Proposed TERMS OF REFERENCE

Task Team on Satellite Imagery and Geospatial Data

Global Working Group on Big Data for Official Statistics

Introduction

The demand for more diversified, sophisticated and rapid statistical services could be met by leveraging the emerging sources of Big Data, such as those relating to remote sensing imagery, transactional and social media data and mobile device data.

Statistical agencies around the world have a strong interest in investigating the viability of using satellite imagery and geospatial data in the statistical production processes of official statistics on a wide range of topics spanning agriculture, the environment, business activity and transport. Satellite imagery has significant potential to provide more timely statistical outputs, to enhance analysis, to reduce the frequency of surveys, to reduce respondent burden and other costs and to provide data at a more disaggregated level for informed decision making.

Satellite imagery may also support the monitoring of the Sustainable Development Goals (SDGs) by improving timeliness and relevance of indicators without compromising their impartiality and methodological soundness.

The goal will be to develop a satellite imagery and geospatial ensemble of enabling items made of tools, guiding instructions and training material. More specifically, the Task Team will identify and develop the following:

- Open source software applications and related Application Program Interface (APIs) for the use of satellite imagery and geospatial data in the production of statistics and indicators;

- An instruction guide on the methods and techniques applied in the software applications and APIs with appropriate reference best practices;

- Training materials supported by trainer data in support of the use of the software applications and related APIs;

Deliverables and time schedule

Within a time period of one year, the Task Team will deliver;

A Proof of Concept (PoC) of an operational information infrastructure for high resolution and real time satellite imagery data base in an Analysis Ready Data format for the purpose of production of official statistics and indicators based on open data standards regarding access and use of the data in collaboration with partners of the statistical community, technology and academic sectors

These PoCs will be accompanied by open source software algorithms for specific statistical and thematic applications such as agricultural crop production statistics, land accounts,

disaster management and relief, and open street maps that are supported by instructional guides and training material.

It is expected that the PoCs will establish data collaboratives between partners of the statistical community, technology sector and academia for purpose of advancing innovative thinking and sharing research in the use of satellite imagery and geospatial data and their integration with survey and administrative data.

Method of work

The team will almost exclusively meet through WebEx-type conferences, and will piggy back on related meetings to meet face to face for those that can attend.

Meetings will be on a monthly basis.

Specific leads and/or small groups will be tasked to develop each of the 3 deliverables.

Members of the committee will be expected to actively participate in at least one of the deliverables.