UNITED NATIONS SECRETARIAT Department of Economic and Social Affairs Statistics Division

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United Nations Expert Group on the Integration of Statistical and Geospatial Information First Meeting New York, 30 October - 1 November 2013

Agenda: Item 3

UNSD-Summary of the Programme Review ¹

Prepared by UNSD

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 $^{^{1}}$ This document is being produced without formal editing $\,$

UNSC: Developing a statistical-spatial framework

UN-GGIM: Linking geospatial information to statistics

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"Positioning geospatial information to address global challenges"

Background & Drivers

Background

- Increasing demand for location based information about places, people, business, economic growth, wellbeing, development,....
- Recognition of the value of linking socio-economic information to location

Global Drivers

- Post-2015 Development Agenda
- Sustainable Development (Rio+20)
- Inclusive Growth
- Environmental Indicators climate change, etc.
- Human Development
- Economic Performance and Social Progress



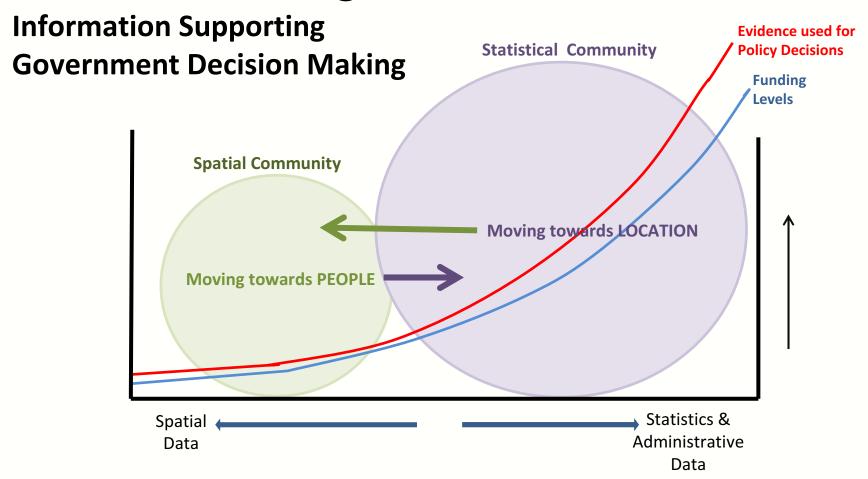
Background & Drivers

"The work on global geospatial information management over the past two to three years has confirmed that one of the key challenges is a better integration of geospatial and statistical information as a basis for sound and evidence-based decision-making."

Secretary-General, UN Economic and Social Council (2012)



Background & Drivers



Built & Natural Environment Focus (primarily spatial attributes) **People & Economic Focus**

Health, Education, Welfare (primarily non-spatial attributes)



2nd Session of UN-GGIM, August 2012

Inventory of Issues

- Develop a national, regional and global strategic framework for geospatial information;
- Establish best practices in institutional arrangements, legal and common frameworks;
- 3. Build capability and capacity, especially in developing countries;
- 4. Assuring the quality of geospatial information;
- 5. Promoting data sharing, accessibility and dissemination;
- 6. Embracing trends in information technology;
- 7. Promoting geospatial advocacy and awareness;
- 8. Partnering with civil society and the private sector; and
- 9. Linking geospatial information to statistics

http://ggim.un.org/2nd%20Session/E-C20-2012-5%20Inventory%20of%20Issues%205%20July.pdf

2nd Session of UN-GGIM, August 2012

9. Linking geospatial information to statistics

- Determine how national geospatial information authorities and other actors on geospatial information can best work together with national statistical offices in order to best exploit the synergies of both domains
- Explore and recommend effective governance structures for the long term planning and the management of projects in geospatial information and statistics with relevance and added value for the other domain
- Determine effective ways of linking or combining the different metadata conventions and systems for geospatial and statistical information
- Establish guidelines and identify best practices for spatial analysis projects with relevance to statistical work or indicators
- Explore ways of combining statistical databases and geoportals hosting spatial datasets in terms of creation, presentation and use of the information



UNSC Programme Review

UN Statistics Division:

- Secretariat for both the UN Statistics Commission and UN-GGIM
- Recommended a Programme Review of national spatial activities and those activities of National Statistical Organizations (NSOs)
 - Australian Bureau of Statistics offered to undertake Review
 - Questionnaire on the status of the integration of statistical and geospatial information within NSOs globally

The review aimed to:

- Describe current national geospatial capabilities and institutional arrangements
- Look at increasing roles for NSOs in national geospatial activities
- Identify mechanisms for improving NSO driven geospatial activities
- Look at current geocoding activities and capabilities
- Identify the need for standards for linking statistics to location



UNSC Programme Review

Most significant findings:

- Responses from 52 countries
- Overwhelming agreement of the need to link socio-economic information to location
- NSOs expressed concern at the lack of standards for linking statistical information to location
- NSOs recognized the need for the development of relevant standards and the significant benefits that would result from such standards
 - An international standard for linking socio-economic information to location - that supports a population centric view of geography and enables socio-economic information from multiple sources to be easily integrated using location as the link



UNSC Decision 44/101, February 2013

- Recognized importance of integrating geospatial information and statistics in supporting social, economic and environmental policy decision-making
- Welcomed greater collaboration between the geospatial and statistical communities at national and international levels
- Requested UNSD to establish an Expert Group composed of representatives of both statistical and geospatial communities to:
 - Carry out work on developing a statistical spatial framework as a global standard for the integration of statistical and geospatial information
 - Including addressing technical, institutional and information policy issues
 - Convene an international conference in 2014 as a way to reach out and develop best practices
- In developing an international statistical geospatial framework:
 - What might this look like?
 - What elements might be required?
 - Statistical Spatial Framework developed by the ABS is an example



UN-GGIM Decision 3/107, July 2013

- Acknowledged the critical importance of integrating geospatial information with statistics and socio-economic data and the development of a geospatial statistical framework, especially in the context of the post-2015 development agenda
- Supported the decision by Stat. Com. to create an Expert Group
- Supported holding an international conference on the topic and urged the Expert Group to look into institutional arrangements and standards that would facilitate better data integration
- Consider the unique opportunity offered by the preparations of the forthcoming 2020 Round of Censuses
- Recognized the role of 'linked data' as an effective methodology for dynamically linking datasets and recommends this be considered by the Expert Group
- Encouraged NGIAs to reach out to their NSO counterparts to actively engage in a dialogue at the national level
- Requested the Expert Group to report back to the Committee in 2014

Why is this important?

The future role of governments in geospatial data provision and management

Governments will also play a role in many countries in driving, or at least supporting, cross-sector collaboration in areas such as building, construction and public safety, through building information modeling, and farming, through agricultural risk management methods and systems. We also are likely to see stronger interoperability, and in some cases integration, between geospatial and statistical authorities, as well as with other information authorities, as governments look to connect and make sense of the significant volumes of data they will hold

Future trends in geospatial information management: The five to ten year vision, July 2013



Why is this important?

Geospatial information is a key building block to our geography and our environment - both natural and man-made. Geospatial information analysis and modeling in areas including; disasters, the environment, land use and administration, statistics and geography, climate change, the green economy, agriculture and urban vulnerability, provide the evidence base to address and inform critical societal issues for our respective Governments and communities

CIGMA International Conference on Geography and Environment 2013, 7-9 October 2013, Mexico City

Disasters require a data driven and a geospatial approach - risk, hazard, exposure, vulnerability, communities, infrastructure at risk, etc. It is also a statistical approach - populations, addresses, postcodes, census boundaries, villages, etc. This requires integrated population and economic data being made available to understand exposure and vulnerability

Chengdu Forum on UN-GGIM, "Development and Applications in Urban Hazard Mapping", 15 - 17 October 2013, Chengdu, China





UN-GGIM

UNITED NATIONS INITIATIVE ON GLOBAL GEOSPATIAL INFORMATION MANAGEMENT

.....over to the United Nations Statistical-Geospatial Expert Group!

Positioning geospatial information to address global challenges