Regional Workshop on the Integration of Statistical and Geospatial Information
Amman, Jordan, 16-19 February 2015

CONCEPT NOTE

I. Background

The rapid development of contemporary geospatial technologies, such as satellite imagery, aerial photography, global navigation satellite systems (e.g., the Global Positioning System (GPS)), geographic information systems (GIS) and other hand-held devices, has created unprecedented opportunities to collect and use geospatial data. The impact of these developments on official statistics is felt in particular at all stages of population and housing censuses, where efficiency has been improved in the pre-enumeration, enumeration and post-enumeration phases largely through the use of geospatial information tools.

The integration of geospatial data with a variety of socio-economic data, and their analysis and modelling, has increased the understanding of the dynamics of socio-economic and demographic structures and helped create more accurate, timely and unbiased information for better decision-making. For example, such integration has proved to be critical in achieving improved operational readiness and responsiveness to disasters. By using satellite imaging, scientists and demographers can compare images and statistics taken before and after earthquakes to estimate the amount of aid to be allocated to populated areas. There are many such examples related to the increased use of geospatial data in socio-economic, demographic and environmental analysis.

In today's global community, there is a clear recognition of the need to and value of integrating geospatial information and statistical information. The challenge being faced henceforth is how best to achieve this integration in an effective and consistent way.

The United Nations Statistical Commission and the United Nations Committee of Experts on Global Geospatial Information Management have recognized the need to meet the challenges of managing and effectively integrating geospatial and statistical information nationally and globally. An Expert Group on the Integration of Statistical and Geospatial Information has been established and convened its first meeting in New York, from 30 October to 1 November 2013. Composed of experts with an even professional mix of statistical and geospatial expertise, the Expert Group has been tasked with developing and advancing the implementation of a global statistical-geospatial framework as a standard for the integration of statistical and geospatial information. Mechanisms for achieving this include a Global Forum on the topic, held in New York in August 2014, and a number of technical workshops.

Given the limited opportunity for statisticians and geospatial information experts to meet and learn about the most recent developments in how countries build geospatial/statistical information infrastructures, this regional workshop, organised by UNSD in collaboration

with the Arab Institute for Training and Research in Statistics (AITRS), will serve as an important venue for national statistical offices of Arab countries to enhance their knowledge and understanding of contemporary approaches to geospatial information in support of census and other statistical activities, particularly in preparation for the next 2020 round of censuses. The technical workshop will also effectively augment the capacity of both statisticians and cartographers in the region to better participate in the global consultation aimed at improving the integration of geospatial and statistical information.

II. Objectives

The purpose of the Workshop is to provide a forum for sharing national practices and experiences in the use of geospatial methodologies and tools in support of statistical and census activities. The Workshop aims to (a) review emerging trends, innovative approaches and technological tools employed in the integration of statistical and geospatial information; (b) provide a basis for assessing existing national statistical-geospatial strategies as well as technologies used by National Statistical Offices; (c) aid in taking stock of national capacities and challenges for meeting the increasing requirements of census data users; and help in identifying good practices and lessons learned in the collection, analysis and dissemination of census data.
The ideas generated by the discussion and the recommendations made by participants will contribute to the global consultation and communication carried out by the UN Expert Group on the Integration of Statistical and Geospatial Information.

III. Organization and participation

UNSD in collaboration with the Arab Institute for Training and Research in Statistics will organize the regional workshop on the Revised United Nations Principles and Recommendations for Population and Housing Censuses and Evaluation of Census Data from 19 to 23 October 2014. The workshop will be attended by the representatives of Arab Statistical Offices who are responsible for planning and implementation of census operations.

A total of around 30 participants (?)– one government statistician from each country and participants from AITRS and ESCWA - are expected to attend the regional workshop. UNSD will be represented by 1 staff member and two consultants who will act as resource persons and participate in the training programme.

The representatives of Arab Statistical Offices will be funded by AITRS. Administrative, logistical and substantial support (in form of food and lodging for all participants) will be provided by AITRS.

The United Nations Statistics Division, as the Secretariat of the Statistical Commission and UN-GGIM, will jointly organize this workshop with the the Arab Institute for Training and Research in Statistics (AITRS) from 16 to 19 February 2015. The workshop will be convened at xxx in Amman.

IV. Workshop Format

The Workshop format will consist of four days of technical presentations and dialogue in specific sessions and themes from Monday 16 to Thursday 19 February. The draft format is as described in the table below.

Reg. Workshop Monday 16 Feb.	**Opening Ceremony** **Session 1** - International recommendations on contemporary practices in census cartography and use of Geographic Information Systems (GIS) and other geospatial information tools - Country experiences in integrating statistical and geospatial information using geography.	09:00-12:30
	Lunch	
	Session 2 - Definition of the national census geography – including Approaches to determine and represent geographical units, including geocoding.	14:00-17:30
Reg. Workshop Tuesday 17 Feb.	**Session 3** - Constructing an EA-level database for the Census - Fieldwork using satellite/aerial imagery, GPS .	09:00-12:30
	Lunch	12:30-14:00
	Session 4 - Use of mobile devices for data collection - Demonstrations.	14:00-17:30
Reg. Workshop Wednesday 18 Feb.	**Session 5** - Spatial analysis - Internet and census data dissemination	09:00-12:30
	Lunch	12:30-14:00
	Session 6 - Best practices in the use of GIS and census mapping. - Organizational and institutional issues	14:00-17:30
Reg. Workshop Thursday 19 Feb.	**Session 7** . - Commercial suppliers' demonstrations	09:00-12:30
	Lunch	12:30-14:00
	Session 8 - Discussion and adoption of conclusions and recommendations	

V. Expected Outcomes

1: Increase the knowledge of the government statisticians about the most recent developments in the use of geospatial information methodologies and tools in support of census and statistical activities;

2: Improve the knowledge of statisticians on application of web-based techniques for disseminating census data.

The following workshop outcomes are envisaged:

1. Recognition that a national statistical-geospatial infrastructure has a vital role to play in integrating diverse economic, social and environmental information to support more robust decision-making processes across many sectors of the economy, nationally, regionally and globally.;
2. An emerging understanding of the key issues and challenges to developing a national statistical-geospatial infrastructure, especially in the context of geocoding data requirements and methodologies;
3. A better understanding of future challenges and other required actions to be taken by both the NMAs and the NSOs in the region and the world in integrating statistical and geospatial information;
4. A more informed and shared understanding of the technical capacities and work program of AITRS, and of possible collaborations that may be initiated towards a coordinated approach to the integration of geospatial and statistical information for the next censuses in the region;
5. Agreement on topics that can be carried forward to the UN Expert Group on the Integration of Statistical and Geospatial Information meetings;
6. Identifying possible mechanisms and strategies for positioning the importance of the integration of geospatial and statistical information for the 2020 Round of Censuses; and
7. Identifying a possible pilot project that demonstrates the steps and processes required to integrate national geospatial and statistical information.

V. Proposed agenda items

1. First day of the workshop will be devoted to the introduction of the International recommendations on contemporary practices in census cartography and use of Geographic Information Systems (GIS) and other geospatial information tools; Country experiences in integrating statistical and geospatial information using geography; and Definition of national census geography – approaches to determine and represent geographical units, including geocoding.

2. The following three days of the workshop will be devoted to technical aspects of the use of geospatial information tools covering the following topics:
   a. Constructing an EA-level database for the Census
   b. Fieldwork using satellite/aerial imagery, GPS

c. Use of mobile devices for data collection
d. Spatial analysis
e. Internet and census data dissemination
f. Best practices in the use of GIS and census mapping
g. Organizational and institutional issues
h. Commercial suppliers' demonstrations