



Brussels , 14<sup>th</sup> May 2018



Flanders  
State of the Art

IOCARIBE



# CARIBBEAN MARINE ATLAS PHASE 2 - CMA2

## ATLAS MARINO DEL CARIBE FASE 2 - CMA2

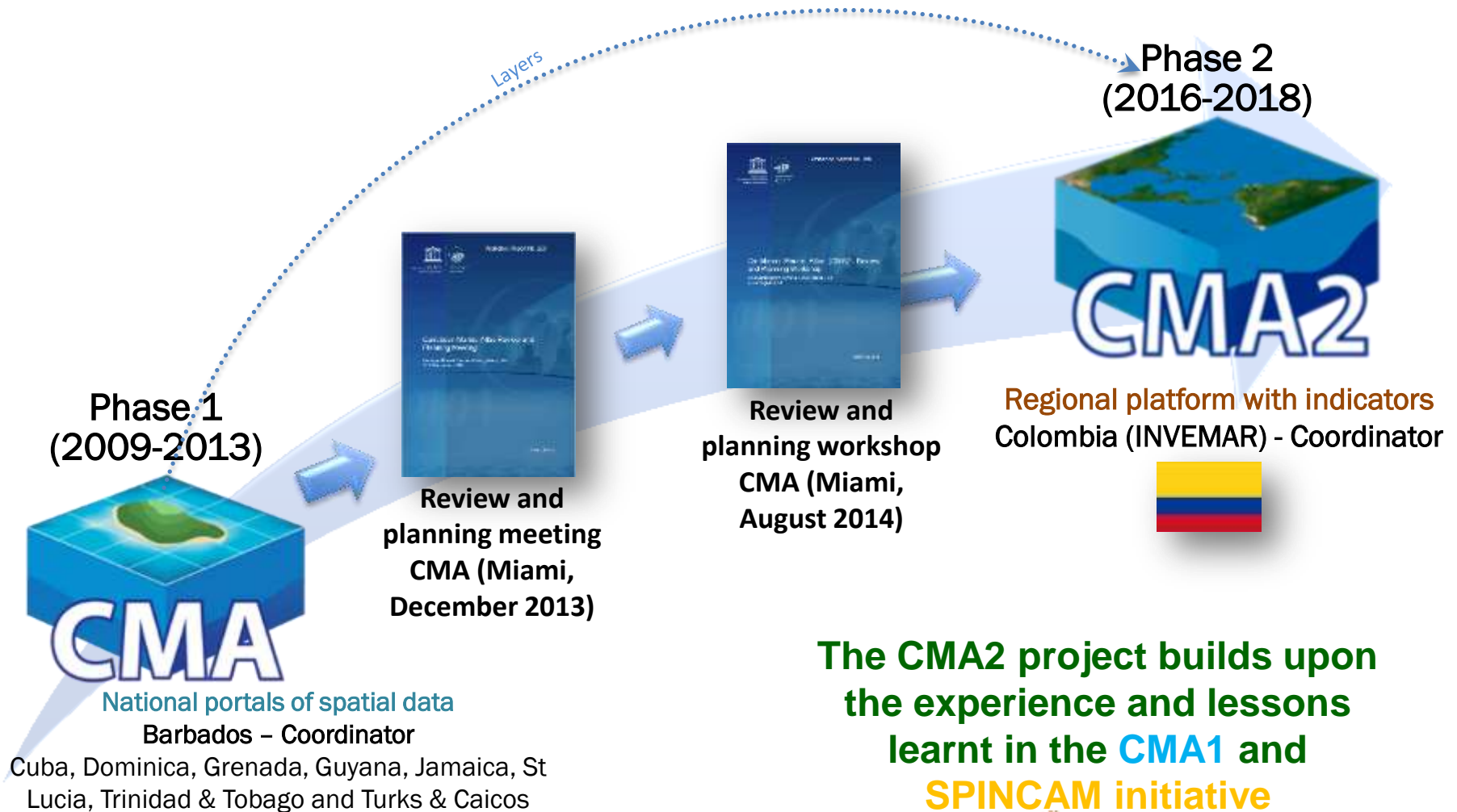
# CARIBBEAN MARINE ATLAS

## General objective

Sustainable operationalization of an online digital “Caribbean Marine Atlas” technology platform as **a support of Integrated Coastal Zone Management - ICZM** (with special attention to: coastal hazards, climate change, biodiversity & habitats, fisheries, land based sources of pollution) and **Ecosystem-based Management** for CLME.



# BACKGROUND



# CMA2 PROJECT BUILDS UPON ...



A collaborative approach to strengthening capacities with existing national, regional and international marine data and information management programs, projects or strategies:

## Cooperation and Exchange Expertise

South to South (CMA2 and ACMA African Coastal and Marine Atlas); as well as SPINCAM – Southeast Pacific data and Information Network in support to integrated Coastal Area Management



## Strategic synergies



## Opportunities

Advising from International coastal Atlas network - ICAN.  
Training through regional training center at IODE Ocean Teacher Global Academy (OTGA).



## Tools



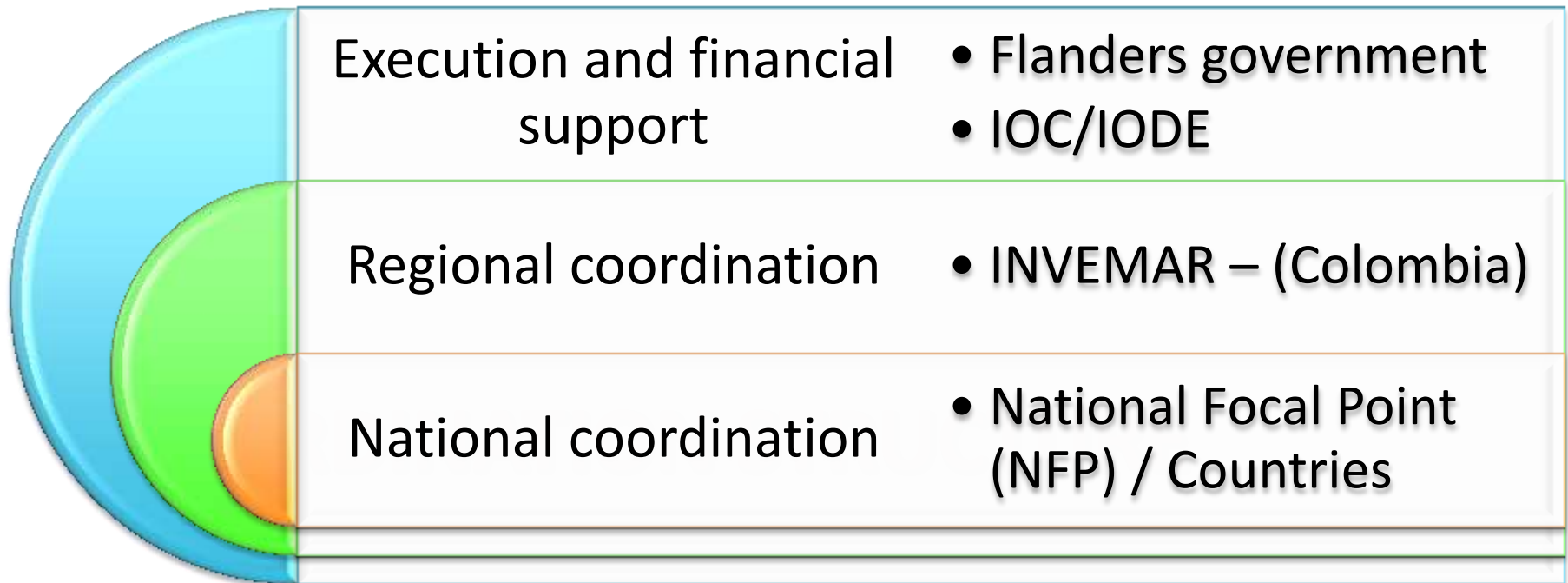
# CMA2 CURRENT PILOT COUNTRIES



13 countries: Barbados, Belize, Colombia, Costa Rica, Dominica, Guatemala, Jamaica, México, Panama, Dominican Republic, Turks & Caicos Isl., Trinidad & Tobago and Venezuela

And the users of the **CLME+ Project**  
(25 countries endorsed at Ministerial level)

# COORDINATION STRUCTURE



# GENERAL PROCESS



2015-2016

- Search of country partners and formal linkage
- Requirements inventory
- Geospatial information inventory
- Website & tools geospatial information prototypes
- Selection of indicators and proposal of methodological sheet



2017

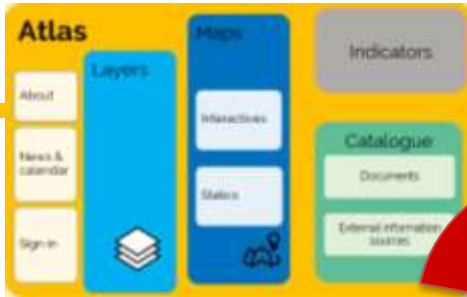
- Uploading information
- Indicators reporting
- Thematic maps generation
- CLME+ maps/reports generation (SAP and Ecosystems State Report)



2018+

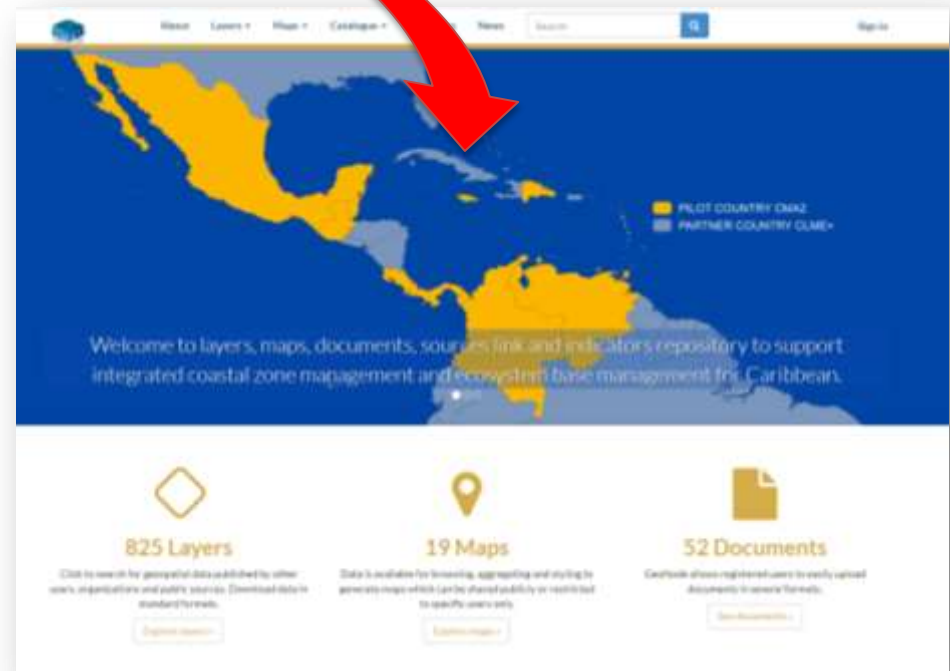
- **Maintenance in time** of e-repository for Caribbean region
- **Enforce dissemination strategy** at national - regional levels
- **Enforce synergies** with others initiatives

# ONLINE TECHNOLOGY PLATFORM (CMA INTERFACE)



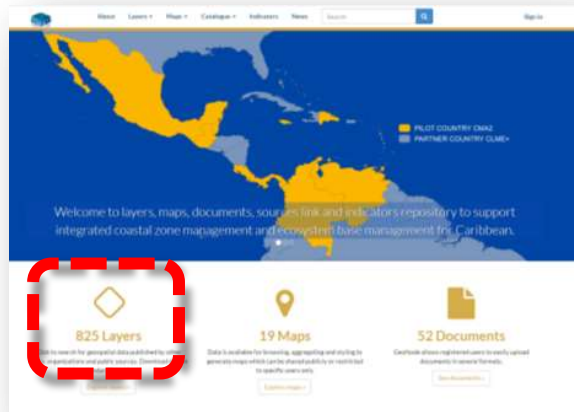
## PLATFORM STATUS - PRODUCTS

- On line 24/7
- Free access to data and information
- Multi topic information for ICZM and EbM
- Geoviewer for consultation of thematic layers and building/downloading maps
- Catalogue with documentation related to spatial information and links with external information sources (projects, countries, institutions)



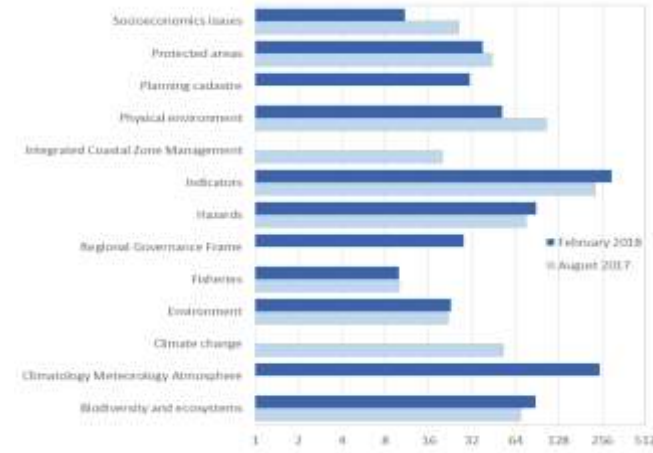
<http://www.caribbeanmarineatlas.net/>

# CMA2 PRODUCTS



## LAYERS

825 thematic layers



**MAPS** { 19 “interactive” maps  
36 “static” maps

**CATALOGUE** { 52 documents  
93 information sources

- Opportunity to customize maps
- To consult and interact with sets of layers displayed
- To publish/download/ interact online maps derived from projects, countries and institutions



Documents  
E-repository

# INDICATORS



Coral Health



Sea  
Level Rise



Threatened  
Species



Global  
Fish Capture  
Production



Invasive  
Species



Ecosystems  
representativeness



Marine  
Protected  
Areas



Coastal  
Economic  
Activities



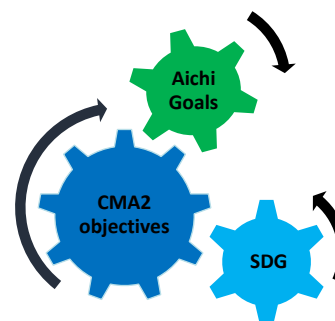
Coastal  
Population  
Change



Extreme  
Events  
Effects

# 10

**Implementation  
process for publishing  
indicators derived from  
national data**



# INFORMATION MANAGEMENT



- Compilation, use and share the most amount of national, regional and international marine data (different marine topics and scales)
- Metadata standards use
- Information policy (IODE information Policy [www.iode.org/policy](http://www.iode.org/policy))
- Protocol to upload products on CMA2 platform
- Quality control periodically
- *Training and enhance awareness: Geonode* technology allows the countries to manage their own contents, allowing self-government over information.



- Technical and scientific dissemination on events
- CMA2 complements and is completely synergistic with the actions and activities of other projects and initiatives linked to the implementation eg. CLME+ SAP.

# COMMITMENTS FOR WORKING TOGETHER



## **CHALLENGE**

**Positioning the Atlas as a  
reference e-repository in  
the Caribbean Region**



*Currently, CMA2 can receive new information from projects, its technical staff is working on developing a structure to host geospatial information from projects to enhance the spectrum of information sources for the Caribbean region*



International  
Oceanographic  
Data and Information  
Exchange



Flanders  
State of the Art

IOCARIBE



# CMA2

## GRACIAS-THANKS-DANKUWEL

<http://www.caribbeanmarineatlas.net>