SECOND SESSION OF THE IODE STEERING GROUP FOR THE CARIBBEAN MARINE ATLAS PHASE 2 PROJECT (SG-CMA2-2)

Cartagena de Indias, 15 – 17 February 2017
Radisson Cartagena Ocean Pavillion Hotel, Cra 9 No. 22 – 850, La Boquilla
ATLAS
ATLAS GOAL

At least ten thematic maps
1. Caribbean base
2. Bathymetric
3. Coral reef
4. Seagrasses
5. Mangrove
6. Marine Protected areas
7. Biosphere reserves
8. Track hurricane
9. Oceanographic and meteorological stations
10. Marine and coastal tool management
Ten Caribbean thematic maps planned:
Layers to search and reviewing by country related to thematic maps information.

<table>
<thead>
<tr>
<th>MAPS</th>
<th>LAYER</th>
<th>BARBADOS</th>
<th>JAMAICA</th>
<th>MEXICO</th>
<th>TRINIDAD &amp; TOBAGO</th>
<th>VENEZUELA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Caribbean base map</td>
<td>Countries</td>
<td>1:10,000</td>
<td>2013</td>
<td>YES</td>
<td>1:1000 000</td>
</tr>
<tr>
<td></td>
<td>Villages</td>
<td>1:10,000</td>
<td>unk</td>
<td>1:50 000</td>
<td>2015</td>
<td>1:25000</td>
</tr>
<tr>
<td></td>
<td>Roads and/or streets</td>
<td>1:10,000</td>
<td>2015</td>
<td>1:1000 000</td>
<td>2017</td>
<td>1:1000</td>
</tr>
<tr>
<td></td>
<td>Hydrography</td>
<td>1:10,000</td>
<td>2003</td>
<td>1:1000 000</td>
<td>2017</td>
<td>1:1000</td>
</tr>
<tr>
<td></td>
<td>Other...</td>
<td>EEZ</td>
<td>1:1000 000</td>
<td>2015</td>
<td>1:1000 000</td>
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</tr>
<tr>
<td>2.</td>
<td>Bathymetry</td>
<td>Isobaths</td>
<td>1:5,000</td>
<td>2005</td>
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<td>1:1000 000</td>
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<tr>
<td></td>
<td>Sounds</td>
<td>1:10,000</td>
<td>2015</td>
<td>1:1000 000</td>
<td>2015</td>
<td>1:1000</td>
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<tr>
<td></td>
<td>Coast line</td>
<td>1:10,000</td>
<td>2000</td>
<td>1:1000 000</td>
<td>2013</td>
<td>1:1000</td>
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<tr>
<td></td>
<td>Other...</td>
<td>EEZ</td>
<td>1:1000 000</td>
<td>2015</td>
<td>1:1000 000</td>
<td>2015</td>
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<tr>
<td>3.</td>
<td>Coral reef</td>
<td>National Coral reef coverage layer</td>
<td>1:5,000</td>
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<tr>
<td></td>
<td>Other...</td>
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<td>2015</td>
<td>1:50 000</td>
<td>2015</td>
<td>1:50 000</td>
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<tr>
<td></td>
<td>National seabottom coverage/habits</td>
<td>1:5,000</td>
<td>2013</td>
<td>1:25000</td>
<td>2000</td>
<td>1:25000</td>
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<tr>
<td></td>
<td>Other...</td>
<td>1:50 000</td>
<td>2015</td>
<td>1:50 000</td>
<td>2015</td>
<td>1:50 000</td>
</tr>
<tr>
<td></td>
<td>Other...</td>
<td>1:1000 000</td>
<td>2015</td>
<td>1:25000</td>
<td>2015</td>
<td>1:25000</td>
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<tbody>
<tr>
<td></td>
<td></td>
<td>SCALE</td>
<td>DATE</td>
<td>SCALE</td>
<td>DATE</td>
<td>Comment</td>
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<td>variable</td>
<td>2013</td>
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<td></td>
<td>Other...</td>
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<td>2017</td>
<td></td>
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<td>7. Biosphere Reserve map</td>
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<td>2003</td>
<td></td>
<td>None in TandT</td>
<td>None in TandT</td>
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<tr>
<td></td>
<td>coverage layer</td>
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<td>Other...</td>
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<td></td>
<td>1:1 000 000</td>
<td>2016_08</td>
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<tr>
<td>8. Hurricane track map</td>
<td>Hurricane track lines layer (NOAA)</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Other...</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>9. Oceanography and meteorological stations map</td>
<td>Stations location layer (oceanographic stations, meteorological -coastal or off shore stations)</td>
<td>N/A</td>
<td>2016</td>
<td></td>
<td>1:1 000 000</td>
<td>2015</td>
</tr>
<tr>
<td></td>
<td>Other...</td>
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<td></td>
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<tr>
<td>10. Tools Management map</td>
<td>Integrated coastal Zone management units and its advance layer</td>
<td>1:10,000</td>
<td>1999</td>
<td></td>
<td>1:5000</td>
<td>2014</td>
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<td></td>
<td>Other...</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>
**STATUS**

- Scale range:
  5.000-10.000 (Barbados), 50.000 – 1.000.000 (Mexico), 1000 – 25.000 (T&T),
- Date:
  1999-2016 (Barbados), 2015-2017 (Mexico), 1984-2015 (T&T)
- Countries:
  Barbados, Jamaica, T&T, Mexico, Venezuela.

Map design (thematic structure)...
- Display by windows (multi-scale)
- Display one window (one scale generalization) with zoom specific on windows
- Very good metadata
- Updating (flexibility)

Diagnostic complete is requested
INFORMATION SOURCES

• **Bathymetric map**
  
  Global source: General Bathymetric Chart of the Oceans (GEBCO) 2014 grid (a global 30 arc-second interval grid).

• **Coral reef map**
  
INFORMATION SOURCES

- **Seagrasses map**  
  Global source: UNEP 2005

- **Mangrove map**
INFORMATION SOURCES

• Marine Protected areas map

Global sources:

http://www.protectplanetocean.org/official_mpa_map

http://www.mpatlas.org/explore/

http://www.biopama.org/learn_more/multimedia/protected_area_country_reports

• Biosphere reserves map

Global source: http://unesdoc.unesco.org/images/0024/002449/244977M.pdf
World Network of Biosphere Reserves
INFORMATION SOURCES

- Track hurricane map

- Oceanographic and meteorological stations

Global source: NOAA
INFORMATION SOURCES

• **Marine and coastal tool management map**

Create a map with state of ICZM advance from countries.

**Preliminary proposal**
Make a survey to know the state of art in the country partners.
According to these results generate levels of advance, i.e. as follow:

- **Levels**
  - 1 no ICZM policy
  - 2 Policy
  - 3 Zoning
  - 4 50% advance
  - 5 100% advance
  - 6 reviewing

Survey questions like....
Exist any ICZM policy?
Level of advance (in progress, created not advance, created and running)
ICZM spatial units exist?
• Marine and coastal tool management map

Advance categories of implementation of planning instruments (Colombia)
OTHER THEME MAPS

• Coastal hazards (erosion), Climate change (climate variability, vulnerability, mitigation, adaptation), Biodiversity (inventory of species by group, populations), Habitats, Fisheries (aquaculture, artisanal, industrial), Land-based sources of pollution (inventory of water bodies, measures, water flow, water level, monitoring network).

• Other potential datasets from Trinidad and Tobago: Fish gear type areas, Oil and gas blocks, Shipping lanes, Pollution maps, Oil and gas rigs, Pipelines, Historical transboundary Fishing grounds, Ramsar sites, Erosion and accretion Hotspots, Hydrometric areas

• JAMAICA Infrastructure, Landuse and statistical data on the island population.

• What else?
WORKSHOP INSTRUCTIONS

OBJECTIVE:
Complete the diagnostic table about availability of country information related to 10 thematic maps.

TARGET: obtain a diagnostic table complete and make decisions about gaps to solve them.

1. Work in **two** groups:
   - Group English: Dominica, T&T, Barbados, Belize, Turks & Caicos
   - Group Spanish: Venezuela, México, Guatemala, Dominican Republic, CLME+

2. Review of excel table to complete diagnostic by country (ten maps) (15 minutes)

3. Identify which themes could be used to generate more regional maps (10 minutes)

3. Socialize results by groups (5 minutes / group)