



Regional Database for the Mediterranean and Black Seas
“Developing a fisheries information system for the Med&BS”

Progress Work

2024 Liaison Meeting, September 24-25



MARE/2020/08 - SI2.839444

DEVELOPMENT OF THE REGIONAL DATABASE FOR THE MEDITERRANEAN & BLACK SEAS (Med&BS RDBFIS)

This project has financed under the European Maritime and Fisheries Fund (EMFF)

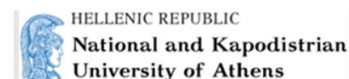
(period: 01/01/2021 – 28/02/2023)



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 (period: 01/04/2023 – 31/03/2025)



Aggregated data

- Med&BS
- FDI (Tables A, B, G, H, I, J)
- AER
- GFCM/DCRF

MEDITS

TA, TB, TC

Detailed biological &
landings data

1. MEDIAS database structure
Acoustics, Pelagic trawl, CTDs



2. Integration with RDBFIS

3. Validation scheme (*acoustics, pelagic trawl*)

4. Consistency check (*R*)

5. Processing (SQL)

Abundance, Biomass, Abundance-Biomass

6. Eggs & Larvae database structure

MEDIAS datacall is running, a workshop is arranged at the end of October

Updated versions

RoME

RoMEBS

BioIndex integration



In the framework of **Qualitrain** and RDBFIS, improvements were made on the R packages supporting the data quality and processing. Inside the RDBFIS, the packages are replaced the old ones

- Perform syntax and consistency checks before submitting data to the JRC. The aim is to decrease discrepancies between the AER and FDI datacalls (cross checking between AER & FDI is a goal for the project)
- Specific economic performance indicators for STECF EWG purposes is under construction (NISEA)



This innovative R package is designed to estimate the spatial effort, weight, and value of landings in small-scale fisheries (SSF) for data-limited scenarios, specifically for vessels under 12 meters in length. The tool utilizes a Multi-Criteria Decision Analysis (MCDA) approach and includes scripts and demos that can be run locally to facilitate key procedures. These procedures include preparing environmental and anthropogenic data, as well as data from the EU fleet register (or more detailed sources if available), which are used to estimate a proxy for fishing effort.

Additionally, part of this tool will be integrated into RDBFIS, facilitating the estimation of fishing effort and landings in the format of Tables H and I. The package enables users to apply the MCDA-derived proxy for fishing effort, combine it with Tables A and G (as submitted in the data call), integrate results from species distribution models, and estimate spatial effort, landings, and value by fishing rectangle or at finer resolutions. The tool also generates maps to visualize these estimations.

RDBFIS progress work -> EU fleet analysis

Fleet analysis: an open access dynamic tool has developed to illustrate the evolution of the fleet dynamics in Europe; potential links with the landings, discards and value (FDI Table A); Data from the professional fishing fleet, spanning the period from 1991 to 2023, was downloaded from the official EU Fleet Register portal. GIS techniques were employed to spatially join the fishing ports with various geographical entities, including NUTS2 and NUTS3, FDI subregions, Geographical areas (GFCM, ICES). The fishing ports were match to LOCODE from the CIRCAMB Master Data Register. The accuracy of the fishing port locations was validated using information available from the IFREMER Sextant portal. Reports can be generated based on user-defined queries about active or decommissioned fishing vessels

The screenshot displays the 'Med&BS RDBFIS' web application interface. On the left is a dark sidebar with navigation links: Data Calls, Surveys, Stomach Contents, PETS, Alien/Invasive Species, Recreational Fisheries, Litter, EU Fleet Data (highlighted in red), Fleet Vessels, Spatial Analysis, Environmental, Codification System, and User Settings. The main content area is titled 'VESSELS' and has a 'Fleet Analysis' tab selected. It is divided into two sections: '1 Fleet Analysis - Query Parameters' and '2 Fleet Analysis Results'. The 'Query Parameters' section includes a 'Query on' dropdown set to 'Active Fleet', a 'Vessel Length Segmentation' section with radio buttons for 'Med&BS' (selected), 'GFCM', 'Baltic Sea', and 'Other waters', a 'Type of Query' section with radio buttons for 'By Year' (selected) and 'Between' (with start/end years 1991 and 2023), and three filter sections for 'vessel characteristics', 'Results Geographically', and 'Group Results', each with 'Yes' and 'No' radio buttons. An 'Execute Fleet Analysis' button is at the bottom. The footer contains the text 'RDBFIS: Financed by EMFF (2021-2022) and CINEA/EMFAF (2023-2025)' and the European Union flag.

RDBFIS progress work -> quality checks on FDI spatial data, Table H & I

- > Stomach contents data entry form
- > how RDBFIS can contribute to MSFD

quality checks on FDI spatial data (Table H & I): integrated, optional to run
Maurizio, Maciej, Maksims

Stomach contents

- Med&BS and ICES structures were adopted
- User friendly data entry form

RDBFIS → MSFD

- Predefined queries to mine data from RDBFIS and deliver to MSFD experts

D1-Biodiversity

D2-Non-Indigenous Species

D3-Commercially-exploited fish and shellfish

D4-Food webs

D6-Seabed integrity

D10-Marine Litter

The activity has been completed in terms of gathering information from MSFD experts

In the 2024 Med&BS meeting, the RCG set the following priority for the servicing of data calls through RDBFIS:

- 1. High: Med & BS data call (obligatory from 2025);
- 2. Medium: FDI (optional for 2025);
- 3. Low: AER, GFCM (no timeline defined).

The RDBFIS coordinator will liaise with JRC to explore if / how RDBFIS can transmit data on behalf of the Member States and receive a notification.

Data access: the RCG document is adopted by the RDBFIS

- MEDIAS workshop and datacall;
- Integration of MCDA-SSF package;
- AER consistency checks and processing routines;
- Bilateral meeting for the detailed biological data;
- Bilateral meeting for the statistical system and raising methods applied from the Med&BS MS, workshop;
- Eggs&Larvae database, PETS, recreational fisheries and alien species;
- RDBFIS 2nd training (in person, January 2025)
- keep open the channel with ICES and RCG LP
- Optimization of R code



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

We thank you for your attention
<https://rdbfis.eu/>



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)

*Maurizio GIBIN, Maciej ADAMOWICZ, Maksims KOVSARS quality
(checks on spatial information and mapping for the FDI EWG)*