

# CARIBBEAN PROJECT

## Caribbean Sea

# General Objective

Promote the development of Spatial Data Infrastructure in 16 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 16 Caribbean countries in the UN-GGIM: Americas initiative.



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United Nations Initiative on  
Global Geospatial Information Management

*"Positioning geospatial information to address global challenges"*

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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



## Establishment of National SDI

Aligned to UN-GGIM:  
Americas key actions

Promote  
Regional Interoperability



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# Benefits for the Caribbean Countries

## Top Geoespatial 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 16 countries and the whole Continent.
4. Have information for regional-plan design and implementation.



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# Kind Request

- For Mexico: 5.3 meters multi spectral imagery, in order to test them first and use them as an input for projects such as: *Annual Land Cover Data, National Forestall Inventory and the National Agricultural Survey*, among others.
- For The Caribbean Countries: 5.3 meters multi spectral imagery, in order to test them first and use them to help strengthen the National Spatial Data Infrastructure of the Caribbean.



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# 1. Diagnosis of the geospatial information management status

Cuestionario de diagnóstico  
sobre el estado de la infraestructura de  
Datos Espaciales(IDE) en los países  
miembros de la Asociación de Estados  
del Caribe



2014

Diagnostic Questionnaire  
on the state of the Association of  
Caribbean States member countries'  
Spatial Data Infrastructure (SDI)



2014

Questionnaire de diagnostic  
sur l'état de l'infrastructure d'information  
géo-spatiale dans les pays membres de  
l'Association des États de la Caraïbe



2014



# First Caribbean Project Workshop:

April 3 and 4, Panama City, Panama

1. Antigua & Barbuda



2. Bahamas



3. Barbados



4. Dominique



5. Grenada



6. Guadeloupe



7. Guyana



8. Haiti



9. Jamaica



10. Martinique



11. Dominican Republic



12. St Kitts & Nevis



13. Vincent & the Grenadines



14. St. Lucia



15. St. Maarten



16. Trinidad & Tobago



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# 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.



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# 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.



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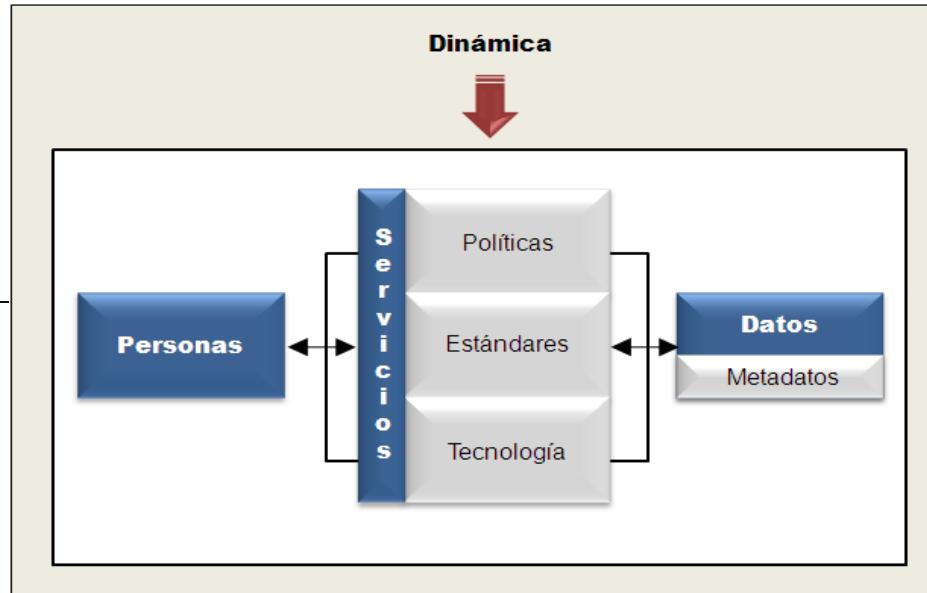
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# Spatial Data Infrastructure Concept

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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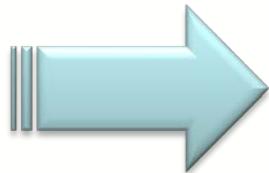
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# 3. Infrastructure acquisition

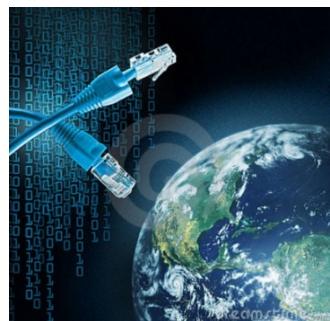


GNSS continuous  
operating reference  
stations

Computer  
equipment



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



Telecommunications



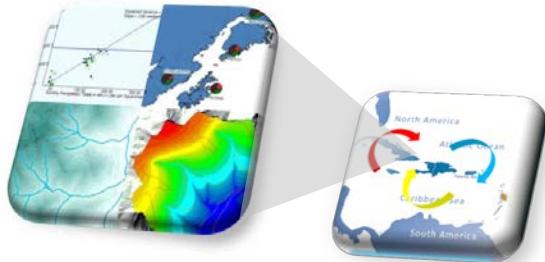
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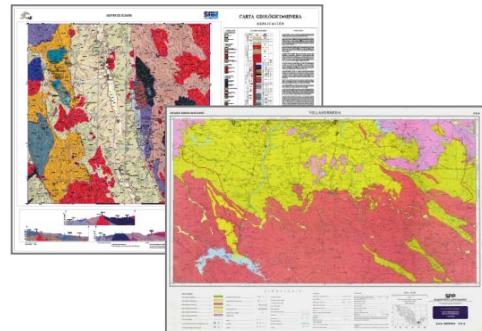
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# 2. Capacity building



Spatial data infrastructures



Land cover and vegetation classification System



Geospatial information systems

