

Outcomes from the Third Meeting of the Expert Group on the Integration of Statistical and Geospatial Information,
25-26 April 2016, Paris, France

Summary¹
(Draft as of 27/05/2016)

Session 1 – Introductory Session

- An overview was provided of the work progress made since the second meeting, held in Lisbon, Portugal, in May 2015. The activities carried out by the Expert Group include an informal consultative meeting, held in August 2015, as a side event to the fifth session of UN-GGIM, the preparation of a report submitted for discussion to the 5th session of UN-GGIM and another report for information to the 47th session of the Statistical Commission, including the preparation of a proposal for a Global Statistical Geospatial Framework (GSGF) that has been shared and commented by the members of the Expert Group.
- The Expert Group discussed in detail the proposal for a GSGF, reviewing the key issues raised in the consultation among the members of the EG and agreeing on the way forward for the global consultation, involving both the geospatial and statistical communities. The Expert Group also discussed how it can best contribute to the work of the Inter-Agency and Expert Group on the Sustainable Development Goals (IAEG-SDGs) with regard to the support of geospatial information for the measurement and monitoring of the SDG-related indicators, through the disaggregation of data by its geographic dimension (location, region, urban/rural, coverage, etc.).

Session 2 – Global Statistical Geospatial Framework Proposal - focus session

- After a summary review of the Global Statistical Geospatial Framework (GSGF), consultation issues raised on the GSGF Proposal were introduced and thoroughly discussed. Six issues were particularly highlighted:
 - (1) **Expectation that GSGF should be a standard.** It was stated that the GSGF is a principles framework. Some questions were raised about the completeness of the GSGF as a standard; it was stated that this is not its intention. It was agreed and confirmed that the GSGF is a principles framework. It was also stressed that if we use the word standard in the proposal, it should be clear that it's a technical standard (e.g. ISO), statistical standard, etc., given the fact that some principles lend themselves to standards and standardization, e.g. data and metadata interoperability, geography standards, etc.
 - (2) Concerns were raised about the fact that **“location references” and “geocoding” are too focused on address**, which is not applicable to some developing countries. Suggestions were made that location references be broadened to other location descriptions, including enumeration geographies, and that address or property is a preferred model wherever applicable or attainable. The Expert Group agreed with these suggestions but strongly encouraged developing countries to geocode to a point if address or property is not attainable and applicable. The EG also encourage countries to test point referencing (e.g. lat./long.) or some form of proxy e.g. centroid of a polygon, telephone tower, especially in rural areas.

¹ Unedited version.

- (3) **GSGF needs to be extended to environmental data.** It was stated that the GSGF is currently limited to socio-economic data, including traditional NSO environmental statistics, and there are many types of environmental data, and the Framework doesn't attempt to account for all of these. The Expert Group agreed that preference be as inclusive as of different data types as possible, framework to be flexible and made as inclusive as possible to encourage as much geo-referencing as possible. There was some support for agreeing to limit to socio-economic data but with a review point in three years time to include other environmental data as uses of these data types, in official statistics, gain more transaction e.g. experimental ecosystem accounts become less experimental. The Expert Group should also try to offer practice suggestions like produce official statistics on grids for those countries who do want to look beyond traditional official statistics data sources (i.e. socio-economic) or are using non-traditional sources in newer official statistics e.g. land accounts. In summary: Be inclusive but offer practical suggestions and a review point.
- (4) **“Authoritative” data to be changed to “Fundamental” data** – to reflect the need to access the most current and up-to-date data, and align it with UN-GGIM terminology. The EG agreed on the proposal.
- (5) **New data sources identified** as an area that could benefit from GSGF – e.g. mobile phone datasets. The Expert Group agreed on the proposal and encouraged the sharing of examples and good practices on mobile technology and other innovative data sources.
- (6) **Open data policies and principles are not universally agreed on.** The GSGF proposal has included reference to the international principles or agreed national policies on open data. The EG agreed on this.

Session 3 – Global Statistical Geospatial Framework Proposal – related international activities

- Two presentations on “Sustainable Development Goals, geospatial information and a Global Framework” as well as on “Global Working Group on Big Data and links to the Global Framework” were made. The Expert Group discussed the best way to contribute to the SDGs Indicator Framework as well as to the Big Data work, and particularly their link to the Framework. The Expert Group sought to have an EG member representative on these other groups e.g. the IEAG-SDG WG on Geospatial Information (first meeting two days before UN-GGIM in Aug 2016), UN GWG on Big Data Task Team on Satellite Imagery Data, SEEA , and Land Management groups.

Session 4 – Global Statistical Geospatial Framework Proposal – how to contribute to SDGs Indicator Framework (the way forward)

- A panel discussed the way forward for the Global Statistical Geospatial Framework, with emphasis on how to contribute to the SDGs Indicator Framework. The Expert Group agreed that, for each of the five principles of the Framework, we need to:
 - Collect country level examples of practices, policies, guidelines, standards, use cases, etc.;
 - Collect regional and global practices, standards, etc., where they exist;
 - Collect examples of obstacles countries have faced in implementing the principles and how they have been overcome;
 - Publish through the UN website.

- The Expert Group discussed the capacity building issue with regard to the Global Framework. Focus was about advice and guidance to countries on where they can go for help with implementing the framework:
 - E.g. for 2020 Round of Censuses, both the UN and UN regional bodies can advise;
 - E.g. for SDGs, the IEAG-SDG, UN Global Working Group on Big Data, UN-GGIM Regional Bodies, etc. are all providing guidance;
 - E.g. for methods in how to use new data sources like satellite data for official statistics, the UN Global Working Group on Big Data can advise;
 - E.g. examples integrated official statistics like Land Accounts;
 - Publish through the UN website.

- The Expert Group recognized the importance of knowledge management, with the active use of the UN-GGIM website through:
 - Links to other UN and professional forums e.g. EFGS, IAOS;
 - Use cases;
 - Potentially FAQs, blog, etc.

- The Expert Group also recognized the interaction with existing, new and emerging global and regional bodies pursuing areas of detail that contribute to the consolidation and implementation of the Global Framework. It agreed on reaching out to other bodies with similar mandates to the EG in order to:
 - Develop a map of all the linkages and how they interact. Publish an interactive map on the website;
 - Steer relevant groups to the Framework and its relevance and applicability to their work programmes;
 - Seek to ‘outsource’ technical issues raised through the EG consultation process to these other bodies e.g. metadata and data interoperability to UNECE-HLG and Standards Bodies like ISO and OGC;
 - Where gaps still exist, i.e. no other body will take the ‘issue’ on, the EG may decide to take it on
 - Seek to have an EG member representative on these other groups, as stated earlier in session 3.

- Participants were informed that once the EG agrees on the final draft of the Proposal, UNSD will then undertake a global consultation, with the intent of submitting the Principles Framework to UN-GGIM and UNSC in 2016 respectively for adoption and endorsement.

Session 5 – Coordination of activity on standards

- The Expert Group discussed principle 4 - data and metadata standards and interoperability- and agreed on the following:
 - Identify touch points where both NSOs and NMAs have common interests e.g. SDMX, addressing;

- Identify geospatial bodies such as European WG on Core Data and UN Global Working Group on Fundamental Data and statistical bodies such as the UNECE-HLG-MOS-Standards that may be able to work together to facilitate the integration of geospatial and statistical data;
- At the national level, encourage NSOs who are undergoing modernisation and transformation activities to reach out to National Mapping Agencies to identify areas where modernisation efforts could be designed and developed to facilitate the integration of geospatial and statistical data. To also reach out to National Mapping Agencies to establish mechanisms for cooperation in modernisation efforts e.g. inviting the NMA onto modernisation governance boards;
- At the national level, encourage NSOs and NMAs to collaborate when partaking in international and regional experiments and trials e.g. positioning for 2020 Round of Censuses, Big Data experiments through UNECE, UN-GWG, etc., SDG experiments.

Session 6 – Expert Group Future Programme – prioritization of topics

- The Expert Group reviewed the EG-IGSI Mandate and amended it as follows:
 - Provide a forum for coordination of statistical and geospatial community with the view to developing a Global SGF as a standard for the integration of statistical and geospatial data
 - Propose work plans and guidelines to advance the implementation of a Global SGF so there is increased information to support social, economic and environmental policy decision making
 - Address various technical, institutional and information policy issues related to implementation of a Global SGF, especially issues of confidentiality
 - Pursue implementation of the Global SGF in the *2020 Round of Censuses* with understanding it will apply to *other initiatives* (other Censuses) and global initiatives such as Post-2015 (ie *SDGs*) and *Big Data*

- It was also agreed that:
 - The Global Statistical Geospatial Framework was, pending incorporation of EG feedback on the six key issues, ready for global consultation;
 - UNSD would facilitate the global consultation during May, allowing time for a final proposal to be ready by end June for consideration at UN-GGIM in August 2016.
 - UNSD will facilitate the adoption of the Global Framework at UN-GGIM in August, and endorsement by UNSC soon after (out of session) or in March (at UNSC).
 - EG members would prepare a country level example of the practical application of the Framework principles in their country. A blank template would be sent to EG members asap to be completed and returned by mid-June 2016;
 - UNSD would provide advice on the establishment and maintenance of an interactive knowledge management and information sharing platform;
 - A mapping of UN and UN Regional Bodies (both statistical and geospatial) would be drafted and shared amongst EG members for comment, gaps, etc., and used as the basis for outreach and knowledge management activities e.g. for mapping existing EG work programme issues to existing bodies that may be able to take these issues on

- EG members encouraged an extension of their mandate to include communication, especially to decision makers. Part of this would also be looking at best practices for analysis and outputs that attract policy/political interest;
- EG members encouraged development of some guidance on topics such as comparing geography over time; generating national data more frequently than a five/ten yearly census (e.g. modelling); mechanism for how institutions can partner and work together (e.g. joint governance, collaborative projects, legislation, etc.); guidance on how to bring NSDS and NSDI developments together;
- EG members thanked Eurostat, Finland and Australia for taking forward the work program activity to develop common terminology and agreed to establish a small editorial board from both NSOs and NMAs to continue this work, including translation, and work with those in the standards community (e.g. Andrew Jones re ISO repository and W3C re a terminology repository) to build coherence and re-use of the same terminologies.
- The EG also agreed that we need to encourage more Expert and Working Groups to report jointly to UNSC and UN-GGIM (Unique position of having two members of the EG being the Chair and Vice-Chair of UN-GGIM and one member of the EG being Chair of UNSC).
- The EG agreed on an extension to the current mandate to include communication with decision makers. Part of this would also be looking at best practices for analysis and outputs that attract policy/political interest
- The Expert Group confirmed the continuation of the existing work program:
 - Build capability through the application of the Framework and geospatial technologies to the 2020 Round of Population Censuses;
 - Enhance collaboration and partnership between statistical and geospatial organisations;
 - Work towards consistent terminology internationally and across communities;
 - Protect confidentiality within statistics released for small geographic areas and across different geographies;
 - Ensure data interoperability between statistical and geospatial domains;
 - Investigate the application of statistical, administrative and grid geographies to data release;
 - Develop and share methods for ensuring effective and authoritative geocoding; and
 - Contribute to the broader discussion on the use of Big Data in official statistics and geospatial information.
- Other issues were raised in the consultation process of the Global Framework for consideration in future work program:
 - Develop methods to track changes over time for geometries (Germany).
 - Define data assets in a "service oriented architecture" construct (USA).
 - Develop "channel management standards" (USA).
 - Develop best practices for maintaining data over time (USA).
 - Work towards establishing the Global Statistical Geospatial Framework into a formal standard (New Zealand).
 - Agree to a system of unique identifiers for all geospatial features, including an appropriate time and version control mechanism (Eurostat).
 - Promote favourable access and use conditions for geospatial data relevant for geocoding and use within the context of framework purposes (Eurostat).

- Work to harmonize the geographic and geospatial objects used by the statistical and geospatial communities as their geographic reference framework (Poland).
- With regard to Membership, composition and terms of office were discussed and agreed upon:
 - Elect two co-chairs, to serve for a period of three years, renewable for period of an additional three years;
 - Current term ends November 2016;
 - Proposal is for UNSD to write out to members of EG seeking agreement to renew term of current co-chairs for another three years (to steer Global SGF to approval and endorsement by UNSC and UN-GGIM).

Recommendations

The Expert Group made the following recommendations:

- **Recommendation 1:**
 - The UN-GGIM adopt the Global Statistical Geospatial Framework
 - Aim for August 2016
 - Important achievement for the UN-GGIM as it seeks to become a UN Functional Commission
 - The UNSC endorse the Global Statistical Geospatial Framework
 - March 2017
- **Recommendation 2**
 - The UNSC and the UN Committee of Experts on GGIM support the continuation of the EG but with a focus on:
 - Consolidation and implementation of the Global Framework
 - Capability building
 - Knowledge management
 - Interaction with existing, new and emerging global and regional bodies pursuing areas of detail that contribute to the consolidation and implementation of the Global Framework
 - Continue to collect examples of the country level application of the framework
 - As a start, EG members agreed to prepare country level application examples for inclusion in the proposal going to UN-GGIM and UNSC
 - The country level examples to be published on the UN website