#### UNITED NATIONS SECRETARIAT Department of Economic and Social Affairs Statistics Division

ESA/STAT/AC.279/P14 October 2013 English only

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

Agenda: Item 9

#### Towards a Global Statistical Geospatial Framework: Overview on the existing geo-standards<sup>1</sup>

Prepared by UNSD

\_

<sup>&</sup>lt;sup>1</sup> This document is being produced without formal editing

# Towards a Global Statistical Geospatial Framework:

Overview on the existing geo-standards

Amor Laaribi GGIM Secretariat United Nations Statistics Division



## **Outline:**

International Geo-Standards Bodies

- Existing geographic information standards
- Some existing standards for linking geospatial information to statistics
- Future actions

## **Geo-Standards Bodies**

- Main Bodies:
  - **ISO/TC 211** Geographic information/Geomatics
  - Open Geospatial Consortium (OGC)
  - International Hydrographic Organization (IHO)

## **Geo-Standards Bodies...**

#### ISO/TC 211:

 ISO/TC 211 is the ISO technical committee responsible for the standardization of geographic information. Its work aims at developing international standards to support the understanding and usage of geospatial information through a country-driven balloting process.

#### OGC

 OGC is an international industry consortium of more than 400 members (companies, Government agencies and universities) developing standard specifications for a large number of geospatial and locational sectors and establishing common interfaces that "geo-enable" the Internet and mainstream information technology.

#### IHO

 IHO is an intergovernmental consultative and technical organization working to establish and maintain hydrographic standards to support safety of navigation and the protection of the marine environment.

#### And:

- UN-GGIM: promotion
  - ...Many others

## **Existing geographic information standards (UN-GGIM issues)**

UN-GGIM issue	Number of standards		
	ISO	OGC	IHO
(a) Developing a national, regional and global strategic framework for geospatial information	6	5	1
(b) Establishing institutional arrangements and legal and common frameworks	5	2	7
(c) Building capability and capacity, especially in developing countries	5	2	2
(d) Assuring the quality of geospatial information	7	6	8
(e) Promoting data sharing, accessibility and dissemination	63	24	15
(f) Embracing trends in information technology	20	18	3
(g) Promoting geospatial advocacy and awareness	-	4	2
(h) Working in partnership with civil society and the private sector	-	-	-
(i) Linking geospatial information to statistics	7	6	-

## Standards for geospatial and statistical information

- This issue is concerned with linking or combining different metadata conventions and systems for geospatial and statistical information, as well as combining statistical databases with geoportals containing spatial datasets;
- **ISO metadata standards** for geographic information are implemented in many geoportals and thus relevant here.
- The OGC has developed a standard for linking geospatial data, such as census boundaries, with corresponding statistical data;

## Future areas of standardization

- Statistical-Spatial Metadata Interoperability, Integrating SDMX/DDI (statistics) with ISO-19115
- ISO standardized representation of boundaries to which statistical data is linked:
  - The development of an ISO standard for the second administrative level boundaries (http://www.unsalb.org/) dataset developed by the UN Geographic Information Working Group (UN GIWG) was identified.
- ISO/TC-211 and OGC: Will prepare a template of standards needed for the fundamental layers of Spatial Data Infrastructure (to be presented at the 4<sup>th</sup> Session of UN-GGIM, August 2014).

## An Action Agenda for Information Integration

- Building a Global Information System: Common Standards, Data Exchange Protocol, Quality Assurance Mechanism, Universal Dissemination Platform, Global Governance Arrangement;
- Working with <u>National Statistical Offices</u> to evolve a global statistical system -- Many achievements over 65 years;
- Now working with <u>National Geospatial Information Authorities</u> to evolve a global geospatial information platform with common practices and standards;
- Imperative to bring these two communities together to evolve an integrated national/global information system.

### **UN-GGIM & the UNSC:** Support to the EG

- The United Nations will facilitate the collaboration of the two communities globally and nationally in:
  - The development of a Statistical-Spatial Framework
  - The promotion and standardization of Geocoding process
  - The development of data management practices enhancing interface of location-based datasets from multiple sources
  - The development of Location Analytics
  - The promotion and sharing of best practices

## Main Role of the Expert Group

Developing a Statistical Geospatial Framework

As a global standard for the

Integration of Statistical and geospatial information



## THANK YOU!!

