

Project for the strengthening of Spatial Data Infrastructures in the Caribbean

Progress Review July 2018

General Objective

To promote the development of **Spatial Data Infrastructure (SDI)** in the Caribbean, in order to strengthen the generation, use and sharing of geospatial information, including for policy making

Specific Objectives:

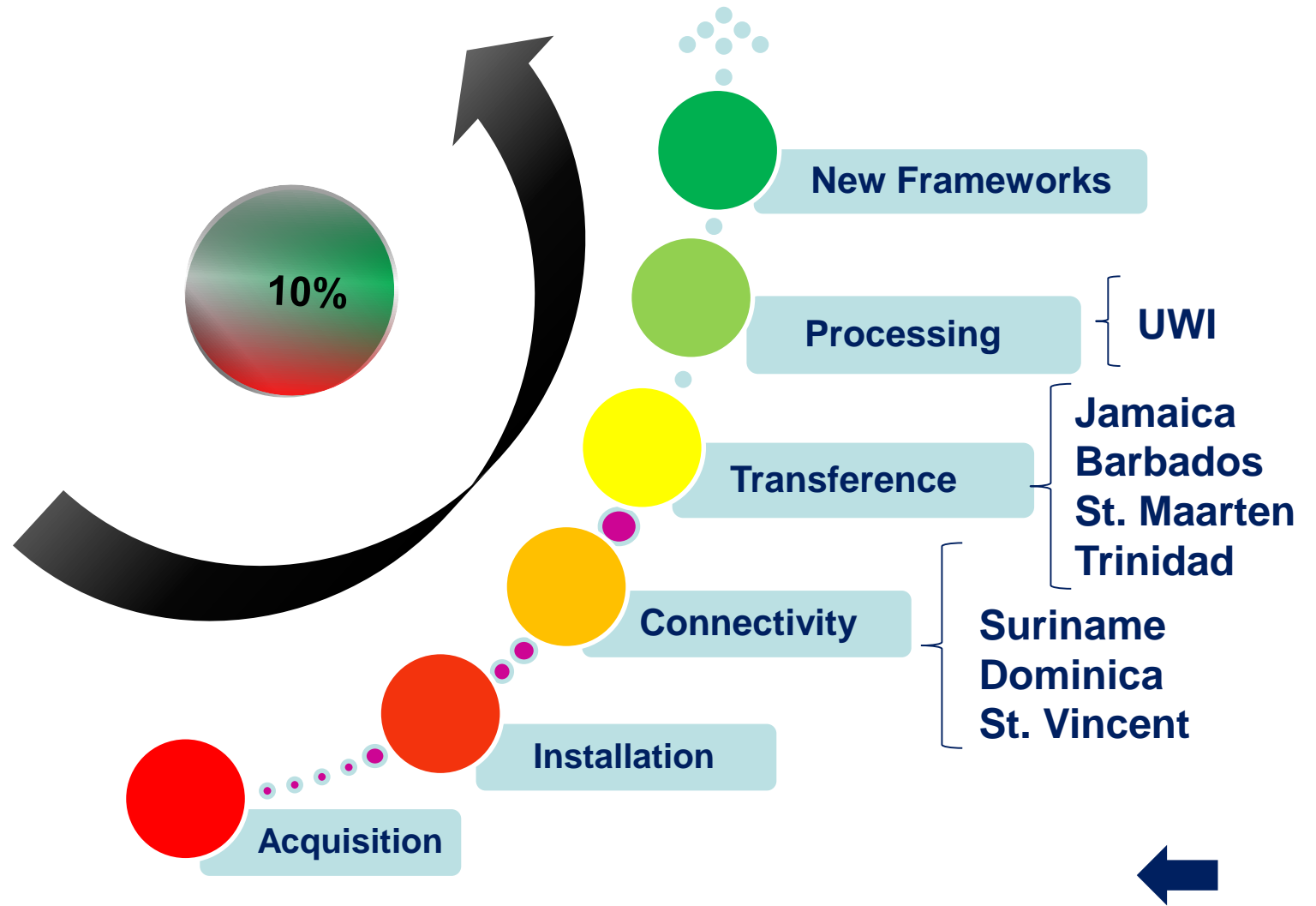
- Reduce Geospatial Data Infrastructure gaps within the Caribbean region, and with respect to the rest of the Continent.
- Support the integration and participation of Caribbean countries in both; the United Nations Experts Committee on Global Geospatial Information Management and the regional committee UN-GGIM: Americas

Progress on the strategic Objectives

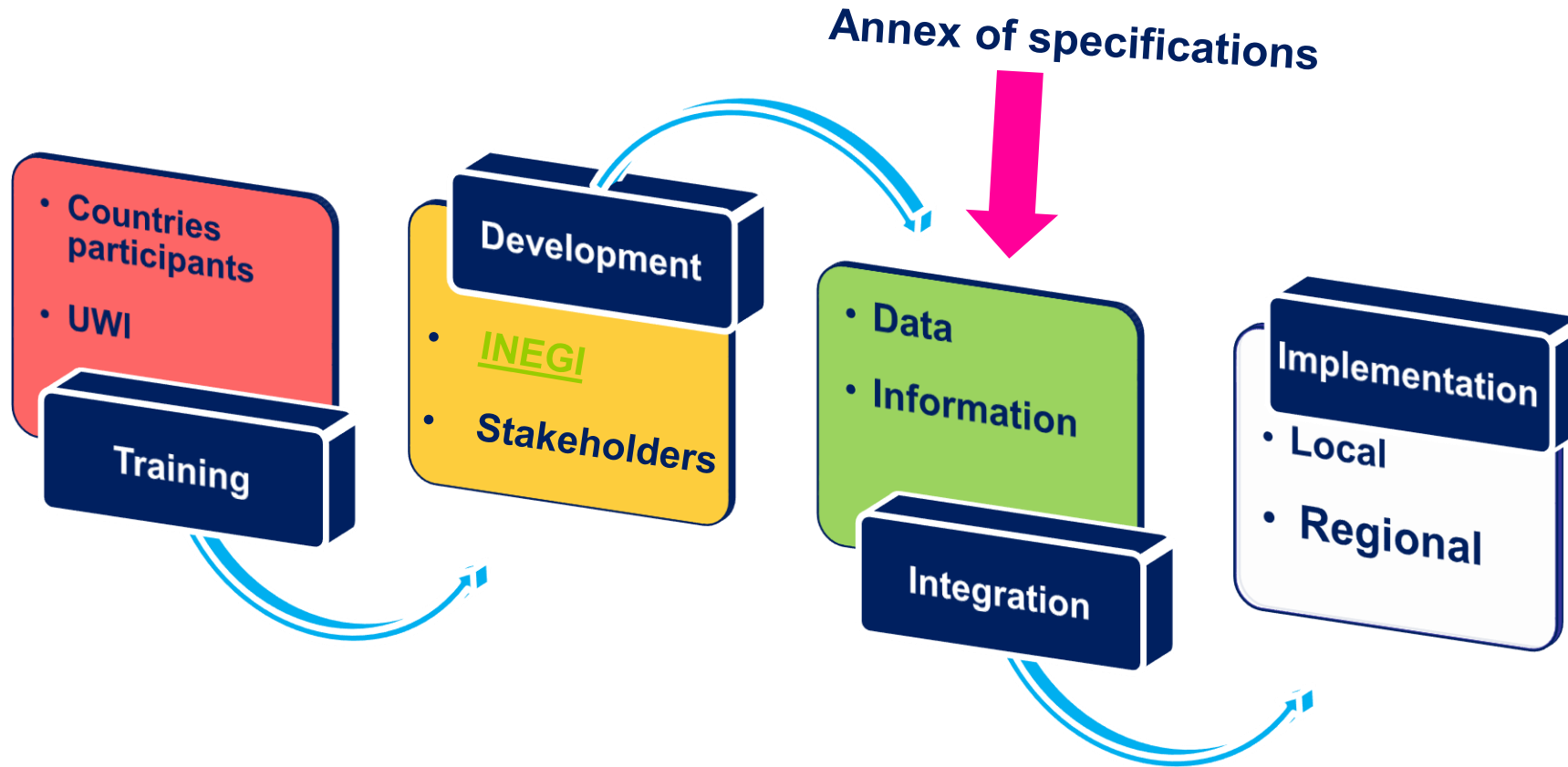
Business Unit: Caribbean Project		Strategic option:		STRENGTHEN				
Strategic Objective		Strategies		Indicators Tracing	GOALS / Specific objectives			
					minimum	medium	optimum	Real
1	<u>Strengthen the geodetic network</u>	Increase stations	Increase number of stations	5% further in the region	3%	5%	10%	More than 10%
			Increase data availability					
			Increase security location					
2	<u>Broadcast Geographic Information</u>	Create Digital Map of the Caribbean	Increase number of geoportals	10% further in the region	5%	10%	15%	5%
			Increase dissemination of G.I.					
			Increase the number of users					
3	<u>Promote the use of G. I.</u>	Construct Land Cover Map	Consider Project countries	90% of the coverage for the region	80%	90%	100%	100%
			Ensure the quality of the project					
			Disseminate results by geoportal					
4	<u>Capacity Building</u>	Training in geographic skills	Increase basic skills	90% of participations for the countries in the project	80%	90%	100%	80%
			Increase intermediate skills					
			Increase transversal competences					
5	<u>Using geographical standards</u>	Apply standards in processes	Increase in production processes	20% of processes	10%	20%	30%	20%
			Increase in integration processes					
			Increase in dissemination processes					
6	<u>Update computer technology</u>	Renew computers	Update servers	2% of equipment available	1%	2%	3%	More than 3%
			Update computers					
			Update network equipment					
7	<u>Geographic Metadata</u>	Promote the Application	Define a profile for the Region	20% of the countries in the project	10%	20%	30%	Less than 10%
			Train them on application					
			Implement use					

1. Strengthen the geodetic network

Stations 2014	Project Goal	Result
Reported 48	10% Additional	33% Additional
Active 30	Active 35	Active 46
GPS 17	GPS 17	GPS 17
GNSS 31	GNSS 36	GNSS 46



2. Create the Digital Map for the Caribbean



3. Construct the Land Cover Map

<https://conabio.github.io/caribbean/index.html>

Help on line



4. Capacity Building Programme

Production Skills

- Geodesy
- Cartography
- Remote Sensing
- Photo Interpretation

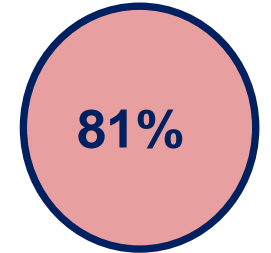
Integration Skills

- Metadata
- Geographic Databases
- Geographic Information Systems
- Geo-portals & Geo-services

Use of information

- 1) Statistical and Geographic Link
- 2) Sustainable Development Goals
- 3) Mexico's Website for DRR & LANOT

Monitoring Indicator

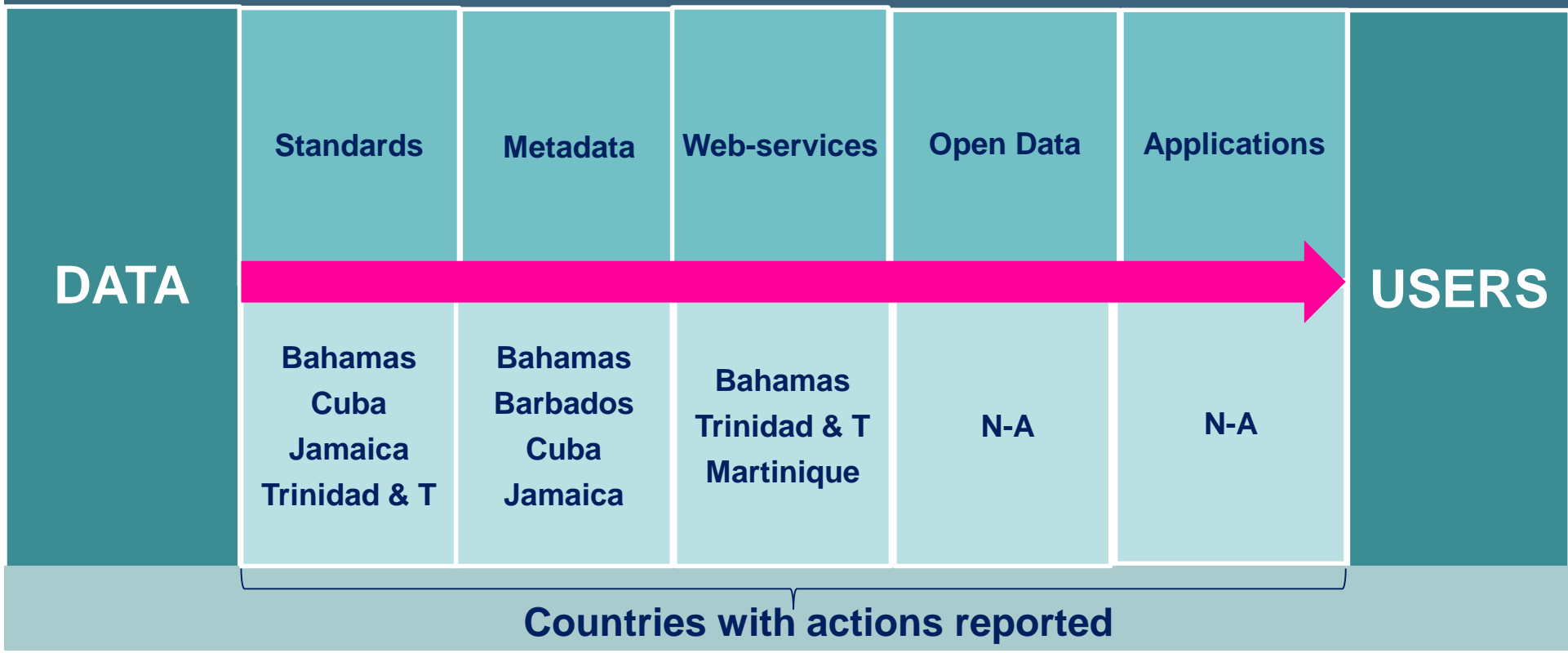


Cross-cutting Skills



5. Standards and 6. Metadata

Steps to implement them

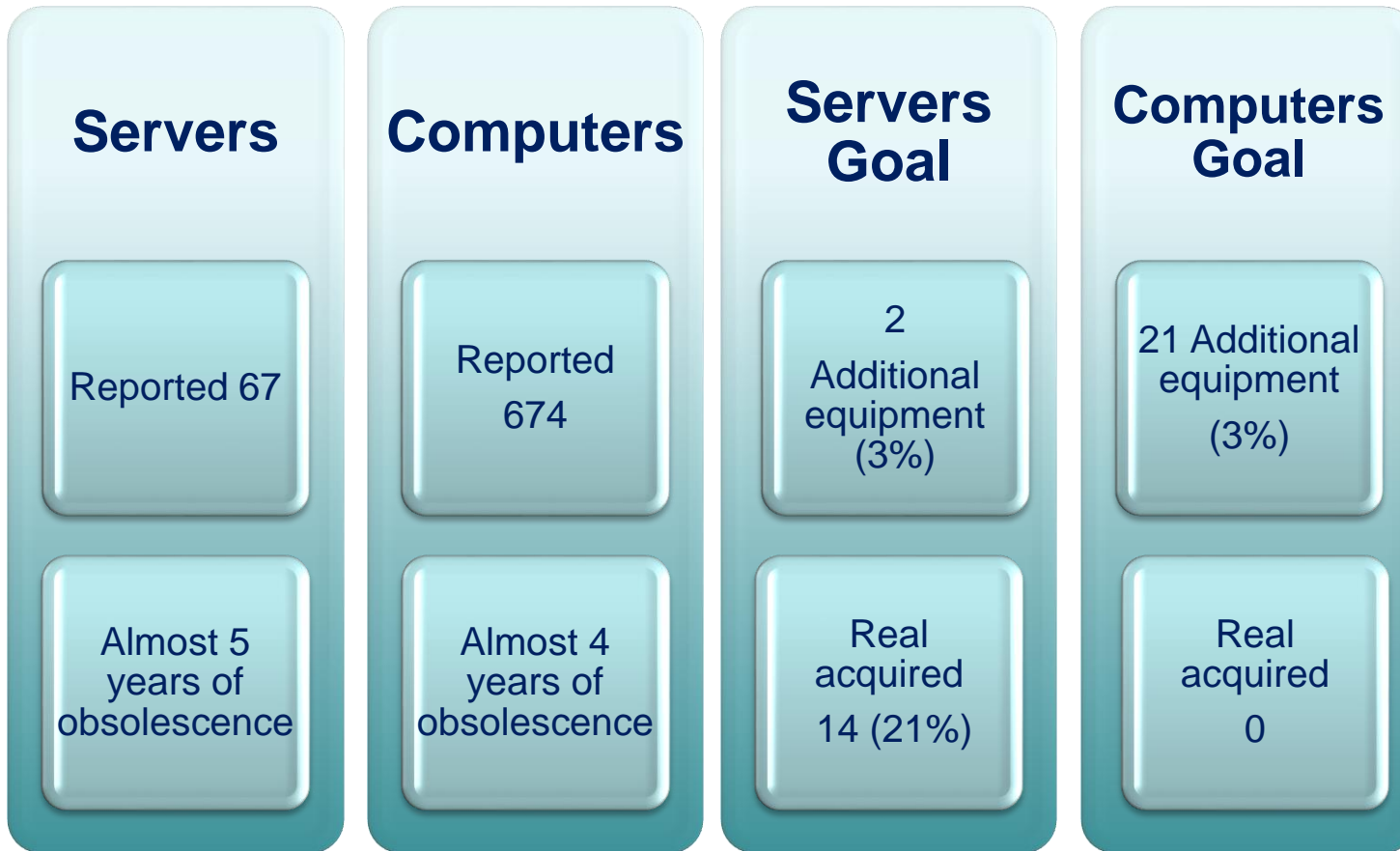


Causes of impact

- Lack of National Policies
- Significant differences
- Other Priorities



7. Update Computer Technology



Causes of impact

- Budget Calendar
- Long Bidding Processes
- Prices of Historical acquisitions
- Restrictions by International trade treaties



Commitments for next months

- Complete the configuration and transfer of files from the geodetic network to the UWI server before October ending
- Complete the validation process of the Land Cover Map by mid-August
- We ask for your support to share the free access geographic information to incorporate it into the Caribbean Digital Map, before September ending
- Please answer the survey available in:
<https://goo.gl/forms/pb9VdgU8ad4lkRBt2>



Anexo, Mapa Digital del Caribe

MxSIG

Introducción

- MxSIG es una plataforma de software libre, desarrollada por el INEGI para implementar soluciones geomáticas en la web para facilitar el uso, interpretación, publicación y análisis de información y la georreferencia de información estadística.

Características que la información debe cumplir para ser incorporada en el Mapa Digital de Caribe

• Información Vectorial

- La información con las siguientes reglas geométricas de validación Las geometrías no se deben intersectar consigo mismas Todos los polígonos deberán estar cerrados Tener una configuración adecuada para la codificación de caracteres de acuerdo con el idioma que se usa en los campos de texto de los atributos Evitar usar en los atributos caracteres especiales como espacios y tabulación. De preferencia, georreferenciados con la proyección Mercator, con el fin de mantener compatibilidad con otros servicios globales. En caso de utilizar alguna otra proyección de mapeo local, asegurar que la proyección para todas las capas de información sea la misma. Favor de incluir por cada capa de archive shape, el archivo .prj con los parámetros de proyección. La información debe usar el Datum WGS84 Los archivos en formato Shape.

• Información raster

- Hacer coincidir la proyección y datum, con el resto de la información. Preferentemente en RGB y JPEG 2000 comprimido con pirámides y con archivo de georreferencia. También puede ser formato BiL o TIFF con archive de georreferencia.



Association of Caribbean States
Asociación de Estados del Caribe
Association des Etats de la Caraïbe



Anexo, Mapa Digital del Caribe

TEMA	CAPA	TEMA	CAPA
Precepción remota/ Datos convertidos	Imágenes/ Fotografía aérea/ Mapas escaneados	Población	Distribución geográfica, incluyendo características de la población
Uso de Suelo – Cobertura de Suelo	Cobertura terrestre- Vegetación/Acumulación Unidades de Gestión de la tierra/ Áreas Uso del suelo/Catastro y tenencia Redes	Instalaciones y servicios	Historia/Cultura/Religión/Turismo Salud/Nutrición Oficinas de Gobierno/Instituciones/Unidades Educación/Alfabetización
Redes	Transportación/Navegación Mapas/Cartografía/Hidrografía Geodésica/ Control terrestre	Agua	Hidrografía Cuerpos de agua – Islas, Océanos
Límites	Límites administrativos/ Delimitaciones	Elevación y Depresión	Hipsografía/ Modelos de Elevación
Medio Ambiente y Recursos Naturales	Geología /Información Geocientífica Geomorfología/Fisiografía Hidrología Agua/Clima/Hidro-meteorología	Información Complementaria	Nombres Geográficos Información Marítima Oceanografía Índices (mapas, cartas, imágenes)
Asentamientos	Ciudades, Áreas urbanas Localidades urbanas Localidades rurales	Demografía / Economía	Bienestar y desarrollo Economía/Socioeconómica/Zonas económicas Agricultura/Pesca
Reducción de Riesgos de Desastres	Reducción de riesgos/Cambio Climático Amenazas/Riesgo	Infraestructura	Información y Comunicaciones tecnológicas Energía



Anexx, Digital Map of the Caribbean

MxSIG

Introduction

- MxSIG is an open source platform developed at INEGI to implement geomatics solutions for the web that facilitate the use, interpretation, publication and analysis of geographic information and georeferenced statistical information. .

Characteristics of the information that must be fulfilled to be uploaded to Digital Map for the Caribbean

For vector

- The information must comply with geometric validation rules That the geometries do not intersect with themselves That all the polygons are closed Have an appropriate configuration for the character encoding according to the language that is used in the text fields of the attributes Avoid using special characters (such as line breaks, tabs, etc.) in attributes Preferably in the Web Mercator projection, with the aim of maintaining compatibility with global services or, in case of choosing a suitable projection for a local atlas, the projection of all layers of information must be the same. Please include a .prj file with the parameters of the projection for each layer. Datum WGS84 Shapefile format

For raster

- Match projection and datum with the rest of the system information Preferably in RGB and compressed format as JPEG 2000 with pyramids and georeferenced file. Other case BiL or TIFF with georeferenced file .



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Anexx, Digital Map of the Caribbean

THEME	LAYER	THEME	LAYER
Remote sensing /Data conversion	Imagery/ Aerial Photo/ Scanned Maps	Population	Geographical distribution of people, including population characteristics.
Land Use – Land Cover	Land Cover-Vegetation/Buildup Land Management Units/ Areas Land Use/Cadastré and Tenure	Utilities and Services	History/Culture/Religion/Tourism Health/Nutrition Government Offices/Institution/Units Education/Literacy
Networks	Transportation/Navigation Mapping/Cartography/Hydrography Geodesy/Geodetic Control Network	Water	Hydrography Waterbodies-Inland Water/Oceans
Boundaries	Administrative Boundaries/Delimitations	Elevation and depth	Hypsography/ Elevation Models
Environment and Natural Resources	Geology /Geoscientific Information Geomorphology/Physiography Hydrology Weather/Climate/Hydrometeorology	Complementary information	Geographical Names Maritime Oceanography Indices (maps, charts, imageries)
Settlements	Cities, Urban areas Towns Villages	Demography / Economy	Welfare and Development Economy/Socio-economics/Economic Zones Agriculture-Farming/Fisherie
Disaster Risk Reduction	Disaster Risk Reduction/Climate Change Hazard/Risk	Infrastructure	Information and Communications Technology Energy



A satellite-style map of the Caribbean region, showing the Americas, the Caribbean Sea, and the Atlantic Ocean. The map is overlaid on a dark blue background with a teal gradient on the left side.

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