

Second training
15-19 April 2024



Overview on the project: timeline, scope, foreseen results, planned workshops and collaboration with RCG

Project coordinator:
Isabella Bitetto



COISPA



CNR
IRBIM
Istituto per lo studio e la
conservazione delle risorse
biologiche marine



Background

QualiTrain (**Quality** checking of Mediterranean and Black Sea data and **Training** for Member State experts) is a specific contract within the FRAMEWORK CONTRACT – EASME/EMFF/2020/OP/021 (EMFF/2020/3.2.4 Lots 1-2-3), a “Framework Contract for the provision of scientific advice for the Mediterranean and the Black Seas” specifically dedicated to implement **technical work on quality checks**, as well as prepare, coordinate and **organise technical trainings** and **information sessions**.



Focus on **assessed stocks** in:
Western Mediterranean,
Adriatic Ionian/Aegean Seas.



Ad-hoc EWG on data
quality
(EWG 21-02)



Follow up!
EWG 21-02

Ad-hoc EWG on data
quality on not assessed
stocks



Stocks not reviewed by
STECF



Unbalanced
reporting among
MS



78 stocks not checked

EWG 22-03 ANNEX I
List of stocks for EWG 22-03

N	Member State	Area (GSA)	Scientific name
1	Spain	GSA 1	<i>Sardina pilchardus</i>
2	Spain	GSA 5	<i>Engraulis encrasicolus</i>
3	Spain	GSA 6	<i>Engraulis encrasicolus</i>
4	France	GSA 7	<i>Sparus aurata</i>
5	France	GSA 8	<i>Sparus aurata</i>
6	Malta	GSA 15	<i>Scorpaenopsis</i>
7	Malta	GSA 15	<i>Boops boops</i>
8	Italy	GSA 16	<i>Engraulis encrasicolus</i>
9	Italy	GSA 19	<i>Engraulis encrasicolus</i>
10	Slovenia	GSA 17	<i>Merluccius merlangus</i>
11	Slovenia		
12	Croatia		
13	Croatia		
14	Greece		
15	Greece		
16	Greece		
17	Cyprus		
18	Cyprus		
19	Bulgaria		
20	Bulgaria		
21	Romania		
22	Romania		

EWG 22-03 ANNEX II

List of additional stocks for EWG 22-03. In light blue the stocks checked during EWG 22-03.

N	Member State	Area (GSA)	Scientific name
1	Spain	GSA 1	<i>Engraulis encrasicolus</i>
2	Spain	GSA 1	<i>Sardinella aurata</i>
3	Spain	GSA 1	<i>Trachurus mediterraneus</i>
4	Spain	GSA 1	<i>Trachurus mediterraneus</i>
5	Spain	GSA 1	<i>Octopus vulgaris</i>
6	Spain	GSA 1	<i>Lophius budegassa</i>
7	Spain	GSA 1	<i>Micromesistius poutassou</i>
8	Spain	GSA 1	<i>Scyliorhinus canicula</i>
9	Spain	GSA 5	<i>Octopus vulgaris</i>
10	Spain	GSA 5	<i>Sardina pilchardus</i>
11	Spain	GSA 5	<i>Raja clavata</i>
12	Spain	GSA 5	<i>Trachurus mediterraneus</i>

Scope and objectives of the project

The EWG 22-03 noted that **most MS do not seem to apply the available tools on quality checks** (EWG 22-03) R scripts and RoME (Bitetto et al., 2019) **neither on commercial nor on survey data.**

Specific objectives:

- to finalise and consolidate the quality checks and outputs used during the EWG 22-03;
- to complete the data quality checking for the 78 remaining stocks of Annex II;
- to propose additional stocks driving the fishery for each MS in the Med & BS;
- to carry out data quality checking of these additional stocks;
- to organise, prepare and carry out trainings for MED & BS National experts;
- to advise on the way forward, in terms of improving data coverage and quality in the MED & BS Region;
- to participate in other meetings (STECF EWGs, DCF related meetings such as RCG, GFCM meetings, MEDITS survey meetings, etc.), where the work of this study needs to be disseminated.

Project tasks

Task 0: Project management and coordination.

Task 1: Finalisation and consolidation of data quality checks applied during EWG 22-03;

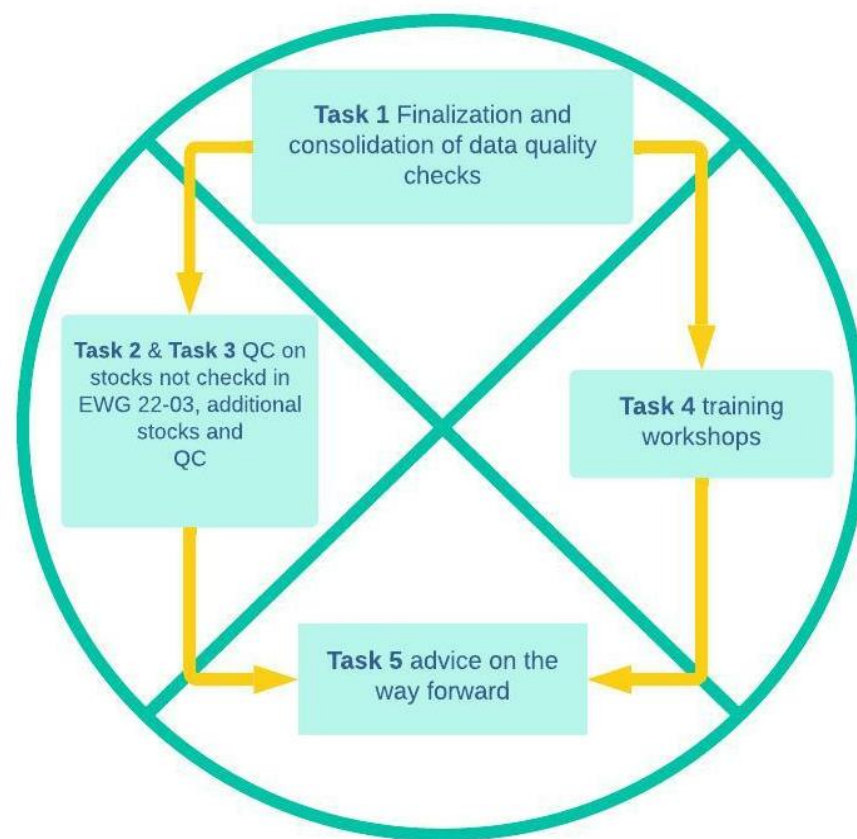
Task 2: Carrying out of data quality checks for the 78 remaining stocks of annex II (not checked by EWG 22-03);

Task 3: Proposal of additional stocks driving the fishery for each MS in the Med & BS and carrying out of data quality checks for these stocks;

Task 4: Organisation, preparation and carrying out of trainings for Med & BS national experts;

Task 5: Advise on the way forward, in terms of improving data coverage and quality in the Med & BS region.

Task 0 – Project management and coordination and dissemination



Task 0 – Project management and coordination, participation in other relevant meetings

Coordinator: Isabella Bitetto (COISPA)

Core Team: Angeliki Adamidou, Silvia Angelini, Maria Cristina Follesa, Daniel Grigoras, Beatriz Guijarro, Igor Isajlović, Alessandro Ligas, Alessandro Mannini, Stefanos Kavadas, Manos Koutrakis, Ivelina Zlateva, Walter Zupa.

Task 0 provides coordination, progress monitoring, management, communication and synthesis of project results.

Milestones

Milestone 0.1 - Draft Inception Report, December 21, 2022

Milestone 0.2 - 1st Plenary meeting, approval of the Inception Report, January 16, 2023

Milestone 0.3 – Kick-off meeting, January 9, 2023

Milestone 0.4 – First Progress meeting, May 30, 2023

Milestone 0.5 – Creation of a training network on data quality checks, September 14, 2023

Milestone 0.6 - Draft Interim Report, November 14, 2023

Milestone 0.7 - Interim meeting. November 30, 2023

Milestone 0.8 – Second Progress meeting, May 30, 2024

Milestone 0.9 - Draft Final Report, November 14, 2024

Milestone 0.10 - Final meeting, approval of Final Report, November 30, 2024

Creation of a training network on data quality checks

- A **training network** will be created **in collaboration with RCG Med & BS** to promote the widest participation of the MSs in developing/improving data quality checks, including training workshops, the testing of the new quality check tools and the application of these tools to DCF data.
- Effort will be made to facilitate the **participation of all MSs**, including MS experts outside the consortium;
- It will be required to **each MS to indicate two reference persons** to be part of the network (similarly to what recently done for the sampling optimization network).
- Communication and dissemination of the work in the RCG Med & BS framework, to **complement the results of the scientific network on the sampling optimization**, highlighting data gaps, failures and further improvements on data collection.



Task 0 – Project management and coordination, participation in other relevant meetings

Coordinator: Isabella Bitetto (COISPA)

Core Team: Angeliki Adamidou, Silvia Angelini, Maria Cristina Follesa, Daniel Grigoras, Beatriz Guijarro, Igor Isajlović, Alessandro Ligas, Alessandro Mannini, Stefanos Kavadas, Manos Koutrakis, Ivelina Zlateva, Walter Zupa.

Deliverables

Deliverable 0.1 - Inception Report, January 16, 2023

Deliverable 0.2 - First Progress Report, June 14, 2023

Deliverable 0.3 - Interim report. December 14, 2023

Deliverable 0.4 - Second Progress Report. June 14, 2024

Deliverable 0.5 - Final Report. December 14, 2024

Deliverable 0.6 - Project Factsheet. December 14, 2024

Task duration

24 months from December 14, 2022 to December 13, 2024

Coordination and communication: meetings

Five plenary meetings are planned during the duration of the project; in addition, Intersession phases meetings and all necessary virtual meetings have been and will be held to facilitate the communication among the project participants, RCG, DGMARE and CINEA.

Task 0 also address the participation in other relevant meetings, where the work of this contract needs to be disseminated:

- STECF EWGs (e.g. to test the consolidated RDBqc and RoME packages);
- GFCM WGs;
- RCG Med&BS (e.g. RCG Med&BS annual meeting in September 2023);
- MEDITS survey meetings (e.g. MEDITS International coordination meeting 2023 to present RoME package)

Task 1 – Finalization and consolidation of data quality checks used during EWG 22-03

Coordinator: Walter Zupa(COISPA)

Core Team: Loredana Casciaro, John Dokos, Alessandro Ligas, Irida Maina, Alessandro Mannini, Claudia Musumeci, Vasiliki Sgardeli.

This Task will work on the finalization and consolidation of data quality checks used during EWG 22-03, including the work done under Med&BS RDBFIS project (MARE/2020/08, still in progress).

Milestones

Milestone 1.1 - first version of the refined R package RDBqc. June 14, 2023.

Deliverables

Deliverable 1.1 - Report on tests carried out and final version of R package RDBqc. September 14, 2023. (completed)

Task duration

9 months from December 14, 2022 to September 14, 2023

Task 1 – Finalization and consolidation of data quality checks used during EWG 22-03

Specific cross-checks between the number of trips, length and age measurements reported in the MED & BS data call against the achieved numbers given in the DCF Annual Reports were also implemented.

The **functions** were designed to work at the lower common level of aggregation of the compared tables and are **already available in the RDBqc package and stored in a GitHub repository** (<https://github.com/COISPA/RDBqc>).

The test of the consolidated R package has been carried out on a sample of the stocks already checked during the EWG 22-03, EWG 22-09 and EWG 22-16 to demonstrate the correct functioning of the package and the enhancement of the quality checks functions respect to the EWGs.

A data call was launched by DGMARE to allow this test with the authorization of MS.

Communication with the Commission IT Platform Team and the **participation to the relevant meetings and working groups** (e.g. EWG for the Evaluation of the Annual Report) are key elements in the project to **take advantage of the synergies** among the different groups and to not duplicate work.

Stable communication with RDBFIS project.

Task 2 – Carry out data quality checks for the stocks not checked by EWG 22-03

Coordinator: Alessandro Mannini (CNR-IRBIM)

Core Team: Silvia Angelini, Loredana Casciaro, Vanja Čikeš Keč, Ilaria Costantini, John Dokos, Encarnacion Garcia, Daniel Grigoras, Igor Isajlović, Dalibor Jelavić, Irida Maina, Claudia Musumeci, Paola Pesci, Mario Sbrana, Miguel Jose Serna, Vasiliki Sgardeli, Konstantinos Touloumis, Ivelina Zlateva, Walter Zupa.

This Task will carry out the data quality checks for the 78 remaining stocks of (not checked by EWG 22-03), based on the methodology followed at the EWG 22-03 and consolidated under Task 1 of this project.

Milestones

Milestone 2.1 - Workshop finalised. March 14, 2024.

Deliverables

Deliverable 2.1 - Report of the outcomes regarding the quality checks related to the 78 stocks not checked at EWG 22-03. May 14, 2024.

Task duration

8 months from September 14, 2023 to May 14, 2024

Task 2 – Carry out data quality checks for the stocks not checked by EWG 22-03

In the next months, Task 2 will be mainly engaged in the activity to make the core team able to run the quality checks on a sub-set of stocks autonomously, being aware of the quality checks implemented in the available R tools.

One or two virtual meetings will be organized with the aim to:

- Illustrate to the core team the quality checks implemented in the new version of RDBqc package (for commercial data) and in the last version of RoME (for MEDITS survey data);
- organize the work on the 78 stocks among the experts of the core team;
- provide technical support to the experts in running the RDBqc and ROME applications in their own machines.

The meetings will be possibly attended also by experts of Task 3 core team.

The Task 2 team carried out the **preparatory work towards the Task 2 workshop** (5-days physical workshop), involving only the experts of the project; the objective of the workshop is to complete the quality checks related to the 78 stocks not checked at EWG 22-03.

Task 3 – Propose additional stocks driving the fishery for each MS in the Mediterranean Sea and Black Sea and carry out quality checks on these stocks

Coordinator: Alessandro Ligas (CIBM)

Core Team: Angeliki Adamidou, Silvia Angelini, Loredana Casciaro, Ilaria Costantini, Marc Farré, Encarnacion Garcia, Daniel Grigoras, Paola Pesci, Stefanos Kavadas, Alessandro Mannini, Claudia Musumeci, Konstantinos Touloumis, George Tserpes, Ivelina Zlateva, Walter Zupa.

This Task to propose additional stocks driving the fisheries for each MS in the Med & BS and will carry out quality checks on these stocks using the tools consolidated in Task1.

Milestones

Milestone 3.1 - Finalization of the list of additional stocks. January 14, 2024.

Milestone 3.2 - Workshop finalised. April 14, 2024

Deliverables

Deliverable 3.1 - Report of the outcomes regarding the data quality checks related to the additional stocks. June 14, 2024.

Task duration

8 months from October 14, 2023 to June 14, 2024.

Task 3 – Propose additional stocks driving the fishery for each MS in the Mediterranean Sea and Black Sea and carry out quality checks on these stocks

- A **structured questionnaire** for NC and RCG Chairs has been prepared addressing key questions for the identification of the additional stocks.
- The list of stock will be drafted according to:
 - relevance of stocks for assessment and advice purposes (e.g. sub-regional or regional level),
 - relevance of stocks as commercial by catch,
 - MSFD framework.
- The applicable criteria and the final stocks list has been discussed and commonly agreed with the CINEA and DGMARE and accomplished in collaboration with MSs and RCG Med&BS. The expected numbers of additional stocks is around **70-80**.
- **Preparatory work towards the Task 3 workshop (5-days physical workshop)**, involving only the experts of the project. **Workshop in June 2024**.

Task 4 – Organize, prepare and carry out trainings for Mediterranean Sea and Black Sea national experts

Coordinator: Isabella Bitetto (COISPA)

Core Team: Loredana Casciaro, Vanja Čikeš Keč, Ilaria Costantini, Encarnacion Garcia, Daniel Grigoras, Igor Isajlović, Alessandro Ligas, Irida Maina, Alessandro Mannini, Paola Pesci, Kostantinos Touloumis, Ivelina Zlateva, Walter Zupa.

This Task is aimed at:

- **organising,**
- **preparing**
- **carrying out trainings for Med & BS national experts involved in the DCF for data quality checks**

based on the methodology followed at the EWG 22-03 as consolidated under Task 1 and applied in Task 2 and Task 3.

Task duration

11 months from September 14, 2023 to August14, 2024



Task 4 – Organize, prepare and carry out trainings for Mediterranean Sea and Black Sea national experts

Milestones

Milestone 4.1 - Online training meeting accomplished. November 14, 2023.

Milestone 4.2 - Physical training meeting accomplished. April 15-19, 2024

Deliverables

Deliverable 4.1 - Reports summarizing the works and outputs of each meeting, including if targets were met or not, where and why (one for each training, finalized by August 14, 2024).

The **training network** established under Task 0, in collaboration with RCG Med & BS, will test the package developed under **task 1** in order to provide relevant feedback to be included in the final version.

A dedicated budget allocation for facilitating the participation of one expert per MS, for Malta, Slovenia, Cyprus and France (not involved in the project) to the physical training.

Task 4 – Organize, prepare and carry out trainings for Mediterranean Sea and Black Sea national experts

Two trainings organized *between October 2023 and June 2024* to allow the experts to get familiar and proficient with the data quality checks and procedure of data checking:

❑ the **1st online**, with a duration of 3 days (**3rd - 5th October 2023**)

❑ the **2nd physical** with a duration of 5 days (**15th-19th April 2024**).

During both trainings:

- **Description** of the data quality checks and R tools;
- **Set-up of the experts' machines** to make them able to run the check autonomously both for the training and in preparation of the datacalls;
- Dedicated practical sessions with exercises on **dummy datasets**.

Task 4 – Organize, prepare and carry out trainings for Mediterranean Sea and Black Sea national experts

ToRs of Task 4 training meetings

- Illustration of the quality checks for commercial data in MED & BS data call format implemented in the **RDBqc R package**.
- Practical session on dummy dataset.
- Illustration of the quality checks for MEDITS data implemented in the **RoME package**.
- Practical session on dummy dataset.
- Practical sessions on experts' data, in preparation to MED & BS data call.

If needed, **online meetings** will be organised (under request) before and after the two Workshops.

Task 5 – Advice on the way forward, in terms of improving data coverage and quality in the Mediterranean Sea and Black Sea region

Coordinator: Vasiliki Sgardeli (HCMR)

Core Team: Angeliki Adamidou, Enrico Arneri, Loredana Casciaro, Vanja Čikeš Keč, Dimitrios Damalas, Maria Cristina Follesa, Daniel Grigoras, Beatriz Gujiarro, Igor Isajlović, Alessandro Ligas, Alessandro Mannini, George Tserpes, Ivelina Zlateva.

This Task aims at advising on the way forward, in terms of improving data coverage and quality in the Med & BS region.

Deliverables

Deliverable 5.1 - Report on the advice on the way forward, in terms of improving data coverage and quality in the Med and BS regions. October 14, 2024.

Task duration

5 months from May 14, 2024 to October 14, 2024

Task 5 – Advice on the way forward, in terms of improving data coverage and quality in the Mediterranean Sea and Black Sea region

- **Synthesis** of the main achievements and the areas that need further work, including proposals for improvement of data collection activities of Med & BS MS, as well as further improvement of data quality checks.
- Identification of possible **improvements to the data quality** and **data collection** in the Med & BS region.
- Possible **improvements on the structure of the templates utilized** to submit data will be provided, with the aim to facilitate the harmonization of the different tables and facilitate the appropriate compilation by the MSs.
- **Stocks** (e.g. fishery driving) for which the quality of survey and fishery data were found **not sufficiently checked** will be identified. Particular attention will be paid to the consistency and **harmonization of biological information across the years** (specifically growth, sex and maturity).

Task 5 – Advice on the way forward, in terms of improving data coverage and quality in the Mediterranean Sea and Black Sea region

- The **severity of the data quality issue** will be evaluated on several criteria; several examples are the **quarterly coverage**, the **presence of discard information** when mandatory, the presence of a **consistent number of length measurements** to raise length-frequency distributions, the presence of consistent biological information, **consistent coverage of survey hauls**. In the cases of seasonal fisheries and stocks characterized by discrete recruitment, the absence of quarterly information will be detected and identified as room of improvement in the sampling.
- **Identification of Mediterranean and Black Sea areas** where **further work will be needed** in terms of data quality check.

Conclusions

- QualiTrain project, as also others previous projects, has the main objective to facilitate the work of the experts involved in the DCF, increasing the expertize in the Region in the use of R tools specifically created to improve the data quality and to optimize the sampling effort.
- A wider expertize in the data quality R tools is expected to positively impact on the robustness of the results of the biological sampling optimization analyses carried out by the corresponding ISSG. Indeed, the two ISSG will collaborate to take advantage of the synergies.
- For these reasons, **the participation of the RCG experts from all MSs**, in the training organized within QualiTrain, **is crucial** to ensure in the near future the **achievement of a better data quality and a decrease in the number of data failures**.

Thanks for the attention!

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