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**SCIENTIFIC, TECHNICAL AND
ECONOMIC COMMITTEE FOR
FISHERIES –
72nd PLENARY REPORT
(STECF-PLN-23-01)**

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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 72nd plenary from 20-24 March 2023.

72ND PLENARY REPORT OF THE SCIENTIFIC, TECHNICAL AND ECONOMIC COMMITTEE FOR FISHERIES (PLEN-23-01)

20-24 March 2023

1. INTRODUCTION

The STECF hold its spring plenary on 20-24 March 2023 in Rue van Maerlant, Brussels. The meeting was held as a hybrid meeting.

2. LIST OF PARTICIPANTS

The meeting was physically attended by 27 members of the STECF and four JRC personnel. Five STECF members and six 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. The STECF members Daniel Valentinsson and Nedo Vrgoc were unable to attend the meeting.

3. INFORMATION TO THE PLENARY

Presentation by JRC

The JRC presented a brief review of the current system in place to provide STECF advice on MED data collection and advice. It highlights some structural risks and inefficiencies. It explores some examples of integrated actions that could reduce or mitigate such risks. Such actions as part of a long-term strategy would lead to a proactive advisory process as opposed to the current more reactive sequence of individual steps considered by STECF.

STECF notes this initiative from the JRC and aims to revisit the topic in time for development of the next management plan stage, post 2025.

Presentations by DG MARE

On 21 February 2023, the Commission adopted the Fisheries and Ocean package consisting of four documents: the [Communication on the functioning of the CFP](#), [the Action Plan "Protecting and restoring marine ecosystems for sustainable and resilient fisheries"](#), the [energy transition initiative](#) and the [report](#) on the functioning of the Common Market Organisation (CMO). The package brings together all different aspects of the EU's policy on fisheries and the Ocean, looking at the future, and at how we can ensure that fisheries continue to grow in resilience and sustainability. With this package, the European Commission plans on launching a policy discussion with all institutions and stakeholders the EU's policy on fisheries and the Ocean.

The CFP Communication (and its accompanying staff working document) is the 'chapeau' document for this package, giving an overview of the implementation of the CFP during the last decade and providing elements looking forward.

The marine action plan has been prepared as the environmental pillar of the CFP Communication; and sets a work-programme for work for the Commission and with Member States on a number of topics, including selectivity, sensitive species, bottom trawling in MPAs, governance and strengthening the evidence base.

The energy transition initiative is the economic pillar of the CFP Communication, aiming to give a new push to the energy transition in the sector to strengthen its resilience and reduce its GHG emissions.

The CMO report addresses each chapter of the CMO Regulation: professional organisations, marketing standards, information to consumers, competition rules and market intelligence.

Representatives of DG MARE presented the different documents and content, the presentations can be found as background document on the meeting's web site on: <https://stecf.jrc.ec.europa.eu/plen2301>

4. STECF INITIATIVES

The current STECF was appointed in July 2022 and PLEN 23-01 will be its third Plenary meeting. This is an opportune time for an open discussion on STECF's "way of working" and identifying any improvements that could be made. Issues to be discussed include, inter alia:

- Preparations for Plenary
- Reporting on Expert Working Group
- Introducing TORs
- Discussing the advice
- Completing the Final Report
- Handling Written Procedures

5. ASSESSMENT OF STECF EWG REPORTS

5.1 EWG 22-14: SOCIAL DATA IN EU FISHERIES

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.

STECF general comments

The main task of EWG 22-14 was to advance work on the development of National profiles, social indicators and the methodologies for the collection and analysis of social data in fisheries. In particular, it addressed alignment of the use of social indicators between different STECF reports (in particular between the annual economic report and the reporting on the social data call) as well as other Working Groups such as in RCG ECON and ICES WGSOCIAL. The report details the development of an analytical framework for social data, such as Community and National profiles, and introduces new criteria for social concepts such as social justice, social capital, vulnerability, and dependency. Additionally, the report evaluates responses of the Member States (MS) towards the DG MARE questionnaire of January 12, 2022, on the implementation of Articles 16 (6) and 17 of Regulation (EU) No 1380/2013 (CFP Basic Regulation) on the allocation of fishing opportunities.

EWG 22-14 met virtually, from the 7th until the 11th of November 2022 and was attended by 20 experts of which two were STECF members (co-chairs), two observers and two members from JRC. STECF considers that the EWG adequately addressed the TORs.

STECF notes that while there was an interest from experts to join the Social Data EWG, the representation of the social science expertise in other STECF EWGs and in the STECF Committee remains limited. Social scientists focussing on the management of marine resources can already be found in other fora (e.g., RCG ECON, ICES WGSOCIAL, Center for Maritime Research¹) and links between STECF and those other fora already exist.

STECF identified a number of tasks described below to further the development of social assessments. Several of these tasks could be completed via *ad hoc* contracts.

STECF notes that the process of developing and operationalising a framework for the analysis of the social dimension of the CFP has been taken a step further with the work done by EWG 22-14. Important discussions were held on the framework, definition, methodology and operationalisation of National and Community Fishing profiles. As these profiles will be the backbone of the analysis of developments in the social domain of fisheries, their further development is of utmost importance.

1 <https://marecentre.nl/>

STECF notes that to ensure that the profiles are fit for purpose, it is important for DGMARE to involve the end-users and/or stakeholders in the development process.

STECF notes that there is a need to align the definitions and methodologies used, both across the different fora currently developing social indicators (i.e., RCG ECON and ICES WGSOCIAL) and across the different STECF reports. STECF notes that expertise in social science is needed to facilitate this work.

STECF comments on specific TORs

TOR 1: Assessment of the model of the National Profile as result of the Fishn'co project

STECF notes that to play an important role in understanding the social importance of fisheries in the Member States, the proposed National Fisheries Profiles (NFPs) need to be in a format as suggested by EWG 22-14, that allows for a proper analysis while adequately covering the diversity of cases found across Member States. It should also allow for easy interpretation of collected social data and a basis for comparison across Member States, which can then be reviewed and updated when new information becomes available.

STECF notes that a web-based profile rather than a pdf document, would allow easier linking to data presented (and analysed) elsewhere and easier updates of (parts of the) data, as well as easier comparability between Member States.

STECF observes that the Dutch NFP developed under the FISHN'CO² project provides a solid basis for further development of NFPs. STECF agrees with the modifications suggested by the EWG to the structure of the Dutch NFP to improve its utility.

These include the addition of:

- a short (max 5 pages) executive summary to the NFP covering the core aspects of the underlying chapters.
- an analytical assessment of the state of the fishing sector in the country, based on both the data and the trends, opportunities and constraints.
- chapters on the General description of society and on the Governance system
- the social and cultural value of fisheries in the chapter 'Social, cultural and economic aspects of fisheries'.

STECF notes that in order to properly assess whether the new proposed structure of NFP is appropriate in a variety of contexts, two additional NFPs should be prepared, ideally covering a diversity of fishery types (e.g., North & South, ICES region & Med, country with one or several seas, industrial and small-scale fisheries).

² <https://www.fisheries-rcg.eu/fishnco/>

TOR 2: Alignment in the methodology and preparation of National Profiles with the development and output in the fora of RCG ECON and ICES WG SOCIAL

STECF notes that in several fora (STECF, RCG ECON, ICES) discussions are being held on the methodology and indicators required for the collection of social data and the preparation of National and Community profiles. Based on the work completed in those fora, EWG 22-14 has made several suggestions for alignment of the National profiles across the related fora.

STECF notes, that there is a need to focus on the purpose that these profiles are serving and not just on the development of the methodology and data needs to complete them.

STECF notes that the definition of the concept of "Fishing Community" is crucial in the development of Community profiles, and hence National profiles. ICES WGSOCIAL and WGECON have used landing ports as a proxy for the concept of fishing communities in Ecosystem Overviews since such information is already available in the Regional Data Base of ICES (RDB).

STECF notes that landing ports only consider one dimension of a fishing community, (i.e., the place where fish is landed). A better definition of fishing communities could include other aspects, such as the port of registration, historical socio-cultural significance or the presence of other activities linked to fisheries. Inclusion of these aspects would improve the definition of Community Profiles and thus, their use for social impact assessment under the CFP. In addition, landing port may not be the most appropriate unit for future analyses for Mediterranean Community Profiles as the number of landing places is very high in the Mediterranean Sea.

TOR 3: Assess whether the data produced with the National Profile are fit for analysing the social effects of fisheries management measures

STECF notes that a main task of the EWG in analysing social impacts of fisheries policy was to engage with social scientists from academia and the different bodies of the EU and ICES. This collaboration had the common aim of coordinating efforts towards better supporting social aspects and implications of fisheries management.

STECF notes that the current set of social data being collected under the EUMAP (EU data collection framework), and their level of aggregation, limits the possibility of analysing social phenomena and issues that significantly affect social sustainability and resilience. This is especially the case when these are regionally or locally sensitive. This is particularly true for analyses of outermost regions.

STECF notes that adding social variables at a disaggregated level (regional or local in addition to national level) to the EUMAP to compute social indicators would facilitate a more thorough and in-depth analysis.

TOR 4: Explore the compatibility of the social indicators with the data call for the annual economic report

STECF notes that, currently, the definitions of the social variables in Table 9 of the EUMAP, provided in the DCF guidance (<https://datacollection.jrc.ec.europa.eu/guidelines/socioeco/social>) prepared and updated by RCG ECON, are inconsistent with the definitions of the variable group "employment" that is included in the list of economic variables (EUMAP tables 7 and 10). For example, while onshore activities paid from income on vessels are included in both calls, the description of onshore activities diverge. The same activities need to be included in both calls.

STECF notes that the compatibility of the social indicators with the data call for the Annual Economic Report could be improved by clearly detailing some of the definitions in the guidance documents for social variables among which include that the target population of both data collections should be the same; the definition of employment should be consistent; data should refer to the same time frame; and the segmentation of the population should be the same and at least disaggregated by marine (finfish), freshwater (finfish) and shellfish segments.

STECF notes that EWG 22-14 has provided a number of proposals for development of the EUMAP social variables, for example relating to definitions of paid and unpaid labour and to provide a more detailed split in age classes for the 'Employment by age' variable (see table 12 of the EWG report).

STECF considers that, noting the wide diversity between Member States, the correct definition of social variables implies a clear understanding of the underlying (legal) aspects. This includes the classification of employment status (e.g., what is considered to be self-employment or "share-fisher" in different Member States, or the legal ages of retirement) or level of education (the definition of vocational training varies in the national education systems).

STECF notes that EWG 22-14 identified two possible options for the presentation of the social data currently collected in the frame of EUMAP table 9. The social variables could be presented in one single report dedicated to the social variables of the three sectors (fisheries, aquaculture, and processing) to be prepared once every three years, or in separate sections included in the Economic Reports for each sector (as is currently the case). In both options, the presentation of social data could be delivered once every three years because, according to the EUMAP, social data should be collected every three years.

STECF notes that for both options to present social data (as separate sections in the economic reports or in a standalone social report) additional input is required. If the approach of publishing social data in the AER is chosen, the structure of the social chapter and appropriate content in each of the economic reports should be further detailed, clarified and/or revised. If a standalone document is to be developed the social data call structure, data presentation, the format of the report and additional sources of data need to be developed further.

STECF notes that while both options have their advantages and disadvantages in the longer term, the standalone option may be more appropriate over time as more social data can be collected and more social information can be provided together with the variables from EUMAP Table 9.

TOR 5: Advise on further actions to be taken for the development of social indicators.

STECF notes that there is a need for social indicators for use by other STECF working groups. For example, in the EWG 20-05 Report - Criteria and indicators to incorporate sustainability aspects for seafood products in the marketing standards under the Common Market Organisation (CMO) - social sustainability is discussed extensively.

STECF notes that part of the process of operationalising a framework for social indicators is the further development of the current and additional social indicators. STECF notes that the EWG proposed a number of actions in order to facilitate the process of developing social indicators. Two parallel actions are proposed to progress the operationalising of the social dimension: a) to launch a stepwise process that ensures relevance and credibility of the indicators to be developed; b) to implement short-term actions that take advantage of ongoing developments such as in RCG ECON and ICES WGSOCIAL. This process could be organised in 4 steps:

- A scoping exercise with policymakers and advisory bodies (including ACs) and across STECF EWGs to scope the questions that need to be answered with the data collected (e.g., social sustainability indicators needed to incorporate sustainability aspects for seafood products in the marketing standards under the Common Market Organisation have to be covered by the social data collection) and determine the specific policy relevance of individual concepts and indicators.
- Develop a conceptual framework which positions the social indicators in the suit of fisheries indicators (ecological, environmental, economic), providing the linkage for integrative trade-offs, analysis, and advice.
- Implement a validation of the methodology and data proposed.
- Select the final set of criteria to be embedded based on other ongoing activities such as the ICES WGSOCIAL systematic review and the EWG 22-14 findings under TOR 1 to 4.

STECF notes that the EWG proposed the following steps in order to make further advances in the long-term development of social indicators that can be used for fisheries policymaking and management:

- In addition to the conceptual validation of current methodological and data considerations, develop operational indicators for concepts such as social justice, social capital, dependency and vulnerability.
- Include specific variables and indicators (such as on vulnerability and dependency) as part of the development of the country and community profiles as soon as relevant indicators for the concepts have been conceptually and methodologically developed.

TOR 6: Assess the types of criteria applied by the member states for the implementation of Article 17 of the CFP Regulation

STECF notes that the system of allocation of fishing opportunities used by Member States varies significantly. For many Member States the basis and criteria for the allocation of fishing opportunities was put in place many years ago and is fixed.

STECF observes that for those fishing opportunities that are being annually allocated, Member States are using a variety of criteria in the context of the entire national fisheries management system. This makes the comparison between Member States rather complex.

STECF notes that whereas Article 17 specifically states that "*Member States shall endeavour to provide incentives to fishing vessels deploying selective fishing gear or using fishing techniques with reduced environmental impact, such as reduced energy consumption or habitat damage*" these criteria are not widely applied for allocation of fishing rights and, in the case of energy consumption, not used at all by Member States.

STECF notes the complexity of defining precisely whether a criterion is social or economic (e.g., employment) and their highly contextual dependency (i.e., variables such as employment can be classified as social or economic depending on the context).

STECF notes that concerning the transparency of the system of fishing opportunity allocations, this varies widely between Member States. In some, the process for sharing fishing opportunities and the final allocation is widely discussed with different stakeholders and officially published, in others it is only shared by the national administrations with the fishing sector.

TOR 7: Develop a questionnaire to consult the Member States on the criteria applied for the allocation of the fishing opportunities

STECF notes that from the responses received from Member States, it appears that the current DGMARE questionnaire³, does not provide the level of guidance to obtain the answers required to analyse the allocation criteria. The length and detail of answers varied widely between Member States.

STECF notes that “environmental criteria” or “social and economic criteria” are not clearly defined in the questionnaire, nor in the text of Article 17. This may have led to differences in the interpretation by Member States.

STECF notes that EWG 22-14 developed a draft template for an on-line, structured questionnaire. The questionnaire is kept as short as possible, to facilitate a high response rate. The main flow of the questionnaire is set around closed questions (tick-boxes) that lead the respondent in some cases to further clarifications and to a subject-specific final page on which more open questions need to be answered.

STECF notes that the questionnaire has to be implemented within the Commission’s Web-environment, in different languages, which, next to technical requirements also has a number of regulatory requirements.

STECF conclusions

STECF concludes that the capacity of STECF to address social science ToRs needs to be increased by identifying social scientists in the different fora working on fisheries (e.g., RCG ECON, ICES WGSOCIAL, Center for Maritime Research⁴) and involving them more in STECF. This could be achieved by inviting social scientists as experts to the relevant STECF meetings. Additionally, in selecting future STECF committees, DG MARE may want to reflect whether further expertise in social science (governance, political science, sociology) is needed to actively contribute to the inclusion of the social dimension in STECF’s work.

ToR 1 and 2 - Conclusions on NFP importance and purpose

STECF concludes that the work on identifying fishing communities and assigning data to them should be considered a priority under the CFP in order to be able to assess the socio-economic impact of policy on fishing communities.

STECF concludes that the purpose that the NFPs serve needs to be defined in consultation with end-users and stakeholders.

3 European Commission’s (EC) questionnaire dated January 12th, 2022 about the implementation of Articles 16 (6) and 17 of Regulation (EU) No 1380/2013

4 <https://marecentre.nl/>

ToR 3 - Conclusions on coming steps on NFP development

STECF concludes that in order for NFP's to be fit for purpose the following short term and long-term actions need to be undertaken:

- The modifications suggested by the EWG 22-14 to the format of the NFP need to be tested in at least two additional MS cases, varying in type of fisheries (prepared via *ad hoc* contracts).
- The NFP should be produced as web-based profiles rather than as a pdf document.
- Following developments in ICES WGSOCIAL and WGECON, STECF suggests starting the process of fishing community identification by using ports as proxy in the national profile while continuing the development of the methodology on community and national profiles together with ICES.
- The data needs for NFP development (such as information on ports) need to be identified and the EUMAP and ICES data calls should be aligned.

ToR 4 - Conclusion on reporting of social data

STECF concludes that presenting the social data, indicators, and analyses in a standalone report rather than as part of different STECF EWG report is preferable. A standalone report allows the accommodation of an expected growing demand for social assessments. However, the final choice depends on the aims and needs of the end-users.

ToR 5 - Conclusions on data needs with action list

STECF concludes that in order to achieve progress in operationalising the social dimension of assessments, the further development of social indicators is needed. To facilitate the process of developing social indicators and to ensure the relevance and credibility of those indicators, the following actions are required:

- Develop a table of comparison of the (legal) issues affecting the classification of the current social variables across MS as a proper background for the revision of the guidance document on social variables by RCG ECON (prepared via an *ad hoc* contract).
- Add relevant variables to compute indicators of social sustainability and resilience to the EUMAP those need to be collected at a disaggregated level (regional or local).
- Organise a scoping exercise on the policy questions that need to be answered and the data and indicators needs with policy-makers and advisory bodies (including ACs) and across STECF EWGs, including the data needed for NFP development.
- Develop a conceptual framework which positions the social indicators in the suit of fisheries indicators (ecological, environmental, economic), providing the linkage for integrative trade-offs analysis and advice.
- Provide clear data definition, methodological framework and assessment of the use of the data (to be) collected, and align those between calls, across Member States and with ICES and RCG ECON.
- Implement a validation protocol of the methodology and data proposed.
- Plan the collection of new data and the addition of variables in the EUMAP in the future (based on previous scoping and methodological development actions).

In addition, STECF concludes that, in the long term, the development of social indicators should capture concepts such as social justice, social capital as well as dependency and vulnerability. The last two should be included in NPFs as soon as they are operational.

ToRs 6 and 7 - types of criteria used for allocation of fishing opportunities

STECF concludes that to adequately assess the systems of fishing opportunity allocation, transparency on the allocation rules and the final allocation is needed, for example, through Member States publishing them.

STECF concludes that the main criterion used to allocate fishing opportunities are historic catch rights. The environmental and social criteria are hardly used and have a limited impact on the final allocation.

STECF concludes that examples of socio-economic criteria as currently used by some Member States could be provided as guidance for other Member States in the operationalisation of Article 17.

STECF concludes that the regulatory requirements of the EU Commission need to be addressed in the operationalisation and implementation phases of the consultation of Member States on the criteria applied for the allocation of the fishing opportunities.

STECF concludes that the further development of the online questionnaire about the implementation of Article 17 should be carried out through collaboration between the Commission's IT services, DGMARE and (STECF) expertise in the field of social science (via an *ad hoc* contract).

5.2 EWG 22-19: REVIEW OF THE TECHNICAL MEASURES REGULATION

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

EWG 22-19 was held at the JRC in Ispra, Italy, 23-27 January 2023. The meeting was attended by 18 experts in total, including 5 STECF members and 2 JRC experts. STECF considers that the EWG adequately addressed the TORs and has the following specific comments on the ToRs addressed by EWG 22-19.

ToR 1 - Identify the ages and sizes at which fish (as per Annex XIV of the Technical Measures Regulation 2019/1241) would need to be caught to optimise yield and reduce the catches of juveniles as far as possible, building upon the relevant work of STECF-21-07. Prioritise stocks where the highest gains can be achieved.

STECF notes that the analysis carried out by EWG 22-19 has identified the potential gains that can be made in terms of single stock catches (yield) and spawning stock biomass (SSB) by increasing gear selectivity, both under current and varying fishing mortality (F). These gains are typically accompanied with improvements in the protection of juveniles, except for early maturing species.

STECF notes that the work conducted by this EWG covered 33 stocks relevant to Annex XIV of the TMR and observes that stocks which show the highest potential gains in terms of yield and/or SSB through improving selectivity, are mainly long-lived, late maturing roundfish stocks, and also currently fished above F_{MSY} . As such, STECF notes that EWG 22-19 identified 11 'priority stocks' for such highest gains: cod.27.22-24, cod.27.47d20, cod.27.6a, cod.27.7e-k, whg.27.7a, pok.27.3a4 (in the NorthEast Atlantic) and, HKE.01-05-06-07, HKE.08-09-10-11, HKE.17-18, HKE.19, HKE.20 (in the Mediterranean Sea)

STECF observes that a large increase in L_{50} (length corresponding to 50% probability that a fish from the population is captured) of priority stocks would be required to reach the identified optimal yields under current F patterns. Therefore, to achieve optimal yield, stocks fished far above F_{MSY} would require a combination of improved selectivity with a decrease in F.

STECF notes that optimal L_{50} estimates, both under current F and variable F, are uncertain, as they are based on the current population characteristics and biological parameters of the stocks, which are expected to change if stock sizes increase substantially.

ToR 2 - Identify the fishing gears corresponding to the optimum age and size of each of the stocks in (1).

STECF observes that for priority stocks there is limited availability of gear selectivity studies for static gears compared to the availability of gear selectivity studies for active gears. This hindered a thorough evaluation of the potential impact of static gears. However, based on the limited information available, combined with the partial selectivity of fleet segments inferred from the stock assessments (where available), static gears (GNS, GTR, LLS) generally seem to capture fish closer

to their optimal size than active gears (OTB, TBB). The analysis by the EWG demonstrates also that there are cases where modifications of active gears may result in large gains in yield.

STECF notes that the observed selectivity of the OTB fleet segment was worse (i.e., shifted to smaller fish) than expected from baseline codends) in all case expect for cod.27.6.a, where observed selectivity was fractionally better (~2cm) than the available gear studies. STECF notes that the observed selectivity of two stocks - cod.27.47d20 and pok.27.3a46 - was found to be the same as the baseline codend. Therefore, STECF observes that gear selectivity is not always a reliable predictor of population selectivity.

ToR 3 - If feasible, identify possible operational changes needed to realise the transition to higher yields. Identify the technical support required to assess at the regional level, the potential socio-economic implications of fisheries-based transition plans for improving yields.

STECF observes that any transition in gear selectivity comes with implementation challenges and short-term economic losses, which are greater in the case of gear change (e.g., from active to static gears) than in the case of gear modification (e.g., codend mesh increase in trawlers). By contrast, based on the available information, the potential gains in yield and protection of juveniles seem to be typically greater for gear changes than for gear modifications.

STECF observes that technological change is complex and challenging to achieve due to the inherent uncertainty and the underlying perception of the fishing industry that such changes will lead to significant capital outlay and economic loss.

STECF observes that analyses of socio-economic implications of fisheries-based transitions depend on the availability of data and bio-economic models for specific fisheries. To ensure meaningful results these models would need to account for: short term (1-2 years) losses and longer term (5-10 years) benefits; incorporate target, bycatch and PET species; and include relevant fleets (to be able to investigate the socio-economic consequences) and metiers (with explicit selectivity).

Several models have been developed to analyse socio-economic impacts of management measures (STECF 2018, Nielsen et al. 2017), including (but not limited too) FLBEIA (Celtic Sea, Bay of Biscay and North Sea (under development)), SIMFISH (Flatfish fishery North Sea), FishRent (demersal and pelagic versions for North Sea), BEMTOOL and IAM (Western Med). STECF notes that these models would need effort to update to make them fit for purpose.

STECF observes the current gap in quantitative analysis on the socio-economic impact of technical measures. For such an impact assessment to be conducted this year, STECF plenary proposes the following four-step process which may provide some insights in the socio-economic implications of fisheries-based transitions:

- 1- **Define questions & scenarios (responsibility of DGMARE)** – For this process to succeed, there would need to be a clearly defined list of questions and scenarios provided to STECF (preferably by end of April) specifying a shortlist of priorities for the EWG to explore as test cases. These questions would outline the combination of stocks, gears, technical measures, and areas to explore.
- 2- **Scoping exercise (responsibility of STECF)** – A dedicated subgroup could be formed during PLEN 23-02, focusing on defining the test cases for socio-economic assessments which would then be conducted during the follow-up EWG planned for later in 2023 (EWG 23-15). This sub-group would identify data needs, available models, skills and people required at the EWG meeting.

- 3- **Synthesis of current knowledge (conducted by ad hoc contract)** – An ad hoc contract in advance of EWG 23-15 could be used to conduct a literature review on the current knowledge of the socio-economic implications of changes in technical measures (e.g., Simons *et al.* 2015). This review would provide context and support for the analysis to ensure meaningful conclusions can be drawn from the findings of the model applications in EWG 23-15. It is also a fallback option in case a limited number of test cases can be analysed in the EWG.
- 4- **Implementation of test case (responsibility of EWG 23-15)** - The experts attending the EWG 23-15 (economists, mixed fisheries stock assessors, and modellers) will use the data and apply models identified by the scoping exercise, to provide test case(s) of fisheries-based transition plans to inform future research goals and advice needs. The literature review will also allow putting the model results in a broader context of implementation of technical measures.

STECF conclusions

STECF concludes that improved selectivity is more likely to lead to higher gains in yield and/or SSB for stocks which are long lived, late maturing, and currently fished far above F_{MSY} , such as Northeast Atlantic cod stocks and Mediterranean hake stocks.

STECF concludes that improved gear selectivity is only one aspect of optimising yield and reducing juveniles catches. As a result, the gear studies considered by the EWG would be more likely to provide higher gains in terms of yield and SSB, if priority stocks were fished at or below F_{MSY} .

STECF concludes that additional gear selectivity studies are required to provide robust estimates of selectivity for static gears (GNS, GTR, LLS); and additional selectivity options for active gears (OTB) that provide a gear selectivity shifted closer to the optimal fish lengths identified in the analysis.

STECF concludes that differences in gear selectivity coming from gear trials and the realised population selectivity of the OTB fleets are observed in some priority stocks. This could be driven by the operational reality of how gears are used and effected by external forces such as fisher behaviour, season, or be indicative of a higher availability of smaller fish to the commercial trawlers.

STECF concludes that mixed fisheries (target, bycatch and PET species) bio-economic models would provide valuable information on the trade-offs involved for reaching the optimal yield goals. Several models already exist that can account for the population dynamics, fisher behaviour, and seasonality of selectivity patterns of multiple stocks combined.

STECF concludes fisheries-based transition plans for modified or alternative gears require not only technical trials, but also supported by assessments of socio-economic impacts. STECF recognises that substantial work will be required to develop such assessments, which would need to be tailored to specific regions and fisheries. To achieve this STECF proposes a four-step process should be followed to ensure favourable outcomes of the EWG 23-15.

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5.3 EWG 23-01: WEST MED ASSESSMENTS: CLOSURE AREAS AND SOCIO-ECONOMIC MODELLING

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, especially in view of the preparation of EWG 23-11.

STECF comments

EWG 23-01 met online from 27 of February to 3 of March 2023. EWG 23-01 was the tenth such STECF EWG dedicated to the evaluation of the implementation of the Western Mediterranean Sea Multi-Annual Management Plan (West Med MAP)⁵. This plan refers to the Western Mediterranean geographical subareas (GSA) adjacent to EU member states Spain, France and Italy: GSAs 1, 2, 5, 6, 7, 8, 9, 10 and 11, grouped into two spatial units EMU (Effort Management Units) - EMU1 for GSAs 1 to 7 and EMU2 for GSAs 8 to 11.

STECF considers that the EWG adequately addressed the TORs and has the following specific comments on the four ToRs addressed by EWG 23-01.

ToR 1 - Development of socio-economic indicators

STECF notes that a roadmap for the economic assessment of the impacts of the West Med MAP was discussed in the EWG and a three-step process to carry out a future assessment was suggested:

1. A scoping exercise with representatives of the Member States which took place during the EWG 23-01.
2. A meeting with stakeholders in the middle of 2023 to discuss their perception and experience of the socio-economic consequences of measures of the West Med Plan. This will help in the conditioning of the different models.
3. Carry out the socio-economic assessments during EWG 23-11 (see also ToR 7.5 of this report with the draft ToRs for EWG 23-11).

Regarding the stakeholder consultation in step 2, STECF notes that it may be preferable to do this by conducting a few semi-structured interviews with stakeholders instead of having a meeting with a larger group. This will be discussed and finalised with the Secretariat of the MEDAC.

STECF notes that for EWG 23-11, it is suggested to keep essentially the same scenarios as those assessed in EWG 22-11. Changes to the scenarios should be kept to a minimum due to the lack of time that the modelers have to condition the models for any new or amended scenarios.

Additionally, EWG 23-01 suggested running additional scenarios where only one of the management measures applied within the West Med MAP will be tested at the same time (e.g., fishing days reduction). This will provide an indication of what additional efforts beyond those currently in place

⁵ Regulation (EU) 2019/1022 of the European Parliament and of the Council of 20 June 2019 establishing a multiannual plan for the fisheries exploiting demersal stocks in the western Mediterranean Sea and amending Regulation (EU) No 508/2014. OJ L172, 26.6.2019, p.1.

may be necessary to reach MSY in 2025 in line with the MAP and what the likely contribution of each single measure would be to the overall plan implementation.

STECF notes, that in an attempt to account for current economic instability, all model scenarios require common assumptions regarding key economic variables such as the evolution of fuel price, and other variable and fixed costs (e.g., interest rates).

ToR 2 - Harmonization of the economic indicators provided.

STECF notes that EWG 23-01 discussed the variables to include in the various models and drafted a list of indicators for EWG 23-11 to consider. The list of variables and indicators are provided in annexes 1 and 2 of the EWG 23-01 report.

STECF notes that given there are differences in the indicators that each model can produce and to harmonise the list of indicators, some adaptations to the models will be required. STECF further notes that two different indicators exist for employment (number of employees and/or Full Time Equivalent FTE) in the two models producing economic indicators (IAM and BEMTOOL); However, the BEMTOOL model cannot simultaneously compute both employment indicators without changes to the code.

STECF notes that part-time employment in the Mediterranean fishing fleet is a characteristic of this region (AER, 2022). Therefore, even if FTE is a more harmonised and comparable indicator for employment, total employment should also be retained as an indicator given the preponderance of part-time employees in the Mediterranean. Therefore, efforts should be made by the modelers to retain both in the final list of indicators.

STECF further notes that ISIS-Fish does not provide any economic analysis and SMART has only a very limited economic module.

STECF notes, that all models predict landings and variable costs dynamically, although prices are only updated with landings in BEMTOOL (the other models can in principle handle the change in prices, but this capability is not implemented yet, specifically for the West Med MAP).

STECF notes that none of the models simulate capacity dynamics. This affects the long-term (up to 2030) projection of the number of vessels and so, the projection of the evolution of employment. Therefore, STECF observes that the current state of development of the models implies that they are more robust to assess the short-term (up to 2025) impacts of any management measure rather than longer-term impacts (2025-2030, and beyond).

ToR 3 - Review the existing and proposed closures.

STECF notes that, together with the reduction of fishing activity, Regulation (EU) 2019/1022 (West Med MAP) prescribes technical measures to be adopted to contribute to the achieving of fishing stocks at MSY by 2025. In particular, Article 11(1) of the West Med Plan specifies that for 3 months each year, trawling shall be prohibited within six nautical miles from the coast except in areas deeper than 100 m depth. Article 11 contains a number of conditions relating to these closed areas as follows:

- The 3 months of closure shall be determined by each Member State and shall apply during the most relevant period, determined on the basis of the best available scientific advice.
- Member States may derogate from Article 11(1) establishing other closure areas, on the basis of best available scientific advice. Those closures shall account for a reduction of at least 20% of catches of juveniles of European hake.

- 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 on the spawning grounds of demersal stocks specified by the West Med MAP.

Beyond the existing closures, STECF notes that in 2023, new closed areas were implemented only by Spain (EMU 1 except GSA 7). STECF further notes that EWG 23-01 could only test the impact of the existing closures in EMU 2 and GSA 7. For GSAs 1, 5 and 6 (EMU 1), the extension of the spatially-explicit model, ISIS-Fish, has not been completed and it is still limited to a single species (European hake).

STECF observes that the closure areas in GSA 7 were tested with two different methods - a static method comparing effort distribution data before and after the implementation of the closures in 2020, and a dynamic method applying ISIS-Fish.

STECF notes that the static method showed how the establishment of the spatio-temporal closure created a strong seasonal constraint to fishing effort in the Gulf of Lions with a decrease in fishing effort within the closed area. However, vessels increased their fishing effort along the border of the closed area, potentially mitigating the benefit of the closure. Overall, the static model results indicate that the implemented closures have the potential to result in increased recruitment of hake in the longer-term.

STECF notes that the simulation made with the ISIS-Fish model shows that introducing a smaller permanent closure within the existing temporal closure did not lead to an increase in overall biomass or the biomass of hake recruited into the stock. However, STECF observes that making the closures permanent rather than seasonal, is expected to provide an increase in overall and the biomass of hake recruited into the stock.

STECF notes that in EMU 1 the reduction in landings for French fleet due to the application of the closures was around 5%, while the results for the Spanish fleets are inconclusive, given that the model only simulated a small part of the Spanish fishery.

For EMU 2, STECF notes that the introduction of temporal closures for the whole fleet (monthly fishing prohibitions) would reduce effort. Introducing additional spatial closures corresponding to persistent hotspots and high effort areas, would increase effort towards coastal areas (depths <200m) specifically for fleet segments <18m. However, fishing mortality is expected to reduce for all species by the introduction of fishing bans and/or additional closures, specifically those targeting high effort areas. Notwithstanding these reductions in F , F_{msy} would only be reached for giant red shrimp and deep-water rose shrimp and for stocks already being exploited below F_{msy} – red mullet in GSA 10 and *nephrops*.

ToR 4 - Criterion listed in Article 8 and their use.

EWG 23-01 reviewed the criteria listed in Article 8 of Council Regulation (EU) 2023/1956 which gives a right to Member States to request a quota of fishing days equal to 3.5% of the baseline value (average between 2015-2017) be added to the current (2023) yearly fishing opportunities established in the Regulation (EU) 2023/195 under the West Med MAP for each fleet segment. This

6 Council Regulation (EU) 2023/195 of 30 January 2023 fixing for 2023 the fishing opportunities for certain stocks and groups of fish stocks applicable in the Mediterranean and Black Seas and amending Regulation (EU) 2022/110 as regards the fishing opportunities for 2022 applicable in the Mediterranean and the Black Seas. OJ L 28, 31.1.2023, p. 220–248.

additional quota would be given to the fleet segment depending to which segment the chosen criterion is applied to. STECF was asked to comment on the effectiveness of each of these criteria:

Criterion A) *"Vessel uses a trawl net with a 45 mm square mesh codend in order to reduce by at least 25% catches of the juveniles of hake"*.

STECF observes that according to the literature review made by the EWG, the requested threshold of at least 25% of reduction in hake juveniles catches for a vessel using a trawl net with a 45 mm square mesh codend does not seem to be achievable using this gear alone.

Criterion B) *"The vessel uses a trawl net with a 50 mm square-mesh codend for deep-water fisheries in order to reduce by at least 25 % catches of blue and red shrimps with a carapace length (CL) of less than 25 mm in GSAs 1, 2, 5, 6, 7, 8, 9, 10 and 11 and to reduce by at least 25 % catches of giant red shrimps with a CL of less than 35 mm in the geographical subareas 8, 9, 10 and 11."*

STECF observes that according to the EWG findings, the introduction of a 50mm square mesh size could lead to a decrease of at least 25% of blue and red shrimp less than 25mm CL. STECF further notes that the EWG could not find any selectivity studies on Giant red shrimp to formulate any conclusion for this species.

Criterion C) *"The vessel uses a regulated highly selective gear, the technical specifications of which result in, according to the scientific study by STECF, a reduction of at least 25 % of catches of juveniles of all demersal species or at least 20 % of catches of spawners of all demersal species compared to 2020, such as a sorting grid with 20 mm spacing."*

STECF observes that according to the literature review made by the EWG, the requested threshold of at least 20% of reduction in catches of spawners of all demersal species compared to 2020 does not seem achievable with this measure.

Criterion D) *"The Member State concerned has established temporary closure areas in order to reduce by at least 25 % catches of juveniles of all demersal species or by at least 20 % catches of spawners of all demersal species."*

STECF observes that the EWG could not find any clear evidence or results which corroborate the fact that specific temporary closures could lead to a reduction of at least 25 % of catches of juveniles of all demersal species or by at least 20 % of catches of spawners of all demersal species.

Criterion E) *"The Member State concerned has adopted a new minimum conservation reference size for hake of at least 26 cm, in order to progressively reach the length at first maturity."*

STECF agrees with the EWG finding that an increase of the MCRS for hake to 26cm TL without being linked to effective additional technical measures would likely lead to an increase of unwanted catches of hake, without any positive benefits to the hake stock.

Criterion F) *"The Member State concerned has set a closure of at least four continuous weeks for fishing activities with trawlers in the areas and periods recognized as important, on the basis of the best available scientific advice, for the protection of spawners of hake stocks. Such areas shall also account for spatial patterns of spawners' distribution, including depths from 150 m to 500 m. The periods of the temporary fishing closure shall be from February to March and from October to November."*

STECF observes that according to the EWG findings the temporal closures implemented by Spain and France under the West Med MAP meet the criterion.

STECF conclusions

ToRs 1 and 2.

STECF concludes that concluding dedicated interviews of individual stakeholders by the EWG 23-11 chairs ahead of the EWG could help define the main assumptions to be used in the bioeconomic models.

STECF concludes that the scenarios to be investigated by EWG 23-11 should be defined well in advance of the EWG 23-11. Additionally, a list of assumptions for the implementation of the models regarding key variables for the socio-economic assessments, should be provided prior to the meeting by the EWG chairs. These two elements will help to save time for modelers to focus on assessing the economic and social consequences of the MAP.

STECF concludes that due to the specific socio-economic characteristics of the Mediterranean fishing fleet, engaged crew and FTE indicators provide different information when assessing the social impacts of the MAP. therefore, it would be advisable to calculate both employment indicators.

STECF concludes that EWG 23-11 should primarily focus on the economic impact of the different management measures in the short-term (3 years). STECF concludes that longer-term (up to 2030) comparisons of scenarios can be performed with the current models, but since they do consider capital dynamics to project changes in capacity and employment, these projections shall be interpreted with caution.

STECF concludes that the conditioning of one single model handling EMU 1 and EMU 2 as proposed by PLEN 22-03, will take at least one year to complete, and will need adequate financial and manpower resources to support the development work needed.

ToR 3

STECF agrees with EWG 23-01 that in GSA7, considering the observed level of effort reduction in the closed areas, the closures have the potential to increase the overall biomass of the hake stock in the long run.

STECF concludes that two years of implementation is still a very short period to determine whether the anticipated recruitment increases for hake have been realised. It should be noted that available STECF assessments of European hake currently show a low fishing mortality for juvenile age classes. Therefore, the protection of juveniles will not necessarily reduce the fishing effort on this species.

STECF concludes that no positive effects on the stock biomasses are observed in EMU 2 independently of the scenarios applied. It should be noted that the model used to evaluate spatial closures in EMU 2 is limited to an evaluation of stock development as it does not account for the evolution of the population.

ToR 4

STECF concludes that considering the available knowledge and the analyses carried out during the EWG, only the requests based on criteria "b" and "f" of Article 8 of the Council Regulation (EU) 2023/195 could be considered to satisfy the stated criterion.

STECF concludes that for criterion "d" there was insufficient information for an evaluation. The remaining criteria do not seem to have been fulfilled.

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

6.1 ASSESSMENT OF A MANAGEMENT PLAN FOR BOTTOM TRAWLERS IN CERTAIN TERRITORIAL WATERS OF SPAIN (MURCIA)

Background provided by the Commission

In October 2020, the Spanish Administration has expressed its intention to adopt a new management plan for trawling in certain territorial waters of Spain (Murcia). This plan envisions the renewal of a previous derogation request from Spain to EC 1967/2006 article 9/13 in terms of distance and minimum depth from the coast in waters of Spain (Murcia).

Following STECF evaluation in July 2021 (STECF PLEN 21-02), the Spanish administration has sent at the end of 2022 additional documents related to this management plan.

Background documents are published on the meeting's web site on: <https://stecf.jrc.ec.europa.eu/plen2301>

Request to the STECF

STECF is requested to review and make any appropriate comments and recommendations on the new documents submitted by Spain related to the new management plan for the trawl fisheries.

In particular, STECF is requested to:

TOR 1. Advise and assess whether the management plan for trawlers in the waters of Murcia 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.
- 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).
- if possible, catch composition in terms of size distribution.
- 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 CFP 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.

TOR 2. Evaluate whether the following conditions set by the MEDREG and Regulation (EU) 2019/1241 are fulfilled:

2.1 Derogation to the distance from the coast (Article 13 – Paragraphs 5, 9 and 10)

- There are particular geographical constraints, such as the limited size of the continental shelf along the entire coastline;
- The fisheries have any significant impact on the marine environment;
- 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) 2019/1241 with the exception of mollusc bivalves, are minimal
- The fisheries do not target cephalopods.

2.2 Derogation to the minimum mesh size (Article 9, paragraph 7)

- The fisheries are highly selective and have a negligible effect on the marine environment; and
- The fisheries do not operate above seagrass beds of, in particular, *Posidonia oceanica* or other marine phanerogams.

Summary of the information provided to STECF

STECF was provided with 3 documents, but these documents have already been presented and evaluated by STECF PLEN 21-02.

STECF conclusions

STECF concludes that the documents provided do not contain any new information and have already been evaluated by STECF PLEN 21-02. Therefore, STECF has been unable to carry out any assessment.

6.2 REVIEW OF A NATIONAL MANAGEMENT PLAN FOR BOAT SEINES IN CERTAIN TERRITORIAL WATERS OF SPAIN (MURCIA)

Background provided by the Commission

In October 2022, the Spanish Administration provided updated monitoring report of the fisheries of transparent gobies (*Aphia minuta*) in certain territorial waters of Spain (Murcia). These documents refer to the adoption of a plan based on the renewal of the derogation from EC 1967/2006 article 9/13 in terms of distance and minimum depth from the coast in waters of Spain (Murcia), which is currently granted with the Regulation (EU) 2020/1242. The current derogation will expire on 1 March 2023.

Background documents are published on the meeting's web site on: <https://stecf.jrc.ec.europa.eu/plen2301>

Request to the STECF

STECF is requested to review and make any appropriate comments and recommendations on the monitoring and reporting associated to the on-going management plan for the fisheries targeting gobies in Murcia waters and make recommendation for a new management plan.

In particular, STECF is requested to:

TOR 1. Advise and assess how the management plan could 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.
- 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).
- if possible, catch composition in terms of size distribution.
- 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 CFP 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.

TOR 2. Evaluate whether the following conditions set by the MEDREG and Regulation (EU) 2019/1241 are fulfilled:

2.1 Derogation to the distance from the coast (Article 13 – Paragraphs 5, 9 and 10)

- There are particular geographical constraints, such as the limited size of the continental shelf along the entire coastline;
- The fisheries have any significant impact on the marine environment;
- 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) 2019/1241 with the exception of mollusc bivalves, are minimal
- The fisheries do not target cephalopods.

2.2 Derogation to the minimum mesh size (Article 9, paragraph 7)

- The fisheries are highly selective and have a negligible effect on the marine environment; and
- The fisheries do not operate above seagrass beds of, in particular, *Posidonia oceanica* or other marine phanerogams.

Summary of the information provided to STECF

Two documents were made available to STECF PLEN 23-01:

- 1) *117-22 Annex. Report Region de Murcia. RE D. Regulation 3-213 Article 13.1 (in Spanish and English).* This document provided by the Spanish Authorities reports on the monitoring of the main results of the fishing season 2021-2022. Data on number of vessels, fishing effort, catch, economic impact, bycatch and discards, impact on the marine environment are reported. This is in compliance with Regulation (EU) 2020/1242, which grants the derogation for the transparent goby fishery with regard to distance from the coast, minimum depth and mesh size.
- 2) *Preliminary report fishing season 2022-23 boat seines Murcia (in Spanish).* This document provided by the Spanish Authorities reports on the preliminary results of the monitoring of the 2022-2023 fishing season which was the last under Regulation (EU) 2020/1242. This Regulation expired on 1st of March 2023. This document was made available by the Spanish Authorities on the second day of PLEN 23-01.

STECF comments

In response to the ToRs, STECF has the following comments:

TOR 1. Advise and assess how the management plan could provide 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***

STECF notes that the results of the biological monitoring for *Aphia minuta* (Transparent goby), *Pseudaphia ferreri* (Ferrer's goby) and *Crystallogobius linearis* (Crystal goby) are presented in the reports. Information on weight and size compositions by sex and maturity stages have also been provided.

A total of 32 samples, encompassing a total of 1.920 fish corresponding to three different species of gobies covered by the designation 'transparent goby', were collected from on board and port sampling. A significant number of individuals in each sample (60) were weighted and measured after determination of the species.

The specimens of transparent goby were classified according to three maturity levels of development (Reina y López (2005) in fry, youth/mature and reproductive stage. For Ferrer's and Cristal goby, the classification was different to the data and observations made in previous fishing seasons (Fisheries and Aquaculture Service, 2017).

- ***Description of the fishing pressure and measures to accomplish a sustainable exploitation of the main target stocks.***

STECF notes that no standard analytical stock assessment is available for gobies. Management is based on TACs (fishing season and daily by vessel) and monthly limit reference CPUEs (kg/day/vessel).

- ***Data on catches (landings and discards) of the species concerned, fishing effort and abundance indices such as catch-per-unit-effort (or CPUE).***

STECF notes that the fishery in terms of catch, effort and CPUE is described in detail in the report provided.

Catches of transparent goby fluctuate from year-to-year. Historical catch, effort and CPUE data covering the period from 2001-2002 up to 2021-2022 are provided by fishing season, month, and by port. No major trends have been detected since the beginning of the management plan in 2013. However, STECF notes that the catch in the 2021/2022 fishing season was the lowest of the whole time series (about 3.6 tonnes). This was due to poor daily catches in December and January which triggered a reduction of active fishing days during January and finally a premature closure of the fishery at the beginning of February.

STECF observes that the preliminary results of the most recent fishing season (2022/2023) indicate low catches as in the 2021/2022 of about 5.5 tonnes. Similar management measures were taken as in 2021/2022.

STECF notes that even though environmental conditions may play a major role in the annual fluctuations of the population biomass of gobies, the low catches could reflect a possible depauperating of the stock.

- *if possible, catch composition in terms of size distribution*

STECF notes that length frequencies distributions for the 3 target species have been provided. Transparent gobies have an average size range averaging from 26.9mm to 31.4 mm, while the average size range for Crystal goby and Ferrer's goby is 23mm to 27.1mm and 21.3mm to 24.5mm, respectively.

The average length for all three species in the 2021/2022 fishing season was the lowest of the time series. However, STECF acknowledges that having closed the fishing season earlier (February) the fishery did not take place when larger individuals are caught.

- *information on the social and economic impact of the measures proposed*

STECF notes that information on the social and economic impact has been provided in terms of catch, income, and mean price, by fishing season, for the period 2001-2002 to 2021-2022. Mean price detailed by fishing season and month for the period 2012-2013 to 2021-2022 and catch, income and mean price by vessel for 2021/2022 has been provided.

The average price in 2021-2022 was the highest of the whole time series at €52.47 euro/kg with an averaging income per boat of €509/per day.

STECF notes that the fishery represents a low percentage (3.9%) by weight of the total catch of the small-scale vessels, while the average relative economic value in relation to the total sales is

13.2%. This value confirms the importance of the transparent goby fishery for small-scale fleets, even if can be highly variable among vessels.

STECF observes that 23 out of 27 authorized vessels have been active during the period, which represents around 70 direct jobs.

- ***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);***

STECF notes that in the 9 sampled hauls made for scientific monitoring purposes, a limited amount of material that would indicate that the gear was trawled over the bottom was also recorded (presence of sediment, stones, sessile species, *Posidonia oceanica*). However, according to these results, there is minimal impact of the fishing gear on the seabed. These samples verified the absence of benthic or sessile organisms as well as inert elements from the seabed. STECF notes that *Posidonia* leaves appeared in 2 samples with clear signs that they had been dead for many days before the fishing day (blackened and in a state of decomposition); the presence of the leaves is attributable to the strong currents during those fishing days from which samples were taken.

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 CFP Regulation and quantifiable targets, such as fishing mortality rates and total biomass.***

STECF notes that a TAC (18.2 tonnes) has been established based on the 75th percentile of catches during the time series 2001-2018, as well as daily TAC limits per vessel (35 kg for vessels with two fishers, and 45 kg for vessels with three fishers).

Monthly limit values (reference points) have been established as the 25th percentile (lower quartile) of the cumulated distribution of CPUE (kg/day/vessel) as 19.6, 19.8 and 20.9 in December, January and February.

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.

STECF notes that both scientific and inspection of daily trips are undertaken on board transparent goby vessels. The specific composition of the commercial by-catch and discards of non-commercial species from 9 hauls (5 in December and 4 in January) is presented for the period 2021-2022. By-catch represented around 7% in weight and 0.14% in number. By-catch species are immediately released, alive, and survivability is assumed to be very high.

- ***Measures proportionate to the objectives, the targets and the expected time frame.***

STECF notes that the fishery is managed at a monthly scale and measures regarding fishing effort reduction and closure of the fishery are taken when the monthly limit reference points (CPUE) are not achieved as was the case in the 2021/2022 and 2022/2023 seasons.

- ***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.***

STECF notes that when the safeguard thresholds are not reached, measures for effort reduction or closure of the fishery are put in place: in case the monthly threshold is not reached, fishing effort the following month is reduced from 5 to 4 fishing day a week; and if the monthly threshold is not reached with the effort reduction, the fishery is closed. These measures have been implemented in the winter fisheries of 2014/2015, 2017/2018, 2021/2022 and 2022/2023

The low CPUEs realised in the two most recent fishing seasons could be reflecting a decreasing phase on the abundance of the goby stock. STECF observes that this indicates that improvements in the assessment of the stock status and sustainability of the current exploitation may be required. The adaptive management mechanisms of the fishery (i.e., reductions in fishing effort or early closure), may require revision if these signs of degradation in the stock continue in the next 2-3 years.

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

STECF notes that according to the reports provided, the percentages of discarded species are around 6% in weight and 0.14% by number respectively, confirming the very high species selectivity of the fishery as gobies form over 90% of the catch.

1.3. Other aspects

Quantifiable indicators for periodic monitoring and assessment of progress in achieving the objectives of the plan.

STECF has previously observed (STECF EWG 19-19) that because of the very short life span of transparent goby, catch limits and CPUE reference points were proposed as empirical in-season management measures aimed at the protection of the resource. CPUE are taken as a proxy of the species abundance. STECF notes environmental conditions are likely to play a major role in the annual fluctuations of the catches. However, due to the short lifespan of the species it remains difficult to disentangle the fishery effects from the environmental effects on the stock. Therefore, STECF suggest that a periodic revision of these CPUE values should be included in the Management Plan.

TOR 2. Evaluate whether the following conditions set by the MEDREG and Regulation (EU) 2019/1241 are fulfilled:

2.1 *Derogation to the distance from the coast (Article 13 – Paragraphs 5, 9 and 10)*

- **There are particular geographical constraints, such as the limited size of the continental shelf along the entire coastline;**

STECF notes that there are specific geographical constraints relevant to this fishery, given the limited size of the continental shelf and the limited extend of the trawlable fishing grounds, and, as the target species is exclusively limited to certain zones in coastal areas in depths of less than 50 meters.

- ***The fisheries have any significant impact on the marine environment;***

Based on the available information, STECF observes that the fishery has no significant impact on the marine environment (see Table 70 of the 117-22 Annex. Report Region de Murcia. RE D. Regulation 3-213 Article 13.1) and any unwanted catches are immediately released alive (97.1% see Table 69 of the 117-22 Annex. Report Region de Murcia. RE D. Regulation 3-213 Article 13.1) with very high survivability. While not definitively evidenced, STECF suggests the requirements of Article 4(1) of Regulation (EC) No 1967/2006 have been fulfilled, which by way of derogation, allows fishing above protected habitats if fishing is operated without touching the seagrass bed under certain conditions.

- **The fisheries involve a limited number of vessels and do not contain any increase in the fishing effort;**

STECF notes that the derogation requested by Spain affects a limited number of vessels (namely 27 vessels) of which only a proportion fish in any fishing season. In recent years 23 of the 27 vessels have fished.

- **The fisheries cannot be undertaken with another gear;**

STECF observes that, as previously advised, the fishery cannot be carried out with a different gear.

- **The fisheries are subject to a management plan and carry out a monitoring of catches as requested in Article 23;**

STECF notes that currently the fishery is managed according to a management plan Under Regulation (EU) 2020/1242, which includes monitoring of the fishery. The fishery continues to take place on working days (Monday-Friday) during December, January and February. In addition, the maximum quota per fishing season has been reduced from 20 to 18.2 tonnes. On the basis of the management plan, if exceeded, the fishery is closed until the following season.

- **The vessels concerned have a track record of more than 5 years;**

STECF notes that the vessels are registered in the Spanish National Operational Fishing Fleet Census, and have a track record in the fishery of more than five years.

- **The fisheries do not interfere with the activities of vessels using gears other than trawls, seines or similar towed nets;**

STECF notes that the fleet operates mostly at <24 m depth and at a very short distance from the coast not interfering with other vessels or fisheries.

- **The fisheries are regulated in order to ensure that catches of species mentioned in Annex IX of Regulation (EU) 2019/1241 with the exception of mollusc bivalves, are minimal**

STECF notes that during 2021-2022, in the 9 monitored hauls a minimal quantity of *Pagellus acarne* (90 specimens) have been caught (and released).

- **The fisheries do not target cephalopods.**

STECF confirms that based on the information provided, the boat seine fishery does not target Cephalopods. The percentage of Cephalopods recorded in the 9 monitored hauls in 2021- 2022 fishing season was 2 specimens, representing 0.52% of the total by-catch. The percentage of Cephalopod by-catch varies from a maximum of 2.5% in 2012-2016 seasons to a minimum value of 0.01% in 2019-2020 (see Table 56 117-22 Annex. Report Region de Murcia. RE D. Regulation 3-213 Article 13.1)

2.2 Derogation to the minimum mesh size (Article 9, paragraph 7)

- **The fisheries are highly selective and have a negligible effect on the marine environment; and**
- **The fisheries do not operate above seagrass beds of, in particular, *Posidonia oceanica* or other marine phanerogams.**

STECF observes that the fishery is a highly species selective and would appear to have a negligible impact on the marine environment. Based on the information provided, it does not operate on seagrass beds.

STECF suggests that according to the current Regulation, the derogation from the minimum mesh size adopted by Spain pursuant to Article 9(7) of Regulation (EC) No 1967/2006, is reasonable as without it the goby fishery could not have taken place and would have had to simply close.

STECF conclusions

STECF concludes that the implementation of the boat seine management plan in the Murcia Region in the period 2021/2022 meets the conditions upon which the derogation regarding minimum distance from the coast and depth was granted in 2020.

STECF concludes that the Plan contains the elements necessary for limiting the level of exploitation of transparent goby in the Murcia region, including limits on licenses, fishing periods, fishing effort, maximum yearly catches, HCRs and monthly CPUE thresholds below which the fishery should be limited or closed.

STECF concludes that in the fishing season 2021/2022 the above management mechanisms have been applied. In December, the CPUE value was below the reference level and the weekly fishing day reduction (from 4 to 5 days) was adopted in January. Subsequently, as the January CPUE value was still below the reference value, the fishery was closed early. The above-mentioned management mechanisms have been similarly applied in the 2022/2023 fishing season.

STECF concludes that the adaptive management measures in place may need to be strengthened if the signs of degradation in the stock observed in the last two fishing seasons continue to be seen in the next 2-3 years.

References

Regulation (EU) 2020/1242 extending the derogation from Council Regulation (EC) No 1967/2006 as regards the minimum distance from the coast and depth granted to boat seines fishing for transparent goby (*Aphia minuta*) within the Spanish territorial waters of the Autonomous Community of the Region of Murcia.

Reina, J.A., López, J.A. (2005). El chanquete (*Aphia minuta*): antecedentes, biología y cultivo experimental en Málaga, Aula del mar de Málaga, CEDMA

Scientific, Technical and Economic Committee for Fisheries (STECF) - Management Plan for boat seines in Murcia, Spain (STECF-19-19). Publications Office of the European Union, Luxembourg, 2019, ISBN 978-92-76-11879-4, doi:10.2760/890396, JRC11807

6.3 REVIEW OF A NATIONAL MANAGEMENT PLAN FOR BOAT SEINES IN CERTAIN TERRITORIAL WATERS OF SPAIN (BALEARIC)

Background provided by the Commission

In November 2021, the Spanish Administration transmitted a scientific study, supporting elements and video data in relation to the derogation from Council Regulation (EC) No 1967/2006 as regards the minimum distance from the coast and the minimum sea depth for boat seines fishing for transparent and Ferrer's gobies (*Aphia minuta* and *Pseudaphia ferreri*) and Lowbody picarel (*Spicara smaris*) in certain territorial waters of Spain (Balearic Islands). STECF experts in Spring Plenary 2022 evaluated that information.

In January 2023, the Spanish Administration provided an updated monitoring report of the boat seine fisheries in certain territorial waters of Spain (Balearic). The current derogation will expire on 30 April 2023.

Background documents are published on the meeting's web site on: <https://stecf.jrc.ec.europa.eu/plen2301>

Request to the STECF

Based on STECF assessment in spring 2022 and on the additional supporting documents, STECF is requested to review and make any appropriate comments and recommendations on the monitoring and reporting associated to the on-going management plan for the boat seine fisheries in Balearic waters and make recommendation for a new management plan.

In particular, STECF is requested to:

TOR 1. Advise and assess how the management plan could 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.
- 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).
- if possible, catch composition in terms of size distribution.
- 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 CFP 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.

TOR 2. Evaluate whether the following conditions set by the MEDREG and Regulation (EU) 2019/1241 are fulfilled:

2.1 Derogation to the distance from the coast (Article 13 – Paragraphs 5, 9 and 10)

- There are particular geographical constraints, such as the limited size of the continental shelf along the entire coastline;
- The fisheries have any significant impact on the marine environment;
- 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) 2019/1241 with the exception of mollusc bivalves, are minimal
- The fisheries do not target cephalopods.

2.2 Derogation to the minimum mesh size (Article 9, paragraph 7)

- The fisheries are highly selective and have a negligible effect on the marine environment; and
- The fisheries do not operate above seagrass beds of, in particular, *Posidonia oceanica* or other marine phanerogams.

Summary of the information provided to STECF

STECF received a document titled:

“INFORME DE LA PESCA CON ARTES DE TIRO TRADICIONAL EN AGUAS DE LAS ISLAS BALEARES - CAMPAÑA 2021-2022”

This report presents the results of the monitoring of the boat seine fishery for transparent and Ferrer’s gobies (*Aphia minuta* and *Pseudaphya ferreri*) and the boat seine fishery for picarel (*Spicara smaris*) in certain territorial waters of Spain (Balearic Islands) during the 2021–2022 fishing season. STECF notes that the reports for the 2019-2020 and 2020-2021 fishing seasons were examined previously by STECF PLEN 22-01. STECF also notes that the new (2021–2022) report is mainly based on data from daily catch reports provided by the skippers of the vessels involved in the fishery.

The information included in the report is summarised below:

A. Boat seine fishery for transparent and Ferrer’s gobies (jonquillera)

This fishery is carried out in Mallorca. The target species covered by the management plan are the gobiids *Aphia minuta* and *Pseudaphya ferreri* (target species), and two frequently associated species *Crystallogobius linearis* (Gobiidae) and *Gymnamodytes cicerellus* (Ammodytidae).

During the 2021–2022 period, fishing was allowed from 15 December to 30 April. The number of authorised vessels was 36 and the number of authorised landing ports was 16. Catch limits (daily catch quota) were set at 30 kg per vessel per day for *Aphia minuta* and 50 kg per vessel per day for *Pseudaphya ferreri*. An annual quota of 20 tonnes has been set for the fishery. Minimum average monthly catch/day/vessel threshold limits have also been set (estimated from the first quartile of the historical catch data and updated annually). These are shown in table 6.3.1.

Table 6.3.1: Minimum Average monthly catch/day/vessel thresholds for the 2021-2022 fishing season in kg/vessel/day.

Month	Monthly threshold - <i>A. minuta</i> + <i>P. ferreri</i> (Kg/vessel/day)
December	15.26
January	22.32
February	22.93
March	20.22
April	13.61

STECF notes that in the 2021–2022 fishing season, average monthly catch/day/vessel were higher than the threshold values.

STECF observes that the time series of fishing days (declared in the catch reports of vessel skippers) and the total number of vessels that landed the target species are presented graphically in the provided report. This shows that, since 2009, fishing effort has been gradually decreasing. In 2021–2022, the total number of fishing days was 217 and only 13 out of 36 authorised vessels fished for gobies.

Regarding catches of the target species, STECF notes that data for the last five fishing seasons are presented. They range from 5.419 to 12.504 Kg. Typically, January and especially February are the months with the highest yields. In 2021–2022, the total catch of target species was 7292 Kg (6822 Kg *P. ferreri* and 470 Kg *A. minuta*).

STECF notes that according to the information presented in Table 6 of the report, *Spicara smaris* (712 Kg) and *Gymnammodytes cicereus* (124 Kg) representing 8.75% and 1.53% of the catches declared in the skippers' reports were caught as bycatch in the fishery. The target species (*A. minuta* and *P. ferreri*) accounted for 90% of the total catches.

STECF notes that according to the report provided, in 24 cases (out of 217 declared fishing days) the daily catch quota (50 Kg) for *P. ferreri* was slightly exceeded, while for *A. minuta*, the daily quota (30 Kg) was exceeded four times. The authorised vessels declared 681 fishing hauls in total, with average yields per haul of 7.2 Kg for *A. minuta* and 11.8 Kg for *P. ferreri* respectively.

STECF notes that it is not possible to precisely estimate the catch for each species of goby separately, as they are often caught together and are not separated onboard. When a mixed catch is estimated (by the skipper) to contain >40% *A. minuta*, it is reported as *A. minuta* 'mixed', and when estimated to contain <40% *A. minuta*, it is reported as *P. ferreri* 'mixed'.

STECF observes that in the 2021–2022 report, information is provided on the position and depth of the hauls (declared by the skippers). In the report, the positions of the hauls have been superimposed on a map of *Posidonia* beds, which STECF notes shows that many fishing operations are pursued over mapped *Posidonia oceanica* beds.

STECF notes that some economic data are presented from the Fisheries Traceability System (TRAZAPES) platform of the Ministry of Agriculture, Fisheries and Food. The total revenue from the fishery (EUR 161.907) was higher than the two previous years. Some discrepancies are described in the report between the TRAZAPES platform (data from sale notes) and the data reported in the catch reports of skippers (e.g., only 78% of fishing trips are reported in the skippers' reports).

STECF notes that the monthly evolution of average prices and first sale revenues are also presented for the last five fishing seasons. The price of *A. minuta* fluctuates and may exceed EUR 90/Kg at first sale in mid-February, while that of *P. ferreri* may exceed EUR 25/Kg at the beginning and end of the fishing season.

B. Boat seines fishing for picarel (*Spicara smaris*)

STECF notes that the authorised fleet is located in the islands of Ibiza and Formentera. Fishing is permitted from November to April, but catches are mainly taken in February–March. There are four authorized landing ports. An annual quota of 30 tonnes has been set in recent years. Similar to the goby fishery, minimum average monthly catch/day/vessel threshold limits have been set, which, for the 2021-2022 period, are shown in Table 6.3.2:

Table 6.3.2: Average monthly catch/day/vessel thresholds for the 2021/2022 fishing season in kg/vessel/day.

Month	Average monthly threshold - <i>Spicara smaris</i> (Kg/vessel/day)
December	34.86
January	91.55
February	95.79
March	91.22
April	94.65

STECF notes that the CPUE threshold values have not been met on several occasions in the past and have triggered a shortening of season for small-scale vessels by two months in the 2020-2021 season. It should be noted that these restrictions did not affect bottom trawlers which also catch picarel in the Balearic Islands.

Data on fishing effort are only provided for authorised vessels in Ibiza (four boats fished in 2020 - 2021 with a total number of fishing days was 183).

Some data on selectivity (catch composition in Kg) are also provided in a Table for the 2020-2021 and 2021-2022 fishing seasons as shown in Table 6.3.3.

Table 6.3.3 Catch composition in kg in the picarel fishery.

	2020/21	2021/22
<i>S. smaris</i> >11 cm	13055	15667
<i>S. smaris</i> -11 cm	1350	1006
<i>S. smaris</i> released	700	730
Discards	911	816
Commercial species	1501	1029
Cephalopods	46	22

STECF finds it difficult to interpret this table and the origin of the data it contains. It is stated that the weight of the target species exceeds 85% of the catch and that discarding at sea has a high probability of survival but only limited evidence of this is provided.

STECF notes that the most common non-target species are *Boops boops*, *Trachurus mediterraneus* and *Spicara maena*. STECF notes that, in the table above, picarels are split into >11 cm and <11 cm. It is mentioned that small (<11 cm) picarels are often released back to sea (discarded). The report mentions a survival study, which was conducted with 26 individuals (picarels). After one week all fish were reportedly still alive. However, STECF has no information on methodology or monitoring used in this project.

STECF notes that some limited economic data (revenues, prices) are also reported concerning picarel caught in the Balearic Islands, separate to catches from bottom trawlers (48295 Kg) and boat seiners (19334 Kg).

STECF observes that fishing mortality estimates (from a length assessment analysis Lbar) are shown from 2013/14 to 2021/22, but they should be interpreted carefully given that the catches of bottom trawlers are not included. Catches of bottom trawlers are more than twice the catches of boat seiners.

STECF notes that other analyses based on the study of the otoliths have been carried out but are not reported to any extent in the report provided.

STECF comments

STECF notes that the data presented in the 2021 – 2022 report are limited and include information mainly gathered from the daily catch reports of skippers and the Fisheries Traceability System (TRAZAPES) platform of the Ministry of Agriculture, Fisheries and Food. Therefore, it is not clear whether they are representative of the fishery.

STECF notes that the current management plan (2019-2022) foresees onboard inspections to monitor fishing operations, assess the impact on the marine environment (presence of marine phanerogams, algae and other benthic marine organisms), and collect data on catches of target and non-target species as well as samples for biological analysis. No such onboard data are presented in the 2021-2022 report (bycatches, discards, size compositions) particularly regarding species of Annex IX of the Mediterranean Regulation.

STECF recalls (from STECF PLEN 22-01) that, for the period 2019-2022, data on bycatch and unwanted catches of species listed in Annex IX have only been presented for the 2019-2020 fishing season. Catch in weight for the bycatch species was not reported at species level but aggregated for all species caught. STECF observes that this prevents estimating bycatch rates as a percentage of total catch.

STECF observations on a new management plan

STECF acknowledges that the current derogations from the MEDREG will expire on 30 April 2023. Therefore, an updated MP is expected to be submitted by the Spanish authorities. Previous evaluations of the current MP (STECF PLENs 19-03, 20-01, 22-01) focused on aspects such as the monitoring of the plan, particularly with regard to bycatch of Annex IX species and discards; the effects of fishing operations on sensitive habitats such as Posidonia beds; the assessment of the status of target species and measures to restrict the fishing effort, such as the daily and annual catch quotas and the monthly CPUE thresholds.

Monitoring of the plan

STECF emphasises that all data to be collected under the MP (catch of all species, size compositions, discards and socioeconomic data) should be clearly described (e.g., the design of the monitoring including the onboard sampling), and the data should be consistently collected, analysed and reported in order to adequately monitor the effectiveness of the management plan.

As pointed out in STECF PLEN 19-03, the time at sea (fishing hours) and/or number of hauls, information which is already available from the skippers' reports, would also be needed in the CPUE analyses to provide more precise estimation of the fishing effort and explain trends in catch per day.

Impacts on *Posidonia*

STECF notes that the present report confirms that the gobiid boat seine fishing in Mallorca is largely taking place over areas with *Posidonia oceanica* meadows (see Figure 6 in the document submitted by Spain). Therefore, the possible effects of the gobiid fishery on *Posidonia* have been a recurrent concern for the boat seine fisheries in the Balearic Islands, as identified in STECF PLEN 19-03, PLEN 20-01 and PLEN 21-01.

In assessing the proposed management plan for 2019-2022, STECF PLEN 19-03, concluded that the information presented by the Spanish authorities was not sufficient to conclude whether the transparent goby fishery has a significant impact on *Posidonia* beds. STECF PLEN 20-01 further commented that the evidence provided by the Spanish authorities did not fully support the statement that the transparent goby fishery is taking place entirely on sandy bottoms, and thus, not affecting the *Posidonia* meadows. Subsequently, the Spanish authorities has provided a series of videos using underwater cameras showing the fishing operations, in response to comments by PLEN 19-03 and 20-01. The underwater video sampling provided information from various vessels (4 out of the 13 active) and fishing operations (13 fishing days out of 285) from different fishing grounds around the Island and operated by the control authorities from the administration under a detailed protocol. While STECF PLEN 21-01 could not fully assess the representativeness of the videos in relation to the standard fishing operations (all operations demonstrated occurred over sandy areas), STECF acknowledges that the gears shown in the videos did not seem to impact the *Posidonia* meadows.

STECF PLEN 20-01 was provided with estimates of the degree of spatial overlap between the Jonquiller boat seine fishing grounds and areas covered by *Posidonia oceanica* for the 2016-2019 period, with a spatial resolution of 1 km². Overlapping areas of fishing activity with beds of *P. oceanica* only occurred north of Mallorca, specifically in the bays of Pollença and Alcúdia. Overall, a 10% overlap was estimated between the boat seine fishing grounds and the total area of distribution of seagrass beds in the Balearic Islands (regional level). The overlap between *Posidonia* beds and the Jonquillera fishing sites was 5.5% at the country level (Spanish territorial waters). These percentages were lower than the upper limit permitted by article 4.5 of MEDREG, both at regional (33%) and country-level (10%).

Further, PLEN 20-01 noted that according to a recent Spanish Government Decree 31/2021 of May 31st, operations of boat seines targeting small gobiids are prohibited on maërl, coral reef and *Posidonia* beds. Article 1.2 of Decree 19/2019, of March 15th was also modified, and it now states: "The scope of application of this Decree is the internal waters of the coast of the Balearic Islands, with the exception of the areas of the bays of Pollença and Alcúdia, where interaction

with Posidonia was detected". STECF PLEN 21-01 understands that fishing in these two bays is now forbidden. However, STECF notes that fishing operations in these areas still seems to have occurred during the 2021-2022 fishing season (Figure 6).

STECF observes that, as a minimum, the degree of spatial overlap between the boat seine fishing grounds and areas covered by *Posidonia oceanica* should be estimated every time the plan is updated, to provide assurance that the provisions of article 4.5 of MEDREG are being satisfied.

Daily and annual quotas

STECF notes that catch limits have been set (since 2009) through daily catch quotas for the Jonquiller fishery (30 Kg and 50 Kg/day/vessel, for transparent goby and Ferrer' gobies, respectively), and weekly quotas for picarel (800 kg/week/vessel). STECF PLEN 19-03 and 22-01 noted that these daily catch quotas have never been exceeded in recent years and appear to be linked to market limitations rather than for fisheries management purposes. In the 2021-2022 report, it is stated that the daily catch quotas were occasionally exceeded, especially for Ferrer's goby (see above), but no other information is given.

STECF observes that in the current MP (2019-2022), the Decree 19/2019 of 15th March 2019 sets maximum annual quotas for transparent and Ferrer's gobies at 40 tonnes and for picarel at 30 tonnes. Decree 31/2021 of May 31th (see STECF PLEN 21-01) subsequently reduced the maximum authorised catch for the fishing season to 20 tonnes for the Jonquiller fishery. STECF PLEN 19-03 & 22-01 noted that the maximum annual quotas for both gobies and picarel (including the revised TAC for the Jonquiller fishery) have never been exceeded since the implementation of the first management plan for the boat seine fishery in 2013. This suggests these limits are not restrictive and may need revision (given also that only a fraction of the number of authorised fishing vessels are active in the fishery). STECF suggests that the usefulness of these limits as a management tool is questionable. STECF observes that at the very least, the annual TACs should be periodically revised to align them with the current fishing exploitation level.

Monthly CPUE thresholds

STECF notes that minimum average monthly catch/day/vessel threshold limits have been set for the boat seine fisheries, estimated from the first quartile of the historical data for gobies and from the first quartile of the previous year's record for picarel. STECF observes that like other goby fisheries, fishing effort reduction and early closure of the fishery are put in place when the minimum monthly limit reference points (CPUE) are not achieved.

STECF observes that in compliance with the terms set out in the MP, fishing effort is reduced by removing one fishing day per week, up to the end of the current fishing period (this was for example applied in 2018 for the gobiid fishery). In circumstances, when the monthly threshold is not reached with the effort reduction, the fishery is closed prematurely. For the picarel fishery, this threshold rule prevented small-scale vessels from fishing for two months in the 2020-2021 season.

STECF considers that the minimum average monthly CPUEs should continue to be updated annually as is current practice in the MP.

Stock assessments

STECF observes that in the MP and the monitoring report, attempts are made to evaluate stock status in relation to the target species based on simplified stock assessment methods. STECF acknowledges the use of exploratory assessments and data-limited methods to assess the status of the target stocks.

Regarding the target species of the Jonquiller fishery, assessments on harvest rates (catches versus original biomass at the beginning of the fishing season, from a depletion model Leslie) have been performed without reference points being specified. STECF notes that such assessments are very preliminary especially as they merge several gobiid species together but nonetheless are a step in the right direction.

STECF notes that the very short life span of transparent goby and the incorporation of new recruits during the fishing season prevents using stock assessment methods able to identify maximum sustainable yield (MSY) for management purposes.

STECF recalls its suggestion from STECF PLEN 19-03 to explore the use of surplus production methods, such as ASPIC. The ASPIC software (surplus production model fitted to catch-effort time series) has been used for the determination of the exploitation status of transparent goby in the Balearic Islands over the period 1990-2014 (Quetglas et al. 2016) and may be applicable to this fishery.

STECF notes that for picarel, the report includes fishing mortality estimates (from a length assessment analysis Lbar) which should be considered with caution, especially as the species is also caught by the bottom trawl fleet.

STECF notes that the largest part of the picarel catch in the Balearic Islands comes from trawlers which operate at different depths and with different exploitation patterns. STECF considers that future assessments of the picarel stock in the area should take into account catches from both gears.

STECF conclusions

STECF concludes no data from onboard observations (catches, bycatches, discards, size compositions) have been presented in the report for the 2021-2022 fishing period of the boat seine fisheries in the Balearic Islands. This is contrary to the MP which requires the deployment of onboard observers and port sampling to collect biological data from the fishery.

STECF concludes that in updating the management plan particular emphasis should be given to the onboard monitoring of catch and size compositions (catches of all species, discards); further robust evidence for the limited impact of the boat seines on *Posidonia* beds, representative of the standard fishing operations; the periodic estimation of the degree of spatial overlap between the boat seine fishing grounds and areas covered by *Posidonia*, e.g., for the 2019-2023 period of the current plan; periodic revision of the annual TACs in line with recent fishing exploitation level and; improvement of stock assessments for the target species.

References

Quetglas A, Merino G, Ordines F, Guijarro B, Garau A, Grau A, Oliver P, Massutí E. 2016. Assessment and management of western Mediterranean small-scale fisheries. *Ocean & Coastal Management* 133: 95-104.

6.4 ASSESSMENT OF A JOINT RECOMMENDATION ON SHORT-NECKED CLAM

Background provided by the Commission

STECF PLEN 21-01 assessed information provided by Ifremer produced as a response to a request from the DPMA (French ministry) on the fisheries for short-necked clam. The study was a summary of biological and fisheries information on short-necked clam. STECF was requested to assess the risks to the population of lowering MCRS (from 35mm to 32 mm) and to advise on a suitable count (numbers per kg) for market and control purposes to be associated with the lower MCRS. STECF concluded that the information provided did not justify the reduction of MCRS for short-necked clam to 32mm, since there was not sufficient evidence that the proposal would ensure the protection of juveniles. STECF concluded that a representative study of length at first maturity in the Arcachon basin was necessary to address the request. Additional information on Arcachon short-necked clam to support an updated assessment.

In order to justify MCRS reduction for short-necked clam in the Arcachon basin, in 2023 DPMA submitted updated information.

Background documents are published on the meeting's web site on: <https://stecf.jrc.ec.europa.eu/plen2301>

Request to the STECF

STECF is requested to evaluate the new supporting material submitted on short necked clams in the Arcachon Basin (Statistical Rectangle 18E8), paying particular attention to Article 15(4) of the Technical Measures Regulation. In particular, STECF is requested to assess:

- i. Whether the reduction in short necked clams MCRS from 35mm to 32mm in Arcachon Basin (statistical rectangle 18E8), complies with Article 15(4) (d) of the TMR (2019/1241) and the objectives of Article 18 of ensuring the protection of juveniles of marine species. The new supporting material should sufficiently evidence that the measures "as a minimum, lead to such benefits for the conservation of marine biological resources that are at least equivalent" to the measures in place.
- ii. Assess the management measures introduced and in place along with the reduction of MCRS would guarantee conservation benefits at least equivalent to the current situation.

Summary of the information provided to STECF

Five documents were provided to PLEN 23-01 to support this request. Apart from document 5, these documents were all in French with English translations provided:

- (1) "Détermination de la taille de première maturité sexuelle de la palourde japonaise (*Ruditapes philippinarum*) du bassin d'Arcachon" (Rapport scientifique_L50_def.pdf).
- (2) "Rapport sur les mesures de gestion encadrant l'activité de pêche à pied des palourdes japonaises dans le Bassin d'Arcachon " (ACOPALBA - Rapport mesures gestion professionnelles - VF.pdf).
- (3) ACOPALBA - Synthèse du projet VF.pdf
- (4) ACOPALBA - Synthèse diaporama VF.pdf

- (5) Cover letter from Direction générale des affaires maritimes, de la pêche et de l'aquaculture explaining the rationale behind the proposal for a local MCRS, which includes the English translation (20221117 Courrier DG MARE_documentation palourde japonaise.pdf).

STECF used the English versions in this evaluation. Documents 3 and 4 are a summary and a presentation of the main results of the ACOPALBA project⁷ This project was implemented to respond to the STECF conclusions of PLEN 21-01 with the intention of resubmitting an application to reduce the MCRS in 2022. This project includes a study on the estimation of size at first maturity (doc 1) and a synthesis of the management and monitoring measures of the Manila clam fishery in the Arcachon basin (doc 2).

Doc (1) *Ruditapes philippinarum* Size at first maturity

The objective of the study is to determine the size at sexual maturity, (i.e., the size at which 50% of individuals are mature), for Manila clam and its intra-basin spatial variability. This study is the first estimate of the size at first maturity of the Manila clam in the Arcachon basin. It was determined from a histological analysis of a large sample of individuals (1420 clams; size range 10-41 mm) from four distinct intra-basin sites and carried out when most individuals were mature, between June and August 2021.

Size at first maturity (L50) has been estimated at 26.7 ± 0.5 mm (24.5 mm for females and 21.6 mm males). Spatially, the estimated L50 varied among sites from 25.0 mm to 28.0 mm These sizes are smaller than the proposed reduction of MCRS to 32 mm. Almost all individuals of < 20 mm were immature. Based on this study, the MCRS of 32 mm for the Arcachon Basin would in all cases remain above the upper bound of the confidence intervals calculated for L50 for the basin as a whole and for each site individually.

The population in Arcachon basin has been observed to spawn once or twice a year, depending on the site, according to previous studies. The observation of immature stages in large individuals (> 38 mm) in the current study suggests that these individuals start a second cycle in the same year.

Combining the Von Bertalanffy growth parameters established for the Arcachon Basin (Dang *et al.* 2010) and the estimated L50, size at first maturity (26.7 mm) is attained at an age of 1.6 years, compared to the requested MCRS reduction to 32 mm corresponding to 2.3 years, and the current MCRS 35 mm at 2.9 years. The document indicates that if the MCRS is reduced to 32 mm, at least half of the clams will have been able to spawn at least once before their potential capture.

STECF notes that no reference is specifically made regarding the potential impact on juveniles in case the MCRS is reduced to 32 mm or on the impacts on the exploitation pattern.

⁷ Amélioration des Connaissances sur la Palourde japonaise et la pêcherie associée dans le Bassin d'Arcachon pour complément d'une demande de diminution de la taille minimale de référence de conservation

Doc (2) Management measures

Doc (2) explains the management measures that have been implemented since the end of the 1990s as well as their development based on knowledge and observations from fishers operating in the fishery.

The Manila clam site in the Arcachon basin is the most important site exploited in France. Fishing is carried out by hand all year round, but spring and summer are the most important seasons. Clam fishers work on average 22 days per month from April to September, and 12-14 days from October to March.

The number of entrepreneurial licenses at present is 40 and two fishers in addition to the entrepreneur can be linked to each of these licenses. Only two fishers linked to the same entrepreneur can work on the same day. There is also a rule in place - "-2+1", whereby to introduce a new license, two existing licenses must be taken out of the fishery. This has been applied for the authorisation of licenses for many years, which means that the number of licenses has decreased from 70 in 1997 to 40 at the start of the 2022-2023 season.

Following the initiative of clam fishers, surveys of the stock started in 2000. At present surveys are carried out every two years. Also, at the initiative of a clam fishers, areas closed to fishing have been implemented. At present, two such "reserve" sites are in place.

According to the documentation provided no new management measures specifically linked to a decrease in MCRS are planned. No explanation is provided on how mitigating actions would specifically be put in place in case a deterioration in stock abundance is observed following the MCRS change.

STECF comments

STECF notes that PLEN 07-03, PLEN 14-02 and PLEN 21-01 have assessed similar requests for short-necked clam. The STECF response in PLEN 07-03 and PLEN 14-02 reports were summarised in the [PLEN 21-01 report](#).

PLEN 21-01 conclusions were as follows:

- *"STECF concludes that the information provided does not justify the reduction of MCRS for short-necked clam to 32mm, since there is not sufficient evidence that the proposal would ensure the protection of juveniles.*
- *STECF concludes that a representative study of length at first maturity in the Arcachon basin is still necessary to answer future requests of this nature.*
- *STECF concludes that if other measures are to be introduced in conjunction with the proposed reduction of MCRS to guarantee conservation benefits that are at least equivalent to the measures in place, these need to be described fully to facilitate future evaluations. No such measures are identified in the current proposal."*

STECF notes that the size at first maturity of the short-necked clam in Arcachon basin has now been estimated, and that management and control measures are already implemented.

STECF observes that, in relation to the comments of PLEN 21-01, no additional measures will be implemented in conjunction with the proposed reduction of MCRS to guarantee conservation benefits. However, STECF notes there are several management measures already in place that will protect the stock as a whole rather than juveniles.

STECF notes that different common names are used referring to *Ruditapes philippinarum* (*Palourde japonaise*, Manila clam) and that short-necked clam may refer to another species (*Paphia undulata*; SeaLifeBase).

STECF is requested to assess:

ToR 1 Whether the reduction in short necked clams MCRS from 35mm to 32mm in Arcachon Basin (statistical rectangle 18E8), complies with Article 15(4) (d) of the TMR (2019/1241) and the objectives of Article 18 of ensuring the protection of juveniles of marine species. The new supporting material should sufficiently evidence that the measures "as a minimum, lead to such benefits for the conservation of marine biological resources that are at least equivalent" to the measures in place.

STECF notes that, reducing the MCRS in isolation is unlikely to ensure the protection of juveniles as required under Article 18 of Regulation (EU) No 2019/1241. Accompanying measures would be required. Therefore, STECF observes that the consequences of the MCRS change for the conservation of the clam population has not been specifically assessed in the documentation provided. Further, STECF notes that no new management measures dedicated to the protection of juveniles in relation to the change in MCRS reduction are proposed. However, STECF notes that currently, two closed fishing reserves are implemented, aimed at the protection of the resource, while bi-annual surveys of the population are carried out. No information on the size distribution in the reserves is provided, therefore STECF cannot assess what level of protection these areas would give to juveniles.

Regarding the potential impact of the MCRS reduction on the population of juveniles, STECF notes that the reduced MCRS requested (32 mm) is still larger than the estimated size at first maturity (27 mm) in Arcachon basin (and above the confidence interval), and the effect on juveniles is therefore, likely to be limited.

Regarding the potential impact of the MCRS reduction on the reproductive potential of the stock, STECF notes that larger individuals are usually those with highest reproductive potential. In a controlled environment, Chung et al. (2001) observed for *Ruditapes philippinarum* that the number of eggs increases with increasing length. In the documentation provided it is commented that the current MCRS of 35 mm means that only a small amount of the available population can be fished, because the abundance of such large individuals is low. STECF notes that Dang et al (2010) determined L_{inf} at 41.1 mm in Arcachon, suggesting that the absence of larger individuals would be due not only to the removal by fishermen but, also, to species growth. In this area, it is stated in the documentation that the shells seem to be much less elongated and more globular in shape than those of other sites, including in Europe. Beyond 32 mm, clams from the Bay of Arcachon grow mainly widthwise, rather than lengthwise.

STECF notes that limited information is provided in the documentation regarding length distribution. However, additional information is available in the Ifremer survey report of 2021 (Sanchez *et al.* 2021), not provided in the supporting documents but available online. This report shows that the fraction of ≥ 34 mm individuals represented around 5% of the total individuals in 2021. By using the reported abundances by size distributions from this survey report, STECF estimates that over the last three surveys (in 2014, 2018 and 2021), the fraction of the mature population (of sizes $L \geq L_{50}$), in numbers) accounted for 33.10%, 50.10% and 49.90%, respectively (Table 6.4.1 below). Of this mature population, around 21%, 13% and 11.5% (mean around 15%) were above 35 mm,

respectively. Similarly, the fraction of the mature population ≥ 32 mm was estimated at 36.20%, 24.90% and 24.10 % (mean around 28.40%), respectively. Therefore, with a MCRS at 32 mm, STECF estimates that around 71% of the mature population in numbers would remain protected from harvest. Sanchez et al. (2021) also shows that the biomass in 2021 is at its highest estimated of the entire time series.

Table 6.4.1: Summary fractions of the population estimates by sizes of Manila clam in the Bay of Arcachon, according to sizes exceeding some threshold size values (as explained in the first column) and ratios of these size fractions reflecting the harvestable population over the mature population as estimated from these last three year surveys. Values taken approximately from figure 19 in Sanchez et al. (2021).

		Survey	Survey	Survey		
	Sizes	2014	2018	2021	Mean	Meaning
Sizes	L>26	33.1%	50.1%	49.9%	44.4%	%Mature Population (in numbers) over surveyed Population
Sizes	L>32	12.0%	12.5%	12.0%	12.2%	% of clams bigger than 32 mm (in numbers) over surveyed Population
Sizes	L>35	5.3%	5.0%	3.8%	4.7%	% of clams bigger than 35 mm (in numbers) over surveyed Population
(L>32mm/L>26)		36.2%	24.9%	24.1%	28.4%	Harvestable fraction of mature population of sizes L>32 mm (L>32mm/L>26)
(L>35mm/L>26)		15.8%	10.0%	7.5%	11.1%	Harvestable fraction of mature population of sizes L> 35 mm (L>35mm/L>26)

ToR 2: Assess the management measures introduced and in place along with the reduction of MCRS would guarantee conservation benefits at least equivalent to the current situation.

The lowering of the MCRS to 32 mm will increase catches. This does not necessarily imply increased pressure on juveniles because the estimated size at first maturity (around 27 mm) is still lower than the requested MCRS (32 mm), therefore, protection of juveniles should be the same as without the MCRS change. In principle, juveniles that will reach maturity should not have been part of the catch that is commercialised before they spawn for the first time.

STECF concludes that in case the derogation is granted, two different MCRS would apply to Manila clam, depending on whether the species is fished in the Arcachon basin, or in other areas. No explanation is provided on the control of sizes and commercialisation of Manila clam in the Arcachon basin. Nevertheless, according to the French Administration (Doc 4), the control of the new MCRS in the Arcachon basin would not create any difficulties given that the active fishers are known. STECF cannot conclude whether this would be sufficient to ensure that market disruption would not occur from the change in MCRS.

STECF conclusions

STECF concludes that based on the documentation provided, the MCRS requested of 32 mm is larger than the estimated size at first maturity (26.7 mm) in Arcachon basin. Therefore, STECF concludes that the impact on juveniles is likely to be minimal, noting that no direct evaluation of such impacts are presented in the information provided.

STECF concludes that the reduction in MCRS means that a larger fraction of the mature population would be harvestable by the fishery. This will impact on the spawning biomass of the stock, but according to the length structure analyses available, the largest proportion of the mature population will still remain protected from fishing. Therefore, STECF concludes that the impact on the mature population is likely to be negligible.

STECF concludes that the effects of a 3 mm reduction in the MCRS for Manila clam (from 35 mm to 32 mm) on the conservation status of the stock in the Arcachon basin cannot be quantitatively

assessed with the information available. However, any such effects are likely to be minor for the entire population and any existing conservation benefits on juveniles arising from the current 35 mm MCRS are expected to remain unchanged.

Notwithstanding the above, STECF concludes that a reduction of MCRS may still alter the exploitation pattern in the fishery, and to safeguard the stock, mitigation actions would need to be defined and implemented if a deterioration in the stock is observed after the MCRS reduction. While no such specific measures are currently defined, STECF notes that management measures in the form of closed areas are already in place in the fishery and would anticipate that further closures could be triggered, in response to any observed deterioration in the stock.

References

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- Sanchez, F., Caill-Milly, N., Lissardy, M., Antajan, A., Méteigner, C. (2021). Suivi de la population de palourde japonaise dans le bassin d’Arcachon. Année 2021. R.ODE/LITTORAL/LER AR 21.018., 49 p.

6.5 CFP MONITORING – FOR EARLY ADVICE BY 31/03

This advice was provided to the Commission and released on the STECF website on 30th March 2023.

Background provided by the Commission

Article 50 of the Common Fisheries Policy (CFP; Regulation (EU) No 1380/2013 of the European Parliament and of the Council of 11 December 2013) stipulates: "The Commission shall report annually to the European Parliament and to the Council on the progress on achieving maximum sustainable yield and on the situation of fish stocks, as early as possible following the adoption of the yearly Council Regulation fixing the fishing opportunities available in Union waters and, in certain non-Union waters, to Union vessels."

Request to the STECF

STECF is requested to report on progress in achieving MSY objectives in line with the Common Fisheries Policy.

STECF observations

To address the agreed Terms of Reference, STECF expert group (STECF-Ad hoc-23-01) was convened between January and March 2023 to compile available assessment outputs and conduct the extensive analysis required to prepare the annual CFP monitoring report.

The expert group presented a comprehensive report accompanied by several detailed annexes to STECF PLEN 23-01 providing: 1) CFP monitoring protocols as agreed by STECF (STECF, 2018); 2) R code for computing NE Atlantic indicators; 3) R code for computing Mediterranean & Black Seas indicators 4) Exploratory indicators in the Mediterranean and Black Seas 5) Sensitivity analyses. The supporting electronic annexes include 1) URL links to electronic annexes referring to the reports and stock advice sheets underpinning the analysis; 2) ICES data quality issues corrected prior to the analysis; and 3) R code for computing all the European waters' indicators provided in the STECF PLEN 23-01 report. The report and electronic annexes are available at <https://stecf.jrc.ec.europa.eu/reports/cfp-monitoring>.

STECF notes that the report is clear and well laid out, comprehensively describing the analysis undertaken and cataloguing the changes made in the approach since the previous report (STECF-Ad hoc-22-01).

The STECF-Ad hoc-23-01 report sets out results of the analyses separately for the Northeast Atlantic (NE Atlantic) and the Mediterranean & Black Seas (Sections 3 and 4 respectively). Based on the above results, progress towards achieving MSY objectives are summarised below. In this report, "Northeast Atlantic" refers to stocks in FAO Area 27 inside and outside EU waters⁸, and

⁸ The stocks that are included in the NE Atlantic analysis are those stocks in ICES category 1, 2 and 3 for which assessments are available and that were managed through a TAC at EU level in 2017 (based on DG MARE TAC/quotas database). This

“Mediterranean & Black Seas” refers to stocks in FAO Area 37⁹. Additionally, at the request of EUROSTAT, an overview for all stocks in European waters is also presented (Section 5 of the STECF-Ad hoc-23-01 report).

For the NE Atlantic (FAO area 27), the most recent published assessments carried out up to (and including) 2022 incorporating data up to 2021 were downloaded from the ICES website on 12 January 2023. For the Mediterranean & Black Seas (FAO area 37), the information was extracted from the STECF Mediterranean Expert Working Group repositories comprising the most recently published assessments carried out up to 2022 with data up to 2021, and from the GFCM stock assessment forms comprising the most recently published assessments carried out up to 2022 with data up to 2020.

STECF notes that among the new stocks added this year in the calculation of the indicators in the Mediterranean & Black Seas, there are three stocks based on quantitative biomass-based models that were not considered in previous years.

Trends towards reaching the MSY objective in the Northeast Atlantic and Mediterranean & Black Seas

The overview below describes the trends in fishing pressure observed in the NE Atlantic and the Mediterranean & Black Sea for the periods 2003 to 2021 and 2003 to 2020, respectively. It applies to the stocks with an analytical assessment and with associated reference points included in the reference list (sampling frame) of stocks for these areas.

Overview of stock status

Northeast Atlantic

The indicators provided in the STECF-Ad hoc-23-01 report show that in the NE Atlantic (both EU and non-EU waters), stock status has significantly improved since 2003 (Figure 6.5.1) but that many stocks are still overexploited. Among the stocks which are fully assessed (Table 3, in the STECF-Ad hoc-23-01 report), the proportion of overexploited stocks (i.e., $F > F_{MSY}$, blue line) has decreased from around 74% (2003-2008) to 26% in 2021. The proportion of stocks outside safe biological limits ($F > F_{PA}$ or $B < B_{PA}$, yellow line, Table 5 in the STECF-Ad hoc-23-01 report), computed for the 47 stocks for which both reference points are available, follows a similar decreasing trend, from 81% in 2003 to 38% in 2021.

year all category 1 and 2 EU stocks that were dropped due to the absence of stock specific TACs in 2017 but for por.27.nea and rju.27.7de there was a TAC in place in 2022 were retained. Stocks in EU waters include stocks in/or partially in ICES areas 3, 4, 6, 7, 8 and 9, but excluding Norwegian coastal stocks in area 4 (see list of stocks in section 5; Scott et al., 2017a).

⁹ The combinations of Species/GSA that are included in the Mediterranean & Black Seas analysis are those based on a ranking system approach for which the species having a rank in the first ten positions either in total live weight or total economic values between 2012 and 2014 were chosen (see Mannini et al., 2017).

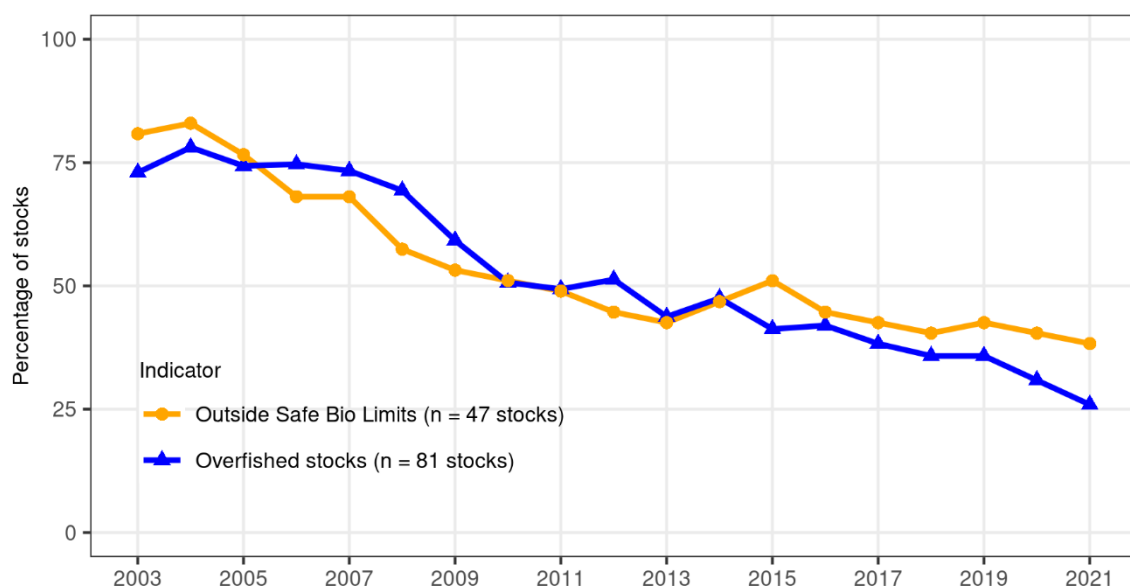


Figure 6.5.1. Trends in stock status in the NE Atlantic (both EU and non-EU waters) 2003-2021. Two calculated proportions are presented: blue line: the proportion of overexploited stocks ($F > F_{MSY}$) (out of a total of 81 stocks) and yellow line: the proportion of stocks outside safe biological limits SBL ($F > F_{pa}$ or $B < B_{pa}$) (out of a total of 47 stocks).

Combining these two calculated proportions (Table 6.5.1), STECF notes that in 2021, 5 stocks that are exploited below F_{MSY} are still outside safe biological limits, and 3 stocks inside safe biological limits are still exploited above F_{MSY} . In addition, 34 stocks have an unknown status with regards to safe biological limits. For the last known year, of the 81 stocks considered, only 32% (26 stocks) are known to be neither overexploited nor outside safe biological limits, suggesting that the objective in Art. 2.2 of the CFP has not been met.

Table 6.5.1 Number of stocks overfished ($F > F_{MSY}$), or not overfished ($F \leq F_{MSY}$), and inside ($F \leq F_{pa}$ and $B \geq B_{pa}$) and outside ($F > F_{pa}$ or $B < B_{pa}$) safe biological limits (SBL) in 2021 in the NE Atlantic (both EU and non-EU waters). Unknown SBL refers to stocks whose status regarding SBL could not be assessed.

	Below F_{MSY}	Above F_{MSY}
Inside SBL	26	3
Outside SBL	5	13
Unknown SBL	29	5

Mediterranean & Black Seas

For the Mediterranean & Black Seas, the number of stocks assessed and for which data is available, varies from year to year and assessment results for some stocks do not extend back to the early part of the time-series. However, STECF observes that the number of stock assessments available this year has increased considerably compared to last year (from 39 stocks in 2021 to 58 stocks in

2022). This is due to stock assessment results now being available publicly on the GFCM website through their STAR application¹⁰ in addition to available reports.

Additionally, biomass reference points are now available for 16 stocks, most of which were calculated during the Western Mediterranean stock assessment working group (EWG 22-09).

STECF notes that for most of these stocks $F_{0.1}$ was used as a proxy for F_{MSY} and consequently, the biomass at $F_{0.1}$ is used here as a proxy for B_{MSY} . As a result, the STECF-Ad hoc-23-01 report presents, for the first time, indicators on the number of overexploited stocks and on the number of stocks with F above F_{MSY} or SSB below B_{MSY} (annex 4 of the STECF-Ad hoc-23-01 report). Given the variation in the data availability from year to year, STECF considers these indicators are still exploratory. However, these results alongside existing information confirm that a large majority of the stocks remain overexploited (in 2021, 41 out of 57 stocks (72%) were overfished).

Trends in the fishing pressure (Ratio of F/F_{MSY})

As agreed by STECF (2018), STECF-Ad hoc 23-01 computed the trends in fishing pressure using a statistical model (Generalised Linear Mixed Effects Model, GLMM) accounting for the variability of trends across stocks and including the computation of a confidence interval around the median. STECF notes that a large confidence interval around the median arises from inconsistent temporal trends among the individual stock time series and the different level of fishing mortality relative to reference fishing mortality across stocks.

The model-based results for the NE Atlantic (inside and outside EU waters), Mediterranean and Black Seas and for all EU waters are displayed in Figures 9, 11, 20 and 26 of the STECF-Ad hoc-23-01 report. For illustration, trends in the median values for F/F_{MSY} are summarised in Figure 6.5.2 below over the time series for the NE Atlantic inside and outside EU waters and for the Mediterranean and Black Sea.

¹⁰ <https://www.fao.org/gfcm/data/star>

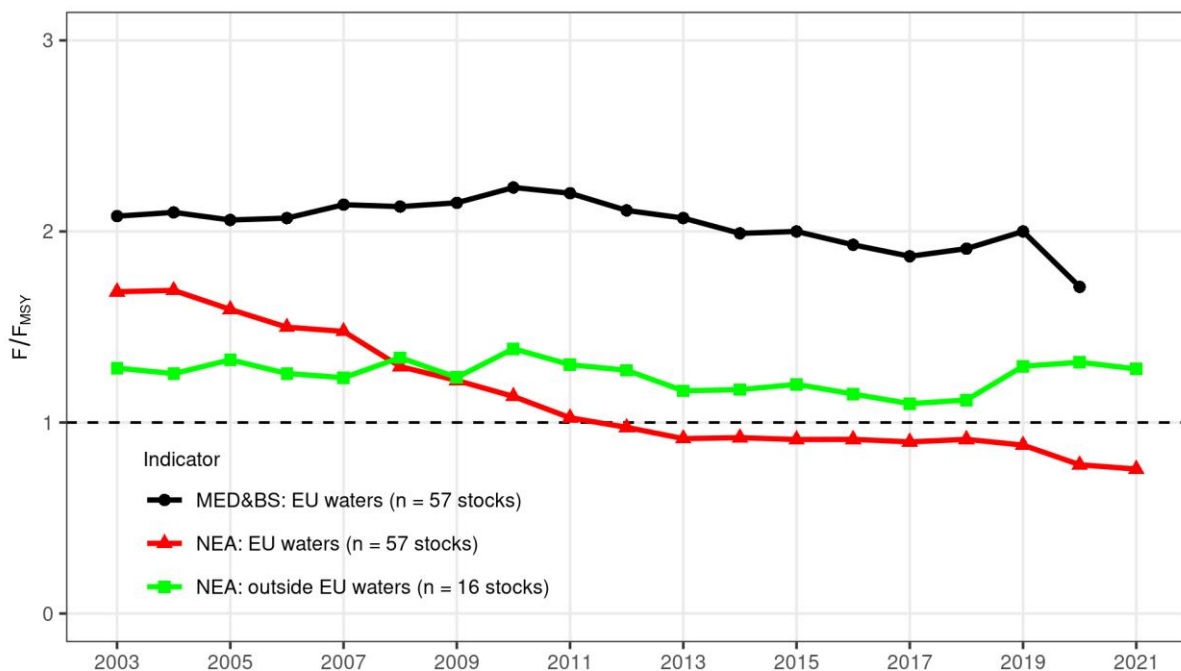


Figure 6.5.2. Trends in fishing pressure 2003-2021. Three model-based indicators F/F_{MSY} are presented (all referring to the median value of the model): one for 57 stocks with appropriate information in the NE Atlantic EU waters (red line); one for an additional set of 16 stocks also located in the NE Atlantic but outside EU waters (green line), and one for the 57 stocks from the Mediterranean Sea & Black Seas (black line).

Northeast Atlantic

In the NE Atlantic EU waters, the model-based indicator of fishing pressure (F/F_{MSY} , based on 57 stocks with appropriate information – Figure 9 in the STECF-Ad hoc-23-01 report) shows a gradual downward trend over the period 2003-2021. In the early 2000s, the median of this indicator of fishing mortality was about 1.7 times larger than F_{MSY} , but this has reduced and stabilised close to slightly below 1 (F_{MSY}) over the period 2013-2019. STECF notes that the line being around 1 means that only around half of the stocks are fished below F_{MSY} . In 2021, the value reached its lowest value of 0.76.

The same model-based indicator was computed by STECF-Ad hoc-23-01 expert group for an additional set of 16 stocks located in the NE Atlantic, but outside EU waters (Figure 11 in the STECF-Ad hoc-23-01 report). The median indicator for these stocks has always remained above 1 (ranging from 1.1-1.4) since 2003, with no increasing or decreasing trend.

STECF notes that the differing perceptions compared to last year may be due to changes in the available stocks (see the sensitivity analyses provided in the annex 5 of the Ad hoc 23-01). Hence, the median estimates of the model-based indicator are likely to be revised from one year to the next and, therefore, should be interpreted with caution.

Mediterranean and Black Seas

The indicator for fishing pressure computed for stocks from the Mediterranean & Black Seas (57 stocks) has remained at a high level during the whole 2003-2020 time series ranging between 2.2 and 1.7 (Figure 20 in the STECF Ad hoc 23-01 report). STECF observes a decreasing trend in the proportion of overexploited stocks from 2019 to 2020 but STECF is not in the position to assess whether this change reflects a temporary decrease in fishing pressure, or whether this is a longer-term positive trend. While there appears to be a downward trend since 2011, the median value for F/F_{MSY} remains above $1.7 \times F_{MSY}$ (Figure 6.5.2), and hence, does not meet the maximum sustainable yield objective of the CFP.

EU Waters

At the request of EUROSTAT, the F/F_{MSY} model-based indicator was also fitted using all stocks in EU waters as input data, (i.e., for both the in NE Atlantic EU waters and in the Mediterranean & Black Seas together (114 stocks)). The overall F/F_{MSY} indicator for all EU waters computed shows a decreasing trend over time but with values always above 1. Compared to previous years, the number of stocks corresponding to the NE Atlantic EU waters and to the Mediterranean & Black Seas was more balanced. However, the trend in indicator values (Figure 26 in the STECF-Ad hoc-23-01 report) appears to be driven by F/F_{MSY} estimates for stocks in the NE Atlantic. This is likely due to the significant variability in trends observed in Mediterranean and Black Seas stocks, compared to the more consistent trends observed across the NE Atlantic stocks. For this reason, STECF decided not to present the trend for EU waters as a whole in Figure 6.5.2 as it can be misleading in terms of monitoring the CFP, although it may be useful for EUROSTAT's reporting requirements.

Trends in Biomass

The model-based results for the NE Atlantic (EU waters), the Mediterranean and Black Seas and for data-limited stocks in the NE Atlantic (=ICES "category 3" stocks) are provided in Figures 13, 22 and 15 respectively of the STECF-Ad hoc 23-01 report. For illustration, trends in the median values for biomass over time are summarised in Figure 6.5.3 below. STECF notes there is large uncertainty around this indicator (see Figure 27 in the STECF-Ad hoc-23-01 report).

The model-based indicators for the trend in biomass (Figures 13 and 22 of the STECF-Ad hoc-23-01 report) show a general increase over time since 2007 in the NE Atlantic (EU waters only) for assessed stocks, whereas data limited stocks for which only a relative biomass index is available from scientific survey data, reach the highest value in 2015 followed by a decreasing trend until 2021 (Figure 6.5.3). STECF notes that the change in the biomass trend for data limited stocks compared to last year is due to changes in the number of stocks used to compute this indicator. Despite the large uncertainty of this indicator, in 2021, biomass was on average around 40% (for assessed stocks) and 46% (for data limited stocks), higher than in 2003. In the Mediterranean & Black Seas, the median biomass was slightly higher at the beginning of the time-series, but declined and remained stable from 2011–2013, after which it shows a gradual increase.

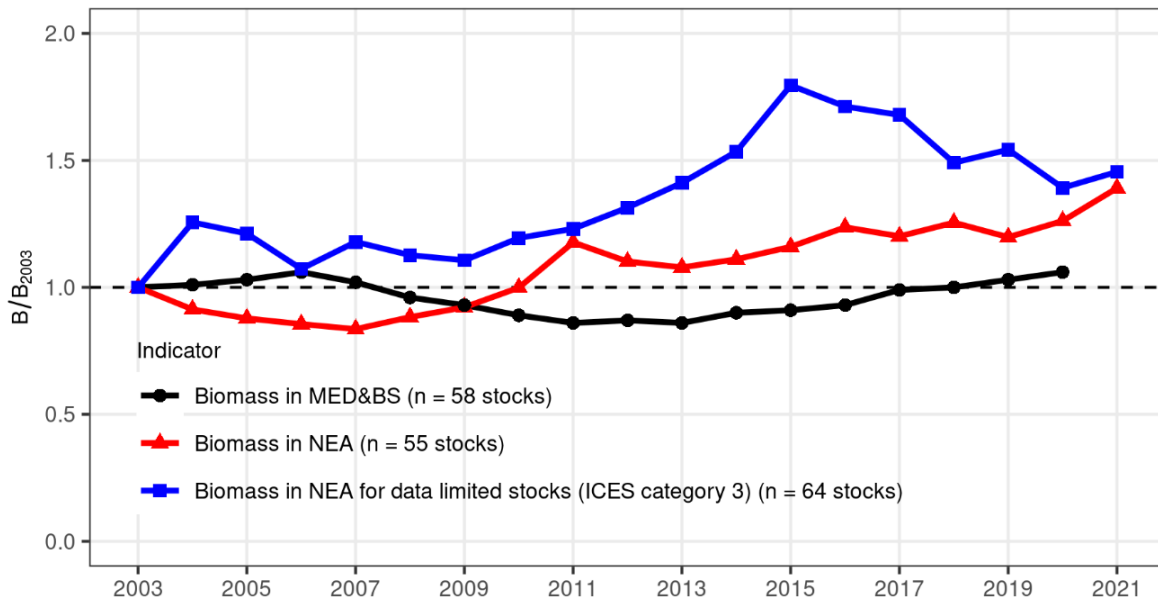


Figure 6.5.3. Trends in the indicators of stock biomass (median values of the model-based estimates relative to 2003). Three indicators are presented: one for the NE Atlantic EU waters (55 stocks considered, red line); one for the Mediterranean & Black Seas (58 stocks, black line); and one for data limited stocks in NE Atlantic (ICES category 3, 64 stocks, blue line).

Trends in Recruitment

The model – based results for the trend in decadal recruitment are given in Figure 16 in the STECF-Ad hoc-23-01 report. This indicator aims to identify long-term trends of recruitment for all stocks and is calculated over a twenty-year moving average: For example, the decadal recruitment for 2019 for a single stock is the ratio between the average recruitment from 2010 to 2019 over the average recruitment from 2000 to 2009 (check the protocol in Annex 1 of the STECF-Ad hoc-23-01 report for more details). This indicator is subject to high year-on-year variability. The model output median values is displayed in Figure 6.5.4 below. The average decadal recruitment indicator shows a decreasing trend until 2012 and an inversion afterwards.

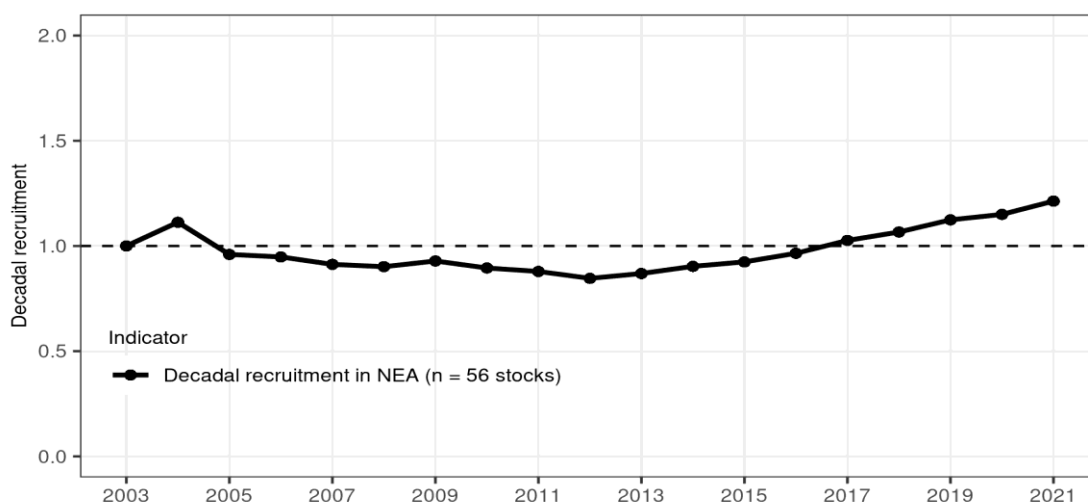


Figure 6.5.4. Trend in median values for decadal recruitment scaled to 2003 in the NE Atlantic area (based on 56 stocks).

Trends per Ecoregion

The STECF-Ad hoc-23-01 report provides indicator trends by Ecoregion for EU waters in the NE Atlantic and the Mediterranean & Black Sea. However, STECF notes that the number of stocks contributing to each ecoregion is generally rather small (<10 stocks per region) meaning that the indicator values may be imprecise and, therefore, should be interpreted with caution.

In EU waters, the overall fishing pressure in all ICES Ecoregions has decreased and the status of stocks has improved compared to the start of the time-series (Figures 4 and 10 in the STECF-Ad hoc-23-01 report). The modelled estimate of the F/F_{MSY} ratio for 2021 was between 0.48 and 0.95 corresponding to the Bay of Biscay and Iberian Eco-Region and the Baltic Sea EcoRegions respectively. Accepting the inherent imprecision in the indicator, for the stocks analysed, the trends give a clear signal that fishing pressure in each region has reduced over the time-series.

In the Mediterranean & Black Sea, the fishing pressure has been stable in the Central Mediterranean Ecoregion, while it has decreased steadily in the Western Mediterranean Ecoregion. However, the recent decreasing patterns in the Eastern Mediterranean Sea and in the Black Sea are both based on only four stocks and, therefore, the trend should be interpreted with caution. The modelled estimate of the F/F_{MSY} ratio for 2021 was above 1.7 for all the EcoRegions.

Historical performance

STECF notes that the trends in fishing pressure and biomass observed in this year's STECF-Ad hoc-23-01 report differ from previous STECF reports. Changes of historical perceptions over time (Section 7 of the STECF-Ad hoc-23-01 report) show that in the Northeast Atlantic from 2017 to 2021 there's a tendency to underestimate F/F_{MSY} when compared to the previous year's estimate, and, conversely, overestimate B/B_{2003} . That pattern seems to have changed for F/F_{MSY} in 2022 and 2023 (Figures 28 and 29 in the STECF-Ad hoc-23-01 report).

In the Mediterranean and Black Seas, there appears to be no systematic under- or over-estimation observed in the historical pattern (Figures 30 and 31 in the STECF-Ad hoc-23-01 report). Beyond the issue of the varying number of stocks from year to year, such differences may be partially attributable to the results from updates of the stock assessments with the addition of additional years of data or changes in the assessment methodology. Therefore, small differences in the resulting outcomes compared to last year’s report should not be over-interpreted as positive or negative.

Coverage of the scientific advice

Coverage of biological stocks by the CFP monitoring

The analyses of progress in achieving the MSY objective in the NE Atlantic should include all stocks with advice provided by ICES that are at least partially inside EU waters. According to the ICES database accessed for the analysis, ICES provided scientific advice for 220 biological stocks included in EU waters (at least partially). Of these, 101 stocks (46%) are data limited (ICES category 3 and above, Table 6.5.2).

Table 6.5.2. Total number of stocks assessed by ICES for different stock categories in different areas. Note that not all of these stocks are considered of EU relevance (STECF 15-04). Therefore, the numbers are higher than those used in the CFP monitoring analysis.

	ICES Stock Category						Total
	1	2	3	4	5	6	
Arctic Ocean	8	0	3	0	0	0	11
Azores	0	0	2	0	1	0	3
Baltic Sea	9	1	4	0	0	0	14
BoBiscay & Iberia	14	5	14	0	2	4	39
Celtic Seas	26	2	14	2	7	1	52
Greater North Sea	26	2	22	3	4	1	58
Iceland, Greenland and Faroes	17	1	6	0	0	0	24
Widely	7	1	9	0	2	0	19
Total	107	12	74	5	16	6	220

The present CFP monitoring analysis for the NE Atlantic is focused on stocks with a TAC in 2017 and for which estimates of fishing mortality, biomass and biological reference points are available. As detailed in the STECF-Ad hoc-23-01 report, not all indicators can be calculated for all stocks in all years. The ad hoc group was able to compute indicators for 31 to 81 of category 1 and 2 stocks depending on indicators, years and areas, and 64 category 3 stocks (Table 2 in the STECF-Ad hoc-23-01 report). Such stocks represent a large share of catches, but there is still a significant number of biological stocks present in EU waters that are not included in the sampling frame of the CFP monitoring analysis.

In the Mediterranean and Black Seas region, stock status and trends are only assessed for a limited number of stocks. The expert group selected 243 combinations of Species/GSA in the sampling frame (Mannini et al., 2017), of which 96 combinations (39%) have been covered by 58 available

stock assessments conducted between 2020 and 2022. The difference between the number of combinations (96) and the number of stock assessments (58) stems from the fact that some stocks are assessed over multiple GSAs. STECF notes that, despite this year's increase in the number of stocks available, there is still a need to increase the coverage of stocks in the CFP monitoring analysis to increase the representativeness of the indicator values for the Mediterranean and Black Seas.

Coverage of TAC regulation by scientific advice

STECF notes that 158 TACs (combination of species and fishing management zones) in the EU waters of the NE Atlantic are derived using the agreed sampling frame (Gibin, 2017; Scott et al 2017a, Scott et al 2017b) with two additional TACs added this year. STECF underlines that in many cases, the boundaries of the TAC management areas are not aligned with the biological limits of stocks used in ICES assessments. Therefore the ad hoc group computed an indicator of advice coverage, where a TAC is "covered" by a stock assessment when at least one of its divisions match the spatial distribution of a stock for which reference points have been estimated from an ICES full assessment. Based on this indicator, 51% of the 158 TACs are covered, at least partially, by stock assessments that provide estimates of F_{MSY} (or a proxy), 40% by stock assessments that have B_{pa} , with 24% covered by stock assessments that provide estimates or proxies of B_{MSY} .

Additionally, STECF notes that, using this index, some TACs can be considered as "covered" if they relate to: (i) part of a given management area, (ii) several assessments contributing to a single TAC (e.g., *Nephrops* functional units in the North Sea) or (iii) scientific advice covering a different (but partially common) area (e.g. whiting in the Bay of Biscay). Such an approach overestimates the spatial coverage of advice (i.e., the proportion of TACs based on a single and aligned assessment) and means that many TACs are still not covered by scientific advice based on F_{MSY} reference values.

Ongoing developments

STECF acknowledges that monitoring the performance of the CFP requires significant effort to provide a comprehensive picture of progress towards the CFP objectives. The process presents several methodological challenges due to the annual variability in the number and categories of stocks assessed as well as the large variation in trends across stocks. As a result, the choice of indicators and their interpretation is regularly discussed, expanded, and adjusted by STECF when necessary.

To ensure consistency in the indicators across years, STECF observes that the guidelines for inclusion/exclusion of stocks for the calculation of indicators needs to be updated in the CFP monitoring protocol. Additionally, STECF notes that there is an increase in the number of stocks assessed with biomass-based dynamic models, both in the NE Atlantic and in the Mediterranean and Black Seas. Their impact in the calculation of indicators has not been fully evaluated and should be further considered in any potential revision of the protocol.

STECF notes that the process to discuss and update the current protocol was initiated in 2022 (STECF PLEN 22-01, STECF PLEN 22-03). The changes to the presentation of results agreed during STECF PLEN 22-03 have already been incorporated into this year's CFP monitoring report. However, additional work is still needed on issues such as the sampling frames definition, sensitivity of the results to available stocks, potential changes to the modelling approach, analyses of historical robustness and the development of indicators for all EU stocks.

STECF also recognises the need to broaden the scope of the CFP monitoring report to address those CFP objectives that are not currently dealt with. In particular, indicators covering selectivity, the landing obligation, the wider ecosystem, and socio-economic aspects in the analysis would be a

useful expansion. A process to develop such indicators was initiated in 2018 by EWG 18-15 but further work is needed to progress these indicators. STECF is ready to carry out this work if requested to do so.

STECF conclusions

Regarding the progress made in the achievement of F_{MSY} in line with the CFP, STECF concludes that the latest results indicate a reduction in overall fishing mortality and a general increase in stock biomass in the NE Atlantic over the period 2003-2021. Nevertheless, several stocks remain overfished and/or outside safe biological limits. The objective of the CFP, which aimed to ensure that all stocks are fished at or below F_{MSY} since 2020, has not been achieved for these stocks.

STECF concludes that the situation with regards to stocks in the Mediterranean and Black Sea remains challenging, with annual fishing mortality estimates around two times above F_{MSY} over the full time-series (2003-2020). However, there are indications that fishing pressure has decreased since 2013 while biomass has shown a slight improvement since 2011, being above the 2003 reference level in the last two years (2019-2020).

STECF concludes that many stocks still lack definition of some key reference points (B_{PA} , F_{PA} , F_{MSY} or B_{MSY}). STECF acknowledges the advances made in the last year in increasing the number of stocks included in the analysis and supports ongoing work in ICES, GFCM and STECF EWGs to increase the number of stocks with key reference points further. Any progression on this issue will be incorporated into future CFP monitoring reports as new information becomes available.

STECF concludes that there is a need to revise and update the protocol that has been followed for this monitoring report since 2018. The protocol would benefit from broadening its scope to consider possible additional CFP objectives not currently dealt with.

References

- STECF, 2018 – 59th Plenary Meeting Report (PLEN-18-03). Publications Office of the European Union, Luxembourg, 2018, ISBN 978-92-79-98374-0, doi:10.2760/335280, JRC114701.
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- Gibin M., 2017 - Integrating Fishing Management Zones, FAO and ICES statistical areas by data fusion, JRC Technical Report, JRC105881.
- Scott, F., Gibin, M. and Jardim, E., 2017a - Generating the CFP indicators sampling frame for FAO area 27 (Northeast Atlantic). JRC Technical Report, JRC106114, doi:10.2760/689063.
- Scott, F., Gibin, M., Vasilakopoulos, P. and Jardim, E. 2017b. Matching the sampling frame for FAO area 27 (Northeast Atlantic) with ICES assessments. JRC Technical Report, JRC106115, doi:10.2760/818883.

6.6 REVIEW OF THE AD HOC CONTRACTS ON KING SCALLOPS IN SUPPORT OF THE EWG 23-02: ASSESSMENT AND ADVICE FOR NON-QUOTA STOCKS - FOR EARLY ADVICE BY 31/03

This advice was provided to the Commission on 29th March 2023.

Background provided by the Commission

In the context of the development and implementation of the EU policy and to support the commitment with the UK under the Trade and Cooperation Agreement (TCA), DG-MARE requested STECF to give advice on non-quota stocks (NQS) to support the development of multi-year management strategies (MYSts). EWG 23-02 will meet later in 2023 to provide an overview and identify the main issues that constitute baseline information to inform stock assessment and support fishery management of king scallops (*Pecten maximus*) in the English Channel (ICES divisions 7d and 7e).

Outputs of this EWG will contribute to inform the discussions under the EU-UK Specialised Committee on Fisheries (SCF) and its Working Group, when discussing the development of a first MYSt for Channel king scallops. This work under the SCF will start at the beginning of 2023 and will follow the agreed framework for the development of MYSts for the conservation and management of EU-UK shared NQS.

For this purpose, two dedicated ad hoc contracts have been launched to develop the following tasks / activities to be delivered by 10.03.2023, in order to be reviewed in the spring plenary meeting (PLEN 23-01) ahead of the EWG 23-02:

- "*King scallops state of knowledge*": Evaluate the current state of knowledge on king scallops in the English Channel. The evaluation should cover fishing activity (including links and conflicts with other fisheries), data collection, landings and value, stock assessment and stock status.
- "*King scallops fisheries management*": Provide an overview of previous work done by existent groups in terms of science and advice to management, in particular the ICES Scallop Assessment Working Group (WGSCALLOP)¹¹ and the NWWAC (Focus Group on Scallop)^{12,13}. Provide an overview and literature review of the current fisheries management measures and strategies/plans for king scallops in the English Channel, including all EU and UK measures relevant for this stock and fishery (whenever possible).

Background documents are published on the meeting's web site on: <https://stecf.jrc.ec.europa.eu/plen2301>

Request to the STECF

STECF is requested to review the work of the two ad hoc contracts and comment on the information provided on the respective reports.

11 <https://www.ices.dk/community/groups/Pages/WGScallop.aspx>

12 <https://www.nwwac.org/about-nwwrac/structure.1607.html>

13 https://www.nwwac.org/_fileupload/Scallop/ToR_FG_Scallops_2021-10_EN.pdf

This review and the comments provided should assist the EWG 23-02 to expand this work and produce the following deliverables: 1) Identify specific issues that may rise from the evaluation on the king scallops state of knowledge; 2) Suggest appropriate procedures and methods to improve the data collection for the conservation and management of king scallops; 3) Provide an overview of the socio-economic importance of the king scallops fishery in the English Channel; 4) Assess the suitability and effectiveness of the current fisheries management measures and strategies/plans for king scallops in the English Channel.

STECF comments

STECF reviewed the findings of two ad hoc contracts which are given in a single report (Foucher and Tully, 2023: "King scallops (*Pecten maximus*) state of knowledge" and "King scallops fisheries management" in the English Channel (ICES divisions 7d, e) – Contracts STECF 2305, 2306, 2307 and 2308).

STECF notes that the Foucher and Tully (2023) report provides a concise overview of all of the elements related to the state of knowledge on the biology, fisheries, assessment and management of king scallop (*Pecten maximus*) specified in the contracts' Terms of Reference.

Furthermore, the report provides a useful and informative summary of many of the issues to consider in the management of scallop fisheries.

All issues mentioned are relevant and ideally should be taken into consideration in any future multi-year management strategy (MYSt).

Regarding data, the report does not identify any need for improved data collection. On the contrary the report concludes that data, and in particular combined logbook-VMS data are underutilized and that better integration of data, standardization of methods and integrated assessments of the main stocks would represent a significant improvement in advice for management.

STECF conclusions

Based on its review of the findings in the Foucher and Tully (2023) report, STECF concludes that the report provides a concise and informative overview of all of the elements related to the state of knowledge on the biology, fisheries, assessment and management of king scallop (*Pecten maximus*) specified in the contracts' Terms of Reference.

Furthermore, STECF concludes that the report provides a useful and informative summary of the issues to consider in the management of scallop fisheries, which will be further discussed and developed during EWG 23-02.

References

FOUCHER, E and TULLY, O (2023): "King scallops (*Pecten maximus*) state of knowledge" and "King scallops fisheries management" in the English Channel (ICES divisions 7d,e) – Contracts STECF 2305, 2306, 2307 and 2308)

6.7 ADDITIONAL INFORMATION TO THE HIGH SURVIVABILITY EXEMPTION FOR BALTIC SALMON

Background provided by the Commission

In 2022, Baltfish requested to: i) add a new gear to the existing exemption for salmon in the Baltic Sea, and ii) prolong that extended exemption beyond 2023. For that purpose, Baltfish submitted new data concerning pontoon traps and the STECF assessed this information during the 2022 November Plenary (PLEN 22-03, point 6.2.). In January 2023, Baltfish submitted a new piece of evidence in addition to what had already been submitted to PLEN 22-03.

Background documents are published on the meeting's web site on: <https://stecf.jrc.ec.europa.eu/plen2301>

Request to the STECF

STECF is requested to assess the new document provided by BALTFISH. Specifically, the STECF is requested to:

- comment on the quality of the new evidence and its relation with the information submitted to PLEN 22-03,
- assess whether this new supporting information affects or changes the conclusions issued by STECF PLEN 22-03, point 6.2. namely:
 - missing data (discard rate) and flaws (missing uncertainty estimates, missing control experiment).
 - quality of the information supplied and need for further supporting information

Summary of the information provided to STECF

STECF was provided with two main documents. The first is a draft scientific article (Ruokonen et al. under review), which aims at assessing and comparing the salmon release mortality with two different fishing gears: a pontoon trap with knotless bag (pontoon-trap KL), which is currently included in the landing obligation exemption, and a pontoon trap with a water hold (pontoon trap WH) for which an extension of the landing obligation exemption is requested by BALTFISH. The assessment is based on a tagging experiment carried out in the Baltic Sea in 2021 and uses a Bayesian mark-recapture model to estimate and compare the release mortality with the two gears.

The second document contains feedback from different stakeholders to the BSAC consultation about the BALTFISH request for the landing obligation exemption. This consultation allowed stakeholders to update their position compared to the previous consultation that was provided as a background document to PLEN 22-03, following the provision of this new study. Comments were received from (1) the Federation of Finnish Fisheries Associations, (2) Baltic Salmon Rivers Association, CCB, DAFV, EEA, FANC, Fisheries Secretariat, WWF, (3) SFPO and (4) Fischereischutzverband. As in the previous consultation, while some stakeholders support the BALTFISH proposal (Federation of Finnish Fisheries Associations, Fischereischutzverband, SFPO), others provided negative feedback (Baltic Salmon Rivers Association, CCB, FANC, WWF, Fisheries Secretariat, EAA).

A third document provided was not relevant to the request.

Summary of previous STECF advice

A high-survivability exemption for trap-net caught salmon in the Baltic Sea has been in place since 2015 (Commission Delegated Regulation (EU) 1396/2014). After a first prolongation in 2018 (Commission Delegated Regulation (EU) 2018/211), a further prolongation and an extension to the pontoon trap with knotless bag (pontoon-trap KL) was implemented in 2021 (Commission Delegated Regulation (EU) 2021/1417) following a BALTFISH request in 2020. This request was assessed by EWG 20-04. The EWG concluded that mortality in traps, fyke nets and trap nets seemed to be low (STECF PLEN 14-02). Moreover, STECF outlined that quantitative data on pontoon traps were scarce and that pontoon-trap KL had potential to be gentler for salmon than traditional pontoon traps not fitted with a knotless bag, and, hence, increase survivability of released salmon.

Commission Delegated Regulation (EU) 2021/1417 is due to remain in force until 31st December 2023. It applies to *“salmon caught with fyke nets, pound nets and all other types of trap nets, except pontoon traps without an attached knot-less bag”* (Article 3 of the Delegated Act). Moreover, the delegated act stipulates that *“by 1 May 2023, Member States having a direct management interest shall submit to the Commission additional scientific information allowing an assessment of the representativeness and quality of the discard survival estimate of salmon caught with pound nets and pontoon traps equipped with an attached knot-less bag, including information on the post-release mortality.”* (Article 4).

In 2022, BALTFISH formulated a new request for a prolongation of the exemption, and its extension to the pontoon trap without a knotless bag but with a water hold (pontoon-trap WH). This request was assessed during STECF PLEN 22-03. Based on the available evidence at that time, STECF concluded that the data and information provided was too limited to draw meaningful conclusions about pontoon-trap WH. Moreover, STECF concluded that the overall mortality resulting from the exemption could not be assessed in the absence of any quantitative information on the fishery discard rate. Understanding the discard rate in the context of the survival estimates is recognised a key aspect in assessing any landing obligation exemption (STECF PLEN 17-02). STECF also noted that the discard rate is also critical to assess the relevance of an 8% maximum discard threshold proposed by BALTFISH. Finally, STECF observed that control and enforcement is a key aspect of any landing obligation exemption (STECF EWG 20-04) and recommended that more detailed information on these aspects would be useful.

STECF comments

- **ToR 1: Quality of the new evidence and its relation with the information submitted to PLEN 22-03**

STECF observed that the new information provided by BALTFISH (Ruokonen et al. under review) provides a valuable quantitative comparison on the release mortality with pontoon-trap KL and pontoon-trap WH. This appropriately responds to the STECF conclusion from PLEN 22-03 that *“the availability of relevant data on discard mortality from pontoon trap WH is insufficient to draw any meaningful conclusions”*.

STECF considers that the survey design used in the paper addresses the question raised by STECF and the model used to analyse the data is relevant. It estimates both survival rates and associated uncertainty, contrary to previous analyses (e.g., Siira et al. 2006, Östergren et al. 2020). STECF notes that the model described in the draft paper uses some informative priors (i.e., *a priori* information coming from experts and from previous studies). Some of the informative priors are inconsistent with the corresponding posterior distribution (i.e., estimates from the model that

combines the information resulting from the mark-recapture experiment with the *a priori* information). This might suggest that data from the mark-recapture experiment might partially contradict *a priori* information. STECF suggests that it might be worthwhile carrying out a sensitivity analysis on those priors. While this may affect the absolute values of release mortality estimates, this is not likely to affect the conclusions on the comparison between pontoon-trap KL and pontoon-trap WH.

- **ToR 2: Assess whether this new supporting information affects or changes the conclusions issued by STECF PLEN 22-03**

STECF observes that there is still no true control experiment in this mark-recapture experiment, as outlined during STECF PLEN 22-03.

STECF recalls that there are a wide range of factors that can affect survival, and these are likely to be the primary cause of the high variability observed across the various studies (STECF EWG 16-10). Since the experiment took place in a single year, additional experiment would be valuable to confirm the results in contrasting environmental conditions. However, STECF acknowledges that the current results confirm the results from a previous experiment in 2020 (Ruokonen et al. 2022). According to Ruokonen et al. (under review), there is 78% chance that release mortality is indeed higher for pontoon-trap WH (mean estimate 24% / 90% uncertainty interval 3-43%) than for pontoon-trap KL (mean estimate 13% / 90% uncertainty interval 1-24%). The studies also report that pontoon trap WH cause more injuries than pontoon-trap KL.

STECF observes that Ruokonen et al. (under review) reports that, when inappropriately used (pontoon-trap KL is un-ergonomic and can be hard to manipulate by fishers), or when catches are high, release mortality and injuries with pontoon-trap KL are likely to increase. This increase is not quantified in the present studies, but this qualitative observation is consistent with findings from Östergren *et al.* (2020) who had observed that if inappropriately used, the release mortality from the pontoon-trap KL increases from 27% (average value in their study) to 47%. This issue is not likely to affect pontoon-trap WH.

STECF notes that Ruokonen et al. (under review) indicates that "*mortality due to the selection and release of salmon from coastal trap net fishing in Finland is probably low because only a small minority of the total catch is released*". However, both Ruokonen et al. (under review) and Östergren et al. (2020) acknowledged that "*no accurate estimate of the number of released salmon is available in Baltic Sea salmon fishery*". Moreover, salmon is also caught as a bycatch in other fisheries. Indeed, ICES (2021) report that "*salmon are also by-caught to an uncertain but probably large extent*" by fisheries targeting other species such as the Swedish coastal whitefish fishery. Since salmon caught outside the fishing season should be released (ICES 2021), the high survivability exemption also aims to allow such fisheries occurring outside the salmon season to continue (Joint Recommendation of the BALTFISH High Level Group – background document to PLEN 22-03). For example, a stakeholder outlined that the 8% threshold included in the Regulation is "*too low*" and "*prevents all the whitefish fishery in the Bothnian Bay area both before and after the salmon fishery period*" (background document to PLEN 22-03). STECF considers that provision of discard data on those latter fisheries are also critical.

STECF notes that no new information has been provided to address the conclusions made by STECF PLEN 22-02 relating to control and enforcement or to the 8% threshold, and that only a qualitative statement was provided about the discard rate in the salmon fishery (see previous paragraph).

STECF conclusions

STECF concludes that this new supporting document appropriately addresses the lack of information identified during STECF PLEN 22-03 relating to the missing data on pontoon-trap WH.

STECF concludes that the information provided indicates that release mortality from pontoon trap WH is higher than from pontoon-trap KL. While pontoon trap KL mortality rate estimates vary greatly among studies, they consistently suggest that it is likely to be higher than mortality with other types of traps (STECF PLEN 14-02 considered that mortality with trap-nets, fyke-nets is typically less than 10%).

STECF concludes that, while it was stated that salmon discard rates are thought to be low in the fisheries targeting salmon (Ruokonen et al. under review), no quantitative evidence was provided on the discard rate. This is a critical parameter to assess the impact of any landing obligation exemption and without this information it is impossible to quantify the impact of the exemption.

STECF concludes that no additional information was provided to address remarks raised during plenary 22-03, including a justification of the 8% threshold, control and enforcement of the exemption and release mortality with other fishing gears.

STECF concludes that since the exemption applies to any fisheries catching salmon with the listed gears, either as a target species or as a bycatch, data on catch and discard rates for those fisheries would be required to assess the overall impact of the exemption.

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6.8 ASSESSMENT OF A JOINT RECOMMENDATION CONTAINING A REQUEST FOR EXEMPTION ON THE LANDING OBLIGATION, NORTH SEA

Background provided by the Commission

Joint Recommendations on the landing obligation (exemptions)

After consulting the relevant Advisory Councils, Member States cooperating at sea-basin level may provide the Commission with joint recommendations requesting exemptions from the landing obligation. Where the STECF's advice is positive, the Commission adopts delegated acts implementing these joint recommendations into EU law, in accordance with Article 15(6) of the Common Fisheries Policy¹⁴ (CFP). Where there is no multiannual plan for the fishery in question, article 15(6) of the CFP empowers the Commission to adopt delegated acts laying down on a temporary basis specific discard plans containing the exemptions. The six potential elements that can be contained in a discard plan are the following:

- definitions of fisheries and species;
- provisions for survivability exemptions;
- provisions on de minimis exemptions;
- the fixation of minimum conservation reference sizes;
- additional technical measures needed to implement the landing obligation; and
- the documentation of catches.

The temporary discard plans under Article 15(6) with a maximum of 6 years have expired in 2020 or will expire in 2021 and have been or should be replaced by provisions adopted under article 15(5) and specified in multiannual plans. Under the existing multiannual plans, provisions¹⁵ specify that the Commission is empowered to adopt delegated acts following Article 18 of the CFP (Regionalisation procedure). Currently, most of the delegated regulations specifying the details of

¹⁴ Regulation (EU) 1380/2013.

¹⁵ Article 13, Regulation (EU) 2019/472 of the European Parliament and of the Council of 19 March 2019 establishing a multiannual plan for stocks fished in the Western Waters and adjacent waters, and for fisheries exploiting those stocks, amending Regulations (EU) 2016/1139 and (EU) 2018/973, and repealing Council Regulations (EC) No 811/2004, (EC) No 2166/2005, (EC) No 388/2006, (EC) No 509/2007 and (EC) No 1300/2008.

Article 11, Regulation (EU) 2018/973 of the European Parliament and of the Council of 4 July 2018 establishing a multiannual plan for demersal stocks in the North Sea and the fisheries exploiting those stocks, specifying details of the implementation of the landing obligation in the North Sea and repealing Council Regulations (EC) No 676/2007 and (EC) No 1342/2008.

Article 7, Regulation (EU) 2016/1139 of the European Parliament and of the Council of 6 July 2016 establishing a multiannual plan for the stocks of cod, herring and sprat in the Baltic Sea and the fisheries exploiting those stocks, amending Council Regulation (EC) No 2187/2005 and repealing Council Regulation (EC) No 1098/2007.

Article 14, Regulation (EU) 2019/1022 of the European Parliament and of the Council of 20 June 2019 establishing a multiannual plan for the fisheries exploiting demersal stocks in the western Mediterranean Sea and amending Regulation (EU) No 508/2014.

implementation of the landing obligation have been adopted by the Commission under the existing multiannual plans (Western Waters, the North Sea and Baltic).

The Scheveningen Group covering the North Sea will submit a joint recommendation for the STECF to review containing one high survivability request for plaice for vessels participating in a scientific project.

Background documents are published on the meeting's web site on: <https://stecf.jrc.ec.europa.eu/plen2301>

Request to the STECF

STECF is requested to:

1. review the supporting documentation underpinning exemptions on the basis of *high survivability* in respect of the new exemption request. STECF should assess the quality of the information supplied, the likely impact of the exemption to the stock, and, where possible, assess what further supporting information may be available and how this could be supplied in the future (e.g. survival studies, tagging experiments).

Background documents

The Scheveningen Group submitted a Joint Recommendation (JR) to DG MARE with a request to amend Art. 6 of Regulation (EU) 2020/2014¹⁶ ("Survivability exemption for catch and bycatch of plaice"). Art. 6 grants a high survivability exemption to land undersized plaice in ICES areas 4 (North Sea) and 3a (Skagerrak-Kattegat) and applies from 2020-2023. The JR proposes simplifying the exemption by removing mesh size specifications related to using bottom trawls (OTB and PTB gears) currently set out in Art. 6c (see Table 6.8.1).

Table 6.8.1 Left: Art.6 "Survivability exemption for catch and bycatch of plaice" in Delegated Regulation (EU) 2020/2014 specifying details of the implementation of the landing obligation for certain fisheries; right: the JR proposal for amending Art 6c.

<p>1.The survivability exemption referred to in Article 15(4)(b) of Regulation (EU) No 1380/2013 shall apply in the Union waters of ICES division 3a and subarea 4 to:</p> <p>(a) plaice (<i>Pleuronectes platessa</i>) caught with nets (GNS, GTR, GTN, GEN);</p> <p>(b) plaice caught with Danish seines;</p> <p>(c) plaice caught with bottom trawls (OTB, PTB):</p> <p>(i) with a mesh size of at least 120 mm when targeting flatfish or roundfish in the Union waters of ICES division 3a and subarea 4;</p>	<p>1.The survivability exemption referred to in Article 15(4)(b) of Regulation (EU) No 1380/2013 shall apply in the Union waters of ICES division 3a and subarea 4 to:</p> <p>(a) plaice (<i>Pleuronectes platessa</i>) caught with nets (GNS, GTR, GTN, GEN);</p> <p>(b) plaice caught with Danish seines;</p> <p>(c) plaice caught with bottom trawls (OTB, PTB)÷</p> <p>(i) with a mesh size of at least 120 mm when targeting flatfish or roundfish in the Union waters of ICES division 3a and subarea 4;</p>
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16 Commission Delegated Regulation (EU) 2020/2014 of 21 August 2020 specifying details of implementation of the landing obligation for certain fisheries in the North Sea for the period 2021-2023 (OJ L145, 10.12.2020, p.10).

<p>(ii) with a mesh size of 90 to 119 mm equipped with Seltra panel with a top panel of 140 mm mesh size (square mesh), 270 mm mesh size (diamond mesh) or 300 mm mesh size (square-mesh), which target flatfish or roundfish in the Union waters of ICES division 3a;</p> <p>(iii) with a mesh size of 80 to 119 mm targeting flatfish or roundfish in the Union waters of ICES subarea 4.</p> <p>2. When discarding plaice caught in the cases referred to in paragraph 1, the plaice shall be released immediately.</p>	<p>(ii) with a mesh size of 90 to 119 mm equipped with Seltra panel with a top panel of 140 mm mesh size (square mesh), 270 mm mesh size (diamond mesh) or 300 mm mesh size (square-mesh), which target flatfish or roundfish in the Union waters of ICES division 3a;</p> <p>(iii) with a mesh size of 80 to 119 mm targeting flatfish or roundfish in the Union waters of ICES subarea 4.</p> <p>2. When discarding plaice caught in the cases referred to in paragraph 1, the plaice shall be released immediately.</p>
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The JR is accompanied with two supporting documents prepared by the Danish Technical University (DTU-Aqua) at the request of the Ministry of Food, Agriculture and Fisheries of Denmark.

These documents are:

- Annex 1 - plaice survival - variable mesh sizes and optional selection panels - 22-12-2022
- Annex 2 - plaice survival - alternative mesh sizes - 22-12-2022

Annex 1 to the JR refers to Danish trawl fishery for flatfish, roundfish and Norway lobster. Annex 2 relates to the Danish North Sea trawl fishery targeting sole, in which plaice is a bycatch. The content of both documents is almost identical and are based on expert advice from three recently published studies by DTU-Aqua - Savina et al. (2019), Noack et al. (2020), and Methling et al. (2017). Savina et al. (2019) states that: "*Generally, fish caught by trawlers show lower survival (44%, 95%-confidence interval: 37–52%) than those caught by seiners (78%, 95%-confidence interval: 67–87%). Air exposure was found to be the most important factor in determining survivability of fish discarded from trawlers.*"

The document (Annex 1) indicates that in the authors' expert opinion "*the survivability of plaice in trawls using variable mesh sizes and optional selection panels would be relatively high*", and that "*there would be little-to-no impact on the plaice stock in the Skagerrak and Kattegat by allowing vessels fitted with electronic monitoring (EM) systems and participating in Fully Documented Fishery trials to fish with trawl using variable mesh sizes and optional selection panels*". Annex 2 contains similar argumentation.

Both supporting documents indicate that the authors are unaware of any scientific studies indicating that mesh size is likely to have an impact on plaice survival and air exposure, seasonality and catch composition are the most important factors influencing survival of plaice in Danish waters.

The JR also states that the inclusion of the mesh size specifications in Art. 6c exemptions may impact the carrying out of pilot scientific studies if such studies intended to test gear options with lower codend mesh sizes than those prescribed in Art. 6. Fishers may be reluctant to engage in such studies if they result in having to land and declare undersized catches of plaice against quotas.

STECF comments

Based on the JR, STECF observes that the rationale for the amendment to the exemption focus on two arguments:

- i) the assumption that survivability of plaice is not linked to mesh size; and
- ii) the requirement for vessels to land all plaice catches when taking part in pilot studies carried out under the provisions of Regulation (EU) 2019/1241 (technical measures regulation), creates a disincentive to undertake such studies by vessels that already have an exemption to discard undersized plaice.

STECF observes that the amendments to Article 6c as proposed by the JR would mean that an exemption from the obligation to land all catches of plaice would be extended to all trawls (OTB, PTB) targeting roundfish and flatfish in Union waters of ICES division 3a and subarea 4, regardless of mesh size.

STECF acknowledges that plaice survivability is impacted by factors such as gear type, season, air exposure, catch composition more than by mesh size (Breen and Catchpole, 2021), noting that EWG 22-05 acknowledged that since 2019, knowledge of plaice survivability has increased. However, available estimates remain highly variable and dependent on the range of factors highlighted.

STECF agrees that, in granting any exemption to the LO, the "high survivability" criterion should be considered in the context of the discard rates in the fishery (Rihan et al. 2019). Furthermore, EWG 22-05 noted that given the relatively high estimated discard rates and relatively low survival rates for plaice in some fisheries, significant quantities of plaice discarded may not survive.

According to ICES, discard rates for plaice in trawl and beam trawl fisheries are historically high (ICES WGNSSK 2022). The discard ratio (by weight) has increased from 40% in 2014 to 51% in 2021 (Figure 6.8.1). In this regard, STECF EWG 22-05 recalled that given the current discard survival together with current discard rates (>50% by weight) mortality of discarded plaice is and will remain high.

According to ICES (ICES WGNSSK 2022), the plaice stock in the North Sea is in good condition with fishing mortality below F_{msy} , F_{pa} , and F_{lim} , and spawning-stock size above $MSY_{trigger}$, B_{pa} , and B_{lim} . However, given that the survival rates are in the range of 20-40% and discard rates are high, considerable volumes of plaice discarded under this exemption are likely not to survive. Unless surviving and dead discards are accounted for in stock assessments and, thus in setting TACs, the actual fishing mortality will potentially exceed the catch advice.

Discards ratio in weight

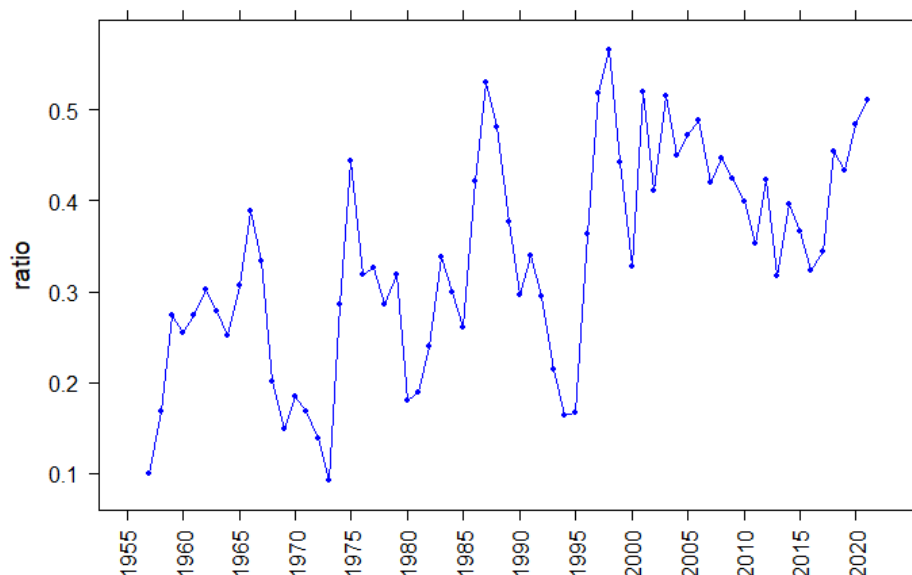


Figure 6.8.1: Discard ratio estimates of ICES 4 and 3a plaice extracted from ICES WGNSK (2022) for the overall fleet (i.e. including discards by bottom trawls, beam trawls and other gears). WGNSK (2022) estimated that the bottom trawls landed 33% of the ICES and 3a plaice in 2021.

STECF observes that removing the mesh sizes specifications set out in Art. 6c would allow the discarding of plaice to take place in all bottom trawl fisheries targeting roundfish and flatfish in ICES areas 3a and 4. This effectively means that almost all plaice catches in otter bottom trawl, seine net and beam trawl fisheries in NWW, the North Sea and the Baltic are covered by a high survivability exemption. However, STECF understands that the specific targeted fisheries mentioned in the existing Art 6c, are those that target roundfish and flatfish, and crustacean fisheries (e.g., those using gears that target *Nephrops* or *Pandalus*) currently have no exemption from the LO for plaice. Amending Art 6c as proposed in the JR would therefore not grant the OTB_CRU_70-99 métier an exemption from the obligation to land plaice. This métier has high discards of juvenile plaice and is currently responsible for almost 50% of the discarded plaice in ICES areas 4 and 3a by otter trawl fleets (based on the STECF FDI disseminated catch data).

STECF observes that allowing the removal of Art. 6(c) could set a precedent for simplifying other high survivability exemptions and thereby potentially widening the scope of fisheries covered by exemptions. Widening the scope may lead to an increase in unwanted catches being discarded and depending on the survival rate and extent of discarding taking place, may lead to an increase in unaccounted mortality of discarded fish. Such a widening may also potentially remove any incentive to improve the selectivity of bottom trawls to reduce unwanted catches of undersized plaice.

STECF observes that one motivation for removing the mesh size specifications is to facilitate the carrying out of pilot scientific studies with alternative gears to those currently described in Article 6 (c). If this is the case, then requesting a derogation under the relevant articles of the technical measures and control regulations to allow such pilot studies to be carried out would seem appropriate. The relevant provisions in these Regulations may negate any existing disincentive to participate in such trials. Such provisions include Art. 25 of the technical measures regulation which

sets out the conditions under which scientific research can be carried out. Additionally, Art 33(6) of Regulation (EC) 1224/2009¹⁷ allows for catches of up to 2 % of the quota can be used for scientific research including catches below the applicable minimum conservation reference size. These catches are not counted against the relevant quota.

STECF observes that another motivation for the proposed change to the exemption is to mitigate against the economic costs of landing high volumes of unwanted plaice (STECF EWG 22-05). However, STECF notes that it is not clearly explained why pilot scientific studies on improving selectivity would include testing codend mesh sizes lower than those defined in Regulation EU 2020/2014. This would conflict with Art 14 of the Technical Measures Regulation (EU) 2019/1241 (the "TMR") ("Pilot projects for the avoidance of unwanted catches"), accept in cases where the pilot project involves testing smaller codend mesh sizes in combination with other selectivity devices such as grids, or square mesh panels.

STECF conclusions

STECF concludes that the proposal for removing mesh size specifications for bottom trawls exemption, as prescribed under Art. 6c of Commission Delegated Regulation (EU) 2020/2014, would significantly widen the scope of the current "high survivability exemption". Essentially, it would allow the discarding of all undersized plaice caught with bottom trawls (OTB, PTB) targeting flatfish or roundfish in Union waters of ICES division 3a and subarea 4, regardless of mesh size.

STECF concludes that the survival estimates for undersized plaice in trawl fisheries are highly variable and lower than in passive gears and Danish seines. No new survival information has been provided for demonstrating higher survivability of plaice than those estimated in previous studies, which demonstrated that survivability (the proportion of the discarded catch that is expected to survive) of plaice when caught with bottom trawls in ICES areas 4 and 3a is in the range of 20 to 40% . The scientific studies showed that using other gears (passive gears, Danish seines) in these areas ensures much higher (70-90%) plaice survivability.

STECF concludes that in considering for high survivability exemptions, the estimates of survivability should be considered in the context of the discard rate for the fishery seeking an exemption (STECF 17-02). Lower survival rates in high discarding fisheries lead to high discard mortality rates. This is the case for plaice in bottom trawl fisheries where survival rates are estimated in the range of 20-40%, but with discard rates of more than 50%. STECF concludes that if adoption of the proposals in the JR result in an increase in the use of smaller mesh sizes, fishing mortality on undersized plaice is likely to increase relative to recent rates.

STECF concludes that work to improve the size selectivity of plaice in trawl fisheries should continue to avoid catching undersized plaice and eventually increase the proportion of larger individuals in the catch and the higher revenue associated with such an increase. STECF concludes that if the carrying out of pilot selectivity studies is impeded by the current exemption, then Member States should use the provisions in Art. 25 of the technical measures regulation to accommodate such trials and considering the 2% tolerance for scientific studies set out in Article 33 ("Recording of catches and fishing effort") in the Control regulation.

17 Council Regulation (EC) No 1224/2009 of 20 November 2009 establishing a Community control system for ensuring compliance with the rules of the common fisheries policy, amending Regulations (EC) No 847/96, (EC) No 2371/2002, (EC) No 811/2004, (EC) No 768/2005, (EC) No 2115/2005, (EC) No 2166/2005, (EC) No 388/2006, (EC) No 509/2007, (EC) No 676/2007, (EC) No 1098/2007, (EC) No 1300/2008, (EC) No 1342/2008 and repealing Regulations (EEC) No 2847/93, (EC) No 1627/94 and (EC) No 1966/2006. OJ L 343, 22.12.2009, p. 1.

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

7.1 PREPARATION OF EWG 23-02: ASSESSMENT AND ADVICE FOR NON-QUOTA STOCKS

Request to the STECF

STECF is requested to discuss the organisation of this EWG, clarify the workflow and discuss the draft ToRs.

STECF response

STECF suggests splitting the EWG meeting into a short virtual preparatory meeting for 2 days in April 2023 and a second about 3-day meeting, if required, to assess any additional issues that may arise. Any additional issues addressed by the EWG will be discussed in the July Plenary meeting. STECF discussed draft ToRs with DG MARE and agreed that the EWG should analyse what extra data and model development would be necessary to better assess existing measures or, in case propose, an eventual move to alternative management methods for king scallop. The EWG should assess the potential effect of the introduction of alternative management measures.

7.2 PREPARATION OF EWG 23-04 AND 23-06: THE EVALUATION OF JOINT RECOMMENDATIONS ON THE LANDING OBLIGATION

Request to the STECF

STECF is requested to discuss the organisation of these EWGs and conclude on the final planning overall, in particular the possibility of having EWG 23-06 as early as possible in May on the basis of the availability of the STECF chair and experts, instead of the original planning of 12 – 16 June.

Due to the recent changes in pressures on the legislative procedures of the delegated acts containing the exemptions, the original timeline needs to be shortened and the Commission requests the STECF to consider the possibility to have a written procedure of the two EWG reports instead of having those reports endorsed in STECF PLEN 23-02 as was originally discussed.

Therefore the elements to be discussed are the following:

- 1) The final dates of the EWGs depending on the availability of the chairs and the experts as the EWG are divided by area of focus;
- 2) The dates of the release of the EWG reports;
- 3) If any ad-hoc contracts are necessary to facilitate the STECF in the written procedure as much as possible;
- 4) Start- and end date of the possible written procedure.

STECF is requested to clarify the workflow and planning, and discuss the draft ToRs provided to the STECF as background document that include also a draft planning schedule as a basis for the discussions

STECF comments

STECF observes that the preparation of upcoming EWGs was discussed previously during the PLEN 22-03. Based on the outcome of those and the discussions held at PLEN 23-01 with DG MARE, the organisation and planning were agreed.

Draft Terms of Reference for EWG 23-04 and EWG 23-06

STECF has reviewed the draft terms of reference provided by DG MARE for the assessment of exemptions and technical measures. STECF notes that these largely follow from the terms of reference for previous evaluations and STECF has no further comments.

Expected Joint Recommendations

STECF notes that DG MARE has provided an overview of the expected Joint Recommendations emanating from the Member States and Regional groups that EWG 23-04 and EW 23-06 will have to evaluate. STECF observes that the deadline for submission of these JRs is 1st of May 2023. The expected JRs are summarised below:

1. One joint recommendation covering certain fisheries in the North Sea for the period >2024.
2. Two joint recommendations covering certain fisheries in the Western Waters (divided into North western and South western waters) for the period >2024.

3. One joint recommendation covering de minimis exemptions for certain demersal fisheries in the Adriatic Sea and south-eastern Mediterranean Sea for the period >2024.
4. One joint recommendation for certain small pelagic fisheries in the Mediterranean Sea for the period >2024.
5. One joint recommendation covering the demersal stocks in the western Mediterranean Sea. Although the delegated act is valid until 2024, a joint recommendation is expected in 2023 for those exemptions that required additional information or that expire by the end of 2023.

Joint Recommendations 1 and 2 will be dealt with by EWG 23-04, while 3-5 will be dealt with by EWG 23-06.

EWG Planning

STECF reiterates its earlier conclusion (STECF 22-03), that the catch information presented to support the exemptions often lacks consistency. In many cases it relates to different years, much wider areas than those covered by the exemption or is not presented as absolute estimates but as percentages of overall catch information for the relevant fishery. Therefore, STECF reiterates that in order to carry out a review of the exemptions the catch data provided to support the exemptions should be based on the most up to date available, as absolute estimates and include data from all Member States availing of the exemption. Having good quality and consistent catch data is important to understand the relationship between the level of potential discards under the requested exemptions and the actual level of unwanted catches in the relevant fishery and for the relevant stocks. This will allow STECF to assess the magnitude of discards allowed under the exemption and the impact that this will potentially have on the status of the stock or stocks involved. The catch data will be the main focus of the review to be carried out by the EWGs in 2024.

STECF PLEN 22-03 has developed checklists of information needed, which Member States can refer to before submitting their Joint Recommendations and that the EWG groups can use for the evaluation process of the requests for de minimis exemptions and high survivability exemptions. STECF encourages Member States to use these as guidance and for the EWG 23-04 and EWG 23-06 to assist in their evaluations.

STECF observes that close to 100 requests for exemptions across the different regions are expected to be evaluated by STECF in 2023. Therefore, STECF suggests that there is a need to do a certain amount of preparatory work to support the EWGs. This would be split into two parts:

1. Pre-screening exercise to identify exemptions that Member States should focus i.e., exemptions which have not been assessed for several years and exemptions which STECF has previously flagged weaknesses in the supporting information and/or data issues. This pre-screening exercise would be completed by DG MARE and STECF collaboratively.
2. An ad hoc contract to collate catch data for the various exemptions using the FDI database. This would provide a dataset to assist the EWGs and allow comparison with the data provided by the Member States.

Timelines and Process

STECF observes that DG MARE has provided a draft timeline for the 2023 evaluation process by STECF and the transformation of the JRs into Delegated Acts.

DG MARE informed the STECF of its requirement to have a published STECF report by end of June 2023 to conform with its legislative timescale. This implies that the EWG 23-04 and EWG 23-06 reports will need to be reviewed and adopted by the STECF by written procedure and not in the July Plenary as previously indicated. The committee discussed how best this might be achieved and given the commitments of STECF members to other EWGs taking place at the same time as the written procedure needs to take place together with their commitments to projects in their home institutes and/or as consultants, arranging the written procedure and delivering quality advice will be challenging.

Having had an extensive discussion, the STECF considers that the only feasible way forward would be to have the joint EWG report (the two EWG reports will be merged into one document) scrutinised by appropriate experts through an ad hoc contract. The contractors would prepare a preliminary draft STECF review. That draft could then be reviewed further, by convening an extraordinary, one-day on-line plenary meeting of the committee where the STECF advice would be adopted and published together with the EWG report.

Such a process requires that appropriate experts to undertake the preliminary review can be commissioned and that at least 50% plus one of the members of the STECF are able to participate in the extraordinary plenary meeting. Furthermore, participants would need to be financially compensated for their time. This will be further discussed by STECF Bureau and DG MARE to confirm the process and timelines.

STECF observes that there will be no requests for additional information from DG MARE to Member States and Regional Groups for additional information to be provided after the EWG meeting, as was the case in previous years due to the very short timelines.

Based on the discussion at the PLEN 23-01 and in particular the dates for EWG 23-06 as well as the Written Procedure, the following timelines were provisionally agreed:

Procedural step	Timetable in 2023	Comments
Pre-screening process	To be completed before the EWGs	MARE and STECF to pre-screen and prioritise exemptions based on agreed criteria. Ad hoc contract to compile catch dataset to support the EWGs
Joint Recommendations and template with all exemptions transmitted by Member States to C1, C5 & D1	01 May	Late submission beyond on 1 May will jeopardise the whole process
STECF EWG 23-04 Evaluation on the Joint Recommendations and all exemptions: focusing on JRs for Northeast Atlantic, North Sea (virtual)	8-12 May	Draft EWG report available two weeks after EWG.
STECF EWG 23-06 Evaluation on the Joint Recommendations and all exemptions: Focus on JRs for MED & Black Sea (virtual)	8-12 May	Draft EWG report available two weeks after EWG.
EWG 23-04 & 23-06 Reports	26 May	EWG reports completed and merged into one report
Ad hoc contract to draft STECF advice	29 May-2 June	To be discussed at 1-day mini plenary during the Written Procedure
Written Procedure launched to include 1-day mini plenary (virtual)	5-16 June	Final advice delivered

7.3 PREPARATION OF EWG 23-05: FDI METHODOLOGY AND OF EWG 23-10: FDI METHODOLOGY AND DATA CALL

Request to the STECF

STECF is requested to discuss the organisation of these EWGs, clarify the workflow and discuss the draft ToRs.

STECF comments

STECF observes that two STECF Expert Working Groups on Fisheries Dependent Information (FDI) will be convened:

1. EWG 23-05: Data methodology and dissemination
2. EWG 23-10: Evaluation of Fisheries Dependent Information for European Fleets to review the data transmitted by Member States under the 2023 FDI data call to judge:
 - a) If data submitted is complete in terms of areas of fishing, types of fleet segment and gear operated, and species identified.
 - b) If data submitted is complete in terms of type of data requested: capacity metrics, effort metrics, landings, discards and spatially disaggregated landings and effort.
 - c) The EWG is asked to map the data on fishing effort obtained from the call for spatially disaggregated data.

STECF notes that DG Mare provided a first draft for the TORs of the forthcoming EWG 23-05 and 23-10.

STECF agrees that a five-day ad hoc contract (ad hoc contract 1) is issued prior to EWG 23-05, for transferring the biological data from the Mediterranean and Black Sea data call to the FDI data format.

STECF agrees that a ten-day ad hoc contract (ad hoc contract 2) is issued prior to EWG 23-10, to generate the FDI codes needed to extract the 2024 exemptions data from table A of the FDI data call 2023. The contract also covers the calculation of the landings and discards, at a level of aggregation corresponding to the fleet, area and gear type as specified in each exemption from the relevant delegated regulation specifying the details of implementation of the landing obligation for 2024. This will be done prior to the EWG 23-10 and updating following resubmissions (if any) during EWG 23-10.

STECF observes that EWG 23-05 will address important methodological issues such as the analysis of quality indicators for discard estimates and the revision of the script that is used to disseminate the biological data in tables C, D E and F by merging with table A. In revising the script, EWG 23-05 should also consider the dissemination of the Mediterranean and Black Sea biological data, and whether they will be transferred into the FDI database from the Mediterranean and Black Sea data call. STECF also observes that the discussion on the statistical reliability of the discards data in table A should reconsider the provision of discards data at the métier level and not at the fleet segment levels (fishing technique and vessel length) as requested by the FDI data call.

STECF considers that the two final reports from the EWGs should be prepared and delivered after the EWGs take place and endorsed by STECF PLEN 23-02 and STECF PLEN 23-03.

7.4 PREPARATION OF EWG 23-09: STOCK ASSESSMENTS IN THE WEST MED

Request to the STECF

STECF is requested to discuss the organisation of this EWG and clarify workflow and discuss the draft ToRs. Specifically, MARE request to discuss whether it is possible the STECF report of EWG 23-09 can be reviewed by written procedure and not by STECF PLEN 23-03.

Background provided by the Commission

STECF was provided with a draft Terms of Reference for EWG 23-09 that had been discussed by STECF Bureau.

STECF comments

STECF discussed the draft ToRs for EWG 23-09. In addition to the standard ToRs requested to the western Med stock assessment EWGs annually, the draft ToRs should include the request for the estimation of F-at-age by GSA and gear for all the stocks to feed the models used by EWG 23-11, and LFDs by GSA and gear.

STECF notes that in addition to the formal three yearly evaluation proposed by PLEN 22-03, the EWG should check biomass and F reference points each year and advise STECF if the assessments have changed significantly.

Since effort data is no longer collected through the Med&BS data call, last year the data was inputted into the WestMed stock assessment report at a later stage by the JRC, once the FDI data for the Med&BS became available in draft form. However, as reporting of effort tables within EWG 23-09 (WestMed stock assessment) is no longer included in the TORs, and the effort data will not be ready for inclusion into EWG 23-09 due to the request by DG MARE for early advice, this will not be possible this year.

DG MARE informed the STECF of its requirement to have a published STECF report by the end of October 2023 to conform with its legislative timescale. This implies that the EWG 23-09 report will need to be reviewed and adopted by the STECF by written procedure. The committee discussed how best this might be achieved, given the commitments of STECF members to other EWGs taking place at the same time as the written procedure along with their commitments to projects at their home institutes or as consultants, arranging the written procedure and delivering quality advice will be challenging.

Having had an extensive discussion, the STECF considers that the only feasible way forward would be to have the EWG report scrutinised by appropriate experts through an ad hoc contract. The contractors would prepare a preliminary draft STECF review. That draft could then be reviewed further, by convening an extraordinary, one-day on-line plenary meeting of the committee where the STECF advice would be adopted and published together with the EWG report.

Such a process requires that appropriate experts to undertake the preliminary review can be commissioned and that at least 50% plus one of the members of the STECF are able to participate in the extraordinary plenary meeting. Furthermore, participants would need to be financially compensated for their time. This will be further discussed by STECF Bureau and DG MARE to agree on a way forward.

The EWG 23-09 ToRs are still under discussion and, when finalised, they will be published on the registration page for EWG 23-09.

7.5 PREPARATION OF EWG 23-11: FISHING EFFORT REGIME IN THE WEST MED

Request to the STECF

STECF is requested to STECF is requested to discuss the organisation of this EWG, clarify the workflow and discuss the draft ToRs.

STECF response

STECF has discussed the organisation of EWG 23-11, taking cognisance of the outcomes of EWG 23-01. The EWG is planned to take place on 25-30 September 2023, and STECF notes that this year the EWG report will be reviewed during STECF winter plenary, and not through written procedure as has been the case in previous years.

STECF notes that draft ToRs for that EWG are already available, but that some clarification from DG Mare is still needed on specific aspects.

STECF acknowledges that the EWG on fishing effort regime is highly simulation-intensive, and stresses that updating models with the most recent data, conditioning simulation scenarios and performing the model runs is time-consuming. This limits the number of analyses that can be performed in a 5-days meeting. It is therefore of utmost importance that the specifications of the management scenarios to be explored are known and agreed well in advance, leaving enough time for the scientists to set them up ahead of the EWG. STECF requests that these scenarios should ideally be agreed no later than during July Plenary and be as close as possible to those performed by EWG 22-11.

STECF notes that EWG 23-01 proposed a roadmap for performing an assessment of the socio-economic consequences of the WestMed MAP. This roadmap includes extracting and analysing new sets of models' outputs and indicators. For that purpose, STECF emphasises that scenarios be similar to those performed by EWG 22-11. To the extent possible, single-management measure scenarios may also be performed.

7.6 PREPARATION OF THE EWG 23-13: BALANCE CAPACITY

Request to the STECF

STECF is requested to discuss the organisation of this EWG, clarify the workflow and discuss the draft ToRs.

Background provided by the Commission

STECF was provided with a draft of the proposed Terms of Reference for EWG 23-13 discussed at STECF Bureau level.

STECF comments

STECF discussed the draft ToRs for EWG 23-13 with the representatives from DG MARE in particular items 2c and 2d and amendments to the draft were proposed.

The potential to include additional information on the sustainable harvest indicator (SHI) was also discussed. Pending the outcome of the proposed ad hoc contract as discussed under ToR 7.9 of this report, the preparatory working group may have to collate additional information from results of stock assessments that have not been included previously. This option would depend on the results of the exploratory ad hoc contract as well as its technical feasibility in the time frame of preparatory balance EWG. STECF suggested that the ToRs for EWG 23-13 be reviewed during the July plenary in case amendments following from the exploratory SHI are required.

It was agreed that as in the past, the EWG 23-13 was scheduled in 2 steps - a Preparatory EWG 20-23 September 2023 and the main EWG from 16-20 October 2023. STECF stresses that because of the nature of the work that needs to be undertaken, if at all possible, both the preparatory meeting and the main meeting should be held as physical meetings. This is subject to budget being available.

TERMS OF REFERENCE

The following terms of reference were agreed for EWG 23-13:

The STECF EWG 23-13 is requested to:

1. Based on the data submitted by Member States under the 2023 DCF Economic data call and the most recent assessments and advice from relevant scientific bodies on stock status and their exploitation rates, **compute values for the technical, economic and biological indicators specified in the European Commission Guidelines.**

JRC will provide tabulated values (in the same format as the Member State indicator tables in the STECF 16-09 data table for all indicators as detailed in items i) to vi) below, covering all Member State fleet segments wherever the necessary data are available.

Values for the following indicators to be provided as specified in the 2014 Balance Indicator Guidelines:

- i. Sustainable harvest indicator (SHI)
- ii. Stocks at risk indicator (SAR)

- iii. Return on investment (ROI) and/or Return on Fixed Tangible Assets (RoFTA)
- iv. Ratio between current revenue and break-even revenue (CR/BER)
- v. The inactive fleet indicators

(vi) The vessel use indicator

For fleet segments for which the indicator values can be calculated, the Expert group is requested to present the trend over the last 5/6-year period.

2. Provide country chapters containing the following information for each Member State, in order to allow the STECF to issue an informed advice both as regard the balance situation of the fleet segments and concerning the quality of the assessment provided by the Member States in their national fleet reports and, where relevant, action plans:

- a) Based on the biological, economic or technical indicator values and their recent trends as computed under task 1, provide an overview of whether, according to the Commission Guidelines (COM (2014) 545) fleet segments can be considered in or out of balance with their fishing opportunities.
- b) For each fleet segment, compare the biological, economic or technical indicator values as computed under task 1 with the equivalent values and trends in the fleet reports submitted by the Member State under Article 22.2 and 22.3 of Regulation (EU) 1380/2013. Highlight any discrepancies between the Member State's assessment of balance between capacity and fishing opportunities and the Expert group's assessment based on the indicator values computed under task 1. Where possible, identify the reasons for such discrepancies.
- c) Assess whether the analysis of balance between fleet capacity and fishing opportunities in the fleet report submitted by the Member State by 31 May 2023 under Article 22.2 and 22.3 of Regulation (EU) 1380/2013 is based on DCF information in accordance with the Commission's Guidelines COM(2014) 545.

Evaluate whether any discrepancies exist between the STECF assessment of the balance between capacity and fishing opportunities relating to the Member States's previous fleet report have been appropriately addressed in the fleet report submitted by 31 May 2023. Advise as to whether the report identifies structural overcapacity and estimates the long-term profitability by fleet segment.

- d) Advise on whether the new or revised action plans submitted with the fleet reports by 31 May 2022 set out the adjustment targets and tools to achieve a balance and a clear timeframe for its implementation.

Identify the number of vessels targeted by each action plan.

- e) Provide a summary overview of the action plans (AP) currently implemented by each Member State. The overview should include the year each AP was launched if it is a renewal or a new one and identify the changes between the current AP and its previous version. The number of fleet segments and their respective vessels concerned should be identified.

3. **The Expert group is requested to list for the Outermost Regions of France (Reunion, French Guiana, Martinique, Guadeloupe, Saint-Martin and Mayotte), Portugal (Madeira and Azores) and Spain (Canary Islands), those fleet segments that according to the most updated set of data (2019 or later if available) for either the biological, economic or technical indicators in the Commission Guidelines, as computed by the STECF, were indicated to be out of balance with their fishing opportunities.** The list should contain information on the fish stocks on which such segments rely and the fishing area to which such segments are attributed. Separate lists should be provided for each indicator. The fish stocks on which a fleet segment is reliant shall be determined by ranking the landings from all stocks caught by that fleet segment in descending order in terms of landings value and listing those stocks that account for at least 75% of the total value of the landings by that fleet segment. The Expert group is furthermore requested to provide a list of the fleet segments for which information available does not allow to calculate the above indicators and to indicate for which indicators what kind of information was not available.

4. **For each Member State, the Expert group is requested to list in the Annex to its report those fleet segments that according to the most updated set of data (2017 or later if available) for either i) the SHI or ii) the SAR, as computed by the STECF, were indicated to be out of balance with their fishing opportunities together with the fish stocks on which such segments rely and the fishing area to which such segments are attributed.** Separate lists should be provided for each indicator. The fish stocks on which a fleet segment is reliant shall be determined by ranking the landings from all stocks caught by that fleet segment in descending order in terms of landings value and listing those stocks that account for at least 75% of the total value of the landings by that fleet segment. The area to which a fleet segment is attributed shall be given as FAO area 27, FAO area 37, OR and for other fishing regions (OFR).

7.7 PREPARATION OF EWGS 23-18: MARKETING STANDARDS – REVIEW OF FISHERY INDICATORS

Request to the STECF

STECF is requested to change the title of the EWG from EWG 23-18: Marketing standards – review of fishery indicators to EWG 23-18: Fishery sustainability indicator. In view of this change of mandate, STECF is requested to discuss on the organisation of this EWG, clarify the workflow and draft ToRs, including for an ad hoc contract supporting the EWG work prior to its meeting.

Objectives of the EWG: (1) Proceed on the development of a fisheries sustainability indicator for the impact on sensitive species and (2) Operationalise the fisheries stock sustainability indicator. Both subjects will be prepared by ad hoc expert teams in advance of the EWG meeting.

STECF comments

STECF agrees on changing the title of the EWG 23-18 to “EWG 23-18: Fishery sustainability indicators”.

STECF notes that the ToRs of EWG 23-18 are kept very general and suggests that more prescriptive ToRs should be identified once the results of the two ad hoc contracts will be available.

STECF proposes the week starting on September 4th as a candidate week for the EWG and, due to the complexity of this topic and the level of brainstorming required, suggests a physical meeting would be much more productive than a virtual one. However, STECF notes this is subject to budget being available.

STECF considers the draft ToRs of the two ad hoc contracts to be finalised in support of EWG 23-18 appropriate for a) operationalising the indicator on stock status developed under EWG 22-12, and b) exploring possibilities for an indicator on fishing activities’ impact on sensitive species.

7.8 UPDATE ON GUIDELINES FOR THE DATA TRANSMISSION MONITORING TOOL AND OF THE ANNUAL REPORT EVALUATION GRID

Request to the STECF

STECF is requested to:

- (1) discuss improvements to the data issues assessment cycle and the monitoring tool, proposed by the Commission (MARE and JRC).
- (2) update the guidelines for the data transmission monitoring tool, recently discussed by EWG 22-18 on work plan assessments.
- (3) finalise the evaluation grid and guidelines in view of this year's Annual Report evaluation (EWG 23-08 in June). The grid and guidelines have been recently discussed by EWG 22-18, but the documents need final editing and cleaning. The Commission would like the STECF evaluation to reflect the MS performance (i.e. data collection gaps should be seen in the AR evaluation).

Background

Data Transmission Monitoring Tool (DTMT)

The DTMT and its guidelines were revised by STECF Plenary 21-02. It was agreed that the DTMT guidance is a living document, and there is potential for future revisions to be discussed annually. During 2022, suggestions on how to improve the handling of DT Issues were compiled from different Expert Working Groups dealing with data. As the assessment and follow-up on the data transmission issues need further streamlining and clarification, PLEN 23-01 was requested by DG MARE to reflect on changes proposed by STECF expert working groups, MARE and JRC.

Annual Report (AR) assessment grid and evaluation guidance

The AR assessment grid and guidelines were recently discussed by EWG 22-18, but it was agreed the documents needed further editing to finalise. The Commission requested STECF evaluation should reflect on MS performance (i.e., data collection gaps should be seen in the AR evaluation).

Portuguese 2023-2024 Work Plan

Recently the European Commission adopted Implementing Regulation (EU) 2022/1614¹⁸ closing areas to all bottom fishing gears between 400-800 m depth in EU waters off the North-East Atlantic to protect Vulnerable Marine Ecosystems (VMEs). For Portugal, 13 areas adjacent to the Portuguese coast were closed to bottom fishing, some of them with significant socio-economic impact to the

¹⁸ Commission Implementing Regulation (EU) 2022/1614 of 15 September 2022 determining the existing deep-sea fishing areas and establishing a list of areas where vulnerable marine ecosystems are known to occur or are likely to occur. OJ L 242, 19.9.2022, p. 1-141

fishing industry. Therefore, the Portuguese Fishermen Associations argued that some of the closed areas are traditional fishing grounds for bottom fisheries, as is the case of EMV13 located in the southwest coast of Portugal, off Sines. They further argued that the scientific criteria used relied on unclear criteria and scarce data.

To help to address the concerns raised by the fishing industry, Portugal has proposed an amendment to their National Data Collection Programme through the inclusion of a new phased monitoring programme. This programme aims to improve knowledge on habitat types and on the assessment of the extent to which Good Environmental Status (GES) has been achieved. It has a focus on deep-sea areas with a high plausibility of VMEs occurrence as identified by ICES. The proposed plan is in line with the recent "step-up action" at EU level to reverse the decline of marine ecosystems by tackling all pressures on marine ecosystems. Under this programme, innovative monitoring technological approaches (e.g., acoustic imaging with multibeam sounders for habitat mapping, and habitat monitoring with video and photo cameras) will be used.

STECF comments

Data Transmission Monitoring Tool (DTMT)

A DTMT workshop was held during PLEN 23-01 to discuss improvements to the data issues assessment cycle and the monitoring tool, proposed by the Commission.

JRC and DG MARE suggested to change the timeline of the data transmission (DT) issues assessment cycle, which was discussed during the DTMT workshop. The suggestion to assess the DT issues in November instead of June (or June next year instead of November for Fleet Economics/Aquaculture/Processing) was accepted at the workshop. This way the Member States would have a chance to resubmit the missing data or amend their national Work Plan (WP) which the data issue refers.

The change for the assessment cycle timing will be in place in 2024 when the end users (data EWGs) will enter the issues related to data collected from spring 2023 and the assessment of those issues will be done in November 2024.

The suggestion to add columns to the DTMT in order to efficiently follow up data collection issues and improve data quality was discussed at the workshop and agreed upon. The addition of the columns to the DTMT online platform will take place by September 2023 and the data issues identified by the end users in spring-autumn 2023 will be entered to the DTMT with the new columns added. These changes were added in the DTMT Guidance document.

The decision tree prepared by EWG 22-07 and EWG 22-18 for the assessment of data issues was revisited and EWG comments in the document were addressed. However, the changes in the timing of the assessment cycle, were not included in the decision tree. This will be done during the year after the new columns will be filled.

There were some other points discussed and agreed but did not require changes to the DTMT Guidance. The option 'recurrent' should describe an identical issue that occurs in different years and not the same issue detected for several years and not yet dealt with. This is already in the guidelines but needs to be underlined when the guidance is used by the End users adding the issue.

There was a suggestion to categorise the comments by developing a (semi) closed list of allowed comments to harmonise input. This is, however, already the case and the guidance documents must be followed.

Annual Report (AR) assessment grid and evaluation guidance

STECF notes that the AR assessment grid and evaluation guidance has to be revised prior to EWG 23-08 (evaluation of AR 2022). During the Plenary 23-01, it became clear that the guidance document is not yet ready for final editing due to subject expertise needed on the various DCF modules. The sections where input from experts is needed to complete the document have been highlighted. STECF considers that the revision of these files should be conducted by a group of experts at the beginning of the pre-screening of the AR early June 2023.

Portuguese 2023-2024 Work Plan

Overall, STECF welcomes the initiative taken by Portugal and considers that the design and methodology of the described survey is scientifically sound. STECF observes that the revised Work Plan is describing a pilot survey, rather than a full monitoring programme (which would identify targets, strata etc.). However, the survey will be valuable in understanding the habitat and informing the development of future monitoring programmes.

7.9 USE OF DATA-LIMITED ASSESSMENT PARAMETERS FOR CALCULATING INDICATORS TO ASSESS THE BALANCE BETWEEN FLEET CAPACITY AND FISHING OPPORTUNITIES

Background provided by the Commission

The “Sustainable Harvest Indicator” (SHI) is one of several useful tools for assessing the balance between fishing opportunities and fishing capacity. While there is a fairly comprehensive coverage of this indicator for north-east Atlantic fisheries due to the general availability of F/F_{msy} values from stock assessments calculated for TAC-setting purposes, this is not necessarily the case in other areas, particularly in Mediterranean and outermost-region fisheries. The Commission wishes to explore the use of data-limited methods to provide proxy values (or estimates from data-limited assessment methods) for F/F_{msy} as inputs to the calculation of SHI. This would help extend the scope of the balance/capacity comparisons to more fleet segments.

The Commission is considering means to obtain advice on this subject reasonably rapidly, such as by carrying an ad hoc contract to report by July 2023 to STECF plenary.

Request to the STECF

STECF is requested to comment on the feasibility and operational tasking for such an approach. The Commission intends to present draft terms of reference for the study to STECF.

STECF comments

To provide advice regarding the inclusion of data limited stock assessments using the SHI, the STECF suggests the following topics to be investigated.

Which stock assessment models should be added?

There are a set of data limited methods that can provide proxies for F/F_{msy} - yield per recruit, biomass dynamic models, etc. Compiling a list of model types that can be used, irrespective of the individual model fit, is the starting point of this process.

How many stocks would currently be added and to which fleet segments?

There will be a trade-off between the amount of data that will potentially be added and the instability this information will create in the indicator. Identifying how many stocks are currently assessed with the models identified above and which fleet segments are catching those stocks will provide information about the scale of this change in the SHI. Following this compilation, a set of stock selection criteria should be suggested to clarify which assessments can be included in the indicator.

What's the impact in the current SHI?

The relative perception of balanced catches across fleets will likely change. The SHI will be revised unevenly for each fleet segment since the number of stocks each segment catches which have data limited assessments is not the same across fleets. This situation means an unknown number of fleet segments will have their SHI revised. A fleet segment that currently has a SHI value based on

analytical assessments may have its SHI revised with the inclusion of data limited assessments. As a consequence, the new estimate may not be accepted since it's based on limited data assessments, which conceptually provide information of lower quality. Furthermore, a perception of unfairness by knowing more can be created on fleet segments for which the direction of the change shows more unbalanced catches.

STECF conclusions

STECF considers that the evaluation of adding data-limited assessment results to calculate indicators to assess the balance between fleet capacity and fishing opportunities needs to consider the trade-off between the stability of the indicator and scaling up the coverage of the SHI.

STECF suggests that the ad hoc contract proposed by the DGMARE to prepare the information for STECF's advice to include the questions laid out above. The results of the ad hoc contract should be sent to the July Plenary for review and provide advice to DG MARE. Following the STECF advice and MARE's decision, the ToR for EWG 23-13 and the preparatory work required may need to be adjusted (see ToR 7.6).

STECF suggests that, on the basis of the work delivered by the ad hoc contract, to proceed with a review of SHI's methodology/protocol, to clarify which types of stock assessments should be selected for the computation of the indicator and any other clarifications needed.

Furthermore, STECF considers that it may be possible to develop a version of the SHI to integrate data limited and data rich stock assessment results, or a complementary version based on data limited data only. Such exercise will require a longer time frame but could deliver an indicator more fit for purpose than the current one.

8. CONTACT DETAILS OF STECF MEMBERS AND OTHER PARTICIPANTS

1 - Information on STECF members and invited experts' affiliations is displayed for information only. In any case, Members of the STECF, invited experts, and JRC experts shall act independently. In the context of the STECF work, the committee members and other experts do not represent the institutions/bodies they are affiliated to in their daily jobs. STECF members and experts also declare at each meeting of the STECF and of its Expert Working Groups any specific interest which might be considered prejudicial to their independence in relation to specific items on the agenda. These declarations are displayed on the public meeting's website if experts explicitly authorized the JRC to do so in accordance with EU legislation on the protection of personnel data. For more information: <http://stecf.jrc.ec.europa.eu/adm-declarations>

*STECF members marked with an asterisk did not attend the meeting.

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