

# **United Nations Statistical Commission Global Working Group on Big Data for Official Statistics Annual meeting**



11 November 2020, 07:00 EST Minutes

# Participants list:

South Africa (Chair), Australia, Bangladesh, Brazil, Canada, China, Colombia, Denmark, Egypt, Georgia, Indonesia, Ireland, Italy, Mexico, Morocco, Netherlands, Poland, Republic of Korea, Rwanda, Saudi Arabia, Switzerland, UAE, UK, Peru (Observer)

African Development Bank, UN Economic Commission for Africa, UN Economic and Social Commission for Asia and the Pacific, Eurostat, FAO, GCC-STAT, IMF, ITU, OECD, UN Global Pulse, UN Statistical Institute for Asia and the Pacific, UPU and UN Statistics Division.

Absent: Cameroon, Germany, Oman, Pakistan, Philippines, Tanzania, USA, CARICOM, UNECE and World Bank

#### Agenda:

- 1. Welcome
- 2. Organizational structure of the UN Global Working Group (GWG) on Big Data for Official Statistics

#### Documents:

- Item (2) - Organizational structure

#### 3. UN Global Platform

#### Documents:

- Item (3) UN Global Platform, Regional Hubs and the Technical Delivery Board
- Item (3) Community Model of UN Global Platform
- 4. Regional Hubs in support of the UN Global Platform

# 5. GWG Task Teams

#### Documents:

- Item (5) Big Data and SDGs Task Team Achievements and Objectives
- Item (5) Scanner data Task Team Achievements and Objectives
- Item (5) MPD Task Team Achievements and Objectives

- Item (5) PPT Task Team Achievements and Objectives
- Item (5) AIS Task Team Achievements and Objectives
- Item (5) EO Task Team Achievements and Objectives
- Item (5) Training Task Team Achievements and Objectives

# 6. GWG Report to the Statistical Commission

- Item (6) Report of the GWG to the 2021 Statistical Commission
- Seoul Declaration v1

# 7. Closing remarks

Documents are available at <a href="https://unstats.un.org/bigdata/events/2020/gwg-annual-meeting/">https://unstats.un.org/bigdata/events/2020/gwg-annual-meeting/</a>

#### **Outcomes:**

- The GWG agreed to the Community model for the UN Global Platform, which consists of co-investment and co-development (i) by in-kind substantive and IT expert contributions to drive innovation on new data solutions, (ii) by base funding contributions to ensure the continuity of the Cloud infrastructure and core services, and (iii) by project (and training) funding contributions to add and grow data and services on the UN Global Platform.
- The GWG welcomed the offers of continued in-kind support to the UN Global Platform by Canada, Netherlands, UK, China, Rwanda-UNECA and UAE.
- The GWG agreed to the creation of a Task Team on acquisition of global private sector data.
  Such task team can approach global companies to make data available under global arrangements.
- The GWG agreed to the creation of a Finance Committee for the UN Global Platform to develop a strategic approach in raising funds.
- The GWG welcomed and supported that all Task Teams are providing input to the global training program on use of Big Data and data science, which is being rolled out during 2021
- The GWG further welcomed a review, which is organized by UNSD and GPSDD, regarding user needs and possible improvements of the UN Global Platform. A report of the review will become available by the end of December 2020.

#### **Minutes:**

#### 1. Welcome

Mr. Risenga Maluleke, Chair of the UN Global Working Group (GWG) on Big Data for official statistics and Statistician General of South Africa, opened the GWG plenary meeting and welcomed all members.

Mr. Stefan Schweinfest, Director of the UN Statistics Division, also addressed the GWG members in the opening segment. He emphasized that the statistical community has shown during the COVID-19 pandemic that it can get access to new (big) data sources and that it can use those to deliver relevant indicators for policy decisions. He therefore encouraged everyone to take advantage of the capabilities of UN Global Platform for collaboration and sharing of experiences. The platform is a unique opportunity for our community to actively work together, and we should all try to support the platform through in-kind and financial contributions.

# 2. Organizational structure of the UN Global Working Group on Big Data for Official Statistics

Leadership:

- Mr. Risenga Maluleke (South Africa) is the Chair;
- Mr. Niels Ploug (Denmark) is Vice-Chair coordinating the Task Teams;
- Mr. Tom Smith (United Kingdom) is Vice-Chair coordinating the UN Global Platform and the Regional Hubs.

The Chair will represent the GWG in any official function, such as the Statistical Commission, will lead the GWG plenary meeting and will lead the Advisory Board. The vice-Chairs take turn leading the GWG Bureau meetings.

A description of the various bodies under the GWG was provided in the supporting documentation. It describes the GWG Advisory Board, the GWG Bureau, the Technical Delivery Board and the Task Teams. OECD was added as member to the Advisory Board. All GWG Members are encouraged to take part in the work of the task teams, if they haven't done so yet. A Scientific Committee is being installed for quality control of the work of the Task teams.

#### 3. UN Global Platform

Mr. Tom Smith, Vice-Chair of GWG, recalled the development of the UN Global Platform (UNGP) from the discussions in Bogota in November 2017 to the implementation of the platform by the Office for National Statistics of the UK in the period 2018 to 2020. On 1 June 2020, ONS, UK, handed over the beta version of the platform to the UN community with the objective to scale it for global use.

The UNGP is based on three principles: global data sources, Cloud-based infrastructure and services, and a community of experts which is driving the substantive and technical innovation.

The UNGP is for the whole statistical community. As an example, there has been an increased use of the AIS vessel tracking data on UNGP. The innovation here is driven by the AIS task team. It has made a dashboard available showing the number of ships making port calls for 1200 ports around the world on a weekly basis. The task team also recently organized a very successful hackathon on AIS data. This work on UNGP is supported by a team of technical experts. The support of all the substantive and IT experts is provided on an in-kind basis by the institutes collaborating in the task team and on the UNGP.

Mr. Rob McLellan, Chair of the Technical Delivery Board (TDB) of the UN Global Platform, reiterated that the platform gives access to scalable infrastructure using Cloud-based services, to global data sets and related services, and access to a network of experts. TDB reviews proof of concepts of activities on the platform, such as the UNSD-FAO project on satellite data for crop statistics, the .STAT technology for Camstat or the AIS hackathon. GWG members are invited to make IT staff available to help in the IT support of the platform.

Ms. Claire Melamed, CEO of the Global Partnership for Sustainable Development Data (GPSDD), explained that GPSDD can be a bridge between the community of official statistics and other stakeholder communities (civil society, academia and private sector). GPSDD is managing the UN Global Platform with UNSD since July 2020 and is – at this moment - conducting a joint review of the user needs and the value proposition of the platform. A report of the review will become available by the end of the year.

Mr. Ronald Jansen of UNSD introduced the community model of the UN Global Platform. The UK invested significantly in the creation of the platform in the period 2018-2020. UNGP was handed over from UK to the UN community on 1 June 2020. The statistical community is now collectively responsible for the financial and technical support of UNGP. China helped for the period of Jun to December 2020 by providing significant financial support for the platform.

The community model is based on three pillars: in-kind contribution, base funding for the Cloud infrastructure and core services and project funding for additional data and services. The growth of the platform comes from growth of in-kind participation and of increase in project funding. All GWG members are urged to contribute in this community model.

**Q&A.** UK supports the community model, will continue in-kind support and supports the Finance Committee. Rwanda emphasized that specific support is needed at regional level, especially also for building of capacity in using Big Data and new technologies. Netherlands expressed continued in-kind support and proposed to have a dedicated task team to get access to global private data sources, which could be linked to the work under the Friends of Chair Group on Economic Statistics. This proposal was supported by others.

## 4. Regional Hubs in support of the UN Global Platform

#### China

Mr. Xian Zude, Deputy Commissioner of the National Bureau of Statistics of China, was leading the delegation, which consisted further of the full team working at the regional hub in China. Mr. Xian underlined that data are becoming increasingly important in the societies, and he sees an important role for the UNGP and the regional hubs in this new data landscape, especially regarding data for the Sustainable Development Goals.

China fully supports the community model and is willing to provide in-kind and other kinds of support to the maintenance of UNGP. By working together, good results will be achieved.

Regarding the Regional Hub in China, the office is ready and is fully staffed. The basic budget for the hub is in place, and the hub has been approved by the Chinese government. An opening and signing ceremony of the regional hub is planned as a virtual event for early December. Details of the ceremony will be further discussed with UNSD. China would like to invite everyone to visit the regional hub in Hangzhou, China, once the COVID-19 pandemic is over.

#### Rwanda

Mr. Ivan Murenzi, Deputy Chief Statistician of the National Institute of Statistics of Rwanda (NISR), informed about the updates and plans. Even though the hub is hosted at NISR, support and guidance are provided by UNECA. The regional hub is hosted at the Data Science Campus and the training center of NISR. All the facilities are up and running and NISR has secured the budget for key technical infrastructure. The government approved the creation of a separate division and its staffing, which should be filled by January 2021.

NISR is grateful to ONS, UK, for a very meaningful partnership developing the Data Science Campus in Kigali. The regional hub will organize workshops with UNECA and UNSD, and wants to share real cases and projects, for example on the analytics of digital payments and on the use of earth observations for agriculture statistics.

#### **UAE**

Mr. Hatem El-Sherif explained that the regional hub in UAE is managed by the Federal Competitiveness and Statistics Center, which is now part of the Cabinet office of UAE. The first phase for the hub is increasing awareness of the use of Big Data in the region. This will be done in collaboration with regional organizations (GCC-STAT and UNESCWA) by organizing joint training workshops and joint webinars. The regional hub in UAE would like to specialize in certain fields, for example, in finance statistics in a project with Master Card. The hub will reach out to other communities for collaboration on projects, especially other government entities, universities and the younger population in general.

#### **Brazil**

The national institute of Brazil for geography and statistics (IBGE) fully supports the regional hub in Rio de Janeiro. UNSD and IBGE are finalizing an institutional agreement for this purpose.

#### 5. GWG Task Teams

Moderated by Mr. Maciej Truszczynski of Statistics Denmark

Seven task teams presented at the plenary meeting; three more task teams are starting up: Task Team on Integrating Statistical and Geospatial Information; Task Team on Rural Access Index and SDG 9.1.1; and Task Team on Mapping of informal settlements and SDG 11.1.1.

All GWG members are encouraged to participate in one or more task teams.

#### Task Team on AIS data

Mr. Markie Muryawan of UNSD started by indicating that the availability of AIS as a global dataset has attracted over 100 users. The task team delivered in 2020 a handbook explaining what AIS data are and presenting some use cases. The AIS Hackathon in September 2020 attracted 43 teams from around the world, only 17 teams could participate. The winner of the hackathon had prepared an interactive application to estimate maritime emissions anywhere in the world. Other achievements were the AIS dashboards (for example, for nowcasting of trade volume) and the UNCTAD maritime report, which highlighted the importance of AIS Data.

In 2021, plans are to develop a new Handbook on methodology with existing use cases; to link AIS with other data sources (registers, satellite (weather)) and to organize the next AIS data week and the next AIS data hackathon.

#### Task Team on Big Data and SDGs

Mr. Maciej Truszczynski of Statistics Denmark presented the work of the Task Team on Big Data for SDGs, which aims to provide Big Data tools for a concrete monitoring of SDG indicators. The task team conducted a survey to identify which of the 169 SDG targets could use Big Data. In 2021, it will produce a repository of ongoing Big Data activities that can relate to the use of Big Data for the SDG within the scope of the GWG. It will also initiate at least two projects focusing on specific SDG indicators, which will be supported by workshops or similar events.

#### **Task Team on Earth Observations**

Ms. Alice Born, Statistics Canada, presented the objectives and deliverables, including a training programme led by QUT Australia and FAO, developing a curriculum from basic to

proficient levels. Sub task team: Further research on methods for calculating agriculture yield with supervised and unsupervised methods; output will be a handbook;

Since April 2020, FAO and UNSD have collaborated on a joint project on the UN Global Platform. Specifically, they use the Sen2Agri toolbox (developed by the European Space Agency) which allows for EO data processing and provides a user-friendly graphic interface for the classification of EO data into crop type maps. The project seeks to build in-country capacity in Senegal and Uganda in the operational use of this tool to produce official crop statistics.

In October 2020, the UN Committee of Experts on Food Security, Agricultural and Rural Statistics (UN-CEAG) and the UN GWG task team on EO officially agreed to join forces in the use of earth observation for land cover mapping and agriculture statistics. Under this arrangement, the joint task team, chaired by Canada, will develop and implement a programme of work that would be monitored by both Experts groups and be reported on separately to the UN Statistical Commission.

#### Task Team on Mobile Phone Data

Ms. Esperanza Magpantay of ITU presented the work. The task team created 6 subgroups to develop guidelines and methodologies on the use of mobile phone data for disaster and displacement statistics, dynamic population mapping, information society statistics, migration statistics, tourism statistics, and for transportation and commuting statistics. The final draft of these guidelines is expected by early 2021. Further plans for 2021 are focused on developing e-learning and other training materials, and on conducting training workshops on the use of mobile phone data with the regional hubs and some national statistical offices (Indonesia and Oman).

## **Task Team on Privacy Preserving Techniques**

Mr. Matjaz Jug of Statistics Netherlands reported on the task team on Privacy preserving techniques. After releasing a first handbook in 2019, the task team has started on a second handbook, which will link more to use cases in the statistical community. It is also working on the legal aspects of using these techniques as well as on learning materials for a training programme to increase awareness and help develop skills in the statistical community. Elearning courses are expected to be released in early 2021 in collaboration with academia and the open-source community.

# Task Team on Training, Competencies and Capacity Development

Mr. Ralf Becker of UNSD explained that the task team started with collecting information on need for training in Big Data as well as on the supply of training. Global assessment of institutional readiness on use of Big Data with technical skills, legal framework, IT infrastructure and Human resources. After delivering the Competency Framework, a UN Big Data Maturity Matrix is now being developed, which will enable NSOs to undertake a

self-assessment of their current level of maturity working with Big Data. The matrix is currently in a testing phase with pilot countries. In these self-assessments, NSOs can identify their stage of development in various dimensions of the use of Big Data, such as legal framework, IT infrastructure, human resources and Big Data applications in the production of statistics.

Guidance will further be provided on using a Learning Management System (LMS) on the UN Global Platform. The LMS will be made available to all task teams for hosting their online training programmes. UN Global Platform is also considered for the storage of training products, with links to NSO case studies and big data applications

#### Task Team on Scanner data

Ms. Tanya Flower of ONS, UK, stated that the TT was relaunched in Summer 2020 with the aim of building on the success of the first phase from May 2017 to April 2019. The second phase is planned to run from July 2020 to June 2022 with the following objectives:

- Price Index Methods Expand the current offering of methods and documentation relating to the calculation of price indices on the UN Global Platform.
- Classification methods Develop guidance on the process for classifying scanner data for price index compilation.
- Trusted learning Expand existing training material and produce a certified training course on using scanner data for calculation of consumer price indices

#### 6. GWG Report to the Statistical Commission

The Chair asked all members to submit comments on this item by email to UNSD, given the limited available time for any discussion. An early draft of the report of the GWG to the Statistical Commission was made available as a background document. A complete draft will be circulated to the GWG members for comments by 23 November 2020. The report has to be submitted by early December. The GWG report will cover the organization of work, the developments of the UN Global Platform, the Regional Hubs and the task teams, the 6th international conference and progress on the global training program.

The GWG members are asked at this stage to reflect on the main messages to the Commission, such as embracing the use of Big Data and data science by national statistical systems, promoting the use of the the global platform and the regional hubs for project and training activities, and requesting the Commission to increase support to the UN Global Platform through in-kind and financial contributions.

#### 7. Closing remarks

The Chair closed the meeting by thanking everyone for their participation and by reminding to send any comments to UNSD.