Outcomes from the Second Meeting of the Expert Group on the Integration of Statistical and Geospatial Information,
Sunday 24 May 2015, Lisbon, Portugal

Summary[1]

Session 1 – Introductory Session

- An overview was provided of what the future might look like within the context of three main themes – being Modern and Innovative, Efficient and Sustainable, and Relevant and Connected. These are the means and motivations on how the Expert Group may build on the proposed Spatial Statistical Framework (SSF).

- The Expert Group confirmed, in line with its Terms of Reference, that it should not solve external issues. The Expert Group should keep aware of and monitor Big Data with the view to being evaluated as a future activity, and consider Metadata, Privacy and Confidentiality, in the context of integration, with the aim to be included in the discussion with the leading groups of these topics.

- The Expert Group will focus on integration and do so with the relevant communities (i.e. statistical, geospatial and others) and adhere to the Terms of Reference of the Expert Group. For the items that are not core work of the Expert Group, the Expert Group has to energize and encourage progress of relevant groups (for example the working groups working on standards - e.g. SDMX), but not be directly involved with the details.

- The Expert Group discussed how to best influence those making the decisions within the Sustainable Development Goals (SDGs) process. The requirements for data collection need to be connected to the benefits of society. In this regard, Expert Group members need to consider the benefits that statistics and geography can bring to the table.

Session 2 – What a global framework would look like

- The Spatial Statistical Framework (SSF), the General Statistical Business Process Model (GSBPM), and the INEGI, Mexico model were introduced and discussed as three levels of possible frameworks. The SSF is a principles-based framework, not too detailed and not overly prescriptive, but able to be customized for individual national circumstances. The GSBPM provides a link to the internationally agreed statistical processes, while the Mexico model is a detailed case study of a successful realized end state, which is useful for the users. The Expert Group agreed that these three models should usefully be harmonized together.

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[1] Unedited version.

- Participants discussed whether the Expert Group can prepare a practical Spatial Statistical Framework in the coming months, based on the 3 models above, and send it out for global consultation before submitting to UN-GGIM and UNSC. Australia agreed to progress this as an action item (i.e. to flesh out the existing SSF model, incorporate a link to the GSBPM and provide the UNEGI model as a best practice example). UNSD will then undertake a global consultation, with the intent of submitting an international SSF to UNSC and UN-GGIM in 2016 for adoption.

- The Expert Group needs to capture the user needs as well, with the objective to collect statistical and geospatial data at the same time during the 2020 Round of Censuses. More specifically, for data collection purposes, Censuses will need to look at the dwelling and unit level and capture information at that level. Furthermore, we need to be more innovative with other data collected and integrated, and consider the collection of other locational data: financial, economic, etc. The Expert Group should also consider developing the overarching SSF principles framework and how it would apply to the 2020 Round of Censuses.

Session 3 – Progress on work program items

- Following a research study, the pros and cons of Administrative Areas and Grid Areas were presented and discussed. The Expert Group confirmed that, based on the complexities and issues with each approach, one is not preferred over the other. The issue is rather should the two methodologies be combined, and how transfer between the two approaches. Each approach needs to consider user needs, as well as maintaining statistical and geospatial integration, bearing in mind that we do not know how to do that yet. The Expert Group concluded that the preferred approach was to collect the finest level geography possible (preferably longitude/latitude), so that any geography can be constructed from the collection unit level.

The Expert Group agreed that the presented pros and cons were a useful aid in deciding between the two approaches for particular applications. The USA agreed to tidy up the list of pros and cons, and the UNSD will then undertake a global consultation, with the intent of submitting the list to UNSC and UN-GGIM in 2016 for adoption.

Session 4 – Progress on work program items

- The European Commission proposed steps on Common Terminology:
  1. develop a list of definitions and synonyms;
  2. form a small editorial board of experts from both the statistical and geospatial communities;
  3. the editorial board review the list of terms/synonyms, proposing additional and redundant terms/synonyms;
  4. seek agreement by the expert group;
  5. transfer the terminology to a web-repository.

  It was agreed that the European Commission would complete step (1), with UNSD completing steps (2) to (5).

- The Principles and Recommendations adopted by the UN Statistical Commission for the 2020 Round of Censuses were brought to the attention of the Expert Group and were recognized as an important contribution by the EG. The Expert Group considered that UN-GGIM should be more involved in the 2020 round of censuses and consider funding for capacity development. This topic should be on the agenda of the next EG meeting

- The Expert Group has inquired whether the UNSD will carry out a programme on strengthening capacities (regional workshops, Guidelines on Geospatial Information Infrastructure, etc.) for the 2020 Round of Censuses, as it did during the 2010 Census Round. The Expert Group specifically recommended the update of the Handbook on Geospatial Infrastructure in Support of Census Activities. In addition the Expert Group requested UNSD to cooperate with UNFPA in order to promote the Handbook, particularly for the least developed countries and small Pacific islands.

Session 5 – Collaboration with EFGS

- The Expert Group recognized the valuable contribution that the European Forum for Geography and Statistics (EFGS) makes in the professional community, and through technical meetings and forums, and welcomes the collaboration and contribution to the work of the Expert Group.

- The EFGS role is primarily networking (but also influencing decisions in the statistical and geospatial communities). It is primarily a forum among experts. The EG therefore concluded that the EFGS should focus on more technical aspects, whereas the EG should focus on the strategic and political aspects of statistical/geo-spatial information integration.

Session 6 –Metadata and interoperability

- A presentation comparing the General Statistical Information Model (GSIM) and General Feature Model (GFM) was made. The Expert Group recognized that joining statistical and geospatial data is not easily transformed and integrated. Too much time is spent preparing and managing data, as opposed to analyzing the data. Standards do not support easy transformation, particularly machine to machine. In this regard, it was recommended the establishment of a small Working Group composed by members from the Expert Group and standards organizations with the aim to: (i) standardize the means to join statistical and geospatial data; and (ii) address different data models and ensure that both GSIM and GFM support joining of the two data types.

- The DCAT-AP (application profile for statistical and geospatial data portals in Europe) provides a metadata interchange format for data portals operated by EU Member States and will be completed soon. DCAT-AP is considered a bridge between statistics and geography and a proposal was made that ideally the Expert Group issue a recommendation to adopt it.

- Some common data challenges were noted; data quality, privacy and security. Standards and associated business processes can assist in easing these data and integration challenges. In this regard, it was recommended that the Expert Group work collaboratively with OGC and pilot an interoperable global Statistical Geospatial Information Framework to take it to best practice.