



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: Funding Model

Community Model of the UN Global Platform

For co-investment and co-development in Big Data and data science for official statistics

Introduction

The UN Global Working Group (GWG) on Big Data for official statistics initiated the development of the UN Global Platform (UNGP) in November 2017 at its annual meeting in Bogota. The Office for National Statistics (ONS) of the UK then actually established a dedicated team inside of ONS to develop and maintain the first version of UNGP in 2018. UNGP facilitates collaboration on data projects across many geographies and involving multiple stakeholder communities (more information on UNGP is given in the overview document under this agenda item).

ONS invested in the initial phase of UNGP, but to support scale-up of use across the global statistics community, the next phase should be led by the UN community. This required transfer of UNGP from ONS to the UN Statistics Division (UNSD). Therefore, on 1 June 2020 the ownership of the platform was transferred to the UN community, which will from here on be responsible for:

- Setting-up arrangements with suitable suppliers for the continuation of services,
- Providing continued support for UNGP from 1st June 2020, as set out in the letter from the GWG to heads of offices of the national statistical offices (see more info in the next section), and
- Operating UNGP from 1st June 2020, including making decisions on services and development guided by the Technical Delivery Board.

UNSD was very happy to secure collaboration with the Global Partnership for Sustainable Development Data (GPSDD), which is managing UNGP on behalf of the UN since July 2020. GPSDD interacts with the service providers and evaluates the user needs on UNGP.

Contributions to the UN Global Platform

A joint letter signed by the Chief Statisticians of South Africa, Denmark, and the UK, and by the Director of the UN Statistics Division was sent to all members of the global statistical community on 21 April 2020 (see letter attached). An accompanying short survey inquired about possible contributions, financially or in-kind, to the UN Global Platform. In total, 44 institutes (40 countries and 4 agencies) responded, of which 29 institutes indicated that they were willing to contribute in one way or another. More specifically, the responses were as follows:

Question	Countries	Agencies	Total
General financial contribution	3	1	4
Specific financial contribution	11	0	11
Technical staff in-kind contribution	19	2	21
Projects contribution	16	3	19
Training contribution	17	3	20
Total number of respondents	40	4	44

The responding institutes also provided valuable comments. The national statistical view the use of new data sources and of data science as important positive developments. It was also noted that the COVID-19 pandemic provided an opportunity to show the benefits of collaboration on new data solutions, but it also had put pressure on institutes to generate funds. As shown in the table, countries are willing to make in-kind contributions, but have difficulties to directly contribute funds. Funding via projects or training could be more successful.

The Community Model of the UN Global Platform

– In-kind contributions of substantive and IT experts

The strength of the UN Global Platform is the in-kind contributions of about 275 active experts through the GWG task teams and the projects on UNGP. They are experts in areas of use of satellite data (and modelling) for agriculture and environment statistics; experts in methods for compiling indicators on human mobility based on mobile positioning data; experts on scanner data and price statistics; experts on AIS data and maritime transport; experts on privacy preserving techniques; experts on SDG indicators and use of Big Data; and experts on building capacity for use of Big Data and data science. All these experts generate value in terms of methods, guidance and training materials.

The projects and other activities on the UN Global Platform are driven by task teams. The task teams should ensure that a larger community of experts is supporting the development and maintenance of a project. They should ensure that support is provided by a multi-disciplinary team consisting of subject-matter experts, data scientists and IT experts. The UNGP team will provide some of the back-end IT support, but the operation and maintenance of applications will mostly be done by the project group.

Besides the substantive contributions, value on UNGP is also generated through the in-kind IT support. For the Sen2Agri, the .STAT and the ARIES projects the major advantage/strength of the UN Global Platform is the availability of in-kind back-end IT support. The IT systems support by the UNGP technical team provides stability and reliability for the projects on UNGP, which is costly if acquired from the commercial market. In fact, for the growing number of projects on UNGP more IT support is needed than what is currently available. GWG members will be approached with the questions to make IT staff available for support of projects on UNGP.

– Sustainable funding

The weakness – at this moment – is the lack of sustained funding to pay for the necessary services of UNGP. From the beginning of 2018 until June 2020, the Office for National Statistics of the UK invested significant amounts of funding to stand up and maintain the UN Global Platform. From 1 June 2020 onwards the UN community has taken over the maintenance of the platform, which consists of in-kind IT support and funding for the acquisition of data and services.

So far, it has been the UN Statistics Division which has redirected some of its capacity development funding to financially support the UN Global Platform for the second half of 2020. As of 1 January 2021, the financial burden of the maintenance of the platform should be shared by the statistical community.

It is proposed to set up a Finance Committee for the UN Global Platform, which will be task with fund raising and with developing plans to secure longer term funding for UNGP.

– Budget lines of UN Global Platform (in USD)

At this moment the services, which are absolutely needed for UNGP, are the Cloud services and Support services, including User Access, Document and Management services. At current usage this amounts to about \$300,000 per year. This would be the base funding of UNGP.

The AIS task team has been very productive in 2020, including a handbook, training materials, an application with fast transport indicators and a Hackathon with 17 competing teams. The AIS related services on the platform are, however, relatively expensive and amount to over \$300,000 on a yearly basis.

Some other services, like the Methods service and the Web development services are services, which are needed to grow the platform, but are not part of the basic UNGP services.

– **Split between Base funding and Project funding**

Most of the ongoing projects on the UN Global Platform only consume Cloud services as a cost. This implies that if the GWG is able to cover the Cloud cost, then the UN Global Platform will be able to execute most of its projects (including, for example, running the production environment of some .STAT databases). This availability of the Cloud services is a must; so the funding needed for the Cloud service is the base funding of the platform, which should preferably be arranged with longer term contracts.

Any additional funding can come from projects, which will be initiated at different times and do not necessarily guarantee a steady flow of funds. If we make the distinction between base funding (about \$300k annually) and project funding (any additional amount), then the GWG can sustain the platform and gradually grow it. As a target for the growth of the UN Global Platform, we aim for 20% base funding and 80% project funding. As of 1 January 2021, specific services need to be covered from project budgets. This implies, for example, that AIS services will have to be paid from project funds.

– **Co-investment and co-development: recommendation from the Friends of the Chair group on Economic Statistics**

The FOC group on Economic Statistics is proposing in its upcoming report to the UN Statistical Commission various key activities including collaborative actions on co-investment and co-production for global statistical infrastructure, operations, and data solutions; and through the prioritization of global use cases for co-investment and co-development. This could be achieved among others through common technological solutions (for the integration of geospatial data, the use of data science, the use of nowcasting techniques, and the production of high frequency statistics). The FOC recommends using the UNGP for this purpose.

In conclusion, the community model for the UN Global Platform consists of co-investment and co-development in the following ways:

- (1) in-kind expert contributions to drive innovation on new data solutions and to provide expert IT support in the development and execution of projects
- (2) base funding contributions to ensure the continuity of the Cloud environment and some basic support services, and to give a low level of entry for the Proof of Concept phase of new project proposals
- (3) project (and training) funding contributions to add and grow data and services on the UN Global Platform

POINTS FOR DISCUSSION

- **Do you agree with the proposed Community model for the UN Global Platform, as outlined above?**
- **Can your office provide in-kind contributions to support the activities on the UN Global Platform?**
- **Do you agree that the GWG should have a Finance Committee, which will be tasked with fund raising and with developing plans to secure longer term funding for the UN Global Platform? Would your institute be interested to be member of this Finance Committee?**

Annex 1 – Joint Letter to support UNGP



UNITED NATIONS

United Nations Statistical Commission
Global Working Group on Big Data for Official Statistics

9 April 2020

Joint letter to support the United Nations Global Platform on Big Data for official statistics

Dear Colleagues,

About one month ago, at the Statistical Commission we heard many positive reactions on the progress made by our community regarding the use of Big Data for official statistics. The Commission reached a decision in which it endorsed the UN Global Platform and its Regional Hubs (in Brazil, China, Rwanda and the United Arab Emirates) and supported the planned projects and the scaling-up of training, while requesting that the Global Working Group (GWG) would develop guidance on harmonized methods and quality assurance frameworks for use of Big Data.

The UN Global Platform and its Regional Hubs give us 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. Building on this infrastructure, our global statistical community is now able to collectively deliver on new data solutions, methods, and training that benefits each of our national and international statistical agencies.

We like to briefly summarize our collective achievement. Over the past 5 years, the GWG delivered core materials on methodological handbooks, global databases, algorithms, and training courses on the use of Earth Observations for agricultural crop statistics; the use of mobile phone data for tourism and migration statistics; the use of scanner data for CPI calculations; the use of AIS vessel tracking data for trade and transport statistics; and on privacy preserving techniques. Moreover, the GWG conducts an increasing number of data collaboratives organised through GWG Task Teams undertaking research and development in the use of Big Data in combination with traditional data sources to produce official statistics. All these activities required active collaboration, participation and commitment from the members of our community.

The UN Global Platform is essential for such active collaboration on data innovation, which would be more difficult and more costly to develop by each of our institutes individually. The platform is also useful for monitoring and analysis of global emerging issues, such as the impact of the COVID-19 pandemic. For example, the platform contains continuous global feeds of AIS vessel tracking data and ADS-B flight tracking data which can be used to compile very timely and frequent indicators on trade, transport and travel. The network of the global platform partners makes it possible to start up new initiatives quickly. Algorithm development and code sharing are part of the network advantages as well.

The pilot phase of the UN Global Platform will end on 30 April 2020. The Office of National Statistics (ONS) of the United Kingdom has so far carried the financial burden for the operation and maintenance of the platform. ONS will now hand-over the coordination and management of the operations of the platform to the United Nations Statistics Division (UNSD). UNSD together with other partners of the Global Platform is making technical staff available to support the services on the platform; however, UNSD does not have the allocated budget to cover the associated recurrent expenses of the commercial services running on the platform. Our statistical community will need to share that burden.

With this joint letter, the undersigned (the co-Chairs of the GWG, South Africa and Denmark; the Chair of the GWG Advisory Board, the United Kingdom; and the Secretariat of the GWG, UNSD) like to enquire of whether your office could commit to contributing to the operation and maintenance of our joint UN Global Platform. We consider the main options for financial and in-kind contributions as listed below, but you may like to suggest additional contributions:

- *Financial.* Covering cost of commercial services running on the platform – through general subscription fees or payments for use of specific services. The level of the fees will depend on commitments by the members of the statistical community. The minimal operating costs of the platform per month are about \$70,000.
- *Technical.* Making staff available for data engineering and data science support of the platform and its activities
- *Project delivery.* Bringing project activities to the platform, through which platform services could be paid on a cost recovery basis
- *Training.* Bringing training activities in the use of Big Data and data science to the regional hubs of the platform, through which platform services could be paid on a cost recovery basis

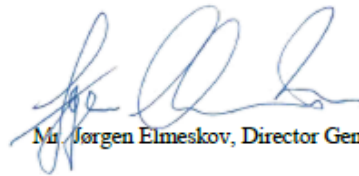
It is time to deliver on Big Data for official statistics. We think that this platform is worth our collective effort and hope that you express your commitment to contribute to our shared global statistical infrastructure. Kindly respond to our brief survey by Tuesday 28 April 2020 using the attached form to be sent to BigData@un.org with the indication also of whether your response can be shared publicly.

We are looking forward to your concrete contributions for the state-of-the-art infrastructure of the UN Global Platform to advance official statistics with the use of new data sources and data solutions.

Yours sincerely,



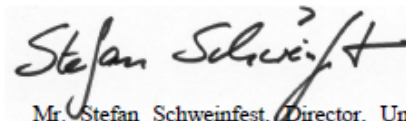
Mr. Risenga Maluleke, Statistician General, South Africa,



Mr. Jorgen Elmeskov, Director General, Statistics Denmark



Sir Ian Diamond, National Statistician, United Kingdom



Mr. Stefan Schweinfest, Director, United Nations Statistics
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