Concept Note of Open Day of the GWG

Background

The UN Global Working Group (GWG) on Big Data for Official Statistics was formally established by the UN Statistical Commission in March 2014. The GWG gives direction on the use of new data sources and corresponding new technologies, services and applications. The GWG has explored the use of satellite data, mobile phone data, scanner data and social media data for various applications of official statistics.

The GWG advanced its work through several task teams and through annual Big Data Conferences: in October 2014 in Beijing; in October 2015 in Abu Dhabi; in September 2016 in Dublin; and in November 2017 in Bogota. The format of the conference has been: 3-day event with around 300 participants to discuss all issues around "Big Data for official statistics" and to demonstrate some latest achievements. At the most recent Conference, the GWG also successfully conducted 4 two-day workshops on the use of the various different data sources indicated earlier.

Ahead of each of those four Big Data Conferences, the GWG held official meetings of the full membership of the GWG (28 countries and 16 international organizations). In those meetings the chair (later co-chairs) would report back on the developments and the direction of work; and the task teams would provide a status report on their achievements. The reports of the GWG annual meetings can be found in one place at https://unstats.un.org/bigdata/bureau/ (under the Documents). Further details of the GWG meetings can be found via the Big Data Conferences webpages at https://unstats.un.org/bigdata/meetings.cshtml For example, the most recent annual meeting of the GWG in Bogota can be found at https://unstats.un.org/unsd/bigdata/conferences/2017/gwg-agenda.asp
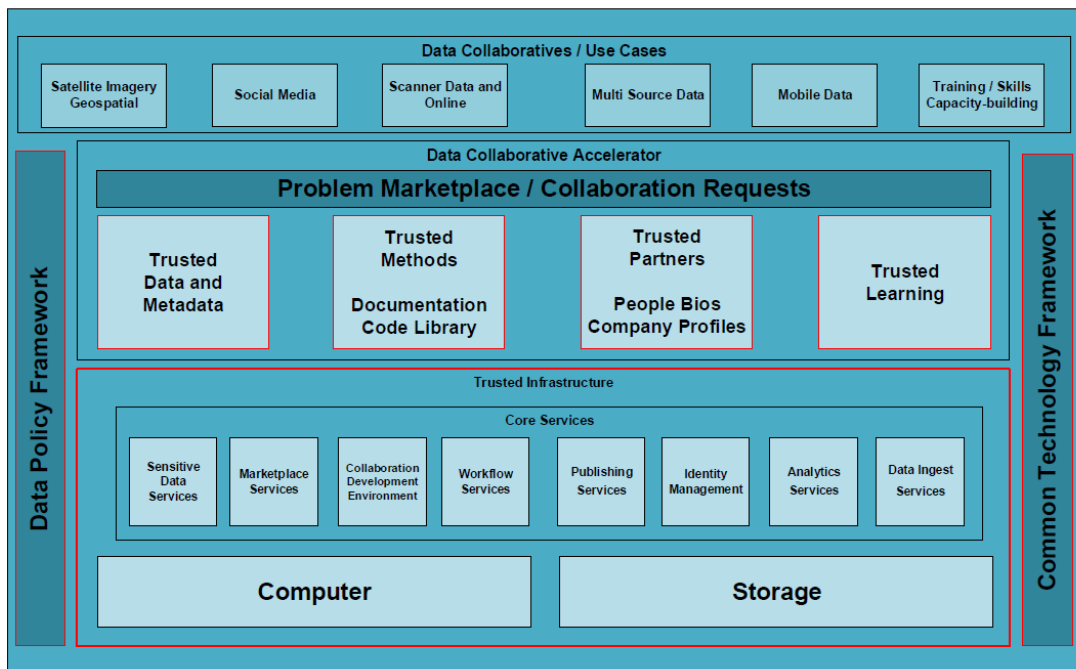
Open Day of the GWG in 2018

This year the GWG will meet not the day before its next Big Data Conference (which will be held in Kigali, Rwanda, next spring 2019), but the day before the 2nd UN World Data Forum. The GWG grasps the occasion to demonstrate its work to a wider audience. The GWG will show the progress made on the Global Platform – thanks to the great efforts made by ONS, UK – as a collaborative research and development environment for trusted data, services and applications by demonstrating [on the Global Platform] a number of projects in partnership with technology companies, data providers and academia. This Open Day of the GWG is an opportunity to show to all stakeholders where the GWG stands with the development of the Global Platform.

UN Global Platform

The focus of the Open Day is on the UN Global Platform. As described in the report to the Commission and in the Bogota Declaration, the platform is envisaged as a marketplace for sharing and developing core catalogues of services, data, metadata, methods, application programming interfaces, information technology tools and training materials. The global network operates as a federated network of platforms at the national, regional and global levels, which ensures interoperability and information-sharing among the platforms in the network through agreed and defined interfaces.

The platform is intended for use by its trusted partners and should meet the requirements for research and development in the use of multisource data. Transparent partnership agreements will need to be developed with private- and public-sector organizations so that the platform partners contribute and derive value through a business model which is individually sustainable for all stakeholders. The platform offers technology infrastructure and constitutes a network for data innovation to facilitate global collaboration of the official statistical community.

Architecture of the Working Group platform

Data Collaboratives / Use Cases					
Satellite Imagery Geospatial	Social Media	Scanner Data and Online	Multi Source Data	Mobile Data	Training / Skills Capacity-building

Data Collaborative Accelerator

Problem Marketplace / Collaboration Requests

Trusted Data and Metadata	Trusted Methods Documentation Code Library	Trusted Partners People Bios Company Profiles	Trusted Learning

Trusted Infrastructure

Core Services

Sensitive Data Services	Marketplace Services	Collaboration Development Environment	Workflow Services	Publishing Services	Identity Management	Analytics Services	Data Ingest Services

Computer	Storage

Data Policy Framework (left vertical label)

Common Technology Framework (right vertical label)

As shown in the figure above, the data policy framework of the platform is meant for data governance and information management, and consists of a set of rules and regulations under which the platform operates in storing, processing and disseminating information. The common technology framework is meant to deliver data, accessible services and open source applications and associated APIs as a trusted public good to which all platform partners subscribe and adhere.

Collaborative Data Projects

Some of the projects, which are ongoing or are in early stages on the global platform, are:

⇨ Measuring Fresh Water Extent, SDG indicator 6.6.1 – this project started as a cooperation between UNEP and Google (Earth Engine) and has now connected with the global platform. Statistics Canada experiments with the developed algorithms and tries to adapt them to the national circumstances.

⇨ Measuring land cover and agricultural crop statistics – this project is a collaboration between FAO, Statistics Canada, Statistics Poland, UNSD and Microsoft's AI for Earth. At this moment the scoping parameters are being put in place. Eventually, this will link up with SDG indicator 2.4.1 on sustainable agriculture.

⇨ Measuring price fluctuations – this project is a collaboration between Statistics Canada, Statistics Netherlands, UNSD, Nielsen and others, in which Nielsen has made its price scanner data available for testing of the latest algorithms on CPI calculations.

⇨ Measuring human mobility – this project is a collaboration among ITU, Indonesia, Positium, Eurostat, EU-JRC, IOM, Georgia, UNSD and Microsoft's Tech for Social Impact group

As mentioned earlier, the objectives of these projects are to develop methods, algorithms, APIs and services. All national, regional and international statistical agencies are invited to become trusted partners on the platform.