical reporting by businesses. The challenges with data disaggregation for SDGs are the same as for official statistics in general. Special skills and tools are needed to deal with big data and geospatial data that can be used for producing and disseminating disaggregated data.

48. Disaggregated data could be acquired from census but in most cases these data become available only once in 10 (or 5 years) which is not frequent enough for the needs of disaggregated data.

49. Producing disaggregated data by combining statistical and administrative data can be a good way but it has associated issues. The first condition is the existence of an administrative register that could provide the necessary information. Secondly, the coverage, definitions, available detail, quality, etc. in administrative sources are often different from

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2 Currently 11 agencies have signed up, including the UK DFID, World Bank, UNICEF, UNFPA, statistical offices of Colombia and the Philippines, selected government agencies of Ghana, Kenya and Sierra Leone, and some NGOs.
statistics. Therefore, these data must be analyzed from the perspective of suitability for statistical purposes. The data that is available in administrative sources may help to shed light on the situation of vulnerable groups and services provided to them but may not necessarily be sufficient to produce the needed disaggregation dimensions for SDG indicators.

50. Additional effort is needed to improve quality of administrative sources, and cooperation is necessary to ensure that holders of administrative data take into account needs of official statistics. Ideally, legislative basis for this should be established. When discrepancy between the administrative and statistical data is significant, guidance is needed on prioritizing data sources.

51. Adding questions to existing surveys can be a good solution but it needs to be considered from the viewpoint of having suitable surveys, and not making the surveys too long and complicated. There has to be a balance between the additional information obtained and burden on respondents and the statistical office for processing the results.

52. Certain disaggregations cannot be included in censuses or surveys because there are no international recommendations on how to define and measure them. Development of methodologies and guidelines is needed. Questions on some groups can be sensitive in national context (e.g. ethnicity) and asking these questions can endanger the result of the whole survey. In such cases, proxy questions can be used.

53. Producing disaggregated SDG indicators in the context of limited resources puts additional pressure on NSOs. The need for disaggregated data should be reflected in strategic documents. In many cases NSOs do not have a specialised unit on SDGs, this work is an additional task for staff. A possibility to reduce the burden could be to produce the disaggregated data with less frequency (for example, not every year). It would be useful to have a platform for exchanging best practices on how to deal with disaggregations of SDG data.

54. Technical means are also needed to transfer the disaggregated data to CAs and international databases. These categories will have to be reflected in SDMX. As the SDMX standard is developed at the global level, there may be a problem with the disaggregation dimensions that are needed for national purposes (which will not be available at the global level).

VI. Decisions and recommendations for further work

55. Many UN agencies and other international organizations are assessing country progress towards SDGs. These should be coordinated to avoid duplication and reduce the burden on involved institutions as resources are limited both in countries and in international organizations. A coordination mechanism of directors of statistical divisions of UN agencies and other international organizations at regional level, similar to such mechanism at the global level, could be established to support the coordination of regional initiatives.

56. The Global Assessments of national statistical systems (carried out jointly by UNECE/Eurostat and EFTA) will continue to serve as important tools to raise awareness of official statistics and its value, targeting policy makers, national statistical system members and other stakeholders of official statistics, international organizations and donors. The Global Assessments are a unique opportunity to assess the legislative and institutional dimensions of national statistical systems from the perspective of production and dissemination of SDG indicators. The collected information should be used as a source of information when planning various capacity development initiatives.

57. National statistical offices and international organizations should increase the use of geospatial data and tools for the production and visualization of SDG indicators. Advanced country experience in this area (for example, Ireland) and use of open source solutions contribute to the development of capacities in this direction. UNECE is setting up a regional knowledge hub on statistics for SDGs to share experience in the production and visualization of official statistics and SDG indicators.
58. Based on national policy priorities regarding vulnerable groups (such as, poor, women, children, elderly, international migrants, forcibly displaced people, and persons with disabilities), the national statistical offices are making efforts to produce granular data to ensure that “no one is left behind”. The quality assurance requirements should be followed at all stages of statistical production and when combining the data from different sources (administrative data, statistical surveys, other data).

59. On emerging issues on capacity development on data disaggregation and use of geospatial data and tools, the UNECE Secretariat, Steering Group on Statistics for SDGs and its Task Teams will take into account the results of other working groups in the area (SDMX, on Geo-spatial information and on Inter-linkages of SDG Statistics).

60. The next Workshop on Statistics for SDGs will take place back-to-back with the 2020 Expert Meeting, during 21-24 April (exact dates to be confirmed) 2020 in Budapest, Hungary.