



JRC SCIENCE FOR POLICY REPORT

SCIENTIFIC, TECHNICAL AND
ECONOMIC COMMITTEE FOR
FISHERIES –
70th PLENARY REPORT
(PLEN-22-02)

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EUR 28359 EN

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EU Science Hub

<https://ec.europa.eu/jrc>

JRC130331

EUR 28359 EN

PDF ISBN 978-92-76-55196-6 ISSN 1831-9424 doi:10.2760/87451

STECF ISSN 2467-0715

Luxembourg: Publications Office of the European Union, 2022

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How to cite this report: *Scientific, Technical and Economic Committee for Fisheries (STECF) – 70th Plenary Report (PLEN-22-02)*. EUR 28359 EN, Publications Office of the European Union, Luxembourg, 2022, ISBN 978-92-76-55196-6, doi:10.2760/87451, JRC130331.

Abstract

Commission Decision of 25 February 2016 setting up a Scientific, Technical and Economic Committee for Fisheries, C(2016) 1084, OJ C 74, 26.2.2016, p. 4–10. The Commission may consult the group on any matter relating to marine and fisheries biology, fishing gear technology, fisheries economics, fisheries governance, ecosystem effects of fisheries, aquaculture or similar disciplines. The Scientific, Technical and Economic Committee for Fisheries held its 70th plenary from 4 to 8 July 2022.

TABLE OF CONTENTS

1.	INTRODUCTION.....	1
2.	LIST OF PARTICIPANTS.....	1
3.	INFORMATION TO THE PLENARY	1
4.	STECF INITIATIVES	2
5.	ASSESSMENT OF STECF EWG REPORTS	3
5.1	EWG 22-03 Quality checking of MED & BS data and reference points.....	3
5.2	EWGs 22-02/06 Annual Economic Report on the EU Fishing Fleet	15
5.3	EWG 22-07: Evaluation of the Annual Reports for data collection and Data Transmission Failures	18
6.	ADDITIONAL REQUESTS SUBMITTED TO THE STECF PLENARY BY THE COMMISSION.....	23
6.1	Review of the ad hoc contract for MCRS for the West Med	23
6.2	Review of the ad hoc contract for the 800m ban	30
6.3	Management plan for purse seine fishing in Croatia.....	39
6.4	North Western Waters MS Group – Joint Recommendation on technical measures for the Celtic sea, Irish Sea and West of Scotland	45
6.5	Evaluation of the ad hoc contract to carry out a preliminary comparison of the 2021 EU outermost regions fleet balance reports (ref. STECF 2240 & 2241)	50
6.6	Follow-up of EWG 21-01 and EWG 22-01: West Med assessments: evaluation of closure areas (Spain)	64
7.	ITEMS/DISCUSSION POINTS FOR PREPARATION OF EWGS AND OTHER STECF WORK	75
7.1	New STECF - Discussion and possible agreement on STECF rules of procedure.....	75
7.2	Preparation of EWG 22-12 – Review of marketing standards – fisheries indicators...76	
7.3	Preparation of EWG 22-19 – Review of the Technical Measures Regulation.....78	
7.4	Preparation of EWG 22-08 – Skates and rays management.....79	
7.5	Discussion on EWG 22-04 – Assessment and advice for non-quota stocks, to support the development of multi-annual strategies in the context EU-UK	81
7.6	Preparation of EWG 22-15 – Balance/Capacity.....82	
7.7	Preparation of EWG 22-14 – Social data in EU fisheries.....83	
7.8	Preparation of EWG 22-09 – Stock assessments in West Med	85
7.9	Preparation of EWG 22-11 – Management scenarios in West Med.	86
8.	CONTACT DETAILS OF STECF MEMBERS AND OTHER PARTICIPANTS	87

70th PLENARY REPORT OF THE SCIENTIFIC, TECHNICAL AND ECONOMIC COMMITTEE FOR FISHERIES (PLEN-22-02)

4-8 July 2022

1. INTRODUCTION

The STECF hold its summer plenary on 4-8 July 2022 in the Centre Borschette, Brussels. This was the 1st plenary meeting of the newly appointed STECF.

2. LIST OF PARTICIPANTS

The meeting was physically attended by 24 members of the STECF, one invited expert, and three JRC personnel. Six STECF members and 7 JRC personell attended online. Several Directorate General Maritime Affairs and Fisheries (DG MARE) attended parts of the meeting physically or online. Section eight of this report provides a detailed participant list with contact details. Alessando Mannini attend the meeting as JRC expert, his appointment as STECF member will become effective on 1 August 2022 after leaving the JRC end July. The STECF members Arina Motova, Ernesto Jardim, Rasmus Nielsen, and Paz Sampedro were unable to attend the meeting.

3. INFORMATION TO THE PLENARY

Director General of DG MARE and Director C addresses to STECF

Ms Charlina Vitcheva, Director General of DG MARE, intervned before the STECF Committee on the first day of the plenary meeting. The Director General welcomed the new STECF Committee, outlined the work agenda for the next mandate (3 years) and raised the prerequisites of STECF participation for the provision of quality and independence advice. She highlighted that STECF, like ICES, is key to credible implementation and monitoring of the Common Fisheries Policy, through the provision of the best available scientific advice. A number of upcoming priorities were detailed includng:

- The Action plan for the conservation of resources and protection of marine ecosystems .
- The proliferation of joint recommendations under the technical measures Regulation.
- The scientific support needed for the negotiations with the UK.
- The ecosystem-based approach to fisheries management .
- Climate change and sustainability .
- Future initiatives on aquaculture .
- Research connecting to Horizon Europe; and
- The diversification of income, decarbonisation and the energy transition of the fisheries sector.

These new priorities will complement the current STECF advice, which remains key for stock assessment and specific actions in the Mediterranean and Black Sea; the implementation and evaluation of the data collection framework planning and reporting; the evaluation of Joint Recommendations on the landing obligation; and social and economic aspects of fisheries management, among others. The STECF work schedule for the next mandate remains demanding and DG MARE will continue to require the Committee to provide advice, in a flexible, independent, and impartial way. Experts were reminded that they are appointed in their personal capacity and should act, as per the STECF Decision, independently and in the public interest.

Director C of DG MARE, Mr Fabrizio Donatella, also intervened to underline the additional advice requirements of the CFP reform which were challenging as well as future policy shocks such as Covid-19 and the crisis in the Ukraine. Director C underlined the importance of data collection and its' contribution to the data needed to support scientific work in relation to the political priorities. These will include issues such as sensitive species and habitats, for which STECF will need to take into account climate change, ecosystem considerations, anthropogenic impacts (other than fishing) and resulting socio-economic aspects. Director C of DG MARE underlined as well the importance of STECF independence from the political process, which is crucial to ensure the credibility of the advice provided.

Presentation on STECF

The STECF Secretariat gave a presentation explaining the STECF rules, the work programme and procedures, declarations of interest DOIs, report publishing, data issues, and reimbursement procedures. It was highlighted that STECF members are appointed in their personal capacity, as independent experts, and that STECF advice needs to continue to reflect this legal obligation. STECF members were asked to observe the revised Rules of Procedures of the group and give agreement.

Renewal of the STECF – Election of the STECF board

Following the appointment of the new Committee for a three-year term, elections for the positions of chair and two vice-chairs of the STECF were held. One nomination for the chair position and two nominations for the vice-chair positions were received by the Secretariat. Before the election, the candidates presented themselves to the plenary in the afternoon of 5 July. The STECF members attending the meeting unanimously decided to waive the secrecy requirement for the ballot (see STECF Rules of Procedure) and vote by show of hands. The STECF members attending elected Dominic Rihan as chair. Cecilia Pinto and Raul Pallezo were elected vice-chairs. Elections were chaired by the Commission/STECF secretariat.

Temporarily suspension of STECF mandate

Jenny Nord informed the Commission of taking up a new role in the Swedish administration between 22 August 2022 and 30 July 2023. As this role will create a conflict of interest with a position as member of the STECF, Jenny Nord's STECF mandate will be suspended for the respective period.

4. STECF INITIATIVES

No STECF initiatives were discussed during the meeting.

5. ASSESSMENT OF STECF EWG REPORTS

5.1 EWG 22-03 Quality checking of MED & BS data and reference points

Background provided by the Commission

Background TOR 1 - Quality checking of MED & BS data

In recent years, STECF Expert Working Groups (EWG) on stock assessment have mainly focused on stocks in the Western Med, Adriatic and Ionian/Aegean Seas; for the remaining areas and stocks there is no information on the quality of the collected data. With regards to the Med & BS data call, the Regional Coordination Group (RCG) Med & BS¹ end user subgroup² considered that quality checks by EWGs on stock assessments only cover stocks to be assessed and not the whole set of data reported in the data call. This creates unbalanced reporting on data issues among MS and puts some MS in an unfavourable position³. In addition, not all stocks are assessed in the year following data collection, so some potential problems in data submitted in response to a data call during year N will be spotted by end-users in years N+2, N+3, N+4 etc. Such a situation is not ideal, if one takes into account that other end-users (projects etc.) may eventually use these data.

The RCG Med & BS end user subgroup discussed several possible ways to improve data quality before the operational deadline of data calls, including a specific ad-hoc EWG on data quality, accuracy and completeness with a focus to improve data quality before data use in the EWGs for stock assessments. The EWG 21-02⁴ served this purpose. This EWG was requested to check and assemble Length Frequency Distribution (LFD) data for the stocks identified as target for assessment activities in 2020. The EWG checked underlying data sets and defined the correct procedures to deal with missing data, raising procedures (specifically for survey data), wrong length measurements, and proposed standardized procedures to be followed from then on.

As a follow up to EWG 21-02, COM proposed an ad hoc EWG to quality check the Med & BS data not currently scrutinized in STECF stock assessments. This EWG should use the outcomes of the EWG 21-02 and apply them to, at least, the priority stocks for each country, as well as agree on other possible quality checks to describe the level of completeness of data submitted to the DG MARE Med & BS data call.

Following COM proposal, STECF⁵ considered that it could be beneficial to have a general overview of the quality of the data collected by the MS under the Mediterranean and Black Sea data call. Given the large number of species, GSA and country combinations, STECF considered that the number of data quality checks and number of species/GSA should be proportionate to the duration and workload of the EWG and therefore subject to some prioritization.

To this end, the RCG Med & BS held a joint meeting with all involved parties⁶ to identify the priority stocks/GSA to be tackled by this EWG. As an outcome of this meeting, the MS - using the CFP monitoring exercise as a basis - proposed a list of stocks not assessed by STECF⁷, based on landings

1 <https://www.fisheries-rcg.eu/rcg-medbs/>

2 Regional Coordination Group Med & Black Sea Subgroup on 'Meeting with End-users of Scientific Data' (12-14 March 2019, Rome). The report is available on the DCF website (<https://datacollection.jrc.ec.europa.eu/docs/rcg/>).

3 Due to the fact that specific stocks are assessed, only the relevant Member States that collect data on these stocks receive data issues from STECF EWGs.

4 EWG 21-02: Methods for supporting stock assessment in the Mediterranean, 12 - 16 April 2021 ([Report](#))

5 STECF Plenary 21-02: 5.1 EWG 21-02 Methods for supporting stock assessment in the Mediterranean ([Report](#)).

6 Joint meeting of the RCG Med & BS, DG MARE, JRC & STECF on data quality and availability, 16 December 2021, online.

7 Previous STECF EWGs.

and income/value, averaged over 3 years, including data availability as an additional factor (Annexes I and II).

TOR 1

The EWG is requested to check the coverage and quality of the data hosted in the JRC database for the stocks of Annex I. If time allows, the EWG is invited to repeat the same exercise for (as many of) the remaining stocks proposed by Member States, as listed in Annex II. For this purpose, the EWG is invited to use the outcomes of the EWG 21-02, as well as additional relevant tools that may be available from other sources, such as other STECF EWGs, GFCM, checks developed and used by JRC, work under projects and grants etc. The EWG may also develop new tools. The consolidated checks used under the EWG should be clearly listed and described, to allow their use by the Member States in the future.

The EWG may contact the National Correspondents of Member States to request clarifications on the data sets during the meeting, if needed. Relevant reports of working groups from STECF and GFCM may also be used as background documents.

One of the main outcomes will be to produce a report per MS, where the results of the data checks will be described. In addition, the EWG is requested to propose possible actions to improve the data sets, as well as improvements to the future data collection activities of the MS. The EWG should clearly highlight cases where the applied and available checks may not be adequate/ relevant for specific data sets and propose ways forward.

All unresolved data issues encountered during the EWG meeting should be reported on line via the Data Transmission Monitoring Tool (DTMT) available at <https://datacollection.jrc.ec.europa.eu/web/dcf/dtmt> (with restricted access). All output should clearly indicate that issues come from this specific EWG ('EWG 22-03'). Further guidance on precisely what should be inserted in the DTMT, log-on credentials and access rights will be provided separately by the STECF Secretariat focal point for the EWG.

Following the preliminary outcomes of this EWG⁸, and if time permits, the Member States will be requested to re-upload corrected historic data sets during the official data calls.

Background TOR 2 - Reference points

These ToRs deal with the methodology and estimation of conservation reference points for demersal stocks in the Western Mediterranean.

The Western Mediterranean multiannual management plan (West Med MAP) was adopted in 2019. It encompasses a fishing effort regime and various technical and conservation measures to address the overexploitation of demersal stocks, in particular of six main target species listed in Article 1(2).

The main objective and legal obligation (Article 7(3)b) of the West Med MAP is to achieve fishing mortality securing Maximum Sustainable Yield (Fmsy) for all demersal stocks by 1 January 2025 at the latest.

Article 5 of the West Med MAP specifies which Conservation reference points are to be used for the management decisions:

“the following conservation reference points shall be requested, in particular from STECF, or a similar independent scientific body recognised at Union or international level, on the basis of the plan:

(a) precautionary reference points, expressed as spawning stock biomass (BPA); and

⁸ Before the outcomes are discussed at STECF Plenary.

(b) limit reference points, expressed as spawning stock biomass (BLIM).”

And Article 2 of the West Med MAP provides the following legal definitions:

(5) 'FMSY point value' means the value of the estimated fishing mortality that, with a given fishing pattern and under current average environmental conditions, gives the long-term maximum yield;

(10) 'BLIM' means the limit reference point, expressed as spawning stock biomass and provided for in the best available scientific advice, in particular by STECF, or a similar independent scientific body recognised at Union or international level, below which there may be reduced reproductive capacity;

(11) 'BPA' means the precautionary reference point, expressed as spawning stock biomass and provided for in the best available scientific advice, in particular by STECF, or a similar independent scientific body recognised at Union or international level, which ensures that the spawning stock biomass has less than 5 % probability of being below BLIM;

The safeguard mechanisms under the West Mediterranean EU MAP7 demersal plan can thus be triggered by levels of SSB falling below given thresholds. For stocks for which targets relating to MSY are available, and for the purpose of the application of safeguards, it is necessary to establish conservation reference points, expressed as precautionary reference points (B_{pa}) and limit reference points (B_{lim}).

Appropriate safeguards should be provided for in order to ensure that the targets are met and to trigger, where needed, remedial measures, inter alia, where stocks fall below the conservation reference points.

TOR 2

In preparation for the Expert Working Group on stock assessments in the western Mediterranean Sea (EWG 22-09) and the Expert Working Group on fishing effort regime for demersal fisheries in the western Mediterranean (EWG 22-11), EWG 22-02 is requested to estimate preliminary B_{lim} and B_{pa} biological reference points, as well as other reference points that could be estimated (e.g. B_{msy}), for the 6 main target species under the West Med MAP. The preliminary values and the approach should be presented to STECF summer plenary with the aim of giving final values in EWG 22-11.

Using existing stock assessments, EWG 22-02 is requested to define an appropriate practical framework for deriving the conservation reference points (i.e. B_{pa} and B_{lim}) for the demersal stocks in the West Mediterranean listed in Annex III. The proposed values shall be related to long-term high yields and low risk of stock/fishery collapse and ensure that the exploitation levels restore and maintain marine biological resources at least at levels which can produce the maximum sustainable yield. The supplied approach should draw on the experience with other approaches (e.g. ICES and GFCM) where applicable. Where other approaches are needed specifically for species with short time series, alternatives should be proposed.

ToR ANNEX I

List of stocks for TOR 1

Member State	Area (GSA)	Scientific name
Spain	GSA 1	<i>Sardina pilchardus</i>
Spain	GSA 5	<i>Engraulis encrasicolus</i>
Spain	GSA 6	<i>Engraulis encrasicolus</i>
France	GSA 7	<i>Sparus aurata</i>
France	GSA 8	<i>Sparus aurata</i>

Malta	GSA 15	<i>Scomber colias</i>
Malta	GSA 15	<i>Boops boops</i>
Italy	GSA 16	<i>Engraulis encrasicolus</i>
Italy	GSA 19	<i>Engraulis encrasicolus</i>
Slovenia	GSA 17	<i>Merlangius merlangus</i>
Slovenia	GSA 17	<i>Eledone moschata</i>
Croatia	GSA 17	<i>Sardina pilchardus</i>
Croatia	GSA 17	<i>Engraulis encrasicolus</i>
Greece	GSA 20	<i>Sepia officinalis</i>
Greece	GSA 22	<i>Sepia officinalis</i>
Greece	GSA 23	<i>Sepia officinalis</i>
Cyprus	GSA 25	<i>Boops boops</i>
Cyprus	GSA 25	<i>Spicara smaris</i>
Bulgaria	GSA 29	<i>Engraulis encrasicolus</i>
Bulgaria	GSA 29	<i>Merlangius merlangus</i>
Romania	GSA 29	<i>Engraulis encrasicolus</i>
Romania	GSA 29	<i>Merlangius merlangus</i>

ToR ANNEX II

List of additional stocks for TOR 1

Member State	Area (GSA)	Scientific name
Spain	GSA 1	<i>Engraulis encrasicolus</i>
Spain	GSA 1	<i>Sardinella aurita</i>
Spain	GSA 1	<i>Trachurus mediterraneus</i>
Spain	GSA 1	<i>Trachurus trachurus</i>
Spain	GSA 1	<i>Octopus vulgaris</i>
Spain	GSA 1	<i>Lophius budegassa</i>
Spain	GSA 1	<i>Micromesistius poutassou</i>
Spain	GSA 1	<i>Scyliorhinus canicula</i>
Spain	GSA 5	<i>Octopus vulgaris</i>
Spain	GSA 5	<i>Sardina pilchardus</i>
Spain	GSA 5	<i>Raja clavata</i>
Spain	GSA 5	<i>Trachurus mediterraneus</i>
Spain	GSA 5	<i>Loligo vulgaris</i>
Spain	GSA 5	<i>Lophius budegassa</i>
Spain	GSA 5	<i>Sepia officinalis</i>
Spain	GSA 6	<i>Sardina pilchardus</i>
Spain	GSA 6	<i>Sardinella aurita</i>
Spain	GSA 6	<i>Trachurus mediterraneus</i>
Spain	GSA 6	<i>Trachurus trachurus</i>
Spain	GSA 6	<i>Octopus vulgaris</i>
Spain	GSA 6	<i>Lophius budegassa</i>
Spain	GSA 6	<i>Eledone cirrhosa</i>
Spain	GSA 6	<i>Sepia officinalis</i>
Spain	GSA 6	<i>Micromesistius poutassou</i>
France	GSA 7,8	<i>Octopus vulgaris</i>
France	GSA 7,8	<i>Scomber scombrus</i>

France	GSA 7,8	<i>Eledone cirrhosa</i>
France	GSA 7,8	<i>Lophius budegassa</i>
France	GSA 7,8	<i>Trachurus mediterraneus</i>
Malta	GSA 15	<i>Mullus surmuletus</i>
Italy	GSA 16, 19	<i>Aristeus antennatus</i>
Italy	GSA 16, 19	<i>Aristaeomorpha foliacea</i>
Italy	GSA 16	<i>Parapenaeus longirostris</i>
Italy	GSA 16	<i>Merluccius merluccius</i>
Italy	GSA 16, 19	<i>Mullus surmuletus</i>
Italy	GSA 16, 19	<i>Mullus barbatus</i>
Italy	GSA 16, 19	<i>Sardina pilchardus</i>
Slovenia	GSA 17	<i>Sparus aurata</i>
Slovenia	GSA 17	<i>Solea solea</i>
Slovenia	GSA 17	<i>Loligo vulgaris</i>
Slovenia	GSA 17	<i>Mullus barbatus</i>
Slovenia	GSA 17	<i>Pagellus erythrinus</i>
Slovenia	GSA 17	<i>Dicentrarchus labrax</i>
Slovenia	GSA 17	<i>Mugilidae</i>
Slovenia	GSA 17	<i>Sardina pilchardus</i>
Croatia	GSA 17	<i>Scomber colias</i>
Croatia	GSA 17	<i>Trachurus mediterraneus</i>
Croatia	GSA 17	<i>Trachurus trachurus</i>
Croatia	GSA 17	<i>Eledone moschata</i>
Croatia	GSA 17	<i>Octopus vulgaris</i>
Greece	GSA 20, 22, 23	<i>Boops boops</i>
Greece	GSA 20, 22, 23	<i>Mullus surmuletus</i>
Greece	GSA 20, 22, 23	<i>Pagellus erythrinus</i>
Greece	GSA 20, 22, 23	<i>Panaeus kerathurus</i>
Greece	GSA 20, 22, 23	<i>Spicara smaris</i>
Greece	GSA 20, 22, 23	<i>Scomber japonicus</i>
Cyprus	GSA 25	<i>Mullus surmuletus</i>
Cyprus	GSA 25	<i>Mullus barbatus</i>
Cyprus	GSA 25	<i>Siganus rivulatus</i>
Cyprus	GSA 25	<i>Siganus luridus</i>
Cyprus	GSA 25	<i>Diplodus sargus</i>
Bulgaria	GSA 29	<i>Mullus barbatus</i>
Bulgaria	GSA 29	<i>Rapana venosa</i>
Bulgaria	GSA 29	<i>Scophthalmus maximus</i>
Bulgaria	GSA 29	<i>Sprattus sprattus</i>
Bulgaria	GSA 29	<i>Squalus acanthias</i>
Bulgaria	GSA 29	<i>Trachurus mediterraneus</i>
Romania	GSA 29	<i>Mullus barbatus</i>
Romania	GSA 29	<i>Rapana venosa</i>
Romania	GSA 29	<i>Scophthalmus maximus</i>
Romania	GSA 29	<i>Sprattus sprattus</i>

Romania	GSA 29	<i>Squalus acanthias</i>
Romania	GSA 29	<i>Trachurus mediterraneus</i>

ToR ANNEX III

List of stocks for TOR 2

Area	Common name	Scientific name
GSA 1-5-6-7	Hake	<i>Merluccius merluccius</i>
GSA 1-5-6-7	Deep-water rose shrimp	<i>Parapenaeus longirostris</i>
GSA 1	Red mullet	<i>Mullus barbatus</i>
GSA 5	Striped red mullet	<i>Mullus surmuletus</i> (*)
GSA 6	Red mullet	<i>Mullus barbatus</i> (*)
GSA 7	Red mullet	<i>Mullus barbatus</i> (*)
GSA 5	Norway lobster	<i>Nephrops norvegicus</i>
GSA 6	Norway lobster	<i>Nephrops norvegicus</i>
GSA 8-9-10-11	Hake	<i>Merluccius merluccius</i>
GSA 9-10-11	Deep-water rose shrimp	<i>Parapenaeus longirostris</i>
GSA 9	Red mullet	<i>Mullus barbatus</i>
GSA 10	Red mullet	<i>Mullus barbatus</i>
GSA 9	Norway lobster	<i>Nephrops norvegicus</i>
GSA 11	Norway lobster	<i>Nephrops norvegicus</i>
GSA 1-2	Blue and red shrimp	<i>Aristeus antennatus</i>
GSA 5	Blue and red shrimp	<i>Aristeus antennatus</i> (*)
GSA 6-7	Blue and red shrimp	<i>Aristeus antennatus</i> (*)
GSA 8-9-10-11	Giant red shrimp	<i>Aristaeomorpha foliacea</i>
GSA 8-9-10-11	Blue and red shrimp	<i>Aristeus antennatus</i>

(*) if feasible, explore the possibility to merge red mullet in GSAs 5-6-7 and blue and red shrimp in GSAs 5-6-7.

(2 or 8) to be discussed by experts whether data of GSA 2 and 8 can be added to the assessment.

Request to the STECF

STECF is requested to review the report of the STECF Expert Working Group meeting, evaluate the findings and make any appropriate comments and recommendations, especially with regards to the upcoming EWG 22-09 on stock assessment in the Western Mediterranean Sea and EWG 22-11 on the management measures for demersal fisheries in the western Mediterranean Sea.

STECF comments

EWG 22-03 met online from 2-6 May with 23 experts of which 3 were members of JRC, and 2 were members of STECF. The objective of EWG 22-03 was to carry out data quality checks on a list of Member States, species, and areas (hereby referred to as "combinations") supplied by DG MARE. The EWG also proposed biomass reference points for stocks assessed in the STECF EWGs on Western Mediterranean stock assessments, in accordance with the ToRs supplied.

The EWG was split in two sub-groups, with 14 experts dealing with TOR 1 (data checking), and 9 concentrating on TOR 2 (reference points). JRC staff assisted as required for both TORs. STECF acknowledges the EWG has addressed both TORs, giving priority workload to TOR 1 as requested by DGMARE. STECF acknowledges the extensive work carried out by the EWG, which is a major step forward for data quality checking and assessment of Mediterranean stocks.

ToR 1: Quality checking of MED & BS data

During its plenary discussion, STECF has noted a difference of perception between DG MARE and the EWG participants on the extent to which ToR 1 had been addressed. The EWG was requested to evaluate the data quality of 22 priority 1 combinations and “if time allowed”, as many as possible of the 73 priority 2 combinations. Additionally, at the request of DGMARE Unit D1 shortly before the EWG, *Chamelea galina* (Venus Clam) in GSA 17-18, *Aristaeomorpha foliacea* (Giant Red shrimp) in GSA 18-19-20 and *Aristeus antennatus* (blue and red shrimp) in GSA 18-19-20 were added to the list of stocks to be checked. This was based on data needs for STECF EWG 22-16. STECF notes that the EWG has carefully evaluated data quality for all the priority 1 combinations (including the 3 additional stocks, corresponding to 10 combinations), and an additional 15 priority 2 combinations totalling 47 combinations (Table 5.1.1). Combinations checked within the priority 2 list were freely selected by experts attending the EWG, spreading the workload across all GSAs. The remaining priority 2 combinations could not be checked due to time constraints.

STECF understands DG MARE’s wish that all 73 Priority 2 combinations could have been checked by the EWG but agrees with the EWG that thoroughly investigating and documenting data quality is tedious and time-consuming (and even more for new combinations that had never been checked previously). STECF underlines that there is a limit in how many combinations could reliably be checked in the course of a 5-day EWG. Considering that this time limitation was also acknowledged by DG MARE in its formulation of the ToR 1, distinguishing between Priority 1 and Priority 2 combinations, STECF considers that ToR 1 has been adequately and thoroughly addressed. However, STECF acknowledges that more work is still needed to completely fulfil DG MARE’s needs on this topic and considers that all procedures and tools developed and used by EWG 22-03 will be excellent support for helping future initiatives.

STECF notes that in agreement with the procedures adopted, information on errors or uncertainties in the data were listed in the Data Transmission and Monitoring Tool (DTMT). These have been communicated to the Member States National Correspondents through a pdf document reporting all the data issues observed during the quality checks. All of this information was transmitted by 17 May 2022.

STECF notes that the RDBqc package tested during the meeting provided consistent results compared to the JRC routine. The RDBqc package is an R package containing routines for data quality checks, developed under the RDBFIS regional grant (Call MARE/2020/08), which has the objective of developing the Med&BS regional database. The RDBqc package will be integrated within the Med&BS regional database as a web-based framework, allowing Member States to check the quality of the data before submission to the different data calls (MED&BS, FDI, AER). The JRC routines were developed and tested by the JRC team before the EWG and will be publicly available as annexes of the final report for EWG 22-03. The two routines, though, do not work on the same data format. The JRC routines work on the Med&BS Data Call format, while the RDBqc package is aimed at working on primary data (e.g., SDEF format), before the transformation in the format requested by the Data Call.

Table 5.1.1 List of MS/GSA/species data checked during the EWG (priority 1 combinations are in bold; priority 2 combinations are in black (not in bold); additional combinations requested for EWG 22-16 are in blue).

Slovenia	GSA 17	<i>Merlangius merlangus</i>	Cyprus	GSA 25	<i>Boops boops</i>
	GSA 17	<i>Eledone moschata</i>		GSA 25	<i>Spicara smaris</i>
	GSA 17	<i>Sparus aurata</i>		GSA 25	<i>Mullus barbatus</i>
	GSA 17	<u><i>Chamelea galina</i></u>	Malta	GSA 15	<i>Scomber colias</i>

Croatia	GSA 17	<i>Sardina pilchardus</i>	GSA 15	<i>Boops boops</i>
	GSA 17	<i>Engraulis encrasicolus</i>	GSA 15	<i>Mullus surmuletus</i>
	GSA 17	<i>Scomber colias</i>	Greece GSA 20	<i>Sepia officinalis</i>
	GSA 17	<i>Atlantic horse mackerel</i>	GSA 22	<i>Sepia officinalis</i>
	GSA 17	<i>Mediterranean horse mackerel</i>	GSA 23	<i>Sepia officinalis</i>
	GSA 17	<u><i>Chamelea galina</i></u>	GSA 20	<i>Boops boops</i>
Bulgaria	GSA 29	<i>Engraulis encrasicolus</i>	GSA 22	<i>Boops boops</i>
	GSA 29	<i>Mullus barbatus</i>	GSA 23	<i>Boops boops</i>
	GSA 29	<i>Merlangius merlangus</i>	GSA 20	<u><i>Aristeus antennatus</i></u>
Romania	GSA 29	<i>Merlangius merlangus</i>	GSA 20	<u><i>Aristaeomorpha foliacea</i></u>
	GSA 29	<i>Mullus barbatus</i>	Italy GSA 16	<i>Engraulis encrasicolus</i>
	GSA 29	<i>Engraulis encrasicolus</i>	GSA 19	<i>Engraulis encrasicolus</i>
France	GSA 7	<i>Sparus aurata</i>	GSA 16	<i>Aristeus antennatus</i>
	GSA 8	<i>Sparus aurata</i>	GSA 18	<u><i>Aristeus antennatus</i></u>
	GSA 7	<i>Octopus vulgaris</i>	GSA 19	<u><i>Aristeus antennatus</i></u>
Spain	GSA 5	<i>Engraulis encrasicolus</i>	GSA 18	<u><i>Aristaeomorpha foliacea</i></u>
	GSA 6	<i>Engraulis encrasicolus</i>	GSA 19	<u><i>Aristaeomorpha foliacea</i></u>
	GSA 1	<i>Sardina pilchardus</i>	GSA 17	<u><i>Chamelea galina</i></u>
	GSA 1	<i>Engraulis encrasicolus</i>	GSA 18	<u><i>Chamelea galina</i></u>
	GSA 6	<i>Sardina pilchardus</i>		

ToR 2: Reference Points

STECF notes that the EWG has provided a framework based on deterministic age-structured equilibrium computations that integrates estimated stock recruitment functions with yield per recruit analysis. This allows evaluation of biomass reference points (Section 4.2 of the EWG report) and preliminary biomass reference points for all 14 of the western Mediterranean stocks for which full analytical assessments are available (Table 5.1.2). Stock recruitment relationships were fitted and evaluated with the FLR (Fisheries Library in R: Kell et al., 2007) package FLSRTMB (2021; <https://github.com/flr/FLSRTMB>), using maximum likelihood estimation in Template Model Builder (TMB; Kristensen 2015).

The available stock recruitment relationship models used were:

- Geometric mean
- Conditioned Hockey-Stick
- Beverton and Holt
- Ricker

STECF notes that the refinement of the Conditioned Hockey-Stick model (ICES, 2022) allows constraining the fitting algorithm of the segmented regression so that the breakpoint (B_{lim}) is restricted to a specific range relative to virgin biomass B_0 (1%-20% B_0 , Section 4.2.5 of the report). If no clear breakpoint can be identified within the defined range of 1%-20% B_0 , the EWG recommended that a reasonable first estimate of B_{lim} can be computed as 25% of the biomass $B_{F0.1}$ that corresponds to $F_{0.1}$ (Section 4.2.3 in the report).

STECF acknowledges that the refinement of the Conditioned Hockey-Stick was possible thanks to extensive preparatory work by the JRC modelling group before the fitting could be run during the EWG.

STECF notes that for the estimation and evaluation of biomass reference points, a dedicated R package FLRef was specifically developed by the JRC for this EWG. This is now available on <https://github.com/Henning-Winker/FLRef>. This package is implemented with FLR and makes use of the optimisation routine for estimating fisheries reference points at equilibrium that is available in the FLBRP package.

STECF notes that B_{pa} was estimated as $2*B_{lim}$. A value of $2*B_{lim}$ corresponds to a sigma (standard deviation of $\ln(SSB)$) at the start of the year following the terminal year of the assessment of 0.4, while the ICES procedure is based on a sigma = 0.2 when sigma is unknown. STECF endorses this adjustment which is justified to account for the larger presumed uncertainties in the estimates of the SSB in the terminal year in the assessment of the Mediterranean stocks.

STECF notes that the EWG developed a decision-tree to provide guidelines for choosing the most appropriate approach to estimate B_{lim} based on decision rules related to stock depletion and the contrast in the stock-recruitment data. STECF considers this decision-tree is highly useful and would merit scientific dissemination beyond EU Mediterranean stock assessment EWGs.

STECF endorses the proposed framework developed by the EWG which proved to be suitable/appropriate to estimate biological reference points in general as well as for short time series and stocks in poor conditions (See Section 4.3.1 of the report).

STECF notes that the framework has resulted in a preliminary classification of 14 stocks into three categories, based on the biomass status in the last assessment year: above B_{pa} , between B_{lim} and B_{pa} and below B_{lim} . For the remaining 5 stocks from Annex III, full analytical assessment models are not available, therefore biomass reference points could not be estimated for these. The assessment EWGs (e.g. EWGs 21-11 and 21-15) currently provide advice sheets with catch options based on exploitation status and target F_{MSY} , (for Mediterranean stocks F_{01} is used as a proxy of F_{MSY}) and $F_{MSY\ Transition}$, without consideration for potential additional measures to increase biomass. With the new estimation of biomass reference point provided by EWG 22-03, such additional considerations may now be provided in the catch options for stocks with biomass $<B_{pa}$.

STECF notes that ICES already accounts for such situations and provides exploitation advice under the following rule:

1. $F = F_{MSY}$ when the spawning-stock biomass is at or above $MSY\ B_{trigger}$; and
2. $F = F_{MSY} \times \text{spawning-stock biomass} / MSY\ B_{trigger}$ when the stock is below $MSY\ B_{trigger}$ and above B_{lim} ;
3. If the F following from applying rule 2 is insufficient to bring the stock above B_{lim} in the short term, ICES advice is based on bringing the stock above B_{lim} in the short term. This may result in zero catch advice.

STECF notes that such rules may be adapted in the context of the framework defined in the Western Med Map, with B_{pa} used as a trigger point. Option 1 above may also include substitution of F_{MSY}

with $F_{MSY\ Transition}$ if, the stock is expected to be in transition to MSY, as is the case for some of the stocks assessed in the Western Mediterranean.

STECF suggests that DG MARE needs to consider if such catch options are required, and if so include them in the Terms of Reference for EWG 22-09 for inclusion in the Short-Term Forecast table. DG MARE should indicate if the headline advice in the first paragraph of Section 5 of the assessment EWG report should be based on the appropriate option (i.e., options 1 to 3) or based solely on option 1 regardless of biomass status as is the case currently.

STECF considers that it is appropriate to re-evaluate biomass reference points at regular intervals, the timing of which depends on the evolution of the status of the stock as well as on any substantial changes in data input, model assumptions or assessment methods. These revisions may be time-consuming as they require reconsidering the most appropriate and updated methods for deriving the biomass reference points. Therefore, dedicated ad-hoc EWGs may be convened when considered appropriate by the assessment EWGs, to assure coherent procedures of estimation of reference points are applied across stocks. To achieve this an overarching benchmarking strategy needs to be developed (e.g., periodicity and methodologies). In case of shared stocks, a coordinated strategy should be developed with international regional bodies such as GFCM.

STECF conclusions

STECF concludes that, in addressing the TORs, EWG 22-03 has carried out extensive work before and during the EWG. STECF concludes that the EWG outcomes are a major step forward for the data quality checking of Mediterranean stocks.

Regarding TOR 1, STECF concludes that while not all Priority 2 combinations could be directly checked during the EWG itself, all the developed data checking routines are operational and available and can now be used by Member States to check their data before fulfilling the EU data call (MED&BS, FDI, AER).

Regarding ToR 2, STECF endorses the general approach for calculating biomass reference points. STECF concludes that the framework developed and tested during the EWG should be used by EWG 22-09 to estimate biomass reference points for western Mediterranean stocks.

STECF concludes that an overarching general benchmarking strategy for the regular updating of reference points and stock assessment methods needs to be developed with realistic timelines and methodologies.

References

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Table 5.1.2 Summary of reference points results and status by stock. Recruitment model either Hockey-stick (hs) or Geometric Mean (gm) recruitment. The basis of B_{Lim} (B_{Lim} basis) is the fitted point of inflection in the Hockey Stick (hs. B_{Lim}) or 25% of B at $F_{0.1}$ (gm.0.25). Where $B_{F0.1}$ derived from is the MSY F proxy used in the EWG ($F_{0.1}$) and is the estimated SSB at $F_{0.1}$. Un-fished biomass (B_0). Value of B_{Lim} (B_{Lim}). Value of B_{pa} (B_{pa}) based on factor of 2 from B_{Lim} , equivalent to a sigma of approximately 40%. F_{pa} is the F that will give B_{pa} on average. A number of ratios are provided to indicate where the stock parameters are located: Ratio of B_{Lim} to $B_{F0.1}$ ($B_{Lim} / B_{F0.1}$); Ratio of $B_{F0.1} / B_{pa}$ ($B_{F0.1} / B_{pa}$) which represents the region below BMSY where risks of reduce recruitment are less than 5%; Ratio of B_{Lim} to the un-fished biomass (B_{Lim} / B_0), the region where it is considered R is not depleted. Ratio of B_{Lim} to BMSY ($B_{Lim} / B_{F0.1}$). Current stock status is also indicated relative to BMSY ($B_{cur} / B_{F0.1}$) and relative to B_{Lim} (B_{cur} / B_{Lim}). Current F status relative to FMSY ($F_{cur} / F_{0.1}$)

Stock	S-R / B_{Lim} Basis	$F_{0.1}$	$B_{F0.1}$	B_0	B_{Lim}	B_{pa}	F_{pa}	$B_{Lim} / B_{F0.1}$	$B_{F0.1} / B_{pa}$	$B_{F0.1} / B_0$	B_{Lim} / B_0	$B_{cur} / B_{F0.1}$	B_{cur} / B_{Lim}	$F_{cur} / F_{0.1}$
ARA01	hs.blim	0.292	529	1374	120	241	0.79	0.227	2.20	0.385	0.088	0.101	0.443	5.746
ARA06_07	hs.blim	0.286	1542	3924	263	525	1.01	0.170	2.94	0.393	0.067	0.350	2.056	2.985
ARA09_10_11	gm.0.25	0.294	649	1532	162	325	0.92	0.250	2.00	0.424	0.106	0.376	1.505	5.716
ARS09_10_11	gm.0.25	0.462	711	1713	178	356	1.50	0.250	2.00	0.415	0.104	0.626	2.503	2.129
DPS09_10_11	gm.0.25	1.287	900	3550	225	450	2.38	0.250	2.00	0.253	0.063	1.000	4.002	1.23
HKE01_05_06_07	hs.blim	0.444	59561	223391	4138	8276	1.26	0.069	7.20	0.267	0.019	0.024	0.339	4.369
HKE08_09_10_11	hs.blim	0.168	43255	103666	4316	8633	0.60	0.100	5.01	0.417	0.042	0.108	1.087	2.998
MUT01	hs.blim	0.607	419	1294	205	410	0.62	0.489	1.02	0.324	0.159	0.252	0.514	2.13
MUT06	gm.0.25	0.317	3307	7811	827	1653	0.87	0.250	2.00	0.423	0.106	0.649	2.596	2.837
MUT07	hs.blim	0.456	455	1416	128	256	0.87	0.282	1.77	0.321	0.091	1.062	3.768	1.369
MUT09	gm.0.25	0.52	1812	4385	453	906	1.40	0.250	2.00	0.413	0.103	1.076	4.305	0.721
MUT10	gm.0.25	0.401	954	2493	239	477	0.99	0.250	2.00	0.383	0.096	1.518	6.073	0.784
NEP06	gm.0.25	0.228	2013	6500	503	1007	0.41	0.250	2.00	0.31	0.077	0.253	1.013	1.132
NEP09	gm.0.25	0.297	812	2893	203	406	0.55	0.250	2.00	0.281	0.07	1.397	5.587	0.504

*Blue and red shrimp (ARA) in GSA 6 & 7 was found to have potential catch errors in the first two years and the evaluation was carried out 2004-2020 (17 years) (see section 6.5.3) ; ^ Deepwater rose shrimp in GSA 9, 10 & 11 has a value of fraction mature of 0.45 at age 0. This t is not thought to have significant influence on the state of the stock, but it appears high and should be checked. # Nephrops (NEP) in GSA 9 was found to have a mistake in the mean weights age 1 in 2018 and 2019, and more importantly the maturity ogive was incorrectly set by age in all years (see section 6.4.2). Nephrops (NEP) in GSA 6 was found to have a miss-specified plusgroup, this was corrected. These were corrected and the analysis completed with the corrected values. Both data sets will be checked again before final values are computed in September.

5.2 EWGs 22-02/06 Annual Economic Report on the EU Fishing Fleet

Request to STECF

STECF is requested to review the report of the STECF Expert Working Group meeting, evaluate the findings and make any appropriate comments and recommendations.

STECF comments

EWGs 22-02 and EWG 22-06 took place virtually from 04-08 April (AER I) and 13-17 June 2022 (AER II). The AER report produced by the EWGs covers the period 2008 to 2022 and includes information on the EU fleet's fishing capacity, effort, employment, landings, income and costs. The reference year for the AER 2022 report is 2020 with nowcast performance estimates provided for 2021 and 2022. All monetary values have been adjusted for inflation to 2020 constant prices.

STECF observes that the regular analysis provides a structural and economic overview of the EU fishing fleet, a regional analysis of the EU fishing fleet by major sea basin and a detailed structural and economic overview of each EU Member State fishing fleet. Additionally, special requests relating to pelagic fleets, on social aspects and also an outlook for 2021 and 2022 considering the impacts of COVID-19, fuel prices and inflation were also addressed by the EWGs. As in previous years, STECF observes that the quality of the data submitted by Member States has steadily improved.

Regarding the analysis of social data of the fleets conducted by the EWG, STECF observes that there were some issues with the data provided in 2022 as highlighted in the EWGs report. While all Member States submitted data for the year 2020, only 10 resubmitted data for 2017, while the data submitted in 2019 was not available to the EWG. Therefore, the EWG could not carry out a comparison between 2020 and 2017 as had previously been planned.

STECF notes that different methodologies and input variables are applied in the Mediterranean and Atlantic nowcast. This is mainly because for the Atlantic, information on the TACs for the nowcasted years is used.

For the production of the nowcast for years 2021 and 2022, STECF observes that this could only be performed after the AER II meeting had finished. This was due to the delay in the availability of the input data (fuel and fish prices were updated up to May 2022, to account for as much as possible of the current variability of prices and market conditions) and the time needed for running the model as well as checking the results. Although a nowcast is more robust when more input data for the current year can be incorporated, having to produce the nowcast outside of the regular meeting is not advised because the time needed to check the results by the experts is severely reduced. STECF advises that the JRC incorporates the production of nowcasts for the Atlantic to its database, as it already performs the Mediterranean nowcasts. This would help producing the nowcast results during the EWG meeting.

STECF further observes that the basic methodology to produce the nowcast is based on the notion of relatively stable markets, gradually evolving over time. Abrupt variations in costs, prices, and inflation, resulting in changes in market structure and in fishing fleets' strategies, are currently observed, but are ignored in the current procedure, and this has potentially large impact on the robustness of the results obtained in the nowcast.

STECF observes that a full evaluation of the Long-Distance Fleet (LDF) has not been completed in the current AER. This can partly be attributed to a methodological issue and partly to a capacity issue within EWG 22-06. As noted previously by STECF, fleet data for some segments of the LDF cannot be reported because of confidentiality concerns arising from the small size of the fleet segments involved. Additionally, the LDF operates in the jurisdiction of several RFMO's, where some

vessels cross jurisdictions even during a single fishing trip. In order to properly report for those vessels operating in more than one area, allocating catches and effort to specific areas is cumbersome and STECF notes that there was a capacity problem in EWG 22-06 that did not allow completing this task. The voluntary field "fishery" in the uploading template can be used by Member States to identify vessels of a fleet segment operating in a specific RFMO (e.g., ICCAT or IOTC), vessels operating under Sustainable Fisheries Partnership Agreements (SFPAs), which would ease the work of the EWG and lead to more robust estimates for the LDFs.

STECF observes that data quality has improved for the Outermost Regions (OMRs) although is still incomplete. Therefore, the EWG could not provide a full analysis of the OMR segments due to the lack of some indicators and incomplete time series.

Concerning the quality checking of data submitted by the Member States, STECF observes that for the 2022 JRC economic data call, although feedback was provided to Member States before AER I, the regular automatic checks (done in the database and available in Tableau) were not provided before the meeting. This was due to a shift in the system used by the JRC for data quality checks (from Tableau to QLIK). However, it will resolve this issue for future data calls.

STECF observes that providing Member States with timely feedback on data coverage is valuable, in addition to the general DTMT reporting, as it improves the quality of submitted data. In light of this, STECF observes that providing a checklist to Member States of data quality issues applied by JRC would help Member States in their (pre) checking of data quality before submission.

Concerning the storage and processing of data, STECF observes that Member States upload data to the JRC database. JRC processes these data and makes them available to the EWG by way of an Excel file. This Excel file has a very high operational time constraint. Average opening time of the file can take a long time; making changes to the file and regenerating the cells in the file also has a very long processing time requirement. STECF observes that automating procedures further, and moreover, reconsidering the data platform used to produce the AER analyses could facilitate a smoother workflow of the EWG, reducing the current time constraints.

As for additional requests, STECF observes that in recent years, new requests for the analysis of special topics have been added every year to the EWG ToRs. This year was no exception, with additional requests being added to the ToRs, representing a substantial additional workload to facilitate proper analysis and documentation in the report. This makes the completion of the AER report challenging. Noting the importance of current developments, STECF agrees that trade-offs may be required, and priorities may need to be discussed with DG Mare on the relative importance of for example of producing the nowcasts against these additional requests. Additionally, STECF observes that a number of these special requests may be dealt with outside the AER EWG through ad hoc contracts or as ToRs to the STECF Plenary.

STECF notes that with the new EU MAP some additional variables have been introduced in the data collection. STECF observes that reporting on these variables varies largely between Member States. For example, the way subsidies and support under COVID-19 measures have been dealt with is wide ranging. Some, Member States report COVID-19-related supporting measures as "Operating Subsidies", others as "Other Income" or even as social security aids as part of the crew wages. Other Member States do not report them at all. STECF observes that RCG ECON is best placed to review the variables and provide guidance to the Member States to reach a more unified approach to reporting on these issues.

Finally, STECF notes that the analyses made by the EWG 21-10 (FDI) show that there are discrepancies between the AER and FDI datasets. These discrepancies mainly relate to the naming and clustering of fleet segments, coding, and absence of data on inactive vessels in the FDI and reporting of inactive vessels.

STECF conclusions

STECF concludes that the data presented in the AER report has been validated and is fit for purpose. The EWGs have addressed the TORs and STECF endorses the AER report.

STECF concludes that for the nowcast, the methodology used for the Mediterranean and the Atlantic could be better aligned if the JRC integrates the production of the nowcasts for the Atlantic to its database in the same way as for the Mediterranean.

In order to allow for a proper analysis of the LDF, STECF concludes that more capacity and expertise is needed in the EWG. STECF supports the use of the voluntary field "fishery" in the uploading template as it would ease the work of the EWG and lead to more robust estimates.

Similar to the STECF conclusions of 2021, for the outermost regions, although improvements in the data quality have been observed, some data gaps still persist, that continue to affect the coverage of the AER and also the quality of the balance indicators of these regions.

Concerning data quality checking, STECF concludes that making available a check list and access to the quality check would facilitate Member States in improving the quality of the data submitted. This should be provided at the start of the data call. To allow for timely corrections, the data quality check report should be made available before the AER I meeting, following uploading of the economic data.

Concerning the storage and processing of data, STECF concludes that automating procedures further, and moreover, reconsidering the data platform used to produce the AER analyses could facilitate a smoother workflow of the EWG, reducing the current time constraints

As for additional special requests, STECF concludes that trade-offs may be required, and priorities discussed with DG Mare on the relative importance of certain elements of the AER (e.g., producing the nowcasts against the special requests). Additionally, STECF concludes that special requests may be dealt with outside the AER EWG through ad hoc contracts or as TORs to the STECF Plenary.

STECF points out the importance of coordination at Member State and EU level. STECF suggests for the RCGs, in coordination with JRC, to consider the organisation of a workshop to explore the allocation of vessels to fleet segments and landing and effort to métiers by Member States for both FDI and AER data calls. STECF concludes it would be beneficial to both groups to harmonise different approaches in accordance with DCF definitions, variables and data call specifications.

5.3 EWG 22-07: Evaluation of the Annual Reports for data collection and Data Transmission Failures

Request to STECF

STECF is requested to review the report of the STECF Expert Working Group meeting, evaluate the findings and make any appropriate comments and recommendations.

Background provided by the Commission

Article 11 of the Data Collection framework (DCF) Regulation (EU) 1004/2017 requires Member States to submit to the Commission an annual report (AR) on the implementation of their national work plans (WPs) and requires STECF to evaluate: (a) the execution of the WPs and (b) the quality of the data collected by the Member States. These tasks have been conferred to EWG 22-07 [ToR 1, 2]. In addition, EWG 22-07 was asked to prepare the assessment grid and evaluators' guidance for AR 2022 and onwards [ToR 3], and to check the AR 2022 Excel and Word templates for completeness, in particular the formulas in the Excel file (yellow columns) [ToR 4].

Summary of the information provided to STECF

EWG 22-07 met virtually from 20 to 24 June 2022. As there was just one week between the end of the EWG and the start of STECF PLEN 22-02, the final EWG report was not yet available to PLEN 22-02. The following STECF comments and suggestions are consequently based on discussions amongst STECF members, on a presentation of the outcomes from the EWG 22-07 meeting made by the chairs, and a preliminary draft of the EWG 22-07 report made available to STECF.

STECF comments

TOR 1: Evaluation of 2021 Annual Reports

STECF notes that the 2021 Annual Reports are the last reports to be submitted and evaluated in accordance with the Commission Delegated Decision (EU) 2019/910 and Commission Implementing Decision (EU) 2019/909.

STECF observes that the evaluation of 2021 Annual Reports (ARs) was based on the outcome from the pre-screening exercise and supporting documents such as the guidance documents for AR-WP evaluators and a stand-alone document of assessment criteria.

STECF observes that as in 2021 a two-step pre-screening exercise was carried out in which Member States were asked to address the issues spotted by the pre-screener/EWG and resubmit Annual Reports both before and during the EWG, as necessary. STECF notes that rules concerning the communication with the Member States prior to the meeting were pre-defined stating that all identified issues had to be reviewed by at least two pre-screener before the issue was sent to the Member States. Moreover, the issue types (inconsistencies, formatting issues, missing tables etc.) initiating a request to Member States for clarification or Annual Report re-submission were also defined before the pre-screening. The communication with Member States both prior and during to the EWG was thoroughly documented for future reference.

STECF observes that 26 Member States were contacted for clarification on various Annual Report sections prior to the EWG. All contacted Member States replied to the requests. Additionally, the Commission re-contacted 23 Member States during the EWG, for clarification on various Annual Report sections from which 22 Member States replied. STECF acknowledges that the two-step approach with early correspondence with Member States allowed for an efficient evaluation of Annual Reports.

STECF further acknowledges that the EWG decided to highlight in the EWG report positive examples that had been identified during the Annual Report assessment, since the effort to produce well-written Annual Reports and to submit additional information does not always come out in the standardised assessment grid.

STECF observes that the overall scores of performance levels by Member States were significantly higher compared to last year with the number of Member States receiving a compliance level score of "YES" increasing from 5 in 2020 Annual Reports to 14 in 2021 Annual Reports. The number of "PARTLY" compliance scores decreased from 3 to 1. The increase in the overall performance is in the majority of cases a result of an increase in the performance from "MOSTLY" to "YES" in the assessment of sections 1E- 1H.

STECF agrees with the EWG that the increase in the overall performance between 2020 and 2021 is primarily due to a reduction of Covid-19 related issues such as surveys not being carried out or only partially carried out. Nevertheless, STECF observes that this also reflects a continuous improvement in the process, since the overall performance scores are also substantially higher than their levels prior to the pandemic. STECF considers that the improvement in the overall performance after the pandemic compared to before is most likely due to the two-step "ping-pong" approach allowing immediate solutions of issues both prior and during the EWG. Additionally there has been a general improvement in the quality of the Member States ARs over time.

Covid-19 consequences for the data collection in 2021.

STECF observes that the Commission requested Member States to clearly highlight any deviation from the Work Plan due to Covid-19 in their Annual Reports. This was suggested by EWG 20-18 and endorsed by PLEN 21-01. Based on the input received, the EWG evaluated the Covid-19 consequences on data collection in 2021 by Annual Report modules. STECF observes that the extent of impact of COVID-19 pandemic on the sampling intensity of the biological variables and the field operations related to the collection of biological data (sections 1A, 1C, 4A, 4C) was largely country-specific, ranging from high impact to little or no impact.

STECF observes that among the difficulties that Member States have faced were the refusal of vessel owners to allow observers to embark onboard fishing vessels, travel restrictions that prevented observers accessing vessels, and the implementation of social distancing rules that affected laboratory work.

STECF observes that a similar situation was observed with Annual Report sections 1D, 1E, 1F and 1GH. For section 1D (Recreational fisheries), three Member States were impacted severely (even though nine Member States had issues with Covid-19). For section 1E (Anadromous and catadromous species data collection in fresh water), two Member States were impacted severely (even though five Member States had issues with Covid-19). For section 1F (Incidental by-catch), eight Member States identified that sampling was severely impacted. A further five Member States referred to section 4A for comments. These were not always easy to identify as relating directly to section 1F. For section 1GH (Research surveys), 11 Member States reported Covid-19 related issues.

STECF observes that due to the Covid-19 pandemic, several Member States reported that Pilot Study 3 on the collection of employment data by education type and nationality was extended and that Pilot study 4 for the collection of environmental data was not implemented.

STECF notes that the EWG did not observe any impact of Covid-19 on the implementation of WP 2021 Annual Report sections 2A (Fishing activity variables), 5A (Quality assurance framework for biological data), 7A (Planned regional and international coordination), 7B (Follow-up of recommendations and agreements) and 7C (Bi- and multilateral agreements) as reported by Member States.

STECF observes that Member States made attempts to mitigate the problems as far as practicably possible. In most cases, on-board sampling was replaced by on-shore sampling or market sampling. Additional sampling was also conducted in the time periods when lower restrictions were in place to compensate for the periods of closure. Other measures taken by the Member State included self-sampling (ITA, DNK, IRL) and the pilot use of "FishMetrics" (PRT). This is a system of automatic/remote image acquisition of landing boxes during sales.

TOR 2: Evaluation of DCF data transmission (DT) issues

STECF observes that as for the Annual Reports, the DT issues were subject to a pre-screening assessment prior to the EWG final assessment. The pre-screener were requested to run a first assessment of the issues and prepare draft comments. In order to ensure harmonisation and consistency, four EWG experts revised all issues for consistency after the sub-group assessments were finalised.

STECF observes that in total 257 DT issues, from 5 data calls in 2021 and 3 end users were reported in the DTMT. The number of DT issues was lower, compared to issues raised in the previous year (555 issues last year). However, STECF reiterates that the numbers of DT issues between years are not fully comparable. This is because the end-users may report issues at different levels of aggregation. Moreover, in some years, certain data issues are being evaluated in more depth by request of the Commission. Additionally, various EWGs may raise additional issues with respect to certain data calls. Lastly, not all end-users report data issues each year and certain data calls (e.g., Aquaculture, Fish Processing) are not issued each year.

STECF observes that 129 DT issues were related to "COVERAGE", 125 to "QUALITY" and 3 to "TIMELINESS". STECF further observes that out of the 257 DT issues, 92 issues were classified as "SATISFACTORY" and 56 as "UNSATISFACTORY". Additionally, 109 issues were assessed as "FOLLOW-UP NEEDED" as the comments from the Member State and end-user were either contradictory or the Member State comments were unclear. Issues concerning historical data acknowledged by the Member State and stated to be fixed and resubmitted were assessed as "FOLLOW-UP NEEDED". When the issue was concerning data collection and not data transmission, it was assessed as "UNSATISFACTORY".

STECF observes that 118 DT issues were reported for the Mediterranean and Black Sea of which 13 were "UNSATISFACTORY" issues. These related to failures concerning data collection and not data transmission. They were of low severity and non-recurrent.

STECF observes that for the Fleet Economics data call (60 issues in total), 26 DT Issues were "zero" values reported by Members States where confirmation was required whether the zero value is a missing value or not. These were all finally assessed as "SATISFACTORY".

STECF observes that the FDI data call resulted in 47 issues. Of these, 2 were "UNSATISFACTORY" issues as they were of high severity involving missing and erroneously reported data (coverage and quality). The other 20 issues were assessed as "SATISFACTORY".

STECF acknowledges that the EWG also made suggestions to improve the handling of DT issues by the experts and end-users. The STECF agrees that a screening of the DT Issues should continue to take place before the EWG starts, together with the pre-screening of Annual Reports.

STECF notes that objective assessment criteria for the evaluation of DT issues are crucial for an objective assessment, and it is important that the current guidelines are fit for that purpose. STECF observes that the evaluation of DT issues, as specified in the guidelines, is based on whether the work of the EWG or end-user was significantly hampered due to the data issue. In that case, the assessment rating is "UNSATISFACTORY". If the severity is low and it is a non-recurrent issue, expert judgement is relevant to assess the severity.

STECF recognises that for certain data issues there is still uncertainty as regards to the assessment criteria. STECF agrees that these issues should be further addressed in STECF plenary as was previously done in PLEN 19-01 and PLEN 21-02. In order to facilitate these discussions, the EWG drafted a decision tree that could be used as the basis for these discussions, which STECF acknowledges as a good starting point.

TOR 3: Prepare the assessment grid and evaluators' guidance for AR 2022 and onwards

STECF observes that in order to review and prepare an assessment grid and guidance for the evaluation of the Annual Reports 2022 and beyond, the EWG based its work on a draft stand-alone document for Annual Report evaluation that had been prepared by EWG 20-18. This was provided to the EWG as a background document. The EWG elaborated further on the document by addressing the following issues:

- Setting the scene for the evaluation process and the basic principles of evaluation.
- Guidance for pre-screening.
- Overview of automatic checks during submission and expert pre-screening.
- Guidance for the screening by experts for each table and text box.

STECF notes that the EWG was not able to finalise the guidance documents within the given time of the EWG. STECF agrees with the EWG that this would need to be further elaborated and finalised during the EWG 22-18 on the evaluation of National Work Plans in October 2022.

TOR 4: CHECK THE AR 2022 TEMPLATE (EXCEL AND WORD FILES)

STECF observes that ToR 4 was addressed by each sub-group during the EWG. After guidance by the focal point from MARE, priority was given to checking for inconsistencies in the formulas inserted in the Excel files. STECF acknowledges that the formulas in the Annual Report 2022 template were modified where necessary.

STECF conclusions

STECF concludes that the EWG addressed all the ToRs appropriately in the given time frame and endorses the report and the related documents. STECF suggests that the outstanding work to complete ToR 3 on the assessment grid and guidance for evaluation of the Annual Reports for 2022 and beyond be completed by EWG 22-18.

STECF concludes that the communication with Member States prior to the start of the EWG and during the EWG session (two-step "ping-pong") is a positive development in the feedback process with the Member States. This has led to a significant number of issues being identified and addressed prior to the meeting following from the pre-screening process. This early communication process allows for more time to evaluate improvements in the quality of the Annual Reports during the EWG and has also contributed to the increase in the overall performance of Member States.

STECF concludes that the extent of impact of the COVID-19 pandemic on the sampling intensity of the biological variables and the field operations, related to the collection of biological data was largely Member State specific. STECF further concludes that the pandemic affected the performance of the pilot studies, causing delays in their completion. In general, STECF concludes that the Covid-19 effects remained apparent in the 2021 Annual Reports but to a lesser degree than in 2020.

STECF concludes that all DT issues that are not marked as "SATISFACTORY" are followed up by the Commission, in communication with the Member States and end-users.

STECF concludes that suggested improvements of the guidelines for assessing DT issues should be addressed in the next autumn or spring plenary.

STECF concludes that the formulas in the Annual Report 2022 template were checked and corrected where necessary by the EWG and can be applied in the new Annual Report template.

6. ADDITIONAL REQUESTS SUBMITTED TO THE STECF PLENARY BY THE COMMISSION

6.1 Review of the ad hoc contract for MCRS for the West Med

Background provided by the Commission

Latest assessments have shown the delayed recovery of stocks in the Western Mediterranean Sea, including some of the 6 main target species under the Western Mediterranean MAP and the blackspot seabream (*Pagellus bogaraveo*) in GFCM subareas 1,2,3. Additional management measures could be considered to help kick off those stocks recovery, in particular technical measures aiming at reducing the captures of under-sized fish.

Background documents are published on the meeting's web site on: <https://stecf.jrc.ec.europa.eu/plen2202>

Request to the STECF

STECF is requested to review a report developed via an ad-hoc contract. The report is based on a synthesis review of the length at first maturity and of the corresponding minimum conservation reference size (MCRS) of key species in the Western Mediterranean Sea. The work has been conducted based on all available data, including additional information that DG MARE received from Member States, international bodies (e.g. GFCM) and stakeholders. This review aims to facilitate the recommendation work of STECF PLEN 22-02 on the values, updated if need be, of MCRS for 7 species of the Western Mediterranean Sea. For blackspot seabream, it could be looked at aligning with the MCRS recommendation in the Atlantic stocks of ICES zones 6-7-8 and 9-10 and see if a distinction between MCRS for commercial and recreational fisheries could not be considered.

STECF is requested to evaluate the findings and make any appropriate comments and recommendations.

Summary of the information provided to STECF

STECF PLEN 22-02 was provided with the report of an ad-hoc contract concerning "*length at first maturity (L50%) and corresponding Minimum Conservation Reference Size of key species in the western Mediterranean Sea*". The ad-hoc contract had the following Terms of Reference:

1. Collate and analyse all data available (fisheries dependent and non-fisheries dependent) to review the length at first maturity of each of the 7 species, taking into account males/females and subregions if necessary.
2. After the above, the contractor shall draft a short report (20-page max) including clear recommendation, based on all available literature, on the efficiency of the existing MCRS to support stock recovery and the relevance of updating and if needs be adopting MCRS values for each species. It could also be discussed if a differentiation in MCRS between commercial and recreational fisheries would be relevant for some species.

Information was requested for the following species:

- Blue and red shrimp (*Aristeus antennatus*), in particular in GFCM subareas 1, 2, 5, 6 and 7.
- Deep-water rose shrimp (*Parapenaeus longirostris*), in particular in GFCM subareas 1, 5, 6 and 9-10-11.
- Giant red shrimp (*Aristaeomorpha foliacea*), in particular in GFCM subareas 8-9-10-11.
- European hake (*Merluccius merluccius*), in particular in GFCM subareas 1-5-6-7 and 8-9-10-11.

- Norway lobster (*Nephrops norvegicus*), in particular in GFCM subareas 5, 6, 9 and 11.
- Red mullet (*Mullus barbatus*), in particular in GFCM subareas 1, 5, 6, 7, 9, 10 and 11; and
- Blackspot seabream (*Pagellus bogaraveo*), in particular in GFCM subareas 1,2,3.

The ad-hoc contract report provides a review of the current MCRS in the Mediterranean as established by the European Union (EU) and by the General Fisheries Commission for the Mediterranean (GFCM). It also contains information on size at first maturity (L50%) collated for each of the selected species, accounting for differences between sexes and areas where relevant. Based on the collated values of average size at first maturity, the report suggests potential MCRS for each species.

The information provided in the ad-hoc contract was obtained from three main data sources:

- The FAO Atlas of the maturity stages of Mediterranean fishery resources by Follesa and Carbonara (2019).
- Size at maturity from Fishbase (<https://www.fishbase.se/>) for fishes and from SeaLifeBase (<https://www.sealifebase.ca/>) for crustaceans.
- Maturity ogives in the western Mediterranean from the Data Collection Framework (DCF).

All the information compiled for each species in the specified GSAs was included in the report in the form of annexes. For blue and red shrimp and giant red shrimp, size at first maturity from other Mediterranean areas was also collated. However, maturity ogives for these two species in the Central and Eastern Mediterranean Sea collected under the DCF were not available for the ad-hoc contract. These data were made available to STECF PLEN 22-02 and were analysed and compared to the rest of the data during the meeting.

The main results of the ad-hoc report regarding ToR1 - data collation and analysis - are summarised below, while discussions on ToR2 – MCRS - are integrated into the STECF comments section.

1) Blue and red shrimp (*Aristeus antennatus*) in GSAs 1, 2, 5, 6 and 7.

Size at first maturity for blue and red shrimp is reported in terms of the carapace length (CL). This species has different sizes at first maturity by sex, being larger for females.

In GSAs 1, 2, 5, 6 and 7 (western Mediterranean) the L50% for females from the scientific literature and from the DCF maturity ogives within the size range 21-29 mm. In the most recent years, L50% from the DCF maturity ogives has been around 24-28 mm. Therefore, L50% for females in this subregion is assessed to be in the range 25-30 mm.

For comparison purposes, size at first maturity values from other subregions in the Mediterranean Sea were also collated. In the central Mediterranean, the L50% for females from the scientific literature is very wide (25-35 mm CL). The L50% for females derived from maturity ogives is in the range 22-30 mm. In the eastern Mediterranean, the L50% for females from the scientific literature is around 29.5 mm. These values are in accordance with the size at first maturity in the western Mediterranean. Nevertheless, the L50% for females from the DCF in the eastern Mediterranean is around 36 mm, the largest reported L50%.

2) Deep-water rose shrimp (*Parapeneaus longirostris*) in GSAs 2, 5, 6 and 9-10-11.

Size at first maturity for deep-water rose shrimp is based on carapace length (CL) and combined for both sexes in GSAs 1, 5 and 6 but only for females in GSAs 9, 10 and 11.

In the scientific literature, L50% values have been reported in the size range of 20-25 mm in GSAs 6 and 9 and 26-28 mm in GSA 10. From the DCF maturity ogives, L50% is in the

range of 16-28 mm in GSAs 1, 5 and 6, 16-26 mm in GSA 9, 18-27 mm in GSA 10 and 18-23 mm in GSA 11. Additionally, since 2014, a gradual decrease of L50% has been observed in GSA 6. The current MCRS (20 mm) is in line with L50% in GSAs 9 and 11, but it is smaller than the reported L50% in GSAs 1, 5, 6 and 10.

3) Giant red shrimp (*Aristaeomorpha foliacea*) in GSAs 8-9-10-11

Size at first maturity for giant red shrimp is based on CL and differs for both sexes, being larger for females than for males.

Based on the literature, the L50% for females is in the size range of 35.5-45 mm in GSA 9, 34-41 mm in GSA 10 and 35-40 mm in GSA 11. L50% values from the maturity ogives are consistent with previous studies, that indicated L50% around 35-40 mm. In general, L50% values are in the size range 35-40 mm.

For comparison purposes, size at first maturity values from other subregions in the Mediterranean Sea were also collated. In the central Mediterranean, the L50% for females from the scientific literature is between 40 and 42 mm in GSA 16. The L50% for females derived from maturity ogives are in the range 32-39 mm. In the eastern Mediterranean, the L50% for females from the scientific literature is between 38 and 44 mm, while from the DCF, the L50% for females is within the 35-40 mm range. These values from the maturity ogives are in accordance with the size at first maturity in the western Mediterranean.

4) Hake (*Merluccius merluccius*) in GSAs 1-5-6-7 and 8-9-10-11

Size at first maturity for hake is based on total length (TL) and differs for both sexes, being larger for females than for males.

Based on the information from the scientific literature, L50% for females lies in the range 34-43 cm. In general, the older the scientific reference, the larger the reported L50%. In females, in GSA 5, L50% corresponds to 36 cm, the same as in GSA 6, according to a detailed study on species reproduction. In GSA 7, according to more recent referenced studies, L50% is larger at 38-39 cm, while in GSAs 9 and GSA 10, it is reported as slightly smaller at 35 cm in GSA 9 and 34 cm in GSA 10. Finally, L50% has been estimated at 33 cm for GSA 10 and 30 cm for GSA 11. Overall, the L50% for females is different by GSAs, averaging around 36 cm.

Data from the DCF indicates large interannual variations (23-42 cm) in the combined L50% in GSAs 1, 5 and 6, while the L50% for females are 30-33 cm in GSA 7, 23-36 cm in GSA 9, 26-33 cm in GSA 10 and 26-37 cm in GSA 11. All these values are much larger than the current MCRS of 20 cm.

5) Norway lobster (*Nephrops norvegicus*) in GSAs 5, 6, 9 and 11

Size at first maturity for Norway lobster is based on carapace length (CL). Although males attain larger sizes than females, maturity in males is rarely mentioned in reproduction studies and therefore, no differences between sexes were considered in the analysis.

Scientific studies report L50% values of around 30-36 mm in GSAs 1, 6, 9 and 10 and around 27-28 mm in GSA 9. Information from the DCF points to L50% of around 22-29 mm in GSA 9, 25-31 mm in GSA 10 and 25-32 mm in GSA 11. There has been a decrease in L50% observed in recent years. These values are larger than the current MCRS of 20 mm CL.

6) Red mullets (*Mullus spp.*) in GSA 1, 5, 6, 7, 9, 10 and 11

Size at first maturity for red mullets is based on total length. Given that size at first maturity is similar between females and males (slightly larger in females), no differences by sex were considered in the analysis.

Scientific studies report L50% between 10 and 13 cm in the different GSAs. From the DCF maturity ogives, L50% is the size range of 11-12 cm in GSA 1, 12 cm in GSA 5, 10-14 cm in GSA 6, 8-12 cm in GSA 7, 10-13 cm in GSA 9, 10-12 cm in GSA 10 and 11 cm in GSA 11. The MCRS of red mullet for the Mediterranean (11 cm) falls within the size range of the L50% for females and therefore, current MCRS (11 cm) is consistent with the biological information compiled.

7) Red seabream or blackspot seabream (*Pagellus bogaraveo*) in GSAs 1, 2 and 3

Size at first maturity for blackspot seabream is based on total length. Given that this is a protandric hermaphrodite species (male-first sex-changing species), the overall mature population sex ratio is expected to be highly male-biased and the calculation of the size at first maturity should consider the length at sexual inversion.

In the benchmark sessions for the assessment of blackspot seabream in GSAs 1-3 (Alborán Sea) organised by the GFCM SAC Working Group on Stock Assessment of Demersal Species (WGSAD) in 2019-2020, the length at sexual inversion (from male to female) was estimated at 34.61 ± 0.9 cm with the L50% for females being around 35 cm. The two MCRS applicable in the Alborán Sea (33 cm in Reg (EU) 2019/1241 and 30 cm in Resolution GFCM/44/2021/2) are smaller than the estimated length at sexual inversion.

STECF comments

Current MCRS

STECF notes that Regulation (EU) 2019/1241 establishes MCRS in the Mediterranean Sea for five of the seven species covered by the ad-hoc contract (deep-water rose shrimp, hake, Norway lobster, red mullet and blackspot seabream). Similarly, Resolution GFCM/44/2021/2 on the definition of a minimum conservation reference size for priority stocks in the Mediterranean, establishes MCRS for the same five species, in relevant subregions. The MCRS values by species and subregions as established in Regulation (EU) 2019/1241 and Resolution GFCM/44/2021/2 are shown in Table 6.1.1.

STECF observes that the MCRS values in both Regulations are the same, except for blackspot seabream that has a MCRS of 30 cm in the Alboran Sea and 33 cm in the rest of Union waters.

STECF observes that according to Resolution GFCM/44/2021/2, the GFCM Scientific Advisory Committee on Fisheries (SAC) is requested to develop a methodology for establishing the best scientific basis for proposing MCRS for the priority species in the Mediterranean Sea and propose an updated list of MCRS by no later than 30 June 2022. STECF met shortly after that deadline and did not have access to documents in relation with this resolution and could thus not take this into account in its comments.

STECF observes that no MCRS are currently established for two species in the ad-hoc contract (red and blue shrimp and giant red shrimp), despite being among the main target species contained in the Western Mediterranean multiannual management plan (Regulation (EU) No 2019/1022).

STECF has previously addressed similar requests on the blackspot seabream MCRS in the Atlantic. In 2016 a dedicated expert working group on Minimum conservation size for red seabream (STECF EWG 16-09) was conducted. The EWG concluded that:

"The blackspot seabream is a male-first sex-changing and slow growing species. Growth and maturity have been studied to various extents in the different stocks in the Atlantic and Mediterranean. Some differences have been observed across the various stocks, but it cannot be

ascertained whether these reflect real biological differences across stocks or bias linked to the different methods used.

The size at which >50% of females are mature is estimated to be 36 cm total length in the Atlantic for the two stocks in areas VI, VII, and VIII and in area IX. This is slightly above the size of 33 cm suggested. 33 cm corresponds to the mean size at sex change to female. Additionally, because of the hermaphroditism of the species, the size at which 50% of the total population are mature female is even larger (40 cm) than the size of 50% maturity of females. Therefore, 33 cm cannot be considered an appropriate MCRS from a biological point of view in areas VI, VII, and VIII and in area IX."

STECF considers these conclusions are still valid, as previously reiterated when evaluating additional conservation measures for the species in the Atlantic area (e.g., STECF PLEN-19-01 and PLEN-19-03). Given that no real biological differences have been found between the Atlantic and Mediterranean stocks, the potential MCRS for blackspot seabream in GSAs 1, 2 and 3 could be set at 40 cm as proposed in the Atlantic area.

STECF notes that with the available biological information, it was not possible to make any distinction between MCRS for commercial and recreational fisheries for blackspot sea bream.

Generic considerations on MCRS

STECF recalls that in the Common Fisheries Policy (CFP Basic Regulation (EU) No 1380/2013, Art 4.17), MCRS is defined as "*the size of a living marine aquatic species taking into account maturity, as established by Union law, below which restrictions or incentives apply that aim to avoid capture through fishing activity*". In Art. 13 of the Technical Measures Regulation (Regulation (EU) 2019/1241), it is further specified that the purpose of an MCRS is to ensure the protection of juveniles, as well as in establishing fish stock recovery areas and constituting minimum marketing sizes.

STECF observes that the candidate MCRS values proposed in the ad-hoc contract report were solely based on the size at first maturity (L50% or size at which 50% of the individuals are mature). When the size at first maturity was different by sex, the MCRS was based on the largest value to allow first maturation of individuals of both sexes (including those that mature at larger size). Similarly, when size at first maturity differed by GSAs, the proposed MCRS was based on the largest value in the Western Mediterranean subregion.

STECF acknowledges that setting appropriate MCRS values based on biological considerations is in itself not sufficient to achieve the stated objectives (e.g., to ensure reduced mortality of juveniles or to aid the recovery of stocks), if it is not supported by supporting management measures.

STECF observes additionally that according to Art 15 of the CFP, all species with MCRS in the Mediterranean Sea are subject to the landing obligation. The multiannual plan for demersal stocks in the Western Mediterranean Sea (Regulation (EU) No 2019/1022) also aims at contributing to the implementation of the landing obligation for species subject to MCRS. In this context, STECF observes that, STECF EWG 14-01 provided guidelines for setting appropriate MCRS in the transition from minimum landing sizes as required under Art. 15 of the CFP.

Based on the observations of EWG 14-01, STECF observes for species caught in gears/fisheries with high survival if discarded, MCRS can be a valuable management tool, whereas if discard survival is low, an increased MCRS could rather lead to an increase of unwanted catches unless the selectivity is adjusted accordingly. EWG 14-01 also observed that increasing or decreasing MCRS or implementing it for the first time could lead to unintended consequences such as a decreased incentive for correct catch reporting with the subsequent risk for increased fishing mortality, effort displacement or negative economic impacts for the relevant fleet. Therefore, STECF reiterates the conclusions of EWG 14-01 that the impact of candidate MCRS should be assessed from a broader

perspective rather than solely based on biological considerations. In this regard, STECF notes also that the ToRs of EWG 22-19 on Review of the Technical Measures Regulation include the identification of the optimal ages and sizes at which fish should be caught, and the identification of the corresponding fishing gears, beginning with the Mediterranean hake case study for which the highest gains are expected (see section 7.3 of this report).

Size at first maturity with respect to current MCRS

STECF notes that, as described above, the ad-hoc contract report provides a comprehensive review of size at first maturity of the seven selected species based on data from scientific literature and from DCF. STECF endorses the methodology used in the ad-hoc contract report and the various values of size at first maturity obtained for each species.

Based on the ad hoc contract, STECF notes that from the seven species, one (red mullets) is considered to have current MCRS aligned with the size at first maturity values, four species (deep-water rose shrimp, hake, Norway lobster and blackspot seabream) are considered to have a current MCRS lower than the size at first maturity, while for two species (blue and red shrimp and giant red shrimp) no MCRS currently exists in legislation. This is summarised in Table 6.1.1.

Table 6.1.1: MCRS by species and subregions as established in Regulation (EU) 2019/1241 and Resolution GFCM/44/2021/2 and size at first maturity in the Western Mediterranean Sea from the ad-hoc contract report. TL refers to total length and CL to carapace length.

	Reg (EU) 2019/1241	Resolution GFCM/44/2021/2					Suggested L50% in Western Mediterranean from ad-hoc contract report	L50 in Western Mediterranean against current MCRS
		EU waters	All Mediterranean	Adriatic Sea	Alboran Sea	Strait of Sicily		
Blue and red shrimp	-	-	-	-	-	-	25-30 mm CL	No MCRS currently
Deep-water rose shrimp	20 mm CL	20 mm CL		20 mm CL		20 mm CL	≥ 25 mm CL	L50% > MCRS
Giant red shrimp	-	-	-	-	-	-	35-40 mm CL	No MCRS currently
Hake	20 cm TL	20 cm TL	20 cm TL				36 cm TL	L50% > MCRS
Norway lobster	20 mm CL 70 mm TL	20 mm CL 70 mm TL		20 mm CL 70 mm TL			25-30 mm CL	L50% > MCRS
Red mullets	11 cm TL	11 cm TL		11 cm TL			11 cm TL	L50% = MCRS
Blackspot seabream	33 cm TL	33 cm TL			30 cm TL		40 cm TL	L50% > MCRS

STECF notes that the various estimates on size at first maturity were obtained from different data sources. This might sometimes entail differences in the underlying methodology, in the maturity scales, the sampling method and the sampling period. This level of detail was not considered in the analysis, but it may explain part of the uncertainty observed in some GSAs as well as some of the differences observed across years and GSAs.

STECF observes that maturity ogives from the DCF indicate a decreasing trend over time of first size at maturity for some species and GSAs. In these cases, overall sizes at first maturity were based on the most recent values. However, these trends could reflect phenotypic responses to some environmental variations or evolutionary consequences of selective pressures, such as fishing effort, and would need to be further investigated.

STECF conclusions

STECF concludes that the ad-hoc contract provides a comprehensive review of size at first maturity of the seven selected species considering differences by sex and subregions where relevant.

STECF concludes that the current MCRS for red mullet species is aligned with the range of size at first maturity values (L50), while current MCRS for deep-water rose shrimp, hake, Norway lobster and blackspot seabream are substantially lower than the range of L50 collated in the ad-hoc contract. For blue and red shrimp and giant red shrimp there is currently no MCRS in legislation.

STECF reiterates its previous conclusions that amending current MCRS would have wide implications, and this should be assessed including broader considerations than biological estimates alone, including gear selectivity in the fishery and the market situation.

Therefore, STECF concludes that for most of the species covered under the ad hoc contract such considerations need to be weighed against the unintended consequences that may occur if MCRS were to be aligned with size at first maturity without other appropriate management measures being taken in parallel.

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6.2 Review of the ad hoc contract for the 800m ban

Background provided by the Commission

In the Mediterranean Sea, the use of towed dredges and trawl nets at depths beyond 1.000 meters has been prohibited since 2005⁹. Several trawling fisheries exist in the Mediterranean that target deep-water shrimps, notably giant red shrimp (*Aristaeomorpha foliacea*) and blue and red shrimp (*Aristeus antennatus*). The depth range distribution of both species is estimated to go down up to several thousand meters, however, fishing grounds are normally above 800 meters¹⁰. In the context of the EU Green Deal and 2030 Biodiversity Strategy, extending the existing deep closure areas could be considered based on best available scientific advice.

Background documents are published on the meeting's web site on: <https://stecf.jrc.ec.europa.eu/plen2202>

Request to the STECF

STECF is requested to review a report developed via an ad-hoc contract and including simulations as a complementary work to the report from STECF EWG 22-01 on deep-water closure areas and previous studies looking at spatial measures to increase conservation of deep-water habitats. The report summarizes the biological (F, SSB, recruitment etc.) and socio-economic (gross profit margin, jobs etc.) impacts of an extension of the existing ban of fishing activities from 1000m to 800m and to 600m depth in the Western Mediterranean (GSAs 1,2,5,6,7,8,9,10,11).

STECF is requested to evaluate the findings and make any appropriate comments and recommendations.

Summary of the information provided to STECF

STECF was provided with an ad-hoc contract report presenting a simulation study conducted to estimate the efficiency of closure of marine areas deeper than 600m in depth and 800m in depth in the Western Mediterranean Sea (GSAs 1, 2, 5, 6, 7, 8, 9, 10, 11). The simulations are intended to evaluate whether these closures would improve the stock status of two deep-sea shrimps (red shrimp *Aristaeomorpha foliacea* (ARS), and blue and red shrimp *Aristeus antennatus* (ARA)), together with quantifying the possible socioeconomic effects of such closures on the affected fishing fleets.

The simulation study was conducted with the bioeconomic BEMTOOL model (Rossetto et al. 2015, Russo et al. 2017). This model has been routinely used by STECF since 2019 for projecting stock status and fleet economics in EMU2 (effort management unit 2, GSAs 8-11) during the suite of STECF EWGs dedicated to the West Med MAP. The BEMTOOL model is not spatially-explicit but handles the spatial dimension implicitly by conditioning different fishing patterns for different fleets fishing in different areas. The latest stock assessment data has been inputted into the model and it has been extended to include EMU1 (GSAs 1-7). Additionally, the study has conditioned the model with some existing or new data, as follows:

1. Data from the Global Fishing Watch (<https://globalfishingwatch.org/>; Kroodsma et al. 2018) providing fishing effort distribution data in the West Med in the form of daily fishing effort (in hours) binned at 0.01-degree resolution by vessel, aggregated by flag state and gear type for the years 2018-2020. This data was used to identify the proportion of the effort per

⁹ Recommendation GFCM/2005/209/1.

¹⁰ See literature review in GFCM. 2019. Report of the Working Group on Marine Protected Areas (WGMPA), including a session on essential fish habitats (EFH).

GSA area and depth strata fished by the different fleets simulated in the model. Approximately, 71% and 83% of the vessels declared in the EU Fleet register in ports of West Med EMU1 and EMU2, respectively, using trawl gears in GSA 1, 6, 7, 9, 10 and 11 and >12m were considered by the analysis. Missing vessels in the analysis are those for which it proved impossible to allocate effort data due to the absence of Maritime Mobile Service Identity (MMSI) codes usually found on vessel traffic websites, such as Marine Traffic (<https://www.marinetraffic.com/>) and Vessel Finder (<https://www.vesselfinder.com/>). In the BEMTOOL conditioning, the effort per fleet is also used to split the recorded fleet-specific landings of the FDI data to the identified fishing grounds (procedure described in Russo et al. 2017).

2. Data for creating maps of nursery and spawning grounds of the two deep-sea shrimp species ARA and ARS were obtained from the MEDISEH survey analysed in Giannoulaki et al. (2013) and Colloca et al. (2015).
3. Fleet selectivity (length at first capture by species and fleets), which is already informed in the BEMTOOL default conditioning for deducing the species-specific exploitation pattern, was further used to simulate the effect of the spatial closures. Firstly, the spatial fleet-based effort distribution was overlapped with the species distribution maps to deduce the fishing grounds and the effort proportions by fleet on these grounds. For ARA, only the information on spawning grounds was available, because no overlap of historical effort with assumed hotspots of shrimp recruits were identified. Secondly, the fleet selectivity in the BEMTOOL was altered to translate a change (increase) of the length at first capture (in nursery areas). Assuming no effort in the spawning grounds proportionally shapes the exploitation pattern of the target species by GSA and fleet (similar to the approach applied in EWG 19-14 and 21-13) for the two shrimp species.

Based on this model conditioning, the simulation outcomes with the BEMTOOL anticipate that the effect of closing >800m or >600m will yield only a modest increase in the spawning biomass (SSB) of the two shrimp species, reduce fishing mortality (F), and affecting the yield and revenues by fleet segments. This is particularly the case in EMU1 where the reductions in revenue in 2025 and 2040 are between 0-7% for the different GSAs, as shown in Table 6.2.1. The impact on revenues by 2040 with a closure of areas >600m are more pronounced (e.g., 14% for GSA11_DTS_VL2440 by 2040) in the EMU2, as shown in Table 6.2.2.

Table 6.2.1. Simulated % change in revenues compared to baseline revenue of ARA in EMU1 by using trawl gear according to the different scenarios on closed areas (>800m and >600m deep areas) at the time horizons of 2025 and 2040 (disclaimer: preliminary results).

Revenues (ARA)	Baseline	Closure	Closure	Baseline	Closure	Closure
	revenue (Euro)	>800m deep	>600m deep	revenue (Euro)	>800m deep	>600m deep
	2025	2025	2025	2040	2040	2040
ESP_GSA1_DTS_1824	1324666	-3%	-3%	1284252	0%	0%
ESP_GSA1_DTS_VL1218	402006.4	-3%	-1%	389742	0%	+1%
ESP_GSA1_DTS_VL2440	819490.6	-4%	-7%	794489	0%	-5%
ESP_GSA6_DTS_VL1218	262876.5	-6%	-3%	255241	-2%	-5%
ESP_GSA6_DTS_VL1824	4974185	-6%	-3%	4829713	-2%	-6%
ESP_GSA6_DTS_VL2440	7953029	-6%	-4%	7722039	-2%	-7%
FRA_GSA7_DTS_VL1824	93719.49	+2%	+6%	90997	+6%	+5%

FRA_GSA7_DTS_VL2440 745793.8 +2% +6% 724133 +6% +5%

Table 6.2.2. Simulated % change in revenues compared to baseline revenue of ARA and ARS pooled made in EMU2 by fleet segments using trawl gear according to the different scenarios on closed areas at the horizons 2025 and 2040 (disclaimer: preliminary results).

Revenues (ARA-ARS)	Baseline revenue (Euro)	Closure >800m deep	Closure >600m deep	Baseline revenue (Euro)	Closure >800m deep	Closure >600m deep
	2025	2025	2025	2040	2040	2040
	GSA10_DTS_VL1218	3766553	0%	+9%	3720687	+2%
GSA10_DTS_VL1824	5163874	0%	+7%	5101454	+2%	+9%
GSA10_DTS_VL2440	697258	0%	-4%	689881	+2%	-2%
GSA11_DTS_VL1218	671592	+1%	0%	677733	+1%	+1%
GSA11_DTS_VL1824	1800352	+1%	+2%	1826337	+1%	+2%
GSA11_DTS_VL2440	6241379	0%	-15%	6244827	+1%	-14%
GSA9_DTS_1824	1321633	+2%	+8%	1343581	+1%	+8%
GSA9_DTS_VL1218	1179753	+2%	+8%	1204080	+1%	+7%
GSA9_DTS_VL2440	23512	+2%	+9%	23996	+1%	+9%

STECF comments

STECF understands the DG MARE request for the ad-hoc contract was meant as a preliminary analysis of the potential impacts of extending the current restriction to trawling in areas deeper than 1000m (as defined by Art.4.3 in MEDREG, Council Regulation (EC) No 1967/2006) to areas deeper than 800m or 600m. This represents an effort to align for the West Med the requirement defined in Regulation (EU) 2016/2336 currently enforced in the North-East Atlantic. The restrictions in the deep-sea access regulation 2016/2336 aim to protect Vulnerable Marine Ecosystems (VMEs). STECF acknowledges that such a move towards restricting bottom trawling in the West Med represents a step forward in preserving vulnerable habitats and biodiversity hotspots that are often found in deep-sea waters (e.g., >800m deep).

STECF underlines the comprehensive modelling work carried out by the contractor to address the ToRs in a very limited time. This involved expanding and fitting an existing model to new data and running several simulations. STECF further acknowledges the efforts made by the contractor in making use of available data to reconstruct the proportion of fishing effort per fleet and area that target the two deep-sea shrimp species present in the West Med.

STECF acknowledges that the approach adopted in the ad-hoc contract is aligned with the approaches previously used in STECF EWGs (e.g. EWG 22-01). It represents an improvement in the modelling of the shrimp populations as one single fisheries model now encompasses the entire West Med area (both EMU1 and 2), while BEMTOOL was previously only used in EMU2. The model is also able to estimate closure effects based on finer data aggregations than FDI spatial data. Hence, similarly to STECF EWG 22-01, the spatial FDI data on effort and landings has been disaggregated on a finer geographical scale based on the publicly available and finely resolved AIS data. This has potential to refine the description of fishing effort in space and time compared to logbook information or FDI data. This has been demonstrated by a recent study similarly focusing

on measuring the footprint of "high-risk fishing" in existing European MPAs (Perry et al. 2022), even if AIS data are by nature not as comprehensive as VMS data.

Nevertheless, STECF has some concerns about the robustness of the outcomes presented in the ad-hoc report. These relate both to difficulties in understanding aspects of the modelling and interpreting the results accordingly due to the relative short-time period to carry out the simulations and produce the report. STECF further highlights that there are some sensitive modelling choices and assumptions made with potentially high impact on the outcomes from the simulations, that warrant further investigation. These comments are detailed below. STECF's general perception is that this work, although commendable and comprehensive, is still at a preliminary stage, and the results presented should not be used in their current format for defining management measures.

Effort data

STECF observes that effort data are only presented in relative terms in the report. Absolute values are not presented, making it difficult to assess the actual importance of the fisheries in the deep-sea areas. For example, the percentage of overlap of the fishing effort with spawning or nursery hotspot areas appears very low, apart from ARA in GSA1, 10 and 11. It is unclear to STECF whether the absolute effort is also low in these areas, and whether these areas make up a significant proportion of the total effort for the affected fleets (Table 6.2.3). STECF also notes that the level of effort in the >800m or >600m areas that overlap juvenile and/or spawning hotspots used to derive the impacts in the simulation tool is also unclear.

STECF considers that a comprehensive description of the data content and the current state of the fisheries would improve the readability of the ad-hoc report and the interpretation of the outcomes. Such information would help identify and quantify the magnitude of the effects on the possible affected fleet segments exploiting the deep-sea areas in the West Med.

STECF observes that the ad-hoc contract contains maps showing fishing effort in areas >800m in the West Med. This leads the simulations to show potential economic effects of a fishing ban at that depth. These maps are produced from Global Fishing Watch interpreting AIS data. STECF has discussed these findings extensively and has some reservations as to whether bottom trawl fishing would take place beyond 800m depth, accepting there may be differences across GSAs. The deeper, offshore distant fishing grounds are only reachable by larger vessels due to operational issues related to fishing safely at such depths (e.g., winch capacity and power, length of trawl warps to be carried) as described by Maynou et al. (2006). The presence of seafloor areas unsuitable for trawling (e.g., steep slopes along the canyons, and rough ground at the bottom of canyons) at such depths naturally limit trawling at such depths. STECF further observes that, despite some geographical differences in the Mediterranean, the biomass of red shrimps has been found to be highest around 600-700 m depth, with a decreasing pattern below that depth (Cartes et al., 2009; Guijarro et al., 2019).

Additionally, it is unclear to STECF whether the Global Fishing Watch data can distinguish the activities of vessels with multiple fishing licenses (e.g., between pelagic and bottom trawling). This implies that fishing effort may be assigned to the wrong gear category in the simulation. The extent to which AIS data used includes pelagic longline fisheries, which by their nature have no impact on the seafloor but take place in areas >800m is not described or separated from the analysis.

Therefore, STECF considers that some uncertainties remain on whether the AIS data used for the simulations is truly related to deep sea bottom trawling. STECF suggests that these assumptions be verified by performing additional analyses involving national VMS data coupled to logbook data whenever possible, to assess the robustness of the simulations.

Table 6.2.3. Percentage of overall fishing effort distributed over the nursery/spawning grounds of ARA and ARS by GSA below 800 m and below 600 m in depth.

%	Nursery ARS	Spawning Grounds ARS	Spawning Grounds ARA
Area		Below 800 m	
GSA1	NA	NA	1.1
GSA6	NA	NA	0.3
GSA7	NA	NA	0
GSA9	0	0	0
GSA10	0	0	0
GSA11	0.26	0.25	0.25
Area		Below 600 m	
GSA1	NA	NA	9.6
GSA6	NA	NA	1.6
GSA7	NA	NA	0
GSA9	0	0	0
GSA10	4.9	3.9	6.1
GSA11	8.7	9	9.24

Effort reallocation and fleet dynamics

STECF observes that the BEMTOOL model is not a spatially-explicit model, an individual vessel-based model, or a multi-species dynamic model. Therefore, the approach can only simulate the effect of a closed area by assuming a change in fleet selectivity applied to the two deep-sea shrimp populations. STECF acknowledges that such an assumption is sufficient for predicting the short-term effects (i.e., 1-2 years), even when assuming fishing effort and operating costs remain constant in the simulations. However, ignoring spatial dynamics, fleet capacity changes or effort reallocation as well as changes in gear use and selectivity, renders the projections largely uninformative over longer term horizons (i.e., beyond 1-2 years). STECF observes that understanding and accounting for fleet behaviour is particularly important in the case of this deep-water fishery that has shown rapid changes and adaptation to fishing patterns in recent years. STECF observes that the large historical observed variability in fishing effort in the fishery is not reproduced in the current simulations. This is likely a sign of key drivers being missed in the simulated fleet dynamics.

STECF recalls that by not using spatially explicit dynamic models for testing closure effects on fishing activities, ignores the effects of displacement of fleet effort, spatially and temporally on both

stock dynamics and socioeconomics. Examples of such effort displacement are described in recent STECF work including:

- The seasonal closures of bottom trawlers in part of the GSA 7 area (STECF PLEN 19-03, ToR 6.4).
- The adoption of trawl closures in GSAs 9, 10, and 11 leading to an increase in fishing pressure on hake sub-adults and adults (STECF 20-01, ToR).
- Displacement of the gillnet fishery in Kattegat areas where there is an increasing incidence of sensitive species bycatch (STECF PLEN 21-01, ToR 6.6).
- Displacement in West Med closed areas toward other gears, species and habitats (STECF PLEN 21-02, ToR 6.2); and
- Decreasing catch rates for the targeted species outside the Celtic Sea Protection Zone (STECF PLEN 21-03, ToR 5.8).

STECF underlines that, because the approach presented in this report does not account for effort displacement, the analysis is likely to overestimate both the economic negative impacts. It is also likely to overestimate the conservation benefits of the future management scenarios by assuming that all the impacted fishing landings weight and value would be lost and not displaced to compensate for the loss in fishing opportunities by shifting areas or target species.

STECF reiterates that, as described in the guidelines developed in PLEN-21-03 (ToR 6.4), this effect is of paramount importance to account for effort displacement. On this basis, STECF observes that the work presented in the ad-hoc contract should only be considered as a preliminary exploratory study, and the results should not be overinterpreted. STECF suggests that future work to examine trade-offs in management scenarios to include the effects of displacement in the evaluation (e.g., Bastardie et al. 2020) and the possible ecological effects with multi-species considerations (e.g., Tecchio et al. 2013) should be carried out.

STECF recalls that to minimise effort re-allocation effects, area restrictions are best accompanied by other management measures such as an effort reduction for the targeted fisheries to limit an increase in the fishing footprint in the remaining opened areas. The simulations could for example include the current effort reduction regime included under the West Med plan (EU Reg 2019/1022) since 2019, which aim at reaching FMSY by 2025 for all species covered by Art. 1 of Regulation (EU) 2019/1022.

Other economic assumptions

Beyond the two main sources of concern described above, STECF notes several other issues in interpreting the simulations results and limitations in the data and model used in the ad-hoc contract. STECF acknowledges that these limitations are not necessarily specific to the present ad-hoc contract but are important to bear in mind for future simulation exercises.

Based on the simulations, STECF observes that the revenue derived from landings of the two shrimp species was found to be largely unaffected by the area closures >800m, even though some fishing is assumed to take place and biomass increases have been forecasted in the simulations. This may be also because the simulations assume price elasticity, where higher price compensates for reduced landings. STECF notes that some of the economic results from the simulations remain difficult to interpret (e.g., the simulations suggest a loss of revenue of up to 14% for GSA11_DTS_VL2440 in EMU2 if <600m, but a gain of 1% if <800m; Table 6.2.2), because of these interdependencies between biomass, landings and revenues affecting some fleets more than others.

STECF observes that the possible socioeconomic effects of such area restrictions have not been fully investigated. They would require additional modelling and analysis to provide estimates of the possible changes to the operating costs of individual vessels' or on the number of FTEs involved in

the impacted fisheries, especially when the simulations are running until 2040. The likelihood that capital and labour productivity would be affected relates to the extent to which vessels depend on deep-sea stocks other than shrimp and the possibility of redirecting effort to other fisheries.

STECF notes that for both EMUs, the study assumed that employment remained constant in all scenarios. As the simulations relate to only the two deep-sea shrimp species, the total landing and revenue for other species were assumed to change proportionally with the landings of shrimp. STECF notes this is an unrealistic assumption. It is also apparent that the present simulations address the potential socioeconomic effects only superficially and is restricted to anticipating changes in the Gross Value Added (GVA), assuming the fleets do not react to changes implemented in the different scenarios. STECF observes that many economic indicators rely on the calculation of opportunity costs, and knowledge of crew numbers and personal costs. STECF understands that this information was not available to the contractors. Therefore, no analysis of the capital productivity from affecting fleets or the labour productivity and number of FTEs has been provided in the ad hoc contract as had been requested by DG MARE.

STECF notes that seasonality in fishing effort allocation or seasonal occurrence of the relevant species was not simulated. In the West Med, seasonal effects are known to drive fisheries dynamics and the economic revenue alternating between several species within a given year (Russo et al. 2017).

STECF observes that the spatial resolution of the economic data remains a generic issue to all evaluations of the economic impact of closed areas. The mismatch between economic data and the resolution of fishing effort data for some countries, as well as the approach to estimating the spatial value of landings may differ across countries. Furthermore, STECF observes that there were incompatibilities between the Global Fishing Watch data used and the fleet register, resulting in an incomplete picture of fishing vessels involved in the fisheries. Such mismatches mean that the outcomes of the economic analysis will always be uncertain and less informative than the spatial analyses of effort and landings at this level of aggregation.

Biological maps and spawning grounds

STECF considers that, contrary to what has been assumed in the ad hoc contract, the distribution of adults identified during the MEDISEH project may not be directly interpreted as spawning grounds of deepwater shrimp. The MEDITS survey only provides accurate information on spawning grounds for red mullet (EWG 22-01). Therefore, during STECF EWG 22-01, MEDISEH layers for spawning distributions of ARS and ARA were not used as these were considered not to be representative of the actual spawning aggregations.

Additionally, STECF recalls that the distribution maps derived from MEDISEH are likely to underestimate the actual distribution of ARA and ARS in the Western Mediterranean as these are based on the catchability of the MEDITS survey for these species which is quite low where the seabed is steepest. Further STECF notes that the current MEDISEH maps were created using MEDITS data up to 2012. STECF suggests distribution maps should be updated with the most recent survey data for future analyses.

STECF conclusions

STECF concludes that based on the information provided, the current fishing footprint deployed by bottomtrawling in the West Med over 2018-2020 appears limited in the areas >800 m or >600m deep.

STECF acknowledges and commends the comprehensive work performed by the ad-hoc contract in a limited time, but STECF has expressed some concerns about the interpretation and robustness of the outcomes presented. Given the preliminary nature of the work, STECF concludes that results presented should not be used for defining management measures.

STECF acknowledges the use in the ad hoc contract of a dynamic bioeconomic model to evaluate the impacts of such closures, which provides more robust simulations than a static "snapshot" evaluation. However, STECF concludes that some potentially important longer-term effects were not included in the simulation study. These include changes in effort levels, effort displacement effects, changes in population spatial dynamics/dispersion/recruits and gear selectivity changes. These shortcomings are likely to overestimate the impacts of the closures on both the fleets as well as the environmental benefits.

Based on these uncertainties, STECF concludes that the ad-hoc simulation study is a useful preliminary exercise but that further work is needed to reliably assess the expected qualitative and quantitative biological, ecological and socioeconomic impacts of restricting bottom trawling in the West Med areas for >800m or >600m deep areas.

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6.3 Management plan for purse seine fishing in Croatia

Background provided by the Commission

In November 2021, the Croatian administration has expressed its intention to revise and renew the management plan adopted in 2017. STECF PLEN 22-01 has evaluated this management plan and, while it found that a number of the MedReg requirements were fulfilled, others were not. Consequently, Croatia was requested by DG MARE to address the points raised by STECF and to add the missing information, notably on the overlap between the vulnerable habitats (Posidonia) and the authorized activities.

STECF is requested to update its prior advice, in view of the modified national management plan submitted by Croatia, as well as the preliminary impact assessment, in line with the EU Habitat Directive, issued by the Croatian Ministry of Environment.

With the submission of the updated plan, Croatia requests a derogation from Art 13(3) of EC 1967/2006 for the following purse-seine gears:

- a) - purse seine nets for catching chub mackerel, mackerel, horse mackerel, needlefish and sardine – *lokardara*
- b) purse seine nets for catching bonito, turbot, little tunny and greater amberjack – *palamidara*
- c) purse seine nets for catching mullet, salema and saddled seabream – *ciplarica*
- d) purse seine nets for catching needlefish – *igličara*
- e) purse seine nets for catching smelt – *oližnica*

In particular, this plan envisions for the above gears, the renewal of the derogations from EC 1967/2006 article 13(3) in terms of minimum distance from the coast and minimum depth, which is currently granted with the Regulation¹¹ (EU) 2018/1586 of 22 October 2018. The current derogation expired on 26 October 2021.

Background documents are published on the meeting's web site on: <https://stecf.jrc.ec.europa.eu/plen2202>

Request to the STECF

TOR 1. Advice and assess whether the management for the purse-seine gears, (a) *lokardara*, (b) *palamidara* (c) *ciplarica*, (d) *igličara*, (d) *oližnica*, targeting respectively (a) chub mackerel, mackerel, horse mackerel, needlefish and sardine, (b) bonito, turbot, little tunny and greater amberjack, (c) mullet, salema and saddled seabream and (d) needlefish, in the waters of Croatia contains adequate elements in terms of:

1.1. The description of the fisheries

- Biological characteristics and state of the exploited resources with reference in particular to long-term yields;

¹¹ Commission Implementing Regulation (EU) 2018/1586 of 22 October 2018 establishing a derogation from Council Regulation (EC) No 1967/2006 as regards the minimum distance from coast, the minimum sea depth and the prohibition to fish above protected habitats for shore seines fishing in territorial waters of Croatia C/2018/6842. ELI: http://data.europa.eu/eli/reg_impl/2018/1586/oj.

- Description of the fishing pressure and measures to accomplish a sustainable exploitation of the main target stocks;
- Data on catches (landings and discards) of the species concerned, fishing effort and abundance indices such as catch-per-unit-effort (or CPUE);
- Catch composition in terms of size distribution, with particular reference to the percentage of catches of species subject to minimum sizes in accordance with Annex IX of Regulation (EU) 2019/1241¹²¹³;
- Information on the social and economic impact of the measures proposed;
- Potential impact of the fishing gear on the marine environment with particular interest on protected habitats (i.e., seagrass bed, coralligenous habitat and maërl bed);

1.2. Objectives, safeguards and conservation/technical measures

- Objectives that are consistent with the objectives set out in Article 2 and with the relevant provisions of Articles 6 of CFP¹⁴ Regulation and quantifiable targets, such as fishing mortality rates and total biomass;
- Objectives for conservation and technical measures to be taken in order to achieve the targets set out in Article 15 of Regulation (EU) No 1380/2013, and measures designed to avoid and reduce, as far as possible, unwanted catches;
- Measures proportionate to the objectives, the targets and the expected time frame.
- Safeguards to ensure that quantifiable targets are met, as well as remedial actions, where needed, including situations where the deteriorating quality of data or non-availability places the sustainability of the main stocks of the fishery at risk;
- Other conservation measures, in particular measures to gradually eliminate discards, taking into account the best available scientific advice or to minimise the negative impact of fishing on the ecosystem.

1.3. Other aspects

- Quantifiable indicators for periodic monitoring and assessment of progress in achieving the objectives of the plan in line with Art 2 of Commission Implementing Regulation (EU) 2018/1586 of 22 October 2018 or new information in the case of new gears not covered under the previous plan.

TOR 2. Evaluate whether the following conditions set by the MedReg:

2.1 Derogation to the distance from the coast or depth (Article 13(3)) – Pursuant Article 13 paragraphs 3, 5 and 9):

12 Regulation (EU) 2019/1241 of the European Parliament and of the Council of 20 June 2019 on the conservation of fisheries resources and the protection of marine ecosystems through technical measures, amending Council Regulations (EC) No 1967/2006, (EC) No 1224/2009 and Regulations (EU) No 1380/2013, (EU) 2016/1139, (EU) 2018/973, (EU) 2019/472 and (EU) 2019/1022 of the European Parliament and of the Council, and repealing Council Regulations (EC) No 894/97, (EC) No 850/98, (EC) No 2549/2000, (EC) No 254/2002, (EC) No 812/2004 and (EC) No 2187/2005.

13 Council Regulation (EC) No 1967/2006 of 21 December 2006 concerning management measures for the sustainable exploitation of fishery resources in the Mediterranean Sea, amending Regulation (EEC) No 2847/93 and repealing Regulation (EC) No 1626/94.

14 Regulation (EU) No 1380/2013 of the European Parliament and of the Council of 11 December 2013 on the Common Fisheries Policy, amending Council Regulations (EC) No 1954/2003 and (EC) No 1224/2009 and repealing Council Regulations (EC) No 2371/2002 and (EC) No 639/2004 and Council Decision 2004/585/EC.

- There are particular geographical constraints, such as the limited size of the continental shelf along the entire coastline;
- The fisheries involve a limited number of vessels and do not contain any increase in the fishing effort;
- The fisheries cannot be undertaken with another gear;
- The fisheries are subject to a management plan and carry out a monitoring of catches as requested in Article 23;
- The vessels concerned have a track record of more than 5 years;
- The fisheries do not interfere with the activities of vessels using gears other than trawls, seines or similar towed nets;
- The fisheries are regulated in order to ensure that catches of species mentioned in Annex IX of Regulation (EU) 2019/1241¹⁵ with the exception of mollusc bivalves, are minimal
- The fisheries do not target cephalopods;
- The fisheries have any significant impact on the marine environment.

Request to the STECF

STECF was provided with a document entitled "Management Plan for Purse Seine Fishing in the Republic of Croatia". The document is largely similar to the one submitted in November 2021 and evaluated by STECF PLEN 22-01.

The modifications/amendments in the revised document are summarised below:

- On page 7 (Introduction) it is stated that: *"This Management Plan shall be applied to all fishing vessels using purse seine nets within the fishing sea of the Republic of Croatia, ..., and shall be applied over the period of five years, while for the fleet operating under the derogations from the Mediterranean Regulation, the application period shall correspond to that of the derogations granted."*
- On pages 16-17 (Management measures and their expected effect) (see also page 7 - Introduction) an additional management measure is included, labelled: *"Decrease of fleet capacity and phasing out"*. This additional measure states *"it is envisaged to gradually phase out those fishing practices within the small purse seine fisheries which operate under derogations from the provisions of the Mediterranean Regulation regarding the minimum distance from the coast. This process shall be implemented provided the accessibility of EMFAF funds and the process would require minimum three years upon the approval of the Operational programme."* *"...it is planned to completely phase out fishing practices with "ciparica", "igličara", "oližnica" and "palamidara" operating under the derogations from the Mediterranean Regulation provisions, by the end of 2025."* The document also explains that phasing out will be carried out through two measures: (a) permanent cessation of fishing

¹⁵ Regulation (EU) 2019/1241 of the European Parliament and of the Council of 20 June 2019 on the conservation of fisheries resources and the protection of marine ecosystems through technical measures, amending Council Regulations (EC) No 1967/2006, (EC) No 1224/2009 and Regulations (EU) No 1380/2013, (EU) 2016/1139, (EU) 2018/973, (EU) 2019/472 and (EU) 2019/1022 of the European Parliament and of the Council, and repealing Council Regulations (EC) No 894/97, (EC) No 850/98, (EC) No 2549/2000, (EC) No 254/2002, (EC) No 812/2004 and (EC) No 2187/2005.

activities of mainly larger vessels >12 m, and (b) buy-out of fishing gears for smaller vessels <12 m.

- Further information is provided to explain a discrepancy noted in STECF PLEN 22-01. Specifically, PLEN 22-01 observed that although the total number of vessels authorised under derogations from the MEDREG is 126, in Tables 3 and 4 of the Chapter "Socioeconomic Impact" of the MP, the number of authorized vessels appears as 85, 91 and 91 for 2018, 2019 and 2020, respectively. In response to this comment, on page 8-9 (Management framework), the process of granting authorisations to fish with lokardara, palamidara, igličara, ciplarica and oližnica is explained in more detail. Fishing vessels are permitted to fish with purse seines provided they have a commercial fishing license that lists one or more types of purse seine nets as permitted gears. While a single fishing vessel may be issued with only one fishing license, it can be issued with more than one authorisation, where more than one type of purse seines is listed on the fishing licence. Hence, in practice, the actual number of active vessels can be smaller than the number of issued authorisations, as a vessel can have multiple authorisations.
- A preliminary list of vessels authorised to operate under derogation for each purse seine is provided in the Annex 1 of the Management Plan. It is stated that the final list might change slightly. However, replacement vessels must have the 'same or lower capacity', where capacity is measured in Gross tonnage and Kw.
- A new measure is included in the MP (page 20), labelled "*Minimising the negative interactions with the environment*". It is stated that: "*Pursuant to Article 4 of the Mediterranean Regulation, fishing with small purse seines shall be prohibited above the Posidonia oceanica beds.*"
- For each of the gears under derogation, it is now stated (pages 33-36) that the gear "*does not operate above Posidonia oceanica beds*", and that the gear does not come into contact with the seabed.
- The document explains (page 37) that in order for the net not to get stuck and damaged: "*...fishermen chose areas with good visibility, clean, muddy or sandy bottom and naturally avoid seagrass beds. The fishing operations are quite swift, and the net is, after being dropped, closed and pulled back to the vessel before it gets in the contact with the seabed. By way of this, the targeted shoal is effectively encircled and at the same time the risk of damaging the gear minimised.*"
- It is also claimed (page 20-21) that because the fleet operates with small purse seines following the migrations of pelagic species, it is not possible to foresee the area (and presumably depth) that the fishing operation will actually take place.
- The large net depths of palamidara and ciplarica are justified as follows: "*Not being able to foresee the area where the fishing operation will actually take place, the dimensions of the nets are set as maximum so as to cover various ranges of sea depth along the Croatian indented coast and enable fleet migration.*"
- Regarding the purse seine net for sand smelts (oližnica), which is only used in certain areas of the northern Adriatic, it is stated (page 27) that there are no Posidonia beds in the northern Adriatic due to increased primary productivity and consequently, low water transparency. It is also stated that "*in the area of the northern Adriatic, seagrass beds limited in size can be found within the national park Brijuni and those are forbidden for commercial fishing activities*".
- Finally, an additional document was received during the plenary (PLEN 22-02) meeting. This was a resolution published by the Croatian Ministry of Economy and Sustainable

Development, Directorate of Nature Protection, accepting the planned MP for purse seine fishing in the Republic of Croatia for the 'ecological network' in Croatia. This resolution accepts the MP based on a 'preliminary assessment' procedure which simply examined the elements contained in it. The document states that: "...taking into account the general objectives and management measures as well as the activities planned by the Plan and their scope, as well as the fact that these are nets not towed on the bottom, in compliance with applicable legal regulations, it was assessed that it is possible to exclude the possibility of significant negative impacts of the Management Plan for purse seines fishing in the Republic of Croatia on conservation objectives and integrity of the ecological network and it is therefore not necessary to carry out the Main assessment of the impact to the ecological network and therefore a resolution was adopted ...".

STECF comments

STECF considers that the changes listed above do not warrant a detailed response to the ToRs in a point-by-point manner. Such a response would largely be a reiteration of the response given by PLEN-22-01 and therefore, only the comments on which new elements have been provided are discussed below.

STECF acknowledges that the prohibition of fishing with small purse seines above *Posidonia* beds is now explicitly contained in the plan. STECF also acknowledges the qualitative statements provided describing the operation of the gears. However, STECF notes that these statements are not supported by any scientific evidence and STECF cannot, therefore, assess their validity. STECF cannot thus ascertain that the vessels operating under derogations do not operate above *Posidonia* beds, and neither that the purse seines used, especially those with large net depths (palamidara and ciparica), do not come into contact with the seabed.

STECF observes that no maps indicating the location of *Posidonia* beds and of fishing grounds are presented, although the provision of these was already suggested by STECF PLEN 22-01.

STECF observes in the absence of such maps, no evaluation of the potential impact of the prohibition to fish above *Posidonia* beds on the activity of the fleets can be made. Equally, no assessment on the enforceability of this measure can be made as no indication is provided on how this prohibition will be controlled and monitored.

Regarding the documentation of contact with seabed, STECF refers to the example of underwater videos monitoring the fishing activities following a scientific sampling protocol (as provided for the boat seine fisheries in the Balearic Islands - see STECF PLEN 22-01), as a potential avenue for documenting the activity of the different purse seine fisheries in Croatia.

STECF understands that 'permanent cessation' involves withdrawal of vessels from the EU Fleet register with compensation available from the European Maritime Fisheries and Aquaculture Fund (EMFAF). The 'gear buy-out' scheme involves the withdrawal of purse seine gears and respective fishing authorisations, again with compensation from EMFAF funds. Vessels participating in the buy-out scheme will be prevented from re-entering the relevant fishery and the gears withdrawn will be destroyed.

STECF agrees that these measures should, over time, ultimately result in the removal of any negative impacts that these purse seines might have on coastal habitats and *Posidonia* beds, provided there is no re-entry of vessels into the fishery or into other fisheries with potential impact on the seabed. However, STECF notes that this fleet and gear withdrawal will take some years to complete, so all the previous STECF comments regarding the impacts of the fishery on the seabed remain valid until then.

STECF notes that the status of the additional resolution published by the Croatian Ministry of Economy and Sustainable Development, Directorate of Nature Protection, which received during

the Plenary, is unclear. STECF understands that this resolution accepts the planned MP for purse seine fishing in the Republic of Croatia for the 'ecological network' in Croatia, but STECF is unable to clarify what this actually means in practice.

STECF conclusions

STECF concludes that the additional supporting information and scientific documentation included in the new version of the MP is limited and most comments and conclusions of PLEN-22-01, which identified the weaknesses in the MP remain relevant.

STECF concludes that a prohibition to fish over *Posidonia* beds is now explicitly included in the plan. However, there is no detail of how this will be monitored in practice. Additionally, no information indicating the location of *Posidonia* beds and fishing grounds has been presented as suggested by STECF PLEN 22-01. Therefore, STECF cannot evaluate the potential impact of the prohibition to fish above *Posidonia* beds.

STECF concludes that the new elements of (a) explicitly prohibiting fishing operations above *Posidonia* beds and (b) future phasing out of fishing operations with ciplarica, igličara, oližnica and palamidara in the area prohibited by MEDREG will likely reduce and, over time, remove, the impacts of the fisheries in the future, provided there is no re-entry into the fishery. STECF concludes though that as these measures will take time to implement, its comments remain valid until then.

6.4 North Western Waters MS Group – Joint Recommendation on technical measures for the Celtic sea, Irish Sea and West of Scotland

Background provided by the Commission

The North-Western Waters Member States Group (NWW MSG) submitted on the basis of the Technical Measures Regulation (TMR) a new Joint Recommendation with technical measures for Celtic Sea, Irish Sea and West of Scotland.

Background documents are published on the meeting's web site on: <https://stecf.jrc.ec.europa.eu/plen2202>

Request to the STECF

Based on past STECF conclusions and advice to the Commission, the STECF is requested to assess whether and to what extent the joint recommendations that are setting out the specifications of Article 27.7 and in Part B of Annexes V to XI of Regulation (EU) 1241/2019:

- I. Could lead to a deterioration of selectivity standards and to what extent in particular in terms of an increase in the catches of juveniles, existing on 14 August 2019 (date of entry into force of TMR);
- II. Would help achieve the objectives and targets set out in Articles 3 and 4 of TMR; Joint Recommendations on Technical Measures (Regulation)

All amendments, supplements, repeal or derogations from technical measures will be based upon Article 15 of the Technical Measures Regulation (Regulation (EU) 2019/1241). The entry into force of this Regulation resulted in the introduction of the process of regionalization in numerous fields as far as technical measures are concerned. In this process, the regional groups should develop joint recommendations that would need to go through the STECF in order to assess to what extent the recommendation proposed goes in line with achieving the objectives set out in the Regulation.

The Member States provided the data and information to demonstrate that the three elements listed above (STECF conclusions 20-02) have been taken into account in the definition proposed for 'directed fishing' and the definition can be justified based on such data and information. This also includes providing corresponding datasets of individual logbook and sea-sampling trip data that are needed to assess the robustness and the impact of the catch composition threshold. Where the data provided information is not sufficient, the STECF is requested to identify what information and data should be provided in order for a complete assessment

The STECF should further assess the implications of the Member Stategroups' joint recommendations for other policies, mainly the compatibility with the landing obligation (Article 15 CFP) and other technical regulations.

Information provided to STECF

STECF was provided with a Joint Recommendation from the NWW Member States group. No other supporting documentation was provided, although STECF understands from DGMARE that the Member States were not asked to provide any such documentation as the JR represents a limited revision of the existing measures contained in Commission Delegated Regulation (EU) 2021/2324.

STECF comments

STECF has previously qualitatively assessed proposals for changes to technical measures in this region (STECF PLEN 20-02). For the purposes of responding to the request, the terms 'more

selective', 'most selective' and 'better selectivity' or similar, are used qualitatively to mean that a smaller proportion of juveniles of a species are likely to be caught and retained by a particular gear configuration, compared to a different gear configuration, everything else being equal.

The JR makes amendments to the technical measures in the Celtic Sea, Irish Sea and West of Scotland as follows:

Celtic Sea

STECF has identified the following amendments to the technical measures currently in place in the Celtic Sea (ICES divisions 7b-k). The amendment to the JR compared to the current NWW technical measures (Delegated Regulation (EU) 2021/2324), is marked in bold below.

Paragraph 1.3.2 of the Annex to the NWW Delegated Regulation states:

In ICES divisions 7f and 7g, the part of ICES division 7h north of latitude 49° 30' North and the part of ICES division 7j north of latitude 49° 30' North and east of longitude 11° West:

(a) Vessels operating with bottom trawls or seines with catches comprising more than 30 % of Norway lobster shall use one of the following gear options:

- (i) 300 mm squared mesh panel; however, vessels below 12 metres in length overall may use a 200 mm square mesh panel;*
- (ii) Seltra panel;*
- (iii) sorting grid with a 35 mm bar spacing as referred to in Annex VI Part B of Regulation (EU) 2019/1241 or a similar Netgrid selectivity device;*
- (iv) 100 mm cod-end with a 100 mm square mesh panel;*
- (v) dual cod-end with the uppermost cod-end constructed with T90 mesh of at least **90 mm** and fitted with a separation panel with a maximum mesh size of 300 mm;*

The JR proposes to amend this as follows:

- ➔ *Dual cod-end with the uppermost cod-end constructed with T90 mesh of at least **100mm** and fitted with a separation panel with a maximum mesh size of 300mm.*

STECF acknowledges that the dual cod-end option with the uppermost cod-end constructed with T90 mesh of at least 100mm is more selective than the currently legislated dual cod-end option with the uppermost cod-end constructed with the T90 mesh of 90 mm. This has been assessed in more detail by EWG 22-05 that concluded, evidence has been provided to EWG 19-08 and EWG 22-05 that the dual codend is very effective at sorting fish into the uppermost cod-end. Implementing this gear modification in the uppermost cod-end of the dual cod-end would align with the technical measures for targeting fish in the area, as the 100mm T90 cod-end is currently one of the gear options included in the Delegated Act for demersal fisheries (paragraph 1.3.1 of the Annex to Delegated Regulation (EU) 2021/2324).

Therefore, STECF observes that this amendment to the current measures represents an improvement in selectivity.

West of Scotland

STECF identified the following deletions of the technical measures currently in place in the West of Scotland (ICES Divisions 6a and 5b). The deletions in the JR compared to the NWW technical measures Delegated Act, are stroked out.

1.4.1. of the NWW discard plan states:

~~The following shall apply to fishing vessels operating with bottom trawls or seines in ICES divisions 6a and 5b, within the Union waters, East of 12°W (West of Scotland) in Norway lobster (*Nephrops norvegicus*) fisheries:~~

~~(a) vessels shall use of a square mesh panel (positioning retained) of at least 300 mm for vessels deploying a cod-end mesh size less than 100 mm; for vessels below 12 m in length over all and/or with engine power of 200 kW or less, the panel overall length may be 2 m and the panel 200 mm;~~

~~(b) vessels with catches comprising more than 30 % of Norway lobster shall use a square mesh panel (positioning retained) of at least 160 mm for vessels deploying a cod-end mesh size of 100-119 mm.~~

The JR proposes to remove the technical measures that are stipulated for the Norway lobster fisheries in the West of Scotland in paragraph 1.4.1. STECF observes that the removal of the derogations implies that vessels will fall back to the use of 80 mm cod-end and 120mm square mesh panel or 80mm cod-end with a sorting grid with a maximum bar spacing of 35 mm, as defined for *Nephrops* directed fisheries in Part B of Annex VI to Regulation (EU) 2019/1241. What constitutes a directed fishery for *Nephrops* is not defined in the Regulation. STECF observes that the technical measures proposed to be deleted by the NWW Member States JR have previously been identified by PLEN 20-02 as being more selective than the baseline gears set out in the Technical Measures Regulation (i.e., 80mm+120mm smp or 80mm with sorting grid). Vessels not engaged in directed fishing for *Nephrops* would be required to fish with a 120mm cod-end as per Regulation (EU) 2019/1241.

STECF further observes that in ICES division 6a and 5b, the main *Nephrops* fishing grounds are the North Minch (FU 11), the South Minch (FU 12), the Clyde and the Sound of Jura (FU 13). These FU's are almost exclusively in the UK EEZ. Available ICES advice shows also that these *Nephrops* FUs are almost exclusively exploited by Scottish and Northern Irish (UK) vessels. These vessels account for 98- 100% of the total catch of *Nephrops* on average in 2018- 2020 in the relevant FUs (ICES advice, 2021). Catches of *Nephrops* in the rest of 6a and 5b outside these FUs are minimal. However, STECF is unable to quantify the present and future impacts of the removal of this derogation on Union vessels. There is no information on the usage of these gear options by Union vessels and in any case, assigning *Nephrops* catches to Union and UK waters is not possible as the data available in the ICES advice and in the FDI database is not at the required spatial resolution to allow such an analysis.

Therefore, STECF observes that removing these derogations represents a decrease in selectivity compared to the baseline gears for *Nephrops* fisheries contained in the Technical Measures Regulation. However, STECF cannot fully assess the actual impact of this removal as no information on usage of these gears by Union vessels is available.

Irish Sea

STECF identifies the following deletions of the technical measures currently in place in the Irish sea (ICES division 7a). The deletions in the JR compared to the NWW technical measures Delegated Act, are stroked out below.

1.4.2. of the NWW discard plan states:

~~(b) Vessels equal to or greater than 12 meters in length overall operating with bottom trawls or seines with catches comprising more than 10 % of haddock, cod and skates and rays combined, shall use 120 mm cod-end;~~

~~(c) Vessels equal to or greater than 12 meters in length over all operating with bottom trawls or seines with catches comprising less than 10 % of haddock, cod and skates and rays combined shall~~

~~apply a cod-end mesh size of 100 mm with a 100 mm square mesh panel. This provision shall not apply to vessels with catches comprising more than 30 % of Norway lobster or more than 85 % of queen scallops.~~

~~(d) Vessels operating with bottom trawls or seines may use a 100mm T90 cod-end.~~

The JR proposes to drop the application of the cod-end mesh size of 100 mm with a 100 mm square mesh panel for vessels equal to or greater than 12 meters in length overall operating with bottom trawls or seines with catches comprising less than 10 % of haddock, cod and skates and rays combined. STECF acknowledges that this implies that vessels availing of this derogation currently would be required to use a 120 mm cod-end as the baseline specification for bottom trawls and seines in the Irish Sea (Part B of Annex VI to Regulation (EU) 2019/1241).

Based on previous assessments by PLEN 20-01, the 100 mm cod-end with a 100 mm square mesh panel option has a lower selectivity for cod, haddock and whiting than the baseline cod-end mesh size of 120mm. Therefore, STECF observes that the removal of this derogation (indent c)) represents an improvement in selectivity in the relevant fisheries.

In addition, the JR also proposes to remove the option for bottom trawlers and seines to use an 100mm T90 cod-end in the Irish Sea (indent d). STECF observes that the removal of the 100mm T90 gear option will mean vessels operating in the relevant fisheries with bottom trawls and seines will be required to fish with the baseline 120m cod-end in Regulation (EU) 2019/1241. STECF PLEN 20-02 had earlier concluded that it remained uncertain whether the 100mm T90 cod-end configuration may be of equivalent selectivity for cod and whiting than the 120 mm baseline gear. A more robust selectivity trial was needed to fully conclude on this. Therefore, STECF PLEN 20-02 could not make any definitive conclusion that the 100mm T90 is less selective than the 120 mm cod-end based on the available information.

STECF EWG 22-05 carried out a further analysis of the 100mm T90 cod-end based on new information provided to this EWG. EWG 22-05 concluded that the analysis provided for use of the 100mm T90 codend gear indicated that the main benefit of the T90 100 mm in the Irish Sea whitefish fishery was a considerable reduction in <MCRS haddock compared to a 120mm cod-end. There was minimal difference in catches between the two gears for whiting. The difference in cod catch was also negligible across all size classes, reflecting the poor stock state of cod in the Irish Sea where the experiments were carried out. No inference could thus be made for cod and whiting, given that there were not enough of these species encountered during the trials to allow for an analysis. Notwithstanding this, the data provided were still limited in terms of the number of hauls. EWG 22-05 concluded also that more robust selectivity and/or catch comparison trials was still needed to fully conclude the outcomes of the supporting Irish studies and in particular for cod and whiting.

Therefore, based on previous evaluations, STECF observes that the 100mm T90 cod-end is more selective than the baseline for haddock, but no not enough data is available to conclude on whether it is less or more selective for cod and whiting.

STECF conclusions

For the Celtic Sea, STECF concludes that the amendment of the technical measures set out in the JR represents improvements in selectivity and can therefore be considered to contribute to the conservation of the cod and whiting stocks in those areas, as stipulated out in Articles 3 and 4 of the technical measures Regulation (Regulation (EU) 2019/1241) relating to catches of juveniles.

For the West of Scotland, STECF concludes that removing the derogations for *Nephrops* in ICES divisions 6a and 5b represents a decrease in selectivity when compared to the baseline gears for *Nephrops* fisheries contained in the Technical Measures Regulation. However, STECF cannot fully assess the impact of this removal on cod and whiting, as no information on usage of these gears

by Union vessels is available noting that the *Nephrops* in this area is predominantly a UK fishery in UK waters.

For the Irish Sea, STECF concludes that the removal of this derogation to use 100mm cod-end with a 100mm square mesh panel represents an improvement in selectivity in the relevant fisheries in the area. However, STECF is unable to conclude on whether the removal of the 100mm T90 cod-end gear option represents an improvement in selectivity. The available information suggests this gear is more selective for haddock than a 120mm cod-end but the lack of data prevents any firm conclusion being drawn as to whether this gear is less or more selective for cod or whiting.

References

ICES advice, October 2021: "Norway lobster (*Nephrops norvegicus*) in Division 6.a, Functional Unit 11 (West of Scotland, North Minch)"

ICES advice, October 2021: "Norway lobster (*Nephrops norvegicus*) in Division 6.a, Functional Unit 12 (West of Scotland, South Minch)"

ICES advice, October 2021: "Norway lobster (*Nephrops norvegicus*) in Division 6.a, Functional Unit 13 (West of Scotland, Firth of Clyde, and Sound of Jura)"

Scientific, Technical and Economic Committee for Fisheries (STECF) – 63 rd Plenary Report – Written Procedure (PLEN-20-01). Publications Office of the European Union, Luxembourg, 2020, ISBN 978-92-76-18117-0, doi:10.2760/465398, JRC120479

Scientific, Technical and Economic Committee for Fisheries (STECF) – 64th Plenary Report (PLEN-20-02). Publications Office of the European Union, Luxembourg, 2020, ISBN 978-92-76-21081-8, doi:10.2760/325560, JRC121501.

Scientific, Technical and Economic Committee for Fisheries (STECF) – Evaluation of Joint Recommendations on the landing obligation and on Technical Measures Regulation (STECF-22-05). EUR 28359 EN, Publications Office of the European Union, Luxembourg, 2022, ISBN XXXXXX, doi:XXXXXXXX, PUBSY No.

6.5 Evaluation of the ad hoc contract to carry out a preliminary comparison of the 2021 EU outermost regions fleet balance reports (ref. STECF 2240 & 2241)

Background provided by the Commission

The objective of this ad hoc contract is to provide the Outermost Region (OR) Member States (MS) (Spain, France, Portugal) with a scientific opinion on what potential actions they could take to improve data collection and the quality of reporting on the balance between their fishing capacity and the available fishing opportunities in certain segments, in a timely manner. This ad hoc contract shall exceptionally carry out a preliminary comparison of the last two annual fleet reports of the MS. The outcomes of the comparison shall feed into a roadmap which will assist the OR MS identify a strategy to concentrate indicator reporting, and the associated data collection efforts on the list of stocks and fleet segments identified in STECF 21-16. Along with the updated roadmap the ad hoc contract shall provide recommendations to the Member States on potential steps to take for calculating balance between their fishing capacity and the available fishing opportunities in certain segments in a timely manner.

Request to the STECF

STECF is requested to evaluate the findings and make any appropriate comments and recommendations.

STECF comments

STECF considered the ad-hoc contract as being preparatory work for the plenary. Consequently, instead of commenting on the findings of the ad-hoc report, STECF chose to respond to this request following the terms of reference given to the contractors (ToRs 1-3). Under each of these ToRs, the key findings proposed in the ad-hoc contract are reported, together with additional comments from the STECF PLEN 22-02.

General comments on the ad-hoc contract

The report of the ad-hoc contract was provided to STECF, and a presentation by the contractors was given to plenary.

The background documents used by the contractors included:

- 2022 Member States report from France, Spain and Portugal and their annexes, including additional elements in a reply letter from French Fisheries Ministry to Commission Ares(2022)3550138.
- STECF EWG 21-16 report "Balance Opportunities".
- STECF EWG 19-19 report "Outermost regions"; and
- EASME/EMFF/2018/011 report "Overview of the state of data collection and scientific advice in the EU ORs, with case study on a roadmap towards regular stock assessment in French Guiana".

STECF notes that the Member States reports were provided late in the process, close to the end of the contract, which limited the ability of the contractors to perform a thorough evaluation of these reports. Additionally, STECF notes that the timeframe to deliver the report overlapped with the timing of the STECF AER (Annual Economic Report, (EWG 22-06) and DCF (EWG 22-07) EWGs during which evaluation of the data provided by Member States for the AER and DCF Annual reports

are carried out. Information from those evaluations was thus not available. STECF notes that this could well have provided additional relevant information to the contractors.

STECF notes that EWG 21-16 had previously identified a significant lack of data from several fleet segments operating in the ORs, preventing the calculation of the biological indicators. EWG 21-16 could only compute the Stocks at Risk indicator (SAR) for 32% of the fleet segments and the Fleet Coverage indicator (SHI) for only 21% of the 44 fleet segments identified in the ORs for the three Member States.

ToR 1: *Review the 2021 fleet balance reports from Spain, France and Portugal (expected by 31 May 2022) and focus on their outermost regions section. Specific action plans presented for these regions shall also be taken into account. When necessary, the expert shall review the reasoning that each MS has provided in the annual fleet report and respective action plan, demonstrating balance in the outermost regions.*

The contractors reviewed the 2022 fleet reports for the three Member States, in the light of earlier comments made by EWG 21-16 and PLEN 21-03. The indicators provided by Spain and Portugal in their 2022 reports are presented in the ad hoc report and reported below in tables 6.5.2 and 6.5.3 (although these results should be considered preliminary for the biological indicators). For France, only the 2019 indicator table completed by STECF EWG 21-16 was included in the ad hoc report (table 6.5.1 below), as the 2022 French balance report provided to the contractors only included narrative text describing the methodologies and approaches followed. It did not include any quantitative values of indicators, data or results.

France

Previous comments by STECF

STECF PLEN 21-03 and EWG 21-16 had earlier highlighted that the 2021 national report from France (all regions) did not follow the Commission guidelines and that no comparison could be made between the Member States and EWG 21-16 calculations. STECF PLEN 21-03 had observed that the fleet segmentation used by France differed from the one used by the EWG, and that France considered the economic and technical indicators not relevant to assess fleet balance. Therefore, EWG 21-16 had been unable to assess whether the actions proposed in the 2021 report from France will influence balance.

Regarding the outermost regions, STECF EWG 19-19 and EWG 21-16 had highlighted that key data and indicators were largely lacking for the French ORs in 2019. No information was available to EWG 21-16 to allow for the calculation of the SAR indicator for any segments, and the SHI could only be computed for 6 segments out of 23 (27%). No actions were specifically proposed in the Member State report for the ORs.

STECF EWG 21-16 also noted large discrepancies among the French ORs regarding the calculated indicators (Table 6.5.1). This was mainly because for some ORs there was a lack of economic data collection, biological information, and provision of landings only at species group level rather than at individual species level. In terms of economic indicators, no data from Martinique, Mayotte and Saint Martin was available, while for La Reunion, data was available only for the hook and line fleet segments larger than 12m (HOK1218 and HOK1824).

(1) Table 6.5.1 (Table III in the ad-hoc report) – List of Fleet Segments indicators in French Outermost Regions in 2019. Out of balance (XX), in balance (XX) with no information (XX) (from STECF 21-16, indicators calculated by the EWG; 2020 indicators were not provided by the Member State).

Overseas Territories	Cluster	SAR	SHI	RoFTA	CR/BER	VUR	VUR ₂₂₀
French Guiana	FRA OFR DFN0010 GF *						
	FRA OFR DFN1012 GF *						
	FRA OFR DTS1824 GF						
Guadeloupe	FRA OFR DFN0010 GP						
	FRA OFR FPO0010 GP						
	FRA OFR HOK0010 GP						
	FRA OFR PGP0010 GP *						
	FRA OFR PGP1012 GP *						
	FRA OFR PS 0010 GP						
Martinique	FRA OFR DFN0010 MQ						
	FRA OFR FPO0010 MQ						
	FRA OFR FPO1218 MQ						
	FRA OFR HOK0010 MQ						
	FRA OFR HOK1012 MQ						
	FRA OFR HOK1218 MQ						
	FRA OFR PG00010 MQ *						
	FRA OFR PGP0010 MQ *						
Réunion	FRA OFR HOK0010 RE *						
	FRA OFR HOK1218 RE						
	FRA OFR HOK1824 RE *						
	FRA OFR PGP0010 RE *						
Mayotte	FRA OFR HOK0010 YT *						
	FRA OFR DFN0010 YT *						

*Stocks at Risk Indicator (SAR); SHI = coverage of fleet segments; Capital productivity measured by Return on Fixed Tangible Assets (RoFTA); Ratio Current Revenue and Break-Even Revenue (CR/BER); Vessel Use Indicator (VUR); and VUR over a maximum 220 theoretical days at sea (VUR₂₂₀).

2022 report

The French fleet report for 2022 describes the calculation methodology for all indicators plus some additional biological ones not calculated by EWG 21-16 (i.e., "Number of Overexploited Stocks" (NOS1, NOS2) and "Economic Dependency Indicator" (EDI)). France considers these more appropriate to describe the fleet situation. France also stated that they considered a fleet segment to be out of balance if 3 consecutive years of indicator were negative. The report does not provide overall indicator calculations per fleet segment, but fleet segments are listed as considered to be 'unbalanced' or "under surveillance".

For the ORs fleet segment, the 2022 French report states that "In 2020, 22 segments showed landing data allowing them to be ranked in balance, 14 more than in 2021"; and that "there are still 7 segments whose data collection does not allow a balanced ranking for the 2022 report, but the situation will improve year after year due to the increase in scientific knowledge". The ad hoc contract observes that France highlighted several ongoing initiatives and research projects to address gaps in the scientific knowledge. These included the projects referred to as ACCOBIOM; MULTIFISH; RECREAFISH projects. These projects aim to improve the data and use DCF and AER data to fill the gaps identified by the earlier EU funded ORFISH project, which finished in 2019. However, these national projects are still ongoing, and their results are not yet publicly available, so little supporting information was available to the contractors. Additionally, as explained in the French report, the projects have suffered delays in the French Antilles and Guiana due to Covid-19.

STECF notes since no OR fleet segments have been listed by France to be imbalanced in 2020, no specific Action Plans are presented in the report for these areas.

STECF notes also that the generic comments raised by the EWG 21-16 appear still valid, regarding the difficulty to compare the Member State report with the work performed by STECF EWG 21-16. Indicators calculations and fleet segmentation still differ from those used by STECF 21-16 and detailed quantitative values are not provided. Therefore, it is likely that STECF 22-15 (Balance/Capacity) will be faced with the same difficulties in assessing the content of the French report. STECF encourages France to provide quantitative results and comparability elements that could ease future evaluations of balance/capacity.

Portugal

Previous comments by STECF

STECF PLEN 21-03 and EWG 21-16 has previously highlighted that the 2021 national report from Portugal (all regions) did not follow Commission guidelines and biological and economic indicators were not provided. STECF PLEN 21-03 observed that there was a lack of a proper rationale to conclude that all fleet segments were in balance. No revised Action Plan had been submitted, on the basis that Portugal considered its management system to be well functioning and able to maintain balance.

Regarding the outermost regions, EWG 21-16 could calculate the SAR indicator for 8 out of 15 fleet segments (53%) Portuguese OR fleet segments. The SHI indicator was calculated for only 1 segment in Madeira (<7%).

2022 report

Portugal's 2022 fleet report indicates the capacity of the Portuguese Azorean and Madeiran fleet is close to being in balance with fishing opportunities for all OR fleet segments. This is based on a combined analysis of the results of the vessel utilisation, biological and economic sustainability indicators. According to the Portuguese report, "vulnerabilities" (not defined in the report) were identified in the Portuguese fleets operating with hooks and lines (HOK) but only in the fleets

operating from the Portuguese mainland. Therefore, no action plan for the Portuguese ORs was proposed. However, the contractors noted that there are clear negative indicators in 2020 for the following Portuguese fleet segments:

- Azorean fleets with hook & line 10- 12m PTR NAO HOK1012 P3
- Azorean fleets with hook & line 24- 40m PTR NAO HOK2440 P3
- Madeira fleet with hook & line 24- 40m PTR NAO HOK2440 P2
- Purse seines for small pelagics; PTR NAO MGP1824 P2

A summary of the indicators from the Portuguese OR fleet segments for 2019 and 2020 are shown in Table 6.5.2.

Table 6.5.2 (Table IV in ad-hoc report) – List of Fleet Segments indicators in Portuguese Outermost Regions in 2019 and 2020. Out of balance (XX), in balance (XX) with no information (XX). 2019 data from STECF 21- 16, indicators calculated by the EWG; 2020 provided by the Member State.

Overseas territory	Fleet segment	Status 2019 according to thresholds and criteria in the 2014 Guidelines						Status 2020 according to the 2022 MS report					
		SAR	SHI	RoFTA	CR/BER	VUR	VUR220	SAR*	SHI*	RoFTA	CR/BER	VUR	VUR220
Azores	PRT NAO DFN0010 P3							<40%	<40%	0.11	1.45	0.40	
	PRT NAO HOK0010 P3							<40%	<40%	0.15	1.68	0.27	
	PRT NAO HOK1012 P3							<40%	<40%	- 0.17	0.76	0.53	
	PRT NAO HOK1218 P3							<40%	<40%	0.21	1.75	0.48	
	PRT NAO HOK2440 P3 *							<40%	<40%	- 0.10	0.50	0.46	
	PRT NAO PGP0010 P3 *							<40%	<40%	0.08	1.33	0.44	
	PRT NAO PS 0010 P3							<40%	<40%	0.27	2.18	0.55	
	PRT NAO PS 1012 P3 *							<40%	<40%	0.21	1.75	0.69	
PRT NAO PS 1218 P3							<40%	<40%	0.42	2.58	0.94		
Madeira	PRT NAO HOK0010 P2 *							1	0.75	0.38	2.49	0.78	
	PRT NAO HOK1218 P2							1	0.91	0.89	3.16	0.87	
	PRT NAO HOK1824 P2												
	PRT NAO HOK2440 P2							1	1.75	-0.04	0.8	0.71	
	PRT NAO MGP0010 P2							1	0.95	1.47	4.65	0.83	
	PRT NAO MGP1824 P2 *							2	3.14	-0.11	0.6	0.86	

*Stocks at Risk Indicator (SAR); SHI = coverage of fleet segments; Capital productivity measured by Return on Fixed Tangible Assets (RoFTA); Ratio Current Revenue and Break-Even Revenue (CR/BER); Vessel Use Indicator (VUR); and VUR over a maximum 220 theoretical days at sea (VUR220).

STECF notes that regarding the previous comments by EWG 21- 16, the indicators are now provided but the methodology followed was not presented. Additionally, there was no information provided how the conclusion that all fleet segments were balanced was reached.

Spain

Previous comments by STECF

STECF PLEN 21-03 and EWG 21- 16 had previously highlighted that the 2021 national report from Spain (all regions) followed the Commission guidelines but comparison between Member States and EWG 21- 16 calculations could only be made for some indicators. There were large discrepancies

in the calculation of the SAR indicator. EWG 21-16 noted that the objectives of the Spanish Action Plan (all fishing regions and not for the ORs) provided were well defined, but the timeframe not specified. EWG 21-16 could though not assess whether the actions proposed would influence balance. Regarding the outermost regions, EWG 21-16, calculated the SAR indicator for all 6 Spanish OR fleet segments. The SHI indicator was computed for 2 segments.

2022 report

According to the 2022 report for Spain, the capacity of the Spanish Canarias fleets was stated as being 'relatively balanced' with fishing opportunities in most fleet segments. The Spanish OR 18-24m and 24-40m hook and line fleets reported some "vulnerabilities" (not defined in the report). Spain considered these fleets to be out of balance, but no Action Plan was proposed. The report states that an Action Plan is a "work in progress". In 2020, there was an improvement in the indicators for the Canarias fleet with hook & line 10-12m, while the Vessel Use indicator (VUR) and Vessel Use over a maximum 220 theoretical days at sea indicator (VUR220) were provided for an additional 6 fleet segments. A summary of the indicators from the Spanish OR fleet segments for 2019 and 2020 are shown in Table 6.5.3.

Table 6.5.3 (Table V in the ad-hoc report) - List of Fleet Segments indicators in Spanish Outermost Regions in 2019 and 2020. Out of balance (XX), in balance (XX) with no information (XX). 2019 data from STECF 21-16, indicators calculated by the EWG; 2020 provided by the Member State.

Overseas territory	Cluster Name	Status 2019 according to thresholds and criteria in the 2014 Guidelines						Status 2020 according to the 2022 MS report					
		SAR	SHI	CR/BER	RoFTA	VUR	VUR220	SAR	SHI	CR/BER	RoFTA	VUR	VUR220
Canary Islands	ESP NAO FPO1012 IC *		<40%						<40%	8.62	181.67	1.02	0.42
	ESP NAO HOK1012 IC *		<40%						<40%	2.17	33.32	0.57	0.31
	ESP NAO HOK1218 IC		<40%						<40%	2.68	81.84	0.65	0.43
	ESP NAO HOK2440 IC *							1.42	0.44	-27.72	0.92	0.61	
	ESP NAO PMP0010 IC *								<40%	3.65	92.47	0.35	0.39
	ESP NAO PS 1218 IC *		<40%						<40%	2.77	65.79	0.97	0.87

*Stocks at Risk Indicator (SAR); SHI = coverage of fleet segments; Capital productivity measured by Return on Fixed Tangible Assets (RoFTA); Ratio Current Revenue and Break-Even Revenue (CR/BER); Vessel Use Indicator (VUR); and VUR over a maximum 220 theoretical days at sea (VUR220)

STECF notes that the SAR indicator was not provided by Spain in the 2022 report. STECF further notes that, as stated before, Spain considered some fleets to be out of balance, but no Action Plan was proposed. STECF understands that Spain is preparing this Action Plan, but no further details are available.

ToR 2: Define a strategy to concentrate indicator reporting and the associated data collection efforts for the list of fish stocks and fleet segments identified in STECF 21-16. On the basis of the above findings, deliver an updated version of the STECF EWG 21-16 action roadmap per Member State to implement. The roadmap shall identify specific priority actions for the MS to implement in order to collect and report the information required to calculate balance between fishing capacity and fishing opportunities. Such priority actions can be the following (non-exhaustive list, the experts may enrich the list as they find appropriate based on their findings and expert knowledge):

- *the additional information (e.g., data, assessments, supporting documents etc.) that the MS shall provide to be considered by the STECF EWG 22-15 on balance/capacity.*
- *existing and foreseen improvements to the MS data collection schemes under their DCF work plans, which could then be amended before submission to the Commission by 15 October 2022.*
- *or what can be done in a longer term, such as key fish stocks and fleet segments on which to target data collection resources.*
- *specific stock assessment to be performed.*
- *propose other actions to take under other forums (specific STECF EWG, relevant studies, others); and*
- *An updated list of fish stocks and fleet segments shall be provided.*

STECF notes that the ability to calculate and the reliability of the biological indicators for each area is data dependent. Where indicators cannot be calculated, Member States need to increase the knowledge on stocks and improve the relevant stock assessments. Information on fishing mortality and reference points for as many stocks as possible should be prioritised, together with stock assessments that can be validated by the relevant RFMOs.

STECF notes that although some assessments of coastal stocks in the ORs may be carried out by national institutes, they may not be systematically peer-reviewed nor endorsed and therefore cannot be used by the STECF Balance-Capacity EWG in the calculation of biological indicators.

STECF observes that the economic indicators used to assess the balance of the fleets with fishing opportunities across all fleets including the ORs do not take account of the impacts of operating subsidies. This is particularly relevant in ORs where such subsidies may be quite prevalent (cf. AER EWG, ToR 5.2 of this Plenary report).

STECF notes that STECF EWG 19-19 had already developed roadmaps with specific priority actions identified for each Member State. STECF notes these roadmaps have been updated in the ad hoc contract with the identification of future research needs by Member State, as reported below in tables 6.5.4-6.5.6. These roadmaps identified specific priority actions for each Member State to improve fisheries knowledge as well as collecting and reporting the information required to calculate the balance indicators.

STECF observes that these roadmaps cover a broader scope than what may be strictly required for the balance-capacity indicators alone. STECF considers this to be a correct approach as these roadmaps should support the broader CFP fisheries management objectives in the outermost regions.

STECF observes though that it is difficult to evaluate the progress in implementing these roadmap actions. No specific information has been provided and the results of national studies are not always publicly available.

France

(2) Table 6.5.4 (Table I of the ad-hoc report) – Updated STECF 19-19 roadmap recommending by global issues identified possible future scientific studies and activities to improve knowledge in the French ORs, divided into four main challenges (data collection, stock assessment, ecosystem knowledge, and social & economic impacts). Changes suggested by the ad-hoc contract compared to the EWG 19-19 version are highlighted in bold.

Challenges	Issues Identify	Recommendations
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Data Collection	<p>General data: Future EU-MAP reporting tables consider ORs separately, but some are joined, ex. Martinique & Guadeloupe</p> <p>There is very little knowledge on IUU fishing especially in French Guiana</p> <p>DCF fleet and fishers age segmentation may not be the most appropriate for the situation in the ORs. Namely vessels <10 m and fishers mostly 40-64 years.</p>	<p>Increase share between ORs experts on data collection and on calculation of indicators methodologies - Expert Group(s) on ORs (more transversal between economic, social and biologists)</p> <p>DCF WP & ARs should present data by ORs and metier, including recreational fisheries</p> <p>MSs DCF Recreational fisheries coverage should be extended, either in terms of species and volumes (weight and value equivalent). Results for RECREAFISH project should be public when available.</p> <p>An assessment of IUU is fundamental to evaluate the consequences in term of social, economic as well as environmental impacts on exploited ecosystems and ETP species. In the meantime, reinforcement of the control of IUU in national waters by local authorities is still needed. Commitment and discussions with local fishers would strengthen the potential effects and research for co-build initiatives. Awareness campaigns targeting the illegal fishing communities could be an additional option.</p> <p>An assessment of the capacities in the different ORs (human and financial resources, facilities, equipment) should be carried out to secure the resources necessary to implement the DCF</p> <p>At-sea monitoring should be improved in each ORs Women roles in fisheries should be taken into consideration specifically in social and economic studies by ORs</p> <p>DCF fleet and fishers age segmentation should be at a finer scale interval (following STECF 19-03 recommendation¹⁶)</p>
	<p>Biological data: Information on a limited number of species considering the high biodiversity in ORs France WP does not mention ORs separately French ORs draft biological sampling (except lengths)</p>	<p>Increase the number of species sampled for at least length composition ACCOBIOM project results should be made public France WP to include sampling program by ORs specifically French ORs to enhance biological sampling coverage and provide OR's landings at the species level</p>
	<p>Economic data: No economic data for Martinique. Mayotte and Saint Martin, only partial data for Réunion, French Guiana. Data available for Guadeloupe Réunion - discrepancies between gross and total value of landings (should be similar)</p>	<p>France to collect and report economic data by ORs and metiers Better consideration of the diversity and variability/seasonal changes of activities of small-scale fisheries, predominant in most ORs is needed Economic data should be check for consistency and quality, for example harmonization of the activity variables (value of landings and economic variable [gross value of landings]) and improve the data quality.</p>

¹⁶ EWG 19-03 felt that the 40-64 age bracket should be broken down further as it is difficult to tell if the figures are being skewed based on this bracket being wider than others. 5-year age brackets as in the EU population census would provide much more useful information without increasing workload. STECF Scientific Technical and Economic Committee for Fisheries (2019). Social data in the EU fisheries sector (STECF-19-03). Luxembourg: Publications Office of the European Union. <https://bit.ly/2mGW7FH> Accessed August 17, 2019.

	Réunion - Discrepancies on "non-other variable" costs category (higher than crew and fuel costs) Guadalupe and French Guiana – inconsistencies of FTE values Sub-representativeness of women in the economic data	
	Social data: All French ORs missing data for several social variables Mayotte – only employment known with no gender information Sub-representativeness of women in the social data	French ORs need to improve social data collection
Stock Assessment	Assessment of all stocks caught in multispecies fisheries with usual methods may not be feasible	Share the results of the MULTIFISH project in the context of reviewing data and methods dedicated to the assessment of small-scale multi-specific multi-species fisheries on data limited context Reflect on the possibilities to endorse national assessments by a regional RFMO or during a dedicated EWG (e.g. proposed STECF EWG OR 2) to benefit from the effort carried out by research and convert it to a better evaluation of biological indicators.
Environmental Knowledge	General lack of knowledge on environmental issues related to fisheries Lack of quantification and prioritization of environmental issues related to fisheries	A review of Ecosystem Fisheries Interactions is needed by ORs.
Economic & Social	Markets issues are not considered in DCF, namely trade flows should be assessed by ORs Ageing population of fishers Sub-representativeness of women	Analysis of trade flows and local consumption of fishery and aquaculture products by ORs is needed. Study of the dynamics of fisheries and work force recruitment is needed by ORs Review fisheries governance systems by ORs. Calculation of Input/Output tables to determine the economic dependency of ORs on fishing and the income and employment multipliers

Portugal

(3) Table 6.5.5 (Table II of the ad-hoc report) – Updated STECF 19- 19 roadmap recommending by global issues identified possible future scientific studies and activities to improve knowledge in the Portuguese ORs, divided into four main challenges (data collection, stock assessment, ecosystem knowledge, and social & economic impacts). Changes suggested by the ad-hoc contract compared to the EWG 19- 19 version are highlighted in bold.

Challenges	Issues Identify	Recommendations
Data Collection	General data: There is very little knowledge on IUU fishing	Increase share between ORs experts on data collection and on calculation of indicators methodologies - Expert Group(s) on ORs (more transversal between economic, social and biologists) DCF WP & ARs should present data by ORs and metier, including recreational fisheries

	DCF fleet and fishers age segmentation may not be the most appropriate for the situation in the ORs. Namely vessels less than <10 m and fishers mostly 40-64 years	<p>MSs DCF Recreational fisheries coverage should be extended, namely in terms of species.</p> <p>An assessment of IUU is fundamental to evaluate the consequences in term of social, economic as well as environmental impacts on exploited ecosystems and ETP species. In the meantime, reinforcement of the control of IUU in national waters by local authorities is still needed. Commitment and discussions with local fishers would strengthen the potential effects and research for co-build initiatives. Awareness campaigns targeting the illegal fishing communities could be an additional option.</p> <p>At-sea monitoring should be improved in both ORs. Women roles in fisheries should be taken into consideration specifically in social, economic studies by OR</p> <p>DCF fleet and fishers age segmentation should be at a finer scale interval (following STECF 19-03 recommendation¹⁷)</p>
	Biological data: Information on a limited number of species considering the high biodiversity in ORs Inconsistent catch data reported to RFMO	Increase the number of species sampled for at least length composition.
	Economic data: Azores - fuel prices per litre are unusually low Madeira – inconsistencies of FTE values Sub-representativeness of women in the economic data	<p>Better consideration of the diversity and variability/seasonal changes of activities of small-scale fisheries, predominant in most ORs is needed</p> <p>Economic data should be check for consistency and quality, for example harmonization of the activity variables (value of landings and economic variable [gross value of landings]) and improve the data quality.</p>
	Social data: Sub-representativeness of women in the social data	
Stock Assessment	Assessment of all stocks caught in multispecies fisheries with usual methods may not be feasible	<p>Review data and methods dedicated to the assessment of small-scale multi-specific multi-species fisheries on data limited context & test several assessment methods in different ORs and compare results – possibly within an existing WG (ex. STECF, ICES, RFMOs)</p> <p>Reflect on the possibilities to endorse national assessments by a regional RFMO or during a dedicated EWG (e.g. proposed STECF EWG OR 2) to benefit from the effort carried out by research and convert it into better evaluation of biological indicators.</p>
Environmental Knowledge	General lack of knowledge on environmental issues related to fisheries	A review of Ecosystem Fisheries Interactions is needed by ORs.

¹⁷ EWG 19-03 felt that the 40-64 age bracket should be broken down further as it is difficult to tell if the figures are being skewed based on this bracket being wider than others. 5 year age brackets as in the EU population census would provide much more useful information without increasing workload. STECF Scientific Technical and Economic Committee for Fisheries (2019). Social data in the EU fisheries sector (STECF-19-03). Luxembourg: Publications Office of the European Union. <https://bit.ly/2mGW7FH> Accessed August 17, 2019.

	Lack of quantification and prioritization of environmental issues related to fisheries	
Economic & Social	<p>Markets issues are not considered in DCF. namely trade flows should be assessed by ORs</p> <p>Ageing population of fishers</p> <p>Sub-representativeness of women</p>	<p>Analysis of trade flows and local consumption of fishery and aquaculture products by ORs is needed.</p> <p>Study of the dynamics of fisheries and work force recruitment is needed by ORs</p> <p>Review fisheries governance systems by ORs.</p> <p>Calculation of Input/Output tables to determine the economic dependency of ORs on fishing and the income and employment multipliers</p>

Spain

(4) Table 6.6.6 (Table VIII in the ad-hoc contract)- Updated STECF 19- 19 roadmap recommending by global issues identified possible future scientific studies and activities to improve knowledge in the Spanish OR, divided into four main challenges (data collection, stock assessment, ecosystem knowledge, and social & economic impacts). Changes suggested by the ad-hoc contract compared to the EWG 19- 19 version are highlighted in bold.

Challenges	Issues Identify	Recommendations
Data Collection	<p>General data: There is very little knowledge on IUU fishing</p> <p>DCF fleet and fishers age segmentation may not be the most appropriate for the situation in the ORs. Namely vessels less than <10 m and fishers mostly 40-64 years</p>	<p>Increase share between ORs experts on data collection and on calculation of indicators methodologies - Expert Group(s) on ORs (more transversal between economic, social and biologists)</p> <p>MSs DCF Recreational fisheries coverage should be extended, either in terms of species and volumes (weight and value equivalent).</p> <p>An assessment of IUU is fundamental to evaluate the consequences in term of social, economic as well as environmental impacts on exploited ecosystems and ETP species. In the meantime, reinforcement of the control of IUU in national waters by local authorities is still needed. Commitment and discussion with local fishers would strengthen the potential effects and research for co-build initiatives. Awareness campaigns targeting the illegal fishing communities could be an additional option.</p> <p>At-sea monitoring should be improved</p> <p>Women roles in fisheries should be taken into consideration specifically in social, economic studies</p> <p>DCF fleet and fishers age segmentation should be at a finer scale interval (following STECF 19-03 recommendation¹⁸)</p>
	Biological data:	Increase the number of species sampled. for a least length composition.

¹⁸ EWG 19-03 felt that the 40-64 age bracket should be broken down further as it is difficult to tell if the figures are being skewed based on this bracket being wider than others. 5 year age brackets as in the EU population census would provide much more useful information without increasing workload. STECF Scientific Technical and Economic Committee for Fisheries (2019). Social data in the EU fisheries sector (STECF-19-03). Luxembourg: Publications Office of the European Union. <https://bit.ly/2mGW7FH> Accessed August 17, 2019.

	Information on a limited number of species considering the high biodiversity in ORs Inconsistent catch data reported to RFMO	Extend biological sampling to parrotfish. and increase geographical sampling
	Economic data: Discrepancies between gross and total value of landings (should be similar) Fuel prices per litre are unusually low Sub-representativeness of women in the economic data	Better consideration of the diversity and variability/seasonal changes of activities of small-scale fisheries is needed Economic data should be check for consistency and quality, for example harmonization of the activity variables (value of landings and economic variable [gross value of landings]) and improve the data quality.
	Social data: Sub-representativeness of women in the social data	
Stock Assessment	Assessment of all stocks caught in multispecies fisheries with usual methods may not be feasible Canaries – stock data sent but not assessed	Review data and methods dedicated to the assessment of small-scale multi-specific multi-species fisheries on data limited context & test several assessment methods in different ORs and compare results – possibly within an existing WG (e.g., STECF, ICES, RFMOs) Reflect on the possibilities to endorse national assessments by a regional RFMO or during a dedicated EWG (e.g. proposed STECF EWG OR 2) to benefit from the effort carried out by research and convert it into better evaluation of biological indicators.
Environmental Knowledge	General lack of knowledge on environmental issues related to fisheries Lack of quantification and prioritization of environmental issues related to fisheries	A review of Ecosystem Fisheries Interactions is needed
Economic & Social	Markets issues are not considered in DCF, namely trade flows should be assessed by ORs Ageing population of fishers Sub-representativeness of women	Analysis of trade flows and local consumption of fishery and aquaculture products is needed. Study of the dynamics of fisheries and work force recruitment is needed Review fisheries governance system. Calculation of Input/Output tables to determine the economic dependency of ORs on fishing and the income and employment multipliers

TOR 3: *Translate the above findings and deliverables into a set of recommendations for each OR that will assist the Member States in improving the reporting of the balance between the fishing opportunities and fleet capacity for the fish stocks and fleet segments identified in Task 2.*

As specific and general conclusions were provided to Member States in the roadmaps developed by STECF EWG 19-19 and updated in ToR 2, for this ToR, the contractors provided general recommendations, common to all ORs. In this regard, the contractors concluded that the ORs have common specificities: remoteness from the main national territory, high raw material prices, importance of the fishing sector for local economy, lack of infrastructure that hinder development but also the efficiency of data collection. Despite the efforts already deployed and the ongoing projects in many ORs, these points will take time to be offset.

Additionally, considering the predicted impacts of climate change in ORs, such as the increase of severe unpredicted weather events and their consequences for ecosystems, halieutic resources and fisheries sector (AMEC, 2014), the following actions were proposed in the ad-hoc contract:

- Review the present assessment framework to give more importance to national or at OR level stock assessments.
- review the methodologies and results by relevant RFMOs or by STECF in order to enhance the number of stocks included in the balance capacity analysis (as well as in STECF EWGs or research projects); and
- promote a dedicated EWG (e.g., under STECF) to discuss the feasibility – among other measures - of co-management at OR fleet segment level.

Specifically, the contractors suggested the need for:

1. A lower landings threshold of 200 tonnes under the DCF should be considered for the obligation to sample catch for the ORs.
2. Increase sampling of recreational fisheries and evaluation of the impacts of these fisheries.
3. Increase number of stocks assessed.
4. Increase monitoring and control, namely through enhancing the use of existing technologies such as VMS and innovative technological solutions (remote length sampling or EM) as well as participatory approaches such as promotion of voluntary self-sampling protocols with involved fishing fleets.
5. Increase sampling and assessment of Protected, Endangered and Threatened (PET) species, based on the ICES priority species or international conventions lists¹⁹.
6. Increase data coordination and centralisation.
7. Promote methodological exchange and harmonisation through ORs.
8. Increase economic and social data collection.

STECF notes that these suggestions, as well as the roadmaps described in ToR 2, contribute to providing the required knowledge detailed to each OR. This would assist the Member States in improving the reporting of the balance between the fishing opportunities and fleet capacity for the fish stocks and fleet segments, as requested in ToR 3.

STECF considers that convening a dedicated EWG for ORs at regular intervals would be beneficial to assist further in the improvement of the balance-capacity assessment. In addition to investigating more thoroughly the Member States reports and STECF EWG conclusions, this EWG would allow:

- Peer-reviewing available stock assessments that are not covered by other scientific entities.
- Increase knowledge exchange between ORs experts on data collection and on calculation of indicators methodologies, (e.g., considering specific issues such as operating subsidies).

¹⁹OSPAR, Carthage Convention, Bern Convention, CMS convention

- Identify specific topics, for instance relating to improvement of the knowledge of IUU, revision of monitoring & control actions implemented in the ORs, management plans, fisheries impact on sensitive species, etc. Such issues could be dealt with as special requests at the EWG.

In addition to this dedicated EWG, STECF observes that specific data collection issues, like the thresholds for biological data collection, may need a broader reflection at marine region level and that this reflection should involve the DCF National Correspondents and the institutes in charge of the presentation and implementation of the DCF Work Plans. This could be achieved through the establishment of an intersessional working group within the Regional Coordination Group (RCG) for the Long-Distance Fleet (LDF).

STECF conclusions

STECF concludes that the results of the ad hoc contract show data gaps and methodological discrepancies still occur in the Member State reports for 2022. STECF concludes that such issues appear more important in the French outermost regions, while acknowledging that important work seems to be ongoing to address the data gaps. The results from studies designed to address these issues are not available yet.

STECF concludes that the 2022 balance-capacity reports provided by Spain and Portugal contain quantitative indicators comparable with those calculated by EWG 21-16. For France, STECF concludes that the computed indicator and fleet segmentation used by the Member State still differ from those used by STECF EWG 21-16. No quantitative values are provided in the report, making assessment difficult. STECF encourages France to provide quantitative results and comparability elements that could ease future evaluations of balance/capacity by EWG 22-15.

STECF concludes that establishing an STECF EWG specific to the ORs and meeting at regular intervals would potentially be useful to progress work in the ORs. This OR EWG should ideally include participants with relevant expertise in economic, social and biological topics.

STECF concludes that one of the priorities of the EWG could be to review and endorse stock assessments produced by local scientists working in the OR context, in cases where they such reviews have not been undertaken by relevant RFMOs or other competent scientific bodies.

STECF concludes that the EWG could cover other specific topics depending on needs, for instance relating to improvement of the knowledge of IUU, revision of monitoring & control actions implemented in the ORs, management plans, fisheries impact on sensitive species, etc. Such issues could be dealt with as special requests at the EWG.

6.6 Follow-up of EWG 21-01 and EWG 22-01: West Med assessments: evaluation of closure areas (Spain)

Background provided by the Commission

In adopting the Western Mediterranean multi-annual management plan, Member States agreed to Article 11.1 (alternatively Article 11.2) that aims at protecting juveniles of hake and to Article 11.3 that aims at protecting spawners and juveniles of demersal stocks. The definition of closure areas should be on the basis of the best available scientific advice, where there is evidence of a high concentration of juvenile fish, below the minimum conservation reference size, and of spawning grounds of demersal stocks, in particular for the stocks concerned.

STECF PLEN 19-03, STECF PLEN 20-01, STECF PLEN 21-03, STECF EWG 21-01 and recently STECF EWG 22-01 have reviewed the proposals of closure areas (placement and period) submitted by Spain and determine their efficiency to protect juveniles and spawners of demersal stocks, including hake, as planned in Article 11.

However, in view of a recent modification of the closure areas in Spanish waters, this review should be updated, including juveniles and spawners of all demersal species covered by the West Med MAP and accounting for fishing effort displacement.

Background documents are published on the meeting's web site on: <https://stecf.jrc.ec.europa.eu/plen2202>

Request to the STECF

In light of additional data provided by Spain, STECF is requested to review the updated closures (placement and period) submitted by Spain in 2020, in 2021 and 2022.

In order to facilitate the visualisation of the network of closure areas, STECF could map the different closure areas by year of adoption and by type of closure (temporary vs. permanent).

Finally, STECF is requested to determine their efficiency to protect both juveniles and spawners of all demersal species covered by the West Med MAP and accounting for fishing effort displacement. To provide an order of magnitude of the closure efficiency, the proposed closure areas should aim at reducing about 20% of the bycatch of each target species in each GSA. Following the roadmap provided in previous STECF Plenary and based on available literature, including the results from STECF EWG 22-01 and preparatory work leading to it, the Plenary could suggest complementary closed areas for Spain in order to protect all demersal species covered by the MAP.

Summary of the information provided to STECF

STECF was provided with the successive publications of the Spanish Official Journal detailing the relevant Ministerial decrees (Orden APA/423/2020 de 18 de mayo, Orden APA/753/2020 de 31 de julio, Orden APA/1397/2021 de 10 de diciembre, Orden APA/XXX/2022 de XX de mayo). These decrees implement the network of closures put in place by Spain and successive modifications to these closures. They detail the locations and seasonality of the closures as well as the targeted fishing gears. The decrees are cumulative, each modifying the pre-existing ones. As an example, the implemented closure areas in early 2022 were the result of an original decree from 2020 (Orden APA/423/2020), with additional modifications enforced through Orden APA/753/2020 and Orden APA/1397/2021.

STECF notes that the latest decree (Orden APA/XXX/2022 de XX de mayo) did not seem to have been published at the time of STECF PLEN 22-02.

STECF comments

Summary of previous STECF evaluations of West Med MAP closures

Following the implementation of Regulation (EU) 2019/1022 (West Med MAP), Member States proposed closures that were assessed by STECF PLEN 19-03. Given the wide variety of data used and justifications provided by Member States, STECF provided some guidelines on how the analysis could be performed: *"The assessment of the best location and timing for closures should compare and overlay a) where the fisheries are taking place and the likely catch composition and b) where juveniles are most likely to be distributed, in order to assess the expected impact of the fisheries on the juvenile stock component. Juvenile hake habitats can be modelled using fishery-independent trawl surveys and applying persistency analyses of the juvenile hake distribution to document hotspots in time and space."* (See PLEN 19-03 report for more detail). Those guidelines were updated during STECF PLEN 20-01 by incorporating fishing gear selectivity and the potential for effort redistribution.

According to Article 11 paragraph 3 of Regulation (EU) 2019/1022, Member States were required to implement closures by 17 July 2021 in areas with evidence of high concentration of juvenile fish, below minimum conservation reference size, and spawning grounds of demersal stocks covered by the West Med MAP. Moreover, European Council, Statement 5415/1/21 Rev1, stipulated that *"the additional closures should result in a reduction of between 15% and 25% in the by catch of juveniles and spawners of each stock covered by the WMMAP" (the term "by catch" used in the literal sentence from the joint statement, was interpreted as catch in the analysis carried out by STECF)*". Therefore, implemented closures should protect both juveniles and spawners of the relevant species. EWG 21-01 noted, in this context, the objective of the closures changed and EWG 22-01 suggested that the overlap between proposed areas should now be checked against information on the distribution of juveniles and spawners of the 6 species covered by the West Med MAP.

Following this change in the objective, EWG 21-01 assessed the proposal formulated by Spain resulting from the publication of decrees Orden APA/423/2020 and Orden APA/753/2020. The EWG acknowledged that the methodology used by Spain was in line with the STECF guidelines. However, it was considered that none of the areas evaluated reached the objectives required for any proportion of the stocks.

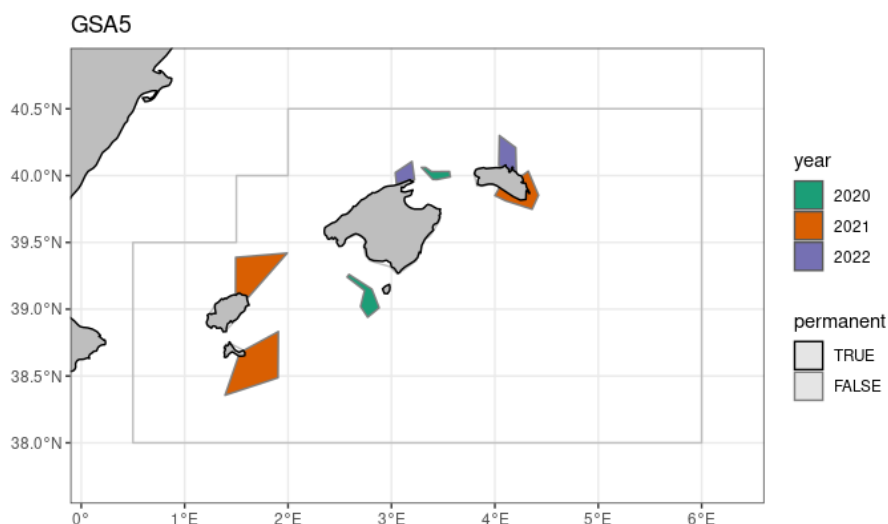
After discussion during STECF PLEN 21-02, EWG 22-01 was tasked to produce a roadmap to identify hotspots of juveniles and spawners and to prioritise closures. The EWG used data from the MEDITS scientific survey complemented with maps interpolated from commercial logbooks and VMS data (Alglave et al. 2022 – additional data were also used in EMU2). EWG 22-01 then identified potential new closure areas by prioritising the overlapping surfaces of the identified hot spots of juveniles and spawners for all species.

Evaluation of 2022 closures

Following Orden APA/XXX/2022, which did not seem to be officially published at the time of the STECF plenary meeting, STECF was asked to draw and assess the relevance of proposed closures resulting from the 4 successive decrees. No justification or supporting scientific information explaining how these new closures were selected were supplied. Therefore, STECF chose to compare their consistency with the hotspots identified by EWG 22-01. This assessment thus only accounts for the spatial distribution of juveniles and spawners, and STECF was unable to account for spatial distribution of fishing effort or potential effort redistribution.

To derive the locations of implemented closures, STECF used the locations mentioned in the three published Spanish decrees (Orden APA/423/2020, Orden APA/753/2020, Orden APA/1397/2021) and in the background document "Orden APA/XXX/2022". These coordinates were used to build a shapefile with the history of all of the closures (Figure 6.6.1). When decrees specified that a closure

was “depth-specific”, bathymetry data from GEBCO²⁰ was used to restrict the polygon to the corresponding depth (by making an intersection of layers with GIS software). In doing this, STECF noticed that the list of closure areas provided to PLEN 22-02 was not entirely consistent with the list and location of closures that were provided as a background document to EWG 22-01. Moreover, STECF notes that the cumulative process of the successive decrees modifying previously existing ones is prone to errors because of initial errors in the decrees themselves (e.g., Orden APA/5/2022 corrected errors in Orden APA/1397/2021, Orden APA/506/2020 corrected coordinates errors in Orden APA/423/2020, while there are suspected errors in the coordinates of Subárea Valencia contained in Orden APA/XXX/2022). Additionally, copying and pasting geographical coordinates from a pdf file to a GIS shapefile is also not an efficient and robust procedure. In the future, STECF suggests it would be better for Member State to maintain a single updated shapefile as the one provided to EWG 22-01, which would allow tracking of the successive modifications, and which could then be easily provided and used for evaluation.



20 https://www.gebco.net/data_and_products/gridded_bathymetry_data/

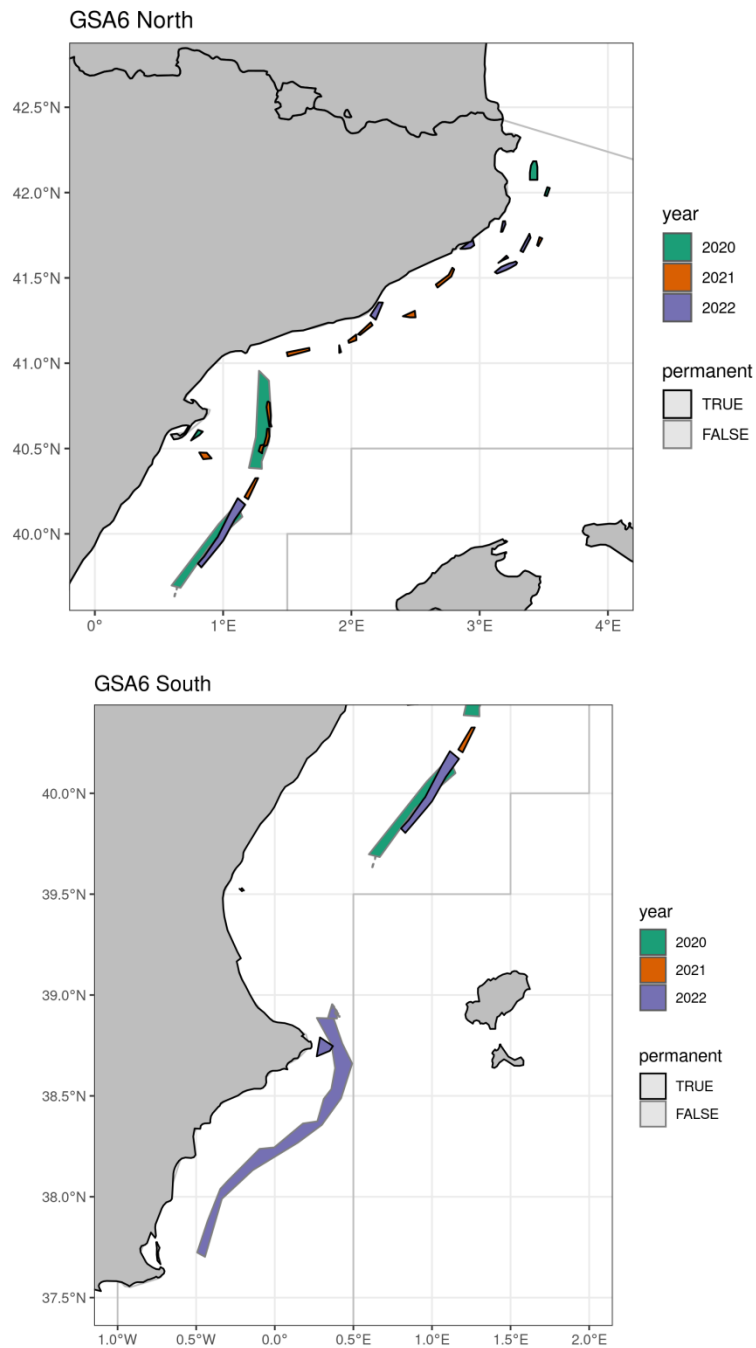


Figure 6.6.1: Implemented closure areas in GSA5 (top figure), Northern GSA6 (centre figure) and Southern GSA6 (bottom figure) after publication of the 4 decrees. Both trawler specific and multi-gear closures are drawn. The shape of the closed areas is based on the polygons described in corresponding Spanish decrees and colours stand for the year of the implementation or latest modification (green: 2020 from Orden APA/423/2020 or Orden APA/753/2020 – red: 2021 from Orden APA/1397/2021, - purple: 2022 from Orden APA/XXX/2022). Closure areas with a black border are permanent whereas the others are seasonal. There are doubts about the coordinates of “Subárea Valencia” (more visible in the following figures) as described in Orden APA/XXX/2022 since the specified coordinates do not seem fully consistent with the specified bathymetry.

Compared to the closed areas existing from the 3 published decrees, the changes proposed in Orden APA/XXX/2022 affect closures in GSA 5 and GSA 6 (Table 6.6.1). They mostly consist in modifications of shapes of closures and in the implementation of one new closure (Roca dels Feliu). Since the only documented changes occur in GSA5 and 6, STECF focused its evaluation on these two sub-areas. The resulting locations of closure areas is displayed in Figure 6.6.2, and STECF used the shapefiles to compute the area size.

STECF notes that in most cases, the changes lead to an increase in the surface area of the existing closed areas. Subárea Valencia is an exception. STECF highlights that there may be an error in the coordinates specified in the decree Orden APA/XXX/2022 (noting that the specified coordinates do not seem consistent with the depth in which the closure is supposed to take place according to the decree). The decree stipulates that the closure affects grounds between 150 and 210m depth, but the polygon described by the coordinates in the same decree is located on much deeper grounds. Surfaces are also reduced in two other areas (Subárea Alicante and Veda permanente de Castellón), resulting in an overall decrease in total closed surface in GSA 6 (even ignoring Subárea Valencia).

Table 6.6.1: Characteristics of the closure areas affected by the Orden APA/XXX/2022. "TOTAL" stands for all closure areas within the corresponding GSAs (including closure areas that were not affected by the Orden APA/XXX/2022. Overlapping closures areas are counted only once). The trawable area is presented since trawling is affected consistently among all areas (* denotes trawl specific closure areas, while other closures affect longlines, trawls and gillnets). Surfaces were estimated using a GIS software (package sf, R) by measuring the surface of the polygons described in the decrees, from which non-trawable areas estimated by EWG 22-01 were removed. In this analysis, the focus is on trawable areas only since trawling is prohibited in all closure areas. For closure areas specific to a depth-range according to the decree (here Subárea Valencia 150-210m), bathymetry data from GEBCO was used to restrict the polygon to the relevant area. Name, GSA, period and gears are stipulated in the decrees. Type of change refers to the changes induced by Orden APA/XXX/2022 compared to the pre-existing situation.

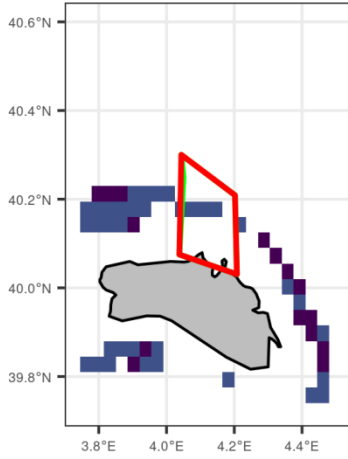
Name	Period	Type of change induced by Orden APA/XXX/2022	Closed trawable surface after Orden APA/XXX/2022 (before Orden APA/XXX/2022) – km ²
GSA 5			
Zona 1 Norte Menorca*	Sep- Mar	change in design	268.9 (260.8)
Zona Noroeste Mallorca*	Sep- Mar	change in design	182.0 (182.0)
TOTAL			3600.4 (3592.4)
GSA 6			
Área "Bol del Port de Barcelona"	Permanent	change in design	34.5 (34.5)
Área de Repoblación Blanes-Palomós	Permanent	change in design	38.1 (12.2)
Bol de terra al vapor de Palamós	Permanent	result from the union of former areas "Núcleo de Amortiguación Mars	21.1 (0)

Bol de Tossa*	Permanent	d'Anterra" and "Zona de Drapaire" change in design	15.8 (5.4)
Núcleo de Amortiguación Mars d'Anterra*	Permanent	merged into "Bol de terra al vapor de Palamós"	0 (24.5)
Núcleo Mas d'Enterra	Permanent	change in design	10.4 (10.4)
Roca dels Feliu	Permanent	new	48.6 (0)
Subárea Alicante*	May-Sep	change in design	970.9 (1059.4)
Subárea Valencia*	May-Sep	change in design	25.9 (562.8)
Veda permanente de Castellón	Permanent	Change in design, formerly named A Fora, Castellón	225.4 (261.8)
Zona "Bol de les Bruixes de Blanes"	Permanent	change in design	5.1 (5.1)
Zona de Drapaire	Permanent	merged into "Bol de terra al vapor de Palamós"	0 (22.1)
TOTAL			2428.9 (3090.9)
TOTAL (without Subárea Valencia)			2403.0 (2528.2)

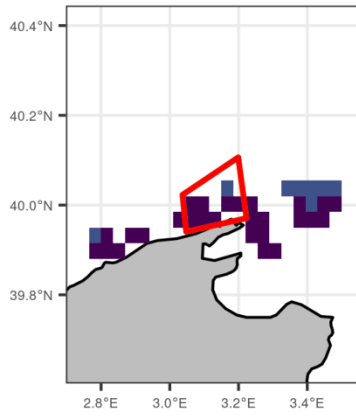
From figure 6.6.2, STECF also notes that:

- For many closure areas (Zona 1 Norte Menorca, Zona Noroeste Mallorca, Bol de las Bruixes de Blanes, Bol de Port de Barcelona, Bol de Tossa, Núcleo Mas d'Enterra), the changes are barely visible.
- Changes are more significant in the Bol de Terra al Vapor de Paalamós but the proposed area does not overlap identified hotspots of juveniles/spawners.
- The increase in surface area of the Subareá Alicante covers more hotspots, while it is the opposite for Veda Permanente de Castellón.
- The design of Subareá Valencia as described in the last decree appears erroneous. The updated location of this closure needs to be checked against the original one, which seemed to protect multiple identified hotspots.
- Some of the closure areas implemented in GSA6 are far away from identified hotspots.

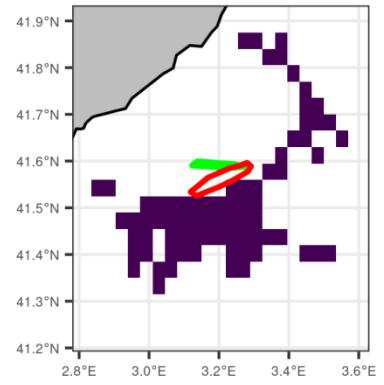
GSA5
Zona 1 Norte Menorca



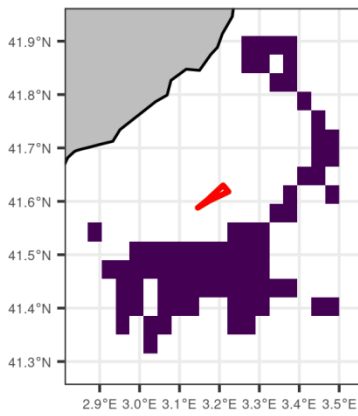
GSA5
Zona Noroeste Mallorca



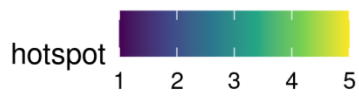
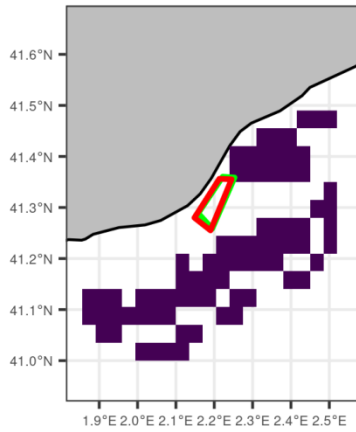
GSA6
Área de Repoblación de Blanes-Palamós



GSA6
Bol de les Bruixes de Blanes



GSA6
Bol de Port de Barcelona



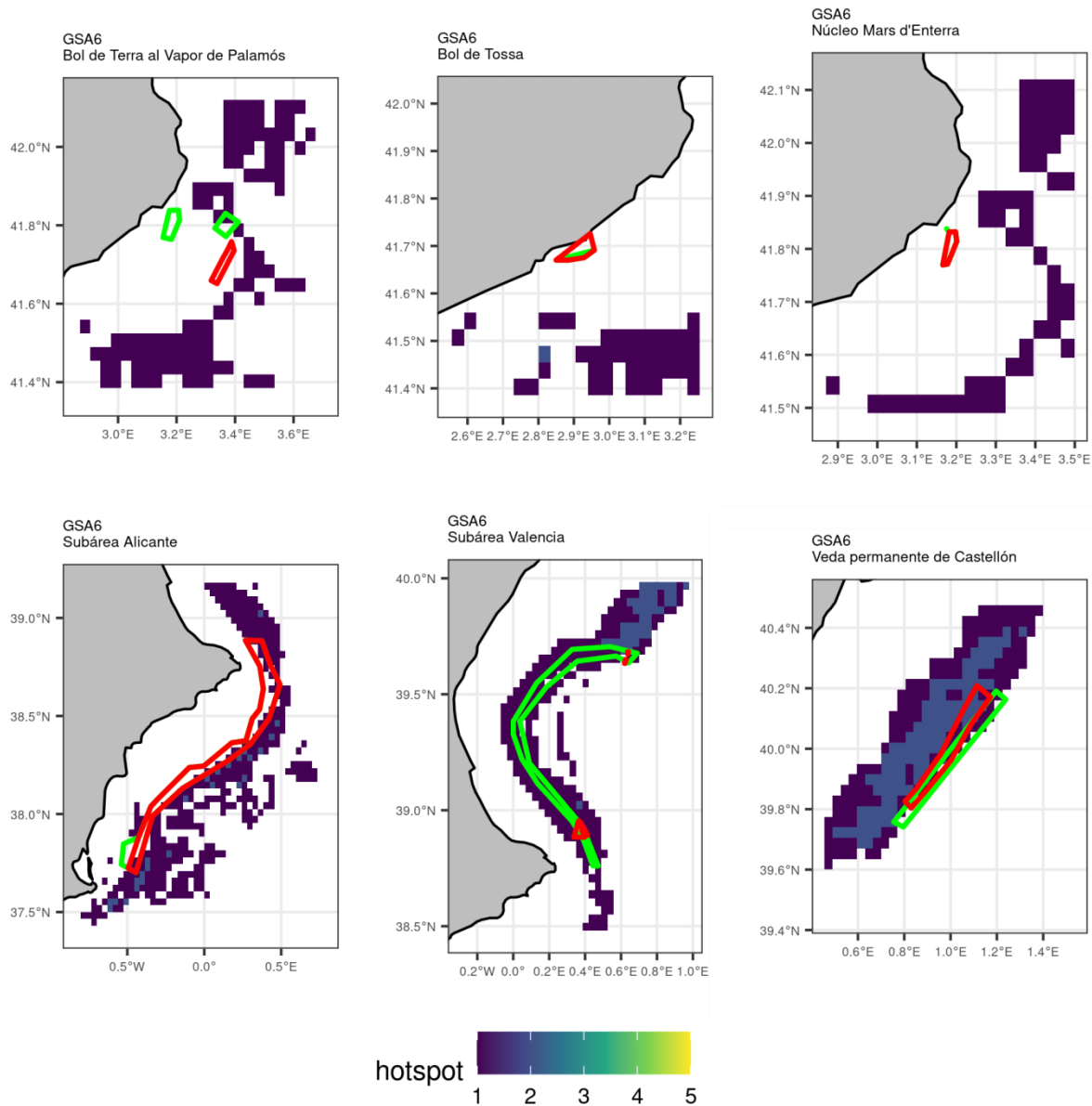
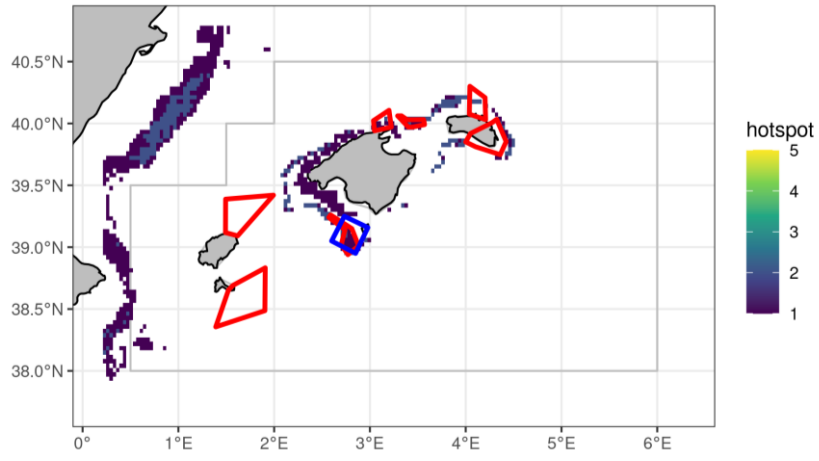


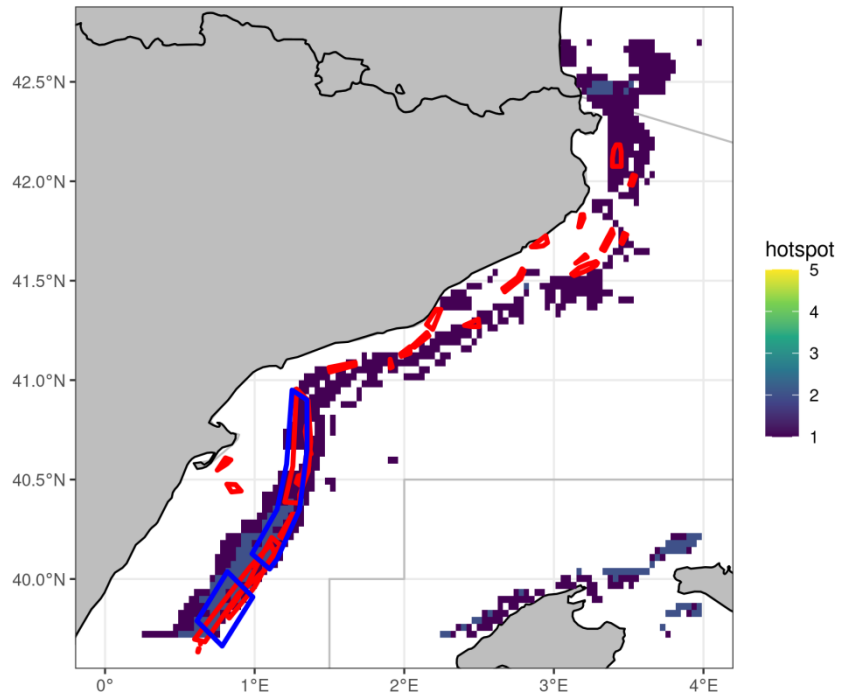
Figure 6.6.2: Comparisons of the modified design of closure areas by decree Orden APA/XXX/2022 (red) with respect to the old design resulting from the 3 previous decrees (green). The closure areas are overlaid with the hotspots identified by EWG 22-01 (background color – hotspot values stand for the number of species covered by the WestMed MAP for which a pixel was detected as a “persistent area of high concentration”). There are doubts about the coordinates of “Subárea Valencia” as described in Orden APA/XXX/2022: coordinates are not consistent with specified bathymetry in the decree resulting in a very small closure area.

To further explore the potential impact of the modifications, STECF overlaid the modified closures, the old closures and the hotspots identified by EWG 22-01 (See Figure 6.6.3). In GSA5, EWG 22-01 proposed a closure area at the South-West of Mallorca. This proposed closure is partly consistent with the existing seasonal closure “Subárea Suroeste Mallorca” that was implemented in 2020. In GSA6, EWG 22-01 proposed large closure areas along the identified hotspots. Some existing closures are consistent with those proposed closures (e.g., “Subárea Castellón”, “Subárea Catalunya”), though the existing closures are of more limited areas.

GSA5



GSA6 North



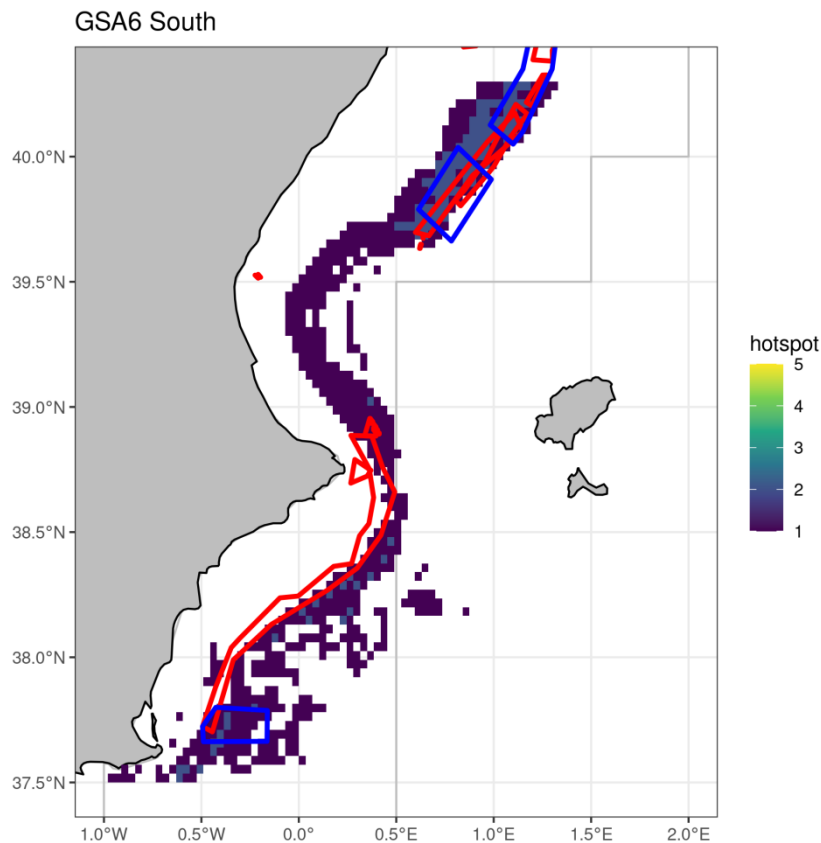


Figure 6.6.3: Implemented closures after the publication of the 4 decrees (red) and proposed closures by EWG 22-01 (blue) overlaid with identified hotspots identified by EWG 22-01 (background color – hotspot values stand for the number of species for which a pixel was detected as a “persistent area of high concentration”). There are doubts about the coordinates of “Subárea Valencia” as described in Orden APA/XXX/2022: coordinates are not consistent with specified bathymetry in the decree resulting in a very small closure area

STECF conclusions

STECF was able to draw maps displaying the location of the closure areas, their year of implementation or latest modification and their type (permanent or seasonal). These are based on the polygon information described in the various decrees.

STECF concludes that this process is prone to errors and will require subsequent updates and corrections. STECF further concludes that maintaining and updating the latest closure areas with the single shapefile provided to EWG 22-01 could improve the analysis of proposed closures, while allowing keeping track of the successive modifications.

Regarding the request on the evaluation of the efficiency of the 2022 closures, STECF concludes that the modifications introduced by the latest decree (Orden APA/XXX/2022) are limited to GSA5 and GSA6, and lead to minor changes in terms of closed trawlable surface (+0.2% in GSA 5; -5.0% for GSA6 not including Subárea Valencia - Table 6.6.1). Many of these closures do not overlay the hotspots identified by EWG 22-01.

STECF concludes that the efficiency of a closure area in achieving its objective depends on the spatial distribution of fishing effort (and on its redistribution) and other factors such as fishing gear selectivity. In the absence of detailed scientific information supporting the selection of the closed areas by the Member State, STECF was unable to conclude on the efficiency of the closure areas nor or to identify any additional closure areas to those proposed by EWG 22-01.

STECF concludes that, as underlined by EWG 22-01, a spatially explicit mixed fisheries model would be required to evaluate the efficiency of closure areas in the Western Mediterranean Sea. For such a model, data on spatial distribution of the Spanish fishing effort (VMS data) would be required.

7. ITEMS/DISCUSSION POINTS FOR PREPARATION OF EWGS AND OTHER STECF WORK

7.1 New STECF - Discussion and possible agreement on STECF rules of procedure

The STECF rules of procedure were discussed and agreed.

7.2 Preparation of EWG 22-12 – Review of marketing standards – fisheries indicators

Request to the STECF

STECF is requested to further discuss and advise on the content and organisation of this EWG. The Plenary should revise the ToRs and give indication of the composition of the EWG.

Background

One of the measures established under the common market organisation (CMO) are regulatory marketing standards for fishery products. The current marketing standards lay down uniform quality characteristics for certain fishery products sold in the EU, whatever their origin. The 2019 evaluation²¹ of the marketing standards framework concluded that the current standards do not sufficiently contribute to supply the market with sustainable products. Consequently, the revision of the marketing standards is included as an initiative under the Farm to Fork Strategy for a fair, healthy and environmentally friendly food system²².

In May 2021 STECF released a report on "Criteria and indicators to incorporate sustainability aspects for seafood products in the marketing standards under the Common Market Organisation"²³ (STECF 20-05). This report proposes transparent methods of measuring and communicating along the supply chain some sustainability aspects of FAPs, based on scientifically sound, simple and verifiable criteria and indicators. Among the eight criteria suggested by the STECF report, three have been identified by the Commission as key sustainability hotspots for a potential first stage of the revision of the marketing standards: (i) fishing pressure (impact on the targeted stock), (ii) impact on the seabed and (iii) impact on sensitive species.

Based on STECF 20-05, two ad hoc contracts have defined specific indicators for criteria (i) and (ii) above and developed a methodology for the grading of each of these indicators. An indicator for criterion (iii) still needs to be developed.

The Commission has requested the establishment of a further EWG to assess and potentially complement the findings of the two ad-hoc expert teams mentioned above. For that purpose, the STECF EWG will be able to build on the preparatory work of the two previous ad-hoc expert teams. This preparatory work consists of a report and an Excel database for the sustainability criteria (i) fishing pressure and (ii) impact on the seabed.

The EWG should also discuss and define an approach for establishing an indicator for (iii) the impact on sensitive species.

STECF comments

STECF discussed and revised the ToRs for EWG 22-12. Once finalised, they will be published on the meeting registration page. STECF noted that Tasks 1 and 2 are relatively straightforward, in particular concerning the work-stream dedicated to seabed impacts (i.e., most of the marine species marketed in the EU have been included in the ad hoc contract completed to support the EWG).

21 [Seafood markets \(europa.eu\)](https://europa.eu)

22 [Communication from the Commission to the EP and Council - Farm to Fork Strategy](#)

23 [EN \(europa.eu\)](https://europa.eu)

STECF also discussed the possibility of organising the EWG in hybrid modality, as well as the best way of involving potential observers during the meeting. No firm decisions were made, and it was agreed that the EWG chair, DG Mare and STECF bureau will exchange views on the organisation of the meeting. The list of invited experts attending also requires further discussion in order to ensure a broad coverage of the required expertise.

7.3 Preparation of EWG 22-19 – Review of the Technical Measures Regulation

Request to the STECF

STECF is requested to further discuss and advise on the organisation of this EWG, based on the intersessional discussions, with the selection of new co-chairs, dates and a location venue.

STECF comments

STECF continued the discussions (summarised in PLEN 22-01) and during intersessional meetings following the Plenary. New co-chairs have been identified (one is confirmed, and one is contacted/pending confirmation). According to the revised time plan, the meeting will be arranged as a physical meeting and will take place at JRC/Ispra between 28 November and 2 December 2022. STECF further discussed the data requirements, organisation, and identified the competences needed in relation to the draft ToRs (which were presented by DG MARE at the meeting). The draft ToRs were agreed with DG MARE as follows:

- 1) Identify the optimal ages and sizes at which fish should be caught.
- 2) Identify the corresponding fishing gears, beginning with the stocks where the highest gains can be achieved (cod stocks and Mediterranean hake). Where possible, assess the transitional costs, and the operational changes needed to realise this.
- 3) Identify a workplan for developing, under STECF leadership and review, technical support for detailed fisheries-based transition plans at regional levels for the purpose of improving yields while having regard to appropriate economic and social transitions.

STECF stressed the importance of contacting relevant experts as soon as possible and encouraging them to attend the EWG.

7.4 Preparation of EWG 22-08 – Skates and rays management

Request to the STECF

STECF is requested to discuss on the organisation of this EWG and clarify the workflow.

Background to Request

The management of skates and rays has been subject to ongoing review and research, including requests to STECF to evaluate possible changes to TAC setting and wider management approaches (STECF 15-01, EWG 17-01, STECF 17-16).

A large proportion of skate and ray species are currently managed under a group TAC with the code "SRX". Historically, ICES has provided biennial catch advice for skates and rays at this very general level. Over the past ten years and more, ICES have been able to provide catch advice at the species level for more and more stocks. The single species advice and stock distribution is not necessarily consistent with the group TAC areas, which complicates the translation of the advice into TAC setting.

Under paragraph 5 (e) of the 2021 Written Records, the parties agreed that they *'would work through the SCF, and with ICES as appropriate, to seek to agree the most appropriate way to interpret the ICES advice for the setting of the skates and rays group TACs SRX/07D, SRX/2AC4-C and SRX/67AKXD, and to work jointly to adopt a possible in-year amendment to the TACs to reflect the agreed interpretation of the advice'*. The Parties reconfirmed this commitment for 2022 in the 2022 Written Record, with a view to applying this to existing and emerging ICES advice throughout 2022 for TAC setting for 2023.

For the 2021 EU-UK consultations, the EU proposed to maintain the current SRX approach, whereby individual stock advice trends are used to calculate a composite TAC figure for the SRX group for the relevant management area. The UK proposed a different approach, basing their position on the tonnages of the individual stock advice sheets for the relevant management area to calculate the overall TAC.

The Parties agreed to work in the EU-UK Specialised Committee on Fisheries (SCF) to develop and agree on the approach to setting the SRX TAC in the annual fishing opportunities consultations for 2023. In the context of the SCF, the EU agreed to engage with the UK to consider the various options of translating the scientific advice into the group TAC setting. The output of EWG 22-08 will inform the Commission in its preparation for these discussions.

As a second step, a more comprehensive discussion in the SCF should be held on alternative management approaches to the SRX group TAC. This should be coupled with an update of the application of the landing obligation and the possible use of the prohibited species list. The work should be based on the best available science, but also consider the broader management challenges, as well as socio-economic and internal quota allocation issues in the short term for EU Member States and fishing fleets.

STECF comments

Further discussions on EWG 22-08 were held during PLEN 22-02 and the following ToRs were agreed:

1. To consider the appropriateness of the current EU and UK approaches for calculating fishing opportunities in terms of ensuring the sustainable exploitation and conservation of all skates and rays species falling under the SRX group TACs.

2. To consider the appropriateness of using single species sub-TACs as an alternative to the current SRX group TACs.
3. To consider the possibility of developing bespoke management plans as a replacement to SRX group TACs.
4. To report on progress made in underpinning the exemption to the landing obligation and next steps, by species and by gears, by assessing catch data, discard survival rates, methods for improving avoidance, selectivity and survival.
5. To consider transparent criteria to classify skate and ray species as prohibited species, to the extent possible.
6. The work should build on the EWG 17-01 report and any additional knowledge from more recent years.

STECF agreed that the work under TOR 1 should, as a starting point, be based on the following documents:

- Joint UK-EU Non-Paper: EU and UK approaches to Skates and Rays TAC-setting for 2021 and 2022 (Draft, July 2022) – explanatory document of the two approaches
- Exploring alternative methods for Skates and rays TAC and quota management (Batsleer and Lorance, May 2022) – STECF ad hoc contract
- EU request to ICES for a Technical Service to provide catch statistics for skates and rays caught in ICES areas 3, 4, 5, 6, 7, 8 and 9 included in the SRX TAC group ([ICES Technical Service](#), 20 April 2022)

For TOR 1-3, STECF agreed that the EWG should discuss the pros and cons of each approach considered, including their practical application. This should be in the overall context of achieving CFP objectives, but also in terms of *inter alia*, relative stability and socioeconomics of the fisheries for skates and rays, species identification and reporting, to the extent possible.

For TOR 4, STECF agreed that the work should draw on the findings of STECF EWG 22-05 relating to the landing obligation JRs.

For TOR 5-6, STECF agreed that the EWG should build on the work completed by EWG 17-01.

For all of the ToRs, the EWG should provide guidance on where specific questions cannot be fully answered, or gaps exist in the available information and further scientific advice is required.

STECF PLEN 22-02 also discussed the organisation of this meeting, which will be arranged provisionally as a physical meeting and will take place in Brussels between 26 September and 30 September 2022. The option of the meeting being held in a hybrid format was also discussed and will be further explored by the STECF Bureau, EWG chair and DG MARE. STECF stressed the importance of contacting relevant experts as soon as possible and encouraging them to attend the EWG.

7.5 Discussion on EWG 22-04 – Assessment and advice for non-quota stocks, to support the development of multi-annual strategies in the context EU-UK

Request to the STECF

STECF is requested to discuss the follow-up of the EWG 22-04.

Background

In the Trade and Cooperation Agreement (TCA) between the EU and the UK, the two parties agreed in Art. 2 on the setting up of a Specialised Committee on Fisheries (SCF) which should also cover the management of non-quota stocks (NQS). In Art. 500 (2) of the TCA, the two parties state that they “*may agree, in annual consultations, further specific access conditions in relation to (...) (b) any multi-year strategies for non-quota stocks developed under point (c) of Article 508(11)*”. This was re-affirmed in the Written Record of Fisheries Consultations between the UK and the EU for 2022 which stated, “*The Delegations confirmed their commitment to developing multi-year strategies for the conservation and management of shared non-quota stocks in accordance with Article 508(1)(c), and that this is a priority to ensure sustainable management of these fisheries from 2023 onwards*”.

Following from this commitment, STECF was requested to provide input to DG MARE to support the development of multi-year management strategies. This input was provided through EWG 22-04 that represented the first dedicated STECF working group meeting on non-quota stocks. Due to the schedule of the discussions on non-quota stocks between the UK and the EU in July STECF had to organise the first meeting in May 2022 at the latest to provide advice before July 2022. The EWG was requested to provide an overview and identify the main issues that constitute a baseline to inform stock assessment and support fishery management of non-quota stocks

The report of EWG 22-04 provides a comprehensive overview on available fisheries management measures for the management of Non-Quota Species but did identify several gaps in the knowledge that require further EWG’s to address.

STECF comments

Following from a presentation of the conclusions of EWG 22-04, STECF discussed with DG MARE the follow-up to EWG 22-04 and possible future requests to STECF on data analyses and development of management options for Non-Quota Species to support a second EWG. Additionally, STECF discussed a possible time frame for the next EWG meeting. It was agreed the ToRs, organisation and experts needed for the next EWG on Non-quota species require further inter-sessional discussion between the chairs of EWG 22-04, STECF Bureau, JRC and DG MARE.

7.6 Preparation of EWG 22-15 – Balance/Capacity

Request to the STECF

STECF is requested to discuss on the organisation of this EWG, clarify the workflow and support DG MARE in drafting the ToRs.

STECF comments

Terms of Reference

No major changes to the work of the EWG 22-15 are envisaged and the tasks to be addressed will remain essentially the same as those addressed by the 2021 Balance Capacity EWG (STECF 21-16).

The request for advice to the STECF will also remain the same as in STECF 21-16, except for two additional items to be added.

The first relates to the desire to extend and improve the understanding of the balance between fleet capacity and fishing opportunities for fleets in the outermost regions. The second aims to provide an overview of the timing of the Action plans implemented by Member States and the status of such Action plans (i.e., when they were/are to be implemented and whether they are new proposals, continuations of existing Action plans or revisions to Actions Plans already being implemented).

The Terms of Reference are currently in draft form and will be clarified and finalised pending further discussions between the DG MARE focal point and the Chair of the EWG 22-15.

The EWG 22-15 is scheduled as an on-line (Virtual) meeting from 17-21 October 2022 and the STECF review and opinion will be conducted during its November 2022 plenary meeting scheduled for 14-18 November 2022.

Preparatory Working Group.

The EWG 22-15 meeting will be preceded by a preparatory Working group to assemble data and information required to finalise the indicator values required by the EWG. Originally this was scheduled for 7-9 September but because certain key participants are not available, this will now take place from 21-23 September. To ensure participation by appropriate experts, consideration should be given to convening a "hybrid meeting" with participants from France, meeting in Brest and others, participating joining on-line. If a hybrid meeting is not feasible, then the meeting should be held as a "virtual" meeting as in 2021.

Normally the preparatory meeting would be chaired by the Chair of the EWG 22-15 (John Casey) but as he is unavailable, Armelle Jung has agreed to act as Chair.

7.7 Preparation of EWG 22-14 – Social data in EU fisheries

Request to the STECF

STECF is requested to discuss on the organisation of this EWG, clarify the workflow and support DG MARE in drafting the ToRs.

STECF comments

STECF discussed the organisation of EWG 22-14 with DG MARE. STECF notes that a requirement for EWG 22-14 to take place is the availability of supporting analysis of the national profiles. These national profiles, to be produced through ad hoc contracts, depend on the availability of a preliminary national profile to be used as a model. Due to a delay in the production of the preliminary national profile and the subsequent delay in the production of the remaining national profiles through ad hoc contracts, it will not be possible to hold the STECF EWG 22-14 in September 2022 as originally planned. Therefore, it was agreed an alternative date will be discussed by the EWG chair, STECF Bureau and DG MARE depending on the availability of the national profiles.

STECF observes that prior to the EWG meeting, it was agreed the chairs of the EWG should contact the relevant ICES working groups as well as the RCGECON chairs to coordinate the work on social impact of fisheries management measures, including the use of EU MAP data and national profiles.

STECF suggests that the participation for this EWG should include Member State experts with social science expertise (especially non-economic social sciences).

STECF observes that building upon the EWG 20-14 report, the RCG ECON 2021 report (as well as 2022 report, if this is available at the time the EWG 22-14), and the 2022 STECF ad-hoc contract preparing models of national profiles, the draft ToRs for EWG 22-14 are as follows:

1. Assess whether the model of national profiles deliver data and information in a useful fashion. If required, the EWG shall propose changes to the National Profile models.
2. Identify possible discrepancies and assess the comparability of the available National Profiles across Member States.
3. Ensure alignment in the methodology and preparation of national profiles with the development and output in the fora of RCG ECON and ICES WG SOCIAL. This unification should be achieved across all bodies currently involved in the development of social indicators such as STECF, RCG ECON and ICES WGSOCIAL. GFCM developments should be cross-checked in this discussion.
4. Assess the extent to which the produced data are fit for analysing the social effects of fisheries' management measures. The EWG must identify the work already carried out by WGSOCIAL and RCG ECON and associate its efforts facilitating the above-mentioned analysis. Attention must be given that the work of EWG is in line but does not overlap with the work of WG and RCG.
5. Assess the compatibility of the social indicators with the data call for the Annual Economic Report. Propose further developments to facilitate the compatibility and/or integration of the social and economic aspects, including distribution of data among data calls and EWG reports.
6. Advise on further actions to be taken for the development of social indicators. As an example, further develop indicators for Reliance and Resilience, as suggested by EWG 19-03
7. Using information provided by the Member States, assess the social criteria applied by the Member States for the implementation of article 17 of the CFP.

For TOR 1-3 STECF acknowledges that the national profiles, will contribute to the social analysis required under the EU MAP. They will also support the AER (RCG 2021) as well as making a specific contribution to the social analysis of fisheries not covered by other bodies such as ICES or RCGECON.

STECF discussed coordination needs (TOR 3) with respect to the analysis of social impact of fisheries management measures, as stated in TOR 4. More concretely, STECF discussed particular specificities of social analysis regarding data resources, unit of analysis and cases studies as already addressed by WGSOCIAL and RCGECON.

During EWG 22-06 (AER 2022), experts checked the social data collected under the AER data call and detected several issues. STECF observes that these data issues should be considered by Member States. DGMARE, in consultation with the JRC, should consider the possibility of re-submission of correct data by Member States prior to EWG 22-14, so that the analysis of social impacts can be performed using the best possible quality of data.

STECF acknowledges the coordination with ICES and RCGECON is particularly important given the above. This is especially the case given the scarcity of social expertise and the intrinsic difficulties of any initial phase of establishing a new process for social data collection and analysis. The EWG can benefit from the experience of WGSOCIAL. The EWG can also provide a forum for non-economic social scientists to work.

STECF discussed TOR 5 on coordination between social and economic aspects. The compatibility of variable definitions (e.g., employment) between the economic and the social data calls was highlighted as one issue. STECF considers that the EWG should discuss how to distribute social and economic data among the different data calls, considering the initial observations of the RCGECON Workshop on social issues (2021). STECF observes it would be beneficial to coordinate the data call for FDI more efficiently with the data call for future EWGs on social data.

Given the momentum in the development of social data in the EU (methodology and uses) and the next round of collection of social data in 2024, STECF suggests holding EWG meetings on social data both in 2022 and 2023.

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7.8 Preparation of EWG 22-09 – Stock assessments in West Med

Request to the STECF

STECF is requested to discuss on the organisation of this EWG, clarify the workflow and support DG MARE in drafting the ToRs.

Background provided by the Commission

STECF was provided with a draft of the proposed Terms of Reference for EWG 22-09 discussed at STECF Bureau level.

STECF comments

STECF discussed the draft ToRs for EWG 22-09. Besides the standard ToRs requested to the EWGs on western Med stock assessment annually, the draft ToRs include the request for the estimation of conservation biomass reference points (i.e., B_{pa} and B_{lim}), taking into consideration the work of EWG 22-03 (ToR 2).

STECF has examined the technical aspects related to the biomass reference points estimation for the stocks pointed out by EWG 22-03. STECF considers the methodological framework developed by EWG 22-03 provides a good basis for advising on biomass reference points in a systematic manner across the investigated stocks.

STECF agrees EWG 22-09 should estimate biomass reference points for the stocks involved in the western Mediterranean assessments using the methodologies and procedures developed and proposed by EWG 22-03.

STECF considers it not necessary to review the report of EWG 22-09 via a written procedure. This could be done during the winter STECF Plenary. The outcomes and the draft report can directly feed into the work of EWG 22-11 (i.e., Management scenarios in West Med.), as it was in previous years.

The EWG 22-09 ToRs are still under discussion and, when finalised, they will be published on the registration page for EWG 22-09.

7.9 Preparation of EWG 22-11 – Management scenarios in West Med.

Request to the STECF

STECF is requested to discuss on the organisation of this EWG and clarify workflow and support DG MARE in drafting the ToRs. The STECF report of EWG 22-11 will include an executive summary of the results of EWG 22-09 and be reviewed by written procedure and not by STECF PLEN 22-03.

STECF comments

Based on the discussions at STECF PLEN 22-02 with DG MARE, it was agreed EWG 22-12 will be arranged provisionally as a physical meeting (a hybrid meeting may be considered) and will take place at JRC/Ispra from 26-30 September 2022. The EWG report is due to be submitted by 14 October and will be agreed by written procedure (19-28 October). To assist the written procedure, a short ad hoc contract to draft STECF opinion will be put in place from 17-19 October.

STECF noted that a disclaimer will be needed in the final EWG report for the use of the FDI and stock assessment data, which will not have been reviewed by STECF ahead of the written procedure.

STECF discussed the terms of reference in detail during PLEN 22-02 and a draft form has been published on the STECF meeting page. They will be finalised pending further discussions between the DG MARE focal point, the Chair of the EWG 22-11 and the JRC modelling team.

8. CONTACT DETAILS OF STECF MEMBERS AND OTHER PARTICIPANTS

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STECF

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