

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



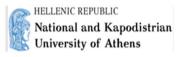
























Second Training on Med&BS RDBFIS-II

RDBFIS-II Statistical Workshop

20th-24th January 2025



> to better understand the existing statistical systems and to make available (through the RCG and RDBFIS websites) the raising procedures for processing the Med&BS biological data

Scope of Statistical Workshop

- ❖ to compile the background information on the raising procedures of the involved MSs
- ❖ to explore the possibility of optimizing /adapting (if needed) the most commonly used methodology so that it can serve as a recommended option to be followed by the MSs of the Med and Black Sea through the RDBFIS.

Preparatory Actions: Work Plans



⊕ EN

Q Search

Food, Farming, Fisheries

Data Collection Framework - DCF

Home > WPs and ARs > Work Plans

Work Plans

Repository of regional work plans, national w

The Work Plans are prepared by the Member States, su independent experts, subject to evaluation by the STEC MARE approves the Work Plans through Commission E

Regional Work Plans

Since 2025

2025-2027

National Work Plans

Since 2017

MINISTRY OF AGRICULTURE, FOOD AND FORESTRY AOUACULTURE



Regulation (EU) 2017/1004 of the European Parliament and of the Council of 17 May 2017 hment of a Union framework for the collection, management and use of data is sector and support for scientific advice regarding the common fisheries policy and repealing Council Regulation (EC) No 199/2008 (recast)

Commission Delegated Decision (EU) 2021/1167 of 27 April 2021 establishing the multiumnaal Union programme for the collection and management of biological, environmental, technical and socioeconomic data in the fisheries and squaculture socioes from 2022

Commission Implementing Decision (EU) 2021/1168 of 27 April

establishing the list of mandatory research surveys at sea and thresholds as part of the literatual Union programme for the collection and management of data in the fisheries and aquaculture sectors from 2022

Commission Implementing Decision (EU) 2022/39 of 12 January 2022 beying down rules on the format and timetables for the submission of national work plans and annual reports on data collection in the finheries and aquaculture sectors, and repealing Implementing Decisions (EU) 2016/1701 and (EU) 2018/1283

Περιστροφή προς το οριστερά

MINISTRY OF RURAL DEVELOPMENT AND FOOD DIRECTORATE GENERAL FOR FISHERIES HELLENIC AGRICULTURAL ORGANISATION-DEMETER

Commission Delegated Decision (EU) 2021/1167 of 16 July 2021 establishing the multisatraal Union programme for the collection and management of biological, environmental, technical and socioeconemic data in the fisheries and aquiculture sectors from 2022 Commission Implementing Decision (RII) 2021/1148 of 16 July 2021

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GREECE Work Plan for data collection in the fisheries and aquaculture sectors

2022-2024

(Revision 26th October 2022



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Commission Implementing Decision (EU) 2022/39 of 12 January 2022

Croatia - Work Plan for data collection in the fisheries and aquaculture sectors

2023-2024

Zagreb. 15 October 2022



Regulation (EU) 2017/1004 of the European Parliament and of the in the establishment of a Union framework for the collection, management and use of data in the fisheries sector and support for scientific advice regarding the common fisheries policy and supealing Council Regulation (EC) No 199/2008 (recast)

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Commission Implementing Decision (EU) 2022/39 of 12 January 2022

Cyprus Work Plan for data collection in the fisheries and aquaculture sectors

2022 - 2024

Department of Fisheries and Aquaculture Ministry for Amiculture Fisheries and Animal Rights



Regulation (EU) 2017/1004 of the European Parliament and of the Council of 17 May 2017

Commission Delegated Decision (EU) 2021/1167 of 27 April 2021





MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT

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Ministry of Agriculture Forestry and Food of the Republic of Slovenia Fisheries Research Institute of Slovenia

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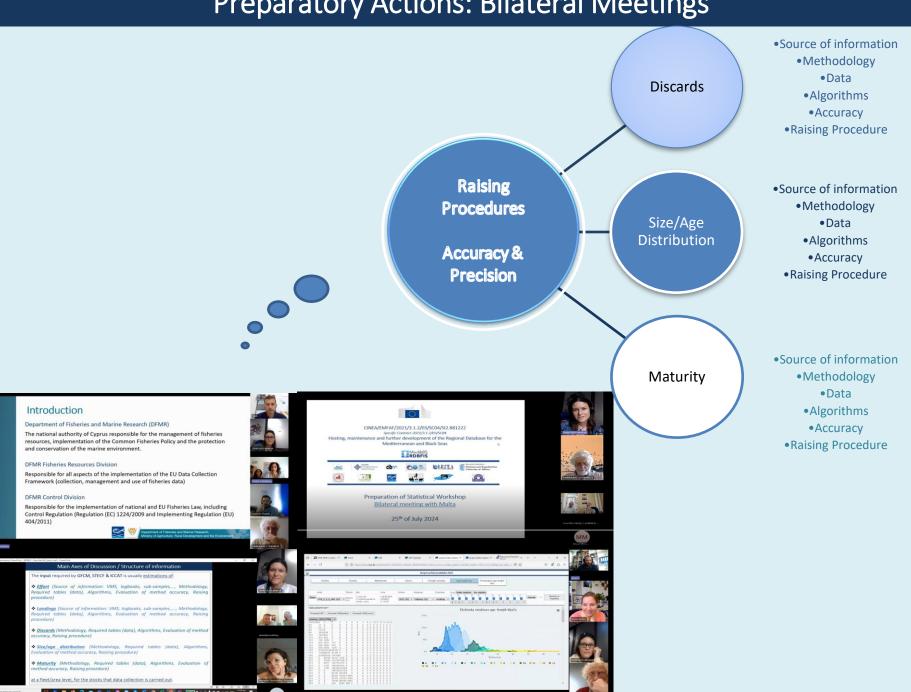
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SLOVENIAN Work Plan for data collection in the fisheries and aquaculture sectors 2022-2024

2025-2027 (24 MS)



Preparatory Actions: Bilateral Meetings





16th of January 2025

35 Participants

10 MSs of the Mediterranean & Black Sea

EC: DG MARE, JRC



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Significant contribution by

Executive Agency for Fisheries and Aquaculture, Bulgaria (Simona Vasileva NICHENA)

Ministry of Agriculture, Directorate of Fisheries, Croatia (Ivana VUCOV)

Fisheries Research Unit, Department of Fisheries and Aquaculture, Malta (Jurgen Mifsud)

Maurizio GIBIN, Maciej ADAMOWICZ, Maksims KOVSARS

Statistical Workshop

on the Raising Procedures for Med&BS Biological data

AGENDA

All-Day Online (Teams) Meeting on the 16th of January 2025

https://teams.microsoft.com/l/channel/19%3AhqVXkR73ivus-Suzw_o9uaKxmDsOl4GrVlOvSAUkV4c1%40thread.tacv2/General?groupId=18d6addb-c854-4e6fa37f-88019a86d889&tenantId=c03e3b6b-19f7-47ba-85a6-115ab98425d0

(CET) 10.30-11.00: Welcome & Adoption of the Agenda (M. Pantazi & K. Touloumis)

Intro

11.00-11. 30: Overview of the RDBFIS project/New Service (S. Kavadas, I. Maina)

11.30-11.45: Statistical Workshop: Summary (M. Pantazi)

11.45-12.00: Overview of statistical systems implemented in the MED&BS data-call (& Kupschus)

Methodological Approaches & Supportive tools

12.00-12.30: Methodological Approaches of Bulgaria (Presentation: L. Nedkova, V. Raykov & Discussion)

12.30-13.00: Methodological Approaches of Croatia (Presentation: D. Jelavic & Discussion)

13.00-13.30: Methodological Approaches of Cyprus (Presentation: Ch. Charilaou & Discussion)

Lunch Break (1h)

Methodological Approaches & Supportive tools

14.30-15.00: Methodological Approaches of Greece (Presentation: K. Touloumis & Discussion)

15.00-15.30: Methodological Approaches of Romania (Presentation: A. Gheorghe & Discussion)

15.30-16.00: SDtool and BioSim tool (I. Bitetto)

16.00-16.30: Methodological Approaches of Italy (Presentation: A. Mannini € Discussion)

Coffee Break (15')

Experts' Interaction Session

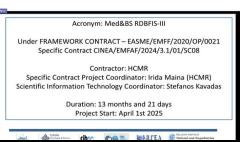
16.45-18.15: This session is dedicated to experts and it will be moderated by the Organizing Committee of the Workshop.

End of Workshop

(CET) 18.15 - 18.30

Statistical Workshop - Agenda Statistical Workshop - Agenda









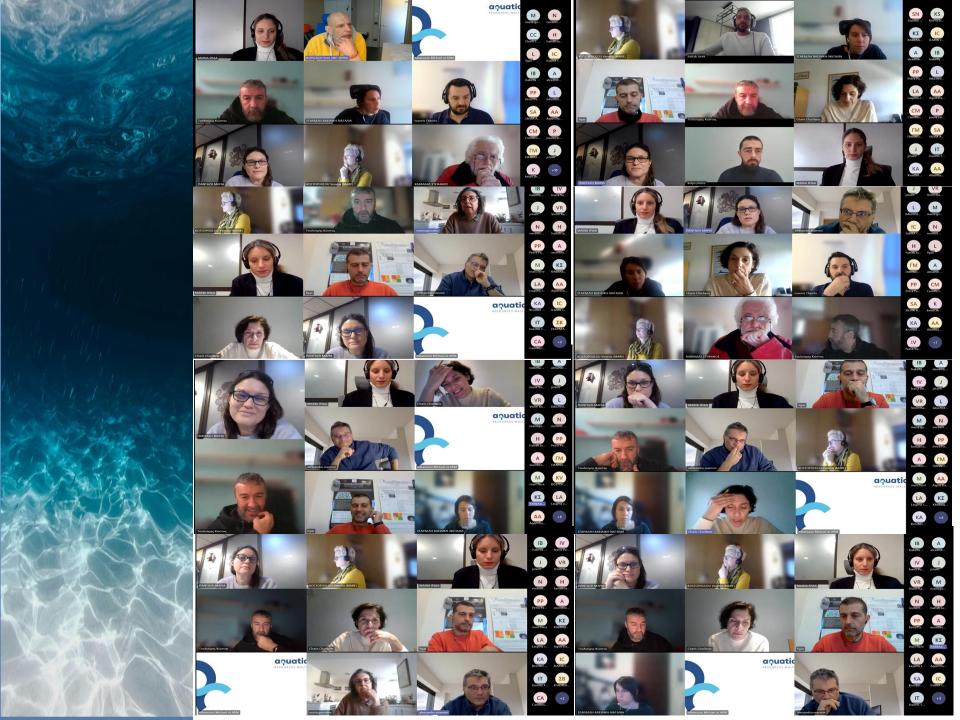
ALWAYS consistent with the sampling design

Statistical Methods WS under RDBFIS

Virtual January 2025









Assumptions and statistical procedures used for MED&BS data-call

Is there a statistical system of the Med & BS data-call?

JRC does not have a relational database. Predominantly what is needed for stock assessment purposes, is the catches table, anything else is not required in the process. Then, EWG aggregates to stock unit. Use elements of the biological parameters, survey (MEDITS, SOLEMON) indices. All data used are ESTIMATES, so no inherent statistical approach in the data-call itself.

Where can we have issues?

The sampling unit is the sample (of fish), need to know how many times I took a sample, not how many samples I have gathered. So, we are lacking representation. This is related to the fact that we assume random sampling instead of cluster sampling. We cannot sample everything. It is inherent that samples are autocorrelated and the degree of autocorrelation is unknown. This is not a question of bias. Stock assessments assume fully mixed populations, different models make different assumptions.

So, how to aggregate?

The appropriate aggregation level depends on the purpose of use of data. If we don't know the use of data, the level of the sampling design is the best. Be prepared for the need of adding data at sample level, as it is foreseen that the Commission requests will become more demanding, and the stock assessment methods will become more complex and requiring lower level data.



Best practices in raising LFDs

The discussion on that field focused on the <u>practices followed by the different MS in raising LFDs</u> when the number of sampled individuals is very small and is then raised to a very big catch. Every MS uses some rules to decide on the minimum number of individuals needed to raise the samples for each aggregation. What has been suggested was to proceed with <u>a decision tree on when to raise the data and how</u> (by year, quarter, no raising at all).

Estimation of maturity

Regarding the estimation of maturity, the issue raised was on how a MS should decide on the maturity stage of small individuals (close to maturation) when these are sampled out of the reproductive season, and a discussion followed about maturity being recorded all year round and that all adult individuals are considered mature. It has been acknowledged by the group that this is and it has been a matter of discussion for more than 30 years.



Estimation of discards ratio

- It has been highlighted that <u>discard estimates are important</u> as these compose <u>age zero (i.e. recruitment) for stock assessments</u>.
- It has been noted that within <u>DCF</u> the sampling is based on the metier and not on the species for discards, having as a result never finding discards for some species (which is a problem of the sampling). So discards is one of the most complicated category to sample and raise.
- It has been suggested as food for thought that one way to estimate discard ratio is by dividing the discards to the total catch (given that the measurements are accurate on both the retained and discarded catch) instead of discard/landings as it also has the advantage of avoiding infinite values, i.e. in the cases where a whole sample of individuals is discarded.
- ➤ Useful to have the number of samples for landings and discards and not only length.



Sampling design and definition of métier across MS

- Within this field the group discussed that some <u>MS base their sampling</u> schemes on national zones (sub-areas), which needs to be taken into account when formulating the common procedures.
- It has been underlined that everybody <u>samples based on metiers</u> (the <u>métier definition does not include the area</u>), but also tries to cover different vessel length.
- Some MS sample within the GSA in a representative way, by performing a spatial allocation, based on expert knowledge, and data is provided at GSA level and assume that the selectivity of the metiers is the same, which is not always the case (for example, due to availability of resources).
- In other MS the <u>sapling design as well as the raising procedures</u> take into consideration the <u>national fishing areas which constitute the national management units.</u>



It has been highlighted that in the <u>EU-MAP</u> it is clearly stated that the frequency and the methodologies and how data is collected should be in line with regional coordination and user needs. There is no specific threshold below which we do not need to collect data. It has been suggested that as <u>selectivity may be different for the same métier</u> for example in different areas, it is important to have the <u>raw data for stock assessment</u>. Another suggestion was to have the <u>number of samples used in the raising</u> (since going from raw data to stock assessments is time consuming), and in some models the number of samples is used <u>to inform uncertainty</u>.

Data gaps

It has been suggested that we need also guidelines on how to fill the gaps, missing data, although it was noted that that it is not the duty of the MS to fill in gaps, but this is up to the WG to decide. The discussions evolved on the different types of gaps e.g. missing LFDs in a Quarter cannot be filled in by MS, it is a decision of the data user, but other gaps, e.g. missing age in ALK could be filled in by MS. So, it has been suggested to distinguish among the different types of gaps, the gaps that can be treated by the MS and the gaps that can be treated by the EWG.



Overall Highlights of the RDBFIS II Statistical Workshop

- ✓ The limitation of common raising procedures has been highlighted, since it might be tricky to have a one- fits-all raising procedure.
- ✓ It has been clarified that the main aim of the workshop was to gather the essential information and no decision will be taken at this point. It is very challenging to incorporate all the specificities by MS, but the most important is to start discussing the issues. The workshop was useful for experts to hear how other MS are dealing with data
- ✓ Reaching a goal, harmonization at regional level is a process and we decide how far we go, to the extent that this does not affect the specificities at national level. This goal has been characterized as twostep process, where we first need to see the different processes used during sampling by the MS and then raising procedures as the final step.
- ✓ Different methods are used among the institutes BUT when comparing the results, they are very similar, which is important. So, methods that are different, they deliver similar results. There might be no need to have one method at RDBFIS, as long as we compare the outcomes. For rare species and for species with wider distribution of length structure, it may be more significant.



Overall Highlights of the RDBFIS II Statistical Workshop

- ✓ Our goal should be also on how to be consistent with the past, not only find commonalities. When and if we agree on common methods, it would be useful to try them with historic data. Of course, primary data become more important.
- ✓ It would be better to have TOR in methodological EWG to look at stock assessment methodologies and discuss whether lower aggregation data would be useful. Useful to have the number of samples for landings and discards and not only length. Need guidelines how to sample.
- ✓ It has been suggested during the next steps, to use some methodologies developed in the past, like e.g. some workshops of ICES, for raising discards or lengths, or GFCM handbook. This type of work that has been done in the past may be useful to help us standardize our methodologies. For eg. to calculate other biological parameters

Way Forward / New Service



New Service

Activity 9: Common raising procedures for the Med&BS biological data

- Build upon the work already done
- In close liaise with MSs' representatives, regional experts and Med&BS Steering Committee of RDB
- ➤ The suggested approach needs to be approved by the RCG Med&BS before it comes into service



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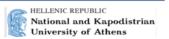
























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Thank you!

Maria Pantazi (<u>mpantazi@hcmr.gr</u>)
Stefanos Kavadas (<u>stefanos@hcmr.gr</u>)