Collaborating from the regional level to the national geospatial information management processes

Session “Strengthening National Geospatial Information Management in the Americas”

Stream 6: Digital Silk Road and International Partnerships

Wednesday, 21 November 2018
Promoting the encounter of geospatial and statistical communities
A two years journey

- Resolution 712 on the regional integration of statistical and geospatial information
- First extended encounter between the statistical and geospatial communities
- Thirty-sixth session of ECLAC
- XVI Meeting of the Executive Committee CEA-ECLAC
- Coordination at regional level between ECLAC and UNGGIM Americas, to support and follow-up the integration process

2016

2017

- IV Session of UN-GGIM: ECLAC
- Seminar: Towards the Integration of Geospatial and Statistical Information

2018

- IX Meeting of the CEA-ECLAC
- V Session of UN-GGIM: Americas
- Workshop on the Integration of Geospatial and Statistical Information: from Dialogue to Action
Integration of statistical and geospatial information: first steps are crucial

- Not started yet
- First conversations
- Pilot Projects
- Medium and long term Programs

Technical assistance
- Horizontal cooperation
- Collection and dissemination of use cases
SDIs are relevant to support geospatial and statistics integration

Latin America and the Caribbean (29 countries): status of statistical and geospatial information integration with respect to the existence of Spatial Data Infrastructures (SDIs)

Number of countries

- Not started
- Initial conversations under way
- Execution under way through one or more pilot programmes
- Execution under way through a medium or long term programme of work

Number of countries with and without formally established SDI.
SDIs are relevant to support geospatial and statistics integration

Latin America and the Caribbean (26 countries): availability of basic data for statistical and geospatial information integration, with respect to the existence of national spatial data infrastructure

With spatial data infrastructure

<table>
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<tr>
<th>Property mapping</th>
<th>Postal address mapping</th>
<th>Mapping of political and administrative divisions up to the third level</th>
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Without spatial data infrastructure

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Towards the integration: the process of integration has not started yet (Step I)

Conformation of the Spatial Data Infrastructure (SDI) still at the project level.

There is no coordination between the National Statistics Office and the National Cartographic Agency.

The production of cartography is analog and is in the process of digitalization. Agreements for the dissemination of digital geospatial information are required before starting the integration.

Limited use of geospatial technologies in the National Statistics Office.
Towards the integration: initial conversations under way (Step II)

**Conversations and initial** approach between the National Statistics Office and the National Cartographic Agency.

**National geospatial information policy in process**, including the National Statistical Office as stakeholder

**Conformation of a working group** to address the challenge in an inter-sectoral manner, under the leadership of the National Statistics Office and the National Cartographic Agency.

**Delivery of geospatial information** from the National Cartographic Agency to the National Statistical Office, but without a formal process or a specific project.

**Projects in the planning phase**, for example use of geostatistical information to support the implementation of the 2030 agenda.
Towards the integration: Execution under way through one or more pilot projects (Step III)

In most cases, as a result of inter-institutional coordination.

Based on Geographic Information Systems tools, with map visualization services.

Application of methods for the homologation of census units and administrative geographies.

Geocoding of statistical databases, using unique fundamental geospatial data.

Elaboration of Statistical Atlas related to a wide range of topics.
Towards the integration: Execution under way through a medium or long term work programme (Step IV)

Most of the cases are denominated as National Geostatistical Framework.

They are coordinated by the National Statistical Offices or the organizations that lead the National Geospatial Data Infrastructures.

They are supported by institutional regulations (NSO) and inter-institutional agreements.

They have services for viewing and downloading (in some cases) geostatistical data.

They are focused on the implementation of the five components of the Global Statistical Geospatial Framework.
The process of integration has not started yet

Initial conversations under way

• Support the NSDI project
• Dissemination of global frameworks
• Inter-institutional workshops and meetings
• Capacity building on technology

Execution under way through one or more pilot projects

• Formalization of working groups (institutional arrangements)
• Dissemination of experiences on pilot projects implementation
• Capacity building on methodologies to integrate geospatial and statistical
• Implementation of geospatial tools and platforms

Execution under way through a medium or long term work programme

• Dissemination of experiences on national geostatistical frameworks
• Development of institutional/normative arrangements to support the national geostatistical framework
• Elaboration of the national work programme

Road map to advance in the integration process

GEOSPATIAL
Strengthening geospatial information management
Strengthening geospatial information management

Contents of the workshops

- Self assessment on geospatial information management
- Exchange of experiences / challenges of the NSO and the NGO
- Global Geospatial Statistics Framework
- Use of geospatial information to support the 2030 Agenda
- Census Mapping Update
Self assessment on geospatial information management

Exchange of experiences / challenges of the NSO and the NGO

Global Geospatial Statistics Framework

Use of geospatial information to support the 2030 Agenda

Census Mapping Update
Self assessment on the Integrated Geospatial Information Framework
## Self assessment on the Integrated Geospatial Information Framework

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<tr>
<th>Topic</th>
<th>Current situation (gaps, opportunities)</th>
<th>Proposed actions</th>
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<td>Governance and institutions</td>
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<td>Policy and legal</td>
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<td>Geospatial data and infrastructure</td>
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<td>Capacity and Education</td>
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<td>Communication and engagement</td>
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Some outputs of the assessment

4. POLICY STATEMENTS

4.1. Data Inventory and Metadata

4.1.1. The GLSC shall be responsible for establishing and publishing metadata standards for geographic information.

4.1.2. Government agencies will examine their data holdings and prepare a metadata listing of those that are spatial or that can otherwise be spatially-enabled. The metadata standard will be prescribed by the GLSC in consultation with the Geospatial Advisory Board. The list of metadata standards is detailed in Appendix 2. The metadata shall be kept on the National Spatial Data Infrastructure.

4.1.3. Quality and coverage assessments will be conducted on a regular basis. This will indicate sensitivity to loss of some data, as well as the need to update/improve some data.

4.1.4. The various metadata will be collated into a National metadata database by the GLSC and will be accessible to the general population. This will help to improve access to data and to reduce duplication of effort.

4.1.5. Each agency managing a spatial database shall be responsible for the update and maintenance of the metadata database of their spatial datasets. This metadata database shall be regularly uploaded to the National metadata database managed by the GLSC.

4.1.6. Metadata shall be available free to all users. Government shall encourage the dissemination of metadata via online portals and standard catalogue search services.

4.1.7. Geospatial data creators and providers will facilitate trust, a clear understanding and use of geospatial data through the publication of metadata, including ownership information and technical specifications. This will support informed and fit-for-purpose use and interpretation of data. Data creators and providers shall make every reasonable effort to ensure data is reliable, up-to-date and confirmed.
Some outputs of the assessment

Documento de trabajo:
Líneas de acción para avanzar en la implementación de un Marco Geoespacial Nacional en la República del Paraguay

Asistencia Técnica de la Comisión Económica para América Latina y El Caribe a la Dirección General de Estadística, Encuestas y Censos (DGEEC) y la Dirección del Servicio Geográfico Militar (DISERGEMIL)

Asunción, Paraguay, Julio de 2018

Action lines to implement a national geospatial framework
Final remarks

✓ Integrating geospatial and statistical information is a key pillar within any regional or national effort to strengthen the geospatial information management.

✓ The integration of statistical and geospatial information need as umbrella a nationwide coordination structure that can be provided by the national spatial data infrastructure.

✓ A first step in those countries where the integration of geospatial and statistical information has not started yet is to review the status of their SDI process and take action in order to activate these suitable and supportive coordination structures.

✓ The Integrated Geospatial Information Framework is a key resource to support the development of geospatial information in the countries of the region.
Thank you!