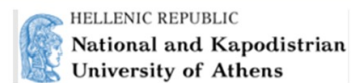CINEA/EMFAF/2021/3.1.2/03/SC04/SI2.881222

Specific Contract 2021/3.1.2/03/SC04

Hosting, maintenance and further development of the Regional Database for the Mediterranean and Black Seas

WGRDBESGOV 2023 meeting
20-24 November 2023
(hybrid)

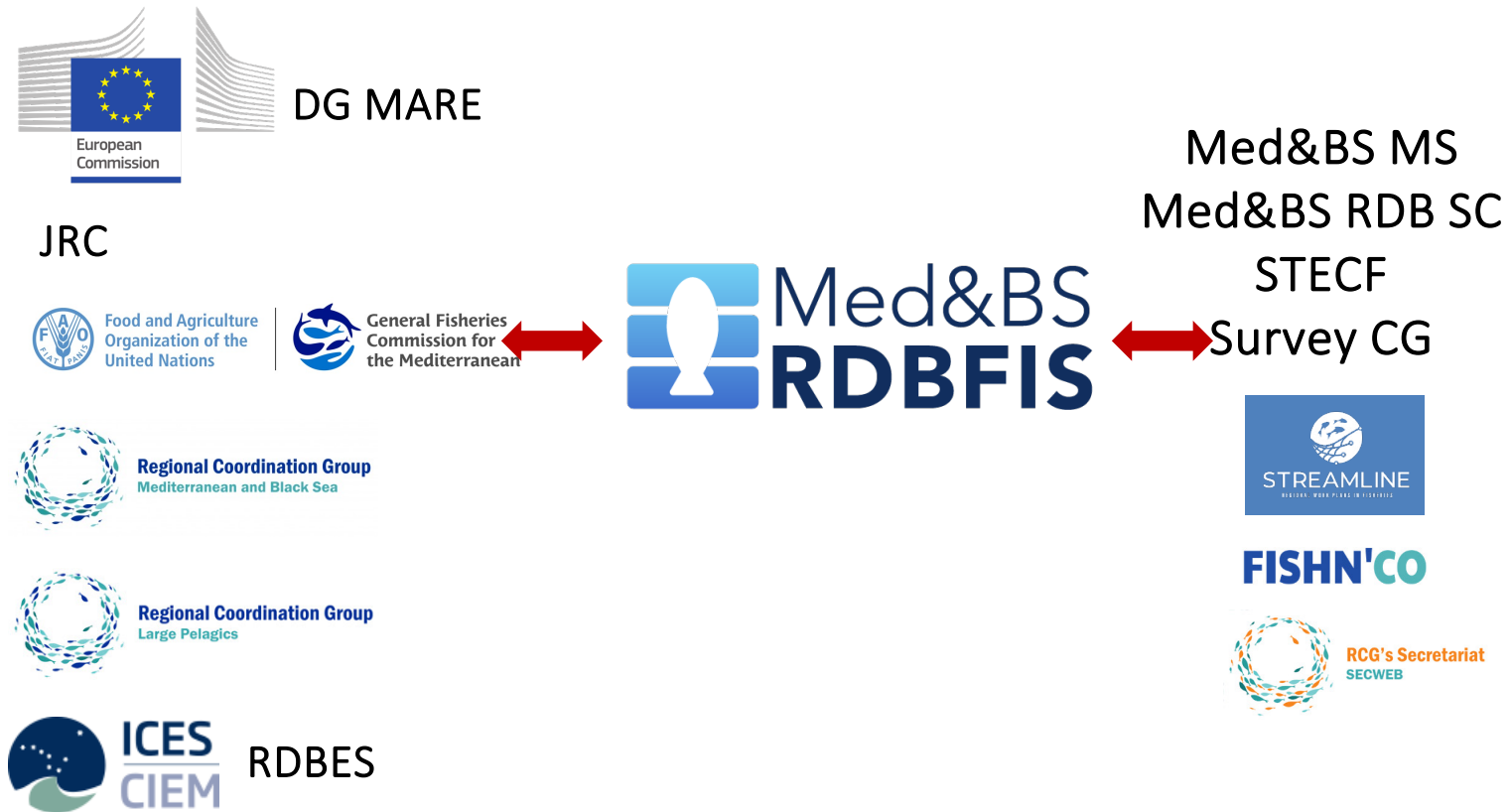# Med&BS RDBFIS - MARE/2020/08 grant overview

The Regional Grant MARE/2020/08 **Med&BS RDBFIS** was launched by DG MARE on **1st January 2021** materialized discussions of over 10 years at regional level;

The project was **completed on February 2023** (having received a 2 month extension from the EC), the final report was accepted by DGMARE;

The action aimed at addressing the legal requirement of the DCF Regulation (EU) 2017/1004 on setting up regional databases purposing to facilitate Member States' response to data calls and reduce the burden of multiple data submissions (for data calls) under different formats;
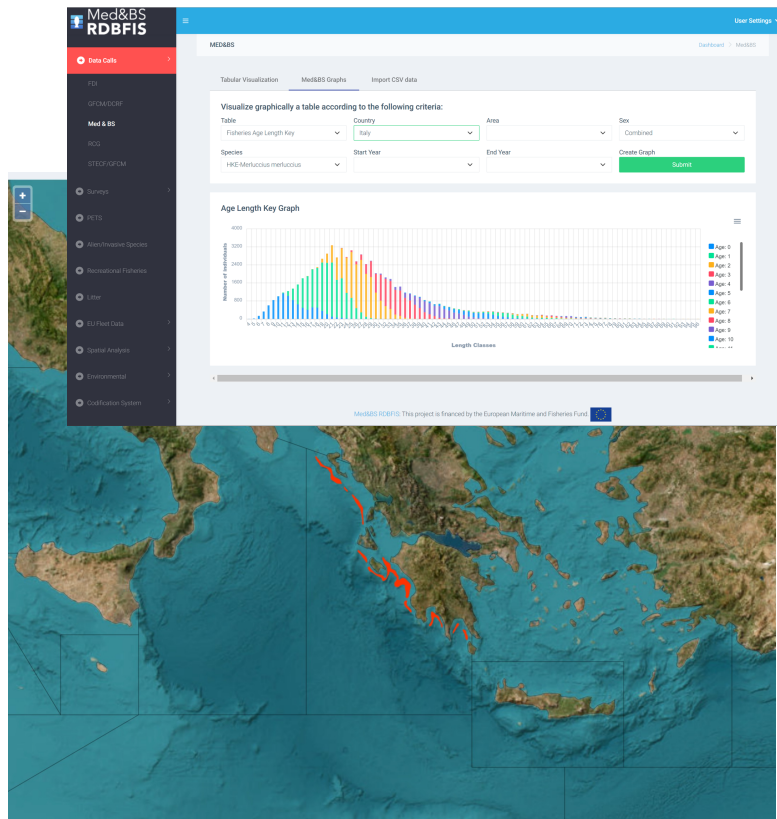
Med&BS RDBFIS - MARE/2020/08 grant overview

On the creation of RDBFIS, the consortium worked closely with all involved parties

DG MARE

JRC

Med&BS MS
Med&BS RDB SC
STECF
Survey CG

RDBES

DG MARE considers that the product of the regional grant RDBFIS forms a solid basis for setting up a regional database.

Med&BS RDBFIS - MARE/2020/08 grant overview

RDBFIS: a web-based integrated fisheries information system for the Med&BS

main features and advantages:

- Centralize RDB for DCF data;

- A power full tool for Med&BS RCG, Med&BS MS, end users;

- A security subsystem ensures data access and protection;

- Support common quality data checks, processing, reporting;

- Surveys are included;

- Spatial information has been integrated

Components

- RDB (incl. RDBES schema)

- GUI through the end user interact with the database(s) and the application modules

- Quality checks & Reporting (insert detailed or aggregated data – syntax text & error report, consistency checks, quality report)

- Processing (detailed biological & landings data -> datacalls)

- Filter data, advanced query tool, export

- Mapping

Med&BS RDBFIS - MARE/2020/08 grant overview

Data sets*

- FDI
- Med&BS RCG (detailed biological data), landings
- Med&BS
- GFCM/DCRF
- Species lists
- Coding system
- Spatial data
- Environmental data
- MEDITS data

* For testing the functionality and the performance – 3 years data were requested

WP3 overview

WP3 was aimed at defining the RDB and final requirements, taking into account the different dimensions and results from WP1 and WP2

I.   First dimension: the system
II.   Second dimension: governance and data policy

Outcomes:

- Final system requirements and MVP
-      Membership schema of the Med&BS RDB Steering Committee
- Guidelines for the Governance of the Med&BS RDB
- Data policy

Hosting, maintenance and further development of the Regional Database for the Mediterranean and Black Seas

Under FRAMEWORK CONTRACT – EASME/EMFF/2020/OP/0021
Duration: 24months, Project Start: April 1st 2023

Purpose of the project
The main aim of the study is to work on the hosting, maintenance, fine-tuning and further development of the end product of regional grant RDBFIS and to provide support to the users of the end product.

Partners
Hellenic Centre for Marine Research **(HCMR)**
Coispa Tecnologia & Ricerca Scarl **(COISPA)**
Consorzio per il Centro Interuniversitario di Biologia Marina ed Ecologia Applicata G. Bacci **(CIBM)**
Italian National Research Council (CNR) (Istituto per le Risorse Biologiche e le Biotecnologie Marine **(CNR-IRBIM)** *and Istituto per il Rilevamento Elettromagnetico dell'Ambiente* **(CNR-IREA))**
Nisea società cooperativa **(NISEA)**
University of Athens **(UOA)**
University of Thessaly **(UTH)**
Hellenic Agricultural Organization Demeter **(HAO Demeter)**
Ministry of Agriculture, Rural Development and Environment of Cyprus - Department of Fisheries and Marine Research, Republic of Cyprus **(DFMR)**
National Institute for Marine Research and Development "Grigore Antipa" **(INCDM)**
Institute of Oceanography and Fisheries **(IOF)**
Institute of Oceanology BAS **(IO-BAS)**

Non-partners with a significant contribution

Executive Agency for Fisheries and Aquaculture, Bulgaria **(Simona Vasileva NICHEVA)**
Ministry of Agriculture, Directorate of Fisheries, Croatia **(Ivana VUKOV)**
Fisheries Research Unit, Department of Fisheries and Aquaculture, Malta **(Jurgen Mifsud)**

QualiTrain: synergies between the two projects have been established (RDBQCs & RoME packages improvements were made during QualiTrain implementation)

With respect to RDBFIS **further development**, meetings have been organized jointly with specific groups and expert scientists with the aim to:

(i) **restructure** the MEDIAS database (1st MEDIAS Work Shop);

(ii) **discuss** technical issues about the integration of R routines into RDBFIS (RDBFIS and FDI spatial group);

(iii) **improve** the method estimating the FDI spatial fishing effort from Small Scale Fisheries (SSF) ('fprmcda' R package improvement);

(iv) **incorporate** Fleet analysis (store historical data into RDBFIS, design, performance,…) ;

(v) **integrate** fleet socioeconomic data (submitted by MS in AER & DCRF datacalls)

Data call to Populate the System with Data (October 2023)

➢ historical detailed and aggregated data from the Mediterranean and Black Sea including socioeconomics submitted in AER & GFCM/DCRF data calls are requested

➢ Member States are invited to use the application in order to execute syntax and data quality control procedures

- Med&BSdatacall, 2002-2022;
- FDI datacall, 2013-2022;
- GFCM/DCRF datacall, 2017-2022;
- Detailed biological data 2002-2022;
- RCG Med&BS(fishing intensity and landings), 2002-2022;
- AER - Fishing Fleet Socio-Economic data call, 2008-2020.

Med&BS
RDBFIS

hcmr   COISPA Tecnologia & Ricerca   cibm   CNR IRBIM   NISEA   HELLENIC REPUBLIC National and Kapodistrian University of Athens

Significant contribution by
Executive Agency for Fisheries and Aquaculture, Bulgaria (Simona Vasileva NICHEVA)
Ministry of Agriculture, Directorate of Fisheries, Croatia (Ivana VUKOV)
Fisheries Research Unit, Department of Fisheries and Aquaculture, Malta (Jurgen Mifsud)

Hosting, maintenance and further development of the Regional Database for the Mediterranean and Black Seas (RDBFIS)

Specific Contract 2021/3.1.2/03/SC04

Data call
for data collected in the framework of
Data Collection Regulation (DCR) and
Data Collection Framework (DCF)

MEDITS survey data

❑ Bilateral meetings among the coordinator and the developers of the RDBqc and RoME took place in order to discuss technical issues about the upgraded **BioIndex** R package and its integration in the RDBFIS.

❑ The **BioIndex** R package provides relevant statistics and mapping on MEDITS (or MEDITS-like) survey data.

❑ Useful for the partners and in particular for end-users interested in intermediate data products and not specifically in detailed data.

Integration of MEDIAS survey

❑ Special thanks to the MEDIAS chair Tarek Hattab and expert scientists

❑ The MEDIAS database structure was presented in the 16th MEDIAS coordination meeting (April 2023)

❑ 1st MEDIAS workshop: aimed at studying the **structure of the tables field by field, revising** where necessary and **defining quality control rules** (May 2023)

❑ 2nd MEDIAS workshop: aimed at discussing and deciding about the integration into RDBFIS of a set of **elaboration routines applied to acoustic processing data** (e.g. biomass/abundance estimates) as well as to **pelagic trawl** data.

❑ Black Sea experts meeting: aimed at discussing about the Pelagic Trawl Survey (PTSBS) carried out under DCF in Bulgarian and Romanian Black Sea waters

Fleet analysis

❖ Aims at developing a dynamic tool that depicts the evolution of fleet dynamics of European Member States.

❖ Current and historical data sets have been downloaded from the official European Fleet Register web gate and the requested datasets are completed.

FDI spatial checks

❖ JRC R routines will be incorporated into RDBFIS.

❖ Meeting with the R routines developers (*Maurizio Gibin, Maciej Adamowicz, Maksims Kovsars*) in which technical integration issues were discussed.

❖ A 2nd meeting is scheduled in the near future to discuss specifications and adjustments needed to R scripts to successfully be integrated into RDBFIS.

'fprmcda' R package improvement

Multi-Criteria Decision Analysis-MCDA estimates the spatial distribution of fishing effort for **small-scale vessels** (less than 12 m of LOA and are not equipped with monitoring devices)

The MCDA produces a **potential fishing pressure (spatial) index (FPI)** by taking into consideration several interactions with **anthropogenic and environmental factors**.

The method has been expanded to include **spatiotemporal environmental factors** (i.e. weather conditions and primary productivity) and **fishing effort estimations** from EU Fisheries Dependent Information datasets ➡ maps of fishing effort can be now estimated in fishing days (and hours) by quarter and gear (gillnets-GNS, trammel nets-GTR and longlines-LLS).

✓ A second release of the 'fprmcda' R package including improvements on the main functions and the expanded version of MCDA approach is ready to be integrated in RDBFIS.
✓ As an added value to RDBFIS, a new R package will be developed to estimate spatial landings from SSF (work in progress).

Meetings:

❖ 16th **MEDIAS** coordination meeting (April 2023);

❖ **RCG ECON** technical meeting (May 2023);

❖ **MEDITS** coordination group (May 2023);

❖ meeting of **RDBFIS with FDI spatial group** (September 2023);

❖ **RCG Med&BS** meeting (September 2023);

❖ **Liaison Meeting** (September 2023);

❖ Internal meeting with **NISEA** (responsible for the ECON integration, October 2023)

❖ 1st & 2nd **MEDIAS workshop** aiming to finalize the db structure and quality checks (May and October 2023)

❖ **Black Sea experts** meeting aiming to discuss harmonization data issues (surveys and biological sampling, November 2023)
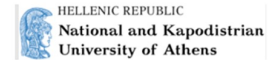
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We thank you for your attention

http://rdbfis.eu/