



# STATUS OF DATA REPOSITORY/DSS DEVELOPMENT

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# **1. Introduction to DSS**

# **2. Existing Reporting System**

# **3. Building a DSS**

# ***Introduction to Data Repository and Decision Support System***

One key outcome of the CLME + project is the **DSS**: decision support system

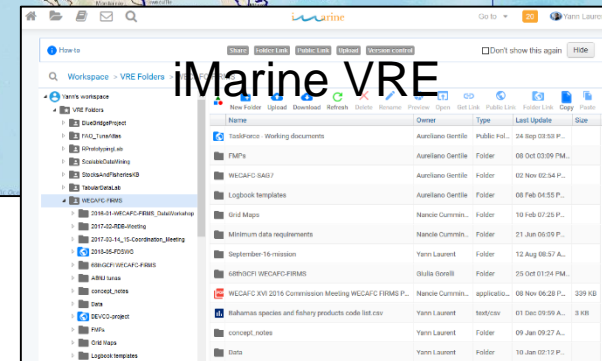
- The DSS is the **repository of all information, data and document** to support decision making in EAF approach
- Outcomes of the CLME + FAO sub-project are expected to feed the DSS.
- In the project, implementation of the DSS is the output of the activity **03.2.2.3.PI1 with**
  - (Milestone A) Repository/DSS designed to provide updated information useful for EAF-based fisheries management, by Year 2;
  - (Target) Repository/DSS (infra)structure in place, with sustainable hosting & maintenance solution, by Year 2.5

In the CLME + FAO subproject, the following information or data are expected to be accessible from the DSS

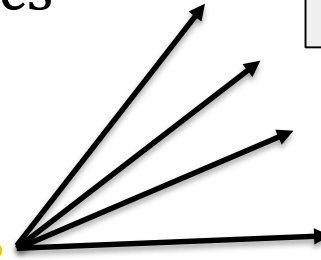
- Integrated national **fishing vessel registry information** included in the Global Record of Fishing Vessels, with services tailored for and accessible from the DSS (**03.2.2.1.T.PI3** )
- Repository/DSS designed to provide **Information useful for EAF-based fisheries management** (**03.2.2.3.PI1** ):
  - Information in support to fisheries management (document resources on FMP, statistics, reports etc...)
  - Information in support to stock assessment (stock status reports, statistics and data, methodologies etc...)
  - Links to external sources of information
  - More ?

In practical, what is the DSS and which types of information can be expected to be found once implemented

- Stocks and fisheries information:
  - Inventories
  - Stocks status
- Regional vessel registries information
- National and regional statistics
- An organized repository of documents



*What do we have already ?*



DSS: need for data access and sharing policies

- DSS is an entry point to the existing information
- ➔ Need to define **WHO** has access to **WHAT**
  - **Output 1.3: Sub-regional data policy to support EAF management of the fishery**
  - **Definition of data access and sharing policies:** public data Vs confidential data :If access is restricted (individual data for stock assessment computation for instance), need to define who can authorized a user to access this information
  - See the WECAFC **Data Collection Reference Framework** for data access and sharing policies in the region

## ***Existing systems for data and information dissemination***



## DSS: more insight on existing dissemination system

- FIRMS for inventories sharing
- WECAFC Regional database for data and statistics sharing
- Global vessel record to host regional vessel record
- iMarine VRE for training on stock assessment
- iMarine VRE for documents sharing

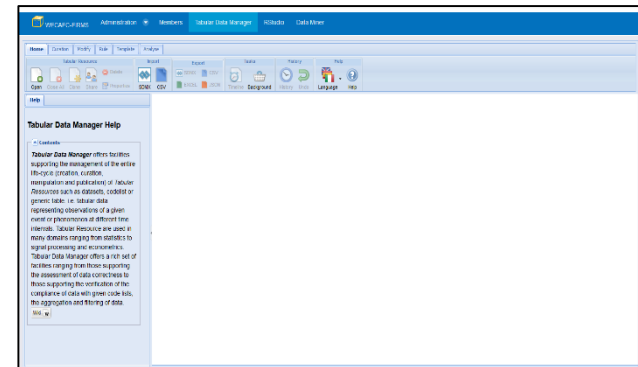
DSS: more insight on existing dissemination system

- **FIRMS for inventories sharing : see previous presentation !**
- WECAFC Regional database for data and statistics sharing
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## DSS: more insight on existing dissemination system

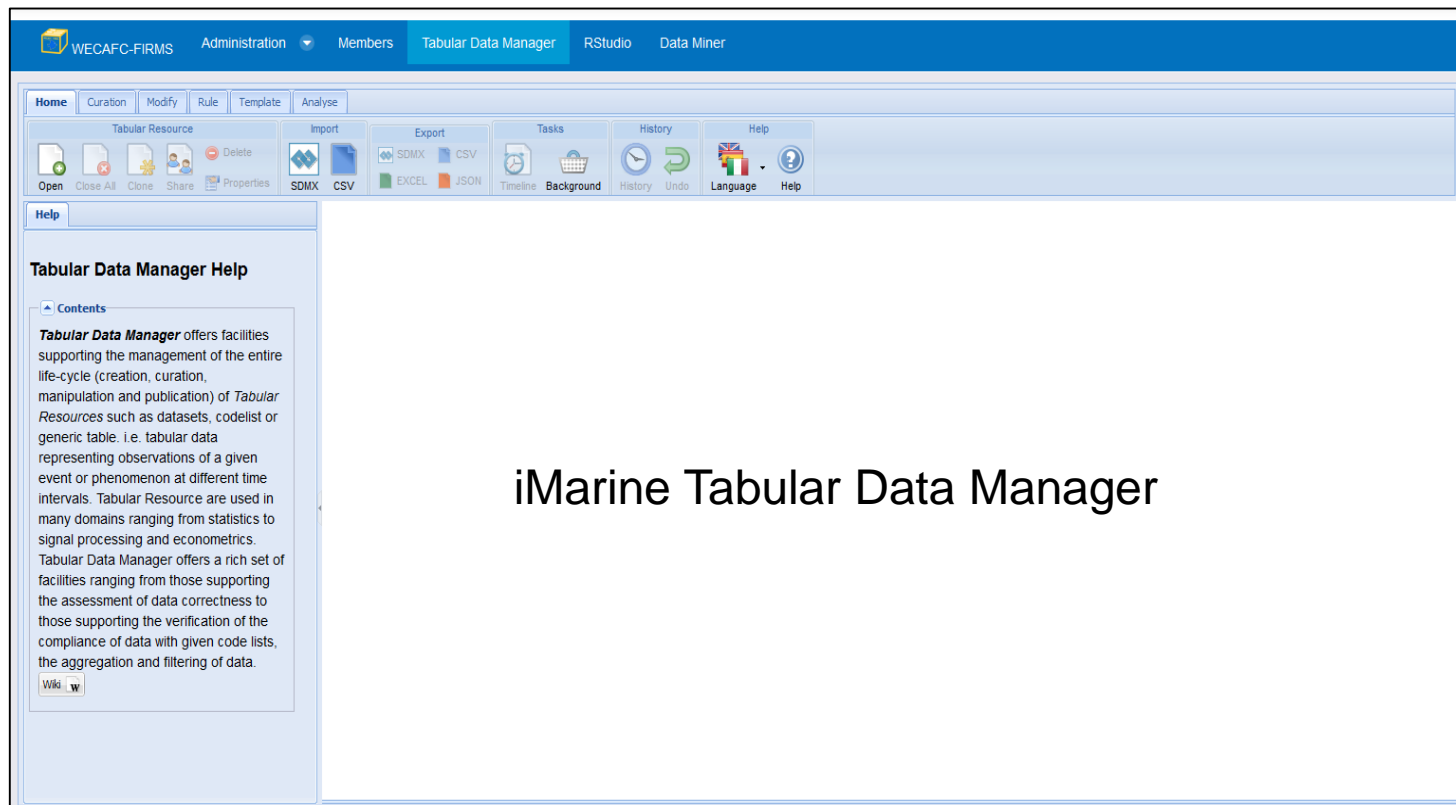
- FIRMS for inventories sharing
- **WECAFC Regional database for data and statistics sharing**
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- Development of the WECAFC Regional database:
- The definition of minimum data requirements for reporting:  
Data collection Reference Framework DCRF
- A series of tools developed under the BlueBRIDGE project (EU funded) to support reporting:
  - A simple tool for the regional data manager to create data calls based on the DCRF
  - A user-friendly tool based on Excel to help the national data manager to report to WECAFC



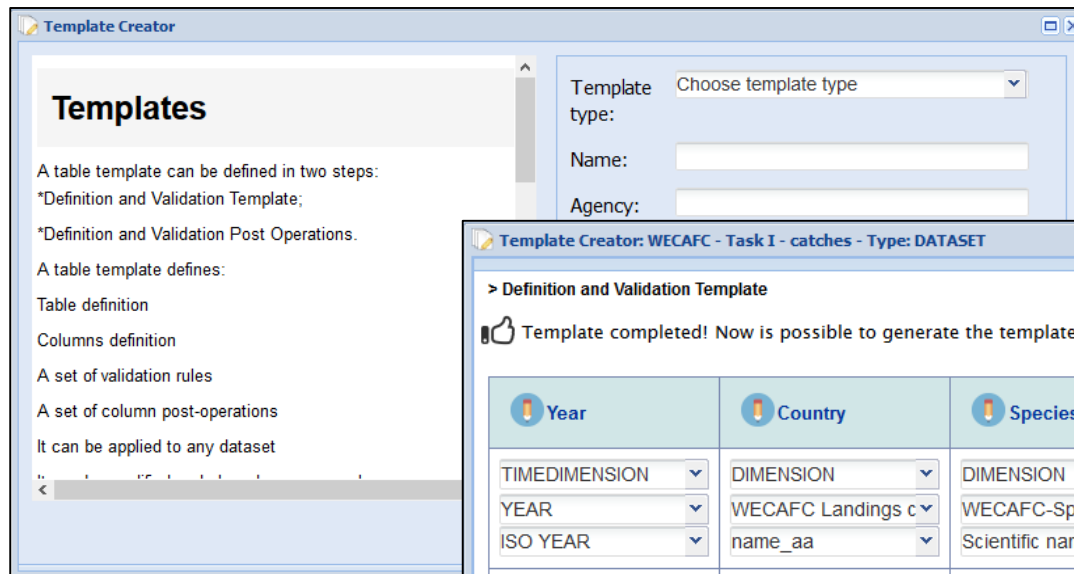
## Simplifying reporting to regional organization

- WECAFC Regional database: Regional Data Manager

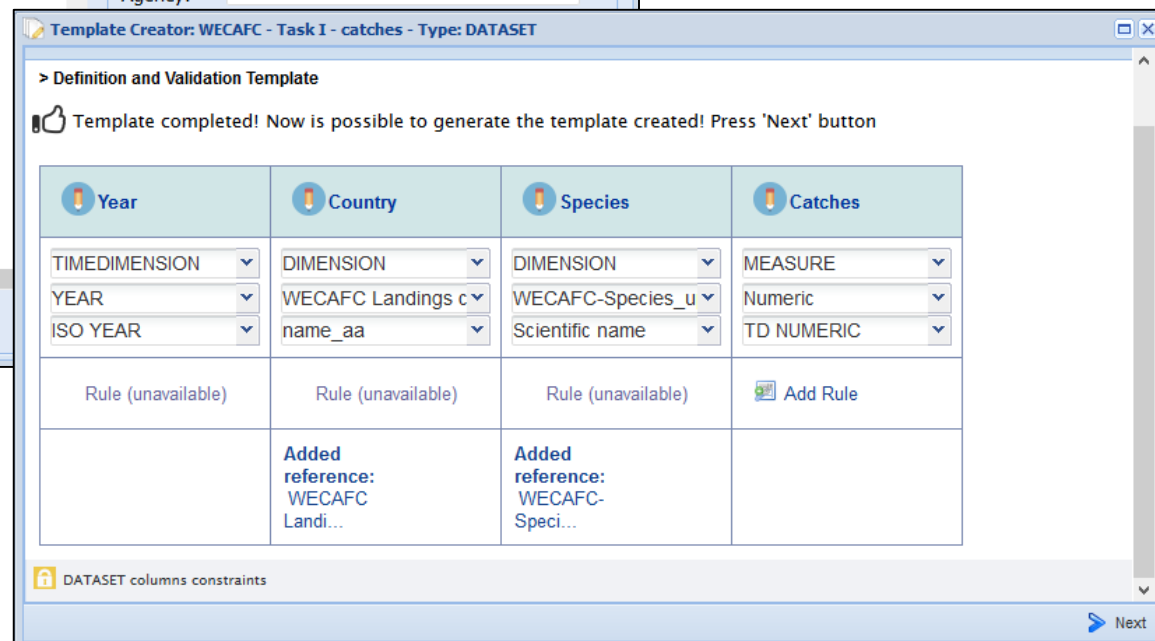


## Simplifying reporting to regional organization

- WECAFC Regional database: Regional Data Manager



iMarine Tabular Data Manager  
 Template creation  
 A DSD is created

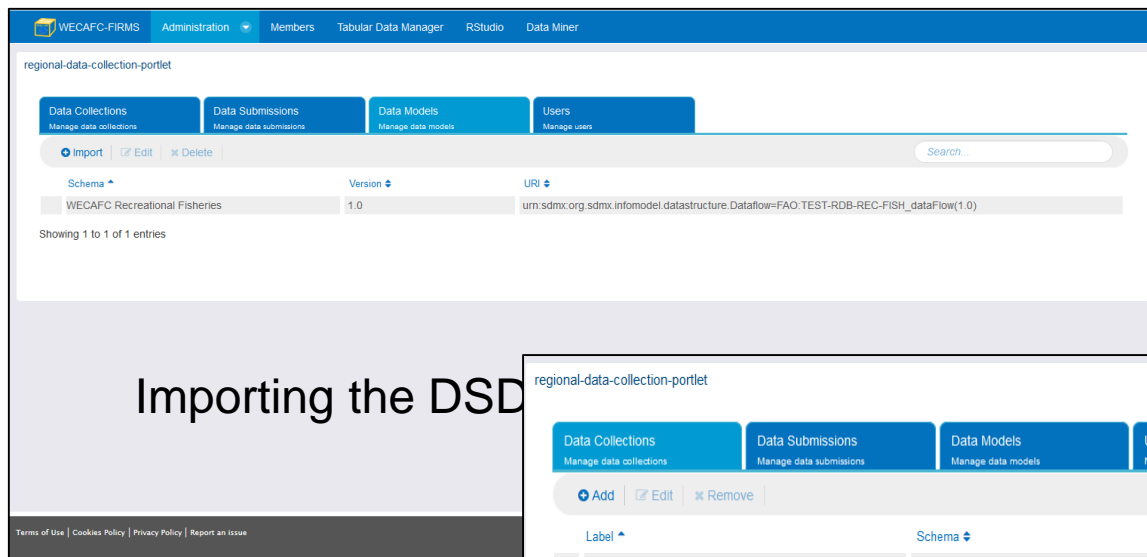


## Simplifying reporting to regional organization

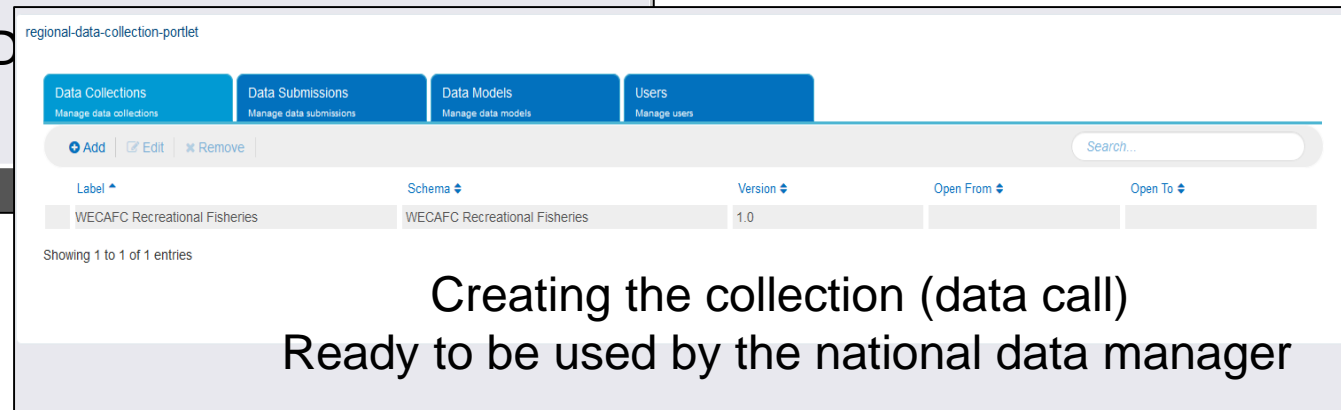
- WECAFC Regional database: Regional Data Manager

iMarine Regional database administration

Creation of data calls  
Based on the DSD

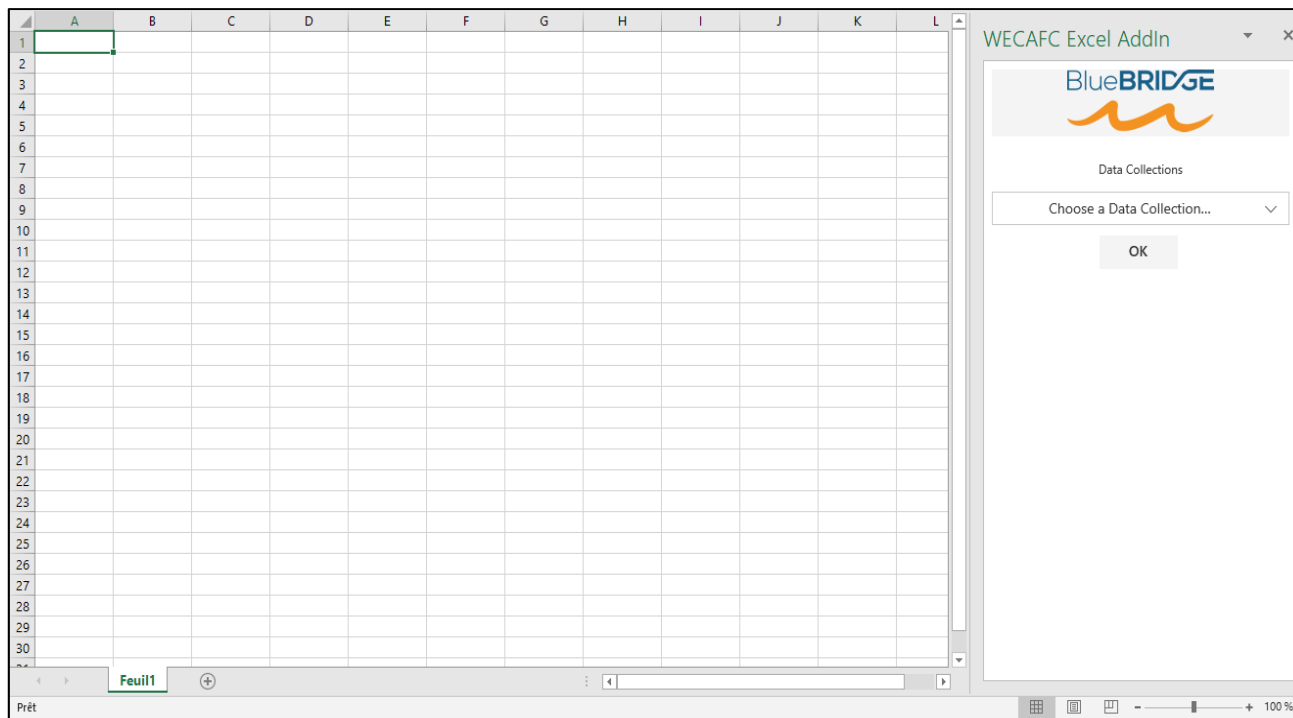


Importing the DSD



## Simplifying reporting to regional organization

- WECAFC Regional database: National Data Manager  
Install an iMarine plugin in Excel  
Validation services (web services; no macro)





## Simplifying reporting to regional organization

- WECAFC Regional database: National Data Manager  
Will use his Excel to fill out the form

The screenshot displays an Excel spreadsheet with the following data:

Country	Species	Year	Catches
Bahamas	Panulirus argus	2015	6525,97152
Bahamas	Strombus gigas	2015	4055,74097
Bahamas	Epinephelus striatus	2015	53,3777223
Bahamas	Mycteroperca venenosa	2015	10,5123866
Bahamas	Serranidae	2015	41,4726316
Bahamas	Lutjanus spp	2015	357,205159
Bahamas	Caranx spp	2015	29,0222323
Bahamas	Haemulon spp	2015	30,7254991
Bahamas	Haemulon album	2015	37,7214156
Bahamas	Sphyraena spp	2015	2,86524501
Bahamas	Lachnolaimus maximus	2015	39,7943966
Bahamas	Pterois volitans	2015	4,23321234
Bahamas	Panulirus argus	2014	6568,74905
Bahamas	Strombus gigas	2014	4177,67294
Bahamas	Epinephelus striatus	2014	127,375907
Bahamas	Serranidae	2014	113,730898
Bahamas	Lutjanus spp	2014	555,027405
Bahamas	Caranx spp	2014	41,0399274
Bahamas	Haemulon spp	2014	76,5328947
Bahamas	Haemulon album	2014	9,9469147
Bahamas	Sphyraena spp	2014	60,3659256
Bahamas	Panulirus argus	2013	6087,95142
Bahamas	Strombus gigas	2013	2274,13816
Bahamas	Epinephelus striatus	2013	84,5893829
Bahamas	Serranidae	2013	211,071915
Bahamas	Lutjanus spp	2013	550,803426
Bahamas	Caranx spp	2013	59,8536751
Bahamas	Haemulon spp	2013	89,2560572
Bahamas	Sphyraena spp	2013	5,48094374

Overlaid on the right is the WECAFC Excel Addin window, titled "WECAFC Excel Addin". It features the BlueBRIDGE logo and the text "2018 WECAFC task I catches". Below the text are two buttons: "Submit" and "Validate".

Ready for submission !

## Simplifying reporting to regional organization

- WECAFC Regional database: Back to Regional Data Manager  
iMarine Regional database administration  
Review of submitted data and final validation

The screenshot displays the 'Data Submissions' section of the WECAFC Regional Data Manager. The interface includes a navigation bar with four tabs: 'Data Collections', 'Data Submissions', 'Data Models', and 'Users'. The 'Data Submissions' tab is active, showing a dropdown menu for 'Data Collection' set to 'WECAFC task I Catches'. Below the dropdown is a toolbar with actions: 'View selected', 'View all', 'Approve', 'Reject', 'Export selected as CSV', 'Export all as CSV', and 'Export all to TabMan'. A search bar is located on the right side of the toolbar. The main content area is a table with columns: 'Author', 'Status', 'Submitted At', and 'Completed At'. The table contains three entries: Edison Deleveaux (TEMPORARY), FAO (VALIDATED), and Grenada (TEMPORARY). At the bottom left, it indicates 'Showing 1 to 3 of 3 entries'.

Author	Status	Submitted At	Completed At
Edison Deleveaux	TEMPORARY		
FAO	VALIDATED		
Grenada	TEMPORARY		

## Simplifying reporting to regional organization

- WECAFC Regional database: A data viewer and query



Only possible if WECAFC data and metadata are harmonized and standardized !

## DSS: more insight on existing dissemination system

- FIRMS for inventories sharing
- WECAFC Regional database for data and statistics sharing
- **Global vessel record to host regional vessel record**
- iMarine VRE for training on stock assessment
- iMarine VRE for documents sharing

## Regional vessel record

- This work is under going by the **joint WECACF-CRFM-OSPESCA working group on IUU**
- Two meetings were held since its creation: define **minimum data requirement** to uniquely identify a vessel across the regional (**Unique Vessel Identifier**) and to build a regional vessel record (**list of minimum information to be reported for a vessel**)
- Technical solution to host the regional record: **possibly the FAO Global record** (see <http://www.fao.org/global-record/information-system/en/>)

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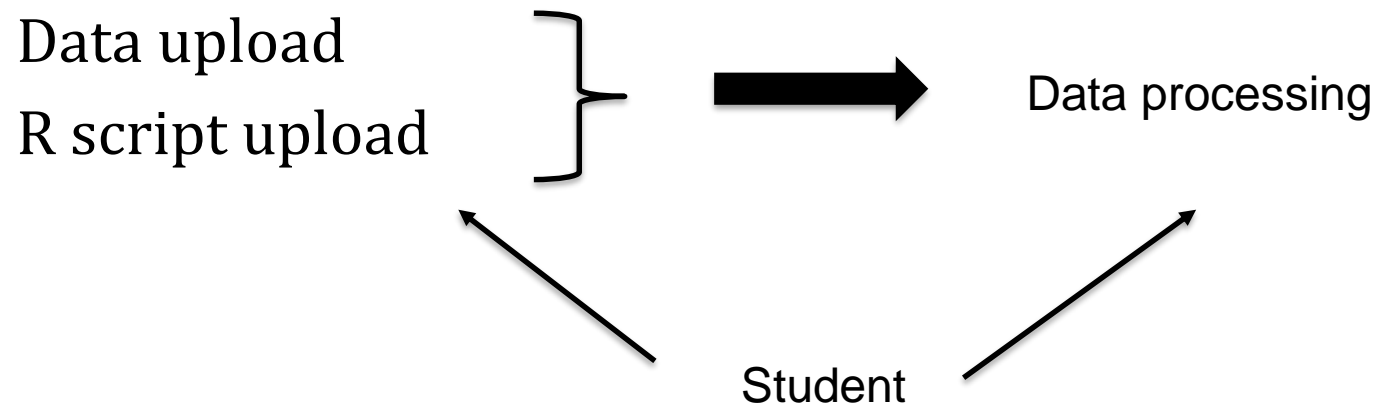
iMarine VRE for training on stock assessment

iMarine is a **EU based e-infrastructure** aiming at “***supporting the implementation of the Ecosystem Approach to fisheries management and the conservation of living marine resources.***”

The infrastructure provides a **certain number of facilities** (VRE) containing **different types of services** (data collation, data curation, data processing, data dissemination) based on **standards for data and metadata** (SDMX, OGC etc..)

## iMarine VRE for training on stock assessment

One VRE is the WECAFC-FIRMS VRE from which resources are accessible to deliver training on stock assessment:





## DSS: more insight on existing dissemination system

- FIRMS for inventories sharing
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- iMarine VRE for training on stock assessment
- **iMarine VRE for documents sharing**

# iMarine VRE for documents sharing

The image displays two overlapping screenshots. The background screenshot shows the WECAFC-FIRMS website interface, which includes a navigation bar with options like Administration, Members, Tabular Data Manager, RStudio, Data Miner, and Data Viewer. The main content area features a 'Share updates' section with a text input field and a 'Share' button, a 'News feed' section with a post by Yann Laurent, and a 'VRE home' table listing various folders and documents.

The foreground screenshot shows the iMarine VRE interface, which displays a file explorer view of the 'Workspace > VRE Folders > WECAFC-FIRMS' directory. The interface includes a toolbar with actions like New Folder, Upload, Download, Refresh, Delete, Rename, Preview, Open, Get Link, Public Link, Folder Link, Copy, and Paste. A table lists the contents of the folder, including folders like 'TaskForce - Working documents', 'FMPs', 'WECAFC-SAG7', and documents like 'Bahamas species and fishery products code list.csv'.

Name	Owner	Type	Last Update	Size
TaskForce - Working documents	Aureliano Gentile	Public Fol...	24 Sep 03:53 P...	
FMPs	Aureliano Gentile	Folder	08 Oct 03:09 PM...	
WECAFC-SAG7	Aureliano Gentile	Folder	02 Nov 02:54 P...	
Logbook templates	Aureliano Gentile	Folder	08 Feb 04:55 P...	
Grid Maps	Nancie Cummin...	Folder	10 Feb 07:25 P...	
Minimum data requirements	Nancie Cummin...	Folder	21 Jun 06:09 P...	
September-16-mission	Yann Laurent	Folder	12 Aug 08:57 A...	
68thOCFI WECAFC-FIRMS	Giulia Gorelli	Folder	25 Oct 01:24 PM...	
WECAFC XVI 2016 Commission Meeting WECAFC FIRMS P...	Nancie Cummin...	applicatio...	08 Nov 06:28 P...	339 KB
Bahamas species and fishery products code list.csv	Yann Laurent	text/csv	01 Dec 09:59 A...	3 KB
conceptLnotes	Yann Laurent	Folder	09 Jan 09:27 P...	
Data	Yann Laurent	Folder	10 Jan 02:12 P...	
2017-03-14_15-Coordination_Meeting	Yann Laurent	Folder	03 Apr 10:27 A...	
WECAFC-RDB-Specs	Yann Laurent	Folder	06 Apr 10:44 A...	
2017-02-RDB-Meeting	Yann Laurent	Folder	05 May 11:18 A...	

***Building a DSS for CLME + FAO sub project***

## iMarine VRE for CLME+

**An iMarine VRE will be created.**

Users already registered in the system as national data manager for the WECAFC RDB can be granted access to this VRE

- Data and sharing policies are already in place in the iMarine infrastructure: access is strictly controlled
- National and regional data already uploaded in the WECAFC RDB can be shared
- The VRE repository can be used to share any type of information (doc, pdf, images, data)
- Existing components in the infrastructure can be added



**Thank you for your attention**