

UN-GGIM

United Nations Initiative on Global Geospatial Information Management

United Nations Statistics Division



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United Nations Initiative on
Global Geospatial Information Management

"Positioning geospatial information to address global challenges"

ggim.un.org

UN-GGIM: Why a global mechanism?

- Significant gap in the recognition and management of geospatial information globally
- Lack of a global consultative and decision-making mechanism among Member States in:
 - setting global standards on geospatial information;
 - developing common tools; and
 - bringing geospatial information to bear on global policy issues
- This gap is increasingly being filled by the private sector, reducing the role and influence of Governments
- Governments, not the private sector, have the mandate and accountability to maintain and deliver the national geospatial information base and related policy



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UN-GGIM: A global initiative

Formal inter-governmental Committee of Experts to:

- Coordinate Global Geospatial Information Management activities by involving Member States at the highest level as key participants
- Make joint decisions and set directions on the use of geospatial information within national and global policy frameworks
- Address global issues and contribute collective knowledge as a community with shared interests and concerns
- Develop effective strategies to build geospatial capacity in developing countries



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UN-GGIM: Global Agenda

1. Global geodetic reference frame.
2. National institutional arrangements in GI management.
3. Global map for sustainable development and status of mapping in the world.
4. Legal and policy frameworks.
5. Establishment and implementation of standards.
6. Linking of geospatial information to statistics and other data.
7. Integration of land and marine GI.
8. Activities on GI within the United Nations system and to the United Nations Conference on Sustainable Development.
9. Development of a knowledge base for GI.



Chengdu Forum on UN-GGIM Global Map for Sustainable Development: Development and Applications in Urban Hazard Mapping 15-17 October. 2013, Chengdu, China

Principal Conclusions:

- There is a need to strengthen the relationships between the National Disaster Management Agencies and the National Geospatial Information Authorities .
- Coordinate our strategies to raise the awareness of our governments so they understand the importance of geospatial information in sustainable development and safeguarding life.
- The need to include standardization to ensure interoperability.
- Disasters require a data driven and a geospatial approach.
- There are challenges in providing timely, reliable and accurate information in all phases of disasters.
- Urban hazard and disaster mapping should be a key input into the development of a GM4SD* by UN-GGIM.
- Increase training, participation in simulation exercises, and exchange of information, to enhance capacity.



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GM4SD- Global Map on Sustainable Development

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Creation of a Regional-Global architecture for UN-GGIM

- UN-GGIM Co-Chairs (2014-2015), Dr. Vanessa Lawrence, Ordnance Survey U.K and Dr. Eduardo Sojo INEGI Mexico

UN-GGIM Regional Committees:

- UN-GGIM for Asia-Pacific (formerly PCGIAP) November 2012
- **UN-GGIM for the Americas (formerly PC-IDEA) August 2013**
- UN-GGIM for Arab States February 2013
- UN-GGIM for Europe August 2014
- UN-GGIM Africa 2014



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UN GGIM:Americas Member Countries

 Argentina	 Belize	 Bolivia	 Brazil
 Canada	 Chile	 Colombia	 Costa Rica
 Cuba	 Ecuador	 El Salvador	 United States
 Guatemala	 Guyana	 Honduras	 Jamaica
 Mexico	 Nicaragua	 Panama	 Paraguay
 Peru	 Dominican Republic	 Uruguay	 Venezuela



CARIBBEAN PROJECT UN-GGIM:AMERICAS

Collaborative Agreement between Ministry of Foreign Affairs and INEGI



General Objective

Promote the development of Spatial Data Infrastructure in countries in the Caribbean, to strengthen the generation, use and sharing of geospatial information.

Specific Objectives:

- Reduce the Geospatial Data Infrastructure gap in the region, with respect to the other countries of the Continent
- Support the integration and participation of the Caribbean countries in the UN-GGIM: Americas initiative.



1. Antigua & Barbuda
2. Bahamas
3. Barbados
4. Cuba
5. Dominique
6. Grenada
7. Guadeloupe
8. Guyana
9. Haiti
10. Jamaica
11. Martinique
12. Dominican Republic
13. St Kitts & Nevis
14. Vincent & the Grenadines
15. St. Lucia
16. St. Maarten
17. Trinidad & Tobago

Participating Countries :



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Strengthening the Region

Regional Collaboration Project scheduled for execution
in three years (2014-2016)

Specific Actions

- [1. Diagnosis of National SDI](#)
- [2. Capacity Building](#)
- [3. Acquisition of Infrastructure](#)
- [4. Incorporation to UN-GGIM](#)



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Benefits for the Caribbean Countries

Top Geospatial Benefits

1. Having infrastructure and knowledge to advance in the development of the national SDI in each country.
2. Advance the construction of a Geodetic Reference Framework Regional and Continental for geodetic survey standardization.
3. Enable information access and exchange among the countries and the whole Continent.
4. Have information for regional-plan design and implementation.



Invitation:

Invitation to attend to the UN-GGIM4, August 6-8, 2014, New York City.

Invitation to attend to UN-GGIM: Americas first Committee Meeting, September 22-25, 2014, Mexico City at the Latin America Geospatial Forum.



UN-GGIM:Americas

REGIONAL COMMITTEE OF
UNITED NATIONS
ON GLOBAL GEOSPATIAL
INFORMATION MANAGEMENT
FOR THE AMERICAS

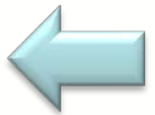


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1. Diagnosis of the geospatial information management status

INEGI prepared a questionnaire for diagnose the current situation of the National Spatial Data Infrastructures of the Caribbean countries designing and implementing a gathering instrument.



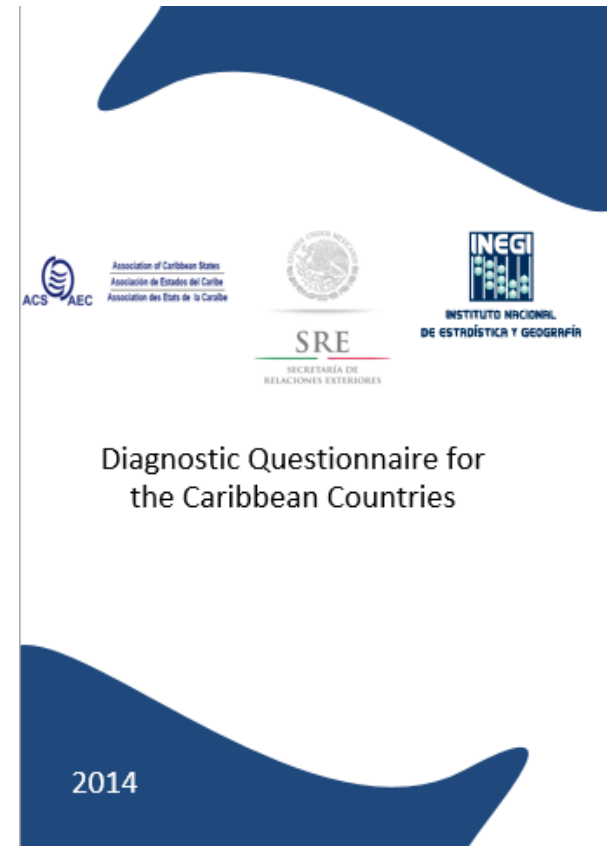
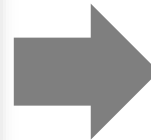
Geographic information users and producers questionnaire implemented in **2005** to national agencies.



SDIs status of PC-IDEA Member Countries questionnaire, **2011**



SDIs status of PC-IDEA Member Countries questionnaire, **2013**



First Caribbean Project Workshop:

The objective of this first Caribbean Project Workshop is to develop a working program and a critical path with the experts in Geospatial field of the this countries:

1. Antigua & Barbuda



2. Bahamas



3. Barbados



4. Cuba



5. Dominique



6. Grenada



7. Guadeloupe



8. Guyana



9. Haiti



10. Jamaica



11. Martinique



12. Dominican Republic



13. St Kitts & Nevis



14. Vincent & the Grenadines



15. St. Lucia



16. St. Maarten



17. Trinidad & Tobago



Caribbean Geodetic Reference Frame.

- GNSS for:
 - ✓ Providing a spatial georeference within International Terrestrial Reference Frame (ITRF)
 - ✓ Linking the Caribbean to Geocentric Reference System for the Americas (SIRGAS).
- According to the diagnosis, the acquisition of the necessary equipment in each country will be implemented, they will be strategically distributed in the geographic area of influence.
- This will be done according to international standards, which will contribute to regional interoperability and building the SDI of the Caribbean.



Land Cover Cartography and Classification System

- Provide capacity building of the Caribbean countries, particularly with respect to information and land cover production.
- Land cover information, maps and statistics will be derived from the satellite imagery supervised classification.
- There will be 9 general steps for the project:
 - ✓ data capture (satellite imagery selection)
 - ✓ bibliographic information and selection
 - ✓ imagery classification
 - ✓ local expert consultancy
 - ✓ field data validation
 - ✓ reinterpretation
 - ✓ final-land cover maps
 - ✓ land cover statistics preparation and
 - ✓ final report development



Interoperability

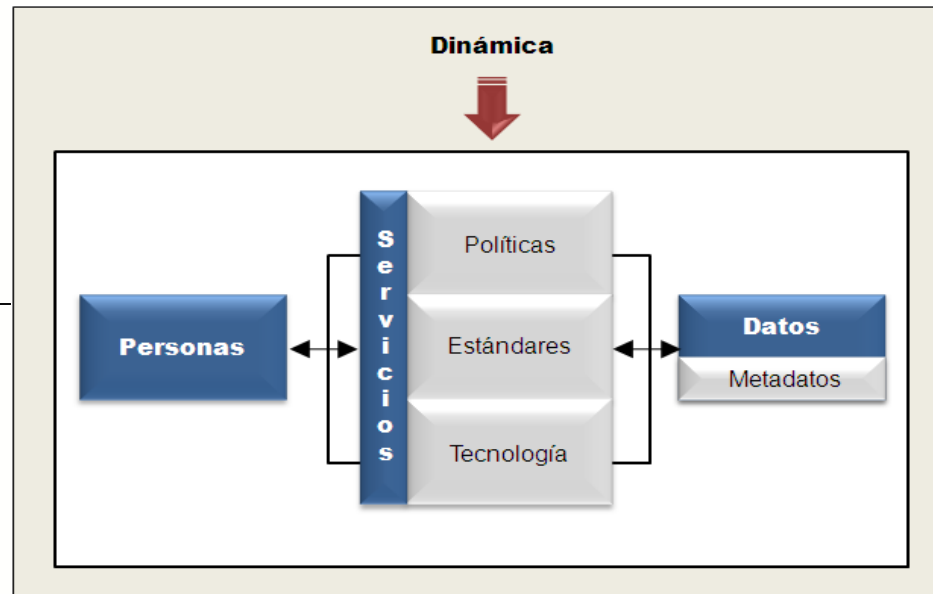
- A geomatic solution will be developed consistent with hardware, software and procedures integrated in the query, analysis and publication system of the georeferenced statistical and geographic information.
- The geomatic solution will be implemented on the Mexico Digital Map platform, V. 6.0.
- The design solutions will allow each country to publish its geographic services compliant with international standards in order to achieve regional interoperability and the Caribbean Spatial Data Infrastructure building.



Spatial Data Infrastructure Concept

Collection of technologies, policies and institutional arrangements that facilitate the availability of and access to spatial data. (Cookbook, 2009)

Conceptual Model



(Strain & Rajabifard, 2004)



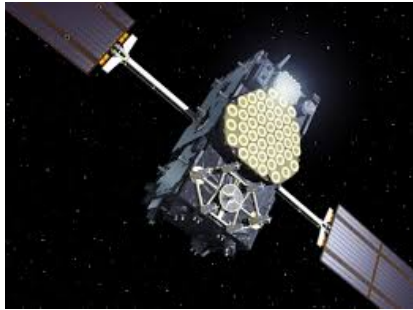
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3. Infrastructure acquisition



GNSS continuous operating reference stations



Computer equipment



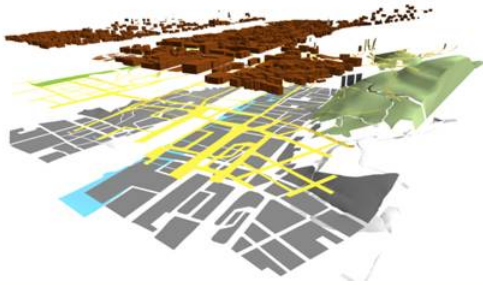
- Caribbean geodetic reference frame
- Promote interoperability and facilitate timely geospatial information use and exchange



Telecommunications

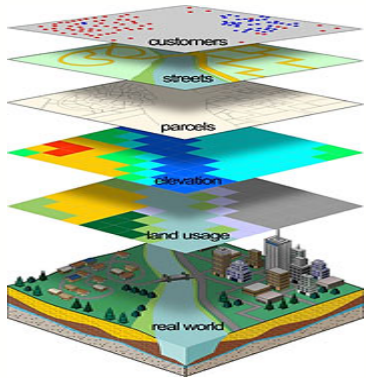


2. Capacity building



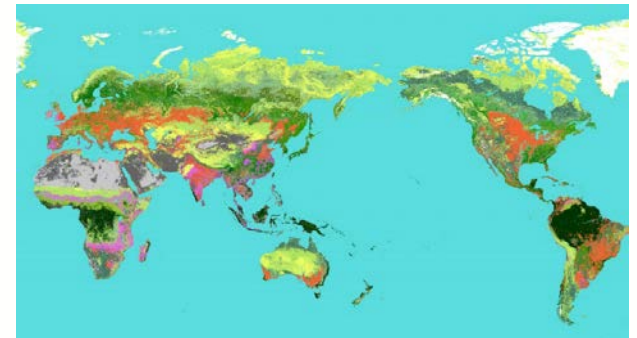
Spatial data infrastructures

Land cover and vegetation classification System



Geospatial information systems

Sustainable Development Global Map: Land Cover Classification System and Cartography, Cadastre information, and others



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