UNITED NATIONS
United Nations Statistical Commission
Global Working Group on Big Data for Official Statistics
Annual meeting

11 November 2020, 07:00 EST
Agenda item (3) – UN Global Platform: Overview

UN Global Platform, the Regional Hubs and the Technical Delivery Board
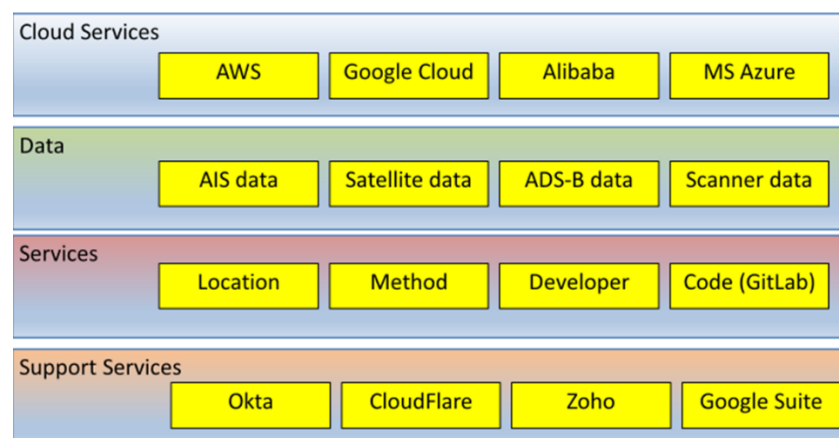
Overview

Introduction

The UN Global Working Group (GWG) on Big Data for official statistics is an inter-governmental body with participation from 30 countries and 16 international organizations (see Item (2): Organizational structure). It was created in 2014 by the UN Statistical Commission to provide strategic vision, direction and coordination for a global program on Big Data for official statistics and SDG indicators. The objective is to produce timelier, more frequent and more detailed data to better inform policies and better monitor progress on the Sustainable Development Goals (SDGs).

To facilitate collaboration on data projects across many geographies and involving multiple stakeholder communities, the Office for National Statistics of the UK developed and maintained on behalf of the GWG the UN Global Platform (UNGP) from 2018 to 2020. UNGP is a Cloud-base collaboration environment for the global statistical community. It offers technology infrastructure for data innovation and the ability to scale, connect, and work with many partners, including private sector, civil society and academia, both virtually and physically in a shared state-of-the-art technology and institutional environment for official statistics.

To fulfil its global reach, the ownership of UNGP was transferred from the UK to the UN community on 1 June 2020. This means that the UN community is now fully responsible for operating, maintaining and funding UNGP. Funding has been found so far through some of the capacity development funds of UNSD, but more funding is needed from all GWG members. A separate document under agenda item (3) deals with the funding model for UNGP. The GWG has been able to partner with the Global Partnership for Sustainable Development Data (https://www.data4sdgs.org/), which is managing UNGP on behalf of the UN since July 2020.

UN Global Platform

UNGP allows access to several global data sets such as AIS data on vessel tracking (and similar data on planes) that can help develop timely indicators of trade; and detailed satellite imagery for agricultural and environment statistics. A global community of users and colleagues has been brought together, with regional hubs establishing around the world. Successful outputs are being produced using UNGP, including rapid economic indicators of shipping, published weekly. An overview of data and services is shown in the picture below.

Projects on UNGP include satellite data for agriculture and environment statistics, scanner data for CPI calculation, open street map and World Pop data for estimation of rural access index and .STAT technology for data dissemination. All of these projects have involvement of developing countries. An overview of the ongoing projects is presented in Annex 1.

The expected long-term outcomes of the UNGP include increased capacity of national statistical systems to produce more relevant statistical data and improved dissemination of data to policy makers and other users. Knowledge transfer will also be an outcome, including sharing of experiences in South-South collaboration.

Regional Hubs in support of the UN Global Platform

To facilitate in-person training and project activities using the UN Global Platform at the regional level, four regional hubs have been established, in Brazil, China, Rwanda and UAE, which aim to bring the community of official statisticians together at regional level for projects using Big Data and data science for the estimation of statistics and SDG indicators, for sharing knowledge on newly developed methods, algorithms and tools, and for providing training in the use of Big Data and data science.

The Regional Hub will generally encompass the following activities:

- research on the use of Big Data and data science for the development of new statistical methods and techniques;
- capacity-building and training of statisticians and data scientists from national, regional and global statistical offices;
- international seminars and workshops on data science and modernization of official statistics;
- further development and maintenance of the United Nations Global Platform - in collaboration with other regional hubs - for the sharing of trusted data, trusted methods and trusted learning among the community of official statistics and its stakeholders;

During 2020 it has not been possible to hold in-person activities, such as workshops, seminars or project meetings, at these Regional Hubs. If the pandemic continues into most of 2021, the Regional Hubs should engage more in virtual events, such as webinars or on-line training. GWG members organized a successful Hackathon in September 2020 using AIS data to build applications for COVID-19 response or Climate Action. Such Hackathons could also be organized with the Regional Hubs.

Technical Delivery Board

Current membership includes Canada (Chair), Netherlands, UAE, OECD, UK, China, Rwanda, UNECA, UNESCAP and UNSD.

The Technical Delivery Board (TDB) of the UN Global Platform provides strategic direction and oversight regarding the development of UNGP and its relation to the Regional Hubs. TDB reviews and approves proposals of the project phases from Proof of Concept through Pilot to Production. Several projects are currently running on the platform and are described in Annex 1 and by phase in the diagram below.

POC	Pilot	Production	Support
• Aries • RAI • .Stat	• FAO Crop Yield	• Methods • Code • Developer • Location • Marketplace • .CamStat • ADS-B	• Helpdesk • Community • Authentication • CRM • Integration Engine • Office Productivity Suite • Newsletters • Dashboards • Billing

A COVID-19 dedicated page has been created in UNGP website for collaboration and information sharing. For example, several dashboards are shown with high-frequent indicators for trade, travel and transportation. UNGP could be used more actively by GWG members and partners with a role of connecting people, data, and methods to contribute to COVID work. A key strength of UNGP is bringing together experts, services, and data – in a collaborative space, together with the ability to take algorithms and methods and turn them into services quickly.

TDB and the UNGP operational support team encourage the GWG task teams and GWG members to put forward further project proposals. These proposals need to be accompanied with indications on how the project will be supported both with human and financial resources. As explained in the other document under this agenda item, the business model of UNGP is a community model with co-investments and co-developments. The core Cloud-services of UNGP will be financially protected first from core funding, so projects can be initiated. Further growth of projects with additional commercial data and services will need to be financed with project funding.

TDB will support the platform marketing efforts by highlighting the key values of the platform: its network of experts working together; a ready-built platform that manages collaboration, learnings, projects, data, services and algorithms; and the quality focus of NSOs on coherence, interpretability and repeatability. UNGP presents opportunities for NSOs to complement and enhance their innovation activities, which may be "trapped" by internal provisioning and limits. These are differentiators from other data platforms.

Finally, TDB wants to increase its interaction with task teams through more regular meetings with the task team leads. Those meetings will help to better explain the potential of platform and its services, and how UNGP can help with task team activities. The platform provides an important sandbox for exploration, with low barriers to entry. Fundamentally, the platform model of UNGP implies that the value of UNGP increases exponentially with the level of participation, contribution and expert networking.

Annex 1 – Projects on the UN Global Platform

.STAT application, production phase for NSI Cambodia

.STAT has been installed on AWS of UNGP and has been made production ready for use by NSI Cambodia. This results in dissemination of data from the NSI Cambodia website, see http://camstat.nis.gov.kh/#/

Sen2Agir application, pilot phase

Sen2Agri has been installed on AWS of UNGP and is ready to be piloted by the statistical offices of Senegal and Uganda. This can result in regular production of crop statistics for these offices, see http://www.esa-sen2agri.org/

ARIES application, proof of concept phase

The intention is to bring ARIES (http://aries.integratedmodelling.org/) on UNGP and have it available as a Cloud-base service for the community of researchers and statisticians around estimation and modeling of ecosystem services.

Moodle as a Learning Management System, proof of concept phase

The GWG task team on training wants to roll out a curriculum with e-learning courses and would need its own LMS to run courses. Moodle Cloud (https://moodle.com/moodlecloud/) is being implemented for that purpose.

Slum mapping project, proof of concept phase

IDEAMAPS Network (https://ideamapsnetwork.org/) wants to develop applications to model and map slums and informal settlements in 2000 cities in Africa. UNGP would be used for code development of for running the API.

RAI project, proof of concept phase

World Bank is custodian for SDG indicator 9.1.1. The RAI tool (https://rai.azavea.com/) is made available to calculate SDG 9.1.1 for every country based on open source data. UNGP can host the RAI tool and create an application which allow to ingest additional data sources to refine the RAI calculation. World Bank will be leading the new task team on SDG 9.1.1