



JRC SCIENCE FOR POLICY REPORT

Scientific, Technical and Economic  
Committee for Fisheries (STECF)  
Assessment of balance indicators  
for key fleet segments and review  
of national reports on Member  
States efforts to achieve balance  
between fleet capacity and fishing  
opportunities  
(STECF-19-13)

Edited by Giuseppe Scarcella and Natacha Carvalho

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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. This report reports on the expert working group EWG-19-13 that was convened under STECF to assess balance indicators for EU Member State fleet segments (ToR 1 and ToR 4), review national reports on Member States efforts to achieve balance between fleet capacity and fishing opportunities, and assess action plans submitted for fleet segments where Member States identified structural overcapacity (ToRs 2 and 3). In addition, the group tried to estimate balance indicators for some specific Outermost Regions of France (Réunion, French Guiana, Martinique, Guadeloupe, Saint-Martin and Mayotte), Portugal (Madeira and Azores) and Spain (Canary Islands) (ToR 5). The EWG-19-13 was held in Larnaca, Cyprus from the 23 – 27 September 2019.

Independently-calculated balance indicators, based on DCF economic and transversal data and stock assessment information were provided to experts, and the evaluation of these balance indicators was reported by country and region. In addition, experts considered a number of recurring issues and caveats related to biological, economic, and technical indicators and provided, when possible, a comparison between the outputs of the MS fleet reports and the independently-calculated balance indicators.

In the framework of ToR 2 and 3, fleet reports submitted by Member States were evaluated in term of methodology used to identify balance between fishing capacity and fishing opportunities. In addition, action plans submitted by Member States for fleet segments with identified structural overcapacity as identified by the Member States in their fleet capacity reports in line with Article 22.4 of Regulation (EU) 1380/2013 were evaluated, and the assessment is presented in the report. In general, while it was relatively straightforward to identify in Member States' action plans, those fleet segments that were additional to those included in the action plans submitted with their fleet reports, the information presented was only sufficient to note the actions that Member States intend to implement to address any imbalances in the fleet segments identified and was not sufficient to quantitatively assess whether such measures would be sufficient to redress any such imbalances. The EWG compiled the list of fleet segments that according to the 2017 values for either i) the SHI or ii) the SAR, as computed by the STECF may be out of balance as requested under ToR 4. ToR 5 was fully addressed for the OMRs fleets of Outermost Regions of France (Réunion, French Guiana, Martinique, Guadeloupe, Saint-Martin and Mayotte), Portugal (Madeira and Azores) and Spain (Canary Islands). The EWG-19-13 report was reviewed during the plenary meeting held in Brussels, Belgium, 11-15 November 2019.

**SCIENTIFIC, TECHNICAL AND ECONOMIC COMMITTEE FOR FISHERIES (STECF) -  
Assessment of balance indicators for key fleet segments and review of national reports  
on Member States efforts to achieve balance between fleet capacity and fishing  
opportunities (STECF-19-13)**

**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 is requested to advise on whether the 2018 annual national reports and action plans submitted by the Member States by 31 May 2019 reflect an appropriate analysis of balance between fleet capacity and fishing opportunity of all EU fleet segments, based on DCF information and in line with the Commission guidelines COM(2014)545. To inform its advice, the STECF is requested to review the report of the STECF Expert Working Group meeting, evaluate the findings and also assess the extent to which the STECF Expert Working Group delivered on its Terms of Reference. The STECF is furthermore requested to provide recommendations on possible adjustments in the future work of STECF on Balance/Capacity to enhance the assessment of national fleet reports and action plans and the comparison of the findings of these reports and plans with those of the STECF Expert Working Group on balance/capacity.

**STECF response**

The Following response is structured in three parts, each addressing different requests as given in the Terms of Reference.

- 1. STECF is requested to review the report of the STECF Expert Working Group meeting, evaluate the findings and make any appropriate comments and recommendations. To inform its advice, the STECF is requested to review the report of the STECF Expert Working Group meeting, evaluate the findings and also assess the extent to which the STECF Expert Working Group delivered on its Terms of Reference.**

The STECF reviewed the report of the EWG 19-13 and notes that all terms of reference were successfully addressed to the extent possible. The Expert group has reviewed the fleet reports from Member States and any associated action plans provided in accordance with the criteria specified in the 2014 Balance Indicator Guidelines to Member States (COM (2014) 545 FINAL) and Article 22 of Regulation (EU) 1380/2013.

In previous reports, the STECF has provided a detailed critique of the application and utility of the indicators and criteria specified in the 2014 Balance Indicator Guidelines (COM (2014) 545 FINAL) for assessing the balance between capacity and fishing opportunities. Furthermore, numerous suggestions for modification and improvement have also been provided in previous reports and all such criticisms and suggestions have been endorsed by the STECF. The STECF wishes to stress that all previous criticisms and suggestions remain valid.

In general, the fleet reports from Member States provide pertinent information on the fleet composition and structure, together with accompanying action plans for those fleet segments deemed to be out of balance with fishing opportunities. However in the MS reports, in some cases, the rationale for concluding whether a fleet segment is deemed to be in or out of balance with fishing opportunities is not clear and in other cases such an assessment is on the basis of a single indicator value. STECF has stressed many times before that while it is the Member States that are best placed

to provide an assessment of whether a fleet segment is in or out of balance with fishing opportunities, such an assessment cannot be made solely on the basis of a single indicator value.

In reviewing the fleet reports submitted by Member States, the EWG 19-13 has this year attempted to provide information on any observed discrepancies between the values of the sustainable harvest indicator (SHI) calculated by the EWG and those provided in the MS fleet reports. In many cases and for a variety of reasons, such estimates may not be directly comparable since the basis for calculating the indicator values (e.g. data from different years, different segmentation etc.) will be different. Nevertheless, such a comparison may indicate whether, according to the guidelines, the perceived status of a fleet segment has changed. A change in status may indicate that further scrutiny the fleet segment is warranted and whether there is a need for an accompanying action plan. Any such discrepancies are noted for each Member State in Section 4 of the EWG 19-13 report.

### **STECF conclusions on ToR 1**

STECF concludes that the EWG 19-13 report successfully addressed all terms of reference to the extent possible and endorses the findings presented in the report.

- 2. STECF is requested to advise on whether the 2018 annual national reports and action plans submitted by the Member States by 31 May 2019 reflect an appropriate analysis of balance between fleet capacity and fishing opportunity of all EU fleet segments, based on DCF information and in line with the Commission guidelines COM(2014)545.**

### **STECF observations**

To respond explicitly to the above request, an analysis comparing the data and information provided in Member States' fleet reports and action plans with the provisions in the guidelines (COM(2014)545 Final) would be required. In practice, the EWG was not requested to undertake such an analysis, so the information required was not readily available to the STECF plenary. To undertake such an exercise is clearly beyond the scope of a plenary meeting. Hence the STECF is unable to provide the advice requested.

Furthermore, the STECF considers that the Member State annual fleet reports and action plans do not necessarily reflect an appropriate analysis of the balance between fleet capacity and fishing opportunities even if the Commission guidelines are followed, because the rationale for the Member State assessments of whether particular fleet segments are in or out of balance with fishing opportunities is not always clear or is absent. In such cases it is impossible to judge whether the assessment is appropriate.

In some cases, it is explicitly stated that such an assessment was made on the basis of a single indicator value and STECF considers that such an approach is inappropriate for the variety of reasons that have been pointed out in previous STECF reports. Furthermore, STECF considers that application of the guidelines in COM (2014) 545 Final does not provide for a reliable assessment of the balance between fleet capacity and fishing opportunities.

STECF has previously commented extensively on the appropriateness and utility of the indicators prescribed in the Guidelines (COM(2014)545 Final) and none of the indicators used in isolation are reliable indicators of the balance between fleet capacity and fishing opportunities. Furthermore, for a particular fleet segment, the different indicator values may give conflicting signals e.g. some indicator

values may be favourable, and others may be unfavourable. While each of the indicators are potentially useful to highlight certain aspects of a fleet segment, even if they are used collectively, other criteria need to be taken into account to arrive at an assessment of balance between fleet capacity and fishing opportunities. Nevertheless, the indicators can potentially inform Member States on fleet management.

**STECF conclusion on ToR 2**

Since the EWG was not requested to undertake an analysis to permit the STECF to respond explicitly to the request, and to undertake such an exercise is clearly beyond the scope of a plenary meeting, the STECF is unable to provide the advice requested.

**3. The STECF is furthermore requested to provide recommendations on possible adjustments in the future work of STECF on Balance/Capacity to enhance the assessment of national fleet reports and action plans and the comparison of the findings of these reports and plans with those of the STECF Expert Working Group on balance/capacity.**

**STECF observations**

The current process of reviewing Member States' fleet reports and action plans is linked both to the upcoming report of the functioning of the CFP and the next programming period of the EMFF. It is therefore timely to consider how the process associated with the assessment of the balance between capacity and fishing opportunities might be made more efficient and informative. At the same time, it is also appropriate to review the indicators and guidelines. The issues associated with the current suite of indicators to assess balance/capacity have been documented in this and numerous previous STECF reports notably:

- STECF report 15-02; sections 2.7, 2.8, 2.9;
- STECF report 15-15; 3.5.1, 3.6.1, 3.8, 3.9, 3.10, 3.11.
- STECF report 16-18; 4.2, 4.3, 4.4, 4.5.
- STECF report 17-18; 3.4 and ANNEX I.
- STECF report 18-14; 3.4 and ANNEX I.

Of particular importance is the summary of issues given in Annex I of the STECF 16-18 report, which is reproduced below.

**STECF 16-18 Report ANNEX I - SUMMARY OF INDICATOR ISSUES AND ASSOCIATED COMMENTS AND PROPOSALS**

<p><b>Sustainable harvest indicator (SHI)</b></p>	<p>1. The indicator guidelines state that an SHI value above one could be an indication of imbalance if it has occurred for three consecutive years. This criterion may be interpreted as not being in line with the CFP, where it is stated: <i>“The maximum sustainable yield</i></p>	<p>1. Issue cannot be addressed without changing the guidelines. EWG 16-09 reaffirms the need for a dedicated EWG to revise indicator guidelines.</p>
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	<p><i>exploitation rate shall be achieved by 2015 where possible and, on a progressive, incremental basis at the latest by 2020 for all stocks."</i></p> <p>Therefore, before 2020 an SHI indicator above 1 may reflect the outcome of political decisions to reach <math>F_{MSY}</math> not immediately, but by 2020.</p>	
	<p>2. Proposals for fishery management plans in the ICES area are currently taking into account <math>F_{MSY}</math> ranges; it is thus likely that <math>F_{MSY}</math> ranges which will serve as the basis for future management. SHI calculations are at present based on point estimates of <math>F_{MSY}</math>. SHI calculations could in future be revised to reflect the use of <math>F_{MSY}</math> ranges in management plans, a scenario for which the guidelines state: <i>'Where <math>F_{msy}</math> is defined as a range, exceeding the upper end of the range is interpreted as "overfishing"'</i>. It follows that if <math>F_{MSY}</math> ranges instead of point estimates are used, this will have a substantial impact on SHI values because the upper limit of the <math>F_{MSY}</math> range is often considerably higher than the <math>F_{MSY}</math> point estimate.</p>	<p>2. EWG 16-09 indicator preparatory meeting looked into this issue and concluded that <math>F_{MSY}</math> ranges had not been adopted as the basis for management for any stocks in the ICES area by the 30<sup>th</sup> June 2016 (the cut-off date for the inclusion of new data the EWG 16-09 indicator preparatory meeting worked with).</p>
	<p>3. The SHI may deliver a value of more than 1 for fleet segments which are not overcapacity with regards to their short term legally permitted harvest opportunities, i.e. fishing opportunities based on short term TACs.</p>	<p>3. Issue cannot be addressed without changing guidelines EWG 16-09 reaffirms the need for a dedicated EWG to revise indicator guidelines.</p>
	<p>4. The SHI, used in isolation to assess whether a particular fleet segment is in balance with its fishing opportunities could be misleading because it does not provide results about the extent to which a fleet segment relied on over-harvested stocks and secondly, does not provide any indication as to the overall contribution a fleet segment</p>	<p>4. Issue considered in STECF 15-15 (section 3.8 – 'Proposed Biological Indicators and Evaluation Tool'); STECF 15-15 proposal cannot be implemented without changing guidelines. EWG 16-09 reaffirms the need for a dedicated EWG to revise indicator guidelines.</p>

	<p>makes to the overall catch from an over-harvested stock.</p>	
	<p>5. The SHI may deliver a value of less than 1 for fleet segments which partly rely on individual stocks harvested at rates above <math>F_{MSY}</math>.</p>	<p>5. Issue considered in STECF 15-15 (section 3.8 – ‘Proposed Biological Indicators and Evaluation Tool’); STECF 15-15 proposal cannot be implemented without changing guidelines. EWG 16-09 reaffirms the need for a dedicated EWG to revise indicator guidelines.</p>
	<p>6. The SHI may flag problems with a certain fleet segment despite the fact that the main problem lies with another fleet segment, which in turn may not necessarily be flagged.</p>	<p>6. Issue considered in STECF 15-15 (section 3.8 – ‘Proposed Biological Indicators and Evaluation Tool’); STECF 15-15 proposal cannot be implemented without changing guidelines. EWG 16-09 reaffirms the need for a dedicated EWG to revise indicator guidelines.</p>
	<p>7. SHI values calculated for different fleet segments may not be comparable. Small vessels in particular frequently harvest only a low number of stocks, leading to a high SHI when one of these stocks is overharvested. Fleet segments with larger vessels on the other hand generally fish more stocks in different areas. Therefore, their SHI is less sensitive to the overexploitation of particular stocks, and problems may be masked.</p>	<p>7. Issue considered in STECF 15-15 (section 3.8 – ‘Proposed Biological Indicators and Evaluation Tool’); STECF 15-15 proposal cannot be implemented without changing guidelines. EWG 16-09 reaffirms the need for a dedicated EWG to revise indicator guidelines.</p>
<p><b>Stocks at Risk (SAR)</b></p>	<p>1. According to the 2014 indicator guidelines (COM(2014) 545 final), ‘if a fleet segment takes more than 10% of its catches from a stock which is at risk, this could be treated as an indicator of imbalance’. The Expert Group considers that this is not necessarily true, but it can be used to indicate that a fleet segment may be worthy of further investigation to determine whether</p>	<p>1. Issue cannot be addressed without changing guidelines EWG 16-09 reaffirms the need for a dedicated EWG to revise indicator guidelines.</p>

	<p>it is not in balance with its fishing opportunities.</p>	
	<p>2. The indicator guidelines state that <math>B_{lim}</math> should be taken as threshold below which stocks are counted as stocks at risk. The definition in the CFP in Article 4 (18) for “inside safe biological limits” is: “<i>Stock within safe biological limits</i>’ means a stock with a high probability that its estimated spawning biomass at the end of the previous year is higher than the limit biomass reference point (<math>B_{lim}</math>)”. However, to monitor the performance of the common fisheries policy (see Article 50 of 1380/2013) the Commission has defined “outside safe biological limits” as SSB less than <math>B_{pa}</math> (where <math>B_{pa}</math> is defined), OR <math>F</math> is greater than <math>F_{pa}</math> (where <math>F_{pa}</math> is defined). To take the deterministic or median assessment values for SSB and contrast them with the <math>B_{lim}</math> reference point may be inconsistent with the criteria of “high probability” and the definition used to monitor the CFP. <math>B_{pa}</math> could be seen as more appropriate threshold since <math>B_{pa}</math> is the SSB that gives a high probability to be above <math>B_{lim}</math> given the uncertainties in stock assessments in the terminal year.</p>	<p>2. Issue cannot be addressed without changing guidelines. EWG 16-09 reaffirms the need for a dedicated EWG to revise indicator guidelines.</p>
	<p>3. The current 10% threshold is arbitrary and has not been tested. A sensitivity analysis, using different percentage thresholds as a cut-off point in order to investigate the impact of different thresholds needs to be undertaken. In addition, currently only landings from EU fleets are used to calculate whether the landings of a certain fleet segment comprise more than 10% of the overall landings. The impact of EU fleets on stocks that</p>	<p>3. The EWG 16-09 indicator preparatory meeting discussed the possibility of testing threshold using new R code, and providing EWG 16-09 SAR indicators based on e.g. 3 different thresholds. Ultimately this issue can only be addressed by changing the guidelines. EWG 16-09 supports the proposal for a database which contains all data and information required for</p>

	are shared with non-EU countries may therefore be overestimated.	calculation of biological indicators (including catch data from non-EU countries), and which is updated every year (see section 3.5.1.3, STECF 15-15).
	4. With the exception of stocks assessed as being below the $B_{lim}$ biological level, identifying and categorizing 'stocks at risk' is subjective due to a range of terminology used in stock advice. The Expert Group suggests in future to provide two versions of the SAR; one based on $B_{lim}$ values (criterion a) and a second based on criteria b-d given in the Guidelines (COM (2014) 545 FINAL).	4. EWG 16-09 indicator preparatory meeting discussed this issue, in particular with regards to the interpretation of criterion b for Mediterranean stocks. Ultimately this issue cannot be addressed without changing guidelines. EWG 16-09 reaffirms the need for a dedicated EWG to revise indicator guidelines.
	5. In order to consider IUCN data in future (criterion d), the precise IUCN categories to be included in the SAR indicator calculations need to be agreed with the Commission.	5. EWG 16-09 indicator preparatory meeting discussed the issue of IUCN categories. The EWG 16-09 Prep. Meeting agreed with the approach taken by the expert selecting SAR to only consider species with a Critically Endangered (CR) status. Ultimately this issue cannot be addressed without changing guidelines. EWG 16-09 reaffirms the need for a dedicated EWG to revise indicator guidelines.
	6. In addition to the IUCN Red List and CITES, species lists from other conventions (e.g. OSPAR and CMS, Barcelona Convention, etc.) could in future be considered. A time consuming data gathering exercise would be necessary to include all these listings; such an exercise should be separated from the actual calculation of the indicator.	6. Issue cannot be addressed without changing guidelines. EWG 16-09 reaffirms the need for a dedicated EWG to revise indicator guidelines.
<b>Economic &amp; technical</b>	1. Inconsistent clustering of fleet segments over time makes the interpretation of economic	1. Probable cases of inconsistent clustering were flagged during AER 1 and the EWG 16-09 indicator preparatory meeting

<p><b>indicators general</b> -</p>	<p>indicators for such clusters problematic.</p>	<p>was informed that some MS were able to improve on this. EWG 16-09 indicator preparatory meeting considers that it may not always possible to have consistent clusters, unless 'fake' or super clusters are used (which should not be encouraged). Moreover, the composition of fleet segments is always changing due to the 'dominance criteria' (listed in Commission Decision 2008/949/EC; Annex I, section A2.2), so there are inherent inconsistencies even when not considering clusters. EWG 16-09 is currently unable to propose a solution to the issue of inconsistent clustering.</p>
	<p>2. Assessment of economic and technical indicators for small scale fleet segments is challenging. Economic indicators are generally calculated based on the assumption that fishing is the main economic activity of the fleet segments being assessed. This is often not the case for small-scale fishing fleets where fishing is often only a supplementary source of income.</p>	<p>2. EWG 16-09 considers that economic and technical indicators for small-scale fleet segments should always be interpreted with caution, and that local expert knowledge is generally required to accurately interpret indicator results/trends.</p>
<p><b>Return on Investment (ROI) and/or Return on Fixed Tangible Assets (RoFTA)</b></p>	<p>1. With regards to the application of the long term economic indicator ROI or RoFTA, the 2014 Balance Indicator Guidelines specify that the indicator is to be compared against the 'low risk long term interest rate'. The guidelines further suggest to use the '<i>use the arithmetic average interest rate for the previous 5 years</i>'. Balance EWGs take this approach and e.g. the STECF 15-02 specifies that the '<i>5-year average of the risk free long-term interest rate for each MS was used</i>'. On the other hand, the Annual Economic Report</p>	<p>1. EWG 16-09 indicator preparatory meeting notes that the lack of homogeneity in the methodology to estimate ROI and/or RoFTA by Balance EWGs (which use the approach given in the Commission guidelines) and the AER process was considered in detail by the 2016 AER meeting. It appears that the issue cannot be addressed without changing the Balance guidelines. EWG 16-09 reviewed the AER recommendations and</p>

	(AER) 2015 uses the 'real interest rate'.	reaffirms the suggestion for a dedicated EWG to revise indicator guidelines.
<b>Ratio between current revenue and break-even revenue (CR/BER)</b>	1. Presentation / interpretation of trends: due to the volatile nature of variable costs associated with fishing, the CR/BER indicator values may fluctuate considerably from one year to the next and commenting on trends which may be driven by the price of fuel for instance, does not necessarily help inform an assessment of fleet under- or over-capacity in relation to fishing opportunities.	2. EWG 16-09 indicator preparatory meeting considers that whilst short term volatility is informative, in the long-term it is not. Moreover, the long-term approach overlaps with ROI or RoFTA. The long-term approach suggested in the guidelines should thus not be used and the EWG 16-09 balance indicator tables will as a result only present the short-term approach. EWG 16-09 reaffirms the need for a dedicated EWG to revise indicator guidelines.
<b>Inactive Fleet Indicators</b>	1. In some MS (esp. in the Mediterranean) there is high 'inactivity' for various reasons: many small vessels only operate part time / on a seasonal basis; fishers may own several boats, some of which are used as stand-by vessels for various reasons (see Finland / Italy /Malta 2015 annual reports).	1. EWG 16-09 considers that technical indicators always be interpreted with caution, and that local expert knowledge is generally required to accurately interpret indicator results/trends. This is in particular the case for small-scale fleet segments.
<b>Vessel Indicator Use</b>	1. Data on maximum days at sea (DAS) is not always submitted by MS, in which case a common theoretical maximum DAS of 220 days is used. The use of a theoretical DAS of 220 is not relevant for some fleet segments, in particular where fishing activities are seasonal.	1. STECF 15-15 considers that the use of a default value of 220 DAS to be used if no data on the maximum observed DAS is available should not be applied to vessels which measure less than 12 m in length. A clear methodology on how to calculate maximum DAS should be provide to MS to facilitate the calculation of correct values of maximum DAS. EWG 16-09 indicator preparatory meeting notes that an effort to standardise the calculation of DAS as well as fishing days was made by the second transversal

		variables workshop held in Nicosia in February 2016 (see Annex 5, Ribeiro et al., 2016). EWG 16-09 considers that this proposal should be reviewed at a dedicated EWG to revise indicator guidelines.
	2. In some MS vessel use within fleet segments is not homogenous because only parts of the fleet are fishing full time for various reasons (e.g. fleet segments include a proportion of part-time fishers; older vessels being inactive during periods of maintenance or repair, breaks imposed on parts of fleet segments due to management measures with some vessels compensating by targeting other stocks and others remaining inactive).	2. EWG 16-09 considers that technical indicators always be interpreted with caution, and that local expert knowledge is generally required to accurately interpret indicator results/trends. This is in particular the case for small-scale fleet segments.

STECF notes that the utility of the technical indicator (Vessel Utilisation Rate, VUR) requires that Member States provide an estimate of the Maximum days at sea (Maxseadays) for all fleet segments. At present, the provision of Maxseadays is voluntary and the absence of such information means the indicator value for many fleets is uninformative (see summary of indicator issues from STECF 16-18 reproduced above). STECF considers that this issue should be evaluated by the next EWG on the evaluation of the DCF Annual Reports in 2020, and has also discuss this in the context of the revision of the EU MAP (see TOR 5.3 of this plenary report).

### **STECF conclusions on ToR 3**

In the light of previous comments and criticisms, STECF concludes that a review of the indicators used and proposed by the STECF should be undertaken in 2020. If appropriate, the current guidelines on balance indicators (COM (2014) 545 Final) should subsequently be revised. Moreover, the data currently used to compute the balance indicators should be reviewed since for instance the use of landings (and not catches) data to calculate indicators on stocks at risk is problematic.

The proposed review should thus aim to undertake the following:

- 1) Discuss, analyse and test existing and potential new indicators, in order to assess and compare the indicators currently used and newly proposed indicators towards given criteria e.g. robustness, sensitivity, easy and unambiguous calculation. A suitable approach could be to test the indicators through simulation as well as for typical situations in Area 27, Area 37, long distance fleets and outermost regions to ensure the robustness of the indicators in light of the data available. The indicators to be tested are:

- Number of overfished stocks (NOS)
- Economic dependency indicator (EDI)
- Number of stocks at risk (NSR)
- Sustainable harvest indicator (SHI)
- Restricted Sustainable harvest indicator (SHI<sup>R</sup>)

In order to facilitate a possible future shift to the use of data from the FDI data call instead of from AER data as is the case now (for example with regards to catch data instead of landings), the calculation of indicators based on FDI data should be tested for at least one year of data.

The proposed review will require certain preparatory work and STECF suggests that such work be undertaken through an ad hoc contract. STECF suggests the following time-line:

- Before July 2020: ad hoc contract to be undertaken to address the above.
  - July 2020: Results of ad hoc contract reviewed by the Preparatory WG on Balance indicators. Pending the outcome of that review, the preparatory WG calculates those indicators deemed appropriate in addition to those requested in the Commission guidelines.
  - September 2020: Prepared indicator values used and evaluated by the 2020 EWG on balance / capacity.
- 2) Consideration is to be given to reviewing and, if appropriate, modifying the Terms of Reference of the 2020 EWG dealing with balance capacity so that the work of the EWG is focussed on the pertinent information required by DG MARE. To this end there is a need for DG MARE to reflect on the specific advice that is required from the STECF review of Member States' annual fleet reports and action plans and how such advice is to be reported.
  - 3) STECF concludes that without an estimate of Maxseadays for fleet segments, the Technical Indicator (Vessel Utility Rate, VUR) is uninformative and for some fleet segments, wholly misleading. STECF considers that the Commission should strive to ensure that reporting of Maxseadays becomes a mandatory variable to be reported at fleet segment level in the revised EUMAP.

### **Contact details of STECF members**

<sup>1</sup> - Information on STECF members' affiliations is displayed for information only. In any case, Members of the STECF shall act independently. In the context of the STECF work, the committee members do not represent the institutions/bodies they are affiliated to in their daily jobs. STECF members 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>



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**Expert Working Group EWG-19-13 report**

## **REPORT TO THE STECF**

### **EXPERT WORKING GROUP ON**

**Assessment of balance indicators for key fleet segments and review of national reports on Member States efforts to achieve balance between fleet capacity and fishing opportunities**

**(EWG-19-13)**

**Larnaca, Cyprus, 19-13 September 2019**

This report does not necessarily reflect the view of the STECF and the European Commission and in no way anticipates the Commission's future policy in this area

## 1 INTRODUCTION

### 1.1 Terms of Reference for EWG-19-13

The following terms of reference were agreed by DG Maritime Affairs and Fisheries (DG-MARE) and the chair of the expert working group:

#### Background

The Commission requests that an analysis of balance between fleet capacity and fishing opportunity be made using a standard approach across all EU fleet segments and based on DCF information. Where possible, evaluation should use data reference year 2009 to 2018.

#### Terms of Reference:

- 1. Based on the data submitted by Member States under the 2019 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<sup>1</sup>.**

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

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

- Sustainable harvest indicator (SHI)
- Stocks at risk indicator (SAR)
- Return on investment (ROI) and/or Return on Fixed Tangible Assets (RoFTA)
- Ratio between current revenue and break-even revenue (CR/BER)
- The inactive fleet indicators
- The vessel use indicator

For fleet segments for which the indicator values can be calculated, STECF is requested to present the trend over the last 5/6-year period and where relevant, to comment on any implications of such trends. STECF is also requested to comment on the reliability of data used in calculating the indicator values

For fleet segments for which indicator values cannot be calculated, STECF is requested to explain why that is the case.

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<sup>1</sup> COM (2014) 545 final. Communication from the Commission to the European Parliament and the Council. Guidelines for the analysis of the balance between fishing capacity and fishing opportunities according to Art 22 of Regulation (EU) No 1380/2013 of the European Parliament and the Council on the Common Fisheries Policy.

- 2. Review the fleet reports submitted by Member States under Article 22.2 and 22.3 of Regulation (EU) 1380/2013 and the action plans under Article 22.4 of Regulation (EU) 1380/2013 submitted by May 2019 with the Annual reports on capacity corresponding to the situation in 2018. Regarding the latter, assess whether they have effectively set out "the adjustment targets and tools to achieve a balance and clear time-frame for its implementation" in line with Article 22.4 of Regulation (EU) 1380/2013.**
  
- 3. Comment on the proposed measures in the new or revised action plans under Article 22.4 of Regulation (EU) 1380/2013 submitted by Member States, together with their fleet reports on capacity corresponding to the situation in 2018, intended to address the imbalance as identified in any fleet segments additional to those identified as imbalanced in the fleet report of capacity for 2017. Comments shall focus on whether the measures in the new or revised action plans can be considered sufficient to balance the additional imbalanced fleets.**
  
- 4. For each Member State, list 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 or other fishing regions.**
  
- 5. For the Outermost Regions of France (Réunion, French Guiana, Martinique, Guadeloupe, Saint-Martin and Mayotte), Portugal (Madeira and Azores) and Spain (Canary Islands), list those fleet segments that according to the most updated set of data (2017 or later if available) for either the biological, economic or technical indicators in the European Commission Guidelines, 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. List the fleet segments for which information available does not allow to calculate the above indicators and conclude on balance.**

## 2 GENERAL CONSIDERATIONS REGARDING THE ASSESSMENT OF 'BALANCE'

As far as possible the Expert group has explicitly addressed the terms of reference provided by the Commission which relate to the calculation and evaluation of balance indicators and the review of fleet reports from Member States and any associated action plans provided in accordance with the criteria specified in the 2014 Balance Indicator Guidelines to Member States (COM (2014) 545 FINAL) and Article 22 of regulation (EU) 1380/2013 to redress any imbalances between their fleet capacity and fishing opportunities.

In previous reports, the Expert Group has discussed at length and provided a detailed critique of the application and utility of the indicators and criteria specified in the 2014 Balance Indicator Guidelines (COM (2014) 545 FINAL) for assessing the balance between capacity and fishing opportunities. Furthermore, numerous suggestions for modification and improvement have also been provided in previous reports and all such criticisms and suggestions have been endorsed by the STECF. The Expert Group wishes to stress that all previous criticisms and suggestions remain valid and in particular draws the attention of the Commission to the following sections of previous reports:

- STECF report 15-02; sections 2.7, 2.8, 2.9;
- STECF report 15-15; 3.5.1, 3.6.1, 3.8, 3.9, 3.10, 3.11.
- STECF report 16-09; 4.2, 4.3, 4.4, 4.5.
- STECF report 17-08; 3.4 and ANNEX I.
- STECF report 18-14; 3.4 and ANNEX I.

The comments and suggestions given in the above report sections are intended to provide advice on how the guidelines to Member States (COM (2014) 545 FINAL) might be modified at some future date and lead to a more appropriate suite of indicators to inform Member States on the balance between capacity and fishing opportunities. In this context, the Expert Group wishes to draw attention to the concluding paragraph from STECF General Observations and Conclusions on the utility and appropriateness of balance indicators given in section 2 of STECF 15-15, which reads as follows:

*"STECF acknowledges that there are no immediate plans by the Commission to revise the current suite of indicators or the Guidelines. Nevertheless, recognising that there may be a need to undertake such a revision at some future date, STECF suggests that it would be appropriate to commence investigating the properties and utility of alternative indicators at the earliest opportunity and well ahead of any decision on which indicators are to be used. The guidelines to Member States would then need to be revised accordingly and ideally include explicit instructions on precisely how indicator values should be calculated and how they should be interpreted in the context of the balance between capacity and fishing opportunities. STECF considers that the above work would best be undertaken by a dedicated Expert Working Group."*

Furthermore, the Expert group wishes to stress that contrary to the criteria in the guidelines (COM (2014) 545 FINAL), the indicator values for all of the



indicators being used to assess the balance between capacity and fishing opportunities merely inform on whether fleet segments should be scrutinised further to determine whether an action plan is warranted. The indicator values (either singly or in combination) cannot be considered reliable metrics to identify which fleet segments require an action plan.

In addition, the Expert Group also wishes to draw to the attention of the Commission the information in Section 8 and 9 (ToR 6) and Annex I of STECF report 18-14 which provides a summary of discussion of Indicator Issues and Suggested Actions arising from the present and previous meetings of this expert group.

EWG 19-13 is requested to comment on whether the methodology used in the MS fleet report is different from the methodology applied by the present group.

EWG 19-13 is, also, requested to comment on whether the measures in the new action plans can be considered sufficient to balance any additional imbalanced fleets identified.

To assess whether the action plans can contribute to redressing any imbalance identified in the fleet report, EWG 19-13 suggests that Member State action plans should, at a minimum, contain the following information:

- i. a clear statement on which fleet segments are considered to be imbalanced and why;
- ii. specific objectives, i.e. that relate to those fleet segments that are identified as being imbalanced and/or the resources on which those segments are reliant;
- iii. tools that are considered effective and are appropriate for the imbalanced fleet segments, e.g. by illustrating how the proposed tool will achieve the stated objectives;
- iv. targets that are:
  - (a) quantifiable,
  - (b) specific to those fleet segments or resources identified, and
  - (c) justified, e.g. by estimating the impact of the target proposed; and
- v. a clearly stated, realistic timeframe to achieve the targets that are set.

EWG 19-13 suggests that Member States state whether any action plans are already in place, whether there have been any amendments to these action plans and specify what those amendments are. The EWG 19-13 also suggests that Member States should confirm that the action plans are being implemented and the progress of these in a section of their fleet reports.

In the following sections references to the 'fleet report for 2018' refers to the Annual fleet report delivered by each Member State in May 2019.

## **3 TOR 1 - ASSESSMENT OF BALANCE INDICATORS**

### **3.1 Background**

All indicators provided and used in the STECF EWGs 19-13 were calculated according to the 2014 Balance Indicator Guidelines (COM (2014) 545 final)<sup>2</sup>. The Commission's 2014 Balance Indicator Guidelines seek to provide a common approach for estimating the balance over time between fishing capacity and fishing opportunities according to Art 22 of Regulation (EU) No 1380/2013 of the European Parliament and the Council on the Common Fisheries Policy.

### **3.2 Provision of Indicator Values**

#### *3.2.1 Indicator Calculation Process*

JRC compiled a set of economic and technical indicators as part of STECF EWG 19-06 (2019 Annual Economic Report on the EU Fishing Fleet). During the Annual Economic Report (AER) 2019<sup>3</sup> (hereafter referred to as 'AER 2019') meetings indicators were quality checked, analysed and summarised for the period 2008-2017 (2018 in some cases). The SAR indicator values were prepared under one ad hoc contract and the SHI values were prepared via a collaborative agreement.

An expert group was convened from the 23<sup>th</sup>-25<sup>th</sup> July at the JRC in Ispra, Italy, and tasked with providing agreed balance indicator values in accordance with the methodologies outlined in the 2014 Balance Indicator Guidelines. Experts present at the preparatory meeting for EWG 19-13 (hereafter 'EWG 19-13 Prep. Meeting') (i) reviewed the results of biological indicator calculations for the areas / fleet segments they were familiar with, and (ii) reviewed indicator issues, problems and caveats which had been flagged by previous balance reports, and proposed measures to address these wherever feasible (see Annex I). Participants at the EWG 19-13 Prep. Meeting decided to adopt the date of 25<sup>th</sup> of July 2019 as a cut-off date for the inclusion of additional or updated data from Member States / advice on stock status from the relevant advisory bodies / IUCN and CITES listings (Table 3.2.1.1).

A table prepared by the JRC containing all the balance indicators by Member State (MS) and fleet segment (supra-region<sup>4</sup> + fishing technology + vessel

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<sup>2</sup> Communication from the Commission to the European Parliament and the Council – Guidelines for the analysis of the balance between fishing capacity and fishing opportunities according to Art 22 of Regulation (EU) No 1380/2013 of the European Parliament and the Council on the Common Fisheries Policy COM(2014) 545 final.

<sup>3</sup> Scientific, Technical and Economic Committee for Fisheries (STECF): The 2019 Annual Economic Report on the EU Fishing Fleet (STECF 19-06), Carvalho, N., Keatinge, M. and Guillen Garcia, J. editor(s), EUR 28359 EN, Publications Office of the European Union, Luxembourg, 2019, ISBN 978-92-76-09517-0, doi:10.2760/911768, JRC117567..

<sup>4</sup> The DCF supra-regions are: (1) Area 27 = Baltic Sea, North Sea, Eastern Arctic, North Atlantic; (2) Area 37 = Mediterranean Sea and Black Sea; (3) OFR = Other Fishing Regions. These have been redefined under the EU-MAP, as: (1) NAO = Baltic Sea; North Sea; Eastern Arctic; NAFO; Extended North-Western waters (ICES areas V, VI and VII) and Southern Western waters, (2) MBS = Mediterranean Sea and Black Sea and (3) OFR = Other regions where fisheries are operated by Union vessels and managed by RFMOs to which the European Union is contracting party or observer.

length) was provided to EWG 19-13. Where available, data were provided for each year over the period 2008-2017.

Table 3.2.1.1 - Indicators provided to experts at EWG 19-13.

Indicator		Calculated by	Comments
Biological indicators	<b>SHI</b> Sustainable Harvest Indicator	Jerome Guitton	1. Calculated by landings value for 2008-2018 for every EU fleet segment for which data were available (2018 data are provisional and may be subject to change): <ul style="list-style-type: none"> <li>• Data sources for stock assessment parameters included the ICES and ICCAT for fleet segments operating in Area 27.</li> <li>• For fleet segments operating in Area 37 the data sources for stock assessment parameters included:                             <ol style="list-style-type: none"> <li>a. A database of STECF stock assessment results compiled by the JRC. Updated information on stock assessments carried out at FAO/GFCM working groups was collected during preparatory meeting.</li> <li>b. Tuna fisheries stock assessment</li> <li>c. CECAF Working group</li> <li>d. South Pacific Regional Fishery Management Organisation</li> </ol> </li> </ul> 2. Coverage ratio was also provided to give the part of the landing values that are included in the SHI. This is a quality indicator and the higher the ratio is, the higher the validity of SHI. Values are not taken into consideration if the ratio is less than 40%.                     3. ToR 4: the output was described in the term of reference. For each Member State, those fleet segments that according to the 2016 values 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 were listed. Separate lists were provided for each indicator. The fish stocks on which a fleet segment is reliant were 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 75% of the total value of the landings by that fleet segment. The area to which a fleet segment is attributed was given as FAO area 27 (=NAO), FAO area 37 (=MBS) or other fishing region (OFR). This new indicator was developed for all the fleets. However, data were also provided using subsegmentation for OFR in order to identify some specific fleets operating in OFR (Martinique, Guadeloupe, Mayotte, Réunion, , , etc. ). This new indicator was developed for all the fleets, including fleets in sub segmentation in OFR.
	<b>SAR</b> Stocks at Risk Indicator	Dr. Armelle Jung Jerome Guitton	1. Calculated for 2009-2018 for all fleet segments for which data were available.                     2. Dr. Jung selected the stocks at risk: <ul style="list-style-type: none"> <li>• For fleet segments operating in Area 27, the most recent ICES Advice on fishing opportunities was accessed through the ICES website (up to the cut-off date 30/06/2016).</li> </ul>

		Dr. Tommaso Russo and Dr. Matteo Murenu	<ul style="list-style-type: none"> <li>For fleet segments operating in Area 37, the most recent GFCM/SAC and STECF stock assessment reports were taken into account.</li> <li>For fleet segments operating in other areas (OFR), STECF stock assessment reports and RFMO's reports were considered.</li> <li>Additional information was taken from Council Regulations fixing annual fishing opportunities; from GFCM, ICCAT, IOTOC, SEAFO, NAFO or SPRFMO scientific assessments reports, advices or recommendations; the CITES species list and the IUCN Red List for Actinopterygii and Elasmobranchii.</li> </ul> <p>3. Dr. Russo implemented a routine in R to calculate the SAR indicator for MS fleet segments. The R script is available in the ftp meeting. However, due to some issues in the data calculation, SAR values were provided using a SQL script developed during the WG by Jerome Guitton.</p>
<b>Economic indicators</b>	<b>ROI or RoFTA</b> The Return on Investment (ROI) or Return on Fixed Tangible Assets (RoFTA)	JRC	<ol style="list-style-type: none"> <li>Calculated using the same principle as STECF EWG 19-06; the target reference value to which the indicator value is compared is the 2017 risk-free interest rate. The most recent 5-year average (2012-2017) was also used, as stipulated in the 2014 Balance Indicator Guidelines.</li> <li>Calculated for years 2008-2018, the most recent year for which DCF economic data are available. 2018 data are provisional and may be subject to change.</li> <li>Values are in real terms, i.e., nominal values adjusted for inflation (base=2015)</li> </ol>
	<b>CR / BER</b> Current revenue as proportion of break-even revenue	JRC	<ol style="list-style-type: none"> <li>Calculated for years 2008-2018, the most recent year for which DCF economic data are available. 2018 data are provisional and may be subject to change.</li> <li>The long-term viability analysis of CR/BER approach was taken.</li> <li>Values are in real terms, i.e., nominal values adjusted for inflation (base=2015)</li> </ol>
<b>Technical/inactivity indicators</b>	<b>VUR</b> Fleet segment utilisation indicator. Average Days at Sea / Maximum Days at Sea	JRC	<ol style="list-style-type: none"> <li>Calculated for years 2008-2018 using the latest data submitted by MS during the 2019 DCF call for economic data. 2018 data are provisional and may be subject to change.</li> <li>Member States (MS) had provided either maximum observed days at sea (DAS) for each fleet segment or maximum theoretical DAS.</li> <li>Due to several inconsistencies and/or relevant missing information in the data provided by some MS, the EWG also used the value of 220 maximum theoretical days at sea (VUR220) per fleet segment for all MS, as stipulated in the 2014 Balance Indicator Guidelines.</li> </ol>
	Inactive vessels per length category	JRC	<ol style="list-style-type: none"> <li>Number and proportion of inactive vessels, in number, GT and kW for years 2008-2018 based on the latest data submitted by MS during the 2019 DCF call for economic data.</li> </ol>
Data sources: 2019 DCF Fleet Economic Data Call; EUROSTAT; ICES online stock assessment database; JRC STECF stock assessment database; GFCM stock assessment database; CITES species list; IUCN Red List.			

### 3.2.2 Data Source and Coverage

The data used to compile the various indicators were collected under the Data Collection Framework (DCF), cf. Council Regulation (European Commission (EC) No 199/2008 of 25th February 2008), amended by the multiannual Union programme for the collection, management and use of data in the fisheries and aquaculture sectors for the period 2017-2019 (EU-MAP) (see the Commission Implementing Decision (EU) 2016/1251 of 12 July 2016 and the Council Regulation (EC) No 199/2008 on a framework for the collection of data in the fisheries sector). Technical and economic balance indicators were calculated using data submitted under the 2019 call for fleet economic scientific data concerning 2008-2017/18 issued by DG MARE in January 2019. The two biological indicators (SHI and SAR indicator) were calculated based on transversal (landings) data submitted under the same data call. Additional information needed to calculate the biological indicators was obtained from other sources (see Table 3.2.1.1).

The 2019 fleet economic data call requested transversal and economic data covering years from 2008 to 2017/18. Capacity data (GT, kW, no. of vessels) was requested up to and including 2018, while employment and economic parameters were requested up to and including 2017. Most effort and all landings data were requested up to and including 2018, as well as, value of landings (non-mandatory) to allow for economic performance projections to be estimated for 2018. Landings and effort data for fleet segments operating in the Mediterranean & Black Sea region (i.e. Area 37 or MBS) were requested at the GCFM-GSA level by the 2019 economic data call. This level of aggregation was requested to correctly allocate landings to the relevant stocks when calculating the biological balance indicators (see STECF 15-02 / 15-15 reports).

In terms of the completeness of the Member States data submissions, the AER 2019 report remarks ("Data issues" page 464) that most countries submitted most of the parameters requested under the call. In overall, there has been an improvement in the data quality and coverage compared to previous years. In many cases missing data relates to fleet segments with low vessel numbers for which data is hard to obtain. In terms of data quality, inevitably some 'abnormal' estimates for various indicators were detected by JRC or the AER EWG and in most cases rectified by the Member States. However, some quality issues remain outstanding.

The main problem highlighted by AER 2019 is related to the incomplete data set for Greece, and the consequent exclusion of this MS from the analysis at EU and Regional level. Submissions from France and Spain continue to be somewhat incomplete, especially for the period 2008-2010 that impacts on time-series analysis mainly. Some minor data quality issues remain for several other Member States.

For confidentiality reasons, Member States may aggregate fleet segments into clusters to provide sensitive economic data. However, in several cases, clustering may not be enough to guarantee confidentiality, and hence, parts of MS fleets are not completely covered. As reported in the AER 2019, these

generally relate to distant-water fleet segments and include MSs such as Germany, Italy and Poland. Other MSs, such as Estonia and Latvia, simply did not provide any data on part of their fleet (high sea fleet).

Specific data issues at MS level reported in the AER 2019, which can affect the quality and coverage of the balance indicators are summarised as follows:

- As a new Member State, Croatia submits data from 2012 onwards.
- A significant amount of missing data (transversal and economic data) for the under 10 m segments was registered for Ireland. Value of physical capital (depreciated replacement value) missing or zero was registered for many Irish fleet segments (e.g., DFN VL0010, DRB VL0010, DTS VL0010, PMP VL1218, TM VL1218, etc.). This impacts the calculation of indicators for some fleet segments in Ireland.
- Data on *other non-variable costs* was missing for some small-scale fleet segments (PGO VL0006 and PGO VL 0612) of Cyprus in 2017.

Regarding the fleets' inactivity, similarly to what observed by EWG 18-14 for the year 2017, the EWG 19-13 noted that also for the year 2018 data on the number of inactive vessels by length group was not provided by Denmark, Greece, France and Poland.

Table 3.2.2.1 - Number of inactive vessels by length group and supra-region for each Member State in 2017 and 2018

2017	North Atlantic (NAO)						Mediterranean & Black Sea (MBS)						Other Fishing Regions (OFR)						Total
	VL0010	VL1012	VL1218	VL1824	VL2440	VL40XX	VL0006	VL0612	VL1218	VL1824	VL2440	VL40XX	VL0010	VL1012	VL1218	VL1824	VL2440	VL40XX	
BEL			1	4	1														6
BGR							228	358	15	1									602
CYP							20	14											34
DEU	353	13	11	5	4														386
DNK	407	4	5	2															418
ESP	638	20	29	5	13	1	86	202	39	6	2					2	14	4	1,061
EST			2																2
FIN	1,628	112	9																1,749
FRA	148	27	7	3	2		73	150	4	3	3	1	759	42		9			1,231
GBR	1,422	60	35	14	21	6													1,558
GRC							509	916	67	20	9								1,521
HRV							944	1,177	104	35	37								2,297
IRL	546	78	9	2	3														638
ITA							301	615	49	23	24	1					1		1,014
LTU	40	6	1	1	6													5	59
LVA	73																		73
MLT							136	100	3	5	5								249
NLD	141	13	20	13	16	8													211
POL	31	11	3	3	1														49
PRT	3,923	63	112	34	28	2													4,162
ROU							4	16											20
SVN							52	35	4	1									92
SWE	252	33	9	1	3														298
<b>Total</b>	<b>9,602</b>	<b>440</b>	<b>253</b>	<b>87</b>	<b>98</b>	<b>17</b>	<b>2,353</b>	<b>3,583</b>	<b>285</b>	<b>94</b>	<b>80</b>	<b>2</b>	<b>759</b>	<b>42</b>		<b>11</b>	<b>15</b>	<b>9</b>	<b>17,730</b>

2018	North Atlantic (NAO)						Mediterranean & Black Sea (MBS)						Other Fishing Regions (OFR)						Total
	VL0010	VL1012	VL1218	VL1824	VL2440	VL40XX	VL0006	VL0612	VL1218	VL1824	VL2440	VL40XX	VL0010	VL1012	VL1218	VL1824	VL2440	VL40XX	
BEL			1	2	1														4
BGR							249	399	9	2									659
CYP							19	14											33
DEU	349	16	10	4	1														380
DNK																			
ESP	630	35	41	8	15	2	78	252	54	16	6			1	2	13	4		1,157
EST			4		1														5
FIN	1,817	110	9																1,936
FRA																			
GBR	1,565	64	44	22	24	7													1,726
GRC																			
HRV							692	792	104	40	44								1,672
IRL	617	95	18	7	6														743
ITA							266	700	1										967
LTU	36	5	1	1	9													4	56
LVA	77																		77
MLT							107	86	4	9	4								210
NLD	137	12	16	13	17	4													199
POL																			
PRT	3,904	68	114	35	23	3													4,147
ROU							7	34	1										42
SVN							27	24	5	1									57
SWE	245	33	8	1	3														290
<b>Total</b>	<b>9,377</b>	<b>438</b>	<b>266</b>	<b>93</b>	<b>100</b>	<b>16</b>	<b>1,445</b>	<b>2,301</b>	<b>178</b>	<b>68</b>	<b>54</b>			<b>1</b>	<b>2</b>	<b>13</b>	<b>8</b>		<b>14,360</b>

### 3.2.3 Fleet Segment Coverage

As reported above, the estimation of the balance indicators requires multiple data coming from different sources. As data are not available for all fleet segments, the balance indicators are calculated for a percentage of the EU fleet. This percentage depends on the specific indicator and its data needs. For instance, the VUR indicator needs data on the maximum days at sea, which are provided by MSs on a voluntary basis. When these data are not provided, the indicator cannot be calculated. On the other hand, the calculation of the SHI > 40% indicator depends on the number of stocks assessed in a specific fishing area. When this number is limited, the indicator cannot be calculated for the fleet segments exploiting that area.

To provide a measure per MS of the percentage of fleet segments for which an indicator is calculated, the landings value of these fleet segments is divided by the total landings value of the MS fleet. The use of the landings value instead of the number of fleet segments to calculate these percentages is aimed to consider the different weight of the fleet segments at MS level.

Table 3.2.3.1 shows the values of these percentages for each indicator and MS. Assuming that data on landings value are available for all fleet segments, a value of 100% means that the indicator is calculated for all fleet segments or, equivalently, for a number of fleet segments covering 100% of the MS landings value. This means that the data required to calculate that indicator are available for all fleet segments.

Values for the SHI indicator are reported in the table for (i) SHI values that were calculated for all stocks with assessment data, even if the proportion of landings value of the assessed stocks made up less than 40% of the total landings value of the fleet segment (in such cases, the indicator is considered as unrepresentative/unreliable), and (ii) SHI values calculated only for those fleet segments for which the proportion of landings value of the assessed stocks made



up more than 40% of the total landings value of the fleet segment. For the SAR indicator, all fleet segments with corresponding landings data were screened for stocks falling under the definition of stocks at risk; all of the landings (in weight) data provided by MS were thus considered in the SAR analysis.

Table 3.2.3.1 Coverage of each balance indicator in terms of landed value submitted by MS for the reference year 2017. SHI = coverage of fleet segments for which SHI could be calculated; SHI 40%+ = coverage of fleet segments where proportion of landings value of the assessed stocks made up more than 40% of the total landings value of the fleet segment.

	Vessel utilisation ratio (VUR)	Vessel utilisation ratio 220 days (VUR220)	SAR	Sustainable Harvest Indicator (SHI)	SHI >=40%	Current revenue / break-even revenue (CR/BER)	Net profit margin	Return on fixed tangible assets (RoFTA)	Return on Investment (RoI)*
BEL	100%	100%	100%	100%	50%	100%	100%	100%	0%
BGR	100%	100%	100%	100%	100%	100%	100%	100%	0%
CYP	0%	100%	100%	100%	29%	86%	86%	86%	0%
DEU	93%	93%	100%	93%	71%	93%	93%	93%	0%
DNK	0%	100%	100%	95%	74%	100%	100%	100%	100%
ESP	100%	100%	100%	96%	47%	95%	95%	95%	23%
EST	0%	100%	100%	100%	80%	100%	100%	100%	100%
FIN	100%	100%	100%	100%	40%	100%	100%	100%	60%
FRA	51%	96%	100%	75%	30%	66%	66%	66%	0%
GBR	0%	100%	100%	89%	43%	100%	100%	100%	100%
GRC	29%	29%	100%	100%	40%	29%	29%	29%	0%
HRV	100%	100%	100%	86%	40%	100%	100%	100%	30%
IRL	59%	86%	100%	87%	47%	59%	59%	59%	0%
ITA	100%	100%	100%	96%	65%	96%	96%	96%	13%
LTU	100%	100%	100%	91%	45%	100%	100%	100%	0%
LVA	100%	100%	100%	100%	100%	100%	100%	100%	0%
MLT	90%	100%	100%	100%	40%	100%	100%	100%	70%
NLD	100%	100%	100%	100%	55%	100%	100%	100%	100%
POL	70%	100%	100%	100%	29%	70%	70%	70%	0%
PRT	94%	100%	100%	88%	13%	100%	100%	100%	0%
ROU	100%	100%	100%	100%	100%	100%	100%	100%	100%
SVN	100%	100%	100%	100%	25%	100%	100%	100%	0%
SWE	100%	100%	100%	88%	63%	100%	100%	100%	0%
Total	70%	95%	100%	89%	45%	86%	86%	86%	23%

\* when at least one of the following variables was provided: income from fishing rights, fishing rights costs and value of fishing rights.

It is important to note that full coverage in the table above does not necessarily mean that the entire MS fleet was covered. For confidentiality reasons, some MS may not provide landings data for specific fleet segments in cases where the data are considered sensitive and clustering of fleet segments may be insufficient to overcome breaching confidentiality rules. In some cases, only landings in weight are provided without the corresponding landed values for all active fleet segments reported by a MS. Indicator coverage is thus only relative to the data provided (value of landing), and should be considered together with the number of fleet segments and/or vessels.

In other cases, fleet segments are omitted entirely, i.e. not even capacity data are reported by MS. For instance, in the 2018 data call, Latvia, which appear to have full coverage for most of the indicators, provided data only for their Baltic Sea fleets, since no data on their distant water fleets were submitted. In such cases, there is no way of knowing what the actual coverage would be because certain fleet segments are completely missing from the submitted DCF data. Information on active fleet segments in 2017 with missing landings in value that can be identified is presented in Table 3.2.3.2.

Table 3.2.3.2 Summary table showing for each Member State the number of fleet segments for which data on landings in value were available in 2017, the number of active fleet segments, and the active fleet segments in 2017 with missing landing values.

MS	Region	No. of fleet segments	No. of active fleet segments	No. of inactive fleet segments	No. of fleet segments with data on weight of landings	No. of fleet segments with data on value of landings	Data provision format for landings in 2017	Landings data coverage in 2017	Fleet segments with missing landings value in 2017
BEL	NAO	12	9	3	4	4	Aggregate fleet segment	Available for all fleet segments or aggregate fleet segments	
BGR	MBS	29	25	4	25	25	Fleet segment	Available for all fleet segments	
CYP	MBS	9	7	2	7	7	Fleet segment	Available for all fleet segments	
DEU	NAO	25	20	5	14	14	Aggregate fleet segment	Available for all fleet segments or aggregate fleet segments	
DNK	NAO	23	19	4	19	19	Fleet segment	Available for all fleet segments	
ESP	NAO	62	52	10	52	52	Fleet segment	Available for all fleet segments	
	MBS	35	30	5	30	30	Fleet segment	Available for all fleet segments	
	OFR	11	8	3	8	8	Fleet segment	Available for all fleet segments	
EST	NAO	6	5	1	5	5	Fleet segment	Available for all fleet segments	
FIN	NAO	11	8	3	5	5	Aggregate fleet segment	Available for all fleet segments or aggregate fleet segments	
FRA	NAO	56	51	5	50	50	Fleet segment	Missing for 1 fleet segment	FRA NAO DFN1218 NGI*
	MBS	34	28	6	27	27	Fleet segment	Missing for 1 fleet segment	FRA MBS DFN1218 NGI*

MS	Region	No. of fleet segments	No. of active fleet segments	No. of inactive fleet segments	No. of fleet segments with data on weight of landings	No. of fleet segments with data on value of landings	Data provision format for landings in 2017	Landings data coverage in 2017	Fleet segments with missing landings value in 2017
	OFR	54	41	13	37	37	Aggregate fleet segment	Missing for 4 fleet segments	FRA OFR FPO VL0010 MF; FRA OFR HOK VL0010 MF; FRA OFR PGP VL0010 MF; FRA OFR PS VL0010 MF
GBR	NAO	50	44	6	44	44	Fleet segment	Available for all fleet segments	
	OFR	3	3	-	3	3			
GRC	MBS	28	23	5	5	5	Fleet segment	Available for 5 fleet segments only	Missing for all small-scale fleet (SSCF) segments
HRV	MBS	40	35	5	35	35	Fleet segment	Available for all fleet segments	
IRL	NAO	37	32	5	30	30	Fleet segment	Missing for 2 fleet segments	IRL NAO PS VL0010; IRL NAO TBB VL0010
ITA	MBS	32	26	6	21	21	Aggregate fleet segment	Available for all fleet segments or aggregate fleet segments	
	OFR	3	2	1	2	2			
LTU	NAO	13	8	5	8	8	Fleet segment	Available for all fleet segments	
	OFR	4	3	1	3	3			
LVA	NAO	4	3	1	3	3	Fleet segment	Available for all fleet segments	
MLT	MBS	23	18	5	10	10	Aggregate fleet segment	Available for all fleet segments or aggregate fleet segments	

<b>MS</b>	<b>Region</b>	<b>No. of fleet segments</b>	<b>No. of active fleet segments</b>	<b>No. of inactive fleet segments</b>	<b>No. of fleet segments with data on weight of landings</b>	<b>No. of fleet segments with data on value of landings</b>	<b>Data provision format for landings in 2017</b>	<b>Landings data coverage in 2017</b>	<b>Fleet segments with missing landings value in 2017</b>
<b>NLD</b>	NAO	31	25	6	11	11	Aggregate fleet segment	Available for all fleet segments or aggregate fleet segments	
<b>POL</b>	NAO	22	17	5	9	7	Aggregate fleet segment	Missing for 2 fleet segments	POL NAO DTS40XX; POL NAO TM 40XX;
	OFR	1	1	-	1	-	Aggregate fleet segment	Missing for 1 fleet segment	POL OFR TM 40XX
<b>PRT</b>	NAO	71	55	16	49	49	Aggregate fleet segment	Available for all fleet segments or aggregate fleet segments	
	MBS	1	1	-	1	1	Fleet segment		
	OFR	4	4	-	2	2	Aggregate fleet segment		
<b>ROU</b>	MBS	8	6	2	6	6	Fleet segment	Available for all fleet segments	
<b>SVN</b>	MBS	18	14	4	4	4	Aggregate fleet segment	Available for all aggregate fleet segments	
<b>SWE</b>	NAO	29	24	5	24	24	Fleet segment	Available for all fleet segments	

### 3.2.4 Biological Indicator Visualisation Tool

The expert responsible for the calculation of the SHI values (J. Guillon), has developed an interactive tool which allows users to visualise the input data as well as the results of the biological indicator calculations. The tool is available at:

Link: [http://sirs.agrocampus-ouest.fr/stecf\\_balance\\_2019/](http://sirs.agrocampus-ouest.fr/stecf_balance_2019/)

The input data and balance indicator calculation results can be viewed thematically at fleet segment, country and supra-region level. For example, input data such as landings data can be visualised by weight or value; graphs showing the list of stocks used in calculations and the corresponding timeseries of  $F/F_{MSY}$  used for each stock can be displayed; indicator results can be viewed individually or as a combination of a number of indicators displayed on the same graph. The online tool includes updated values of (i) biological indicators specified in the 2014 Balance Indicator Guidelines, and (ii) the alternative indicators suggested in STECF reports 15-02 and 15-15.

EWG 19-13 considers that the tool provides a useful and informative synthesis of the available indicator values and makes the inputs and calculation process transparent. It could also aid Member States to identify and select those fleet segments that require targeted management measures to address the issue of balance/capacity. Member States. The figures below show some examples of the visual tools available online; an example of the potential utility of the evaluation tool is explained in section 3.8 of STECF report 15-15 (Figures 3.2.4.1-9).



Figure 3.2.4.1 - Comparison of fleet aggregation used in the calculation of economic indicators, where fleet segment clusters are used for confidentiality reasons, and biological indicators, where the lowest aggregation level possible is used.

In the above example economic indicators would be available for the fleet segment BGR A37 PGP0612 and A37 DFN1218 depending on the reference year, while biological indicators would be available for the corresponding segments BGR-A37-PGP-VL0612-NGI, BGR-A37-PGP-VL0006-NGI, BGR-A37-PGP-VL1824-NGI, BGR-

A37-PGP-VL1218-NGI. This tool allows for a visual check of clustering consistency by Member States between years.

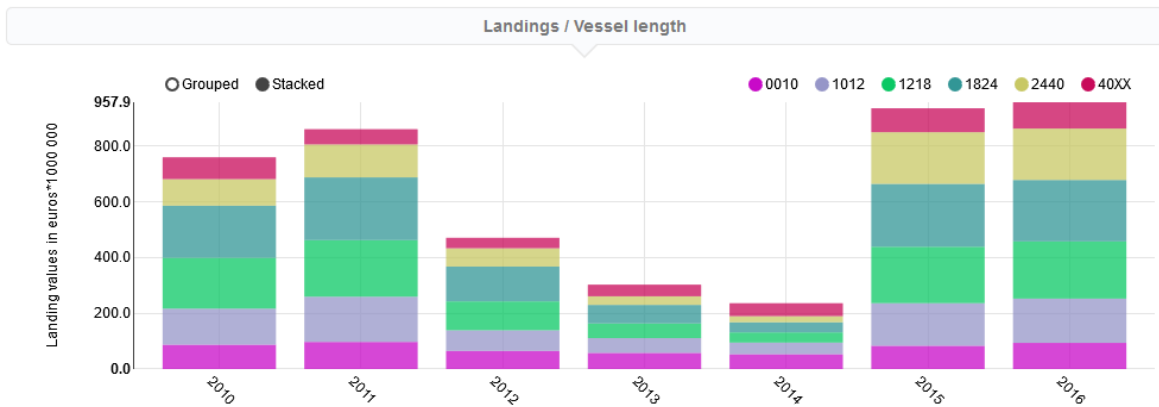


Figure 3.2.4.2 - Total landings values in Euros (x 1 000 000) by fleet segment length (0-10 m; 10-12 m; 12-18 m; 18-24 m; 24 – 40 m; >40 m length overall) for the French fleet in 2010 to 2016 working in AREA 27, as used in the calculation of balance indicators.

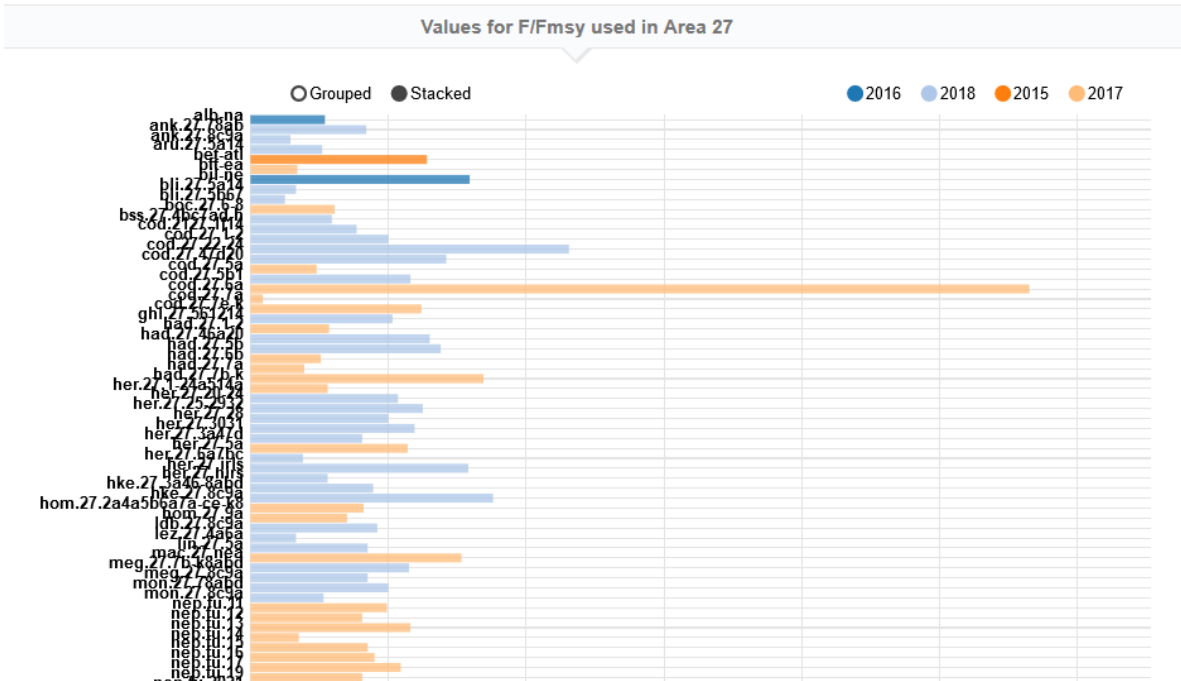


Figure 3.2.4.3 - Most recent F/F<sub>MSY</sub> values for stocks and corresponding landing values in Area 27 used in the calculation of the SHI indicator. Assessments made available in the reporting years 2014-2018 were used.

### Synthesis on SAR for the country for 2016

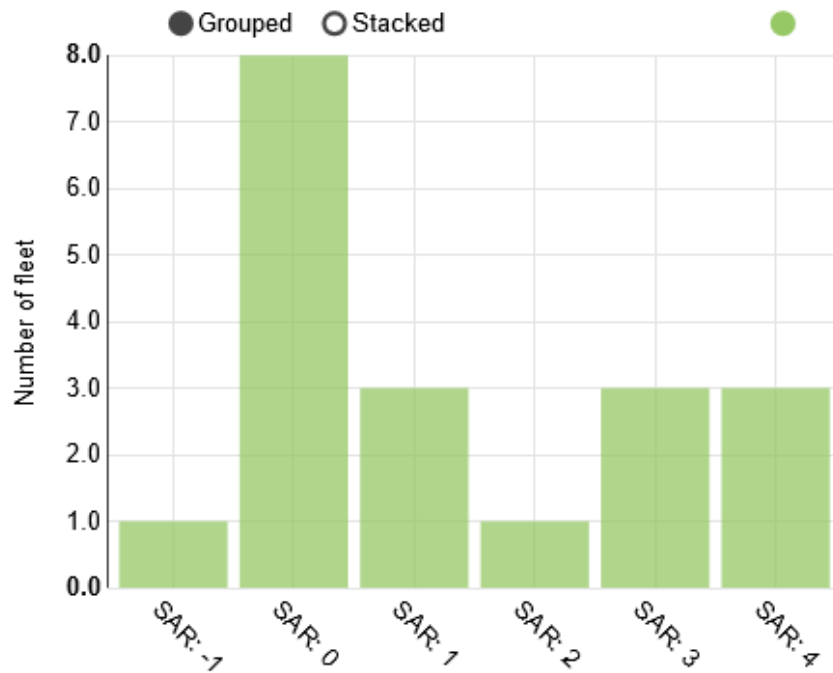


Figure 3.2.4.4 - Stocks at Risk Indicator (SAR) calculation results – indicator values at Member State level. Example shows the number of Danish fleet segments in the reference year 2016, for which the SAR value is 0 (n=8), 1 (n = 3) etc.

#### In landings values

#### In landing weight

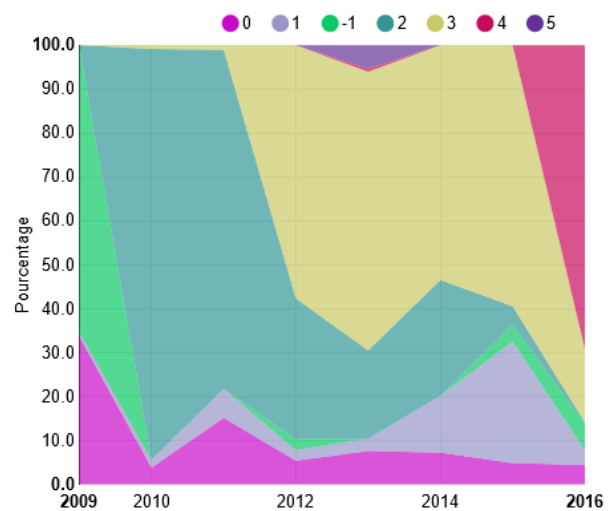
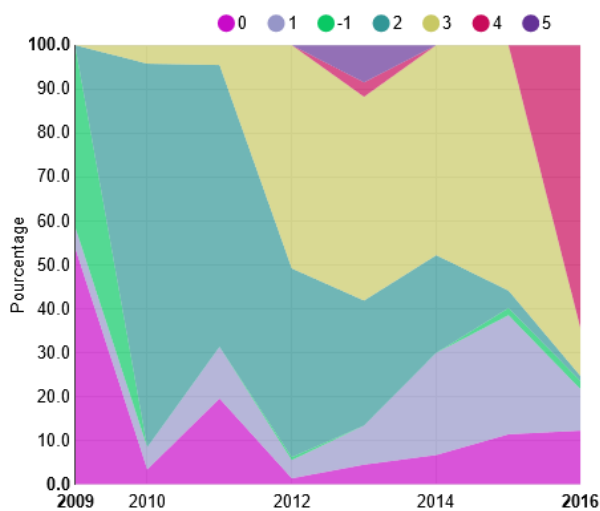


Figure 4.2.4.5 - Stocks at Risk Indicator (SAR) calculation results at Member State level – proportion of landings made by fleet segments landing 0 to 5 stocks at risk. For example, in 2016 fleets which landed 0 stocks at risk accounted for 12.3% of landings values of the Danish fleet.



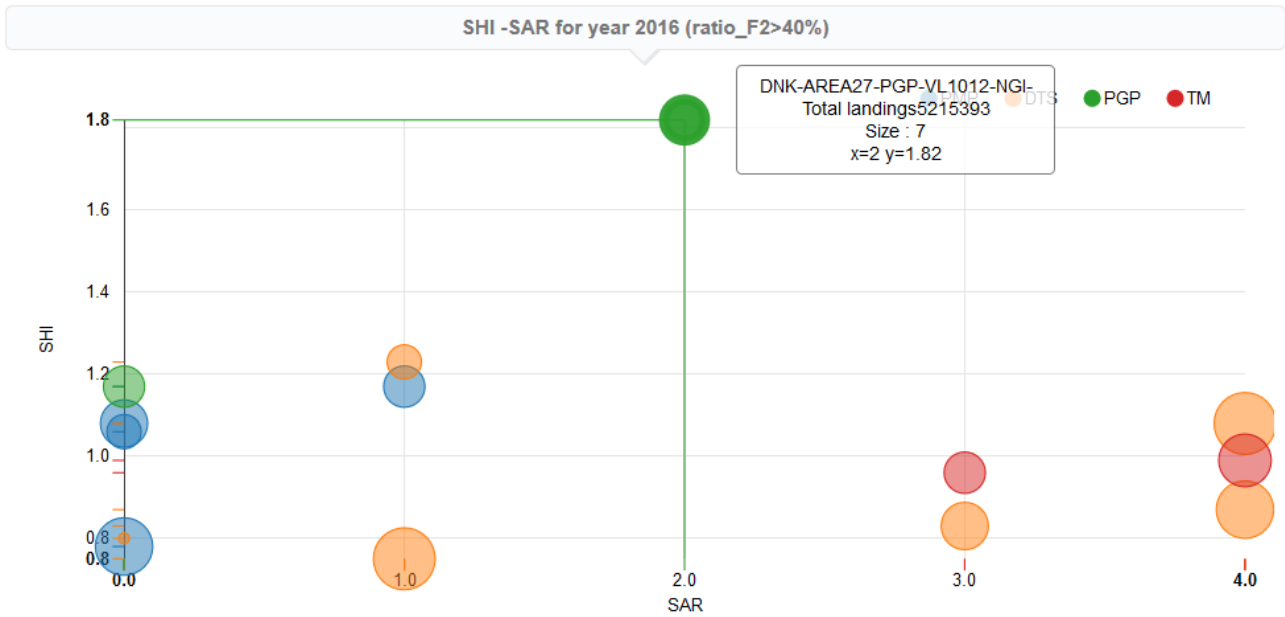


Figure 4.2.4.6 - Results of Sustainable Harvest Indicator (SHI) and Stocks at Risk (SAR); results for the Danish fleet in AREA27, reference year 2016. Only SHI calculation results where more than 40% of the annual value of landings came from assessed stock (ratio\_F2>40%) are shown.

In the example above, users can choose to restrict the display to a particular fishing technique by clicking on the relevant symbol in the legend.

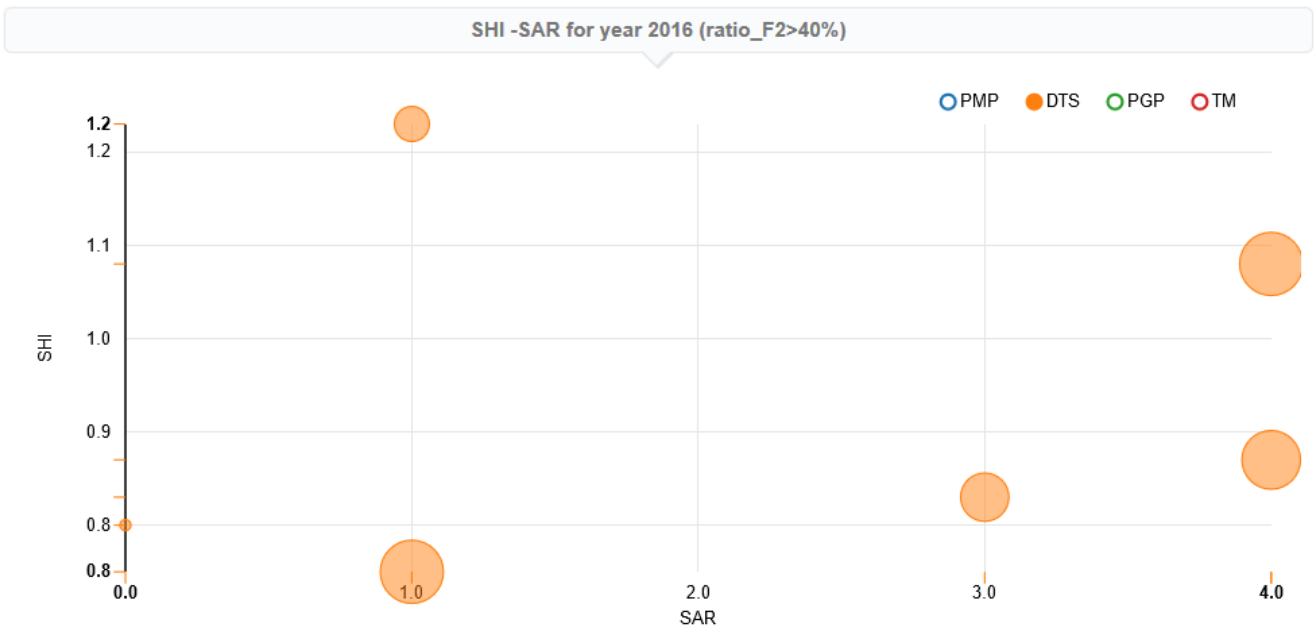


Figure 4.2.4.7 - Results of Sustainable Harvest Indicator (SHI) and Stocks at Risk (SAR); results for the Danish DTS working in AREA27, reference year 2016. Only SHI calculation

results where more than 40% of the annual value of landings came from assessed stock (ratio\_F2>40%) are shown.

In the example above, users can select a particular bubble to access information for the relevant fleet segment.

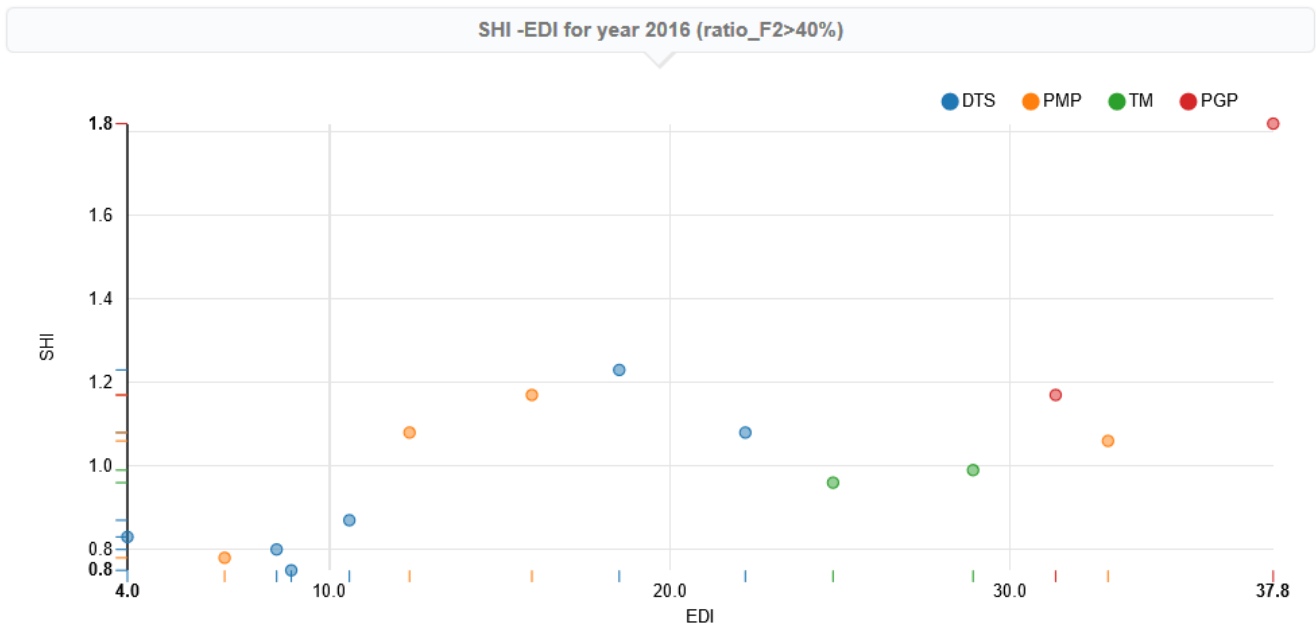


Figure 4.2.4.8 - Results of the Sustainable Harvest Indicator (SHI) and Economic Dependency Indicator (EDI - Part of the landings values based on overexploited stocks harvest); results for the Danish fleet operating in Area 27, reference year 2015. Only SHI results where more than 40% of the annual value of landings came from assessed stock (ratio\_F2>40%) are shown.

Users can choose to restrict the display to a particular fishing technique by clicking on the relevant symbol in the legend.

Part of the landing values of stocks which rely the fleet  
 (selection of stocks or Species/Area if stock is not defined. List of stocks account for at least 75% of the landings values of the fleet )

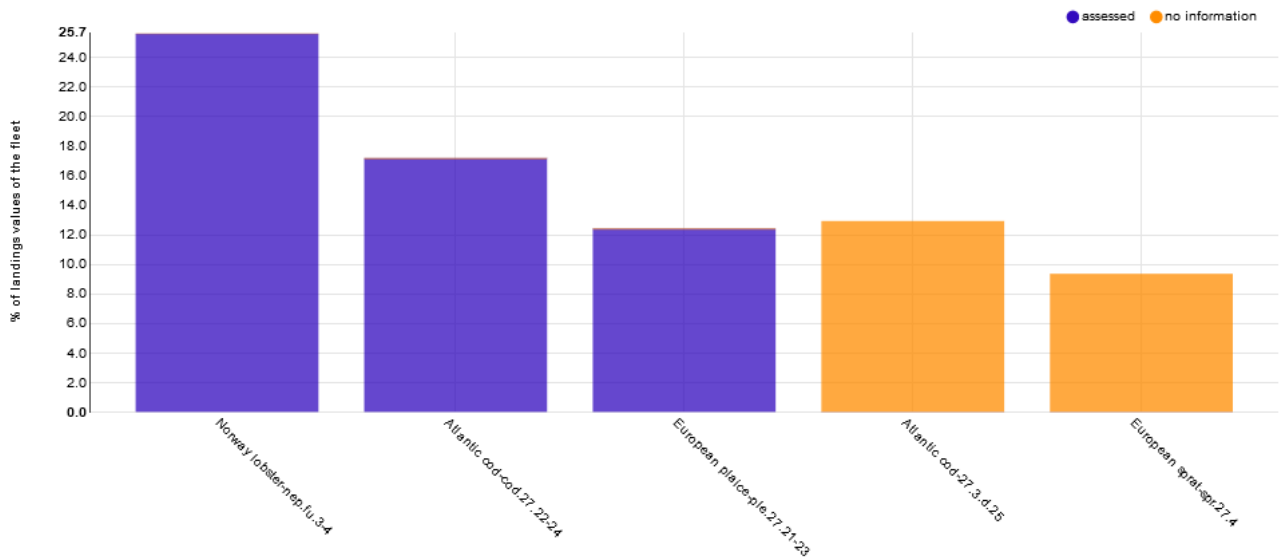


Figure 4.2.4.9 - Results for the new indicator TOR4 for Danish fleet DNK-AREA27-DTS-VL1012-NGI – the 5 species shown represent 75% of the landings value of the fleet; blue shows assessed stocks with available F/Fmsy values; orange shows stocks that are not included in the SHI calculation.

To improve the SHI coverage, we first have to deal with stock assessment for these orange stocks. It's a way to highlight lack of knowledge.

### 3.3 Methods of Calculating Indicators and Trends

#### 3.3.1 Sustainable Harvest Indicator (SHI)

According to the 2014 Balance Indicator Guidelines (COM 2014, 545 final), the sustainable harvest indicator is a measure of how much a fleet segment relies on stocks that are overfished. Here, "overfished" is assessed with reference to  $F_{MSY}$  values over time ( $F / F_{msy} > 1$ ), and reliance is calculated in economic terms (landed value). Where  $F_{MSY}$  is defined as a range, exceeding the upper end of the range is interpreted as "overfishing". Values of the indicator above 1 indicate that a fleet segment is, on average, relying for its income on fishing opportunities which are structurally set above levels corresponding to exploitation at levels corresponding to MSY. According to the 2014 Balance Indicator Guidelines this could be an indication of imbalance if it has occurred for three consecutive years. Shorter time period should be considered in the case of small pelagic species.

A detailed description and discussion of the methodology can be found in the STECF report 15-02. According to the 2014 Balance Indicator Guidelines the SHI is calculated for each national fleet segment (or cluster of segments dependent on the information provided by Member States via the fleet economic data call), using the following formula:

$$\frac{\sum_{i=1}^{i=n} V_i \frac{F_i}{F_{msy_i}}}{\sum_{i=1}^{i=n} \sum V_i}$$

In which,  $F_i$  is the fishing mortality available for stock  $i$  from scientific assessments (e.g. ICES, STECF, GFCM, ICCAT, IOTC advice ) and  $V_i$  is the value of landings from stock  $i$ . Data on  $F_i$  (mean  $F$ ) and  $F_{MSY}$  for fish stocks found in Area 27 were obtained from the ICES online database, a database of stock assessments output summaries (<http://standardgraphs.ices.dk/stockList.aspx>). For Area MBS output from assessments carried out by STECF working group was compiled by JRC (<https://stecf.jrc.ec.europa.eu/web/stecf/dd/medbs/sambs>).

In addition information on  $F/F_{msy}$  was scrutinized from GFCM Stock Assessment Forms (<http://www.fao.org/gfcm/data/safs/en/>) kindly provided by GFCM secretariat. Information on tuna / tuna-like species was obtained from the ICCAT (<http://www.iccat.es/en/>) and IOTC website (<http://www.iotc.org/>). In addition, we considered stocks fished by European fleets in NAFO area ([www.nafo.int](http://www.nafo.int)) as well as in SPRFMO (e.g, jack mackerel, [www.sprfmo.int](http://www.sprfmo.int)). The full indicator time series (2009-2016) was updated based on the most recent assessments available (2017 is most cases) and  $F_{MSY}$  point estimates. Ranges for  $F_{MSY}$  have been estimated by ICES for a number of stocks but have not been officially adopted for management in most cases at the time the working group met. Therefore, the SHI is based on the  $F_{MSY}$  point estimates only.

Landings data are in many cases not available at species level and often more than one stock is present in a certain area. Sometimes the genus code is used in logbooks, and it covers more than one species for example RED for *Sebastes* spp (it covers for REB *Sebastes mentella* and REG *Sebastes norvegicus*). STECF EWG 17-08 decided to use the last five years of landings data provided in the ICES advice sheets at the stock level to estimate the proportion of each stock in the DCF landing's data. STECF 18-14 applied the same approach. The use of data from the ICES database is necessary since data reported under the DCF do not contain landings from shared stocks by non-EU fishing fleets.

For the Mediterranean Sea, stocks may be assessed either as belonging to a single or multiple GSAs and in such cases more than one assessment may be carried out. In such cases to associate a landings value to the  $F/F_{MSY}$  estimate for each stock assessment, we simple divide the total landings value reported for the combined GSAs by the number of assessments.

For example, for deep-water pink shrimp (DPS) in GSAs9, 10 and 11, two assessments are carried out; one for DPS in GSA 10 and a second for DPS in GSAs 9, 10 and 11 combined. Therefore, 50% of the total landings value from GSA 10 is associated with the value of  $F/F_{MSY}$  resulting for the GSA 10 assessment and 50% to that for GSAs 9,10 and 11. For GSA 9 and 11, landings values are associated with  $F/F_{MSY}$  from the merged GSAs(9,10 and 11) stock assessment. The stocks to which such a procedure has been applied are listed in Table 3.3.1.1.

Table 3.3.1.1 - Stock assessed both by combined GSAs and single GSA at STECF EWGs.

ANE	ane-gsa09
	ane-gsa09_10_11
DPS	dps-gsa09
	dps-gsa09_10_11
DPS	dps-gsa09_10_11
	dps-gsa10
DPS	dps-gsa17_18
	dps-gsa17_18_19
HKE	hke-gsa01_03
	hke-gsa01_05_06_07
hke	hke-gsa01_03
	hke-gsa02_03_04_05
hke	hke-gsa09
	hke-gsa09_10_11
MTS	mts-gsa17
	mts-gsa17_18
MTS	mts-gsa17_18

	mts-gsa18
MUT	mut-gsa17 mut-gsa17_18
MUT	mut-gsa17_18 mut-gsa18
PIL	pil-gsa01 pil-gsa01-03

A detailed overview of the values for splitting the stocks are provided in Annex IV of the present report.

EWG 19-13 considers that this methodology should be refined (e.g. annual splitting values could be calculated / splitting values could be calculated at MS level) after peer review by a larger number of experts with expertise in the various geographical regions for which the biological indicators are calculated.

The most important issues related to the calculation of indicator values discussed and addressed during the EWG 19-13 Prep and previous Prep. Meeting are outlined below:

- Stock Assessment Selection - The 2014 Balance Indicator Guidelines state the calculation of the SHI indicator should take into account '*the most recent value of fishing mortality available from scientific assessments*'. The EWG 18-14 Prep. Meeting discussed the approach which should be taken in the absence of recent, updated stock assessments, and agreed that the SHI should take into account all stocks for which the most recent assessment was undertaken in 2014 or more recently.
- F<sub>MSY</sub> Ranges - STECF 15-15 pointed out that proposals for stock management plans in the ICES area are currently taking into account F<sub>MSY</sub> ranges. In such scenario SHI calculations would need to be revised to reflect the use of F<sub>MSY</sub> ranges in management plans, a scenario for which the 2014 Balance Indicator Guidelines state: '*Where Fmsy is defined as a range, exceeding the upper end of the range is interpreted as "overfishing"*'.
- Norway Lobster FUs - Information from the ICES stock assessment graph database has been used to split the *Nephrops* landings in a given area into Functional Unit (FU) based estimates (if there was more than one FU in a given area). An average over the last five years' landings by FU has been used to calculate the splitting factors. Only *Nephrops* FUs with harvest rates and F<sub>MSY</sub> values available (category 1 *Nephrops* stocks) are included in the calculation of the SHI indicator. Possible shortcomings of this method are described in section 3.4.2.
- ICES currently estimates F<sub>MSY</sub> proxies for many data limited stocks (assessment category 3 and 4). For many of these stocks the state in relation to F<sub>MSY</sub> proxy is given in the advice, however, the exact values for F<sub>t</sub>/F<sub>MSY</sub> (F<sub>t</sub> = fishing mortality by year) are not presented and they are also missing in the assessment database. EWG 18-14 was not able to include these stocks

in the SHI calculations. For future years, a recommendation to ICES to provide this information would be highly beneficial.

- Highly Migratory Stocks (ICCAT) - Stock status information for highly migratory species under the jurisdiction of the ICCAT was reviewed to determine which stocks could be incorporated in the SHI indicator since a stock assessment database with stock status data are not available from ICCAT. Stocks were selected according to the following criteria:
  - The most recent assessment was undertaken in 2014 or more recently;
  - A value for  $F/F_{MSY}$  was given in, or a value for  $F/F_{MSY}$  could be derived using the information given in the relevant ICCAT report.
- Mediterranean and Black Sea Biological Indicator Evaluation  
Assessment made during STECF working group was compiled by JRC and was provide for the SHI calculation. This was a useful source of information that would be a recurrent data collection. However, GFCM stock assessment was not included in this stock assessment database and during the preliminary working group 34 stocks assessment parameters were collected from the 53 Stock Assessment Forms scutinized from GFCM website and included in the SHI calculation.
- EWG 19-13 Prep. Meeting participants noted that the list of  $F/F_{MSY}$  ratios in the JRC database includes only the outcomes of the assessment carried out in the framework of STECF meetings. In order to further increase the accuracy of the SHI calculation for the Mediterranean, information on  $F$  and  $F_{MSY}$  timeseries was therefore extracted from reports of the GFCM Working Group on Stock Assessment of Demersal Species (WGSAD), the Working Group on Stock Assessment of Pelagic Species (WGSAP), as well as stock assessment forms available online (<http://www.fao.org/gfcm/data/safs/en/>). EWG 19-13 Prep. Meeting notes that this was a time consuming process since in many cases data has to manually be extracted from graphs provided in stock assessment forms, and considers that a single database with a complete list of updated assessments (as is available for the ICES region) should be required for the Mediterranean and Black Sea and for high migratory species especially looking for Tuna species assessments. For Tuna,  $F/F_{MSY}$  has been collected through ICCAT and IOTC but sometimes reports only provide short time series.
- In cases where stock assessments were available from more than one source, the more updated stock assessment was taken into account for SHI calculations. Where STECF and GFCM assessment were available and values of  $F$  and/or  $F_{MSY}$  differed, both assessments were retained and the SHI calculations were based on an average of the two assessment results.

### Indicator Trends

SHI indicator trends were calculated according to the filters detailed below for the years 2011-2017 (Table 3.3.1.2).

Table 3.3.1.2 Methodology used to automatically generate comments on indicator trends.

Filter 1	Filter 2	Result
At least the last 2 consecutive years with data	Slope* >0.5	Increasing
	Slope* <-0.5	Decreasing
	-0.5=<Slope*=<0.5	No significant trend**
	Slope = 0	Flat / null
No data for 2016 and/or 2017		No conclusion (Null value)

\* The slope is calculated with the intercept of the trend line

\*\* A threshold of 5% is used to indicate whether the value is significant or not.

Instances where the SHI indicator values are based on stocks that comprise less than 40% of the total value of landings by those fleet segments are highlighted in the indicator table. EWG 18-14 considers that for such fleet segments SHI indicator values cannot be used meaningfully to assess the balance or imbalance. No trend analysis was performed for such fleet segments.

### 3.3.2 Stocks at Risk Indicator (SAR)

According the 2014 Balance Indicator Guidelines (COM 2014, 545 final), the stocks at risk indicator is a measure of how many stocks that are biologically vulnerable are being affected by the activities of the fleet segment, i.e., stocks which are at low levels and are at risk of not being able to replenish themselves and which are either important in the catches of the fleet segment or where the fleet segment is important in the overall effects of fishing on the stock. If a fleet segment takes more than 10% of its catches taken from a stock which is at risk, or the fleet segment takes 10% or more of the EU fleets total catches from a stock at risk, the 2014 Balance Indicator Guidelines suggest that this could be treated as an indication of imbalance.

A detailed description and discussion of the methodology can be found in the reports of STECF 15-02/15-15. According to the 2014 Balance Indicator Guidelines the SAR indicator aims to count the number of stocks that are exploited by a fleet segment and which are currently assessed as being at high biological risk. According the definition of the SAR indicator in the 2014 Balance Indicator Guidelines, a stock at risk (SAR) means a stock which is either:

- a) assessed as being below the  $B_{lim}$ ; or
- b) subject to an advice to close the fishery, to prohibit directed fisheries, to reduce the fishery to the lowest possible level, or similar advice from an



international advisory body, even where such advice is given on a data-limited basis; or

c) subject to a fishing opportunities regulation which stipulates that the fish should be returned to the sea unharmed or that landings are prohibited; or

d) a stock which is on the IUCN 'red list' or is listed by CITES.

AND for which either:

1- the stocks make up to 10% or more of the catches by the fleet segment;

**or**

2- the fleet segment takes 10% or more of the total catches from that stock.

The meaning of these last two conditions are represented in Figure 3.3.2.1. Here, three stocks are exploited by five fleet segments, and landings data (in weights) are available for each stocks/fleet segment. The marginal sum of landings for each fleet segment is computed (by row) and used to scale each landing value to its relative contribution (in percentage) to the total landings for each fleet segment. In the meantime, the marginal sum of landings for each stock (by column) is computed and used to scale each landing value to its relative contribution (in percentage) to the total landings for each stock. According to the SAR definition, all the cases in which either the relative contribution by fleet segment or by stocks is equal to or larger than 10% are selected and considered for the SAR. Then, the value of the SAR for each fleet segment corresponds to the number (if any) of the stocks over the threshold (highlighted in orange) and listed as "at risk". In the example of Fig. 3.3.2.1, if all the stocks (A, B, and C) are defined "at risk", the Fleet segments 1 and 2 will have a SAR=1, while the Fleet segments 2-5 will have a SAR=2.

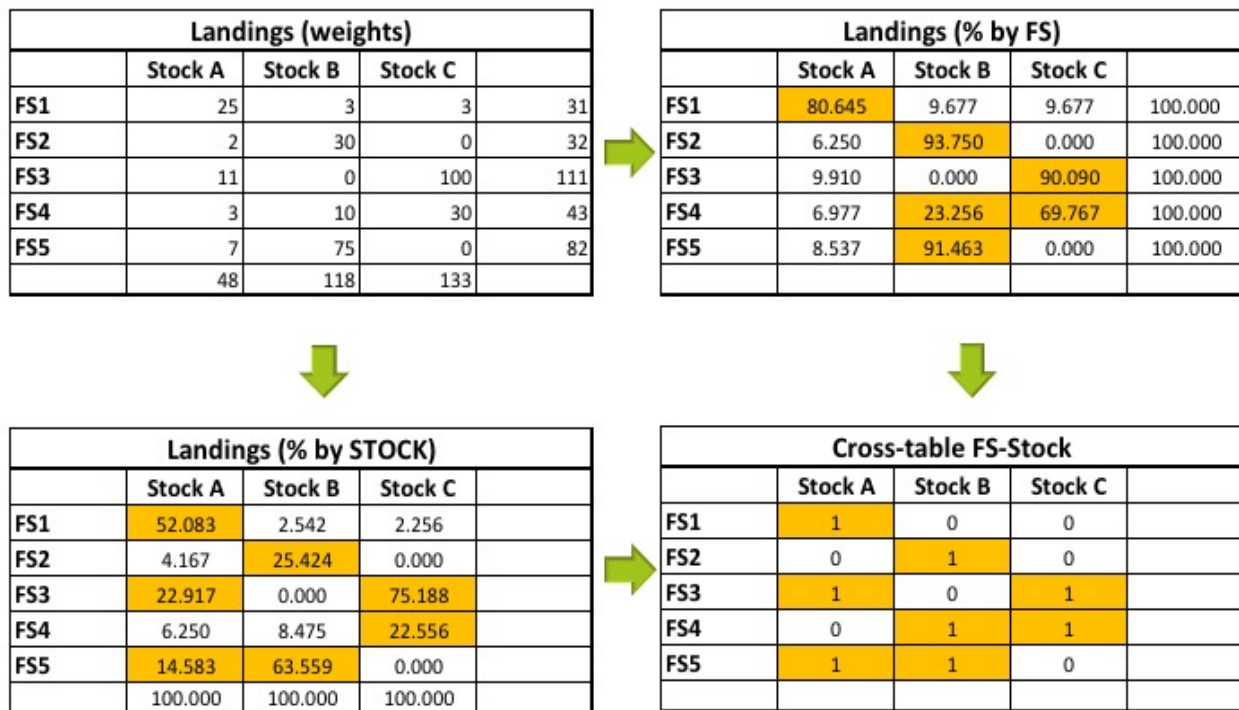


Figure 3.3.2.1. Example of pre-processing of landings data for the computation of the SAR indicator

During the preparatory meeting EWG 19-13, more than 280 stocks were examined. For 2019 Balance Group, 186 items were considered at risk for at least one year of the time period 2009-2017. These represent over 200 stocks considering that some regulations are related to groups. For example, Mobula listing in CITES count for one item but four Mobulas species are included, which correspond to five FAO species codes (including mobula nei, corresponding to FAO 3alpha code RVM). Moreover, some stocks are still unclear or unknown and the construction of the mapping was then based on the species distribution's knowledge (from FishBase, IUCN or publications).

The total number of Stocks as Risk increased from 2012 to 2018, mainly due to the introduction of new fishing regulation texts including some fishing prohibition to data limited species with scientific concerns but also due to the improvement in quality and availability of some RFMO's assessments (Figures 3.3.2.2-3).

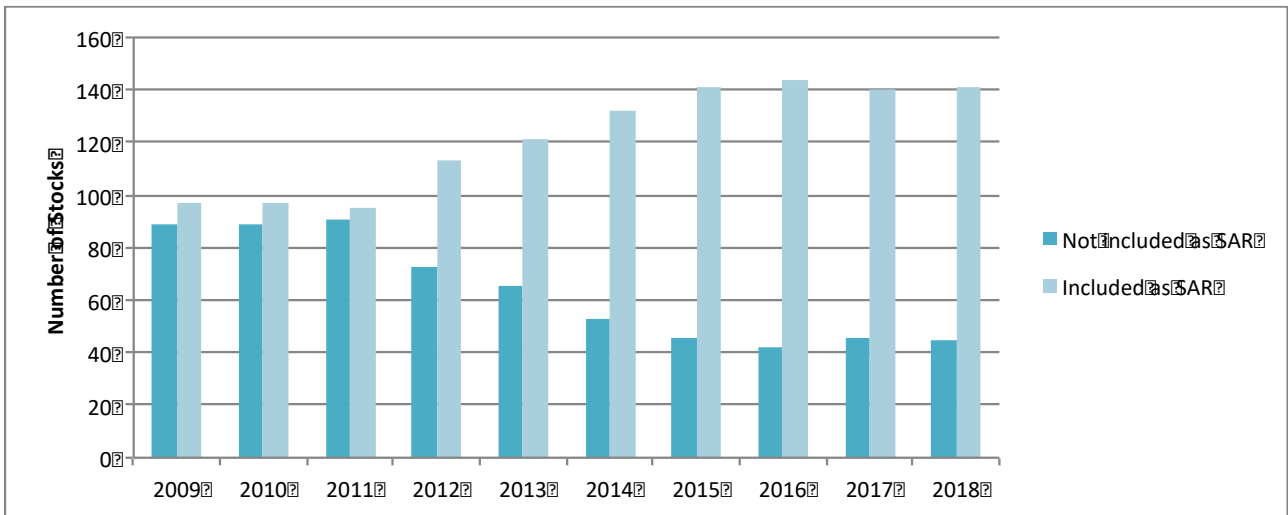


Figure 3.3.2.2 - Distribution of the number of stocks considered as SAR per year.

For 2018, about a third of the stocks were selected based on quantitative data (SSB/ $B_{lim}$ ), another third according to RFMO's advices based on quantitative data different from  $B_{lim}$  and the remaining third were linked to some listing in International conventions (IUCN or CITES).

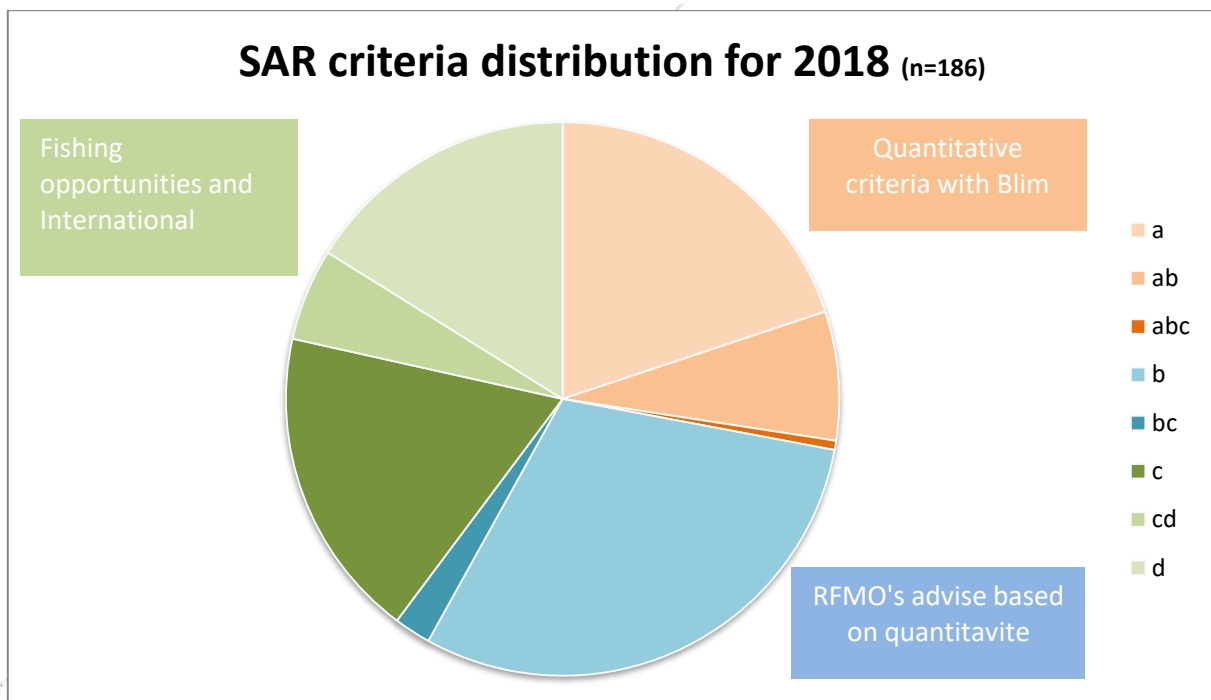


Figure 3.3.2.3 - Distribution of SAR per selecting criteria (a to d) in 2017.

The same methodology described in the STECF 15-02 / 15-15 reports was applied by the expert selecting stocks for the calculation of the SAR. The calculation of the indicator was then carried out using a SQL coding. The code is designed to compute the SAR indicator value, for the temporal range defined by the input data, for each

fleet segment, by crossing-checking DCF landings data provided by JRC with a list of stocks-at-risk prepared by ad hoc contract and validated during the preparatory working.

The same methodology used for attributing landings data available at species level to stocks was used for the calculation of the SAR indicator (see section 3.3.1). The full list of stocks at risk identified for the assessed fleet segments in the reference year 2017 is presented in Annex IV.

### SAR SQL: Inputs

Four sources of data are used as input for the calculation:

1. The full database of the DCF Landings by year, species, areas and fleet segment provided by the JRC;
2. The list of the stocks identified as "at-risk" for one (or more) of the conditions a) to b) in the previous definition. These stocks at risk are listed by year, stock code, FAO 3 alpha code and area.
3. The splitting table described for the SHI (see section 3.3.1) and used to estimate the proportion of each stock in the DCF landing's data.
4. The ICES database of stock distribution, which represents a reference for some steps of the computation and for the check of coherence of the other input data.

The SQL script firstly uses as input the DCF Landings database provided by the JRC (in csv format). The first step of the analysis is the re-shaping of landings data: records by species are transformed in records by stocks. This transformation allows to map the catches presented by species and fishing area to catches per stocks.

The list of the stocks as risk was organized as a 2-way matrix, in which each row corresponds to a stock identified by its code, the 3 alpha species code and the area of presence, while each column corresponds to a year of the analysis (see Table 3.3.2.1).

In this matrix, the code "ALL" identify stocks at risk for with respect to all the fishing techniques, whereas specific codes separated by commas are listed in other cases. The code "0" of the matrix corresponds to stocks NOT at risk for a specific year.

### SAR Calculation: Workflow

The workflow is summarized in Figure 3.3.2.4.

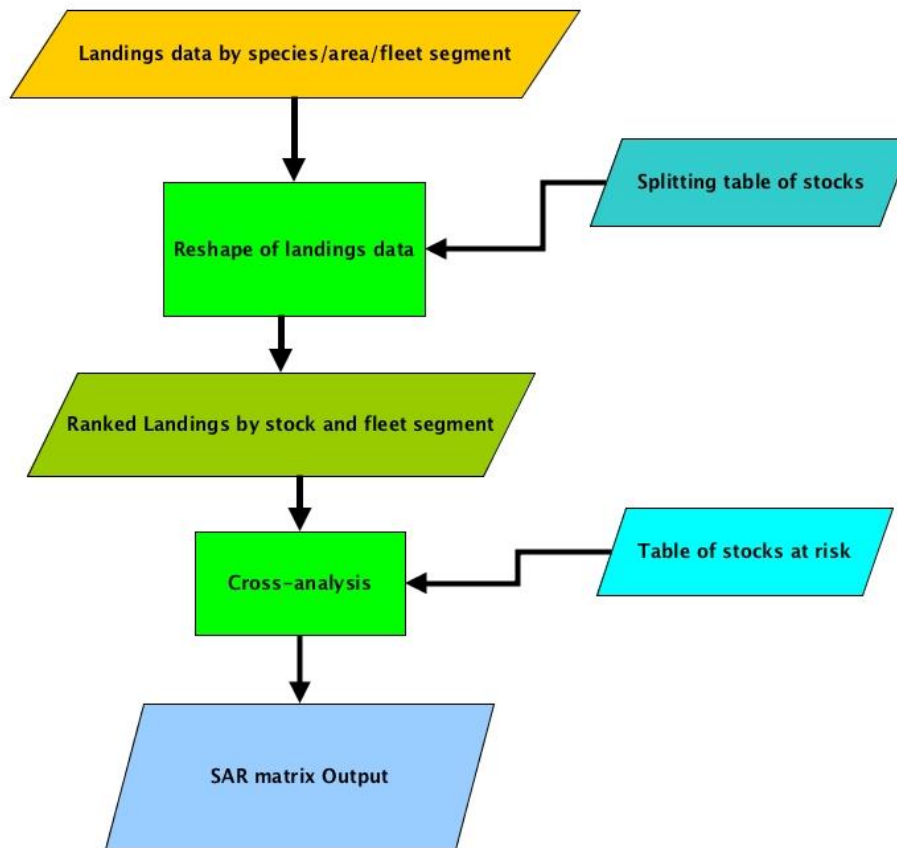


Figure 3.3.2.4. Workflow of calculation designed to calculate the SAR for EU fleet segments

This year the calculation was performed under SQL coding during the meeting, to do so, the distinction of gear prohibition that was taken into account since 2016 was erased. This change only affects tope shark (*Galeorhinus galeus*) in the Mediterranean where GFCM regulation refers to bottom-set nets, longlines and tuna trap.

### SAR Outputs

1. A data frame, exported as a common Excel File (.xlsx), in long format, which reports the SAR value for each fleet segment and for each year. This is the main output of the script and contains the following fields:
  - Member.State: the three alpha code identifying the MS
  - Supra.Region: the area of activity of the fleet segment
  - Fishing.technique: the gear used
  - Vessel.length.group: the class of LOA
  - geo\_indicator: Area
  - Year: the reference year
  - SAR: the value of the SAR indicator
  - Interpretation: the meaning of the SAR value

- Fleet\_Segment\_name: an internal code generated by the JRC for data processing purposes
- Cluster\_name: the highest level of aggregation
- Stock\_at\_Risk: the name of the stocks determining the SAR value
- Category of the threshold: (cF): >10% fleet segment catch, (cS): > 10% stock catch or (cFS): both 10 % thresholds are fulfilled
- Criteria of selection: (a) Blim, (b) advice, (c) regulation, (d) international conventions
- Number of stocks for which selection criteria is (a)

An example of this output is provided in Table 3.3.2.1.

Table 3.3.2.1 - Some sample rows of the SARmatrix output.

Member State	Supra Region	Fishing.technique	Vessel.length.group	geo_indicator	year	SAR	Interpretation	Fleet_Segment_name	Cluster_name	Stock_at_Risk	Criteria
BGR	AREA37	DFN	VL1218	NGI	2010	2	Out of balance	BGR A37 DFN1218 °	AREA37 DFN VL1218	dgs-gsa29, tur-gsa29	a/a
BGR	AREA37	DFN	VL1218	NGI	2011	0	In balance	BGR A37 DFN1218 °	AREA37 DFN VL1218		
BGR	AREA37	DFN	VL1218	NGI	2012	0	In balance	BGR A37 DFN1218 °	AREA37 DFN VL1218		
FRA	AREA27	DTS	VL2440		2011	3	Out of balance	FRA A27 DTS2440		ory-nea, bli.27.5b67, cod.27.6a	b/b/b
FRA	AREA27	DTS	VL2440		2012	0	In balance	FRA A27 DTS2440 °	AREA27 DTS VL2440		
FRA	AREA27	DTS	VL2440		2013	0	In balance	FRA A27 DTS2440 °	AREA27 DTS VL2440		
PRT	AREA27	DFN	VL0010	NGI	2016	0	In balance	PRT A27 DFN0010			
PRT	AREA27	DFN	VL0010	P3	2009	-1	No stocks at risk found	PRT A27 DFN0010 P3			
PRT	AREA27	DFN	VL0010	P3	2010	-1	No stocks at risk found	PRT A27 DFN0010 P3			

The most important issues related to the calculation of indicator values discussed and (where possible) addressed during the EWG 19-13 Prep. Meeting and previous Prep. Meeting are outlined below:

- Committee for Central for Eastern Atlantic (CECAF) - Stock status information for pelagic species under the jurisdiction of the CECAF was reviewed to determine which stocks could be incorporated in the SAR

indicator. The 2018 CECAF-FAO reports were available for evaluation of the SAR this year, which allows an update of the SAR. Madeiran sardinella, Round sardinella, Bonga shad, Atlantic horse mackerel and Cunene horse mackerel from north CECAF were included in the selection as well as Madeiran sardinella, Round sardinella both for north and south CECAF.

- When  $B_{lim}$  was not available a proxy of  $0.4 SSB_{msy}$  were agreed to be used for some RFMO's stocks as for instance the inclusion of Striped Marlin (*Tetrapturus audax*) in IOTC.
- Where new species were added to the SAR list, the relevant geographical ranges were investigated and corresponding FAO fishing areas added to the Stock Description column in the 2017 SAR stock selection sheet.
- The main issues faced by the group during the EWG 18-14 Prep. Meeting were that in some cases the stock assessments had not yet been released, the deadline taken into account was the 20/07/2019. The group thus reviewed the available information and agreed the outcomes during preparatory meeting.
- Since 2016, ICES is on a review process of stock coding for auto-generation of advice sheets. The groups noticed that the cessation of the STECF Consolidated Review of Scientific Advice reports in 2014 caused difficulties for the compilation of stock advice, especially in OFR areas.
- The experts agreed to select only the 'critically endangered' (CR) fish species listed on the IUCN Red list as stocks at risk for the SAR calculation, in order to be consistent with the previous years. However, in a purpose of evaluation of the fishing activity on the environment the inclusion of fishes under 'endangered' (EN) category as well as some other species (eg. Marine mammals, birds, carals, etc.) category would make sense to be considered.
- SAR definition criteria 'c' includes some EC Regulations for fishing opportunity. However, the temporal measures listed in such Regulations cannot be included in the SAR selection (eg. Porkupine bank closure from 01-31 May). Specific gear restrictions were not taken into account neither (for calculation simplification purpose, see above).
- The group stressed that the information on SAR criteria 'c' and 'd' are still heterogeneous from the various relevant reports and selection of stocks still dependent on interpretation, with the exception of criteria 'a' and 'b'. However, the last 2 years has seen some noticeable progress in term of quality and clarity.
- The group highlight the impossibility to perform properly the calculation for some OFR stocks. Only the first threshold calculation can be performed (the stocks make up to 10% or more of the catches by the fleet segment) but the second one is partial (the fleet segment takes 10% or more of the total catches from that stock.) considering that the EWG does not have access to the total catch of OFR stocks. This is also the case for mainland where some stocks are assessed at by member states (eg. Scallops), these national assessments while available might be considered for estimation.

## Indicator Trends

EWG 19-13 agreed with the conclusions reached in the STECF 15-02 / 15-15 reports that calculation of trend for SAR indicator is not relevant. Considering that SAR selection is based on both quantitative or qualitative data and its calculation produce a binary value after threshold selection, it would be incorrect to produce a trend.

The group decided to produce an overview table of the SAR indicator per year and areas (see table here: <https://stecf.jrc.ec.europa.eu/reports/balance>).

### *3.3.3 Return on Investment (ROI) and/or Return on Fixed Tangible Assets (RoFTA)*

According the 2014 Balance Indicator Guidelines (COM 2014, 545 final), the Return on Investment (ROI) or Return on Fixed Tangible Assets (RoFTA) indicator compares the long-term profitability of the fishing fleet segment to other available investments. If this value is smaller than the low-risk long term interest rates available elsewhere, then this suggests that the fleet segment may be overcapitalised. If the return on investment or net profit is less than zero and less than the best available long-term risk-free interest rate, this is an indication of long-term economic inefficiency that could indicate the existence of an imbalance.

ROI (also referred to as capital productivity) is the return of the investment divided by the cost of the investment. It measures profits in relation to the capital invested, i.e. indicates how profitable a sector is relative to its total assets. The higher the return, the more efficient the sector is in utilising its asset base.

When data on intangible assets (e.g. fishing rights, natural resource) are not available, the Return on Fixed Tangible Assets (ROFTA) is used as an approximation of ROI.

ROI is calculated for EWG 19-13 as:

$$\text{Net profit} / (\text{fleet depreciated replacement value} + \text{estimated value of fishing rights})$$

where,

$$\text{Net profit} = (\text{Income from landings} + \text{other income} + \text{income from fishing rights}) - (\text{crew wage} + \text{unpaid labour} + \text{energy costs} + \text{repair costs} + \text{other variable costs} + \text{other non-variable costs} + \text{fishing rights costs} + \text{annual depreciation})$$

ROI is compared against a Target Reference Point (TRP). For this exercise, the 5-year average of the risk-free long-term interest rate for each MS was used.

RoFTA is calculated as

$$\text{Net profit} / (\text{fleet depreciated replacement value});$$



where,

Net profit = (Income from landings + other income) - (crew wage + unpaid labour + energy costs + repair costs+ other variable costs + other non-variable costs + annual depreciation)

Note: Indicators are not calculated if one or more of the essential cost and/or income items are not provided e.g. Net profit is not calculated if depreciated replacement value was not provided.

EWG 19-13 applied the criteria from the 2014 Balance Indicator Guidelines to comment on whether fleet segments were 'in balance' or 'out of balance'. When the indicator value was less than the interest rate, but greater than zero the comment, 'not sufficiently profitable' was used.

The RoFTA indicator has been calculated and is presented under section 3.6 for all Member States. ROI is only available for countries that provide data on fishing rights (income, costs /or estimated value of fishing rights), and is presented for 10 Member States.

### Indicator Trends

Trends were calculated according to the filters detailed below for the years 2012 – 2017 (Table 3.3.3.1).

Table 3.3.3.1 Methodology used to automatically generate comments on indicator trends.

Filter 1	Filter 2	Result
At least the last 2 consecutive years with data	Slope* >0.05	Increasing
	Slope* <-0.05	Decreasing
	-0.05=<Slope*=<0.05	No significant trend**
	Slope = 0	Flat / null

\* The slope is calculated with the intercept of the trend line / the first value of the trend (a/i0)

\*\* A threshold of 5% is used to indicate whether the value is significant or not.

### *3.3.4 Ratio Current Revenue and Break-Even Revenue (CR/BER)*

According to the 2014 Balance Indicator Guidelines (COM 2014, 545 final), the ratio between current revenue and break-even revenue measures the economic capability of the fleet segment to keep fishing on a day-by-day basis: does income cover the pay for the crew and the fuel and running costs for the vessel? If not, there may be an imbalance. If the ratio between current revenue and break-even

revenue is less than one, this is an indication of short-term economic inefficiency that could indicate the existence of an imbalance.

As recommended by STECF 18-14, the long-term viability analysis of CR/BER, as outlined in the 2014 Balance Indicator Guidelines, was used.

Current revenue to break-even revenue ratio (CR/BER) is calculated as:

$$\text{Current revenue (CR) / Break Even Revenue (BER)}$$

In which:

$$\text{CR} = \text{income from landings} + \text{other income}$$

$$\text{BER} = \text{fixed costs} / (1 - [\text{variable costs} / \text{current revenue}])$$

In which:

$$\text{Fixed costs} = \text{other non-variable costs} + \text{annual depreciation} + \text{opportunity cost of capital}$$

And,

$$\text{Variable costs} = \text{crew wage} + \text{unpaid labour} + \text{energy costs} + \text{repair costs} + \text{other variable costs}$$

As for the ROI or RoFTA indicator, fleet segments frequently need to be grouped together in clusters in order to deliver economic data that does not breach confidentiality requirements. Fleet segments should only be clustered when the number of vessels in the fleet segment is too low to ensure confidentiality of sensitive economic data. As economic data are often only provided by the main fleet segment contained in the cluster, the other minor fleet segments in the cluster may not contain any data.

### Indicator Trends

Trends were calculated according to the filters detailed below for the years 2012 – 2017 (Table 3.3.4.1).

Table 3.3.4.1 Methodology used to automatically generate comments on indicator trends.

Filter 1	Filter 2	Result
At least the last 2 consecutive years with data	Slope* >0.05	Increasing
	Slope* <-0.05	Decreasing
	- 0.05=<Slope*=<0.05	No significant trend**
	Slope = 0	Flat / null

\* The slope is calculated with the intercept of the trend line / the first value of the trend (a/i0)

\*\* A threshold of 5% is used to indicate whether the value is significant or not.

### 3.3.5 The Inactive Fleet Indicators

According to the 2014 Balance Indicator Guidelines (COM 2014, 545 final), the Vessel Use Indicators describe how intensively vessels in a fleet segment are being utilized. One of these Vessel Use Indicators is the Inactive Fleet Indicator, which describes the proportion of vessels that are not actually active at all (i.e. that did not fish at any time in the year).

The inactive vessels are split according to length classes. For each subgroup, the number of vessels, total GT and kW are provided per year. If the proportion of inactive vessels is more than 20% (in number or in GT or in kW) within a MS, this could indicate some technical inefficiency.

#### Indicator Trends

Trends were calculated according to the filters detailed below for the years 2012 – 2017 (Table 3.3.5.1).

Table 3.3.5.1 Methodology used to automatically generate comments on indicator trends.

Filter 1	Filter 2	Result
At least the last 2 consecutive years with data	Slope* >0.05	Increasing
	Slope* <-0.05	Decreasing
	- 0.05=<Slope*=<0.05	No significant trend**
	Slope = 0	Flat / null

\* The slope is calculated with the intercept of the trend line / the first value of the trend (a/i0)

\*\* A threshold of 5% is used to indicate whether the value is significant or not.

### 3.3.6 The Vessel Use Indicator

According to the 2014 Balance Indicator Guidelines (COM 2014, 545 final), the 'Vessel Use Indicators' describe how intensively vessels in a fleet segment are being utilised. One of these Vessel Use Indicators is the Vessel Utilisation Ratio (VUR). This indicator concerns the average activity levels of vessels that fished at least once during the year, taking into account the seasonality of the fishery and other restrictions. Under normal conditions, it can be expected that 10% or less of the vessels in a fleet segment should be inactive, which could be due to major repairs, refits, conversions or pending sales and transfers. If more than 20% of the fleet segment is recurrently inactive or if the average activity level of vessels in a fleet segment is recurrently less than 70% of the potential, workable activity of comparable vessels, this could indicate technical inefficiency, that may reveal the existence of an imbalance, unless it can be explained by other reasons, such as unexpected climatic or man-made events or emergency measures as foreseen in the CFP.

Two sets of values for this indicator were included in the balance indicator tables prepared by JRC; VUR per fleet segment based on a theoretical maximum Days At Sea (DAS) submitted voluntarily by some Member States, and VUR<sub>220</sub> per fleet segment based on a reference DAS of 220 days. In total the VUR indicator were estimated for 17 Member States and presented in addition to the indicator VUR<sub>220</sub>.

### Indicator Trends

Trends were calculated according to the filters detailed below for the years 2012 – 2017 (Table 3.3.6.1).

Table 3.3.6.1 Methodology used to automatically generate comments on indicator trends.

Filter 1	Filter 2	Result
At least the last 2 consecutive years with data	Slope* >0.05	Increasing
	Slope* <-0.05	Decreasing
	- 0.05=<Slope*=<0.05	No significant trend**
	Slope = 0	Flat / null

\* The slope is calculated with the intercept of the trend line / the first value of the trend (a/i0)

\*\* A threshold of 5% is used to indicate whether the value is significant or not.

## **3.4 Indicator Issues, Problems and Caveats**

### *3.4.1 General Considerations*

In line with the meeting TOR EWG 19-13 considered the technical, economic and biological indicators contained in the 2014 Balance Indicator Guidelines (COM 2014, 545 final), and commented on the balance or imbalance for the fleet segments provided according to the criteria of the guidelines.

The group could not assess in any detail the reliability of the data and indicator values which were made available in the limited time available. For biological indicators several errors were noted and corrected during the EWG 19-13 Prep. Meeting as well as during EWG 19-13, but it was not possible to fully assess the reliability of the data that were used to calculate indicator values. Instead, additional information on, for instance, the coverage of the indicator was provided (see section on fleet segments coverage). Further checking and/or peer review by experts from a wider range of Member States would thus have been appropriate prior to using the indicator values for the purpose of the EWG. For the technical and economic indicators, it was assumed that the 2019 AER EWGs 19-04 and 19-06 had already quality checked the data. In some cases, the assessment of the

economic indicators was made difficult because of data gaps and the use of inconsistent clustering of some fleet segments over time by some MS.

Comments on whether specific fleet segments are in or out of balance with their fishing opportunities were automatically generated using a series of filters by EWG 19-13 based on the 2014 Balance Indicator Guidelines as requested by the TOR. The EWG nevertheless recognises and acknowledges that deciding whether a fleet segment is in or out of balance with its fishing opportunities is a judgement which must include consideration of political aims and preferences and also depends on the individual characteristics of fleet segments, communities and fisheries. Such a judgement call should ultimately be made by fisheries management decision makers with relevant regional expertise.

Comments on indicator trends were automatically generated using a series of filters. The EWG considers that such automatically generated filters give better consistency than asking experts to comment on trends. EWG 19-13 considers that the definitions and thresholds used should in future be tested in more detail. Indicator specific methods may in future increase the accuracy of indicator trends, for instance the use of a moving average for the economic indicators could be considered due to the high level of fluctuations in some indicator values.

### *3.4.2 Biological Indicator Considerations*

General issues, problems and caveats that affect the overall reliability of the biological indicators specified in the 2014 Balance Indicator Guidelines have already been highlighted in the STECF 15-02, 15-15, 16-09 and 18-14 reports, and a summary of proposed actions was presented in Annex I of STECF 16-09. To avoid repetition caveats which were already discussed by previous EWGs are not repeated here. With regards to the efficiency of the indicator calculation process EWG 19-13 observes that a database where stock assessment data coming from all RFMOs is still lacking. Moreover, the cessation of the STECF Consolidated Review of Scientific Advice reports in 2014 caused difficulties for the compilation of stock advice, especially in the case of OFR areas. Another problem for the calculation of the biological indicators arises from the aggregated species groups (see Annex I).

#### *3.4.2.1 Sustainable Harvest Indicator (SHI)*

STECF stock assessment data were extracted from a database supplied by the JRC. In order to further increase the accuracy of the SHI calculation for the Mediterranean, information on  $F$  and  $F_{MSY}$  time series was in addition extracted from reports of the GFCM Working Group on Stock Assessment of Demersal Species (WGSAD), the Working Group on Stock Assessment of Pelagic Species (WGSAP), as well as stock assessment forms available online (<http://www.fao.org/gfcm/data/safs/en/>; Table 3.4.2.1).

EWG 19-13 Prep. Meeting notes that a single database with a complete list of updated assessments (as is available for the ICES region) should be required for the Mediterranean and Black Sea and for high migratory species especially looking

for Tuna species assessments. For Tuna,  $F/F_{MSY}$  has been collected through ICCAT and IOTC, but sometimes reports only provide short time series.

In cases where stock assessments were available from more than one source, the more updated stock assessment was taken into account for SHI calculations. Where STECF and GFCM assessment were available and values of  $F$  and/or  $F_{MSY}$  differed, both assessments were retained and the SHI calculations were based on an average of the two assessment results.

A further difficulty encountered by the EWG 19-13 Prep. Meeting participants, as already observed by EWG 18-14, was the fact that some recent stock assessment outcomes are available for both single and combined GSAs. For example, the spottail mantis shrimp (*Squilla mantis*) stock was assessed by combining GSAs 17-18 by STECF, but using data from GSA 17 only by GFCM. The SHI estimates took into account both assessments. EWG 19-13 notes that the species was not analyzed in the framework of StockMed project and there is no evidence that the combined assessment would better reflect the status of the stock.

Table 3.4.2.1 - Source of updated (year of assessment 2018) stock assessment data for Mediterranean (Area 37) fleet segment SHI calculations.

Species	GSA	Source (year of assessment)
ane	6	STECF (2017)
ane	09_10_11	STECF (2017)
ane	17_18	STECF (2017)
ane	22	GFCM- (2017)
ane	22_23	STECF (2017)
ane	29	STECF (2017)
ara	1	STECF (2018)
ara	2	GFCM- (2017)
ara	6	STECF (2018)
ars	09_10_11	STECF (2018)
ctc	17_18	STECF (2018)
dgs	29	STECF (2017)
dps	1	GFCM- (2017)
dps	3	GFCM- (2017)
dps	6	GFCM- (2017)
dps	09_10_11	STECF (2018)
dps	12_13_14_15_16	GFCM- (2017)
dps	17_18_19	STECF (2018)
mts	17	GFCM- (2017)
mts	17_18	STECF (2018)
mut	1	STECF (2018)
mut	6	STECF (2018)
mut	7	STECF (2018)
mut	9	STECF (2018)
mut	10	STECF (2018)
mut	15	GFCM- (2017)
mut	16	GFCM- (2017)
mut	17_18	STECF (2018)
mut	19	GFCM- (2017)
mut	20	GFCM- (2017)
mut	29	GFCM- (2017)
nep	5	STECF (2018)
nep	6	STECF (2018)
nep	17_18	STECF (2018)
pac	25	GFCM- (2017)
pil	6	GFCM- (2018)

Species	GSA	Source (year of assessment)
hke	01_03	GFCM- (2017)
hke	01_05_06_07	STECF (2018)
hke	6	GFCM- (2017)
hke	7	GFCM- (2017)
hke	09_10_11	STECF (2018)
hke	12_13_14_15_16	GFCM- (2017)
hke	17_18	GFCM- (2018)
hke	17_18_stecf	STECF (2018)
hke	19	STECF (2017)
hke	20	GFCM- (2017)
hmm	29	STECF (2017)
hom	09_10_11	STECF (2017)

Species	GSA	Source (year of assessment)
pil	16	GFCM- (2017)
pil	17_18	STECF (2017)
pil	22	GFCM- (2017)
pil	22_23	STECF (2017)
rpw	29	STECF (2017)
sbr	01_03	GFCM- (2017)
sol	17	STECF (2018)
spr	29	STECF (2017)
tgs	17	GFCM- (2017)
tur	29	STECF (2017)
whg	29	STECF (2017)

### 3.4.2.2 Stocks at Risk Indicator (SAR)

Criterion 'a' specified for the identification of stocks at risk in the 2014 Balance Indicator guidelines was generally not applicable for most of the stocks in Mediterranean, since these stocks lack  $B_{lim}$  estimates. SAR selection in the Mediterranean and Black Sea was instead based mainly on criteria b – d of the 2014 Balance Indicator Guidelines. Whilst reviewing the SAR indicators it was clear that the interpretation of several criteria is subjective. The rationale of interpreting criterion b for the Mediterranean Sea should be further discussed by future EWGs / during a revision of the guidelines by the Commission as foreseen under ToR 6 of the present report.

Another issue discussed by experts was the fact that the SAR definition criterion 'c' necessitates the consideration of EC fishing opportunity regulations / GFCM Recommendations, which in some cases are gear specific. For example, according to Recommendation GFCM/36/2012/3, each Contracting member and non-Contracting Party (CPCs) shall ensure that catches of tope shark (*Galeorhinus galeus*) taken with bottom- set nets, longlines and tuna traps shall be promptly released unharmed and alive to the extent possible. EWG 18-14 continued using a coding system introduced by EWG 17-08 to distinguish gear prohibitions which are in place for such stocks. However, the temporal measures listed in such Regulations could not be included in the SAR selection criteria.

In some cases, the list of stocks at risk comprises units (defined by species name and distribution) are absent in both ICES table of stocks definitions and the Splitting table used to re-shape the input landings data. This issue forces the experts to consider these units as stand-alone entities, and generates unofficial stock codes. Moreover, it complicates the computation of the SAR indicator, which is largely based on the knowledge about stocks distribution.

### 3.4.2.3 *Suggestion to improve the biological indicator calculation*

Taking into account the issues faced by the group in the biological indicator calculation, EWG 19-13 reiterates the importance of implementing a common database with the information required for the calculation of the SAR and SHI indicators by the JRC or by contracting experts using ad-hoc contracts, in order to avoid data source retrieval during the preparatory meeting. The preparatory meeting could instead be divided in a first part dedicated to the check of inconsistencies in biological indicator data input, and a second part dedicated to the output check.

Moreover, the group noticed that ICES is currently providing  $F_{MSY}$  proxy values for more and more of the Data Limited Stocks (DLS). This means that the SHI indicator may be calculated including information from these stocks. However, the actual values for current  $F$  divided by the  $F_{MSY}$  proxy ( $Ft/F_{MSY}$  proxy) are in most cases not yet provided by ICES, neither in the ICES advice sheets nor in the stock assessment database. The reason is that often the assessments still use just a survey index, while the determination of reference points is carried out e.g., with a production model and only the qualitative information on stock status is used for advice. Therefore, the information on the stock status of DLS stocks could not be used for this year's SHI calculations. The EWG 19-13 suggests starting a dialog with ICES to explore the possibility that information on  $Ft/F_{MSY}$  proxy is made available in the future, and to discuss for which stocks the information is robust enough given the uncertainties around these estimates.

More in general EWG 19-13 suggests that bilateral meetings between STECF/JRC and relevant RFMOs should be arranged in order to inform RFMOs about STECF Balance EWGs, improve coordination in general, and collaborate on the provision of accurate input data for the biological indicators in particular.

### 3.4.3 *Economical and Technical Indicator Considerations*

General issues, problems and caveats which affect the overall reliability of the economic and technical indicators specified in the 2014 Balance Indicator Guidelines (COM(2014) 545 final) have already been highlighted in the STECF 15-02, 15-15, 16-09. In addition, the following issues were discussed in some detail by EWG 18-14 and updated by EWG 19-13.

#### The economic indicators of ROI/RoFTA and CR/BER

There are a number of issues with the economic indicators for assessment of balance, some of which have been highlighted in previous reports and some issues which have not. The two main economic indicators are return on investment (ROI)/return on fixed tangible assets (RoFTA) and current revenue against breakeven revenue (CR/BER). Historically, in STECF working groups on balance these two indicators were considered to indicate respectively the long term and short-term economic performance of fleet segments. ROI/RoFTA was considered



to be a long-term economic indicator as it incorporates opportunity costs while CR/BER was considered to be a short-term indicator as it excluded opportunity and depreciation costs. There are a number of issues with the understanding of these indicators and EWG 19-13 reiterates the need to revise the guidelines.

#### *3.4.3.1 Return on Investment (ROI) and/or Return on Fixed Tangible Assets (RoFTA)*

EWG 19-13 notes that different approaches are taken when estimating the ROI and/or RoFTA indicators by the Annual Economic Report (AER) and Balance expert working groups. The 2014 Balance indicator Guidelines specify that the indicator is to be compared against the 'low risk long term interest rate'. The guidelines further suggest to use the 'arithmetic average interest rate for the previous 5 years. On the other hand, the AER uses the 'real interest rate' when calculating the Opportunity cost of Capital, which would then be used as the reference point if or when assessing ROI or RoFTA in the AER. EWG 16-09 participants considered the discussion of this issue presented in Annex 1 of the AER 2016, as well as the possible ways forward presented by AER 2016 participants. Until the 2014 Balance Indicator Guidelines are amended Balance EWGs are however not in a position to amend the manner in which the ROI and/or RoFTA indicators are calculated. EWG 19-13 suggests that the outcome of STECF 18-15 is used as input to the proposed future revision of the guidelines.

#### *3.4.3.2 Ratio Current Revenue and Break-Even Revenue (CR/BER)*

The *CR/BER* measures the economic capability of the fleet segment to keep fishing on a day-by-day basis. According to the 2014 Balance Indicator Guidelines, the *CR/BER* is calculated as:  $CR/BER = Revenue / Break-Even Revenue$ ; where the *Revenue* considers income from landings and other income, while the *Break-Even Revenue (BER)* accounts for fixed and variable costs. However, the same Indicator Guidelines allow for the possibility to include the opportunity cost of capital and the depreciation costs in the estimation.

STECF 15-15 decided not to consider the opportunity cost of capital in the break-even revenue calculations in order to differentiate from the ROI and RoTA indicators, and provide a more short-term approach. However, this indicator provides little extra information than the ROI/RoFTA given that both indicators use a measure of profitability in one year. The results of this indicator are generally the same as ROI/RoFTA and so serious consideration should be given to excluding its use in future works on balance. To counter-balance this, the long-term viability analysis of CR/BER, as outlined in the 2014 Guidelines, was used instead by EWG 19-13.

EWG 19-13 reiterates the previous comment that due to the volatile nature of variable costs associated with fishing, the CR/BER indicator values may fluctuate considerably from one year to the next.

### *3.4.3.3 The Inactive Fleet Indicators*

EWG 19-13 stresses again that especially in fleet segments with under 10m vessels (small-scale coastal fleets), many vessels are only used part time and fishing is often not the only source of income. Therefore, this indicator needs to be treated with care and does not necessarily indicate that these fleet segments are not in balance.

Within the current data file provided by the JRC, EWG 19-13 notes that the inactive fleet indicators (by vessel numbers, GTs and kW) estimated by length class do not provide appropriate measures of the inactivity level within the length class or each length class inactivity is measured as the percentage of the entire fleet rather than the percentage of inactivity within the length class. The current method allows identification of the length class that contributes most to the overall fleet inactivity. However, this method masks the level of inactivity within the length class. An alternative and more appropriate measure of the inactivity level within a length class can be obtained by dividing the number of inactive vessels in the class by the total number of vessels in the same length class. This alternative method could be provided in the data file alongside the current format.

Additionally, MS could comment in their fleet reports on the nature of the levels of inactivity within length classes and overall for the entire fleet in particular on whether the levels of inactivity are due to vessel registration processes at the national level or if these levels represent latent fishing capacity.

### *3.4.3.4 The Vessel Use Indicator*

As for the inactive fleet indicator, EWG 19-13 notes that for the VUR indicator, the small-scale fleet should be treated differently due to the fact that many fishers are only working part-time or fishing is only one source of income.

### 3.5 Indicator Findings – Regional Overviews

#### 3.5.1 NAO – North Atlantic

##### Sustainable Harvest Indicator (SHI)

Out of 372 fleet segments active in 2017, landings in value have been provided aggregated in 327 fleet segments and SHI indicator values were available for 304.

According to the criteria in the 2014 Balance Indicator Guidelines, the SHI indicator values for 157 fleet segments cannot be used meaningfully to assess the balance or imbalance because the indicator values are based on stocks that comprise less than 40% of the total value of landings by those fleet segments.

The EWG notes that for the 147 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance (Figure 3.5.1.1), accounted for 71.33% of the total value of the landings in 2017 provided by MS, and were as follows:

- 95 fleet segments may not be in balance with their fishing opportunities;
- 52 fleet segments may be in balance with their fishing opportunities.

##### Stocks at Risk Indicator (SAR)

For 108 active fleet segments in 2017, one or more stock at risk was detected.

According to the criteria in the 2014 Balance Indicator Guidelines, the number of fleet segments per SAR category is shown in the table below:

SAR	1	2	3	4	5	6	7	>7
N of fleet-segments	57	25	11	4	8	1	1	1

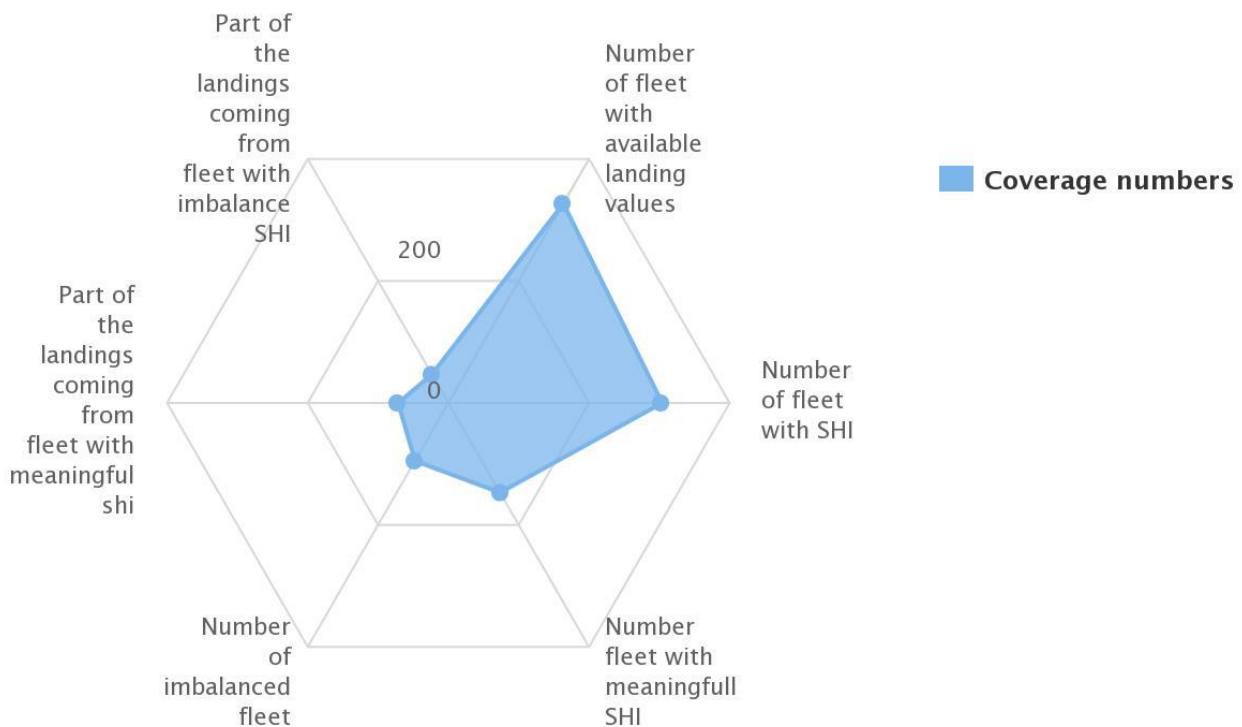


Figure 3.5.1. Diagram showing the SHI indicator information available for Area 27 in 2017.

### Return on Investment (ROI) and/or Return on Fixed Tangible Assets (RoFTA)

The number of fleet segments for which *ROFTA* is available for 2017 in the North Atlantic region (NAO) covering 15 EU countries is 232 and the number of segments for which trends are calculated is 217 (i.e., for the remaining 15 fleet segments, a null trend or no trend was established). *RoI* is available for 72 active fleet segments (or clustered fleet segment) from 6 MS. As *ROFTA* is available for all countries and most fleet segments (or aggregated fleet segments), it was used for this regional analysis.

According to the criteria in the 2014 Balance Indicator Guidelines, the EWG notes that the *RoFTA* indicator values for the 232 fleet segments indicate that:

- 188 fleet segments may be in balance with their fishing opportunities.
- 40 fleet segments may not be in balance with their fishing opportunities;
- 4 fleet segments are classified as not sufficiently profitable.

For 159 segments, an increasing trend is assessed for *ROFTA* while a decreasing trend is observed for 58 segments. A further 15 fleet segments had no clear trend or no trend could be calculated.

### Ratio between Current Revenue and Break-Even Revenue (CR/BER)

The number of fleet segments for which the *CR/BER* indicator is available is 232.

According to the criteria in the 2014 Balance Indicator Guidelines EWG notes that the CR/BER indicator values for the 232 fleet segments for which balance/out of balance was calculated indicate that:

- 192 fleet segments may be in balance with their fishing opportunities.
- 40 fleet segments may not be in balance with their fishing opportunities;

An increasing trend for *CR/BER* was assessed for 146 fleet segments while a decreasing trend was observed for 37 segments. A further 49 fleet segments had no clear trend or no trend could be calculated.

### The Inactive Fleet Indicators

The EU inactive fleets in the North Atlantic (NAO) comprised 74 segments with 10,497 reported inactive vessels in 2017.

Of the 74 inactive segments in 2017, 65 appeared to be in balance.

Overall, 15 fleet segments showed a decreasing trend in the number of inactive vessels and 13 showed an increasing trend. The remaining 46, showed no clear trend.

### The Vessel Use Indicator (or Vessel Utilisation ratio)

The Vessel Use Indicator ( $VUR_{220}$ ) was available for 243 fleet segments in NAO in 2017. According to the criteria in the 2014 Balance Indicator Guidelines EWG notes that the  $VUR_{220}$  indicator values indicate that:

- 88 fleet segments may be in balance with their fishing opportunities;
- 155 fleet segments may not be in balance with their fishing opportunities.

A decreasing trend for the Vessel Use Indicator was assessed for 8 fleet segments while an increasing trend was observed for 7 segments. No clear trend or no trend could be calculated for the remaining 228 fleet segments.

## *3.5.2 MBS - Mediterranean and Black Sea (area 37)*

### Sustainable Harvest Indicator (SHI)

Out of 213 fleet segments active in 2017, landings in value have been provided aggregated for 171 fleet segments and SHI indicator values were available for 162.

According to the criteria in the 2014 Balance Indicator Guidelines, the SHI indicator values for 71 fleet segments cannot be used meaningfully to assess the balance or imbalance because the indicator values are based on stocks that comprise less than 40% of the total value of landings by those fleet segments.

The EWG notes that for the 91 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance (Figure 3.5.2.1), accounted for 61.91% of the total value of the landings in 2017 provided by MS, and were as follows

- 80 fleet segments may not be in balance with their fishing opportunities;
- 11 fleet segments may be in balance with their fishing opportunities.

### Stocks at Risk Indicator (SAR)

For 42 active fleet segments in 2017, one or more stock at risk was detected.

According to the criteria in the 2014 Balance Indicator Guidelines, the number of fleet segments per SAR category is shown in the table below:

SAR	1	2	3	4	5	6	7	>7
N of fleet-segments	36	4	1					1

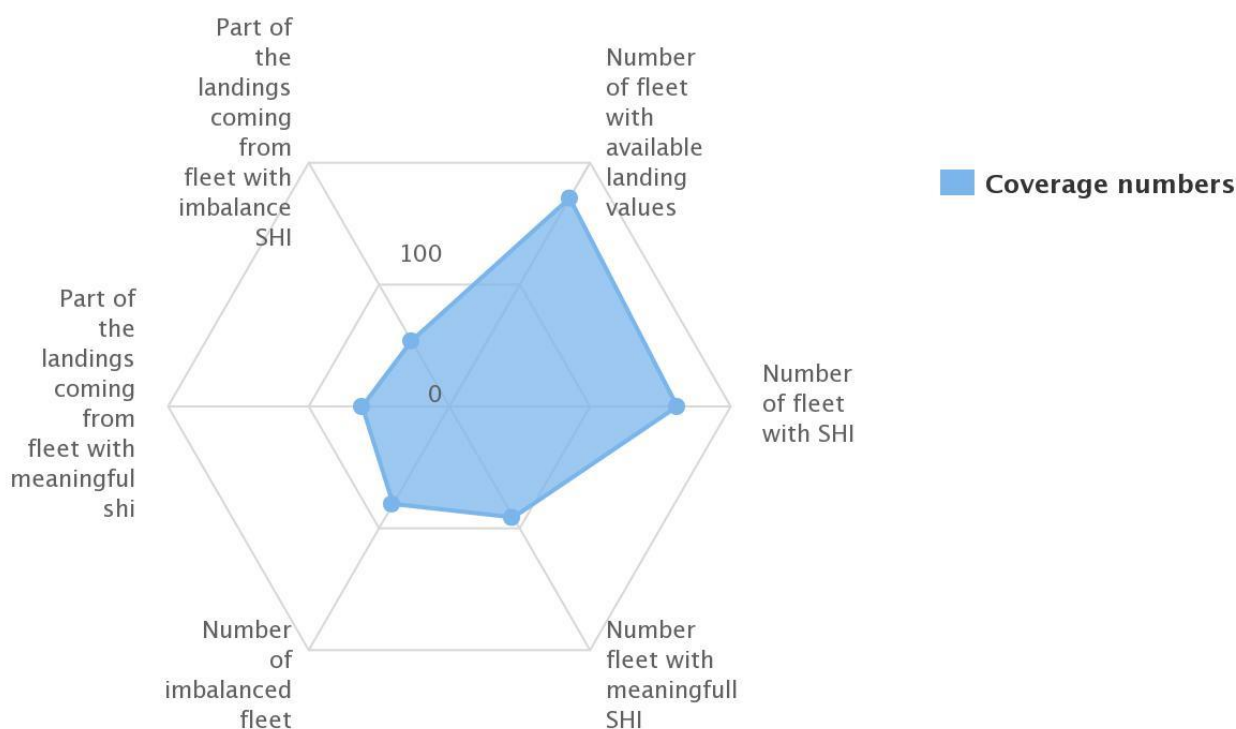


Figure 3.5.2.1. Diagram showing the SHI indicator information available for Area 37 in 2017.

### Return on Investment (ROI) and/or Return on Fixed Tangible Assets (RoFTA)

Out of 213 fleet segments active in 2017, landings in value have been provided in 171 fleet segments or aggregated fleet segments.

The number of fleet segments for which the *ROFTA* indicator is calculated in 2017 is 125. In 77 segments increasing trend in *ROFTA* are estimated, while decreasing trends are observed in 23 segments.

According to the criteria of the 2014 Balance Indicator Guidelines, EWG 19-13 notes that the overview of the *RoFTA* indicator values for the 125 fleet segments in Area 37, indicates that:

- 28 fleet segments may not be in balance with their fishing opportunities;
- 91 fleet segments may in balance with their fishing opportunities;
- 9 fleet segments appear to be not sufficiently profitable.

#### Ratio between Current Revenue and Break-Even Revenue (CR/BER)

The number of fleet segments for which the *CR/BER* indicator is calculated in 2017 is 125. In 17 fleet segments in Area 37, decreasing trends are detected, whereas in 70 fleet segments the trends in *CR/BER* are increasing.

According to the criteria of the 2014 Balance Indicator Guidelines, EWG 19-13 notes that the overview of the *CR/BER* indicator values for the 125 fleet segments in Area 37, indicates that:

- 32 fleet segments may not be in balance with their fishing opportunities;
- 93 fleet segments may be in balance with their fishing opportunities.

#### Inactive Vessel Indicators

Inactive vessels are potential complement to the existing capacity of the fleets. Their returning to the active fleets has the potential to delay or hamper the measures of bringing overcapacity into line with the available fishing opportunities.

In 2017 there were 41 inactive fleet segments located in Area 37. Increasing trends were found in 8 fleet segments, 14 segments showed decreasing trends, while the remaining 19 segments showed no significant trends or trends not calculated for missing data.

In Area 37 there were 6,377 inactive vessels reported in 2017, with 5,916 of them having LOA <12m. Hence only 7.2% of all inactive vessels had LOA >12m.

Inactive vessels registered in Croatia (2,297) dominated the total number of inactive vessels reported in area MBS in 2016 that made up to 36% of the total number of inactive vessels. In 2015 the number of inactive vessels registered in Croatia raised up to 3 times more than those in 2014. The number of inactive vessels in Croatia decreased by 50% in 2016 compared to 2015. A further reduction by around 5% was registered from 2016 to 2017. The reason for this considerable fluctuation is explained by the national registration of about 3,500 vessels into the SSCF as professional fishing vessels that took place in 2015. Before these vessels have been registered as "subsistence" fishing vessels and thus have not been reported in fisheries statistics.

### Vessel Utilization Ratio (VUR)

In Area 37 the number of fleet segments for which the Vessel Utilization Ratio (VUR<sub>220</sub>) is available is 128 in 2017. According to the criteria in the 2014 Balance Indicator Guidelines, EWG 19-13 notes that the VUR<sub>220</sub> indicator values for segments in the Area 37 indicate that:

- 28 fleet segments may be in balance with their fishing opportunities;
- 100 fleet segments may not be in balance with their fishing opportunities.

Out of 128 fleet segments for which VUR<sub>220</sub> could be calculated, increasing trends were detected in 5 segments, decreasing trends in 7 segments; the other fleet segments had flat trends (0 slope) or the trend was not estimated because of insufficient data.

### 3.5.3 OFR - Other Fishing Regions and French Outermost Regions

#### Sustainable Harvest Indicator (SHI)

Out of 62 fleet segments active in 2017, landings in value have been provided aggregated in 56 fleet segments and SHI indicator values were available for 26.

According to the criteria in the 2014 Balance Indicator Guidelines, the SHI indicator values for 15 fleet segments cannot be used meaningfully to assess the balance or imbalance because the indicator values are based on stocks that comprise less than 40% of the total value of landings by those fleet segments.

The EWG notes that for the 11 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance (Figure 3.5.3.1), accounted for 53.43% of the total value of the landings in 2017 provided by MS, and were as follows

- 4 fleet segments may not be in balance with their fishing opportunities;
- 7 fleet segments may be in balance with their fishing opportunities.

#### Stocks at Risk Indicator (SAR)

For 5 active fleet segments in 2017, one or more stock at risk was detected.

According to the criteria in the 2014 Balance Indicator Guidelines, the number of fleet segments per SAR category is shown in the table below:

SAR	1	2	3	4	5	6	7	>7
N of fleet-segments	3	1		1				



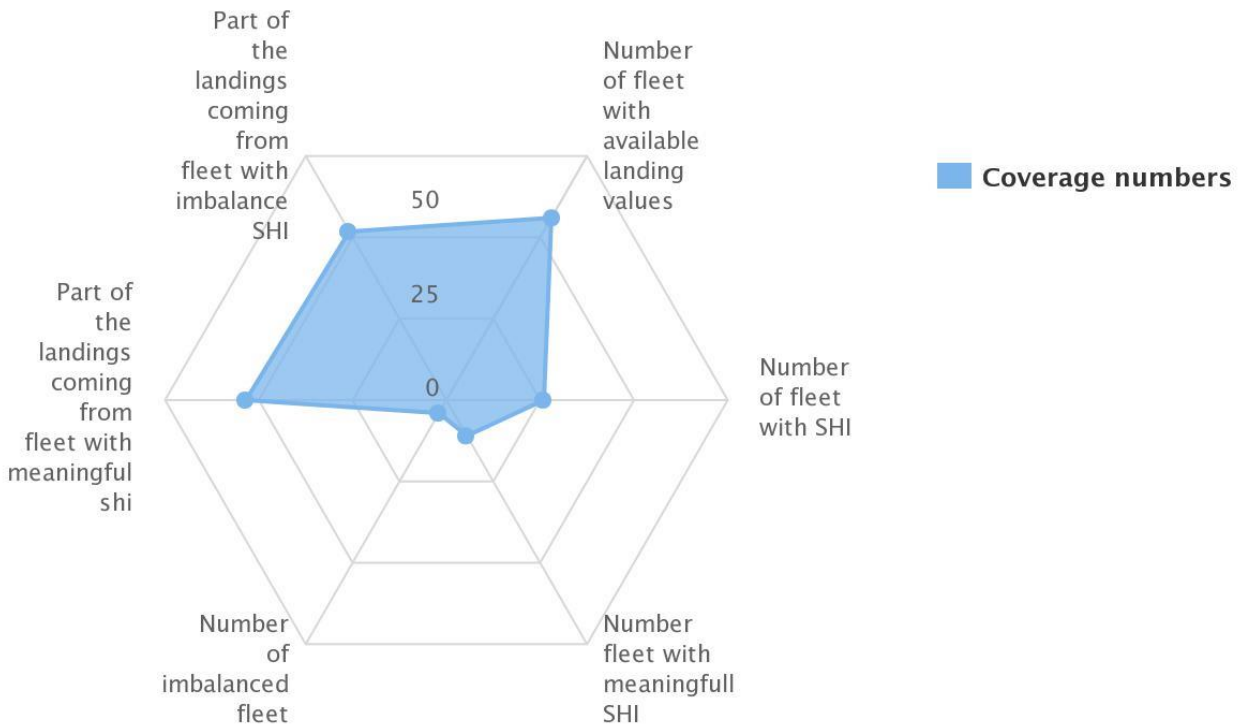


Figure 3.5.3.1. Diagram showing the SHI indicator information available for OFR in 2017.

### Return on Investment (ROI) and/or Return on Fixed Tangible Assets (RoFTA)

In the OFR region there are 80 fleet segments in total of which 18 are inactive. A RoFTA indicator is available for 21.

According to the criteria in the 2014 Balance Indicator Guidelines EWG 19-13 notes that the RoFTA indicator values for the 21 fleet segments indicate that:

- 5 fleet segments may not be in balance with their fishing opportunities;
- 15 fleet segments may be in balance with their fishing opportunities;
- 1 fleet segment appears to be not sufficiently profitable.

For 3 segments an increasing trend is assessed for *ROFTA* while a decreasing trend is observed for 6 segments. No trend could be established for the remaining 12 fleet segments.

### Ratio between Current Revenue and Break-Even Revenue (CR/BER)

In the OFR region the number of fleet segments for which the *CR/BER* indicator is available is 21 with trends assessed for 8. No trend could be established for the remaining 13 fleet segments.

According to the criteria in the 2014 Balance Indicator Guidelines EWG 10-13 notes that the CR/BER indicator values for the 21 fleet segments indicate that:

- 5 fleet segments may not be in balance with their fishing opportunities;
- 16 fleet segments may be in balance with their fishing opportunities.

### The Inactive Fleet Indicators

In 2017, four countries (France, Italy, Lithuania and Spain) reported 18 vessel length segments that had inactive vessels. Those of France, 13, were across the range of length groupings (*VL0010*, *VL1012*, *VL1218*, *VL1824*, *VL2440* and *VL40XX*) while the remainder were in the >24m in length categories.

In 2017, the fleet segments with the highest levels of inactivity within their national fleets in terms of vessels number are the *VL0010* group in France at 10.8%, the *VL0010* group and the *VL40XX* group in Lithuania at 3.4%.

### The Vessel Use Indicator

The number of fleet segments for which the Vessel Use Indicator is available is 48 and trends are available for 15 segments.

According to the criteria in the 2014 Balance Indicator Guidelines EWG 19-13 notes that the VUR<sub>220</sub> indicator values for the OFR segments, indicate that of the 48 segments:

- 33 fleet segments may not be in balance with their fishing opportunities;
- 15 fleet segments may be in balance with their fishing opportunities.

For 4 segments an increasing trend is assessed for Vessel Use Indicator while a decreasing trend is observed for 11 segments. No trend is observed for 33 segments.

### 3.6 Indicator Findings – National Sections<sup>5</sup>

For biological indicator the information is provide by Area as applicable (NAO, MBS, OFR), while for economic and technical indicators the information is provided at member state level.

Biological indicator values in the MS' Fleet reports for 2018 and the values for equivalent fleet segments as estimated by EWG 19-13 are given in Annex II and the comparison is commented for each MS in section 3.6 and chapter 4. Differences in biological indicators estimations can arise for a variety of reasons and care must be taken in interpreting any perceived differences in such values. For example, in many cases the SHI values may have been computed using results from stock assessments undertaken in different years and the discrepancies observed could simply arise from different perceptions of the stock ratio between F and FMSY in such assessments and the uncertainty associated with such estimates. In fact, the F/FMSY ratio is generally expected to change in successive stock assessments. Hence, indicator values correctly computed will be different if the ratios of F/FMSY are different.

The main purpose of these comparisons is to determine whether the estimated SHI values imply an equivalent status regarding whether the segments concerned may be in, or out of balance with their fishing opportunities. Hence if both values for a fleet segment are  $> 1.0$  (may be out of balance with fishing opportunities). Similarly, if both values are  $< 1.0$ , the status would be unchanged (may out of balance with fishing opportunities). In cases where the perceived status has changed and the indicator values are close to 1.0, it is likely that the status of the segment with respect to balance in reality may be either in or out of balance. Hence of there is a perceived change in status and the magnitude of the change is small, such segments are marked with an asteric in tables reported in Annex II. For some segments, the values for the SHI was not provided in the relevant MS fleet report, so no comparison can be made.

Similar comparisons are also carried out for economic and technical indicators and reported for each MS. Differences may arise for several reasons, including: (1) indicators produced by the JRC are in real terms as used in the AER while MS may have provided indicators in nominal values, and (2) the choice of indicator used, for example, whether the short-term or long-term CR/BER was used – the long-term viability (including the opportunity of cost of capital) was used by the JRC in line with recommendations from STECF 18-14.

EWG 19-13 provided also outputs by MS of EDI and NOS estimated following the approach proposed in EWG 18-14.

#### 3.6.1 *Belgium (BEL)*

##### Area 27

##### Sustainable Harvest Indicator (SHI)

Out of 9 fleet segments active in 2017, landings in value have been provided aggregated in 4 fleet segments and SHI indicator values were available for 4.

According to the criteria in the 2014 Balance Indicator Guidelines, the SHI indicator values for 2 fleet segments cannot be used meaningfully to assess the balance or

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<sup>5</sup> Complimentary data for SHI and SAR are available in ANNEXES II-VII

imbalance because the indicator values are based on stocks that comprise less than 40% of the total value of landings by those fleet segments.

The EWG notes that for the 2 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 84.91% of the total value of the landings in 2017 provided by MS, and were as follows:

- 1 fleet segment may not be in balance with their fishing opportunities;
- 1 fleet segment may be in balance with their fishing opportunities.

In the period 2012-2017 the SHI indicator values considered meaningful to assess balance or imbalance showed a decreasing trend.

### Stocks at Risk Indicator (SAR)

For 1 active fleet segments in 2017, one or more stock at risk was detected.

According to the criteria in the 2014 Balance Indicator Guidelines, the number of fleet segments per SAR category is shown in the table below:

SAR	1	2	3	4	5	6	7	>7
N of fleet-segments			1					

### Number of Overharvested Stocks (NOS)

The proportional distribution of NOS for the 4 fleet segments for which SHI has been calculated is shown in the table below:

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	0	3	1	0

### Economic Dependency Indicator (EDI)

Fleet segments' distribution over EDI classes is shown in the table below. Fleet segments reported are those for which  $F/F_{msy}$  is calculated and landings are available.

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	2	2	0	0

### Return on Investment (ROI) and/or Return on Fixed Tangible Assets (RoFTA)

There were 12 fleet segments in the Belgian fleet in 2017 of which 9 were active. After clustering 4 segments were available for analysis.

ROFTA was calculated for 4 segments:

- 3 segments were *in balance* with their fishing opportunities,
- 1 segment was *not in balance* with their fishing opportunities.

Trends were calculated for 4 segments:

- 3 segments displayed an *increasing* trend,
- 1 segment displayed a *decreasing* trend.

ROI was not calculated.

#### Ratio between Current Revenue and Break-Even Revenue (CR/BER)

CR/BER was calculated for 4 segments:

- 3 segments were *in balance* with their fishing opportunities,
- 1 segment was *not in balance* with their fishing opportunities,

Trends were calculated for 4 segments:

- 3 segments displayed an *increasing* trend,
- 1 segment displayed a *decreasing* trend.

#### The Vessel Use Indicator (VUR) and/or Vessel Use Indicator 220 (VUR<sub>220</sub>)

Note: VUR<sub>220</sub> is calculated on a standard year of 220 fishing days and is available in every case. VUR is calculated using the maximum days at sea provided by the Member State (where available).

VUR<sub>220</sub> was calculated for 4 segments:

- All 4 segments were *in balance* with their fishing opportunities,

Trends for the 4 segments were as follows:

- All 4 segments displayed *no* trend (or no trend could be calculated).

VUR was calculated for 4 segments:

- All 4 segments were *in balance* with their fishing opportunities.

Trends for the 4 segments were as follows:

- All 4 segments displayed *no* trend (or no trend could be calculated).

#### The Inactive Fleet Indicators

In 2017, 3 vessel length segments had inactive vessels (VL1218, VL1824 and VL2440). In previous year, these length classes were clustered into one segment (VL2440).

In total, inactive Belgian vessels account for 8.2% of the total number of vessels, 4.4% of the total GT and 6.2% of the total kW.

### Data Issues

As reported in the AER 2019, the questionnaire was adjusted in 2017 and fine-tuned in 2018. This may have an impact on the time series of some variables, like investments, which increased enormously, and subsidies, which show some unusual trends. The methodology for the calculation of days-at-sea and fishing days was adjusted to make it coherent with the methodological approach proposed in the workshop on transversal variables held in Nicosia (2<sup>nd</sup> Workshop on Transversal Variables). Given the specificities of some Belgian vessels fishing activity, under the new approach, fishing days can exceed days-at-sea. Furthermore, response rate with regards to the number of unpaid labours was too low to make sensible estimations.

### Comparison between MS annual fleet report and STECF EWG 19-13

The comparison between biological indicators reported in the MS annual fleet report and those estimated in the framework of EWG 19-13 revealed similar outputs in terms of fleet segment status both for SHI and SAR (see Annex II for more details).

Except for the only negative value, related to PMP VL1824, values of ROFTA reported in the MS annual fleet report for 2017 are higher than those estimated by EWG 19-13. However, the final evaluation on balance/imbalance by fleet segment is the same.

Except for the value related to PMP VL1824, values of CR/BER reported in the MS annual fleet report for 2017 are higher than those estimated by EWG 19-13. The differences in values would not affect the final evaluation on balance/imbalance by fleet segment. However, the MS annual fleet report considers in balance also PMP VL1824, which shows a value lower than 1. This is not coherent with the criteria adopted for the evaluation.

## 3.6.2 *Bulgaria (BGR)*

### Area 37

#### Sustainable Harvest Indicator (SHI)

Out of 25 fleet segments active in 2017, landings in value have been provided for all 25 fleet segments and SHI indicator values were available for 25.

The EWG notes that all 25 fleet segments may not be in balance with their fishing opportunities.

In the period 2012-2017 the SHI indicator values considered meaningful to assess balance or imbalance were increasing for 8 fleet segments, decreasing for 4 fleet

segments, with no evident trend for 1 fleet segment, no conclusion for 12 fleet segments.

### Stocks at Risk Indicator (SAR)

For 9 active fleet segments in 2017, one or more stock at risk were detected.

According to the criteria in the 2014 Balance Indicator Guidelines, the number of fleet segments per SAR category is shown in the table below:

SAR	1	2	3	4	5	6	7	>7
N of fleet-segments	7	2						

### Number of Overharvested Stocks (NOS)

The proportional distribution of NOS for the 25 fleet segments for which SHI has been calculated is shown in the table below:

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	0	1	6	18

### Economic Dependency Indicator (EDI)

Fleet segments' distribution over EDI classes is shown in the table below. Fleet segments reported are those for which F/Fmsy is calculated and landings are available.

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	0	1	2	22

### Return on Investment (ROI) and/or Return on Fixed Tangible Assets (RoFTA)

There were 29 fleet segments in the Bulgarian fleet in 2017 of which 25 were active. After clustering 16 segments were available for analysis.

ROFTA was calculated for 16 segments:

- 9 segments were *in balance* with their fishing opportunities,
- 7 segments were *not in balance* with their fishing opportunities.

Trends for the 16 segments were as follows:

- 6 segments displayed an *increasing* trend,

- 4 segments displayed a *decreasing* trend,
- 6 segments displayed a flat/null or no trend.

ROI was not calculated.

#### Ratio between Current Revenue and Break-Even Revenue (CR/BER)

CR/BER was calculated for 16 segments:

- 9 segments were *in balance* with their fishing opportunities,
- 7 segments were *not in balance* with their fishing opportunities,

Trends for the 16 segments were as follows:

- 6 segments displayed an *increasing* trend,
- 4 segments displayed a *decreasing* trend,
- 6 segments displayed a flat/null or no trend.

#### The Vessel Use Indicator (VUR) and/or Vessel Use Indicator 220 (VUR<sub>220</sub>)

Note: VUR<sub>220</sub> is calculated on a standard year of 220 fishing days and is available in every case. VUR is calculated using the maximum days at sea provided by the Member State (where available).

VUR<sub>220</sub> was calculated for 16 segments:

- All 16 segments were *not in balance* with their fishing opportunities.

Trends for the 16 segments were as follows:

- All 16 segments displayed no trend (or no trend could be calculated).

VUR was calculated for 16 segments:

- 2 segments were *in balance* with their fishing opportunities,
- 14 segments were *not in balance* with their fishing opportunities.

Trends for 16 segments were as follows:

- All 16 segments displayed *no* trend (or no trend could be calculated).

#### The Inactive Fleet Indicators

In 2017, 4 vessel length classes had inactive vessels (VL0006, VL0612, VL1218 and VL1824). The total inactive Bulgarian vessels account for 31.7% of the total number of vessels, 21.1% of the total GT and 27.8% of the total kW.

The fleet segment with the highest level of inactivity is the VL0612 group at 18.9% in terms of number of vessels and at 17.6% in terms of kW.

Except for VL1218, all length classes show a decreasing trend in terms of vessel numbers, GT and kW. All fleet segments appear to be in balance.

#### Data Issues



No major data issues were identified during the meeting.

### Comparison between MS annual fleet reports and STECF EWG 19-13

The comparison between biological indicators reported in the MS annual fleet report and those estimated in the framework of EWG 19-13 revealed similar outputs in terms of fleet segment status for SHI, while for SAR a comparison was not possible (see Annex II for more details).

Values of ROI reported in the MS annual fleet report for 2017 are different than those estimated by EWG 19-13 (same values for ROI and ROFTA). The differences in values affect in some cases the final evaluations on balance/imbalance by fleet segment.

Values of CR/BER reported in the MS annual fleet report for 2017 are different than those estimated by EWG 19-13. The differences in values affect in some cases the final evaluations on balance/imbalance by fleet segment.

The fleet segments PGP VL0006 and PMP VL0006 estimated by EWG 19-13 are out of balance but this is not consistent by the estimations of the MS. On the other hand, the estimations by MS regarding the fleet segments FPO with length class VL0612 and the DFN with vessel length VL1218 show that they are out of balance but this is not consistent by the estimations by EWG 19-13.

### *3.6.3 Croatia (HRV)*

#### Area 37

#### Sustainable Harvest Indicator (SHI)

Out of 35 fleet segments active in 2017, landings in value have been provided for all 35 fleet segments and SHI indicator values were available for 30.

According to the criteria in the 2014 Balance Indicator Guidelines, the SHI indicator values for 16 fleet segments cannot be used meaningfully to assess the balance or imbalance because the indicator values are based on stocks that comprise less than 40% of the total value of landings by those fleet segments.

The EWG notes that for the 14 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 89.94% of the total value of the landings in 2017 provided by MS, and were as follows:

- 13 fleet segments may not be in balance with their fishing opportunities;
- 1 fleet segment may be in balance with its fishing opportunities.

In the period 2012-2017 the SHI indicator values considered meaningful to assess balance or imbalance were increasing for 4 fleet segments, decreasing for 5 fleet segments, with no evident trend for 1 fleet segment, no conclusion for 4 fleet segments.

#### Stocks at Risk Indicator (SAR)

For 2 active fleet segments in 2017, one or more stock at risk was detected.

According to the criteria in the 2014 Balance Indicator Guidelines, the number of fleet segments per SAR category is shown in the table below:

SAR	1	2	3	4	5	6	7	>7
N of fleet-segments	2							

#### Number of Overharvested Stocks (NOS)

The proportional distribution of NOS for the 30 fleet segments for which SHI has been calculated is shown in the table below:

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	1	1	1	27

#### Economic Dependency Indicator (EDI)

Fleet segments' distribution over EDI classes is shown in the table below. Fleet segments reported are those for which  $F/F_{msy}$  is calculated and landings are available.

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	15	7	3	5

#### Return on Investment (ROI) and/or Return on Fixed Tangible Assets (RoFTA)

There were 40 fleet segments in the Croatian fleet in 2017 of which 35 were active. After clustering 23 segments were available for analysis.

ROFTA was calculated for 23 segments:

- 12 segments were *in balance* with their fishing opportunities,
- 7 segments were *not in balance* with their fishing opportunities,
- 4 segments were *not sufficiently profitable*.

Trends were calculated for 19 segments:

- 14 segments displayed an *increasing* trend,
- 5 segments displayed a *decreasing* trend,
- 4 segments displayed no trend (or no trend could be calculated).

ROI was calculated for 7 fleet segments:

- 6 segments were *in balance* with their fishing opportunities,
- 1 segment was *not in balance* with their fishing opportunities,

Trends were calculated for 7 segments:

- 5 segments displayed an *increasing* trend,
- 2 segments displayed no trend.

### Ratio between Current Revenue and Break-Even Revenue (CR/BER)

CR/BER was calculated for 23 segments:

- 13 segments were *in balance* with their fishing opportunities,
- 10 segments were *out of balance* with their fishing opportunities,

Trends for the 23 segments were as follows:

- 13 segments displayed an *increasing* trend,
- 3 segments displayed a *decreasing* trend,
- 7 segments displayed no trend (or no trend could be calculated).

### The Vessel Use Indicator (VUR) and/or Vessel Use Indicator 220 (VUR<sub>220</sub>)

Note: VUR<sub>220</sub> is calculated on a standard year of 220 fishing days and is available in every case. VUR is calculated using the maximum days at sea provided by the Member State (where available).

VUR<sub>220</sub> was calculated for 23 segments:

- 4 segments were *in balance* with their fishing opportunities,
- 19 segments were *not in balance* with their fishing opportunities.

Trends for the 23 segments were as follows:

- 3 segments displayed a *decreasing* trend,
- 17 segments displayed *no* trend (or no trend could be calculated).

VUR was calculated for 23 segments with the same results as VUR<sub>220</sub>.

### The Inactive Fleet Indicators

Five vessel length segments (all Area 37) had inactive vessels: VL0006, VL0612, VL1218, VL1824, VL2440. These represented 27.5% of the total number of vessels, 29.2% of the total GT and 32% of the total kW. The fleet segments with the highest levels of inactivity were the VL0612 group with 14% of vessels inactive (8% GT, 18% kW), the VL0006 group with 11% of vessels inactive (2% GT, 4% kW), and the VL1218 group with 1.3% of vessels inactive (4% GT, 4% kW).

### Data Issues

In the Annual Economic Report 2019 the following data issues were reported:

All fleet segments with major contribution to the total catches of the Croatian fleet have been sampled with satisfactory response rates. As regards to the 3 500 small-scale vessels which were transferred into the commercial Small-scale coastal fisheries (SSCF) in 2015, all these vessels fall under the polyvalent passive gears segment (PGP), but these fishers are not full-time engaged in the fishery and most of them had very limited activity in 2015-2017.

### Comparison between MS annual fleet reports and EWG 19-13

The comparison between biological indicators reported in the MS annual fleet report and those estimated in the framework of EWG 19-13 revealed similar outputs in terms of fleet segment status for SHI, while for SAR a comparison was not possible (see Annex II for more details).

The Croatian annual fleet report and the EWG 19-13 assess the same fleet segments in balance and out of balance for the ROFTA indicator. The CR/BER indicator values calculated for Croatia are different to the EWG 19-13 indicator; the number of segment fleets out of balance is lower in the Croatian annual fleet.

#### 3.6.4 *Cyprus (CYP)*

##### Area 37

##### Sustainable Harvest Indicator (SHI)

Out of 7 fleet segments active in 2017, landings in value have been provided for all 7 fleet segments and SHI indicator values were available for 7.

According to the criteria in the 2014 Balance Indicator Guidelines, the SHI indicator values for 5 fleet segments cannot be used meaningfully to assess the balance or imbalance because the indicator values are based on stocks that comprise less than 40% of the total value of landings by those fleet segments.

The EWG notes that for the 2 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 25.12% of the total value of the landings in 2017 provided by MS, and were as follows:

- 1 fleet segments may not be in balance with its fishing opportunities;
- 1 fleet segments may be in balance with its fishing opportunities.

In the period 2012-2017 the trend of SHI indicator values considered meaningful to assess balance or imbalance were with no conclusion for the 2 fleet segments.

##### Stocks at Risk Indicator (SAR)

No stock at risk was detected for active fleets.

##### Number of Overharvested Stocks (NOS)

The proportional distribution of NOS for the 7 fleet segments for which SHI has been calculated is shown in the table below:

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	0	1	6	0

#### Economic Dependency Indicator (EDI)

Fleet segments' distribution over EDI classes is shown in the table below. Fleet segments reported are those for which F/Fmsy is calculated and landings are available.

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	6	0	1	0

#### Return on Investment (ROI) and/or Return on Fixed Tangible Assets (RoFTA)

There were 9 fleet segments in the Cypriot fleet in 2017 of which 7 were active. After clustering 7 segments were available for analysis.

ROFTA was calculated for 6 segments:

- 2 segments were *in balance* with their fishing opportunities,
- 3 segments were *not in balance* with their fishing opportunities,
- 1 segment was *not sufficiently profitable*.

Trends for the 6 segments were as follows:

- 4 segments displayed an *increasing* trend,
- 2 segments displayed no trend (or no trend could be calculated).

ROI was not calculated.

#### Ratio between Current Revenue and Break-Even Revenue (CR/BER)

CR/BER was calculated for 6 segments:

- 2 segments were *in balance* with their fishing opportunities,
- 4 segments were *not in balance* with their fishing opportunities.

Trends for the 6 segments were as follows:

- 3 segments displayed an *increasing* trend,
- 3 segments displayed no trend (or no trend could be calculated).

#### The Vessel Use Indicator (VUR) and/or Vessel Use Indicator 220 (VUR<sub>220</sub>)

Note: VUR<sub>220</sub> is calculated on a standard year of 220 fishing days and is available in every case. VUR is calculated using the maximum days at sea provided by the Member State (where available).

VUR<sub>220</sub> was calculated for 7 segments:

- 1 segment was *in balance* with their fishing opportunities,
- 6 segments were *not in balance* with their fishing opportunities.

Trends for the 7 segments were as follows:

- All 7 segments displayed *no* trend (or no trend could be calculated).

VUR was not calculated.

### The Inactive Fleet Indicators

In 2017, 2 length classes included inactive vessels (VL0006 and VL0612).

The total inactive vessels account for 4.3% of the number of Cypriot vessels, 1.6% of the total GTs and 3.0% of the total kW of the Cypriot fleet.

### Data Issues

According to the AER 2019, no major data issues were identified.

### Comparison between MS annual fleet reports and STECF EWG 19-13

The comparison between biological indicators reported in the MS annual fleet report and those estimated in the framework of EWG 19-13 revealed similar outputs in terms of fleet segment status for SHI only for one fleet segment, while for SAR a comparison was not possible (see Annex II for more details).

ROFTA is available in the MS annual fleet report only for 4 fleet segments on a total of 6 (PGO VL0006 and PGO VL0612 are not reported). For these fleet segments values of ROFTA for 2017 are different than those estimated by EWG 19-13. Differences in values do not affect the final evaluations on balance/imbalance by fleet segment.

CR/BER is available in the MS annual fleet report only for 4 fleet segments on a total of 6 (PGO VL0006 and PGO VL0612 are not reported). For these fleet segments values of CR/BER for 2017 are different than those estimated by EWG 19-13. Differences in values affect the final evaluations on balance/imbalance for the fleet segment DTS VL2440.

#### 3.6.5 Denmark (DNK)

##### Area 27

##### Sustainable Harvest Indicator (SHI)

Out of 19 fleet segments active in 2017, landings in value have been provided for all 19 fleet segments and SHI indicator values were available for 18.

According to the criteria in the 2014 Balance Indicator Guidelines, the SHI indicator values for 4 fleet segments cannot be used meaningfully to assess the balance or imbalance because the indicator values are based on stocks that comprise less than 40% of the total value of landings by those fleet segments.

The EWG notes that for the 14 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 90.79% of the total value of the landings in 2017 provided by MS, and were as follows:

- 11 fleet segments may *not be in balance* with their fishing opportunities;
- 3 fleet segments may be *in balance* with their fishing opportunities

In the period 2012-2017 the SHI indicator values considered meaningful to assess balance or imbalance were decreasing for 8 fleet segments, with no evident trend for 9 fleet segments, no conclusion for 1 fleet segment.

#### Stocks at Risk Indicator (SAR)

For 12 active fleet segments in 2017, one or more stock at risk were detected.

According to the criteria in the 2014 Balance Indicator Guidelines, the number of fleet segments per SAR category is shown in the table below:

SAR	1	2	3	4	5	6	7	>7
N of fleet-segments	3	5	2		2			

#### Number of Overharvested Stocks (NOS)

The proportional distribution of NOS for the 18 fleet segments for which SHI has been calculated is shown in the table below

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	0	3	15	0

#### Economic Dependency Indicator (EDI)

Fleet segments' distribution over EDI classes is shown in the table below. Fleet segments reported are those for which  $F/F_{msy}$  is calculated and landings are available.

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	5	11	2	0

#### Return on Investment (ROI) and/or Return on Fixed Tangible Assets (RoFTA)

There were 23 fleet segments in the Danish fleet in 2017 of which 19 were active. After clustering 19 segments were available for analysis.

ROFTA was calculated for 19 segments:

- 15 segments were *in balance* with their fishing opportunities,
- 4 segments were *not in balance* with their fishing opportunities.

Trends were calculated for 19 segments.

- 17 segments displayed an *increasing* trend,
- 2 segments displayed a *decreasing* trend.

ROI was calculated for 19 segments:

- 14 segments were *in balance* with their fishing opportunities,
- 3 segments were *not in balance* with their fishing opportunities,
- 2 segments were *not sufficiently profitable*.

Trends were calculated for 19 segments:

- 17 segments displayed an *increasing* trend,
- 2 segments displayed a *decreasing* trend,

#### Ratio between Current Revenue and Break-Even Revenue (CR/BER)

CR/BER was calculated for 19 segments:

- 15 segments were *in balance* with their fishing opportunities,
- 4 segments were *not in balance* with their fishing opportunities,

Trends were calculated for 19 segments:

- 17 segments displayed an *increasing* trend,
- 2 segments displayed a *decreasing* trend,

#### The Vessel Use Indicator (VUR) and/or Vessel Use Indicator 220 (VUR<sub>220</sub>)

Note: VUR<sub>220</sub> is calculated on a standard year of 220 fishing days and is available in every case. VUR is calculated using the maximum days at sea provided by the Member State (where available).

VUR<sub>220</sub> was calculated for 19 segments:

- 5 segments were *in balance* with their fishing opportunities,
- 14 segments were *not in balance* with their fishing opportunities.

Trends for the 19 segments were as follows:

- All 19 segments displayed *no* trend (or no trend could be calculated).

VUR was not calculated.

#### The Inactive Fleet Indicators



In 2017, 4 Danish fleet segments were considered inactive (VL0010, VL1012, VL1218 and VL1824).

The total inactive vessels account for 24.2% of the number of Danish vessels, 1.6% of the total GTs and 5.0% of the total kW of the Danish fleet.

### Quality of data

An assessment on the data quality for Denmark was not reported in the AER 2019 as no expert with expertise on the Danish fishing fleets attended any of the two AER working groups.

### Comparison between MS annual fleet reports and STECF EWG 19-13

The comparison between biological indicators reported in the MS annual fleet report and those estimated in the framework of EWG 19-13 revealed similar outputs in terms of fleet segment status for SAR with some exceptions on stock numbers, while for SHI a comparison was not possible (see Annex II for more details).

Values of ROI reported in the MS annual fleet report for 2017 are equal to those estimated by EWG 19-13; while the values of ROFTA are different. As the main indicator for this MS is ROI, also the final evaluations on balance/imbalance by fleet segment are equivalent.

Values of CR/BER reported in the MS annual fleet report for 2017 are different than those estimated by EWG 19-13. These differences in values affect the final evaluation on balance/imbalance of one fleet segment (PGP with vessel length class VL0010).

### 3.6.6 *Estonia (EST)*

#### Area 27

#### Sustainable Harvest Indicator (SHI)

Out of 5 fleet segments active in 2017, landings in value have been provided for all fleet segments and SHI indicator values were available for all fleet segments.

According to the criteria in the 2014 Balance Indicator Guidelines, the SHI indicator values for 1 fleet segments cannot be used meaningfully to assess the balance or imbalance because the indicator values are based on stocks that comprise less than 40% of the total value of landings by those fleet segments.

The EWG notes that for the 4 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 73.94% of the total value of the landings in 2017 provided by MS, and 4 fleet segments may not be in balance with their fishing opportunities.

In the period 2012-2017 the SHI indicator values considered meaningful to assess balance or imbalance were increasing for 2 fleet segments, with no evident trend for 3 fleet segments.

#### Stocks at Risk Indicator (SAR)

For 1 active fleet segments in 2017, one or more stock at risk was detected.

According to the criteria in the 2014 Balance Indicator Guidelines, the number of fleet segments per SAR category is shown in the table below:

SAR	1	2	3	4	5	6	7	>7
N of fleet-segments	1							

#### Number of Overharvested Stocks (NOS)

The proportional distribution of NOS for the 5 fleet segments for which SHI has been calculated is shown in the table below:

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	0	1	3	1

#### Economic Dependency Indicator (EDI)

Fleet segments' distribution over EDI classes is shown in the table below. Fleet segments reported are those for which  $F/F_{msy}$  is calculated and landings are available.

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	1	0	0	4

#### Return on Investment (ROI) and/or Return on Fixed Tangible Assets (RoFTA)

There were 6 fleet segments in the Estonian fleet in 2017 of which 5 were active. After clustering 4 segments were available for analysis.

ROFTA was calculated for 4 segments:

- 4 segments were *in balance* with their fishing opportunities,
- No segment was *out of balance* with their fishing opportunities.

Trends were calculated for 4 segments:

- 2 segments displayed an *increasing* trend,
- 2 segments displayed a *decreasing* trend.

ROI was calculated for 4 segments:

- 2 segments were *in balance* with their fishing opportunities,
- No segment was *out of balance* with their fishing opportunities,
- 2 segments were *not sufficiently profitable*.

Trends were calculated for 4 segments:

- 1 segment displayed an *increasing* trend,
- 3 segments displayed a *decreasing* trend.

#### Ratio between Current Revenue and Break-Even Revenue (CR/BER)

CR/BER was calculated for 4 segments:

- 4 segments were *in balance* with their fishing opportunities.

Trends were calculated for 4 segments:

- 2 segments displayed an *increasing* trend,
- 2 segments displayed a *decreasing* trend.

#### The Vessel Use Indicator (VUR) and/or Vessel Use Indicator 220 (VUR<sub>220</sub>)

Note: VUR<sub>220</sub> is calculated on a standard year of 220 fishing days and is available in every case. VUR is calculated using the maximum days at sea provided by the Member State (where available).

VUR<sub>220</sub> was calculated for 4 segments:

- All 4 segments were *not in balance* with their fishing opportunities,

Trends for the 4 segments were as follows:

- All 4 segments displayed *no* trend (or no trend could be calculated).

VUR was not calculated.

#### The Inactive Fleet Indicators

In 2017, 1 vessel length segment had inactive vessels (VL1218). The total number of inactive Estonian vessels in the inactive fleet segment accounts for less than 1% of the total number of vessels, less than 1% of the total GT and less than 1% of total kW.

#### Data issues

In the Annual Economic Report 2019 the following data issues were reported:

The data concerning economic variables were collected as listed and defined in Commission Decision (EU) 2016/1251. For economic variables included in the Estonian Fisheries Information System (EFIS) (which includes logbook data and the fishing vessel register) data were collected on all members of the population. For other economic variables questionnaires were sent out. It is important to

mention that all these surveys have been carried out on a voluntary basis. Due to confidentiality issues, the data for the distant water fleet (DTS VL40XX) are not reported. There were only two owners operating with 5 vessels in this segment in 2017.

### Comparison between MS annual fleet reports and EWG 19-13

The comparison between biological indicators reported in the MS annual fleet report and those estimated in the framework of EWG 19-13 revealed different outputs in terms of fleet segment status for SAR, while for SHI a comparison was not possible (see Annex II for more details).

The CR/BER indicator values and the ROFTA indicator values calculated in the Estonian annual fleet report and the EWG 19-13 are identical: all the fleet segments appear to be in balance with their fishing opportunities according to the two economic indicators.

#### 3.6.7 Finland (FIN)

##### Area 27

##### Sustainable Harvest Indicator (SHI)

Out of the 8 fleet segments active in 2017, landings in value have been provided aggregated in 5 fleet segments and SHI indicator values were available for 5. According to the criteria in the 2014 Balance Indicator Guidelines, the SHI indicator values for 3 fleet segments cannot be used meaningfully to assess the balance or imbalance because the indicator values are based on stocks that comprise less than 40% of the total value of landings by those fleet segments.

The EWG notes that for the 2 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 20.61% of the total value of the landings in 2017 provided by MS, and were as follows

- 2 fleet segments may not be in balance with their fishing opportunities;
- No fleet segment may be in balance with their fishing opportunities.

In the period 2012-2017 the SHI indicator values considered meaningful to assess balance or imbalance were increasing for 4 fleet segments and with no evident trend for 1 fleet segment.

##### Stocks at Risk Indicator (SAR)

For 1 active fleet segments in 2017, one or more stock at risk was detected.

According to the criteria in the 2014 Balance Indicator Guidelines, the number of fleet segments per SAR category is shown in the table below:

SAR	1	2	3	4	5	6	7	>7
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N of fleet-segments	1								
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Number of Overharvested Stocks (NOS)

The proportional distribution of NOS for the 5 fleet segments for which SHI has been calculated is shown in the table below:

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	0	0	0	5

Economic Dependency Indicator (EDI)

Fleet segments' distribution over EDI classes is shown in the table below. Fleet segments reported are those for which  $F/F_{msy}$  is calculated and landings are available.

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	2	1	2	0

Return on Investment (ROI) and/or Return on Fixed Tangible Assets (RoFTA)

There were 11 fleet segments in the Finnish fleet in 2017 of which 8 were active. After clustering 5 segments were available for analysis.

ROFTA was calculated for 5 segments:

- All 5 segments were *not in balance* with their fishing opportunities.

Trends were calculated for 5 segments:

- 1 segment displayed an *increasing* trend,
- 4 segments displayed a *decreasing* trend.

ROI was calculated for 3 segments:

- All 3 segments were *not in balance* with their fishing opportunities,

Trends calculated for the 3 segments were:

- 1 segment displayed an *increasing* trend,
- 2 segments displayed a *decreasing* trend.

Ratio between Current Revenue and Break-Even Revenue (CR/BER)

CR/BER was calculated for 5 segments:

- All 5 segments were out of *balance* with their fishing opportunities.

Trends for the 5 segments were as follows:

- No segment displayed an *increasing* trend,
- 3 segments displayed a *decreasing* trend,
- 2 segments displayed no trend (or no trend could be calculated).

#### The Vessel Use Indicator (VUR) and/or Vessel Use Indicator 220 (VUR<sub>220</sub>)

Note: VUR<sub>220</sub> is calculated on a standard year of 220 fishing days and is available in every case. VUR is calculated using the maximum days at sea provided by the Member State (where available).

VUR<sub>220</sub> was calculated for 5 segments:

- 1 segment was *in balance* with their fishing opportunities,
- 4 segments were *not in balance* with their fishing opportunities.

Trends for the 5 segments were as follows:

- All 5 segments displayed *no* trend (or no trend could be calculated).

VUR was calculated for 5 segments:

- 2 segments were *in balance* with their fishing opportunities,
- 3 segments were *not in balance* with their fishing opportunities.

Trends were calculated for 5 segments:

- 2 segments displayed an *increasing* trend,
- 2 segments displayed *no* trend (or no trend could be calculated).

#### The Inactive Fleet Indicators

Three vessel length segments had inactive vessels: VL0010, VL1012, VL1218. These represented 54.4% of the total number of vessels, 27.2% of the total GT and 46.7% of the total kW. The fleet segment with the highest level of inactivity was the VL0010 group with 50.6% of vessels inactive (19.2% GT, 35.6% kW).

#### Quality of data

According to the AER 2019, there is a break in the time series of the number of active vessels in small-scale fishing in 2012, when the recording of active vessels was re-specified, and then again in 2014 and 2015 due to some methodological improvements. Over the last years Finland has also modified the assumptions used in the Perpetual Inventory Method (PIM) regarding service life of each asset, depreciation rates and share of each asset in total value as well as the price per capacity used. These updates have greatly affected depreciated replacement values and the depreciation reported for the time series, affecting also the net profits of the sector.

### Comparison between MS annual fleet reports and STECF EWG 19-13

The comparison between biological indicators reported in the MS annual fleet report and those estimated in the framework of EWG 19-13 was not possible (see Annex II for more details).

As the MS annual fleet report for Finland regarding the estimations of the indicators was not available, it was not possible to compare indicators calculated by the MS with those estimated by the EWG 19-13.

#### 3.6.8 France (FRA)

##### Area 27

##### Sustainable Harvest Indicator (SHI)

Out of 51 fleet segments active in 2017, landings in value have been provided aggregated in 50 fleet segments and SHI indicator values were available for 49.

According to the criteria in the 2014 Balance Indicator Guidelines, the SHI indicator values for 28 fleet segments cannot be used meaningfully to assess the balance or imbalance because the indicator values are based on stocks that comprise less than 40% of the total value of landings by those fleet segments.

The EWG notes that for the 21 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 74.57% of the total value of the landings in 2017 provided by MS, and were as follows

- 9 fleet segments may not be in balance with their fishing opportunities;
- 12 fleet segments may be in balance with their fishing opportunities.

In the period 2012-2017 the SHI indicator values considered meaningful to assess balance or imbalance were increasing for 3 fleet segments, decreasing for 6 fleet segments, with no evident trend for 12 fleet segments.

##### Stocks at Risk Indicator (SAR)

For 15 active fleet segments in 2017, one or more stock at risk were detected.

According to the criteria in the 2014 Balance Indicator Guidelines, the number of fleet segments per SAR category is shown in the table below:

SAR	1	2	3	4	5	6	7	>7
N of fleet-segments	6	4	1	2	2			

##### Number of Overharvested Stocks (NOS)

The proportional distribution of NOS for the 49 fleet segments for which SHI has been calculated is shown in the table below:

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	4	32	13	0

### Economic Dependency Indicator (EDI)

Fleet segments' distribution over EDI classes is shown in the table below. Fleet segments reported are those for which F/Fmsy is calculated and landings are available.

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	39	7	2	1

### Area 37

#### Sustainable Harvest Indicator (SHI)

Out of 28 fleet segments active in 2017, landings in value have been provided aggregated in 27 fleet segments and SHI indicator values were available for 26.

According to the criteria in the 2014 Balance Indicator Guidelines, the SHI indicator values for 18 fleet segments cannot be used meaningfully to assess the balance or imbalance because the indicator values are based on stocks that comprise less than 40% of the total value of landings by those fleet segments.

The EWG notes that for the 8 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 60.54% of the total value of the landings in 2017 provided by MS, and were as follows

- 4 fleet segments may not be in balance with their fishing opportunities;
- 4 fleet segments may be in balance with their fishing opportunities.

In the period 2012-2017 the SHI indicator values considered meaningful to assess balance or imbalance were increasing for 1 fleet segment, decreasing for 4 fleet segments, with no evident trend for 3 fleet segments.

#### Stocks at Risk Indicator (SAR)

For 9 active fleet segments in 2017, one or more stock at risk were detected.

According to the criteria in the 2014 Balance Indicator Guidelines, the number of fleet segments per SAR category is shown in the table below:

SAR	1	2	3	4	5	6	7	>7



N of fleet-segments	9							
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Number of Overharvested Stocks (NOS)

The proportional distribution of NOS for the 26 fleet segments for which SHI has been calculated is shown in the table below

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	3	1	0	22

Economic Dependency Indicator (EDI)

Fleet segments' distribution over EDI classes is shown in the table below. Fleet segments reported are those for which  $F/F_{msy}$  is calculated and landings are available.

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	16	9	1	0

OFR

Sustainable Harvest Indicator (SHI)

Out of 16 fleet segments active in 2017, landings in value have been provided aggregated in 37 fleet segments and SHI indicator values were available for 11.

According to the criteria in the 2014 Balance Indicator Guidelines, the SHI indicator values for 6 fleet segments cannot be used meaningfully to assess the balance or imbalance because the indicator values are based on stocks that comprise less than 40% of the total value of landings by those fleet segments.

The EWG notes that for the 5 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 78.68% of the total value of the landings in 2017 provided by MS, and were as follows:

- 2 fleet segments may not be in balance with their fishing opportunities;
- 3 fleet segments may be in balance with their fishing opportunities.

In the period 2012-2017 the SHI indicator values considered meaningful to assess balance or imbalance were with no conclusion for 5 fleet segments.

Stocks at Risk Indicator (SAR)

For 1 active fleet segments in 2017, one or more stock at risk were detected.

According to the criteria in the 2014 Balance Indicator Guidelines, the number of fleet segments per SAR category is shown in the table below:

SAR	1	2	3	4	5	6	7	>7
N of fleet-segments	1							

#### Number of Overharvested Stocks (NOS)

The proportional distribution of NOS for the 11 fleet segments for which SHI has been calculated is shown in the table below

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	2	1	7	1

#### Economic Dependency Indicator (EDI)

Fleet segments' distribution over EDI classes is shown in the table below. Fleet segments reported are those for which F/Fmsy is calculated and landings are available.

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	5	6	0	0

#### Return on Investment (ROI) and/or Return on Fixed Tangible Assets (RoFTA)

There were 144 fleet segments in the French fleet in 2017 of which 120 were active. After clustering, 90 segments were available for analysis.

ROFTA was calculated for 59 segments:

- 52 segments were *in balance* with their fishing opportunities,
- 7 segments were *not in balance* with their fishing opportunities.

Trends calculated for the 52 segments were as follows:

- 42 segments displayed an *increasing* trend,
- 5 segments displayed a *decreasing* trend,
- 12 segments displayed no trend (or no trend could be calculated).

ROI was not calculated.

#### Ratio between Current Revenue and Break-Even Revenue (CR/BER)

CR/BER was calculated for 59 segments:

- 52 segments were *in balance* with their fishing opportunities,

- 7 segments were *not in balance* with their fishing opportunities,

Trends for the 59 segments were as follows:

- 24 segments displayed an *increasing* trend,
- 2 segments displayed a *decreasing* trend,
- 33 segments displayed no trend (or no trend could be calculated).

#### The Vessel Use Indicator (VUR) and/or Vessel Use Indicator 220 (VUR<sub>220</sub>)

Note: VUR<sub>220</sub> is calculated on a standard year of 220 fishing days and is available in every case. VUR is calculated using the maximum days at sea provided by the Member State (where available).

VUR<sub>220</sub> was calculated for 86 segments:

- 25 segments were *in balance* with their fishing opportunities,
- 61 segments were *not in balance* with their fishing opportunities.

Trends for the 86 segments were as follows:

- 3 segments displayed a *decreasing* trend,
- 83 segments displayed *no* trend (or no trend could be calculated).

VUR was calculated for 46 segments:

- 12 segments were *in balance* with their fishing opportunities,
- 34 segments were *not in balance* with their fishing opportunities,

Trends for the 46 segments were as follows:

- No trend could be calculated for all 46 segments (only one year of data was available)

#### The Inactive Fleet Indicators

24 vessel length segments had inactive vessels. These represented 17.6% of the total number of vessels, 3.4% of the total GT and 13.0% of the total kW. The fleet segments with the highest levels of inactivity were:

- OFR VL0010 (OFR GP and MP) group with 5.1% and 4.8% respectively of vessels inactive (0.9% GT, 8.4% kW),
- Area 27 VL0010 group with 2.1% of vessels inactive (0.2% GT, 0.9% in kW).
- Area 37 VL0612 was the group with the highest percentage of inactive vessels with 2.2% (0.2% GT, 1.0% in kW).

#### Data issues

According to the AER 2019 report all missing data from previous years have been completed and economic data for less than 12 meters in Guadeloupe and French Guiana are available from 2016. Additionally, the coverage of effort and landings

data has been integrated for vessels less than 12 meters active in the Mediterranean Sea, for 2008 to 2017. Issues still remaining: data on efforts and landings were not complete for all outermost region fleets. This concerned around 990 active fishing vessels based in the French islands of Reunion and Martinique.

### Comparison between MS Annual Fleet Report and STECF EWG 19-13

The French annual fleet report uses another segmentation than proposed by EWG 19-13. The comparison is therefore not relevant.

#### 3.6.9 Germany (DEU)

### Sustainable Harvest Indicator (SHI)

Out of 20 fleet segments active in 2017, landings in value have been provided aggregated in 14 fleet segments and SHI indicator values were available for 13.

According to the criteria in the 2014 Balance Indicator Guidelines, the SHI indicator values for 3 fleet segments cannot be used meaningfully to assess the balance or imbalance because the indicator values are based on stocks that comprise less than 40% of the total value of landings by those fleet segments.

The EWG notes that for the 10 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 74.23% of the total value of the landings in 2017 provided by MS, and 10 fleet segments may not be in balance with their fishing opportunities.

In the period 2012-2017, the SHI indicator values considered meaningful to assess balance or imbalance were decreasing for 7 fleet segments and with no evident trend for 3 fleet segments.

### Stocks at Risk Indicator (SAR)

For 9 active fleet segments in 2017, one or more stock at risk was detected.

According to the criteria in the 2014 Balance Indicator Guidelines, the number of fleet segments per SAR category is shown in the table below:

SAR	1	2	3	4	5	6	7	>7
N of fleet-segments	5	2	2					

### Number of Overharvested Stocks (NOS)

The proportional distribution of NOS for the 13 fleet segments for which SHI has been calculated is shown in the table below:

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	0	0	9	4

#### Economic Dependency Indicator (EDI)

Fleet segments' distribution over EDI classes is shown in the table below. Fleet segments reported are those for which  $F/F_{msy}$  is calculated and landings are available.

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	2	4	6	1

#### Return on Investment (ROI) and/or Return on Fixed Tangible Assets (RoFTA)

There were 25 fleet segments in the German fleet in 2017 of which 20 were active. After clustering 14 segments were available for analysis.

ROFTA was calculated for 13 segments:

- 8 segments were *in balance* with their fishing opportunities,
- 5 segments were *not in balance* with their fishing opportunities.

Trends were calculated for 13 segments:

- 7 segments displayed an *increasing* trend,
- 6 segments displayed a *decreasing* trend.

ROI was not calculated.

#### Ratio between Current Revenue and Break-Even Revenue (CR/BER)

CR/BER was calculated for 13 segments:

- 8 segments were *in balance* with their fishing opportunities,
- 5 segments were *not in balance* with their fishing opportunities,

Trends were calculated for 13 segments:

- 6 segments displayed an *increasing* trend,
- 6 segments displayed a *decreasing* trend,
- 1 segment displayed no trend.

#### The Vessel Use Indicator (VUR) and/or Vessel Use Indicator 220 (VUR<sub>220</sub>)

Note: VUR<sub>220</sub> is calculated on a standard year of 220 fishing days and is available in every case. VUR is calculated using the maximum days at sea provided by the Member State (where available).

VUR<sub>220</sub> was calculated for 13 segments:

- 5 segments were *in balance* with their fishing opportunities,
- 8 segments were *not in balance* with their fishing opportunities,

Trends for the 13 segments were as follows:

- No segment displayed an *increasing* trend,
- 1 segment displayed a *decreasing* trend,
- 12 segments displayed *no* trend (or no trend could be calculated).

VUR was calculated for 13 segments:

- 9 segments were *in balance* with their fishing opportunities,
- 4 segments were *not in balance* with their fishing opportunities.

Trends for the 13 segments were as follows:

- No trend could be displayed for all 13 segments.

### The Inactive Fleet Indicators

In 2017, 5 vessel length segments had inactive vessels (VL0010, VL1012, VL1218, VL1824, VL2440).

The total inactive German vessels account for 27.6% of the total number of vessels, 3.7% of the total GT and 9.0% of the total kW.

The fleet segment with the highest level of inactivity is the VL0010 segment at 25.3% in terms of number of vessels and 4.1% in kW.

### Data Issues

According to the AER 2018, there is no major data quality issues. Due to confidentiality issues, only capacity and weight and value of landings data are provided for the pelagic fleet. As a consequence, some indicators are not available for that fleet.

### Comparison between MS annual fleet reports and STECF EWG 19-13

The comparison between biological indicators reported in the MS annual fleet report and those estimated in the framework of EWG 19-13 revealed similar outputs in terms of fleet segment status for both SHI and SAR (see Annex II for more details).

Values of ROFTA reported in the MS annual fleet report for 2017 are equal to those estimated by EWG 19-13. Given the same values, the final evaluations on balance/imbalance by fleet segment are equivalent.

Values of CR/BER reported in the MS annual fleet report for 2017 are equal to those estimated by EWG 19-13. Given the same values, the final evaluations on balance/imbalance by fleet segment are equivalent.

### 3.6.10 Greece (GRC)

#### Sustainable Harvest Indicator (SHI)

Out of 23 fleet segments active in 2017, landings in value have been provided aggregated in 5 fleet segments and SHI indicator values were available for 5.

According to the criteria in the 2014 Balance Indicator Guidelines, the SHI indicator values for 3 fleet segments cannot be used meaningfully to assess the balance or imbalance because the indicator values are based on stocks that comprise less than 40% of the total value of landings by those fleet segments.

The EWG notes that for the 2 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 46.78% of the total value of the landings in 2017 provided by MS, and were as follows

- 1 fleet segments may not be in balance with their fishing opportunities;
- 1 fleet segments may be in balance with their fishing opportunities.

In the period 2012-2017 the SHI indicator values considered meaningful to assess balance or imbalance were decreasing for 2 fleet segments.

#### Stocks at Risk Indicator (SAR)

For 1 active fleet segments in 2017, one or more stock at risk was detected.

According to the criteria in the 2014 Balance Indicator Guidelines, the number of fleet segments per SAR category is shown in the table below:

SAR	1	2	3	4	5	6	7	>7
N of fleet-segments	1							

#### Number of Overharvested Stocks (NOS)

The proportional distribution of NOS for the 5 fleet segments for which SHI has been calculated is shown in the table below:

	0-25%	25-50%	50-75%	75-100%
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N of fleet segments	0	3	2	0
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### Economic Dependency Indicator (EDI)

Fleet segments' distribution over EDI classes is shown in the table below. Fleet segments reported are those for which  $F/F_{msy}$  is calculated and landings are available.

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	3	2	0	0

### Return on Investment (ROI) and/or Return on Fixed Tangible Assets (RoFTA)

There were 28 fleet segments in the Greek fleet in 2017 of which 23 were active. After clustering 17 segments were available for analysis. However, as noted in the AER 2019 substantial data gaps in several years and segments remain and consequently indicator values are only presented for 5 fleet segments.

ROFTA was calculated for 5 segments:

- All 5 segments were *in balance* with their fishing opportunities,

Trends were calculated for 5 segments:

- All 5 segments displayed an *increasing* trend,

ROI was not calculated.

### Ratio between Current Revenue and Break-Even Revenue (CR/BER)

CR/BER was calculated for 5 segments:

- All 5 segments were *in balance* with their fishing opportunities,
- 

Trends were calculated for 5 segments:

- All 5 segments displayed an *increasing* trend,

### The Vessel Use Indicator (VUR) and/or Vessel Use Indicator 220 (VUR<sub>220</sub>)

Note: VUR<sub>220</sub> is calculated on a standard year of 220 fishing days and is available in every case. VUR is calculated using the maximum days at sea provided by the Member State (where available).

VUR<sub>220</sub> was calculated for 5 segments:

- 4 segments were *in balance* with their fishing opportunities,
- 1 segment was *not in balance* with their fishing opportunities.

Trends for the 5 segments were as follows:



- 4 segments displayed an *increasing* trend,
- 1 segment displayed *no* trend (or no trend could be calculated)

### The Inactive Fleet Indicators

In 2017, 5 vessel length classes had inactive vessels (VL0006, VL0612, VL1218, VL1824, VL2440). The total inactive Greek vessels accounted for 10.2% of the total number of vessels, 9% of the total GT and 9.9% of the total kW. The largest percentage of inactive vessels was present in segment VL 0612 with 6% in terms of number of vessels (4% of GT, 5.4% of kW).

### Data Issues

In the Annual Economic Report 2019 the following data issues were reported. The implementation of the National Programme has faced some difficulties during the last years, which resulted in an interrupted time series on the economic data. The lack of data and time series has created many shortfalls in the presentation of the fleet economic performance. The figures for costs come from a survey based on probability sampling, and the response rate was limited for 2017 while the transversal variables were not collected for small-scale fishing segments because the National Program was lately initiated.

### Comparison between MS annual fleet reports and EWG 19-13

The comparison between biological indicators reported in the MS annual fleet report and those estimated in the framework of EWG 19-13 was not possible (see Annex II for more details).

The Greek fleet report only provides estimates for the RoFTA indicator in 5 segments. EWG 19-13 and the Greek national fleet report suggests that all 5 fleet segments are in balance.

#### *3.6.11 Ireland (IRL)*

### Sustainable Harvest Indicator (SHI)

Out of 32 fleet segments active in 2017, landings in value have been provided aggregated in 30 fleet segments and SHI indicator values were available for 26.

According to the criteria in the 2014 Balance Indicator Guidelines, the SHI indicator values for 12 fleet segments cannot be used meaningfully to assess the balance or imbalance because the indicator values are based on stocks that comprise less than 40% of the total value of landings by those fleet segments.

The EWG notes that for the 14 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 81.63% of

the total value of the landings in 2017 provided by MS, and 14 fleet segments may not be in balance with their fishing opportunities.

In the period 2012-2017, the SHI indicator values considered meaningful to assess balance or imbalance were decreasing for 3 fleet segments, increasing for 1 fleet segment and no evident trend was revealed for 9 fleet segments. For 1 fleet segment information for full time series was not available.

### Stocks at Risk Indicator (SAR)

For 11 active fleet segments in 2017, one or more stock at risk was detected.

According to the criteria in the 2014 Balance Indicator Guidelines, the number of fleet segments per SAR category is shown in the table below:

SAR	1	2	3	4	5	6	7	>7
N of fleet-segments	4	5			2			

### Number of Overharvested Stocks (NOS)

The proportional distribution of NOS for the 26 fleet segments for which SHI has been calculated is shown in the table below:

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	2	14	9	1

### Economic Dependency Indicator (EDI)

Fleet segments' distribution over EDI classes is shown in the table below. Fleet segments reported are those for which F/Fmsy is calculated and landings are available.

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	15	7	3	1

### Return on Investment (ROI) and/or Return on Fixed Tangible Assets (RoFTA)

There were 37 fleet segments in the Irish fleet in 2017 of which 32 were active. After clustering 22 segments were available for analysis.

ROFTA was calculated for 13 segments:

- 9 segments were *in balance* with their fishing opportunities,

- 4 segments were *not in balance* with their fishing opportunities.

Trends calculated for 13 segments were as follows:

- 8 segments displayed an *increasing* trend,
- 5 segments displayed a *decreasing* trend.

ROI was not calculated.

#### Ratio between Current Revenue and Break-Even Revenue (CR/BER)

CR/BER was calculated for 13 segments:

- 9 segments were *in balance* with their fishing opportunities,
- 4 segments were *not in balance* with their fishing opportunities.

Trends calculated for the 13 segments were as follows:

- 7 segments displayed an *increasing* trend,
- 4 segments displayed a *decreasing* trend,
- 2 segments displayed no trend (or not trend could be calculated).

#### The Vessel Use Indicator (VUR) and/or Vessel Use Indicator 220 (VUR<sub>220</sub>)

Note: VUR<sub>220</sub> is calculated on a standard year of 220 fishing days and is available in every case. VUR is calculated using the maximum days at sea provided by the Member State (where available).

VUR<sub>220</sub> was calculated for 19 segments:

- 4 segments were *in balance* with their fishing opportunities,
- 15 segments were *not in balance* with their fishing opportunities.

Trends for the 19 segments were as follows:

- 1 segment displayed an *increasing* trend,
- 18 segments displayed *no* trend (or not trend could be calculated).

VUR was calculated for 13 segments:

- 2 segments were *in balance* with their fishing opportunities,
- 11 segments were *not in balance* with their fishing opportunities.

Trends for the 13 segments were as follows:

- 2 segments displayed an *increasing* trend,
- 3 segments displayed a *decreasing* trend,
- 8 segments displayed *no* trend (or not trend could be calculated),

#### The Inactive Fleet Indicators

In 2017, 5 vessel length classes had inactive vessels (VL0010, VL1012, VL1218, VL1824, VL2440). The total inactive Irish vessels account for 32.6% of the total number of vessels, 6.3% of GT and 16.2% of the total kW. The length classes with

the highest number of inactive vessels are the *VL0010* group at 27.9% of the total number of vessels, and the *VL1012* group at 4%.

### Data issues

In the Annual Economic Report 2019 the following data issues were reported. Values and figures may differ somewhat from those in previous annual economic reports as additional survey returns, received after last year's AER meeting, have improved the precisions of many of the variables and indicators.

The effort data in the tables and graphs is not complete for some less than 10m segments. Specifically, from 2015, effort is only reported for less than 10m for the segments DRB and FPO. To report effort for these segments several assumptions had to be made mainly that a sale event for a vessel represents a day of fishing.

### Comparison between MS annual fleet reports and EWG 19-13

The comparison between biological indicators reported in the MS annual fleet report and those estimated in the framework of EWG 19-13 was not possible (see Annex II for more details).

The methodology used to calculate the economic indicators in the Irish annual fleet report differs from the methodology use by the EWG 19-13. Both the RoFTA and CR/BER indicator the Irish annual fleet report suggests that only 1 fleet segment is out of balance with their fishing opportunities while EWG 19-13 identified 4 segments.

#### *3.6.12 Italy (ITA)*

### Sustainable Harvest Indicator (SHI)

#### Area 37

Out of 25 fleet segments active in 2017, landings in value have been provided aggregated in 21 fleet segments and SHI indicator values were available for 21.

According to the criteria in the 2014 Balance Indicator Guidelines, the SHI indicator values for 6 fleet segments cannot be used meaningfully to assess the balance or imbalance because the indicator values are based on stocks that comprise less than 40% of the total value of landings by those fleet segments.

The EWG notes that for the 15 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 59.40% of the total value of the landings in 2017 provided by MS, and were as follows:

- 14 fleet segments may not be in balance with their fishing opportunities;
- 1 fleet segment may be in balance with its fishing opportunities.

In the period 2012-2017, the SHI indicator values considered meaningful to assess balance or imbalance were decreasing for 3 fleet segments, increasing for 5 with no evident trend for 5 fleet segments. For 2 fleet segments information for full time series was not available.

Stocks at Risk Indicator (SAR)

For 1 active fleet segments in 2017, one or more stock at risk was detected.

According to the criteria in the 2014 Balance Indicator Guidelines, the number of fleet segments per SAR category is shown in the table below:

SAR	1	2	3	4	5	6	7	>7
N of fleet-segments	5							

Number of Overharvested Stocks (NOS)

The proportional distribution of NOS for the 21 fleet segments for which SHI has been calculated is shown in the table below:

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	0	0	2	19

Economic Dependency Indicator (EDI)

Fleet segments' distribution over EDI classes is shown in the table below. Fleet segments reported are those for which  $F/F_{msy}$  is calculated and landings are available.

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	6	4	6	5

OFR

Sustainable Harvest Indicator (SHI)

Out of 3 fleet segments active in 2017, landings in value have been provided aggregated in 2 fleet segments and SHI indicator values were available for 1.

According to the criteria in the 2014 Balance Indicator Guidelines, the SHI indicator value cannot be used meaningfully to assess the balance or imbalance because the indicator values are based on stocks that comprise less than 40% of the total value of landings by those fleet segments.

### Stocks at Risk Indicator (SAR)

SAR indicator was not available for the active fleet segments in 2017.

### Number of Overharvested Stocks (NOS)

The proportional distribution of NOS for the 1 fleet segment for which SHI has been calculated is shown in the table below:

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	0	0	0	1

### Economic Dependency Indicator (EDI)

Fleet segments' distribution over EDI classes is shown in the table below. Fleet segments reported are those for which F/Fmsy is calculated and landings are available.

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	1	0	0	0

### Return on Investment (ROI) and/or Return on Fixed Tangible Assets (RoFTA)

There were 35 fleet segments in the Italian fleet in 2017 of which 28 were active. After clustering 23 segments were available for analysis.

ROFTA was calculated for 22 segments:

- 21 segments were *in balance* with their fishing opportunities,
- 1 segment was *not sufficiently profitable*.

Trends for the 22 segments were as follows:

- 16 segments displayed an *increasing* trend,
- 3 segments displayed a *decreasing* trend,
- 3 segments displayed no trend (or no trend could be calculated).

ROI was calculated for 3 segments:

- 2 segments were *in balance* with their fishing opportunities,
- 1 segment was *not sufficiently profitable*.

Trends for the 3 segments were as follows:

- 2 segments displayed an *increasing* trend,
- 1 segment displayed a *decreasing* trend.

### Ratio between Current Revenue and Break-Even Revenue (CR/BER)

CR/BER was calculated for 22 segments:

- All 22 segments were *in balance* with their fishing opportunities,

Trends for the 22 segments were as follows:

- 14 segments displayed an *increasing* trend,
- 2 segments displayed a *decreasing* trend,
- 6 segments displayed no trend (or no trend could be calculated).

### The Vessel Use Indicator (VUR) and/or Vessel Use Indicator 220 (VUR<sub>220</sub>)

Note: VUR<sub>220</sub> is calculated on a standard year of 220 fishing days and is available in every case. VUR is calculated using the maximum days at sea provided by the Member State (where available).

VUR<sub>220</sub> was calculated for 23 segments:

- 7 segments were *in balance* with their fishing opportunities,
- 16 segments were *not in balance* with their fishing opportunities.

Trends for the 23 segments were as follows:

- 3 segments displayed an *increasing* trend,
- 20 segments displayed *no* trend (or not trend could be calculated).

VUR was calculated for 23 segments:

- 12 segments were *in balance* with their fishing opportunities,
- 11 segments were *not in balance* with their fishing opportunities.

Trends for the 23 segments were as follows:

- 2 segments displayed an *increasing* trend,
- 21 segments displayed *no* trend (or no trend could be calculated).

### The Inactive Fleet Indicators

In 2017, 6 vessel length segments had inactive vessels (VL0006, VL0612, VL1218, VL1824, VL2440, VL40XX).

The total inactive Italian vessels account for 8.3% of the total number of vessels, 4.8% of the total GT and 5% of the total kW. The fleet segments with the highest levels of inactivity are the VL0612 group at 5% of the total number of vessels and the VL0006 group at 2.5%.

### Data Issues

In the Annual Economic Report 2019 the following data issues were reported. All fleet segments with major contribution to the total catches of the Italian fleet have been sampled with satisfactory response rates. Apart for capacity and weight of landings no data for the OFR purse seiners segment 40 m or larger ( one vessel in 2017) could be published due to confidentiality issues.

### Comparison between MS annual fleet reports and EWG 19-13

The Italian annual fleet report use another segmentation than proposed by EWG 19-13. A comparison is therefore not possible.

#### 3.6.13 *Latvia (LVA)*

##### Area 27

##### Sustainable Harvest Indicator (SHI)

Out of 3 fleet segments active in 2017, landings in value have been provided for all 3 fleet segments and SHI indicator values were available for 3.

According to the criteria in the 2014 Balance Indicator Guidelines, the SHI indicator values for 0 fleet segments cannot be used meaningfully to assess the balance or imbalance because the indicator values are based on stocks that comprise less than 40% of the total value of landings by those fleet segments.

The EWG notes that for the 3 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 100% of the total value of the landings in 2017 provided by MS, and were as follows:

- 1 fleet segment may not be in balance with its fishing opportunities;
- 2 fleet segments may be in balance with their fishing opportunities.

In the period 2012-2017 the SHI indicator values considered meaningful to assess balance or imbalance were increasing for 2 fleet segments, with no evident trend for 1 fleet segments.

##### Stocks at Risk Indicator (SAR)

No stocks at risk were detected for active fleet segments in 2017.

##### Number of Overharvested Stocks (NOS)

The proportional distribution of NOS for the 3 fleet segments for which SHI has been calculated is shown in the table below:

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	0	1	2	0

##### Economic Dependency Indicator (EDI)



Fleet segments' distribution over EDI classes is shown in the table below. Fleet segments reported are those for which  $F/F_{msy}$  is calculated and landings are available.

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	2	0	1	0

### Return on Investment (ROI) and/or Return on Fixed Tangible Assets (RoFTA)

There were 4 fleet segments in the Latvian fleet in 2017 of which 3 were active. After clustering 3 segments were available for analysis.

ROFTA was calculated for 3 segments:

- 2 segments were *in balance* with their fishing opportunities,
- 1 segment was *not in balance* with their fishing opportunities.

Trends were calculated for 3 segments:

- 1 segment displayed an *increasing* trend,
- 2 segments displayed a *decreasing* trend.

ROI was not calculated.

### Ratio between Current Revenue and Break-Even Revenue (CR/BER)

CR/BER was calculated for 3 segments:

- 2 segments were *in balance* with their fishing opportunities,
- 1 segment was *not in balance* with their fishing opportunities.

Trends were calculated for 3 segments:

- 1 segment displayed an *increasing* trend,
- 1 segment displayed a *decreasing* trend,
- 1 segment displayed no trend (or no trend could be calculated).

### The Vessel Use Indicator (VUR) and/or Vessel Use Indicator 220 (VUR<sub>220</sub>)

Note: VUR<sub>220</sub> is calculated on a standard year of 220 fishing days and is available in every case. VUR is calculated using the maximum days at sea provided by the Member State (where available).

VUR<sub>220</sub> was calculated for 3 segments:

- 1 segment was *in balance* with their fishing opportunities,
- 2 segments were *not in balance* with their fishing opportunities.

Trends were calculated for 3 segments:

- All 3 segments displayed *no* trend (or no trend could be calculated).

VUR was calculated for 3 segments:

- 1 segment was *in balance* with their fishing opportunities,
- 2 segments were *not in balance* with their fishing opportunities,

Trends were calculated for 3 segments:

- All 3 segments displayed *no* trend (or no trend could be calculated).

### The Inactive Fleet Indicators

In 2017, 1 vessel length segment had inactive vessels (VL0010).

The total inactive Latvian vessels account for 22.5% of the total number of vessels, 2.0% of the total GT and 4.8% of the total kW.

### Data Issues

The Annual Economic Report 2019 reported that all transversal data for 2008 to 2018 were obtained from the 'Integrated Control and Information System' for Latvian fisheries. The information system contains the logbook data and technical parameters of the fishing vessels from the Vessel Register. The achieved sample rate was 100%.

The calculations were applied for FTEs and income from landings for 2008-2017 and were based on the data received from questionnaires and vessel logbooks.

The estimated values for the costs were used for 2015 and 2017. Restructuring of the costs between segments of the fleet was implemented for 2015 and 2017 in proportion relative to the value of landings.

### Comparison Between the MS Annual Fleet Report and STECF 19-13.

The comparison between biological indicators reported in the MS annual fleet report and those estimated in the framework of EWG 19-13 revealed similar output only in one case for SHI, in the rest of the case the comparison was not possible (see Annex II for more details).

According to the estimation by EWG 19-13 concerning the two economic indicators RoFTA and CR/BER there is one fleet segment (PGP with length class VL0010) that is in imbalance. This is consistent with the information provided by the MS. However, there are another two fleet segments whose values of CR/BER reported in MS Annual Fleet report indicate imbalance. This is not shown by the values of the EWG 19-13.

#### *3.6.14 Lithuania (LTU)*

##### Area 27

##### Sustainable Harvest Indicator (SHI)

Out of 11 fleet segments active in 2017, landings in value have been provided aggregated in 8 fleet segments and SHI indicator values were available for 7.

According to the criteria in the 2014 Balance Indicator Guidelines, the SHI indicator values for 4 fleet segments cannot be used meaningfully to assess the balance or imbalance because the indicator values are based on stocks that comprise less than 40% of the total value of landings by those fleet segments.

The EWG notes that for the 3 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 53.12% of the total value of the landings in 2017 provided by MS, and 3 fleet segments may not be in balance with their fishing opportunities.

In the period 2012-2017 the SHI indicator values considered meaningful to assess balance or imbalance were increasing for 2 fleet segments, decreasing for 2 fleet segments, with no evident trend for 3 fleet segments.

#### Stocks at Risk Indicator (SAR)

No stocks at risk were detected for active fleet segments in 2017.

#### Number of Overharvested Stocks (NOS)

The proportional distribution of NOS for the 7 fleet segments for which SHI has been calculated is shown in the table below:

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	0	0	0	7

#### Economic Dependency Indicator (EDI)

Fleet segments' distribution over EDI classes is shown in the table below. Fleet segments reported are those for which F/Fmsy is calculated and landings are available.

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	3	1	0	3

#### Return on Investment (ROI) and/or Return on Fixed Tangible Assets (RoFTA)

There were 17 fleet segments in the Lithuanian fleet in 2017 of which 11 were active. After clustering 5 segments were available for analysis.

ROFTA was calculated for 5 segments:

- 1 segment was *in balance* with their fishing opportunities,
- 4 segments were *not in balance* with their fishing opportunities,

Trends were calculated for 5 segments:

- 5 segments displayed a *decreasing* trend.

ROI was not calculated.

#### Ratio between Current Revenue and Break-Even Revenue (CR/BER)

CR/BER was calculated for 5 segments:

- 1 segment was *in balance* with their fishing opportunities,
- 4 segments were *not in balance* with their fishing opportunities,

Trends for the 5 segments were as follows:

- 4 segments displayed a *decreasing* trend,
- 1 segment displayed no trend (or no trend could be calculated).

#### The Vessel Use Indicator (VUR) and/or Vessel Use Indicator 220 (VUR<sub>220</sub>)

Note: VUR<sub>220</sub> is calculated on a standard year of 220 fishing days and is available in every case. VUR is calculated using the maximum days at sea provided by the Member State (where available).

VUR<sub>220</sub> was calculated for 5 segments:

- 1 segment was *in balance* with their fishing opportunities,
- 4 segments were *not in balance* with their fishing opportunities.

Trends for the 5 segments were as follows:

- No segment displayed an *increasing* trend,
- 1 segment displayed a *decreasing* trend,
- 4 segments displayed *no* trend (or no trend could be calculated).

VUR was calculated for 5 segments:

- All 5 segments were *not in balance* with their fishing opportunities.

Trends were calculated for 5 segments:

- 2 segments displayed a *decreasing* trend,
- 3 segments displayed *no* trend (or no trend could be calculated).

#### The Inactive Fleet Indicators

In 2017, 6 vessel length segments had inactive vessels (VL0010, VL1012, VL1218, VL1824, VL2440, VL40XX). The fleet segments with the highest levels of inactivity

are the VL0010 group at 26.9% of total number of vessels and 0.2% of total kW, and the VL2440 group at 4.0% of total number of vessels and 2.5% of total kW.

### Data Issues

In the Annual Economic Report 2019 the following data issues were reported. Under DCF, revenues from landings reported from two distinct data sources (total value of landings as transversal variable and total income from landings as economic indicator). In Lithuania, income from 2019 Annual Economic Report on the EU Fishing Fleet 362 landings together with other socio-economic indicators, such as expenditure, employment and capital value are collected through census with a one-year lag whereas transversal variables are collected one year prior to economic data. Depreciation costs of capital and capital value at MS level is recalculated for the total data set 2008- 2017 after PIM method was revised and updated, whereas at fleet segment level data for capital depreciation costs and capital value from 2008 to 2016 left unchanged. The reason to leave previous data is because historic data were used for the fleet management with respectively addressed management measures.

### Comparison Between the MS Annual Fleet Report and STECF 19-13.

The comparison between biological indicators reported in the MS annual fleet report and those estimated in the framework of EWG 19-13 revealed similar outputs in term of fleet segment status for SHI, while no comparison was possible for SAR (see Annex II for more details).

The values of RoFTA and CR/BER reported in the MS annual fleet report for 2017 are different than those estimated by EWG 19-13. However, the differences in values do not affect the final evaluations on balance/imbalance by fleet segments.

#### *3.6.15 Malta (MLT)*

##### Area 37

##### Sustainable Harvest Indicator (SHI)

Out of 18 fleet segments active in 2017, landings in value have been provided aggregated in 10 fleet segments and SHI indicator values were available for 10.

According to the criteria in the 2014 Balance Indicator Guidelines, the SHI indicator values for 6 fleet segments cannot be used meaningfully to assess the balance or imbalance because the indicator values are based on stocks that comprise less than 40% of the total value of landings by those fleet segments.

The EWG notes that for the 4 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 67.03% of the total value of the landings in 2017 provided by MS, and were as follows

- 3 fleet segments may not be in balance with their fishing opportunities;
- 1 fleet segment may be in balance with its fishing opportunities.

In the period 2012-2017 the SHI indicator values considered meaningful to assess balance or imbalance were increasing for 1 fleet segment, decreasing for 3 fleet segments, with no evident trend for 2 fleet segments, no conclusion for 4 fleet segment.

#### Stocks at Risk Indicator (SAR)

For 4 active fleet segments in 2017, one or more stock at risk were detected.

According to the criteria in the 2014 Balance Indicator Guidelines, the number of fleet segments per SAR category is shown in the table below:

SAR	1	2	3	4	5	6	7	>7
N of fleet-segments	4							

#### Number of Overharvested Stocks (NOS)

The proportional distribution of NOS for the 10 fleet segments for which SHI has been calculated is shown in the table below:

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	0	0	6	4

#### Economic Dependency Indicator (EDI)

Fleet segments' distribution over EDI classes is shown in the table below. Fleet segments reported are those for which  $F/F_{msy}$  is calculated and landings are available.

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	8	2	0	0

#### Return on Investment (ROI) and/or Return on Fixed Tangible Assets (RoFTA)

There were 23 fleet segments in the Maltese fleet in 2017 of which 18 were active. After clustering 10 segment was available for analysis.

ROFTA was calculated for 10 segments:

- 4 segments were *in balance* with their fishing opportunities,
- 6 segments were *not in balance* with their fishing opportunities.

Trends for the 10 segments were as follows:

- 3 segments displayed an *increasing* trend,
- 2 segments displayed a *decreasing* trend,
- 5 segments displayed no trend (or no trend could be calculated).

ROI was calculated for 7 segments:

- 4 segments were *in balance* with their fishing opportunities,
- 3 segments were *not in balance* with their fishing opportunities.

Trends for 7 segments were as follows:

- 2 segments displayed an *increasing* trend,
- 2 segments displayed a *decreasing* trend,
- 3 segments displayed no trend (or no trend could be calculated).

#### Ratio between Current Revenue and Break-Even Revenue (CR/BER)

CR/BER was calculated for 10 segments:

- 4 segments were *in balance* with their fishing opportunities,
- 6 segments were *not in balance* with their fishing opportunities.

Trends for the 10 segments were as follows:

- 2 segments displayed an *increasing* trend,
- 2 segments displayed a *decreasing* trend,
- 6 segments displayed no trend (or no trend could be calculated).

#### The Vessel Use Indicator (VUR) and/or Vessel Use Indicator 220 (VUR<sub>220</sub>)

Note: VUR<sub>220</sub> is calculated on a standard year of 220 fishing days and is available in every case. VUR is calculated using the maximum days at sea provided by the Member State (where available).

VUR<sub>220</sub> was calculated for 10 segments:

- All 10 segments were out of balance with their fishing opportunities.

Trends for the 10 segments were as follows:

- All 10 segments displayed *no* trend (or no trend could be calculated).

VUR was calculated for 9 segments:

- 6 segments were *in balance* with their fishing opportunities,
- 3 segments were *not in balance* with their fishing opportunities.

Trends for the 9 segments were as follows:

- 2 segments displayed a *decreasing* trend,
- 7 segments displayed *no* trend (or no trend could be calculated).

### The Inactive Fleet Indicators

In 2017, 5 vessel length segments had inactive vessels (VL0006, VL0612, VL1218, VL1824, VL2440).

The total inactive Maltese vessels account for 22.4% of the total number of vessels, 24.5% of the total GT and 22.6% of the total kW.

The fleet segments with the highest levels of inactivity are the VL0612 group at 10% in vessel numbers (11% in kW), and the VL0006 group at 13% in vessel numbers (4% in kW).

### Comparison Between the MS Annual Fleet Report and STECF 19-13.

The comparison between biological indicators reported in the MS annual fleet report and those estimated in the framework of EWG 19-13 was not possible (see Annex II for more details).

The values of ROI and CR/BER reported in the MS annual fleet report for 2017 are different from those estimated by EWG 19-13. However, the differences in values do not affect the final evaluations on balance/imbalance by fleet segments.

#### *3.6.16 Netherlands (NLD)*

##### Area 27

##### Sustainable Harvest Indicator (SHI)

Out of 25 fleet segments active in 2017, landings in value have been provided aggregated in 11 fleet segments and SHI indicator values were available for 11.

According to the criteria in the 2014 Balance Indicator Guidelines, the SHI indicator values for 5 fleet segments cannot be used meaningfully to assess the balance or imbalance because the indicator values are based on stocks that comprise less than 40% of the total value of landings by those fleet segments.

The EWG notes that for the 6 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 67.57% of the total value of the landings in 2017 provided by MS, and were as follows:

- 5 fleet segments may not be in balance with their fishing opportunities;
- 1 fleet segment may be in balance with its fishing opportunities.

In the period 2012-2017 the SHI indicator values considered meaningful to assess balance or imbalance were increasing for 1 fleet segment, decreasing for 8 fleet segments, with no evident trend for 2 fleet segments.

##### Stocks at Risk Indicator (SAR)

For 2 active fleet segments in 2017, one or more stock at risk was detected.



According to the criteria in the 2014 Balance Indicator Guidelines, the number of fleet segments per SAR category is shown in the table below:

SAR	1	2	3	4	5	6	7	>7
N of fleet-segments	1	1						

#### Number of Overharvested Stocks (NOS)

The proportional distribution of NOS for the 11 fleet segments for which SHI has been calculated is shown in the table below:

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	0	4	7	0

#### Economic Dependency Indicator (EDI)

Fleet segments' distribution over EDI classes is shown in the table below. Fleet segments reported are those for which F/Fmsy is calculated and landings are available.

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	6	2	2	1

#### Return on Investment (ROI) and/or Return on Fixed Tangible Assets (RoFTA)

There were 31 fleet segments in the Dutch fleet in 2017 of which 25 were active. After clustering 11 segment was available for analysis.

ROFTA and ROI calculated for 11 segments with the same results in each case:

- 9 segments were *in balance* with their fishing opportunities,
- 2 segments were *not in balance* with their fishing opportunities.

Trends were calculated for 11 segments with the same results in each case:

- 10 segments displayed an *increasing* trend,
- 1 segment displayed a *decreasing* trend.

#### Ratio between Current Revenue and Break-Even Revenue (CR/BER)

CR/BER was calculated for 11 segments:

- 10 segments were *in balance* with their fishing opportunities,
- 1 segment was *out of balance* with their fishing opportunities,

Trends were calculated for 11 segments:

- 8 segments displayed an *increasing* trend,
- 1 segment displayed a *decreasing* trend,
- 2 segments displayed no trend (or no trend could be calculated).

#### The Vessel Use Indicator (VUR) and/or Vessel Use Indicator 220 (VUR<sub>220</sub>)

Note: VUR<sub>220</sub> is calculated on a standard year of 220 fishing days and is available in every case. VUR is calculated using the maximum days at sea provided by the Member State (where available).

VUR<sub>220</sub> was calculated for 11 segments:

- 5 segments were *in balance* with their fishing opportunities,
- 6 segments were *not in balance* with their fishing opportunities.

Trends were calculated for 11 segments:

- 1 segment displayed an *increasing* trend,
- 10 segments displayed no trend (or no trend could be calculated).

VUR was calculated for 11 segments:

- 6 segments were *in balance* with their fishing opportunities,
- 5 segments were *not in balance* with their fishing opportunities.

Trends were calculated for 11 segments.

- 1 segment displayed an *increasing* trend.
- 1 segment displayed a *decreasing* trend.
- 9 segments displayed *no* trend (or no trend could be calculated).

#### The Inactive Fleet Indicators

In 2017, 6 vessel length classes had inactive vessels (VL0010, VL1012, VL1218, VL1824, VL2440, VL40XX).

The total inactive Dutch vessels account for 28.7% of the total number of vessels, 4.4% of the total GT and 9.0% of the total kW.

The length class with the highest number of inactive vessels is the VL0010 group at 19.2% in number but 2.1% in kW.

#### Data Issues

In the Annual Economic Report 2019 the following data issues were reported. Most of the segments in the Dutch fishing fleet were well covered. In some of the smaller segments (DRB 0-10 m, DRB 24-40 m, DTS 0-10 m and TBB 12-18 m) variation in activity levels was high resulting in high uncertainty in the economic indicators estimates and large fluctuations from year to year. Moreover, the smaller fleet segments are clusters of vessels using different fishing techniques:

- Drift and/or fixed netters 12-18m include drift and/or fixed netters 12-18m and vessels using pots and/or traps 12-18m;
- Drift and/or fixed netters 18-24m include drift and/or fixed netters 18-24m, vessels using pots and/or traps 18-24m and vessel using other active gears 18-24m;
- Dredgers 24-40m include drift and/or fixed netters 24-40m, dredgers 24-40m and dredgers 40m or larger;
- Beam trawlers 0-10m include demersal trawlers and/or demersal seiners 10-12m, purse seiners 0-10m, beam trawlers 0-10m, beam trawlers 10-12m, pelagic trawlers 0-10m and pelagic trawlers 10-12m;
- Beam trawlers 12-18m include demersal trawlers and/or demersal seiners 12-18m, beam trawlers 12-18m and pelagic trawlers 12-18m.

Because of low response rates for the data collection in the segments above in 2016, clusters were combined in order to estimate the economic parameters: Demersal trawlers and/or demersal seiners 0-< 10 m, Beam trawlers 0-< 10 m and Beam trawlers 12-< 18 m were combined and Dredgers 24-< 40 m and Drift and/or fixed netters 12-< 18 m were combined. Therefore, these figures should be viewed as indicative for the size of the sector rather than describing the exact trends. Currently work is being carried out to improve the estimation procedures.

#### Comparison Between the MS Annual Fleet Report and STECF 19-13.

The comparison between biological indicators reported in the MS annual fleet report and those estimated in the framework of EWG 19-13 showed different outputs in term of fleet segment status for SHI, while for SAR a comparison was not possible (see Annex II for more details).

The economic indicators ROI and CR/BER were not reported by all the fleet segments by the MS. From the ones estimated by MS no fleet segment shows imbalance. This is inconsistent by the outcomes of the EWG 19-13.

#### *3.6.17 Poland (POL)*

##### Area 27

##### Sustainable Harvest Indicator (SHI)

Out of 18 fleet segments active in 2017, landings in value have been provided aggregated in 9 fleet segments and SHI indicator values were available for 7.

According to the criteria in the 2014 Balance Indicator Guidelines, the SHI indicator values for 5 fleet segments cannot be used meaningfully to assess the balance or imbalance because the indicator values are based on stocks that comprise less than 40% of the total value of landings by those fleet segments.

The EWG notes that for the 2 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 55.48% of the total value of the landings in 2017 provided by MS, and both fleet segments may not be in balance with their fishing opportunities.

In the period 2012-2017 the SHI indicator values considered meaningful to assess balance or imbalance were decreasing for 1 fleet segment and with no evident trend for 1 fleet segment.

### Stocks at Risk Indicator (SAR)

For 2 active fleet segments in 2017, one or more stock at risk was detected.

According to the criteria in the 2014 Balance Indicator Guidelines, the number of fleet segments per SAR category is shown in the table below:

SAR	1	2	3	4	5	6	7	>7
N of fleet-segments	2							

### Number of Overharvested Stocks (NOS)

The proportional distribution of NOS for the 7 fleet segments for which SHI has been calculated is shown in the table below:

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	0	0	0	7

### Economic Dependency Indicator (EDI)

Fleet segments' distribution over EDI classes is shown in the table below. Fleet segments reported are those for which  $F/F_{msy}$  is calculated and landings are available.

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	3	2	0	2

### Return on Investment (ROI) and/or Return on Fixed Tangible Assets (RoFTA)

There were 23 fleet segments in the Polish fleet in 2017 of which 18 were active. After clustering 10 segment was available for analysis.

ROFTA was calculated for 7 segments:

- 3 segments were *in balance* with their fishing opportunities,
- 2 segments were *not in balance* with their fishing opportunities,
- 2 segments were *not sufficiently profitable*.

Trends were calculated for 7 segments:

- 3 segments displayed an *increasing* trend,
- 4 segments displayed a *decreasing* trend.

ROI was not calculated.

#### Ratio between Current Revenue and Break-Even Revenue (CR/BER)

CR/BER was calculated for 7 segments:

- 4 segments were *in balance* with their fishing opportunities,
- 3 segments were *not in balance* with their fishing opportunities.

Trends were calculated for 7 segments:

- 3 segments displayed an *increasing* trend,
- 3 segments displayed a *decreasing* trend,
- 1 segment displayed no trend.

#### The Vessel Use Indicator (VUR) and/or Vessel Use Indicator 220 (VUR<sub>220</sub>)

Note: VUR<sub>220</sub> is calculated on a standard year of 220 fishing days and is available in every case. VUR is calculated using the maximum days at sea provided by the Member State (where available).

VUR<sub>220</sub> was calculated for 10 segments:

- 1 segment was *in balance* with their fishing opportunities,
- 9 segments were *not in balance* with their fishing opportunities.

Trends for the 10 segments were as follows:

- 2 segments displayed a *decreasing* trend,
- 8 segments displayed *no* trend (or no trend could be calculated).

VUR was calculated for 7 segments:

- 1 segment was *in balance* with their fishing opportunities,
- 6 segments were *not in balance* with their fishing opportunities,

Trends for the 7 segments were as follows:

- 1 segment displayed a *decreasing* trend,
- 6 segments displayed *no* trend (or no trend could be calculated).

#### The Inactive Fleet Indicators

In 2017, 5 vessel length classes had inactive vessels (VL0010, VL1012, VL1218, VL1824, VL2440). The total inactive Polish vessels account for 5.8% of the total number of vessels, 2.1% of the total GT and 3.2% of the total kW.

The fleet segments with the highest levels of inactivity are the VL0010 group at 3.7% and the VL1012 group at 1.3%.

### Data issues

Similar to previous years, due to confidentiality reasons, distant water fleet (vessels over 40m fishing outside Baltic Sea) were excluded from the economic analysis. However, transversal data (except for value of landings) and employment data were provided for all fleet segments.

### Comparison between MS annual fleet reports and EWG 19-13

The comparison between biological indicators reported in the MS annual fleet report and those estimated in the framework of EWG 19-13 showed similar outputs in term of fleet segment status only for SHI, while for SAR the comparison showed different outputs (see Annex II for more details).

As regards the RoFTA indicator the Polish fleet report and EWG 19-13 give the same results for all segments. A comparison of the CR/BER however show inconsistencies in values.

#### *3.6.18 Portugal (PRT)*

##### Area 27

##### Sustainable Harvest Indicator (SHI)

Out of 55 fleet segments active in 2017, landings in value have been provided aggregated in 49 fleet segments and SHI indicator values were available for 44.

According to the criteria in the 2014 Balance Indicator Guidelines, the SHI indicator values for 37 fleet segments cannot be used meaningfully to assess the balance or imbalance because the indicator values are based on stocks that comprise less than 40% of the total value of landings by those fleet segments.

The EWG notes that for the 7 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 30.07% of the total value of the landings in 2017 provided by MS, and were as follows:

- 4 fleet segments may not be in balance with their fishing opportunities;
- 3 fleet segments may be in balance with their fishing opportunities.

In the period 2012-2017 the SHI indicator values considered meaningful to assess balance or imbalance were decreasing for 4 fleet segments, with no evident trend for 2 fleet segments, no conclusion for 1 fleet segment.

##### Stocks at Risk Indicator (SAR)

For 13 active fleet segments in 2017, one or more stock at risk were detected.

According to the criteria in the 2014 Balance Indicator Guidelines, the number of fleet segments per SAR category is shown in the table below:

SAR	1	2	3	4	5	6	7	>7
N of fleet-segments	8	3	1		1			

#### Number of Overharvested Stocks (NOS)

The proportional distribution of NOS for the 44 fleet segments for which SHI has been calculated is shown in the table below:

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	11	24	8	1

#### Economic Dependency Indicator (EDI)

Fleet segments' distribution over EDI classes is shown in the table below. Fleet segments reported are those for which  $F/F_{msy}$  is calculated and landings are available.

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	37	6	1	0

#### OFR

#### Sustainable Harvest Indicator (SHI)

Out of 11 fleet segments active in 2017, landings in value have been provided aggregated in 2 fleet segments and SHI indicator values were available for 2.

According to the criteria in the 2014 Balance Indicator Guidelines, the SHI indicator values for all fleet segments cannot be used meaningfully to assess the balance or imbalance because the indicator values are based on stocks that comprise less than 40% of the total value of landings by those fleet segments.

#### Stocks at Risk Indicator (SAR)

For 1 active fleet segments in 2017, one stock at risk was detected.

According to the criteria in the 2014 Balance Indicator Guidelines, the number of fleet segments per SAR category is shown in the table below:

SAR	1	2	3	4	5	6	7	>7

N of fleet-segments	1							
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Number of Overharvested Stocks (NOS)

The proportional distribution of NOS for the 2 fleet segments for which SHI has been calculated is shown in the table below:

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	0	2	0	0

Economic Dependency Indicator (EDI)

Fleet segments' distribution over EDI classes is shown in the table below. Fleet segments reported are those for which  $F/F_{msy}$  is calculated and landings are available.

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	2	0	0	0

Return on Investment (ROI) and/or Return on Fixed Tangible Assets (RoFTA)

There were 76 fleet segments in the Portuguese fleet in 2017 of which 60 were active. After clustering 52 segments were available for analysis.

ROFTA was calculated for 52 segments:

- 49 segments were *in balance* with their fishing opportunities,
- 1 segment was *not in balance* with their fishing opportunities,
- 2 segments were *not sufficiently profitable*.

Trends for the 52 segments were as follows:

- 37 segments displayed an *increasing* trend.
- 12 segments displayed a *decreasing* trend,
- 3 segments displayed no trend (or no trend could be calculated).

ROI was not calculated.

Ratio between Current Revenue and Break-Even Revenue (CR/BER)

CR/BER was calculated for 52 segments:

- 49 segments were *in balance* with their fishing opportunities,
- 3 segments were *not in balance* with their fishing opportunities,

Trends for the 52 segments were as follows:



- 43 segments displayed an *increasing* trend,
- 4 segments displayed a *decreasing* trend,
- 5 segments displayed no trend (or no trend could be calculated).

### The Vessel Use Indicator (VUR) and/or Vessel Use Indicator 220 (VUR<sub>220</sub>)

Note: VUR<sub>220</sub> is calculated on a standard year of 220 fishing days and is available in every case. VUR is calculated using the maximum days at sea provided by the Member State (where available).

VUR<sub>220</sub> was calculated for 52 segments:

- 21 segments were *in balance* with their fishing opportunities,
- 31 segments were *not in balance* with their fishing opportunities.

Trends for the 52 segments were as follows:

- 5 segments displayed an *increasing* trend,
- 3 segments displayed a *decreasing* trend,
- 44 segments displayed *no* trend (or no trend could be calculated).

VUR was calculated for 49 segments:

- 31 segments were *in balance* with their fishing opportunities,
- 18 segments were *not in balance* with their fishing opportunities,

Trends for the 49 segments were as follows:

- 11 segments displayed an *increasing* trend,
- 2 segments displayed a *decreasing* trend,
- 36 segments displayed *no* trend (or no trend could be calculated).

### The Inactive Fleet Indicators

The total inactive Portuguese vessels accounted for 52.4% of the total number of vessels, 17.9% of the total GT and 21.4% of the total kW.

The length class with the highest number of inactive vessels is the VL0010 group, which represents almost half of the fleet (43.8%) in number of vessels, 3.5% in GT and 8.6% in kW.

### Data issues

Several improvements were made in the economic model to predict value of landings, vessel classification (fishing gear classification), and expenditure values. In 2019 is also be expected to improve the questioners to the fishermen in order to collect only data that can't be obtained by administrative in a reliable way.

### Comparison between MS annual fleet reports and EWG 19-03

The comparison between biological indicators reported in the MS annual fleet report and those estimated in the framework of EWG 19-13 showed different

outputs in term of fleet segment status for SHI, while for SAR a comparison was not possible (see Annex II for more details).

Based on EWG 19-13 there is one segment, the Dredge segment in Mainland of length class VL0010 that shows imbalance for both economic indicators CR/BER and RoFTA. This is consistent with the Portuguese Annual Fleet Report. Yet, according to the estimations by EWG 19-13 there are another two segments in NAO super-region (MGP of VL1824 and PGP VL1824) that are out of balance regarding the CR/BER indicator but as for RoFTA the outcome is that they are not sufficiently profitable. This is inconsistent with the Portuguese Annual Fleet Report.

### 3.6.19 Romania (ROU)

#### Sustainable Harvest Indicator (SHI)

Out of 6 fleet segments active in 2017, landings in value have been provided for all 6 fleet segments and SHI indicator values were available for 6.

The EWG notes that for the 6 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 100.00% of the total value of the landings in 2017 provided by MS, and all 6 fleet segments may not be in balance with their fishing opportunities.

In the period 2012-2017, the SHI indicator values considered meaningful to assess balance or imbalance were decreasing for 2 fleet segments and increasing for 4.

#### Stocks at Risk Indicator (SAR)

For 2 active fleet segments in 2017, one or more stock at risk were detected.

According to the criteria in the 2014 Balance Indicator Guidelines, the number of fleet segments per SAR category is shown in the table below:

SAR	1	2	3	4	5	6	7	>7
N of fleet-segments	2							

#### Number of Overharvested Stocks (NOS)

The proportional distribution of NOS for the 6 fleet segments for which SHI has been calculated is shown in the table below:

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	0	0	0	6

### Economic Dependency Indicator (EDI)

Fleet segments' distribution over EDI classes is shown in the table below. Fleet segments reported are those for which F/Fmsy is calculated and landings are available.

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	0	0	0	6

### Return on Investment (ROI) and/or Return on Fixed Tangible Assets (RoFTA)

There were 8 fleet segments in the Romanian fleet in 2017 of which 6 were active. After clustering 4 segments were available for analysis.

ROFTA was calculated for 4 segments:

- All 4 segments were *in balance* with their fishing opportunities,

Trends were calculated for 4 segments:

- 3 segments displayed an *increasing* trend,
- 1 segment displayed *no* trend (or no trend could be calculated).

ROI was calculated for 4 segments:

- All 4 segments were *in balance* with their fishing opportunities.

Trends were calculated for 4 segments:

- All 4 segments displayed an *increasing* trend.

### Ratio between Current Revenue and Break-Even Revenue (CR/BER)

CR/BER was calculated for 4 segments:

- All 4 segments were *in balance* with their fishing opportunities.

Trends were calculated for 4 segments:

- All 4 segments displayed an *increasing* trend.

### The Vessel Use Indicator (VUR) and/or Vessel Use Indicator 220 (VUR<sub>220</sub>)

Note; VUR<sub>220</sub> is calculated on a standard year of 220 fishing days and is available in every case. VUR is calculated using the maximum days at sea provided by the Member State (where available).

VUR<sub>220</sub> was calculated for 4 segments:

- All 4 segments were *not in balance* with their fishing opportunities.

Trends were calculated for 4 segments:

- All 4 segments displayed *no* trend (or no trend could be calculated).

VUR was calculated for 4 segments:

- 1 segment was *in balance* with their fishing opportunities,
- 3 segments were *not in balance* with their fishing opportunities.

Trends for the 4 segments were as follows:

- 1 segment displayed an *increasing* trend,
- 1 segment displayed a *decreasing* trend,
- 2 segments displayed *no* trend (or no trend could be calculated).

### The Inactive Fleet Indicators

In 2017, no inactive vessels were reported.

### Data Issues

No specific data issues were reported for Romania in the AER2019. However, the average number of days-at-sea per vessel and the variations in productivity along the period 2008-2017 could indicate the presence of anomalies, which should be further investigated by the national experts. Annual days-at-sea per vessel moved from 8 days in 2008 to 31 days in 2017, with a minimum of 5 days per vessel in 2011. These values seem to be too low for a professional fleet. Furthermore, landings per day changed from 122 kg in 2008 to more than 2 tons in 2017, with an increase in the average productivity by more than 1500 %.

### Comparison between MS annual fleet reports and EWG 19-13

The comparison between biological indicators reported in the MS annual fleet report and those estimated in the framework of EWG 19-13 showed similar outputs in terms of fleet segment status for SHI only on half of the cases, while for SAR a comparison was not possible (see Annex II for more details).

As regards the ROI and CR/BER indicators the Romanian annual fleet report and EWG 19-13 estimate that all 4 segments are in balance. However, there was no data available in the Romanian fleet report to compare the figures. A reference is made to table 8 that appears to be missing from the report.

#### 3.6.20 *Slovenia (SVN)*

##### Area 37

##### Sustainable Harvest Indicator (SHI)

Out of 14 fleet segments active in 2017, landings in value have been provided aggregated in 4 fleet segments and SHI indicator values were available for 4.

According to the criteria in the 2014 Balance Indicator Guidelines, the SHI indicator values for 3 fleet segments cannot be used meaningfully to assess the balance or

imbalance because the indicator values are based on stocks that comprise less than 40% of the total value of landings by those fleet segments.

The EWG notes that for the 1 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 0.81% of the total value of the landings in 2017 provided by MS, and 1 fleet segment may not be in balance with their fishing opportunities.

In the period 2012-2017 the SHI indicator values considered meaningful to assess balance or imbalance were increasing for 1 fleet segment, with no evident trend for 3 fleet segments.

### Stocks at Risk Indicator (SAR)

No stocks at risk were detected for active fleet segments in 2017.

### Number of Overharvested Stocks (NOS)

The proportional distribution of NOS for the 4 fleet segments for which SHI has been calculated is shown in the table below:

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	0	0	1	3

### Economic Dependency Indicator (EDI)

Fleet segments' distribution over EDI classes is shown in the table below. Fleet segments reported are those for which  $F/F_{msy}$  is calculated and landings are available.

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	2	1	0	1

### Return on Investment (ROI) and/or Return on Fixed Tangible Assets (RoFTA)

There were 18 fleet segments in the Slovenian fleet in 2017 of which 14 were active. After clustering 4 segments were available for analysis.

ROFTA was calculated for 4 segments:

- 2 segments were *in balance* with their fishing opportunities,
- 2 segments were *not in balance* with their fishing opportunities.

Trends were calculated for 4 segments:

- 2 segments displayed an *increasing* trend,

- 2 segments displayed a *decreasing* trend.

ROI was not calculated.

#### Ratio between Current Revenue and Break-Even Revenue (CR/BER)

CR/BER was calculated for 4 segments:

- 2 segments were *in balance* with their fishing opportunities,
- 2 segments were *not in balance* with their fishing opportunities.

Trends were calculated for 4 segments:

- 2 segments displayed an *increasing* trend,
- 2 segments displayed a *decreasing* trend.

#### The Vessel Use Indicator (VUR) and/or Vessel Use Indicator 220 (VUR<sub>220</sub>)

Note: VUR<sub>220</sub> is calculated on a standard year of 220 fishing days and is available in every case. VUR is calculated using the maximum days at sea provided by the Member State (where available).

VUR<sub>220</sub> was calculated for 4 segments:

- All 4 segments were *not in balance* with their fishing opportunities.

Trends were calculated for 4 segments:

- 1 segment displayed a *decreasing* trend,
- 3 segments displayed *no* trend (or no trend could be calculated).

VUR was calculated for 4 segments:

- All 4 segments were *not in balance* with their fishing opportunities.

Trends were calculated for 4 segments:

- All 4 segments displayed *no* trend (or no trend could be calculated).

#### The Inactive Fleet Indicators

In 2017, 4 vessel length segments had inactive vessels (VL0006, VL0612, VL1218, VL1824). The total inactive Slovenian vessels account for 53.5% of the total number of vessels and for 45.6% of total kW. The fleet segment with the highest levels of inactivity are the VL0006 group at 30.2% of the total number of vessels and 4.2% of the total kW.

#### Data Issues

No major data issues were reported in AER2019.

#### Comparison between MS annual fleet reports and EWG 19-03

The comparison between biological indicators reported in the MS annual fleet report and those estimated in the framework of EWG 19-13 was not possible (see Annex II for more details).

As regards the RoFTA indicator the estimation in the Slovenian annual fleet report and EWG 19-13 are the same. The same stands for the CR/BER regarding the results. Yet, there are some inconsistencies with the values.

### 3.6.21 Spain (ESP)

#### Area 27

#### Sustainable Harvest Indicator (SHI)

Out of 52 fleet segments active in 2017, landings in value have been provided for all 52 fleet segments and SHI indicator values were available for 51.

According to the criteria in the 2014 Balance Indicator Guidelines, the SHI indicator values for 26 fleet segments cannot be used meaningfully to assess the balance or imbalance because the indicator values are based on stocks that comprise less than 40% of the total value of landings by those fleet segments.

The EWG notes that for the 25 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 63.41% of the total value of the landings in 2017 provided by MS, and whereas follows:

- 15 fleet segments may not be in balance with their fishing opportunities;
- 10 fleet segments may be in balance with their fishing opportunities.

In the period 2012-2017 the SHI indicator values considered meaningful to assess balance or imbalance were increasing for 2 fleet segments, decreasing for 6 fleet segments, with no evident trend for 8 fleet segments, no conclusion for 9 fleet segments.

#### Stocks at Risk Indicator (SAR)

For 20 active fleet segments in 2017, one or more stock at risk was detected.

According to the criteria in the 2014 Balance Indicator Guidelines, the number of fleet segments per SAR category is shown in the table below:

SAR	1	2	3	4	5	6	7	>7
N of fleet-segments	13	1	2	2	1	1		

#### Number of Overharvested Stocks (NOS)

The proportional distribution of NOS for the 51 fleet segments for which SHI has been calculated is shown in the table below:

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	13	34	2	2

### Economic Dependency Indicator (EDI)

Fleet segments' distribution over EDI classes is shown in the table below. Fleet segments reported are those for which  $F/F_{msy}$  is calculated and landings are available.

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	33	16	2	0

### *Spain (ESP)*

#### Area 37

### Sustainable Harvest Indicator (SHI)

Out of 30 fleet segments active in 2017, landings in value have been provided for all 30 fleet segments and SHI indicator values were available for 28.

According to the criteria in the 2014 Balance Indicator Guidelines, the SHI indicator values for 14 fleet segments cannot be used meaningfully to assess the balance or imbalance because the indicator values are based on stocks that comprise less than 40% of the total value of landings by those fleet segments.

The EWG notes that for the 14 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 75.67% of the total value of the landings in 2017 provided by MS, and were as follows:

- 12 fleet segments may not be in balance with their fishing opportunities;
- 2 fleet segments may be in balance with their fishing opportunities.

In the period 2012-2017 the SHI indicator values considered meaningful to assess balance or imbalance were increasing for 1 fleet segment, decreasing for 5 fleet segments, with no evident trend for 7 fleet segments, no conclusion for 1 fleet segment.

### Stocks at Risk Indicator (SAR)

For 10 active fleet segments in 2017, one or more stock at risk were detected.



According to the criteria in the 2014 Balance Indicator Guidelines, the number of fleet segments per SAR category is shown in the table below:

SAR	1	2	3	4	5	6	7	>7
N of fleet-segments	6	2	1					1

#### Number of Overharvested Stocks (NOS)

The proportional distribution of NOS for the 28 fleet segments for which SHI has been calculated is shown in the table below:

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	1	1	9	17

#### Economic Dependency Indicator (EDI)

Fleet segments' distribution over EDI classes is shown in the table below. Fleet segments reported are those for which  $F/F_{msy}$  is calculated and landings are available.

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	12	6	7	3

#### *Spain (ESP)*

#### OFR

#### Sustainable Harvest Indicator (SHI)

Out of 8 fleet segments active in 2017, landings in value have been provided for all 8 fleet segments and SHI indicator values were available for 7.

According to the criteria in the 2014 Balance Indicator Guidelines, the SHI indicator values for 4 fleet segments cannot be used meaningfully to assess the balance or imbalance because the indicator values are based on stocks that comprise less than 40% of the total value of landings by those fleet segments.

The EWG notes that for the 3 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 51.93% of the total value of the landings in 2017 provided by MS, and were as follows:

- 2 fleet segments may not be in balance with their fishing opportunities;

- 1 fleet segment may be in balance with its fishing opportunities.

In the period 2012-2017 the SHI indicator values considered meaningful to assess balance or imbalance were with no evident trend for 2 fleet segments and no conclusion for 1 fleet segment.

### Stocks at Risk Indicator (SAR)

For 1 active fleet segments in 2017, one stock at risk was detected.

According to the criteria in the 2014 Balance Indicator Guidelines, the number of fleet segments per SAR category is shown in the table below:

SAR	1	2	3	4	5	6	7	>7
N of fleet-segments				1				

### Number of Overharvested Stocks (NOS)

The proportional distribution of NOS for the 7 fleet segments for which SHI has been calculated is shown in the table below:

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	0	7	0	0

### Economic Dependency Indicator (EDI)

Fleet segments' distribution over EDI classes is shown in the table below. Fleet segments reported are those for which  $F/F_{msy}$  is calculated and landings are available.

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	4	2	1	0

### Return on Investment (ROI) and/or Return on Fixed Tangible Assets (RoFTA)

There were 108 fleet segments in the Spanish fleet in 2017 of which 90 were active. After clustering 60 segments were available for analysis.

ROFTA was calculated for 57 segments:

- 50 segments were *in balance* with their fishing opportunities,
- 6 segments were *not in balance* with their fishing opportunities,
- 1 segment was *not sufficiently profitable*.

Trends for the 57 segments were as follows:

- 32 segments displayed an *increasing* trend,
- 9 segments displayed a *decreasing* trend,
- 16 segments displayed no trend (or no trend could be calculated).

ROI was calculated for 14 segments:

- 13 segments were *in balance* with their fishing opportunities,
- 1 segment was *not sufficiently profitable*.

Trends for the 14 segments were as follows:

- 11 segments displayed an *increasing* trend,
- 2 segments displayed a *decreasing* trend,
- 1 segment displayed no trend.

#### Ratio between Current Revenue and Break-Even Revenue (CR/BER)

CR/BER was calculated for 57 segments:

- 51 segments were *in balance* with their fishing opportunities,
- 6 segments were *not in balance* with their fishing opportunities,

Trends for the 57 segments were as follows:

- 35 segments displayed an *increasing* trend,
- 5 segments displayed a *decreasing* trend,
- 17 segments displayed no trend (or no trend could be calculated).

#### The Vessel Use Indicator (VUR) and/or Vessel Use Indicator 220 (VUR<sub>220</sub>)

Note: VUR<sub>220</sub> is calculated on a standard year of 220 fishing days and is available in every case. VUR is calculated using the maximum days at sea provided by the Member State (where available).

VUR<sub>220</sub> was calculated for 60 segments:

- 30 segments were in balance with their fishing opportunities,
- 30 segments were out of balance with their fishing opportunities,

Trends for the 60 segments were as follows:

- 2 segments displayed an *increasing* trend,
- 1 segment displayed a *decreasing* trend,
- 57 segments displayed *no* trend (or no trend could be calculated).

VUR was calculated for 60 segments:

- 27 segments were *in balance* with their fishing opportunities,
- 33 segments were *not in balance* with their fishing opportunities,

Trends for the 60 segments were as follows:

- 2 segments displayed a *decreasing* trend,
- 58 segments displayed *no* trend (or no trend could be calculated).

### The Inactive Fleet Indicators

In 2017, 11 vessel length segments had inactive vessels in different areas: VL0006, VL0612, VL1218 and VL1824 in MBS, VL0010, VL1012, VL1218 and VL2440 in NAO and VL2440 in OFR.

The total inactive Spanish vessels account for 11.4% of the total number of vessels, 4.7% of the total GT and 5.4% of the total kW.

The fleet segments with the highest levels of inactivity are the VL0010 group in NAO region at 6.8% in number and 1.0% in kW, and the VL0612 group in MBS region at 2.2% in number and 0.8% in kW.

### Data Issues

AER 2019 pointed out that there are some issues with raising the data of the sampling plan. Spanish authorities are designing a new more realistic sampling design.

### Comparison between MS Annual Fleet Report and STECF EWG 19-13

Based on Spanish Annual Fleet Report there are two fleet segments in NAO region that are in imbalance for both of the indicators CR/BER and RoFTA. These segments are the PS of vessel length segment VL1012 and the DFN of vessel length segment VL1012. This is consistent with the STECF EWG 19-13.

Moreover, as for the IC region according to Spanish Annual Fleet Report there are 3 segments that show imbalance regarding the CR/BER indicator: the HOK of vessel length segment VL2440, the PMP of vessel length segment VL1012 and the FPO of vessel length segment VL1012. These results are consistent with the STECF EWG 19-13. Concerning the RoFTA indicator apart from the above 3 fleet segments which show imbalance the fleet segment PMP of vessel length segment VL1012 shows imbalance too. This is consistent with the estimation by the STECF EWG 19-13.

In the MBS region, according to the Spanish Annual Fleet Report there is only one fleet segment that shows imbalance: the HOK of vessel length segment VL0612 for both of the two economic indicators. Yet, the estimation by the STECF EWG 19-13 cannot tell if this fleet segment is in balance or not.

#### *3.6.22 Sweden (SWE)*

### Area 27

### Sustainable Harvest Indicator (SHI)

Out of 24 fleet segments active in 2017, landings in value have been provided for all 24 fleet segments and SHI indicator values were available for 21.

According to the criteria in the 2014 Balance Indicator Guidelines, the SHI indicator values for 6 fleet segments cannot be used meaningfully to assess the balance or imbalance because the indicator values are based on stocks that comprise less than 40% of the total value of landings by those fleet segments.

The EWG notes that for the 15 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 94.01% of the total value of the landings in 2017 provided by MS, and were as follows:

- 9 fleet segments may not be in balance with their fishing opportunities;
- 6 fleet segments may be in balance with their fishing opportunities.

In the period 2012-2017 the SHI indicator values considered meaningful to assess balance or imbalance were increasing for 3 fleet segments, decreasing for 8 fleet segments, with no evident trend for 4 fleet segments.

### Stocks at Risk Indicator (SAR)

For 10 active fleet segments in 2017, one or more stock at risk were detected.

According to the criteria in the 2014 Balance Indicator Guidelines, the number of fleet segments per SAR category is shown in the table below:

SAR	1	2	3	4	5	6	7	>7
N of fleet-segments	7	1	2					

### Number of Overharvested Stocks (NOS)

The proportional distribution of NOS for the 21 fleet segments for which SHI has been calculated is shown in the table below:

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	2	2	13	4

### Economic Dependency Indicator (EDI)

Fleet segments' distribution over EDI classes is shown in the table below. Fleet segments reported are those for which  $F/F_{msy}$  is calculated and landings are available.

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	11	2	3	5

### Return on Investment (ROI) and/or Return on Fixed Tangible Assets (RoFTA)

There were 29 fleet segments in the Swedish fleet in 2017 of which 24 were active. After clustering 7 segments were available for analysis.

ROFTA was calculated for 7 segments:

- 4 segments were *in balance* with their fishing opportunities,
- 3 segments were *not in balance* with their fishing opportunities,

Trends were calculated for 7 segments:

- 5 segments displayed an *increasing* trend,
- 2 segments displayed a *decreasing* trend,

ROI was not calculated.

#### Ratio between Current Revenue and Break-Even Revenue (CR/BER)

CR/BER was calculated for 7 segments:

- 4 segments were *in balance* with their fishing opportunities,
- 3 segments were *not in balance* with their fishing opportunities,

Trends were calculated for 7 segments:

- 4 segments displayed an *increasing* trend,
- 2 segments displayed a *decreasing* trend,
- 1 segment displayed no trend (or no trend could be calculated).

#### The Vessel Use Indicator (VUR) and/or Vessel Use Indicator 220 (VUR<sub>220</sub>)

Note: VUR<sub>220</sub> is calculated on a standard year of 220 fishing days and is available in every case. VUR is calculated using the maximum days at sea provided by the Member State (where available).

VUR<sub>220</sub> was calculated for 7 segments:

- 1 segment was *in balance* with their fishing opportunities,
- 6 segments were *not in balance* with their fishing opportunities.

Trends for the 7 segments were as follows:

- All 7 segments displayed *no* trend.

VUR was calculated for 7 segments:

- 3 segments were *in balance* with their fishing opportunities,
- 4 segments were *not in balance* with their fishing opportunities,

Trends were calculated for 7 segments:

- All 7 segments displayed *no* trend.

#### The Inactive Fleet Indicators

Four vessel length segments (all in ICES Area 27) had inactive vessels; VL0010, VL1012, VL1824, VL40XX. These represented 24.7% of the total number of

vessels, 7.5% of the total GT and 12.2% of the total kW. The VL0010 group contributed 20.8% of inactive vessels, 2.0% by GT, and 6.9% by kW).

### Data Issues

In the Annual Economic Report 2019 the following data issues were reported. There are no major data issues in the Swedish EU-MAP data. Swedish data come from logbooks, journals, surveys with a census sample with high response rate (87%) and tax declarations. Previously, Sweden used probability sampling when sending out the questionnaires. Since 2012, the survey had a census approach. With the census approach, the number of data points have increased significantly, and the response rate has been stable around 85% since 2012.

An important issue is clustering. With a small and diminishing fleet, Sweden is forced to cluster all of the economic data and also report cluster definitions.

Sweden changed definition for the fleet from including vessels in the fleet by 1 January to include all vessels active during the year. All the previous years are adjusted to follow the new definition. Furthermore, recalculations of many variables were made to the whole time series to have a new and complete time series with the new EU-MAP definitions. The recalculation uses a slightly modified design, which in turn affects the results.

### Comparison Between the MS Annual Fleet Report and STECF 19-13.

Swedish fleet segments in the MS Annual Fleet Report are comparable to those used in the report of STECF 19-13 in the biological sections but in the economics sections although the length groups are largely retained, the fleets are described either as using active gears or passive gears.

The comparison between biological indicators reported in the MS annual fleet report and those estimated in the framework of EWG 19-13 showed different outputs in term of fleet segment status for SAR, while for SHI a comparison was not possible (see Annex II for more details).

No comparison of the two economic indicators could be made since although the MS has largely retained the length groups, the fleet is described either as using active or passive gears and no gear group.

#### *3.6.23 United Kingdom (GBR)*

### Area 27

#### Sustainable Harvest Indicator (SHI)

Out of 44 fleet segments active in 2017, landings in value have been provided for all 44 fleet segments and SHI indicator values were available for 40.

According to the criteria in the 2014 Balance Indicator Guidelines, the SHI indicator values for 21 fleet segments cannot be used meaningfully to assess the balance or

imbalance because the indicator values are based on stocks that comprise less than 40% of the total value of landings by those fleet segments.

The EWG notes that for the 19 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 76.54% of the total value of the landings in 2017 provided by MS, and were as follows:

- 7 fleet segments may not be in balance with their fishing opportunities;
- 12 fleet segments may be in balance with their fishing opportunities.

In the period 2012-2017, the SHI indicator values considered meaningful to assess balance or imbalance were increasing for 1 fleet segments, decreasing for 9 fleet segments, with no evident trend for 7 fleet segments. For 2 fleet segment information for full time series was not available.

#### Stocks at Risk Indicator (SAR)

For 11 active fleet segments in 2017, one or more stock at risk were detected.

According to the criteria in the 2014 Balance Indicator Guidelines, the number of fleet segments per SAR category is shown in the table below:

SAR	1	2	3	4	5	6	7	>7
N of fleet-segments	6	3					1	1

#### Number of Overharvested Stocks (NOS)

The proportional distribution of NOS for the 39 fleet segments for which SHI has been calculated is shown in the table below:

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	6	23	10	1

#### Economic Dependency Indicator (EDI)

Fleet segments' distribution over EDI classes is shown in the table below. Fleet segments reported are those for which  $F/F_{msy}$  is calculated and landings are available.

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	31	4	3	2



## OFR

### Sustainable Harvest Indicator (SHI)

Out of 2 fleet segments active in 2017, landings in value have been provided aggregated in 3 fleet segments and SHI indicator values were available for 2.

According to the criteria in the 2014 Balance Indicator Guidelines, the SHI indicator values for 1 fleet segment cannot be used meaningfully to assess the balance or imbalance because the indicator values are based on stocks that comprise less than 40% of the total value of landings by those fleet segments.

The EWG notes that for the 1 fleet segment for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 0.83% of the total value of the landings in 2017 provided by MS, and 1 fleet segment may be in balance with their fishing opportunities.

In the period 2012-2017, the SHI indicator showed no evident trend.

### Stocks at Risk Indicator (SAR)

For 1 active fleet segments in 2017, one stock at risk was detected.

According to the criteria in the 2014 Balance Indicator Guidelines, the number of fleet segments per SAR category is shown in the table below:

SAR	1	2	3	4	5	6	7	>7
N of fleet-segments	1							

### Number of Overharvested Stocks (NOS)

The proportional distribution of NOS for the 2 fleet segments for which SHI has been calculated is shown in the table below:

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	0	1	1	0

### Economic Dependency Indicator (EDI)

Fleet segments' distribution over EDI classes is shown in the table below. Fleet segments reported are those for which  $F/F_{msy}$  is calculated and landings are available.

	0-25%	25-50%	50-75%	75-100%
N of fleet segments	2	0	0	0

### Return on Investment (ROI) and/or Return on Fixed Tangible Assets (RoFTA)

There were 53 fleet segments in the UK fleet in 2017 of which 47 were active. After clustering 29 segments were available for analysis.

ROFTA was calculated for 29 segments:

- 26 segments were *in balance* with their fishing opportunities,
- 3 segments were *not in balance* with their fishing opportunities.

Trends were calculated for 29 segments:

- 18 segments displayed an *increasing* trend,
- 11 segments displayed a *decreasing* trend.

ROI was calculated for 29 segments:

- 25 segments were *in balance* with their fishing opportunities,
- 2 segments were *not in balance* with their fishing opportunities,
- 2 segments were *not sufficiently profitable*.

Trends were calculated for 29 segments:

- 21 segments displayed an *increasing* trend,
- 8 segments displayed a *decreasing* trend.

### Ratio between Current Revenue and Break-Even Revenue (CR/BER)

CR/BER was calculated for 29 segments:

- 28 segments were *in balance* with their fishing opportunities,
- 1 segment was *not in balance* with their fishing opportunities,

Trends were calculated for 29 segments:

- 18 segments displayed an *increasing* trend,
- 5 segments displayed a *decreasing* trend,
- 6 segments displayed no trend.

### The Vessel Use Indicator (VUR) and/or Vessel Use Indicator 220 (VUR<sub>220</sub>)

Note: VUR<sub>220</sub> is calculated on a standard year of 220 fishing days and is available in every case. VUR is calculated using the maximum days at sea provided by the Member State (where available).

VUR<sub>220</sub> was calculated for 29 segments:

- 11 segments were *in balance* with their fishing opportunities,
- 18 segments were *not in balance* with their fishing opportunities,

Trends were calculated for 29 segments:

- All 29 segments displayed *no* trend.

VUR was not calculated.

## The Inactive Fleet Indicators

In 2017, 6 vessel length segments had inactive vessels (VL0010, VL1012, VL1218, VL1824, VL2440, VL40XX). The total inactive UK vessels account for 24.9% of the total number of vessels, 11.9% of the total GT and 11.9% of the total kW.

The fleet segments with the highest levels of inactivity are the *VL0010* group at 22.7% in terms of number of vessels and 7.6% inactivity in terms of kW.

## Data Issues

In the Annual Economic Report 2019 the following data issues were reported:

No major issues detected. In 2017, some changes were made to segmentation in order to provide a more relevant picture of fleet performance and the methodology used to estimate data on capital values was updated. In 2018, the method for calculating energy cost was updated to take into account monthly fuel prices (as opposed to annual), also updated was the method for calculating depreciation. As a result of these changes values and figures may differ from previous reports.

Exchange rates also affect the trend analysis due to the fact that the UK calculates all economic variables in pounds and then converts to euro amounts. Between 2014 and 2017 there were substantial changes in the exchange rate which would certainly impact this analysis.

## Comparison between MS annual fleet reports and EWG 19-13

The comparison between biological indicators reported in the MS annual fleet report and those estimated in the framework of EWG 19-13 was not possible (see Annex II for more details).

The CR/BER indicator values submitted in the UK annual fleet report is different from the EWG 19-13 indicator values. According the ROI indicator, in the UK annual fleet report, 2 fleet segments appear to be not in balance with their fishing opportunities, but these are not the same fleet segments as those identified by EWG 19-13. According the CR/BER indicator, the UK annual fleet report and EWG 19-13 identify the same fleet segments to be not in balance with their fishing opportunities.

### 3.7 Overview of Balance Indicator status and trends

There were no clear signals overall in indicator status and trends in 2012-2017 for Areas NAO, MBS and OFR. Improving trends in indicator values were found for the majority of fleet segments for which the economic indicators could be calculated. Analyses of technical indicators showed that indicator trends were improving for the inactive vessel indicator, but no clear trend was apparent for the VUR indicator. Improving trends in indicator values were found for the majority of fleet segments for which the SHI could be calculated. EWG 18-14 considered a trend analysis based on SAR indicator values to be too unreliable (Tables 3.7.1-2).

Table 3.7.1 Out of balance trend summary table at supra-region level. The number of fleet segments with improved, worsened and no trends in Areas NAO, MBS and OFR over the period 2010-2017 are shown. For biological and technical indicators decreasing trends indicate improvement; for economic indicators increasing trends indicate improvement.

Indicators / trends	Inactive vessels		VUR		VUR 220		SHI >40%		CR/BER		ROFTA (5 year average)			ROI (5 year average)			
	in balance	out of balance	in balance	out of balance	in balance	out of balance	in balance	out of balance	in balance	out of balance	in balance	not sufficiently profitable	out of balance	in balance	not sufficiently profitable	out of balance	
NAO	decreasing	12	3		9	1	7	27	29	18	19	36	2	20	12	2	2
	increasing	7	6	11	4	6	1	3	13	136	10	142	2	15	43	4	8
	no trend	46		64	92	81	147	22	53	38	11	10		5	1		
NAO Total	65	9	75	105	88	155	52	95	192	40	188	4	40	56	6	10	
MBS	decreasing	13	1	1	7	1	6	4	22	8	9	12	2	9			2
	increasing	7	1	2	1	4	1		24	61	9	63	3	11	14		1
	no trend	19		37	59	23	93	7	34	24	14	16	1	8	4		1
MBS Total	39	2	40	67	28	100	11	80	93	32	91	6	28	18		4	
OFR	decreasing					11				3	1	4	1	1	1	2	
	increasing	1		1		4				4		3			4		
	no trend	15		12	7		33	7	4	9	4	8		4			
OFR Total	16	0	13	7	15	33	7	4	16	5	15	1	5	5	2		
Totals	120	11	128	179	131	288	70	179	301	77	294	11	73	79	8	14	
		131		307		419		249		378		378		101			

When only considering the trends for Member State fleet segments assessed as being out of balance in 2017 according to the criteria of the 2014 Balance Indicator Guidelines (see Table 3.7.2 for assessments of trends in individual countries), the majority of fleet segments which were out of balance according to the biological indicator (SHI) either showed no trends or improving trends. There were no clear trends for the technical and economic indicators.

Table 3.7.2 Summary table of balance indicator values for 2017 and trends over the period 2012-2017 at Member State level. The number of fleet segments in balance, *out of balance* or *not sufficiently profitable* with improved, worsened and no trends are shown. For biological indicators decreasing trends indicate improvement; for economic indicators and VUR, increasing trends indicate improvement.

MS	No. of fleet segments*	Trend	Inactive vessels		VUR		VUR 220		SHI >40%		CR/BER		RoFTA (5 year average interest rate)			RoI (5 year average interest rate)		
			in balance	out of balance	in balance	out of balance	in balance	out of balance	in balance	out of balance	in balance	out of balance	in balance	not sufficiently profitable	out of balance	in balance	not sufficiently profitable	out of balance
BEL	9 (4)	decreasing							1	1		1			1			
		increasing									3		3					
		no trend	3		4		4											
BGR	25 (16)	decreasing	3							4	2	2	2		2			
		increasing								8	4	2	4		2			
		no trend	1		2	14		16		13	3	3	3		3			
CYP	7 (7)	decreasing	2															
		increasing									2	1	2		2			
		no trend					1	6	1	1		3		1	1			
DEU	20 (14)	decreasing	1					1		7	3	3	3		3			
		increasing	1	1							5	1	5		2			
		no trend	2		9	4	5	7		3		1						
DNK	19 (19)	decreasing							3	4		2	1		1	2		
		increasing		1							15	2	14		3	12	2	3
		no trend	3				5	14		7								
ESP	90 (60)	decreasing	1			2	1		2	9	5		8	1		1	1	
		increasing					2		1	2	34	1	31		1	11		
		no trend	10		27	31	27	30	10	18	12	5	11		5	1		
EST	5 (4)	decreasing	1								2		2			2	1	
		increasing								1	2		2				1	
		no trend						4		3								
FIN	8 (5)	decreasing	2								3			4				2

MS	No. of fleet segments*	Trend	Inactive vessels		VUR		VUR 220		SHI >40%		CR/BER		RoFTA (5 year average interest rate)			Rol (5 year average interest rate)		
			in balance	out of balance	in balance	out of balance	in balance	out of balance	in balance	out of balance	in balance	out of balance	in balance	not sufficiently profitable	out of balance	in balance	not sufficiently profitable	out of balance
		increasing		1	1	1				2					1			1
		no trend			1	2	1	4				2						
FRA	120 (90)	decreasing						3	8	2	2		4		1			
		increasing	1							4	23	1	40		2			
		no trend	23		12	34	25	58	11	9	27	6	8		4			
GBR	47 (29)	decreasing		1					6	3	5		10		1	7	1	
		increasing								1	17	1	16		2	18	1	2
		no trend	5				11	18	7	3	6							
GRC	23 (17)	decreasing							1	1								
		increasing	2				3	1			5		5					
		no trend	3		5		1											
HRV	35 (23)	decreasing	4		1	2	1	2	1	5		3	1	2	2			
		increasing	1							4	8	5	8	2	4	4		1
		no trend			3	17	3	17		4	5	2	3		1	2		
IRL	32 (22)	decreasing	4	1		3			1	1	2	2	3		2			
		increasing				2		1		1	5	2	6		2			
		no trend			2	6	4	14	1	10	2							
ITA	28 (23)	decreasing	2							3	2		3					1
		increasing	1		2		3			5	14		15	1		2		
		no trend	4		10	11	4	16	1	6	6		3					
LTU	11 (5)	decreasing	1			2		1			1	3	1		4			
		increasing	3	1														
		no trend	1			3	1	3	2	3		1						
LVA	3 (3)	decreasing		1								1	1		1			
		increasing							2		1		1					
		no trend			1	2	1	2		1	1							

MS	No. of fleet segments*	Trend	Inactive vessels		VUR		VUR 220		SHI >40%		CR/BER		RoFTA (5 year average interest rate)			Rol (5 year average interest rate)		
			in balance	out of balance	in balance	out of balance	in balance	out of balance	in balance	out of balance	in balance	out of balance	in balance	not sufficiently profitable	out of balance	in balance	not sufficiently profitable	out of balance
MLT	18 (10)	decreasing	2			2						2			2			2
		increasing	1								2		2		1	2		
		no trend	2		6	1		10	1	3	2	4	2		3	2		1
NLD	25 (11)	decreasing	2			1			1	3	1		1			1		
		increasing	1		1		1			1	8		8		2	8		2
		no trend	3		5	4	4	6		1	1	1						
POL	18 (10)	decreasing				1		2		1	1	2	1	1	2			
		increasing	2								2	1	2	1				
		no trend	3		1	5	1	7		1	1							
PRT	60 (52)	decreasing				2		3	1	3	3	1	11	1				
		increasing		1	10	1	5				42	1	35	1	1			
		no trend	15		21	15	16	28	2	1	4	1	3					
ROU	6 (4)	decreasing				1				2								
		increasing				1				4	4		3			4		
		no trend			1	1		4					1					
SVN	14 (4)	decreasing		1				1			2				2			
		increasing	1	1						1	2		2					
		no trend	1			4		3										
SWE	24 (7)	decreasing							6	2		2			2			
		increasing	1	1						3	3	1	4		1			
		no trend	1		3	4	1	6		4	1							
<b>Total 647 (439)</b>			<b>120</b>	<b>11</b>	<b>128</b>	<b>179</b>	<b>131</b>	<b>288</b>	<b>70</b>	<b>179</b>	<b>301</b>	<b>77</b>	<b>294</b>	<b>11</b>	<b>73</b>	<b>79</b>	<b>8</b>	<b>14</b>
			<b>131</b>		<b>307</b>		<b>419</b>		<b>249</b>		<b>378</b>		<b>378</b>		<b>101</b>			

\* = Number of active fleet segments (number of active fleet segments and clustered fleet segments)

## **4 TOR 2 – REVIEW OF MEMBER STATES’ FLEET REPORTS FOR 2018 AND ACTION PLANS**

### **4.1 Introductory Remarks for TOR 2**

#### ***Review of Member States’ Action plans accompanying their Fleet reports for 2018.***

Article 22 of Regulation 1380/2013 (on the Common Fisheries Policy) states that where fleet segment assessments clearly demonstrate that fishing capacity is not effectively balanced with fishing opportunities, a Member State should prepare and include in its report an action plan for the fleet segment(s) identified as having structural overcapacity. According to Article 22 of Regulation 1380/2013, action plans should set out the adjustment targets and tools to achieve a balance, and a clear timeframe for its implementation. This Regulation is further supported by COM (2014) 545 Final, which states that action plans should also specify the causes of imbalance and in particular if it has a biological, economic or technical background as calculated according to the indicators.

The evaluation of action plans conducted by EWG 19-13 was based on the protocol described in the STECF 15-02 report. In line with the meeting Terms of Reference, experts considered the following when reviewing the action plans:

- i. Discrepancies in indicators
- ii. Indicators and fleet segments considered;
- iii. Adjustment targets specified;
- iv. Specification of tools to reach the adjustment targets;
- v. Specification of a clear implementation timeframe.

Expert judgements are based on comparing the submitted Member State action plans with the requirements of the 2014 Balance Indicator Guidelines (COM (2014) 545 Final). Such an approach in no way implies that the Expert group agrees with the criteria prescribed in the guidelines for determining whether a fleet segment is out of balance with its fishing opportunities.

### **4.2 Assessment of Member State Action Plans**

Of the 23 Member States submitting fleet reports in 2018, there were 10 accompanying action plans.



#### 4.2.1 Belgium (BEL)

##### Discrepancies in SHI values

A comparison between indicator values in the MS' Fleet reports for 2018 and the values for equivalent fleet segments as estimated by EWG 19-13 (Annex II) indicate that the status of the following segments with respect to being in or out of balance with its fishing opportunities may be different.

	<b>MS Report 2018</b>	<b>Fleet for</b>	<b>EWG 19-13 estimate</b>	<b>Indicator values imply same status?</b>
BEL NAO TBB VL2440	1.04		0.99	No

The Belgium action plan, which was submitted at the end of 2016, contains 10 targeted actions to be taken by Belgium in response to the high F/Fmsy indicator for sole in VIId.

The Fleet report for 2018 asserts that this unfavourable situation was rectified in 2017. The indicator for sole in VIId is less than 1. The action plan has accordingly been implemented and the conditions for balanced fleets have been complied with.

No action plan was provided with the fleet report for 2018.

##### Indicators and Fleet Segments Considered

In the fleet report for 2018, six balance indicators were applied:

- Inactive fleet indicator (for the reference year 2018);
- Days at sea / maximum number of theoretical and observed days at sea (for the reference year 2018);
- Sustainable Harvest Indicator SHI according to F/FMSY (for the reference year 2018);
- SAR (for the reference year 2018);
- ROFTA – low-risk long-term interest rate (for the reference year 2017);
- Current revenue / break-even revenue (CR/BER) (for the reference year 2017);

On 31 December 2018 the Belgian fishing fleet consisted of 68 vessels, three fewer than in 2017.

Belgium asserts that the segments TBB VL1824 and TBB VL2440 are of particular relevance as regards the classifying of segments as 'in balance or imbalance' (ref. Ares(2015)462923 - 02/10/2015 and Ares(2016)5818532 -07/10/2016). Although the indicators for fleet segments DTS24-40 and PMP18-24 are set out in this report, the corresponding results will have to be interpreted with reservations because the segments are so small and diverse.

##### Adjustment Targets and Tools

No action plan was provided with the fleet report for 2018.

#### Plan to improve management system

Major issue underlined by MS report is to solve the problem of choke species in typical mixed fisheries. Belgium is participating fully in this unclear, ongoing process and is preparing for the various possible scenarios.

#### Timeframes for Implementation

The action plan, which was submitted at the end of 2016, contains 10 targeted actions to be taken by Belgium in response to the high F/F<sub>msy</sub> indicator for sole in VIIId. This unfavourable situation was rectified in 2017. The indicator for sole in VIIId is less than 1.

#### Conclusion

In 2018 the capacity of the Belgian fleet fell by 0 kW and 45 GT, resulting in a total decrease of 38% in kW terms and 47% in GT terms compared with the 2003 reference level. Fishing capacity is thus well below the reference levels. There were 68 fishing vessels at the end of 2018 – three fewer than in 2017.

No action plan accompanied the fleet report for 2018.

### 4.2.2 *Bulgaria (BGR)*

#### Discrepancies in SHI values

A comparison between indicator values in the MS' Fleet reports for 2018 and the values for equivalent fleet segments as estimated by EWG 19-13 (Annex II) indicate that the status of the following segments with respect to being in or out of balance with its fishing opportunities may be different.

	<b>MS Fleet Report for 2018</b>	<b>EWG 19-13 estimate</b>	<b>Indicator values imply same status?</b>
BGR MBS FPO VL0612	0.96	2.15	No
BGR MBS PS VL0006	0.92	1.65	No
BGR MBS TM VL1824	0.92	1.51	No
BGR MBS TM VL2440	0.87	1.34	No

#### Indicators and Fleet Segments Considered

Bulgaria presented an Action plan (*Adaptation measures for fleet segments, where structural excess capacity is identified*) with its Annual report on balance between fishing capacity and fishing opportunities for 2018. The Bulgarian authorities assessed balance for 16 fleet segments of which, 6 were assessed to be in balance. This assessment by the MS was on the available indicators for 2018, taking into account trends in indicator values over time.

For the calculation of SHI values Bulgaria used values of F from the STECF 17-11 report, and results for 2016 and 2017 are presented. For 20 out of 24 assessed segments the value of the indicator for two consecutive years was above 1, which may be a sign of imbalance according to Report. The SAR indicator was not calculated because the catches in 2018 did not exceed 10% of the biomass estimates from research surveys for target species. Economic indicators were calculated at the segment level based on the DCF data for 2017 and 2018.

### Adjustment tools and targets

Bulgaria plans to implement list of measures to address unbalanced fleet segments. Listed measures are directed in overall improvement of management system, fisheries infrastructure and value of products, in particular targeting:

- Administrative measures in the applicable national legislation
- Added value, product quality and use of unwanted catches
- Diversification and new forms of income
- Fishing ports, landing quays, fish markets and covered boatshelters
- Marketing measures, sector "Establishing of Producer Organizations"
- Plans for production and marketing
- Conservation and restoration of marine biodiversity and ecosystems and compensation regimes within sustainable fisheries

In order to address identified imbalance Bulgaria launched number of projects under the EMFF where all of them have specific targets for improvement of fleet status. These are:

- Improvement of management of the fishing fleet to achieve better control over the exploitation of fishing capacity
- Promotion of investments that add value to fisheries products, in particular by allowing fishermen to process, market and direct sale of their own catches and innovative investments on board vessels, which increase the quality of fishery products
- Conservation and restoration of aquatic biodiversity and aquatic ecosystems; improving the competitiveness and viability of enterprises in the fisheries sector, including the small-scale coastal fleet, and improving safety and working conditions.
- Improving the competitiveness and viability of enterprises in the fisheries sector, including the small-scale coastal fleet, and improving safety and working conditions
- Contribution to the improvement of the market organization of the products from fishing and aquaculture
- Support of the preparation and implementation of the production and marketing plans of producer organizations and associations of producer organizations. In particular:
  - improving the conditions for the marketing of fishery and aquaculture products of their members;
  - improving the economic returns;
  - stabilizing markets;

- contributing to food supply and promoting the high quality food and safety standards, while contributing to employment in coastal and vilage areas;
- reducing the environmental impact of the fishing
- Promotion of environmentally sustainable, innovative, competitive and knowledge-based fisheries, characterized by resource efficiency

#### Timeframes for Implementation

There is no clear timeframe for implementation of the Bulgarian action plan, however most of the actions are rising from the specific projects under the EMFF and therefore have limited duration.

#### Conclusion

Bulgarian Fleet report and Action plan have clear definition of the unbalanced fleet segments, tools and targets, however timeframe for implementation of the measures proposed is linked to implementation of specific projects within EMFF and are therefore not specified.

### 4.2.3 Croatia (HRV)

#### Discrepancies in SHI values

A comparison between indicator values in the MS' Fleet reports for 2018 and the values for equivalent fleet segments as estimated by EWG 19-13 (Annex II) indicate that the status of the following segments with respect to being in or out of balance with its fishing opportunities may be different.

	<b>MS Report 2018</b>	<b>Fleet for</b>	<b>EWG 19-13 estimate</b>	<b>Indicator values imply same status?</b>
HRV MBS FPO VL0006	0.88		1.57	No

#### Indicators and Fleet Segments Considered

The MS' assessment of balance between fishing capacity and fishing opportunities is based on four indicators (data year in parentheses); SHI (2017), VUR (2018), CR/BER (2017) and Rofa% (2017). Out of 42 fleet segments analysed, 18 are considered by the MS to be in balance and 8 segments out of balance. The segments identified as being out of balance are DTS VL0006, DTS VL0612, DTE VL1218, DTS VL1824, DTS VL2440 PS VL1218, PS VL1824 and PS VL2440.

No assessment of balance was provided for a further 14 fleet segments, 11 of which were inactive in 2018, and a single segment that disappeared from the fleet after 2016 (PS VL40XX). Segments considered to be 'in balance' are segments in all vessel length categories DFN, DRB, FPO, HOK, MGO, MGP, PMP and PSVL0612. For the segments PMP, FPO, MGO and HOK, this represents a change from the fleet

report for 2017, in which such segments were assessed to be out of balance and were included in the action plan accompanying that report.

The basis of the assessments are clearly specified in Table 18 of the fleet report for 2018. The assessments for segments deemed to be out of balance are qualified by an unfavourable value for the SHI ( $SHI > 1.0$ ). Assessments for fleet segments that are considered 'in balance' exhibit a combination of favourable and unfavourable indicator values for the SHI, CR/BER and Rofta%.

An action plan for those DTS and PS fleet segments assessed to be out of balance with their fishing opportunities is contained in the Croatian fleet report for 2018.

### Adjustment tools and targets

The proposed action plan for purse seine fleet segments is a modified version of that proposed in the fleet report for 2017 specifying measures for the years 2019-2021. The proposal is to introduce a set of measures directed to improvement of stock status and reduction of fishing effort. Measures will dominantly target protection of juvenile fish and redirection of fleet from the areas identified as nurseries or important for protection of early age classes of sardine and anchovy. An overview of the proposals for purse seiners for the period 2019-2021 is reproduced below. (The differences between the two action plans are described under ToR 3 (Section 5 of this report).

#### Purse seine (PS) segments

Maximum of 180 fishing days per vessel per year;

- Maximum 20 days per vessel per month;
- Maximum of 144 days targeting anchovy and 144 days per vessel targeting sardine;
- Spatial and temporal closure of no less than 30 continuous days taking place between 1 April to 30 September in order to protect anchovy during spawning and additional closure period between 1 October and 31 March to protect sardine during spawning season;
- Closures for vessels over 12 m length overall for not less than 6 months which shall cover at least 30% of the area which has been identified as a nursery area or as an important area for the protection of early age classes of fish (in territorial and inner sea);
- Limitation of overall fleet capacity of purse seiners actively fishing for small pelagic stocks in terms of gross tonnage (GT) and/or gross registered tonnage (GRT), engine power (kW) and number of vessels, as recorded both in national and GFCM registers in 2014; and
- Control of exploitation so as to ensure that the catches remain at the current levels with possible further decrease;
- Additional temporal closure directed to protection of spawners;
- Further improvement in scientific surveys and stock assessment methodology.

Measures for the management of the capacity of the DTS segments have been included in the Action plan accompanying the fleet report for 2018 as all DTS segments were deemed (based on the SHI) to be out of balance, whereas in the fleet report for 2017, this were deemed to be in balance. The proposed measures for the DTS segments include fishing effort restriction, temporal cessation of fishing activities implementation of a new management plan, revision of licence authorisations, introduction of no-take zones and improvement in monitoring, surveillance and control (MSC).

Timeframes for Implementation

The timeframe for implementation of the Croatian action plan is clearly specified and indicates that the intended reductions are expected to be achieved by the end of 2021.

Conclusion

The fleet segments, tools targets and timeframe for implementation of the measures proposed in the Croatian action plan submitted with their Annual fleet report for 2018 is summarised in Table 4.2.3.1.

Table 4.2.3.1 - Fleet segments, tools targets and timeframe for implementation of the measures proposed in the Croatian action plan submitted with their Annual fleet report for 2018

Fleet name	Area	Tools	Targets	Timeframe
PS VL1218 PS VL1824 PS VL2440	Adriatic Sea	- Limitation of effort (whole period -Time and spatial regulation -Temporal cessation (2019 EMFF, from 2020 national funds -Revision of authorisations with reduction of capacity (ended in 2019) -Decrease of catch level in caparison to 2014 level (5% per year 2019-2021) -Improvement of survey and stock assessment (cont.)	Specified  Specified  Not Specified  Specified  Not specified	2019, 2020 and 2021
DTS VL0006 DTS VL0612	Adriatic Sea	-Implementation of new MP -Implementation of authorisation (ended in 2019) -Limitation and reduction of fishing	Specified Not specified (ended in 2019) Not specified	2019, 2020 and 2021

<b>Fleet name</b>	<b>Area</b>	<b>Tools</b>	<b>Targets</b>	<b>Timeframe</b>
DTS VL1218 DTS VL1824 DTS VL2440		effort (2020 and onwards) - Implementation of cessation (whole period) -Implementation of no-take zones (depending on scientific recommendation) -Improvement in MSC (cont.)	Not specified Not specified Not specified	

The Croatian action plan clearly sets out the timeframe for implementation of the action plan for those purse seine (PS) and demersal trawl and seine (DTS) segments deemed to be out of balance with their fishing opportunities. However the adjustment targets and tools to achieve a balance are not clearly specified in all cases.

#### 4.2.4 Cyprus (CYP)

##### Discrepancies in SHI values

A comparison between indicator values in the MS' Fleet reports for 2018 and the values for equivalent fleet segments as estimated by EWG 19-13 (Annex II) indicate that the status of the following segments with respect to being in or out of balance with its fishing opportunities may be different.

	<b>MS Report 2018</b>	<b>Fleet for</b>	<b>EWG 19-13 estimate</b>	<b>Indicator values imply same status?</b>
CYP MBS PGP1218 NGI	0.93		1.48	No

##### Indicators and Fleet Segments Considered

EWG 19-13 notes that no fleet segments were identified by the Member State as being out of balance with available fishing opportunities and no action plan was provided.

#### 4.2.5 Denmark (DNK)

##### Discrepancies in SHI values

A comparison between indicator values in the MS' Fleet reports for 2018 and the values for equivalent fleet segments as estimated by EWG 19-13 (Annex II)

indicate that the status of segments in the fleet report for 2018 for which a comparison can be made remains unchanged.

#### Indicators and Fleet Segments Considered

EWG 19-13 notes that in its fleet report for 2018, no fleet segments were identified by the Member State as being out of balance with available fishing opportunities and no action plan was provided.

#### 4.2.6 *Estonia (EST)*

##### Discrepancies in SHI values

A comparison between indicator values in the MS' Fleet reports for 2018 and the values for equivalent fleet segments as estimated by EWG 19-13 (Annex II) indicate that the status of segments in the fleet report for 2018 for which a comparison can be made remains unchanged.

##### Indicators and Fleet Segments Considered

EWG 19-13 notes that no fleet segments were identified by the Member State as being out of balance with available fishing opportunities and no action plan was provided.

#### 4.2.7 *Finland (FIN)*

Under Article 22(7) (Annex II) of Regulation (EU) No 1380/2013, Finland's fishing capacity ceiling may not exceed 18 066 GT and 181 717 kW after 1 January 2014. These are imputed ceilings that take into account the supported decommissioning of fishing vessels. The capacity of Finland's fleet remained well below this ceiling between 1 January 2014 and 31 December 2018.

##### Discrepancies in SHI values

A comparison between indicator values in the MS' Fleet reports for 2018 and the values for equivalent fleet segments as estimated by EWG 19-13 (Annex II) indicate that the status of segments in the fleet report for 2018 for which a comparison can be made remains unchanged.

##### Indicators and Fleet Segments Considered

In the report MS included a narrative text about technical, financial and biological indicators with no methodology described for their determination.

No action plan was proposed in the 2018 fleet report but a plan to improve management system of the fleet register is referred to.

##### Timeframes for Implementation

No specific information has been provided



## Conclusion

No specific action plan was provided in the 2018 fleet report.

### 4.2.8 *France (FRA)*

#### Discrepancies in SHI values

A comparison between indicator values in the MS' Fleet reports for 2018 and the values for equivalent fleet segments as estimated by EWG 19-13 (Annex II) indicate that the status of segments in the fleet report for 2018 for which a comparison can be made remains unchanged.

#### Indicators and Fleet Segments Considered

The French fleet segmentation in the fleet report for 2017 consider only 196 fleet segments which represents significant reduction considered for the period 2011-2016 with 232 segments and two less fleet segments compared to last year report. The reason for the observed reduction is concerned that some segments comprising very few vessels and not all segments had vessels during each of the years covered by the report. Using the classification criteria proposed in the fleet report for 2017, 196 fleet segments (193 plus 3: ATL ELE 27, MED ELE 37 and MED Ganguis) were classified as follows:

- 105 were considered balanced,
- 7 showed enduring imbalance,
- 20 are to be monitored,
- 14 are inactive and
- 50 where the status is subjected to additional data collection.

According to the French Authorities, only those 7 fleet segments classified with enduring imbalance are identified as having structural overcapacity and are considered in the action plan.

The enduring imbalance is determined by unsatisfactory values from the SHI or SAR indicator in 2015-2017. The SHI indicator is recorded only if the landings relating to the stock under consideration account for at least 40 % of the segment's landings. France uses two additional biologic indicators to assessed enduring imbalance: Number of Overexploited Stocks (NOS) and Economic Dependence Indicator (EDI), where fleet segments are classified as imbalanced if they present unsatisfactory indicators over the period 2015-2107.

EWG 19-13 notes that the number of fishing stocks available to obtain biologic assessment continues to increase. In the 2019 fleet report France used 109 stocks (105 in 2018), representing the most representative with a coverage rate of 74% of landed volumes (68% in 2018) on the national territory was achieved, including overseas regions. For the SHI calculations 58 stocks were used (five more than in the last year report).

As for 2016, EWG 19-13 notes that despite the French Authorities calculating the technical and economic indicators calculation, they do not take them into account

to assess balance. According to the French report the technical and economic indicators are not suitable to use due to the quality of data, in some cases the segment size (confidentiality applied to statistical data) and also the changes observed in the fleet segments during the time series (some vessels are reclassified in the fleet segments from one year to another).

Only biological indicators were used to determine which segments are out of balance. The segments indicated in the action plan are in accordance with these identified in the fleet report and presented in Table 4.2.8.1.

According to Table 7 of the French report only DTS VL2440 for MED reveals an imbalance in terms of the economical indicators. For the technical indicator all the fleet segments are in balanced (for small scale vessels the indicator was not taken into account)

Table 4.2.8.1 Imbalanced fleet segments

Fleet name	Species (target)	Area
DTS VL1218	<b>NEP</b> -norway lobster	Bay of Biscay <b>(BB)</b>
PS VL1218	<b>PIL</b> -european pilchard	
Eel bycatch VL0024	<b>ELE</b> -eel	Atlantic <b>(AT)</b>
DTS VL1824	<b>HKE</b> -hake and <b>MUT</b> -red mullet	Mediterranean Sea <b>(MED)</b>
DTS VL2440		
Eel bycatch VL0024	<b>ELE</b> -eel	
ME VL0012*		

\* Only for vessels using the *gangui* method are identified as having an enduring imbalance.

### Adjustment Targets and Tools

The French Authorities propose the following tools to achieve balance (Table 4.2.8.2):

Table 4.2.8.2 – Tools proposed in the French action plan

Tools	Fleet
Fleet reduction <b>(FR)</b>	(AT and MED)
Ban of new vessels <b>(BA)</b>	all
Limiting capacity and effort <b>(LE)</b>	(BB and MED_DTS)
Temporary closures <b>(TC)</b>	(AT_Eel and MED_Eel)
Fleet conversion* <b>(FC)</b>	(MED_gangui)

\* In order to improve greater selectivity for fishing gear.

The action plan also proposes to maintain the authorization system in the Mediterranean fleet segments with several limitations to vessel capacity, vessel and license transactions and vessel modifications.

For the fleet operating in the Biscay Bay possible actions concerning vessel reductions are waiting for the scientific recommendations: ICES conclusions related with the NEP stock and a management plan which is prepared by IFREMER and IEO (French and Spanish scientific institutes).

For the remain fleet segments, the action plan only establishes targets for fleet reduction capacity (number of vessels, GT and kW):

Table 4.2.8.3 – Targets applied in the action plan

Area	Gear	Length	Fleet	Proposed reduction		
			Number	Number	GT	kW
Atlantic - Eel		VL0024	451	16-17	78	1156
Mediterranean Sea	DTS	VL1824	28	1	50	240
		vI2440	31	2	230	620
	Eel	VL0010	193	10		
	MGO	VL0012	23	5		
Total			726	34-35	358	2016

#### Timeframes for Implementation

The action plan sets out a timescale for the fleet reduction tool to be complete by the end of 2020.

#### Conclusion

The French criterion for classifying imbalanced fleet segments is only based on biological indicators and an estimation of enduring imbalance. In addition to the SHI and SAR indicators, the member state used two additional criteria: Economic Dependency Indicator (EDI) and Number of Overexploited Stocks (NOS).

The 7 fleet segments classified as having enduring imbalance were identified and specific tools were tailored for each segment. Targets and associated timeframes for the permanent removal of vessels from the fleet are stated in the action plan.

The fleet segments, tools targets and timeframe for implementation of the measures proposed in the French action plan submitted with their Annual fleet report for 2017 is summarised in Table 4.2.8.4.

Table 4.2.8.4 – Tools, targets and time frame applied in the action plan

Fleet name	Area	Tools*	Targets (n. Vessels)	Time frame
DTS VL1218	BB	BA		Until end of 2020
PS VL1218		BA		
Eel bycatch VL0024	AT	PC BA TC	16-17	
DTS VL1824	MED	PC BA	1	
DTS VL2440		PC BA	2	
Eel bycatch VL0024		PC BA TC	10	
ME VL0012*		PC BA FC	5	

\* Only for vessels using the *gangui* method are identified as having an enduring imbalance.

**FR** – fleet reduction

**TC** – temporary closures

**LE** – limiting effort

**BA** – ban of new vessels

**FC** – fleet conversion

#### 4.2.9 Germany (DEU)

##### Discrepancies in SHI values

A comparison between indicator values in the MS' Fleet reports for 2018 and the values for equivalent fleet segments as estimated by EWG 19-13 (Annex II) indicate that the status of the following segments with respect to being in or out of balance with its fishing opportunities may be different.

	MS Fleet Report for 2018	EWG 19-13 estimate	Indicator values imply same status?
DEU NAO DTS VL40XX	0.99	1.24	No

##### Indicators and Fleet Segments Considered

Germany presented an Action plan, as in 2018 (EWG 18-14), covering five fleet segments where some or all of the presented indicators identified an imbalance according to the Balance/Capacity report. The revised Action plan additionally refers to permanent cessation of fishing activities and updates some other actions and specified time frames. The indicators used to determine which segments were out of balance include biological (SHI and SAR) economic (RoFTA 2017 and CR/BER) and the vessel utilisation indicator.

The German Fleet in 2018 numbered 1,329 vessels of which 1,026 small scale (< 12 m) coastal static net vessels (PG VL0010, PG VL1012) comprise by far the biggest component.

The action plan relates to the following segments:

- PG VL0010: Catching Baltic Sea stocks

- PG VL1012: Catching cod and herring in the Western Baltic Sea
- DTS VL1012: Catching cod, herring and dab in the Baltic Sea
- DTS VL1218: Catching Baltic Sea and Kattegat stocks
- DTS VL1824: Catching Baltic Sea and North Sea stocks

For PG VL1012 and DTS VL1218 all of the indicators were taken into account in the assessment, for DTS VL1824 only the biological indicators were considered relevant and for PG VL0010 and DTS VL1012 the assessment was based on species mix and technical indicator baselines.

A particular issue was identified in relation to the small-scale coastal fleet which includes many part-time fishers who do not fish for profit and whose catches account for a very small portion of total catches. Hence the economic indicators are largely irrelevant. However, this segment is also considered to be of significant importance to Germany's Baltic region which underpins the efforts outlined in the action plan to shift fishing pressure to actively support these fleets.

#### Adjustment Targets and Tools

The plan presents tools, objectives and targets and for all of the fleet segments identified identifying the expected effects of these tools, e.g. on sustainability and efficiency. It includes some general tools that target all fleets and some tools that are specifically targeted towards individual segments.

The general tools include:

Transposition of the legal requirements of the new Common Fisheries Policy to promote a positive investment climate within the fishing industry;

Indicator adjustments to improve the accuracy of measures to adjust fishing capacity to fishing opportunities;

Modernisation of the German fishing fleet, including:

- a) Conversion to improve selectivity, energy efficiency and product quality,
- b) Modernisation of on-board processing and storage to improve product quality,
- c) More selective or energy-efficient gear,
- d) Measures to improve the cost-effectiveness of fishing vessels and safety at work on board.

Actively shifting fishing pressure to maintain small-scale fisheries in the Baltic Sea

Temporary and permanent cessation of fishing activities

## Timeframes for Implementation

The action plan also maps tools and timeframes for each individual segment (see Table 4.2.9.1 below) with a commentary on the evolution of each segment and the application of the relevant measures.

Table 4.2.9.1 Elements contained in the Action plan for Germany

Measure	Start	End	Segment
<b>Aid restrictions</b>	2016	Ongoing	Passive fisheries, 10-12 metre vessels (PG VL1012)
			Passive fisheries, vessels less than 10 metres (PG VL0010)
			Trawl fishing, 10-12 metre vessels (DTS VL1012)
			Trawl fishing, 12-18 metre vessels (DTS VL1218)
			Trawl fishing, 18-24 metre vessels (DTS VL1824)
<b>Marketing support</b>	2016	Ongoing	Passive fisheries, 10-12 metre vessels (PG VL1012)
			Passive fisheries, vessels less than 10 metres (PG VL0010)
			Trawl fishing, 10-12 metre vessels (DTS VL1012)
			Trawl fishing, 12-18 metre vessels (DTS VL1218)
			Trawl fishing, 18-24 metre vessels (DTS VL1824)
<b>Permanent cessation of fishing activities</b>	2017	2018	Passive fisheries, 10-12 metre vessels (PG VL1012)
			Trawl fishing, 10-12 metre vessels (DTS VL1012)
<b>Temporary cessation of fishing activities</b>	2017	2020	Passive fisheries, 10-12 metre vessels (PG VL1012)
			Passive fisheries, vessels less than 10 metres (PG VL0010)
			Trawl fishing, 10-12 metre vessels (DTS VL1012)
			Trawl fishing, 12-18 metre vessels (DTS VL1218)
			Trawl fishing, 18-24 metre vessels (DTS VL1824)
<b>Shifting relevant quotas</b>	2015	Ongoing	Passive fisheries, 10-12 metre vessels (PG VL1012)
			Passive fisheries, vessels less than 10 metres (PG VL0010)
			Trawl fishing, 10-12 metre vessels (DTS VL1012)
			Trawl fishing, 12-18 metre vessels (DTS VL1218)
	2017	Ongoing	Trawl fishing, 18-24 metre vessels (DTS VL1824)
<b>Where applicable, further measures to be applied</b>	2020	2020	Trawl fishing, 10-12 metre vessels (DTS VL1012)
			Passive fisheries, 10-12 metre vessels (PG VL1012)
			Passive fisheries, vessels less than 10 metres (PG VL0010)
			Trawl fishing, 12-18 metre vessels (DTS VL1218)
			Trawl fishing, 18-24 metre vessels (DTS VL1824)

## Conclusion

The German Action Plan identifies five imbalanced fleet segments and presents a wide range measures both general for all fleets and specific to those fleet segments identified as being out of balance with fishing opportunities and also to those fisheries where problems have been otherwise identified. These also include a measure to improve the veracity of the balance indicators themselves. The objectives, tools and timeframes are all well described in relation to the general measures identified in the Action Plan and by default to the specific measures. Germany has also identified 'flanking measures', in the form of consultation on the plan with industry and evaluation of outcomes to help ensure that the objectives will be met.

#### 4.2.10 Greece (GRC)

##### Discrepancies in SHI values

A comparison between indicator values in the MS' Fleet reports for 2018 and the values for equivalent fleet segments as estimated by EWG 19-13 (Annex II) indicate that the status of segments in the fleet report for 2018 for which a comparison can be made remains unchanged.

##### Indicators and Fleet Segments Considered

EWG 19-13 notes that no new or revised action plan is presented for the Greece fleet and no additional fleet segments have been identified for action.

An action plan for the coastal fleet segment was presented in 2016 fleet report for Greece. Some of the measures from action plan continuing also in the year 2018.

#### 4.2.11 Ireland (IRE)

##### Discrepancies in SHI values

A comparison between indicator values in the MS' Fleet reports for 2018 and the values for equivalent fleet segments as estimated by EWG 19-13 (Annex II) indicate that the status of segments in the fleet report for 2018 for which a comparison can be made remains unchanged.

##### Indicators and fleet segments considered

Ireland considers that the technical indicators as currently set down by the STECF do not allow for the highly diverse nature of their fleet or the range of natural variation within these segments. The MS identified only one DCF segment as failing the long-term and short-term economic indicators, (DTS 10-12m). However, the assessment made using the Irish Department of Agriculture, Food and the Marine (DAFM) fleet segments, identified none of these as being out of balance with available fishing opportunities. Similarly, the analysis provided for biological indicators indicates that the diversity within the fleet suggests that the fleets are not out of balance. Ireland therefore considered that no structural imbalance exists within the fleet but said that they would keep the situation under review. No action plan was therefore provided.

#### 4.2.12 Italy (ITA)

Italy presented amended action plan together with its Fleet report for 2018 which is a partly continuation to the administrative activities linked to the implementation of the Action plan submitted in 2018. There has been issued measures aimed at reducing fishing effort by decreasing the fishing activity with space- and time-related criteria and by establishing lists of vessels which are expressly authorised to carry out specific fishing activities. The choice of providing information by GSA Italy explained as the need to ascertain the geographical differences in terms of

economic and social performance and the overall status of the resources that reflect on the state of fisheries and on differing levels of fishing capacity.

### Discrepancies in SHI values

A comparison between indicator values in the MS' Fleet reports for 2018 and the values for equivalent fleet segments as estimated by EWG 19-13 (Annex II) indicate that the status of segments in the fleet report for 2018 for which a comparison can be made remains unchanged.

### Indicators and Fleet Segments Considered

Italy assessed the fleet balance based on biological, economic and technical indicators for 2017:

- Sustainable Harvest Indicator (SHI)
- Return of Fixed Tangible Assets (ROFTA)
- Current revenue/Break-Even Revenue (CR/BER)
- Vessel Indicator (VI)
- Vessel utilisation indicator (VUR)

The indicators were calculated considering the results of the National Data Collection Programme (DCR/DCF), presenting an examination of these indicators by Geographical Sub-Area (GSA) with the aim of identifying the overall trends at the level of fishing method and LOA class. However, the indicator measuring the level of inactivity of the fleet (Inactive Vessel Indicator) was calculated on level of fleet LAO segments only.

### Adjustment Targets and Tools

In the 2018 Action plan related to fishing fleets for the capture of demersal (bottom fishing) resources. The Plans elaborated in 2018 aim to achieve the objectives through the regulation of fishing effort, which, in addition to the usual temporary ban, establishes a further specific reduction percentage of fishing days for each GSA and LOA. The fleet segments, tools targets and timeframe for implementation of the measures proposed in Italy action plan is summarised in Table 4.2.12.1

Table 4.2.12.1. Tools and targets for 2019 applied in the Italy action plan

<b>GSA</b>	<b>LOA CLASS</b>	<b>% of additional reduction</b>	<b>Additional days of ban</b>
GSA 9	LOA ≤ 12	10	9
	LOA > 12	10	18
GSA 10	LOA ≤ 12	10	12
	LOA > 12	10	15
GSA 11	LOA ≤ 24	10	13
	LOA > 24	10	17
GSA 16	LOA ≤ 12	6	7



<b>GSA</b>	<b>LOA CLASS</b>	<b>% of additional reduction</b>	<b>Additional days of ban</b>
	12<LOA<=24	6	8
	LOA>24	6	12
GSA 17 and GSA 18	LOA<=12	8	7
	12<LOA<=24	8	10
	LOA>24	8	13
GSA 19	LOA<=18	10	16
	LOA>	10	15

With reference to the geographical distribution by GSA the reductions of the fishing effort to GSA 9, 10, 11 and 19 lays down a ten percent, to GSA 16 a six percent, to GSA 17 and GSA 18 eight percent in the first year (2019) and up to a further reduction of thirty percent in 5 years in terms of activity (annual fishing days).

In addition, in Pormo area (GSA17) existing three Biological Protections Zones are to be maintained: one with complete closure to demersal fishing and two areas where fishing effort is regulated.

Pending the outcomes of the Ritmare national project first stage and letter of Horizon 2020 MINOUW project, new technologies to improve selectivity of towed gears to minimize by-catches of undersized individuals have also been introduced. Three different JTEDs have been tested: the first one (G1-SM40) uses a 40 mm square mesh net; on the second (G2-ST20) and the third (G3-ST25), vertical steel bars of 20 and 25 mm spacing are mounted, respectively.

### Conclusion

The Italy fleet report contains complete assessment of biological, economic and technical indicators per GSA, vessels length class and fishing methods. The tools and timeframes for implementation to achieve the targets in the action plan are specified for vessels length segments by GSA which deem to be out of balance. However, the adjustment tools of the fishing effort reductions are clearly specified only for 2019. For the following period, details of the of the measurement tools are unspecified and only upper level of thirty percent of the fishing activities reduction information has been provided.

#### *4.2.13 Latvia (LVA)*

##### Discrepancies in SHI values

A comparison between indicator values in the MS' Fleet reports for 2018 and the values for equivalent fleet segments as estimated by EWG 19-13 (Annex II) indicate that the status of segments in the fleet report for 2018 for which a comparison can be made remains unchanged.

##### Indicators and Fleet Segments Considered

EWG 19-13 notes that no fleet segments were identified by the Member State as being out of balance with available fishing opportunities and no action plan was provided.

#### 4.2.14 *Lithuania (LTU)*

##### Discrepancies in SHI values

A comparison between indicator values in the MS' Fleet reports for 2018 and the values for equivalent fleet segments as estimated by EWG 19-13 (Annex II) indicate that the status of segments in the fleet report for 2018 for which a comparison can be made remains unchanged.

##### Indicators and Fleet Segments Considered

EWG 19-13 notes that in its fleet report for 2018 no fleet segments were identified by the Member State as being out of balance with available fishing opportunities and no action plan was provided.

#### 4.2.15 *Malta (MLT)*

##### Discrepancies in SHI values

A comparison between indicator values in the MS' Fleet reports for 2018 and the values for equivalent fleet segments as estimated by EWG 19-13 (Annex II) indicate that the status of segments in the fleet report for 2018 for which a comparison can be made remains unchanged.

##### Indicators and Fleet Segments Considered

Maltese authorities provide an action plan after taking into consideration the trend analysis of the economic performance of their fishing fleet and the trend analysis of the two economic indicators for the years 2008-2017. Although the 2018 Fleet report contains information on technical and biological indicators, only the economic trend analysis is used to determine which segments are out of balance in the action plan.

In the fleet report for 2018, five balance indicators were applied:

- Inactive fleet indicator (for the reference year 2018);
- Vessel utilisation indicator (for the reference year 2018);
- Sustainable Harvest Indicator (for the reference year 2017);
- Return on investment economic indicator (for the reference year 2017);
- Break-even revenue economic indicator (for the reference year 2017).

Due to confidentiality reasons for the reference years 2017 and 2018 Maltese authorities had applied a new approach for fleet segment aggregation (clustering) for the economic performance trend. 16 of the previous 21 segments are grouped in 5 clustered segments as follows: Demersal Trawlers (DTS) VL2440, Vessel using other active gears (MGO) VL1824, Polyvalent Passive Gears Only (PGP) VL0006, Polyvalent Passive Gears Only (PGP) VL0612 and Purse Seiners (PS) VL1824.

In case of a low number of vessels in the fleet segments: Gears using hooks (HOK), Pots and traps (FPO) and Fixed netters (DFN), the data is clustered together with the fishing technique: Polyvalent passive gears only (PGP).

Trend analysis in the economic indicators (Table 21 of the fleet report) is provided only for the five non-clustered fleet segments. Two of them are presented (Table 23 of the fleet report) as imbalanced with an improving trend: Combined mobile and passive gears (PMP) VL0006 and VL0612 and one as imbalanced with deteriorating trend in the economic performance: Vessel using other active gears (MGO) VL0612.

Nevertheless, the report (see section A.14.1 of the fleet report) states that the only segment that shows a negative trend and is considered as imbalanced is the entire PMP segment.

#### Adjustment Targets and Tools

The tools proposed in the action plan are several types and are intended to affect fleets segments in addition to the PMP VL0006 and VL0612 segments.

- Monitoring of landings through weighing of fishery products on the automatic weighing and labelling machines in order to guarantee that all catches will be recorded;
- Monitoring of activity:
  - through an implementation of a sampling plan in order to monitor all landings of vessels below 10m;
  - equipping vessels from 6 to 12 meters with a monitoring system to detect fishing activity.
- Conservation through introducing a prohibition of fishing in bays and creeks from 15 February to 30 August with all types of nets and closed season for the months of April and May addressed to FPO segments. The main aim of this tool is increasing the biomass by 2020;
- Interventions on the market to improve the returns of the sector, potentially including promotion of the fishery products or to incentives for the better organization of the sector to access more profitable markets.

Management measures under the Mediterranean Regulation, General Fisheries Commission for the Mediterranean (GFCM) and International Commission for the Conservation of Atlantic Tuna (ICCAT) are also mentioned in the action plan, and are said to contribute to achieving sustainable exploitation of stocks (Table 4.2.15.1).

## Timeframes for Implementation

The timeframe for implementation of the Malta action plan is clearly specified. The implementation of the measure related to the market intervention is ongoing. The implementation of the other measures has to start in 2017 and finish by 2020 (Table 4.2.15.1).

Table 4.2.15.1 – Summary of fleet segments, tools, targets and timeframes reported in Maltese fleet report/action plan.

<b>Fleet name</b>	<b>Area</b>	<b>Tools</b>	<b>Targets</b>	<b>Timeframe</b>
All vessels <12m	Mediterranean	Weighing of fishery products on the Automatic weighing and labeling machines	All catches recorded	2017-2020
All vessels <10m	Mediterranean	Sampling plan	All landings of vessels <10m monitored through sampling and sales notes	2017-2020
Vessels ≥ 6m and <12m	Mediterranean	The vessels will be equipped with a monitoring system to detect fishing activity leading to better monitoring.	All fishing activity	2017-2020
DFN	Mediterranean	Prohibition of fishing in bays and creeks from 15 February to 30 August with all types of nets.	Increase in biomass by 2020	2017-2020
FPO	Mediterranean	Closed season for the months of April and May	Increase in biomass by 2020	2017-2020
Entire fleet	Mediterranean	Analysis of the market to identify any structural deficiencies or market forces resulting in a low average price at first sale for fishery products	Identification of measures to achieve better prices at first sale to help generate more income for the fishermen	From 2016 onwards

## Conclusion

The EWG notes that the current Action plan is the same as that presented in 2018. The fleet segments that show deterioration in economic performance are identified and Malta presents various tools (conservation and monitoring) for the different

segments, including closed areas, closed seasons and monitoring the landings and activities for the small vessels.

Other measures as an increase in monitoring or promotion of better marketing have been applied to all segments. However, the targets are still not always clear, for example an „increase of biomass by 2020“ is listed for the DFN and FPO segments without specifying the species.

Targets, tools and timeframes for the Action plan are given in Table 4.2.15.1 above.

#### 4.2.16 Netherlands (NLD)

##### Discrepancies in SHI values

A comparison between indicator values in the MS' Fleet reports for 2018 and the values for equivalent fleet segments as estimated by EWG 19-13 (Annex II) indicate that the status of the following segments with respect to being in or out of balance with its fishing opportunities may be different.

	<b>MS Fleet Report for 2018</b>	<b>EWG 19-13 estimate</b>	<b>Indicator values imply same status?</b>
NLD NAO TM40XX NGI*	0.83	1.13	No
NLD NAO TBB2440 NGI*	0.89	1.05	No
NLD NAO TBB40XX NGI*	0.89	1.03	No

##### Indicators and fleet segments considered

EWG 19-13 notes that no fleet segments were identified by the Member State as being out of balance with available fishing opportunities and no action plan was provided.

The Sustainable Harvest Indicator calculations used in the report are incorrect for both the Pelagic fleet and the large Beam trawl fleet segments; for the pelagic fleet the total value of landings used in the calculation covers 22 stocks while the SHI value is only calculated for eight of these stocks. For the Beam trawl fleet total landings value is calculated for 16 stocks but the SHI is calculated using only three of the stocks.

The number of large beam trawl vessels is given as 162 in the national report. This is inconsistent with the data supplied to STECF.

#### 4.2.17 Poland (POL)

##### Discrepancies in SHI values

A comparison between indicator values in the MS' Fleet reports for 2018 and the values for equivalent fleet segments as estimated by EWG 19-13 (Annex II) indicate that the status of segments in the fleet report for 2018 for which a comparison can be made remains unchanged.

#### Indicators and Fleet Segments Considered

Between its accession to the European Union and the end of 2013, Poland reduced its fishing capacity by more than 40%. However, it is noted in the Fleet Report 2018 that based on the given status of marine biological resources and the fishing opportunities available for Poland in the Baltic Sea the existing fleet structure showing that individual segments of the fishing fleet have not in balance with the available fishing opportunities.

The action plan proposed by the Polish authorities is based on the values of all indicators prescribed in the 2015-2018 Guidelines (COM (2014) 545 Final) and presented in Fleet report for 2018. On that basis the Polish authorities have identified that the following fleet segments are not in balance with their fishing opportunities:

- **VL0010 PG** - vessels up to 10 m in overall length using nets and other passive gear (the fishing capacity is not in balance with available fishing opportunities as demonstrated by the clear deteriorating trend among biological indicators and is not economically viable),
- **VL1012 PG** - vessels between 10 m and 12 m in overall length using nets and other passive gear (clearly unsustainable relative to available fishing opportunities and is not economically viable. The value of the sustainable harvest indicator showed that the segment relies on overfished stock (the indicator for 2016-18 was higher than 1), whilst the stocks at risk indicator remained at 2 for the second consecutive year),
- **VL1218 DFN** - vessels between 12 m and 18 m in overall length using nets (is unsustainable relative to available fishing opportunities, as demonstrated by its poor biological indicators),
- **VL1218 DTS** - bottom trawlers between 12 m and 18 m in overall length (the fishing capacity of segment is not resource sustainable relative to available fishing opportunities, as demonstrated by the negative trend in its sustainable harvest and stocks at risk indicators over three consecutive years),
- **VL1824 DTS** - bottom trawlers between 18 m and 24 m in overall length (the fishing capacity of segment has proven to be unsustainable relative to available fishing opportunities. The biological indicators for the segment demonstrate a persistent lack of catch sustainability and a reliance on overfished stocks),
- **VL1824 TM** - pelagic trawlers between 18 m and 24 m in overall length (the fishing capacity of segment is marginally unsustainable relative to available fishing opportunities given the deviation of the SHI indicator from the

recommended level. The segment relies on overfished stocks which are exploited above Fmsy).

### Adjustment Targets and Tools

The programme for the temporary cessation of fishing activities referred to in Article 33 of Regulation (EU) No 508/2014 will be financed under the Operational Programme 'Fisheries and the Sea' (OP FISH 2014-2020) by the European Maritime and Fisheries Fund.

The tools in Polish action plan include the aid for temporary cessation of fishing activities and in accordance with Regulation No 508/2014 will concern: Polish fishing vessels which have carried out fishing activities in the Baltic Sea for at least 120 days during the last two calendar years preceding the date of submission of the application for support.

### Timeframes for Implementation

Support per fishing vessel will be granted before the end of 2020 for a maximum period of six months. If the above support for a specified period is granted, all fishing activities carried out by the fishing vessel or the fisherman will be effectively suspended.

### Conclusions

EWG 19-13 notes that based on the indicator values for 2015 - 2018 and fishing opportunities for Polish fleet the action plan was provided. The EWG 19-13 also note that the Action plan applied to the Fleet Report 2018 is similar to the previous year Action plan with only one new segment additionally included.

The fleet segments, tools, targets and timeframe for implementation of the measures proposed in the Polish action plan submitted with their Annual Fleet report for 2018 is summarised in Table 4.2.17.1

Table 4.2.17.1. Summary of the Polish action plan

<b>Fleet name</b>	<b>Area</b>	<b>Tools</b>	<b>Targets</b>	<b>Timeframe</b>
VL0010 PG	Baltic Sea	TC*	None specified	Before 31 Dec. 2020
VL1012 PG	Baltic Sea	TC	None specified	Before 31 Dec. 2020
VL1218 DFN	Baltic Sea	TC	None specified	Before 31 Dec. 2020
VL1218 DTS	Baltic Sea	TC	None specified	Before 31 Dec. 2020
VL1824 DTS	Baltic Sea	TC	None specified	Before 31 Dec. 2020
VL1824 TM	Baltic Sea	TC	None specified	Before 31 Dec. 2020

\* TC – temporary cessation of fishing activities funded under the EMFF

#### 4.2.18 Portugal (POR)

##### Discrepancies in SHI values

A comparison between indicator values in the MS' Fleet reports for 2018 and the values for equivalent fleet segments as estimated by EWG 19-13 (Annex II) indicate that the status of the following segments with respect to being in or out of balance with its fishing opportunities may be different.

	<b>MS Fleet Report for 2018</b>	<b>EWG 19-13 estimate</b>	<b>Indicator values imply same status?</b>
PRT NAO MGP1824 P2	3.24	0.78	No

##### Indicators and Fleet Segments Considered

The Action Plan is not applied in 2018.

The Portuguese fishing fleet consisted of 7 855 vessels with total gross tonnage of 84 436 GT and total engine power of 341 230 distributed over the mainland the Autonomous Region of the Azores and the Autonomous Region of Madeira. The Portuguese national fleet continued to decrease from the 1<sup>st</sup> of January 2014 to 31<sup>st</sup> of December 2018. The vessels number has a reduction by 4,48% and in terms of the gross tonnage and capacity decreased by 15,14% and 6,52% respectively.

The **Action plan 2016** provided in the previous year's identifies two fleet segments operating in Azores and Madeira fishing regions that demonstrated potential signs of imbalance:

- **HOK VL2440** fishes exclusively for tuna using pole and line. It is known that catches of tuna fluctuate each year, partly because they are highly migratory, which explains the warning triggered by the ratios, which reflect the vessels' performance in the face of the constraints of the fishery.
- **MGP VL1824**, which consists of three seiners, has been hit by a sharp drop in the average price of Atlantic chub mackerel and blue jack mackerel over the last few years, resulting in low or negative returns and insufficient revenues to cover operating and capital costs.

The decommissioning of the two vessels in each segment was planned in the Action plan 2016. However, the Portuguese Fleet Report 2018 provided detailed description about situation improvement in Azores and Madeira fishing regions and note that tuna fishing vessels over 24 metres in length and vessels landing small pelagic species with encircling gear, corresponding to HOK VL2440 and MGP VL1824 respectively, which have been the only segments with negative results in recent years are now recovering satisfactorily, particularly the 24-metre segment which has been stable in the last three years. Seinners have recorded numbers which are very close to the acceptable limit.

In overall, the Portuguese national fleet report states that a combined analysis of the results of indicators for use of vessels and biological and economic sustainability shows that the Portuguese fleet capacity is in balance with fishing



opportunities for all mainland segments. Economic situation shows the positive performance for the 97% of the analysed segments.

However, in some segment's vulnerability was seen and following management measures have been taken to limit the activity of vessels which implies the effort and capacity reduction:

- Sardine Fishing Recovery and Management Plan (2018-2023) was implemented in 2018. The Management plan is intended for all sardine catches particularly for vessels licensed for purse and beach seines. The objective is limiting of catches for the recovery of spawning biomass at a minimum rate of 10% per year. Despite of the limitation applied to sardine species the purse and beach seines maintained good economic performance in 2018.
- Fishing Capacity Control Regime which includes licensing management based on the aim of reducing fishing capacity by limiting the number of licenses issued, particularly with regard to gear with greater environmental impact, such as sweep nets and bottom trawlers, dredgers and purse seine (the latter under a new Sardine Fishing Management Plan), but also for different types of trawling and more recently, cage traps.
- A further measure which has been used in fleet management is the withdrawal of vessels and the transfer of the respective gear to other vessels which remain active. This provides improved profitability without increasing the fishing effort.

### Conclusions

No fleet segments were identified by the Member State as being out of balance with available fishing opportunities and no action plan was provided.

#### *4.2.19 Romania (ROU)*

##### Discrepancies in SHI values

A comparison between indicator values in the MS' Fleet reports for 2018 and the values for equivalent fleet segments as estimated by EWG 19-13 (Annex II) indicate that the status of the following segments with respect to being in or out of balance with its fishing opportunities may be different.

	<b>MS Fleet Report for 2018</b>	<b>EWG 19-13 estimate</b>	<b>Indicator values imply same status?</b>
ROU MBS PMP VL1824	2.26	0.64	No
ROU MBS PMP VL1218	2.36	0.81	No
ROU MBS PMP VL0612	2.29	0.96	No
ROU MBS PG VL0006	3.04	0.7	No

In its fleet report for 2018, Romania concludes that none of its fleet segments are out of balance with their fishing opportunities. Nevertheless, an action plan is proposed with the aim of managing existing capacity and to enhance efficiency and performance.

EWG 19-13 notes that the action plan accompanying the fleet report for 2018 is the same as that submitted with the 2017 fleet report which specifies the continuation of measures set out in the action plan presented with the fleet report for 2016.

#### 4.2.20 *Slovenia (SVN)*

##### Discrepancies in SHI values

A comparison between indicator values in the MS' Fleet reports for 2018 and the values for equivalent fleet segments as estimated by EWG 19-13 (Annex II) indicate that the status of segments in the fleet report for 2018 for which a comparison can be made remains unchanged.

##### Indicators and Fleet Segments Considered

The Slovenian action plan submitted with their 2018 fleet report follow the the submitted with the fleet report for 2017 and no additional fleet segments have been identified for action.

The Slovenian fleet report for 2018 states the technical and economic indicators according to DCF fleet segmentation. The biological indicators are provided for different segmentation by fisheries and available only for a part of the fleet.

Based on the information the analysis of the balance between fishing capacity and fishing opportunities of 4 fleet segments:

- DFN VL0006
- DFN VL0612
- DTS VL1218
- PS - purse seines

The outcome of the analysis was that DFN VL0006, DFN VL0612, PS 1218 segments were out of balance.

##### Adjustment Targets and Tools

Slovenia participates in the implementation of the Recommendation GFCM/37/2013/1 on a multiannual management plan for fisheries on small pelagic stocks in the GFCM-GSA 17 (Northern Adriatic Sea) and on transitional conservation measures for fisheries on small pelagic stocks in GSA 18 (Southern Adriatic Sea). For all the years that followed the adoption of this plan further emergency measures have been adopted by the GFCM.

For the purse seine segment, the tools applied under the management plan included in line with the "Recommendation GFCM/40/2016/3":

- i. Fishing vessels targeting small pelagic species shall not exceed 180 fishing days per year, and not more than 20 fishing days per month with a maximum of 144 fishing days targeting sardine and with a maximum of 144 fishing days targeting anchovy.
- ii. Slovenia implemented closure for sardine in period 17-31 March and for anchovy in period 1 – 15 April in 2018.
- iii. Not exceeding the level of catches for small pelagics exerted in 2014 as reported in accordance with Recommendation GFCM/33/2009/3.
- iv. The overall fleet capacity of purse seiners actively fishing for small pelagic stocks in terms of gross tonnage (GT) and/or gross registered tonnage (GRT), engine power (kW) and number of vessels, does not exceed in 2017 and 2018 the fleet capacity for small pelagics in 2014.

The action plan suggests that the use of temporary cessation measures through its EMFF Operational Programme to support the implementation of temporal closures might be applied.

It also extended its "Temporary non-issuing of licenses for commercial fishing for certain fishing gears" measure to the purse seine segment, thereby preventing additional vessels entering the fleet and increasing the fishing effort.

The action plans for the drift and fixed nets segment (DFN) up to 00-06m LOA and 06-12m LOA identify two areas that are intended to contribute to capacity management of the segments:

- i. Implementation of the measure "Support for the design and implementation of conservation measures and regional cooperation" from Article 37 of the EMFF Regulation to ensure effective regional cooperation on the level of the North Adriatic Sea for implementation of the relevant measures of the CFP to contribute to the achievement of MSY for the stocks concerned.
- ii. National management measures for limitation of the fishing effort, specifically the extension of "Temporary non-issuing of licenses for commercial fishing for certain fishing gears" to include drift and fixed nets (GNS and GTR), with the aim of preventing additional capacity entering the the fleet and increasing the fishing effort.

No adjustment targets are specified in relation to either of the above measures.

#### Timeframes for Implementation

The timeframe for implementation of the Slovenia action plan for purse seine is led by the management plan for small pelagics in the North Adriatic and is proposed to be 'as long as requested by the pertinent GFCM Recommendations in force'.

The action plans suggest that the EMFF programme, running from 2014 to 2020, defines the timeframe for the implementation of temporary cessation measures for the purse seine segment and Article 37 support for the drift and fixed nets segments.

Temporary non-issuing of licenses for commercial fishing for certain fishing gears” measure

Timeframe for the implementation of national management measures for limitation of the fishing effort is planned to be in force until the concerned fish stocks reach the level of improvement that would allow for the increase of fishing effort.

### Conclusion

Slovenian action plan submitted with their 2018 fleet report update the action plan submitted with the fleet report for 2017 and no additional fleet segments have been identified for action.

The fleet segments, tools, targets and timeframe for implementation of the proposed measures are summarised in Table 4.2.20.1.

Table 4.2.20.1 Summary of the Slovenian action plan

<b>Fleet name</b>	<b>Area</b>	<b>Tools*</b>	<b>Targets</b>	<b>Timeframe</b>
Purse seines (PS) segment	North Adriatic	DaS	Max 180 days (max. of 144 fishing days targeting sardine and with max. of 144 fishing days targeting anchovy)	Annual
Purse seines (PS) segment	North Adriatic	TC	None specified	2020 (EMFF end)
DFN 0006	North Adriatic	LC	None specified	2020 (EMFF end)
DFN 0612	North Adriatic	LC	None specified	2020 (EMFF end)

\* DaS = Days at Sea, TC = temporary cessation of fishing activities, LC = License cap,

### 4.2.21 Spain (ESP)

#### Discrepancies in SHI values

A comparison between indicator values in the MS’ Fleet reports for 2018 and the values for equivalent fleet segments as estimated by EWG 19-13 (Annex II) indicate that the status of the following segments with respect to being in or out of balance with its fishing opportunities may be different.

	<b>MS Fleet Report for 2018</b>	<b>EWG 19-13 estimate</b>	<b>Indicator values imply same status?</b>
ESP NAO DTS VL40XX	0.98	1.03	No
ESP NAO HOK VL1012IC	1.40	0.76	No

	<b>MS Fleet Report for 2018</b>	<b>EWG estimate 19-13</b>	<b>Indicator values imply same status?</b>
ESP NAO HOK VL1218IC	1.27	0.97	No
ESP NAO HOK VL2440IC	0.81	1.21	No
ESP NAO PS VL2440	1.32	0.82	No
ESP OFR PS VL40XX	0.98	1.05	No

### Indicators and Fleet Segments Considered

Of the active vessels, 5,446 fished full-time (operating for more than 90 days/year) and the action plan has been created based on these, which have been grouped into 50 segments. Overall, 1,002 vessels belonging to 13 fleet segments were found to be out of balance and 4,444 belonging to 37 segments were found to be in balance, resulting in 87% of the study population being in balance

Action plan analyses the biological, economic and technical indicators, segment by segment, using data for 2012-2017, taking the improvements made into account as far as is possible and evaluating the data obtained from economic surveys, data on fishing effort and data on dependency on overexploited or high-risk stocks to reach conclusions as to whether there is a balance or imbalance between capacity and opportunities. Following EU guidelines, for each segment Spain obtained two economic indicators (CR/BER and RoFTA), one technical indicator (the indicator for inactivity has not been included in the action plan since the study population is vessels that operated for more than 90 days), and two biological indicators (SHI and SAR).

The Table 4.2.21.1 summarises the fleet segments considered imbalanced and the number and type of indicators that lead to this conclusion.

Table 4.2.21.1 – Summary of fleets, area and indicators reported in the Spanish report and considered non in balance.

<b>Fleet name</b>	<b>Area</b>	<b>No. of indicators</b>	<b>Type of indicator imbalance</b>
DTS 10-24	Cantabria and NW	<b>2</b>	biological imbalance
DTS 24-40	Cantabria and NW	<b>2</b>	biological imbalance
DFN 18-40	Cantabria and NW	<b>2</b>	biological imbalance
HOK 00-18	Cantabria and NW	<b>2</b>	biological imbalance
HOK 18-24	Cantabria and NW	<b>2</b>	biological imbalance
PS 24-40	Cantabria and	<b>2</b>	biological imbalance

Fleet name	Area	No. of indicators	Type of indicator imbalance
	NW		
DTS 18-24	Mediterranean	2	biological imbalance
DTS 24-40	Mediterranean	2	biological imbalance
PS 00-18	Mediterranean	2	biological imbalance
PS 18-24	Mediterranean	2	biological imbalance
PS 24-40	Mediterranean	2	biological imbalance
PGO 00-18	Mediterranean	2	biological imbalance
PGO 18-40	Mediterranean	2	biological imbalance

The report also notes that the segments presented in the table xx show that some indicators are imbalanced, but positive trends and the interpretation of technical imbalance for artisanal fleets with low levels of activity are used to consider that the fleet is balanced.

Table 4.2.21.2 – Summary of fleets, area and indicators reported in the Spanish report with positive trends.

Fleet name	Area	No. of indicators	Type of indicator imbalance
Cantabria and NW	<b>DRB 00-18</b>	2	imbalance only technical
Cantabria and NW	<b>PGO 00-40</b>	2	imbalance only technical
Mediterranean	<b>HOK 00-40</b>	2	economic imbalance 2014-2015
Mediterranean	<b>PGO 00-40</b>	2	imbalance only technical
Other Fishing Regions	<b>HOK 00-24</b>	2	Economic imbalance 2014-2016

### Adjustment tools and targets

The Action Plan proposes a number of other measures to contribute towards improvements in the imbalanced fleet segments:

#### 1. Biological resource recovery measures

- a) Data collection
- b) Ecosystem improvement
- c) Surveillance and control improvements

#### 2. Effort reduction measures

- a) Permanent cessation
- b) Allocation of fishing opportunities
- c) Temporary cessation
- d) Other measures

3. Measures aimed at improving profitability in the short-to-medium term

- a) Sustainable fisheries
- b) Employment
- c) Marketing

The Action Plan details the permanent cessation undertaken in 2018 in relation to the fleet segments (considered imbalanced in the 2018 Action Plan), listing the number of vessels, GT and engine power removed from these fleets. 19 vessels were permanently removed from the Cantabria and North West fleets and 60 from the Mediterranean fleets. The Action Plan also reports four vessels scrapped from the Gulf of Cadiz and one from the Canaries fleet that were identified as imbalanced in the previous year's fleet report.

The proposed effort reduction measures are targeted towards the fisheries exhibiting fleet imbalance, but no specific targets are set, e.g. in terms of capacity reduction. Some of the proposed measures are still in development and there is no indication of time frames associated with the tools proposed. Other measures are more generic in nature, but it is proposed that imbalanced fleets are prioritised for EMFF funding support in improved competitiveness and market development (Table 4.2.21.3).

Table 4.2.21.3 - Overview of tools, targets and timeframes for the imbalanced fleet segments

Fleet name	Area	Tool	Target	Timeframe
DTS 10-24	Cantabria and NW	<b>Permanent cessation</b> <b>Allocation of fishing opportunities</b> <b>Temporary cessation</b>	Not specified	Not specified
DTS 24-40	Cantabria and NW			
DFN 18-40	Cantabria and NW			
HOK 00-18	Cantabria and NW			
HOK 18-24	Cantabria and NW			
PS 24-40	Cantabria and NW			
DTS 18-24	Mediterranean	<b>Permanent cessation</b>	Not specified	Not specified
DTS 24-40	Mediterranean	<b>Technical measures</b>		

Fleet name	Area	Tool	Target	Timeframe
		<b>Temporary cessation</b> <b>Effort reduction</b>		
PS 00-18	Mediterranean	<b>Permanent cessation</b> <b>Temporary cessation</b>	Not specified	Not specified
PS 18-24	Mediterranean			
PS 24-40	Mediterranean			
PGO 00-18	Mediterranean	<b>Permanent cessation</b> <b>Licence limitation</b> <b>Temporary cessation</b>	Not specified	Not specified
PGO 18-40	Mediterranean			

## Conclusion

The 2019 Action Plan for Spain provides information that details the fleet segments that are considered imbalanced. It also proposes a range of effort reduction measures, some specific to the imbalanced fleets, and prioritised EMFF support for imbalanced fleets to improve competitiveness. A number of Biological resource recovery measures and Measures aimed at improving profitability in the short-to-medium term are reported but no specific timeframes are given.

### 4.2.22 Sweden (SWE)

#### Discrepancies in SHI values

A comparison between indicator values in the MS' Fleet reports for 2018 and the values for equivalent fleet segments as estimated by EWG 19-13 (Annex II) indicate that the status of segments in the fleet report for 2018 for which a comparison can be made remains unchanged.

#### Indicators and Fleet Segments Considered

EWG 19-13 notes that in its fleet report for 2018, no fleet segments were identified by the Member State as being out of balance with available fishing opportunities and no action plan was provided.

### 4.2.23 United Kingdom (GBR)

#### Discrepancies in SHI values

A comparison between indicator values in the MS' Fleet reports for 2018 and the values for equivalent fleet segments as estimated by EWG 19-13 (Annex II) indicate that the status of segments in the fleet report for 2018 for which a comparison can be made remains unchanged.



## Indicators and Fleet Segments Considered

The UK fleet consists in 6,193 vessels with 4,394 active vessels on the 01th January of 2018.

In its annual fleet report for 2018, the UK concludes that having assessed each fleet segment against the combination of indicators, none of them can be conclusively defined as out of balance using the full range of indicators available. Nevertheless, the UK notes that as stated within the guidelines issued to Member States, it should be borne in mind that where key thresholds for the indicators appear to have been exceeded, it is indicative of a **potential** imbalance between fishing capacity and fishing opportunity within the fleet segments concerned.

All fleet segments with potential imbalance from a technical, economic or biological point of view are presented in the UK fleet report (see table 11). Only fleet segment with potential imbalance from biological indicators are considered in the action plan (See the action plan which is in tabular form, including each segment with indicator values, adjustment targets, tools and time frame).

Accordingly, in its annual fleet report for 2018, the UK has proposed an action plan for 13 fleet segments that show potential imbalance for biological indicators only (SAR and SHI). These 13 segments represent around 75% of the total tonnage landed by the UK in 2016 with one segment (GBR 27 \_TM VL40XX) contributing to 49,7% of the UK total landings in volume.

The action plan contains adjustment targets and tools to address the potential imbalances of these fleet segments. The Action plan is presented in tabular form and includes each fleet segment that has values for biological indicators outside of the recommended balance indicator thresholds.

### Adjustment Targets and Tools

The basic targets set out in the UK action plan for achieving balance of the fleet are to adjust the value of indicators that are currently outside of recommended thresholds to bring them within such thresholds (Maintain SAR at 0 and reduce SHI to less than 1.0).

The adjustment tools presented by the UK are clearly set out in the UK Action plan. The UK action plan asserts that the adjustment tools are specific to different fleet segments, and are tailored so that their performance should lead to the achievement of targets (thereby altering indicators to within the recommended thresholds).

### Timeframes for Implementation

The timeframe for implementation of the UK action plan is clearly specified. Implementation of some of the measures commenced in 2015 and the end date for each of the planned measures is also specified. In addition, the deadline for completion of the action plan is set as 2020.

With regards to the impacts of the progressive implementation of the landing obligation on the balance of the fleet, the UK fleet report states that: *"this policy shift will alter the balance of particular UK fleet segments. In that event, the UK*

*fisheries administrations may wish to take a more active approach to capacity management in order to assist fleet segments in responding to these changes ».* The introduction of permanent and temporary cessation could be added to the existing suite of actions.

#### Conclusion on Assessment of Proposed Measures

The UK fleet report provides a full assessment of biological, economic and technical indicators per fleet segment. While the UK concludes that none of its fleet segments can be conclusively defined as out of balance using the full range of indicators available, it recognises that imbalance potentially exists for some fleet segments. Therefore, the UK has proposed an action plan for segments with potential imbalance from biological indicators and associated adjustment targets and tools.

The overall target set by the UK for achieving balance of the fleets is to adjust the value of indicators that are currently outside of recommended thresholds to bring them within specified thresholds. The tools and timeframes for implementation to achieve the targets in the action plan are clearly outlined.

## **5 TOR 3 – COMMENTS ON PROPOSED MEASURES**

### **5.1 Introductory Remarks for TOR 3**

In addressing this term of reference, the Expert Group adopted a step-wise approach as follows:

1. The action plans submitted together with the Member States' fleet reports for 2018 were reviewed to identify any fleet segments were additional to those included in any previous action plan. Such additional segments are listed under "Identification of additional fleet segments" in the sections below relating to each Member State.
2. The information provided in support of the measures proposed for the additional segments was reviewed to ascertain whether such measures are likely to be sufficient to redress any imbalance in the additional segments. Relevant comments are given under "Comments on proposed measures" in the sections relating to each Member State.
3. In some cases, Member States did not present new or revised action plans or has reported on action plans implemented prior to 2019. In such cases the Expert Group has commented accordingly.
4. Any conclusions arising from points 1-3 above review are also listed by Member State

To undertake such an assessment, the EWG would require that the Member State's action plan contains the minimum information outlined in section 2 of this report.

### **5.2 Comments on Proposed Measures**

#### *5.2.1 Belgium (BEL)*

##### Identification of Additional Fleet Segments

No new or revised action plan is presented for the Belgian fleet and no additional fleet segments have been identified for action.

#### *5.2.2 Bulgaria (BGR)*

##### Identification of Additional Fleet Segments

The Bulgarian fleet report for 2018 identifies 10 fleet segments that are out of balance with their fishing opportunities. These are DFN0006, HOK0006, PGP0006, DFN0612, PMP0612, FPO0612, HOK0612, PGP0612, DFN1218 and TM1218.

##### Comments on Proposed Measures

Bulgaria plans to take list of actions in order to address detected imbalance of fleet. Proposed measures are directed to improvement of administrative framework, increasing of added value, diversification of activity, improvement of infrastructure,

marketing and resource conservation. Administrative measures in the applicable national legislation is foreseen to be applied annually, while measures listed below will be implemented through projects under the EMFF framework, where for all of them admission procedure has been launched and they are open for application.

- Added value, product quality and use of unwanted catches
- Diversification and new forms of income
- Fishing ports, landing quays, fish markets and covered boatshelters
- Marketing measures, sector "Establishing of Producer Organizations"
- Plans for production and marketing
- Conservation and restoration of marine biodiversity and ecosystems and compensation regimes within sustainable fisheries

Proposed measures are directed in wide range of fishing related activities, and therefore it is not possible to assess their impact on identified fleet segments and their balance.

Conclusion

With the data and information provided in the fleet report for 2018 and associated action plan, the EWG cannot determine whether the measures proposed are sufficient to balance the imbalanced fleets.

5.2.3 Croatia (HRV)

Identification of Additional Fleet Segments

The Croatia fleet report for 2018 identifies 5 additional fleet segments that are out of balance with their fishing opportunities compared to those in the action plan submitted with the fleet report for 2017: DTS VL0006, DTS VL0612, DTS VL1218, DTS VL1824, DTS VL2440. On the contrary, the following fleet segments are no longer deemed to be out of balance and have been removed (PMP VL 0006, PMP VL 0612, PMP VL 1218; MGO VL0006, MGO VL0612, MGO VL1218; FPO VL0612, FPO VL1218 (Clustered with FPO VL1218); HOK VL0006. Furthermore, the measures given in the action plan accompanying the fleet report for 2017 for such segments have already been implemented.

The measures proposed for the additional DTS fleet segments are as follows:

Fleet name	Area	Tools	Targets	Timeframe
DTS VL0006 DTS VL0612 DTS VL1218 DTS VL1824	Adriatic Sea	-Implementation of new MP -Implementation of authorisation (ended in 2019) -Limitation and reduction of fishing effort (2020 and onwards)	Specified Not specified (ended in 2019) Not specified	2019, 2020 and 2021

DTS VL2440		- Implementation of cessation (whole period) -Implementation of no-take zones (depending on scientific recommendation) -Improvement in MSC (cont.)	Not specified  Not specified  Not specified	
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### Comments on Proposed Measures

According to the fleet report for 2018, effective reduction of capacity in PS and DTS segments took place in line with the Action plan submitted in 2015 as well as its revisions for 2016 and 2017, which included measures for permanent withdrawal within the scope of EMFF OP. The targeted date for achieving these results under the EMFF was end of 2017.

Nevertheless, because such segments are currently deemed to be out of balance with fishing opportunities, in the text of the fleet report, Croatia considers that effort reduction measures should be continued through temporary cessation of fishing activities. The EWG notes however, that in the action plan, in addition to temporary cessation of fishing activities, other additional measures are proposed (see table above). While all of the measures proposed should in principle contribute to redressing the apparent imbalance, data and information provided in the fleet report for 2018 and associated action plan, the EWG cannot determine whether the measures proposed are sufficient to balance the additional imbalanced fleets.

### Conclusion

With the data and information provided in the fleet report for 2018 and associated action plan, the EWG cannot determine whether the measures proposed are sufficient to balance the additional imbalanced fleets.

#### *5.2.4 Cyprus (CYP)*

##### Identification of additional fleet segments

No new or revised action plan is presented for the Cyprus fleet and no additional fleet segments have been identified for action.

#### *5.2.5 Denmark (DNK)*

##### Identification of Additional Fleet Segments

No new or revised action plan is presented for the Danish fleet and no additional fleet segments have been identified for action.

## 5.2.6 Estonia (EST)

### Identification of Additional Fleet Segments

No new or revised action plan is presented for the Latvian fleet and no additional fleet segments have been identified for action.

## 5.2.7 Finland (FIN)

### Identification of Additional Fleet Segments

No new or revised action plan is presented for the Finnish fleet and no additional fleet segments have been identified for action.

## 5.2.8 France (FRA)

### Identification of Additional Fleet Segments

Compared to the French fleet report for 2017, the one for 2018 identifies 2 additional fleet segments that are out of balance with their fishing opportunities: DTS\_VL1218 and PS\_VL1218 for the Bay of Biscay. However, for these two fleet segments no targets were presented in terms of fleet reduction. In compare to the report for 2017, 1 fleet segment is no longer considered to be out of balance and therefore not included in the action plan.

### Comments on Proposed Measures

The adjustment tools and timeframes that are proposed in the fleet report for 2018 are similar to those proposed in the previous report. EWG 19-13 notes that the reduction targets for the permanent cessation of fishing activity in terms of number of vessels, GT and kW in the 2019 action plan are the same as those listed in the 2018 action plan accompanying fleet report for 2017 (Table 5.2.8).

Table 5.2.8. Comparison of capacity reduction targets (Number of vessels, GT and kW) in the action plans (AP) proposed in the Annual fleet reports for 2017 and 2018 for France.

Area	Gear	Length	Proposed reduction FR for 2017			Proposed reduction FR for 2018		
			Number	GT	kW	Number	GT	kW
Bay of Biscay	DFN	VL1218	3-4	150	730			
	DTS	VL1218				New segment no target established		
	PS	VL1218				New segment no target established		
Atlantic - Eel		VL0024	16-17	220	3250	16-17	220	3250
Mediterranean Sea	DTS	VL1824	1	50	240	1	50	240
		VL2440	2	230	620	2	230	620

			Proposed reduction FR for 2017			Proposed reduction FR for 2018		
Area	Gear	Length	Number	GT	kW	Number	GT	kW
	MGO	VL0012	5			5		
Mediterranean Sea-Eel			10			10		
Total			37-38	650	4840	33-34	500	4110

### Conclusion

With the data and information provided in the fleet report for 2018 and associated action plan, the EWG cannot determine whether the measures proposed are sufficient to balance the imbalanced fleets.

#### 5.2.9 Germany (DEU)

##### Identification of Additional Fleet Segments

Germany presented an updated Action plan but no additional fleet segments have been identified for action.

##### Comments on Proposed Measures

According to the Action plan any further suspension of fishing activities, including segments concerned and the level of support will be decided on a yearly basis once catch level recommendations have been made and quotas have been set.

### Conclusion

With the data and information provided in the fleet report for 2018 and associated action plan, the EWG cannot determine whether the measures proposed are sufficient to balance the imbalanced fleets.

#### 5.2.10 Greece (GRC)

##### Identification of Additional Fleet Segments

No new or revised action plan is presented for the Greece fleet and no additional fleet segments have been identified for action. The EWG notes that the measures proposed in the action plan accompanying the fleet report for 2016 are still on-going.

#### 5.2.11 Ireland (IRL)

##### Identification of Additional Fleet Segments

No new or revised action plan is presented for the Irish fleet and no additional fleet segments have been identified for action.

### 5.2.12 Italy (ITA)

#### Identification of Additional Fleet Segments

The updated action plan accompanying the fleet report for 2018 has been provided. Proposed measures are the same where some targets have been adjusted. In addition, achievements on fully implemented permanent cessation plan were presented.

#### Comments on Proposed Measures

The plan proposes adjusted targets for reduction of fleet activity through the National Management Plans for the fishing fleets to catch demersal resources in GSA 9 (Ligurian and Central North Sea), GSA 10 (Central and Southern Tyrrhenian Sea), GSA 11 (Sardinia), GSA 16 (Strait of Sicily), GSA 17 (North Adriatic Sea) and GSA 18 (Southern Adriatic Sea) and GSA 19 (Western Ionian Sea). These measures will target from 6 % to 10 % reduction in the number of fishing days for 2019 and the further reduction of 30% in 5 years in terms of activity (annual fishing days). The measures aim to reduce fishing mortality for relevant species in the areas.

In addition, Action plan from fleet report for 2017 proposes a set of closures for bottom trawlers in existing Biological Protection Zones (ZTB) and establishment of additional ZTB to improve exploitation patterns and reduce the catch of undersized specimens, especially of hake and pink shrimp. The measures are outlined in Table 5.2.12 where number of closures in GSA 17 and 18 has been increased from 7 to 8 in action plan from report for 2018.



Table 5.2.12. Target species, by-catch species, managed fisheries, and main additional technical measures in terms of closing bottom trawls of critical areas to improve the sustainability of demersal fisheries in the different GSAs.

<b>GSA</b>	<b>Target species</b>	<b>By-catch species</b>	<b>Fishing methods</b>	<b>Additional technical measures</b>
9	Hake, red mullet, striped red mullet, white shrimp, Norway lobster	Curled octopus, European flying squid, red shrimp, blue and red shrimp	Bottom trawling and mixed passive gear	2 BPZs in force and 5 newly proposed ones (nurseries of hake and pink shrimp)
10	Hake, red mullet, white shrimp or pink shrimp, red shrimp	Squilla mantis	Bottom trawling and mixed passive gear	4 BPZs in force and 2 newly proposed ones (nurseries of hake and pink shrimp)
11	Hake, red mullet, white shrimp or pink shrimp, Norway lobster and red shrimp	Striped red mullet, blue and red shrimp, curled octopus, common octopus and European squid	Bottom trawling and mixed passive gear	3 BPZs in force and new proposed ones (nurseries of hake pink shrimp and red shrimp)
16	Hake, white shrimp or pink shrimp, red mullet and red shrimp	Musky octopus, striped red mullet, Norway lobster and common pandora	Bottom trawling and mixed passive gear	3 FRA GFCM in implementation phase (nurseries of hake and pink shrimp)
17 & 18	Hake, red mullet, common sole, Norway lobster and white shrimp or pink shrimp	Squilla mantis, curled octopus, common cuttlefish (17) and anglerfish (18)	Bottom trawling, rapido trawling (17), mixed passive gear (17) and longline (18)	8 BPZ in force, including the Pomo Pit which is in a transformation phase in FRA GFCM. Other protection proposals of hake and pink shrimp nurseries.
19	Hake, white shrimp or pink shrimp and red shrimp	Blue and red shrimp, striped red mullet and red mullet	Bottom trawling, longline and mixed passive gear	1 FRA GFMC (Santa Maria di Leuca) for the protection of white coral and other protection proposals of hake and white shrimp nurseries.

### Conclusion

Italy proposed additional actions to be taken in order to address imbalance with available resources which are predominantly directed to reduce fishing mortality on certain target species. Proposed measures aim to reduce fishing effort. However, with the data and information provided in the fleet report for 2018 and associated action plan, the EWG cannot determine whether the measures proposed are sufficient to balance the imbalanced fleets.

### 5.2.13 *Latvia (LVA)*

#### Identification of Additional Fleet Segments

No new or revised action plan is presented for the Latvian fleet and no additional fleet segments have been identified for action.

### 5.2.14 *Lithuania (LTU)*

#### Identification of additional fleet segments

No new or revised action plan is presented for the Lithuanian fleet and no additional fleet segments have been identified for action.

### 5.2.15 *Malta (MLT)*

#### Identification of additional fleet segments

The Maltese action plan provided with the fleet report for 2018 is the same that was presented with the fleet report for 2017. It does not include any additional fleet segments and/or additional measures.

Nevertheless, the fleet report for 2018 identifies additional fleet segments that are out of balance with their fishing opportunities, however according to fleet report these are considered to be covered by the current action plan.

#### Comments on Proposed Measures

No additional measures were presented in the Action plan. According to the fleet report for 2018, the only additional segments which shows a trend of being imbalanced is the entire PMP segments (see point A.14.1. of the Action plan). Since PMP segment is a mixed gear segment, it is expected to be indirectly addressed through the measures for the other segments as per Action plan and to benefit from its application.

#### Conclusion

With the data and information provided in the fleet report for 2018 and associated action plan, the EWG cannot determine whether the measures proposed are sufficient to balance the imbalanced fleets.

### 5.2.16 *The Netherlands (NLD)*

#### Identification of additional fleet segments

No new or revised action plan is presented for the Netherlands fleet and no additional fleet segments have been identified for action.

### 5.2.17 Poland (PLD)

#### Identification of Additional Fleet Segments

In the Polish fleet report for 2018 one additional fleet segment is identified as being out of balance with fishing opportunities - **VL1824 TM** pelagic trawlers between 18 m and 24 m in overall length. According to fleet report the fishing capacity of segment is marginally unsustainable relative to available fishing opportunities given the deviation of the SHI indicator from the recommended level. The segment relies on overfished stocks which are exploited above Fmsy.

#### Comments on Proposed Measures

For additional segment, the action plan proposes the aid for temporary cessation of fishing activities in accordance with Regulation No 508/2014 which will concern fishing vessels which have carried out fishing activities in the Baltic Sea for at least 120 days during the last two calendar years preceding the date of submission of the application for support.

The programme for the temporary cessation of fishing activities referred to in Article 33 of Regulation (EU) No 508/2014 will be financed under the Operational Programme 'Fisheries and the Sea' (OP FISH 2014-2020) by the European Maritime and Fisheries Fund.

Support per fishing vessel will be granted before the end of 2020 for a maximum period of six months. If the above support for a specified period is granted, all fishing activities carried out by the fishing vessel or the fisherman will be effectively suspended.

In addition, the Action plan include five fishing segments listed in previous Action plan:

- **VL0010 PG** - vessels up to 10 m in overall length using nets and other passive gear,
- **VL1012 PG** - vessels between 10 m and 12 m in overall length using nets and other passive gear,
- **VL1218 DFN** - vessels between 12 m and 18 m in overall length using nets,
- **VL1218 DTS** - bottom trawlers between 12 m and 18 m in overall length,
- **VL1824 DTS** - bottom trawlers between 18 m and 24 m in overall length.

Poland continue implement aid for the temporary cessation for these five imbalanced segments also after 31 December 2017.

#### Conclusion

The EWG 19-13 note that the Polish Action plan include clear description of new individual fleet segment which is not in balance with available fishing opportunities and corrective actions have been proposed to achieve the balance. However, with the data and information provided in the fleet report for 2018 and associated action

plan, the EWG cannot determine whether the measures proposed are sufficient to balance the imbalanced fleets.

#### 5.2.18 *Portugal (PRT)*

##### Identification of additional fleet segments

No new or revised action plan is presented for the Portugal fleet and no additional fleet segments have been identified for action.

#### 5.2.19 *Romania (ROU)*

##### Identification of Additional Fleet Segments

No additional fleet segments have been identified as being out of balance with their fishing opportunities in the Romania fleet report for 2018 and no new action plan is presented. However, EWG notes that action plan from fleet report for 2017 is still in force.

#### 5.2.20 *Slovenia (SVN)*

##### Identification of Additional Fleet Segments

No additional fleet segments in the action plan accompanying the fleet report for 2018 were identified by the Slovenian authorities as being out of balance with their fishing opportunities compared to the previous year's action plan.

#### 5.2.21 *Spain*

##### Identification of Additional Fleet Segments

A comparison of the Spain fleet reports for 2017 and for 2018 reveals that there is one new fleet segment from the 13 identified as imbalanced compared to also 13 identified in the fleet report for 2017. That segment is the 24-40m Purse Seiners in Cantabria and the North West.

In 2017, a total of 77 vessels operated full-time in the 24-40 segment, 26 more than the previous year, which can be explained by the fact that this fleet alternates between fisheries, adopting hook gear for mackerel and bonito. In 2017, however, purse seines were used more frequently. This may have influenced the slight drop in profitability, although economic performance was nevertheless good overall and fishing ground exploitation homogeneity decreased.

The biological indicator for the 24-40 stratum revealed that surveyed stocks exceeded 40% in this year because new surveys of sardine in zones 8ABD and 8C9A (both of which are overexploited) were included in the calculation. The SHI had a value of 1.32 (out of balance), which meant that the indicator gave a biological imbalance for the segment, therefore recommending an action plan.

#### Comments on Proposed Measures

In the Spain fleet report the action plan for Purse seiners 24-40, operated in Cantabria and North West an action plan is recommended, but no specific measures are listed for that segment.

Under the Biological resource recovery measures only a general explanation is given; "There is an imbalance in the biological indicator of the CNW 24-40 m purse seine segment. Of the species targeted by this segment, mackerel is overexploited and the data for horse mackerel indicate that this stock is also close to being overexploited. An analysis of the data obtained in these surveys is therefore essential for a proper assessment of these stocks."

Some general actions are also mentioned under the Effort reduction measures, especially about allocation of fishing opportunities but without any specific measure for that segment.

#### Conclusion

With the data and information provided in the fleet report for 2018 and associated action plan, the EWG cannot determine whether the measures proposed are sufficient to balance the imbalanced fleets.

### 5.2.22 *Sweden (SWE)*

#### Identification of Additional Fleet Segments

No new or revised action plan is presented for the Swedish fleet and no additional fleet segments have been identified for action.

### 5.2.23 *United Kingdom (UK)*

#### Identification of additional fleet segments

The total number of the segments included in the action accompanying the UK fleet report for 2018 is 13, which is 2 less in compare to the action plan submitted with the fleet report for 2017. It corresponds to the exit of 4 segments from the list of segments for which potential imbalance is found and the entry of 2 new segments.

The fleet segments identified for action in the fleet report for 2018 that are additional to those identified for action in the 2017 fleet report are given in Table 5.2.23.

Table 5.2.23. Additional fleet segments identified as imbalanced and included in the action plan submitted with the UK fleet report for 2018.

Area 27		<b>Number vessels 2018</b>	<b>of in</b>	<b>% of total tonnage landed in 2018</b>
DFN	VL2440	7		0.4%
TBB	VL1218	24		0.7%

Comments on Proposed Measures

The adjustment measures proposed by UK regarding the above (and other) segments are clearly set out in the proposed action plan. The EWG notes that all of the measures are intended to redress the potential imbalance in the segments identified. This is to be achieved through continued implementation of and compliance with existing or future legislative provisions regarding technical measures, TAC limits and the landing obligation.

Conclusion

With the data and information provided in the fleet report for 2018 and associated action plan, the EWG cannot determine whether the measures proposed are sufficient to balance the imbalanced fleets.

**5.3 Concluding remarks on Assessment of Proposed Measures in Action Plans**

In general, while it was relatively straightforward to identify in Member States’ action plans, those fleet segments that were additional to those included in the action plans submitted with their fleet reports for 2017, the information presented was only sufficient to note the actions that Member States intend to implement to address any imbalances in the fleet segments identified and was not sufficient to quantitatively assess whether such measures would be sufficient to redress any such imbalances.

Furthermore, such a quantitative assessment will not be possible unless the specific objectives of the measures proposed for each of the segments identified as being out of balance are specified by the Member State. Even in such cases, any quantitative assessment is likely to be trivial. For example, if a Member State plans to reduce a segment’s capacity by 20% of GT, without a stated objective of how such a measure will redress the imbalance in that segment, the assessment could only conclude the obvious i.e. that removing 20% of GT will result in a 20% reduction in GT. To provide a more informative assessment, the Member State would need to specify what the intended measure is likely to lead to in terms of how it will redress the imbalance they have identified, and that will depend entirely

on the nature of the imbalance and which indicators and other factors have been taken into account in determining the imbalance. Nevertheless, the indicators are not metrics and the judgement as to whether a segment is in or out of balance with its fishing opportunities has to be made taking into account other factors. Furthermore, measures simply to improve an adverse indicator value will not guarantee that any imbalance, if it truly exists, will be redressed; it will simply mean that the indicator value has improved.

The expert group also considers that previous comments and criticisms on the indicators and criteria specified in the 2014 Balance Indicator Guidelines given in previous balance EWG and STECF reports remain valid and using the indicators in such a way does not necessarily indicate imbalance. Hence, it is not reasonable to expect to be able to provide an informed assessment of whether proposed measures will improve or redress any imbalances identified if despite the indicator values, no such imbalances actually exist.

## 6 TOR 4 – LIST OF FLEET SEGMENT OUT OF BALANCE

### 6.1 Introductory Remarks for TOR 4

For each supra-region tables (Tables 6.1.1-6) biological indicators are presented with the list of those fleet segments that according to the 2017 values for either i) the SHI or ii) the SAR calculated by STECF are out of balance with their fishing opportunities, according to the criteria in the 2014 Balance Indicator Guidelines. In the tables 6.1.1-6 also the fish stocks on which segments out of balance rely. The fish stocks on which a fleet segment is reliant have been determined by ranking the landings of value from all stocks caught by that fleet segment in descending order in terms of landings value and listing those stocks that account for 75% of the total value of the landings by that fleet segment.

Table 6.1.1 List of fleet segment by country in Area 27 that in 2017 were out of balance according to the SHI indicator. Note that the SHI has been estimated according to 2014 Balance Indicator Guidelines (COM (2014) 545 Final), using 40% of the annual value of landings that came from assessed stocks as threshold (% of coverage).

Country	Fleet	SHI	% of coverage	Major stocks
BEL	BEL-NAO-DTS-VL2440-NGI	1.06	59.48	European plaice-ple.27.420/assessed Norway lobster-nep.fu.8/assessed Norway lobster-nep.fu.6/assessed Norway lobster-nep.fu.5/no information Common squids nei-27.7.d/no information Norway lobster-nep.fu.33/no information Turbot-tur.27.4/assessed Common sole-sol.27.4/assessed Surmullet-mur.27.3a47d/no information Common sole-sol.27.7fg/assessed
DEU	DEU-NAO-DFN-VL1218-NGI	1.25	91.42	European eel-ele.2737.nea/no information Marine fishes nei-27.3.d.24/no information Common sole-sol.27.4/assessed Common sole-sol.27.20-24/assessed
DEU	DEU-NAO-DFN-VL2440-NGI	1.22	44.98	Deep-sea red crab-27.4.a/no information Deep-sea red crab-27.9.a/no information Deep-sea red crab-27.8.d/no information Turbot-27.6.b/no information
DEU	DEU-NAO-DTS-VL1012-NGI	1.55	62.48	Marine fishes nei-27.3.d.24/no information Pike-perch-27.3.c.22/no information Atlantic herring-her.27.20-24/assessed Common dab-dab.27.22-32/no information
DEU	DEU-NAO-DTS-VL1218-NGI	1.63	69.69	European hake-27.3.d.24/no information Pike-perch-27.3.d.24/no information Marine fishes nei-27.3.d.24/no information Lumpfish(=Lumpsucker)-27.3.d.24/no information
DEU	DEU-NAO-DTS-VL1824-NGI	1.20	64.80	Sea trout-trs.27.22-32/no information European eel-ele.2737.nea/no information European hake-27.3.d.24/no information Lumpfish(=Lumpsucker)-27.3.d.24/no information Marine fishes nei-27.3.d.24/no information Pike-perch-27.3.d.24/no information European plaice-ple.27.420/assessed Norway lobster-nep.fu.8/assessed
DEU	DEU-NAO-DTS-VL2440-NGI	1.28	87.71	Atlantic cod-cod.27.47d20/assessed Saithe(=Pollock)-pok.27.3a46/assessed European hake-hke.27.3a46-8abd/assessed Haddock-had.27.46a20/assessed
DEU	DEU-NAO-DTS-VL40XX-NGI	1.24	80.89	Greenland halibut-ghl.27.561214/assessed Atlantic cod-cod.27.1-2/assessed Greenland halibut-21.1.c/no information Saithe(=Pollock)-pok.27.3a46/assessed
DEU	DEU-NAO-PG-VL1012-NGI	1.55	73.06	Saithe(=Pollock)-27.3.d.24/no information Pollack-27.3.c.22/no information Lumpfish(=Lumpsucker)-27.3.c.22/no information European lobster-27.4.b/no information Eelpout-27.3.c.22/no information Edible crab-27.4.b/no information
DEU	DEU-NAO-TBB-VL2440-NGI	1.04	86.52	Common sole-sol.27.4/assessed European plaice-ple.27.420/assessed Turbot-tur.27.4/assessed
DEU	DEU-NAO-TM-VL40XX-NGI	1.18	83.46	European hake-27.3.d.24/no information Marine fishes nei-27.3.d.24/no information European eel-ele.2737.nea/no information Atlantic salmon-sal.27.22-31/no information Atlantic searobins-27.3.d.24/no information Tusk(=Cusk)-27.3.d.24/no information Saithe(=Pollock)-27.3.d.24/no information
DNK	DNK-NAO-DTS-VL0010-NGI	1.09	63.83	European plaice-ple.27.21-23/assessed Atlantic cod-cod.27.21/no information Norway lobster-nep.fu.3-4/assessed
DNK	DNK-NAO-DTS-VL1012-NGI	1.16	62.31	European plaice-ple.27.21-23/assessed Norway lobster-nep.fu.3-4/assessed Atlantic cod-cod.27.22-24/assessed Atlantic cod-cod.27.21/no information Atlantic cod-27.3.d.25/no information European sprat-spr.27.4/no information
DNK	DNK-NAO-DTS-VL2440-NGI	1.18	63.78	Atlantic cod-cod.27.47d20/assessed Angler(=Monk)-anf.27.3a46/no information European plaice-ple.27.420/assessed Northern prawn-pra.27.3a4a/assessed European hake-hke.27.3a46-8abd/assessed Saithe(=Pollock)-pok.27.3a46/assessed Lemon sole-lem.27.3a47d/no information Sandeels(=Sandlances) nei-san.sa.1r/no information



Country	Fleet	SHI	% of coverage	Major stocks
				Sandeels(=Sandlances) nei-san.sa.3r/no information Ling-lin.27.3a4a6-91214/no information
DNK	DNK-NAO-DTS-VL40XX-NGI	1.10	48.77	Sandeels(=Sandlances) nei-san.sa.1r/no information Atlantic mackerel-mac.27.nea/assessed European sprat-spr.27.4/no information Atlantic herring-her.27.3a47d/assessed Atlantic herring-her.27.1-24a514a/assessed Sandeels(=Sandlances) nei-san.sa.3r/no information Blue whiting(=Poutassou)-whb.27.1-91214/assessed
DNK	DNK-NAO-PGP-VL1012-NGI	1.59	60.46	Atlantic cod-cod.27.22-24/assessed European plaice-ple.27.21-23/assessed Atlantic cod-cod.27.21/no information Common sole-sol.27.20-24/assessed European plaice-ple.27.420/assessed Common sole-sol.27.4/assessed European eel-ele.2737.nea/no information Turbot-27.3.c.22/no information Atlantic cod-cod.27.47d20/assessed
DNK	DNK-NAO-PGP-VL1218-NGI	1.21	75.32	European plaice-ple.27.420/assessed Atlantic cod-cod.27.47d20/assessed Common sole-sol.27.4/assessed Turbot-tur.27.4/assessed Angler(=Monk)-anf.27.3a46/no information European plaice-ple.27.21-23/assessed Atlantic cod-cod.27.21/no information
DNK	DNK-NAO-PMP-VL0010-NGI	1.21	57.89	European plaice-ple.27.21-23/assessed Atlantic cod-cod.27.21/no information Norway lobster-nep.fu.3-4/assessed Common sole-sol.27.20-24/assessed Atlantic cod-cod.27.22-24/assessed European flat oyster-27.4.b/no information Atlantic cod-cod.27.47d20/assessed European lobster-27.4.b/no information Pollack-pol.27.3a4/no information
DNK	DNK-NAO-PMP-VL1012-NGI	1.07	57.06	European plaice-ple.27.21-23/assessed Norway lobster-nep.fu.3-4/assessed Atlantic cod-cod.27.3.d.25/no information Atlantic cod-cod.27.21/no information European plaice-ple.27.420/assessed European flat oyster-27.4.b/no information Atlantic cod-cod.27.22-24/assessed Lemon sole-lem.27.3a47d/no information
DNK	DNK-NAO-PMP-VL1824-NGI	1.15	84.78	European hake-hke.27.3a46-8abd/assessed Atlantic cod-cod.27.47d20/assessed European plaice-ple.27.420/assessed Common sole-sol.27.4/assessed Turbot-tur.27.4/assessed European plaice-ple.27.21-23/assessed
DNK	DNK-NAO-TM-VL1218-NGI	1.18	55.25	Atlantic herring-her.27.20-24/assessed European sprat-spr.27.22-32/assessed Sandeels(=Sandlances) nei-san.sa.3r/no information European sprat-spr.27.4/no information
DNK	DNK-NAO-TM-VL40XX-NGI	1.08	80.62	Atlantic herring-her.27.1-24a514a/assessed Atlantic mackerel-mac.27.nea/assessed Atlantic herring-her.27.3a47d/assessed Sandeels(=Sandlances) nei-san.sa.1r/no information
ESP	ESP-NAO-DFN-VL0010-NGI	1.18	74.76	Atlantic mackerel-mac.27.nea/assessed White seabream-27.8.c/no information
ESP	ESP-NAO-DFN-VL1218-NGI	1.30	44.34	Nurse shark-27.8.c/no information Thorntooth grenadier-27.9.a/no information Timucu-27.8.c/no information Pacific cornetfish-27.9.a/no information Fraudella carassiops-27.8.c/no information Dwarf sawfish-27.9.a/no information Disc-fin squids nei-27.9.a/no information Coccorella atlantica-27.9.a/no information Pacific jack mackerel-27.8.c/no information Channeled tun-27.9.a/no information Castaneta-27.9.a/no information Brown cup-and-saucer-27.8.c/no information Lepophidium aporrhox-27.8.c/no information Neolumpenus unocellatus-27.9.a/no information Blood cockle-27.8.c/no information Blachea xenobranchialis-27.9.a/no information Blachea xenobranchialis-27.8.c/no information Frog shell nei-27.8.c/no information Gulaphallus bikolanus-27.8.c/no information Gulf herring-27.8.c/no information Gulf herring-27.9.a/no information Hourglass moray-27.9.a/no information King weakfish-27.8.c/no information Largescale fat snook-27.8.c/no information Longfin mullet-27.9.a/no information Bigeye scad-27.8.c/no information Bifid clingfish-27.9.a/no information Belone spp-27.8.c/no information Bathysauropsis gigas-27.8.c/no information Barathronus maculatus-27.9.a/no information Warthead blenny-27.9.a/no information Tripletail-27.9.a/no information Two-finned round herring-27.9.a/no information Tusked goby-27.9.a/no information Taquilla clams-27.8.c/no information Spiny gracilaria-27.9.a/no information Spadefishes nei-27.9.a/no information South Australian cobbler-27.9.a/no information Shango dragonet-27.9.a/no information Shango dragonet-27.8.c/no information Rough scad-27.9.a/no information Rough scad-27.8.c/no information Reeves shad-27.9.a/no information Purple-spotted bigeye-27.8.c/no information Porgies-27.8.c/no information Ponyfishes(=Slipmouths) nei-27.8.c/no information Panatella silverside-27.9.a/no information Panama ghost catshark-27.8.c/no information Pacific tripletail-27.8.c/no information Pacific menhaden-27.9.a/no information Bothrocara alalongum-27.9.a/no information Boeseman croaker-27.8.c/no information
ESP	ESP-NAO-DFN-VL1824-NGI	1.59	67.81	Luminous cardinalfish-27.8.c/no information Large-scale lantern fish-27.8.c/no information Japanese snapper-27.8.c/no information Brownspotted sandfish-27.8.c/no information Two-finned round herring-27.8.c/no information European hake-hke.27.8c9a/assessed Anglerfishes nei-mon.27.8c9a/assessed

Country	Fleet	SHI	% of coverage	Major stocks
ESP	ESP-NAO-DFN-VL2440-NGI	1.66	50.96	Belanger's croaker-27.8.c/no information European hake-hke.27.8c9a/assessed Albacore-27.8.d.2/no information Albacore-alb-na/assessed
ESP	ESP-NAO-DTS-VL2440-NGI	1.21	78.73	Parastichopus tremulus-27.7.c.2/no information Yellowstripe scad-27.9.a/no information White croaker-27.9.a/no information Suckerfishes-ECN/no information Stichopus naso-27.8.c/no information Spiny slipper shell-27.9.a/no information Sandlances nei-27.8.c/no information Rough scad-27.9.a/no information Rhinoceros leatherjacket-27.9.a/no information Red Pacific land crab-27.9.a/no information Parastichopus tremulus-27.8.c/no information Parastichopus tremulus-27.7.j.2/no information Parastichopus tremulus-27.7.b/no information Pacific jack mackerel-27.9.a/no information Onyx slipper shell-27.9.a/no information Manystriped blowfish-27.9.a/no information Malpelo land crab-27.9.a/no information Lebranche mullet-27.9.a/no information Largescale fat snook-27.9.a/no information Irish pollan-27.9.a/no information Hawaiian ladyfish-27.9.a/no information Giant sea cucumber-27.8.c/no information Giant sea cucumber-27.7.j.2/no information Giant sea cucumber-27.7.b/no information Discrepant venus-27.8.c/no information Chilean torpedo-27.9.a/no information Castaneta-27.9.a/no information Bigeye scad-27.9.a/no information Bicolor butterflyfish-27.8.c/no information Atlantic sawtail catshark-27.8.c/no information Argentine menhaden-27.9.a/no information Arched box crab-27.9.a/no information Actinopyga agassizii-27.8.c/no information
ESP	ESP-NAO-DTS-VL40XX-NGI	1.03	50.41	Atlantic cod-cod.27.1-2/assessed Greenland halibut-21.3.l/no information Beaked redfish-reb.27.1-2/no information Atlantic redfishes nei-21.3.m/no information Raja rays nei-21.3.n/no information Atlantic redfishes nei-21.3.o/no information
ESP	ESP-NAO-HOK-VL0010-IC	1.05	61.46	Skipjack tuna-34.1.2/no information Bigeye tuna-bet-atl/assessed Albacore-alb-na/assessed
ESP	ESP-NAO-HOK-VL1012-NGI	1.49	50.38	Parrella fusca-27.8.c/no information Spotfin dragonet-27.8.b/no information Rough spanish lobster-27.8.b/no information Trident grenadier-27.8.c/no information Discrepant venus-27.8.c/no information West African ladyfish-27.8.c/no information Atlantic mackerel-mac.27.nea/assessed European hake-hke.27.8c9a/assessed
ESP	ESP-NAO-HOK-VL1218-NGI	1.53	51.91	Yellowstripe scad-27.8.c/no information Antarctic flying squid-27.8.c/no information Atlantic sawtail catshark-27.8.c/no information Bigeye scad-27.8.c/no information Chironia spp-27.8.c/no information Grenadier cod-27.8.c/no information Japanese snapper-27.8.c/no information Large-scale lantern fish-27.8.c/no information Melancholy cranch squid-27.8.c/no information Paraliparis tetrapteryx-27.8.c/no information Snaky klipfish-27.8.c/no information Two-finned round herring-27.8.c/no information Two-finned round herring-27.9.a/no information
ESP	ESP-NAO-HOK-VL1824-IC	1.18	67.15	Bigeye tuna-bet-atl/assessed Albacore-alb-na/assessed Splendid alfonsino-34.1.2/no information Splendid alfonsino-34.1.3.1/no information
ESP	ESP-NAO-HOK-VL1824-NGI	1.33	54.53	Atlantic sawtail catshark-27.8.c/no information Pacific menhaden-27.8.c/no information Largebrain root coral-27.8.c/no information Bigeye scad-27.8.c/no information Bean's sawtooth eel-27.8.c/no information
ESP	ESP-NAO-HOK-VL2440-IC	1.21	80.60	Bigeye tuna-bet-atl/assessed Albacore-alb-na/assessed
ESP	ESP-NAO-PMP-VL1218-NGI	1.22	50.04	Northern wobbegong-27.9.a/no information Rock violet-27.9.a/no information Shortbeard cusk-eel-27.8.c/no information White croaker-27.9.a/no information King weakfish-27.8.c/no information Brazilian menhaden-27.9.a/no information Egyptian sole-27.9.a/no information Atlantic mackerel-mac.27.nea/assessed Albacore-alb-na/assessed Common octopus-27.9.a/no information Albacore-27.8.d.2/no information
ESP	ESP-NAO-PMP-VL1824-NGI	1.32	66.76	European hake-hke.27.8c9a/assessed Albacore-27.8.d.2/no information Albacore-alb-na/assessed Atlantic mackerel-mac.27.nea/assessed
ESP	ESP-NAO-PMP-VL2440-IC	1.45	88.07	Bigeye tuna-bet-atl/assessed Albacore-alb-na/assessed
EST	EST-NAO-PG-VL1012-NGI	1.09	95.16	Atlantic herring-her.27.25-2932/assessed
EST	EST-NAO-TM-VL1218-NGI	1.17	100.00	Atlantic herring-her.27.25-2932/assessed European sprat-spr.27.22-32/assessed
EST	EST-NAO-TM-VL1824-NGI	1.17	99.36	Atlantic herring-her.27.25-2932/assessed European sprat-spr.27.22-32/assessed
EST	EST-NAO-TM-VL2440-NGI	1.17	99.47	European sprat-spr.27.22-32/assessed Atlantic herring-her.27.25-2932/assessed
FIN	FIN-NAO-TM-VL1218-NGI	1.13	54.33	Atlantic herring-her.27.25-2932/assessed Atlantic herring-her.27.3031/no information
FIN	FIN-NAO-TM-VL1824-NGI	1.13	66.47	Atlantic herring-her.27.25-2932/assessed Atlantic herring-her.27.3031/no information
FRA	FRA-NAO-DTS-VL1218-NGI	1.07	62.03	Norway lobster-nep.fu.2324/assessed Monkfishes nei-mon.27.78abd/assessed Great Atlantic scallop-27.7.d/no information Common sole-sol.27.8ab/assessed European hake-hke.27.3a46-8abd/assessed Megrin-meg.27.7b-k8abd/assessed Monkfishes nei-ank.27.78abd/assessed Common cuttlefish-27.8.b/no information Common cuttlefish-27.8.a/no information European seabass-bss.27.8ab/assessed John dory-27.8.a/no information Inshore squids nei-27.8.b/no information Inshore squids nei-27.8.a/no information

Country	Fleet	SHI	% of coverage	Major stocks
FRA	FRA-NAO-DTS-VL1824-NGI	1.15	57.21	Monkfishes nei-mon.27.78abd/assessed Inshore squids nei-27.7.d/no information Monkfishes nei-ank.27.78abd/assessed Megrim-meg.27.7b-k8abd/assessed Whiting-whg.27.7b-ce-k/assessed European hake-hke.27.3a46-8abd/assessed Haddock-had.27.7b-k/assessed Norway lobster-nep.fu.2324/assessed Albacore-alb-na/assessed Atlantic mackerel-mac.27.nea/assessed Common cuttlefish-27.7.d/no information Common cuttlefish-27.8.a/no information Common cuttlefish-27.7.e/no information Atlantic cod-cod.27.7e-k/assessed Whiting-whg.27.47d/assessed European seabass-bss.27.8ab/assessed Inshore squids nei-27.8.a/no information Common sole-sol.27.8ab/assessed Inshore squids nei-27.7.e/no information John dory-27.7.e/no information John dory-27.8.a/no information Cuckoo ray-27.7.h/no information Smooth-hounds nei-sdv.27.nea/no information John dory-27.7.h/no information European seabass-bss.27.4bc7ad-h/assessed Surmullet-mur.27.3a47d/no information Inshore squids nei-27.4.c/no information
FRA	FRA-NAO-DTS-VL2440-NGI	1.20	65.24	Monkfishes nei-mon.27.78abd/assessed Megrims nei-meg.27.7b-k8abd/assessed European hake-hke.27.3a46-8abd/assessed Haddock-had.27.7b-k/assessed Monkfishes nei-anf.27.3a46/no information Whiting-whg.27.7b-ce-k/assessed Inshore squids nei-27.7.d/no information Monkfishes nei-ank.27.78abd/assessed John dory-27.7.e/no information John dory-27.7.h/no information Atlantic mackerel-mac.27.nea/assessed Atlantic cod-cod.27.7e-k/assessed Surmullet-mur.27.3a47d/no information Albacore-alb-na/assessed Common cuttlefish-27.7.e/no information
FRA	FRA-NAO-PS-VL1218-NGI	1.38	57.74	European pilchard(=Sardine)-pil.27.8abd/assessed European pilchard(=Sardine)-27.7.e/no information European anchovy-ane.27.8/no information
FRA	FRA-NAO-PS-VL1824-NGI	1.16	68.22	European pilchard(=Sardine)-pil.27.8abd/assessed Mediterranean horse mackerel-27.8.b/no information Atlantic bluefin tuna-bft-ea/assessed Atlantic horse mackerel-hom.27.2a4a5b6a7a-ce-k8/assessed European seabass-bss.27.8ab/assessed
FRA	FRA-NAO-TM-VL0010-NGI	1.52	90.51	European pilchard(=Sardine)-pil.27.8abd/assessed
FRA	FRA-NAO-TM-VL1012-NGI	1.44	54.46	European pilchard(=Sardine)-pil.27.8abd/assessed Black seabream-27.8.a/no information Meagre-27.8.a/no information Atlantic mackerel-mac.27.nea/assessed European seabass-bss.27.8ab/assessed
FRA	FRA-NAO-TM-VL1218-NGI	1.06	75.93	European pilchard(=Sardine)-pil.27.8abd/assessed European hake-hke.27.3a46-8abd/assessed Albacore-alb-na/assessed European seabass-bss.27.8ab/assessed Mediterranean horse mackerel-27.8.a/no information Norway lobster-nep.fu.2324/assessed Common cuttlefish-27.8.a/no information Inshore squids nei-27.8.a/no information
FRA	FRA-NAO-TM-VL40XX-NGI	1.15	97.51	Atlantic mackerel-mac.27.nea/assessed Blue whiting(=Poutassou)-whb.27.1-91214/assessed Atlantic herring-her.27.3a47d/assessed
GBR	GBR-NAO-DFN-VL1218-NGI	1.07	58.52	European hake-hke.27.3a46-8abd/assessed Pollack-pol.27.67/no information Turbot-27.7.f/no information Common sole-sol.27.4/assessed European plaice-ple.27.420/assessed Turbot-tur.27.4/assessed
GBR	GBR-NAO-DFN-VL1824-NGI	1.09	68.80	European hake-hke.27.3a46-8abd/assessed Pollack-pol.27.67/no information Turbot-27.7.g/no information Anglerfishes nei-mon.27.78abd/assessed
GBR	GBR-NAO-DFN-VL2440-NGI	1.12	59.70	Anglerfishes nei-mon.27.78abd/assessed Anglerfishes nei-anf.27.3a46/no information
GBR	GBR-NAO-DTS-VL1012-NGI	1.04	42.34	Cuttlefish-CTL/no information Norway lobster-nep.fu.13/assessed Lemon sole-27.7.e/no information Norway lobster-nep.fu.8/assessed Norway lobster-nep.fu.6/assessed Common squids nei-27.7.e/no information Norway lobster-nep.fu.12/assessed Norway lobster-nep.fu.5/no information Norway lobster-nep.fu.11/assessed Norway lobster-nep.fu.15/assessed Norway lobster-nep.fu.33/no information Anglerfishes nei-mon.27.78abd/assessed John dory-27.7.e/no information Whiting-whg.27.7b-ce-k/assessed
GBR	GBR-NAO-DTS-VL2440-NGI	1.22	76.44	Haddock-had.27.46a20/assessed Atlantic cod-cod.27.47d20/assessed Anglerfishes nei-anf.27.3a46/no information European hake-hke.27.3a46-8abd/assessed Whiting-whg.27.47d/assessed Anglerfishes nei-mon.27.78abd/assessed Saithe(=Pollock)-pok.27.3a46/assessed European plaice-ple.27.420/assessed Megrims nei-meg.27.7b-k8abd/assessed
GBR	GBR-NAO-TM-VL2440-NGI	1.21	100.00	Atlantic mackerel-mac.27.nea/assessed
GBR	GBR-NAO-TM-VL40XX-NGI	1.22	98.37	Atlantic mackerel-mac.27.nea/assessed
IRL	IRL-NAO-DFN-VL1012-	1.16	42.01	European hake-hke.27.3a46-8abd/assessed Pollack-pol.27.67/no information Turbot-27.7.g/no information Saithe(=Pollock)-27.7.g/no information Unknown-27.7.g/no information Turbot-27.7.j/no information Whiting-whg.27.7b-ce-k/assessed Ling-lin.27.3a4a6-91214/no information
IRL	IRL-NAO-DFN-VL1218-	1.06	46.75	European hake-hke.27.3a46-8abd/assessed Pollack-pol.27.67/no information Palinurid spiny lobsters nei-27.7.j/no information Saithe(=Pollock)-27.7.g/no information Turbot-27.7.g/no information Turbot-27.7.j/no information Whiting-whg.27.7b-ce-k/assessed

Country	Fleet	SHI	% of coverage	Major stocks
IRL	IRL-NAO-DFN-VL1824-	1.09	72.67	European hake-hke.27.3a46-8abd/assessed Pollack-pol.27.67/no information Turbot-27.7.j/no information Anglerfishes nei-mon.27.78abd/assessed
IRL	IRL-NAO-DFN-VL2440-	1.02	68.80	European hake-hke.27.3a46-8abd/assessed Saithe(=Pollock)-27.7.j/no information
IRL	IRL-NAO-DTS-VL1012-	1.16	75.23	Norway lobster-nep.fu.16/assessed Anglerfishes nei-mon.27.78abd/assessed Norway lobster-nep.fu.19/assessed Norway lobster-nep.fu.22/assessed Megrim nei-meg.27.7b-k8abd/assessed Norway lobster-nep.fu.15/assessed Atlantic herring-her.27.irls/assessed Norway lobster-nep.fu.2021/assessed European sprat-27.7.a/no information Whiting-whg.27.7b-ce-k/assessed Common sole-sol.27.7h-k/assessed Pollack-pol.27.67/no information Unknown-27.7.g/no information Norway lobster-nep.fu.17/assessed Palaemonid shrimps nei-27.7.g/no information
IRL	IRL-NAO-DTS-VL1218-	1.07	81.54	Anglerfishes nei-mon.27.78abd/assessed Norway lobster-nep.fu.16/assessed Megrim nei-meg.27.7b-k8abd/assessed Norway lobster-nep.fu.15/assessed Norway lobster-nep.fu.22/assessed Whiting-whg.27.7b-ce-k/assessed European hake-hke.27.3a46-8abd/assessed Norway lobster-nep.fu.2021/assessed Norway lobster-nep.fu.19/assessed Haddock-had.27.7b-k/assessed Common sole-sol.27.7h-k/assessed Turbot-27.7.j/no information Haddock-had.27.7a/assessed
IRL	IRL-NAO-DTS-VL2440-	1.13	76.93	Norway lobster-nep.fu.16/assessed Common squids nei-27.6.b/no information Whiting-whg.27.7b-ce-k/assessed Norway lobster-nep.fu.2021/assessed Norway lobster-nep.fu.22/assessed Anglerfishes nei-mon.27.78abd/assessed European hake-hke.27.3a46-8abd/assessed Atlantic mackerel-mac.27.nea/assessed Megrim nei-meg.27.7b-k8abd/assessed Norway lobster-nep.fu.19/assessed Anglerfishes nei-anf.27.3a46/no information Megrim nei-lez.27.6b/assessed
IRL	IRL-NAO-TBB-VL2440-	1.20	70.35	Megrim nei-meg.27.7b-k8abd/assessed Anglerfishes nei-mon.27.78abd/assessed Turbot-27.7.g/no information Anglerfishes nei-ank.27.78abd/assessed Lemon sole-27.7.g/no information Haddock-had.27.7b-k/assessed Witch flounder-27.7.g/no information
IRL	IRL-NAO-TM-VL1218-	1.44	51.93	European sprat-27.6.a/no information Atlantic mackerel-mac.27.nea/assessed European sprat-27.7.a/no information Atlantic herring-her.27.irls/assessed Megrim nei-meg.27.7b-k8abd/assessed
IRL	IRL-NAO-TM-VL1824-	1.37	83.88	Atlantic mackerel-mac.27.nea/assessed Atlantic herring-her.27.irls/assessed Atlantic herring-her.27.6a7bc/no information Albacore-alb-na/assessed
IRL	IRL-NAO-TM-VL2440-	1.08	96.73	Atlantic mackerel-mac.27.nea/assessed Albacore-alb-na/assessed Jack and horse mackerels nei-hom.27.2a4a5b6a7a-ce-k8/assessed
IRL	IRL-NAO-TM-VL40XX-	1.17	99.37	Atlantic mackerel-mac.27.nea/assessed Jack and horse mackerels nei-hom.27.2a4a5b6a7a-ce-k8/assessed
LTU	LTU-NAO-TM-VL1824-NGI	1.19	100.00	European sprat-spr.27.22-32/assessed Atlantic herring-her.27.25-2932/assessed
LTU	LTU-NAO-TM-VL2440-NGI	1.20	96.49	European sprat-spr.27.22-32/assessed Atlantic herring-her.27.25-2932/assessed
LTU	LTU-NAO-TM-VL40XX-NGI	1.21	100.00	European sprat-spr.27.22-32/assessed
LVA	LVA-NAO-TM-VL2440-NGI	1.15	80.04	European sprat-spr.27.22-32/assessed Atlantic herring-her.27.28/assessed Atlantic cod-27.3.d.26/no information
NLD	NLD-NAO-DTS-VL1824-NGI	1.07	56.42	European plaice-ple.27.420/assessed Norway lobster-nep.fu.8/assessed Norway lobster-nep.fu.6/assessed Common shrimp-27.4.c/no information Turbot-tur.27.4/assessed Norway lobster-nep.fu.5/no information Norway lobster-nep.fu.33/no information Common shrimp-27.4.b/no information
NLD	NLD-NAO-PG-VL1012-NGI	1.04	93.38	Common sole-sol.27.4/assessed
NLD	NLD-NAO-TBB-VL2440-NGI	1.05	73.52	Common sole-sol.27.4/assessed European plaice-ple.27.420/assessed Common shrimp-27.4.c/no information Turbot-tur.27.4/assessed
NLD	NLD-NAO-TBB-VL40XX-NGI	1.03	90.98	Common sole-sol.27.4/assessed European plaice-ple.27.420/assessed
NLD	NLD-NAO-TM-VL40XX-NGI	1.13	77.23	Atlantic mackerel-mac.27.nea/assessed Blue whiting(=Poutassou)-whb.27.1-91214/assessed Atlantic herring-her.27.3a47d/assessed Atlantic herring-her.27.1-24a514a/assessed Atlantic horse mackerel-hom.27.2a4a5b6a7a-ce-k8/assessed
POL	POL-NAO-TM-VL1824-	1.18	76.08	European sprat-spr.27.22-32/assessed Atlantic herring-her.27.25-2932/assessed
POL	POL-NAO-TM-VL2440-	1.19	96.60	European sprat-spr.27.22-32/assessed Atlantic herring-her.27.25-2932/assessed
PRT	PRT-NAO-HOK-VL2440-P2	1.05	89.41	Bigeye tuna-bet-atl/assessed Albacore-alb-na/assessed Swordfish-swo-io/assessed Blue shark-bsh-io/assessed
PRT	PRT-NAO-PS-VL1218-NGI	1.24	51.43	European pilchard(=Sardine)-pil.27.8c9a/assessed Chub mackerel-27.9.a/no information European anchovy-ane.27.9a/no information Atlantic horse mackerel-hom.27.9a/assessed
PRT	PRT-NAO-PS-VL1824-NGI	1.30	59.62	European pilchard(=Sardine)-pil.27.8c9a/assessed European anchovy-ane.27.9a/no information
PRT	PRT-NAO-PS-VL2440-NGI	1.30	50.97	European pilchard(=Sardine)-pil.27.8c9a/assessed European anchovy-ane.27.9a/no information Chub mackerel-27.9.a/no information
SWE	SWE-NAO-DFN-VL1012-NGI	1.78	46.04	Atlantic cod-cod.27.22-24/assessed Vendace-27.3.d.31/no information Atlantic herring-her.27.20-24/assessed Atlantic herring-her.27.3031/no information Atlantic cod-cod.27.21/no information Atlantic mackerel-27.3.a/no information

Country	Fleet	SHI	% of coverage	Major stocks
SWE	SWE-NAO-DFN-VL1218-NGI	2.16	80.98	Atlantic cod-cod.27.22-24/assessed
SWE	SWE-NAO-DTS-VL2440-NGI	1.19	68.29	Northern prawn-pra.27.3a4a/assessed Atlantic herring-her.27.3031/no information Saithe(=Pollock)-pok.27.3a46/assessed Atlantic cod-cod.27.47d20/assessed Atlantic herring-her.27.25-2932/assessed
SWE	SWE-NAO-PS-VL1012-NGI	1.12	97.45	Atlantic herring-her.27.25-2932/assessed
SWE	SWE-NAO-PS-VL1218-NGI	1.12	99.34	Atlantic herring-her.27.25-2932/assessed
SWE	SWE-NAO-TM-VL1012-NGI	1.12	100.00	Atlantic herring-her.27.25-2932/assessed
SWE	SWE-NAO-TM-VL1824-NGI	1.14	99.92	Atlantic herring-her.27.25-2932/assessed
SWE	SWE-NAO-TM-VL2440-NGI	1.09	66.50	Atlantic herring-her.27.25-2932/assessed Atlantic herring-her.27.3031/no information European sprat-spr.27.22-32/assessed Atlantic herring-her.27.3a47d/assessed Atlantic herring-her.27.20-24/assessed
SWE	SWE-NAO-TM-VL40XX-NGI	1.05	84.27	Atlantic herring-her.27.25-2932/assessed Atlantic herring-her.27.3a47d/assessed European sprat-spr.27.22-32/assessed Atlantic mackerel-mac.27.nea/assessed Atlantic herring-her.27.1-24a514a/assessed

Table 6.1.2 List of fleet segment by country in Area 37 that in 2017 were out of balance according to the SHI indicator. Note that the SHI has been estimated according to 2014 Balance Indicator Guidelines (COM (2014) 545 Final), using 40% of the annual value of landings that came from assessed stocks as threshold (% of coverage).

Country	Fleet	SHI	% of coverage	Major stocks
BGR	BGR-MBS-DFN-VL0006-NGI	2.39	100.00	Sea snails-rpw-gsa29/assessed
BGR	BGR-MBS-DFN-VL0612-NGI	3.18	100.00	Turbot-tur-gsa29/assessed Sea snails-rpw-gsa29/assessed
BGR	BGR-MBS-DFN-VL1218-NGI	3.21	100.00	Turbot-tur-gsa29/assessed Sea snails-rpw-gsa29/assessed Red mullet-mut-gsa29/assessed
BGR	BGR-MBS-DFN-VL1824-NGI	5.65	100.00	Picked dogfish-dgs-gsa29/assessed Red mullet-mut-gsa29/assessed Turbot-tur-gsa29/assessed
BGR	BGR-MBS-FPO-VL0006-NGI	1.47	100.00	Red mullet-mut-gsa29/assessed Mediterranean horse mackerel-hmm-gsa29/assessed
BGR	BGR-MBS-FPO-VL0612-NGI	2.15	100.00	European sprat-spr-gsa29/assessed Mediterranean horse mackerel-hmm-gsa29/assessed
BGR	BGR-MBS-HOK-VL0006-NGI	6.59	100.00	Mediterranean horse mackerel-hmm-gsa29/assessed Picked dogfish-dgs-gsa29/assessed
BGR	BGR-MBS-HOK-VL0612-NGI	9.47	100.00	Picked dogfish-dgs-gsa29/assessed Mediterranean horse mackerel-hmm-gsa29/assessed
BGR	BGR-MBS-HOK-VL1218-NGI	11.63	100.00	Picked dogfish-dgs-gsa29/assessed
BGR	BGR-MBS-PGP-VL0006-NGI	3.25	100.00	Mediterranean horse mackerel-hmm-gsa29/assessed
BGR	BGR-MBS-PGP-VL0612-NGI	6.74	100.00	Turbot-tur-gsa29/assessed Picked dogfish-dgs-gsa29/assessed
BGR	BGR-MBS-PMP-VL0006-NGI	2.25	100.00	Sea snails-rpw-gsa29/assessed
BGR	BGR-MBS-PMP-VL0612-NGI	2.29	100.00	Sea snails-rpw-gsa29/assessed
BGR	BGR-MBS-PMP-VL1218-NGI	2.81	100.00	Sea snails-rpw-gsa29/assessed Red mullet-mut-gsa29/assessed
BGR	BGR-MBS-PMP-VL1824-NGI	2.52	100.00	Sea snails-rpw-gsa29/assessed Turbot-tur-gsa29/assessed
BGR	BGR-MBS-PS-VL0006-NGI	1.65	100.00	European sprat-spr-gsa29/assessed Mediterranean horse mackerel-hmm-gsa29/assessed
BGR	BGR-MBS-PS-VL0612-NGI	2.21	100.00	European anchovy-ane-gsa29/assessed Mediterranean horse mackerel-hmm-gsa29/assessed
BGR	BGR-MBS-PS-VL1824-NGI	3.71	100.00	Mediterranean horse mackerel-hmm-gsa29/assessed
BGR	BGR-MBS-TBB-VL0612-NGI	2.38	100.00	Sea snails-rpw-gsa29/assessed
BGR	BGR-MBS-TBB-VL1218-NGI	2.35	100.00	Sea snails-rpw-gsa29/assessed
BGR	BGR-MBS-TBB-VL1824-NGI	2.25	100.00	Sea snails-rpw-gsa29/assessed
BGR	BGR-MBS-TM-VL0612-NGI	3.24	100.00	Turbot-tur-gsa29/assessed Mediterranean horse mackerel-hmm-gsa29/assessed
BGR	BGR-MBS-TM-VL1218-NGI	2.19	100.00	European sprat-spr-gsa29/assessed Red mullet-mut-gsa29/assessed Sea snails-rpw-gsa29/assessed
BGR	BGR-MBS-TM-VL1824-NGI	1.51	100.00	European sprat-spr-gsa29/assessed Sea snails-rpw-gsa29/assessed
BGR	BGR-MBS-TM-VL2440-NGI	1.34	100.00	European sprat-spr-gsa29/assessed
CYP	CYP-MBS-PGP-VL1218-	1.48	88.87	Albacore-alb-med/assessed Atlantic bluefin tuna-bft-ea/assessed Swordfish-swo-med/assessed

Country	Fleet	SHI	% of coverage	Major stocks
ESP	ESP-MBS-DTS-VL1824-NGI	3.50	45.85	<p>Creole damsel-sa 6/no information Whitson's grenadier-sa 6/no information White croaker-sa 1/no information Wheelerigobius maltzani-sa 6/no information Wedgenose skate-sa 6/no information Verany's enope squid-sa 6/no information Verany's enope squid-sa 1/no information Velvet helcion-sa 6/no information Vaillant's grenadier-sa 1/no information Unbranched bamboo coral-sa 7/no information Triplewart seadevil-sa 6/no information Toadfishes-TFD/no information Toadfishes nei-sa 1/no information Threadfin breams nei-sa 1/no information Tehuelche scallop-sa 1/no information Tasselled wobbegong-sa 1/no information Taquilla clams-sa 6/no information Striped eel catfish-sa 6/no information Stout red shrimp-sa 6/no information Stout red shrimp-sa 5/no information Spotted eagle ray-sa 5/no information Spotted eagle ray-sa 1/no information Spoon-nose eel-sa 6/no information Spirulina nei-sa 6/no information Spiny plunderfishes nei-sa 1/no information Spiny greasyback shrimp-sa 6/no information Spiny dreamer-sa 6/no information Spikefin goby-sa 6/no information Spadefishes nei-sa 6/no information Smooth dreamer-sa 6/no information Slender blacksmelt-sa 6/no information Silver grunter-sa 6/no information Silvergray rockfish-sa 6/no information Shorttail pike conger-sa 6/no information Shore crab-sa 6/no information Scopelarchus analis-sa 1/no information Salps-sa 6/no information Sailfin anthias-sa 6/no information Rooster hind-sa 6/no information Rooster hind-sa 1/no information Ridge scaled rattail-sa 6/no information Ridge-back lobsterette-sa 6/no information Reticulate round ray-sa 6/no information Reef perch-sa 6/no information Ragworm-sa 6/no information Ragworm-sa 5/no information Radiate semele-sa 6/no information Quirichthys stramineus-sa 1/no information Psilodraco breviceps-sa 5/no information Pinhead pearlfish-sa 6/no information Paralabrax spp-sa 6/no information Panopea spp-sa 6/no information Pale toadfish-sa 6/no information Pacific grenadier-sa 5/no information Pacific burrfish-sa 6/no information Pacific burrfish-sa 1/no information Ornate arm squid-sa 6/no information Ornate angelfish-sa 7/no information Orange dottyback-sa 6/no information Olive rockfish-sa 6/no information Notopogon endeavouri-sa 1/no information Northern wobbegong-sa 1/no information Nicobar spindle-sa 5/no information New Zealand blue cod-sa 6/no information New Caledonia blackfish-sa 6/no information Netted olice-sa 6/no information Neoceratias spinifer-sa 6/no information Narrownose smooth-hound-sa 6/no information Narrownose smooth-hound-sa 5/no information Narcetes erimelas-sa 6/no information Mystriophis porphyreus-sa 6/no information Munda round ray-sa 6/no information Moustache sculpin-sa 6/no information Mississippi paddlefish-sa 6/no information Mimika bobtail squid-sa 6/no information Mantas-MAN/no information Luzonichthys earlei-sa 6/no information Longtail skate-sa 6/no information Lestidiops affinis-sa 6/no information Lesser guitarfish-sa 6/no information Lepophidium aporrhox-sa 6/no information Lentil bobtail squid-sa 6/no information Leister-sa 6/no information Lebranche mullet-sa 6/no information Lamprogrammus brunswigi-sa 7/no information Lamprogrammus brunswigi-sa 6/no information Kiyi-sa 6/no information King weakfish-sa 6/no information King weakfish-sa 1/no information Kentrocapros aculeatus-sa 7/no information Jumbo flying squid-sa 1/no information Jolthead porgy-sa 6/no information Japonolaeops dentatus-sa 5/no information Indian mottled eel-sa 6/no information Heavybeak parrotfish-sa 6/no information Halimuraena hexagonata-sa 6/no information Half-mourning croaker-sa 6/no information Gulf herring-sa 6/no information Gulaphallus bikolanus-sa 7/no information Glyptocidaris crenularis-sa 1/no information Fusitriton magellanicus-sa 6/no information Fringed pipefish-sa 6/no information Fingerprint oyster-sa 5/no information Feather stars and sea lilies-sa 6/no information Episcopal miter-sa 6/no information Ecsenius pulcher-sa 6/no information Easter damselfish-sa 6/no information Dwarf oyster-sa 6/no information Disparichthys fluviatilis-sa 6/no information Deep-water mud shrimp-sa 1/no information Dall's porpoise-sa 6/no information Cucumaria japonica-sa 6/no information Coregonus nilssonii-sa 6/no information Convict surgeonfish-sa 6/no information Common arm squid-sa 6/no information Common arm squid-sa 1/no information Cobbler wobbegong-sa 1/no information Cnidarians nei-sa 6/no information Chinese gizzard shad-sa 5/no information China anchovy-sa 1/no information Chere-chere grunt-sa 7/no information Chere-chere grunt-sa 6/no information Castaneta-sa 6/no information Castaneta-sa 5/no information Carol bobtail squid-sa 6/no information Carmine triplefin-sa 7/no information Canarytop wrasse-sa 1/no information Butterflyfishes-sa 1/no information Bronze croaker-sa 6/no information Broadgill catshark-sa 6/no information Branched sea cushion-sa 6/no information Bothus mancus-sa 5/no information Blood cockle-sa 6/no information Black-spot surgeonfish-sa 6/no information Blackspot picarel-sa 6/no information Blacksaddle herring-sa 6/no information Blacksaddle herring-sa 1/no information Blacknosed butterflyfish-sa 6/no information Black corals and thorny corals-sa 6/no information Black corals</p>

Country	Fleet	SHI	% of coverage	Major stocks
				and thorny corals-sa 1/no information Bigeye scad-sa 6/no information Bifid clingfish-sa 1/no information Belted sandfish-sa 6/no information Belanger's croaker-sa 6/no information Bathysauropsis gigas-sa 6/no information Barred moray-sa 6/no information Barramundi(=Giant seaperch)-sa 1/no information Baleen whales nei-sa 6/no information Balao halfbeak-sa 6/no information Balaenoptid whales nei-sa 6/no information Baikal seal-sa 6/no information Artedidraco glareobarbatus-sa 6/no information Arrowhead soapfish-sa 6/no information Armed cranch squid-sa 5/no information Argentina elongata-sa 6/no information Arctic flounder-sa 6/no information Apocryptes bato-sa 6/no information Antarctic flying squid-sa 1/no information Anisarchus macrops-sa 1/no information Amphipods-sa 6/no information Ambanoro prawn-goby-sa 6/no information Aconcagua grenadier-sa 6/no information
				Fourlined terapon-sa 6/no information Amur sturgeon-sa 6/no information Antenna codlet-sa 5/no information Arrowtail-sa 6/no information Barathronus maculatus-sa 6/no information Bayer's moray-sa 6/no information Bellybutton nautilus-sa 1/no information Bigeye scad-sa 6/no information Longfin African conger-sa 6/no information Luposicya lupus-sa 1/no information Narrownose smooth-hound-sa 1/no information Netted olice-sa 7/no information Nurse shark-sa 1/no information Nurse sharks nei-sa 1/no information Occella kasawai-sa 6/no information Ornate arm squid-sa 6/no information Otophidium chickcharney-sa 6/no information Patagonian scallop-sa 6/no information Planate abalone-sa 6/no information Port Jackson shark-sa 6/no information Queen coris-sa 6/no information Ragworm-sa 6/no information Rigid boxfish-sa 1/no information Spiny cockle-sa 6/no information Spiny greasyback shrimp-sa 6/no information Spotted dolphins nei-sa 6/no information Syngnathus tenuirostris-sa 6/no information Threespot flounder-sa 6/no information Tilesina gibbosa-sa 6/no information Variable abalone-sa 6/no information Warthead blenny-sa 6/no information Zebra turkeyfish-sa 7/no information Exechodontes daidaleus-sa 6/no information Dusky sole-sa 6/no information Diogenichthys atlanticus-sa 6/no information Coregonus nilssoni-sa 6/no information Cnidarians nei-sa 1/no information Campeche catshark-sa 6/no information Broomtail grouper-sa 6/no information Branched sea cushion-sa 6/no information Blackspot picarel-sa 6/no information Black corals and thorny corals-sa 1/no information Gobitrichinotus radiocularis-sa 6/no information Green Panama keyhole limpet-sa 6/no information Grey bonnet-sa 1/no information Hairy toadfish-sa 6/no information Jumbo flying squid-sa 1/no information Largescale fat snook-sa 1/no information Leaf-tail croaker-sa 6/no information
ESP	ESP-MBS-DTS-VL2440-NGI	3.62	63.01	
ESP	ESP-MBS-HOK-VL0612-LLD	1.81	90.54	Swordfish-swo-med/assessed
ESP	ESP-MBS-HOK-VL1218-LLD	1.68	95.49	Tiger shark-sa 6/no information Benthophilus baeri-sa 6/no information Dogtooth tuna-sa 6/no information Fleming's urchin-sa 1/no information Rivulated mutton hamlet-sa 6/no information Sympagurus dimorphus-sa 5/no information Tiger shark-sa 1/no information Tiger shark-sa 5/no information
ESP	ESP-MBS-HOK-VL1218-NGI	1.11	45.41	Shango dragonet-sa 6/no information Argentine menhaden-sa 1/no information Atlantic seabasses-sa 1/no information Barred moray-sa 6/no information Chinese gizzard shad-sa 6/no information Common Californian venus-sa 1/no information Dipulus caecus-sa 6/no information Milkfish-sa 6/no information Platyrhina sinensis-sa 6/no information Smooth oreo dory-sa 6/no information Polititapes durus-sa 6/no information Atlantic bluefin tuna-bft-ea/assessed Blackspot(=red) seabream-sa 6/no information
ESP	ESP-MBS-HOK-VL1824-LLD	1.62	94.28	Eastern jumping blenny-34.1.2/no information Tiger shark-sa 6/no information Perinereis spp-sa 6/no information Psychrolutes macrocephalus-sa 6/no information
ESP	ESP-MBS-HOK-VL2440-LLD	1.67	80.69	Swordfish-swo-med/assessed Swordfish-swo-na/assessed
ESP	ESP-MBS-HOK-VL2440-NGI	3.10	62.53	Blackspot picarel-sa 6/no information Blue and red shrimp-ara-gsa06/assessed Argentine-sa 6/no information Atlantic bluefin tuna-bft-ea/assessed European hake-hke-gsa06/assessed European hake-hke-gsa01_05_06_07/assessed Blue whiting(=Poutassou)-whb-gsa06/no information Norway lobster-nep-gsa06/assessed
ESP	ESP-MBS-PMP-VL1824-NGI	2.65	66.12	Gulf menhaden-sa 6/no information Atlantic menhaden-sa 6/no information Balao halfbeak-sa 6/no information Blue trevally-sa 6/no information European anchovy-

Country	Fleet	SHI	% of coverage	Major stocks
				ane-gsa06/assessed Deep-water rose shrimp-dps-gsa06/assessed European pilchard(=Sardine)-pil-gsa06/assessed Gilthead seabream-sa 6/no information
ESP	ESP-MBS-PMP-VL2440-NGI	5.32	47.89	European hake-hke-gsa01_05_06_07/assessed European hake-hke-gsa06/assessed Surmulletts(=Red mullets) nei-sa 6/no information Red mullet-mut-gsa06/assessed Common pandora-sa 6/no information Angler(=Monk)-mon-gsa01_05_06_07/assessed Blue whiting(=Poutassou)-whb-gsa06/no information Broadtail shortfin squid-sa 6/no information Common cuttlefish-sa 6/no information Common octopus-sa 6/no information Caramote prawn-sa 6/no information Common sole-sa 6/no information Norway lobster-nep-gsa06/assessed Monkfishes nei-gsa06/no information Monkfishes nei-mon-gsa01_05_06_07/assessed
ESP	ESP-MBS-PS-VL1218-NGI	1.41	60.45	Barathronus maculatus-sa 1/no information Atlantic menhaden-sa 6/no information Atlantic menhaden-sa 1/no information Argentine menhaden-27.9.a/no information Argentine menhaden-sa 6/no information Argentine menhaden-sa 1/no information Atlantic menhaden-27.9.a/no information Yellowfin menhaden-sa 1/no information Spiny cockle-sa 1/no information Smooth sandeel-sa 1/no information Slendertail grenadier-sa 1/no information Menhadens nei-sa 1/no information Bigeye scad-sa 6/no information Benthabella macropinna-sa 1/no information
ESP	ESP-MBS-PS-VL1824-NGI	1.44	62.98	Argentine menhaden-sa 7/no information Smooth sandeel-sa 1/no information Gulf menhaden-sa 6/no information Barathronus maculatus-sa 1/no information Atlantic menhaden-sa 7/no information Atlantic menhaden-sa 6/no information Atlantic menhaden-sa 1/no information Argentine menhaden-sa 6/no information Argentine menhaden-sa 1/no information
FRA	FRA-MBS-DFN-VL0006-NGI	2.91	48.46	Gilthead seabream-sbg-gsa07/assessed European seabass-bss-gsa07/assessed Mugil spp-sa 7/no information European eel-sa 7/no information Sea urchins-URX/no information White seabream-sa 7/no information Sand steenbras-sa 7/no information
FRA	FRA-MBS-DFN-VL0612-NGI	3.75	40.63	Gilthead seabream-sbg-gsa07/assessed Mugil spp-sa 7/no information European seabass-bss-gsa07/assessed Swordfish-swo-med/assessed Spiny lobsters nei-sa 7/no information Wrasses- etc. nei/no information Spiny lobsters nei-sa 8/no information Surmullet-sa 7/no information Octopuses-OCT/no information European hake-hke-gsa01_05_06_07/assessed European hake-hke-gsa07/assessed Sea urchins-URX/no information Common pandora-sa 7/no information Common sole-sol-gsa07/assessed Common cuttlefish-sa 7/no information White seabream-sa 7/no information Monkfishes nei-mon-gsa01_05_06_07/assessed European eel-sa 7/no information Sargo breams nei-sa 7/no information Surmulletts(=Red mullets) nei-sa 7/no information
FRA	FRA-MBS-DFN-VL1218-NGI	7.39	61.84	Common sole-sol-gsa07/assessed European hake-hke-gsa01_05_06_07/assessed European hake-hke-gsa07/assessed Atlantic mackerel-sa 7/no information Monkfishes nei-mon-gsa01_05_06_07/assessed Pink spiny lobster-sa 7/no information Spiny lobsters nei-sa 8/no information Brill-sa 7/no information
FRA	FRA-MBS-PGP-VL0006-NGI	3.02	43.68	Gilthead seabream-sbg-gsa07/assessed European eel-sa 7/no information European seabass-bss-gsa07/assessed Sea urchins-URX/no information
GRC	GRC-MBS-PS-VL1824-NGI	1.01	67.68	European anchovy-ane-gsa22/assessed European pilchard(=Sardine)-pil-gsa22_23/assessed European pilchard(=Sardine)-pil-gsa22/assessed Bogue-sa 22/no information Atlantic mackerel-sa 22/no information European pilchard(=Sardine)-sa 20/no information
HRV	HRV-MBS-DFN-VL0612-NGI	2.61	40.04	Common sole-sol-gsa17/assessed Red scorpionfish-sa 17/no information Gilthead seabream-sa 17/no information Turbot-sa 17/no information Common spiny lobster-sa 17/no information Common dentex-sa 17/no information John dory-sa 17/no information Common cuttlefish-ctc-gsa17_18/assessed European hake-hke-gsa17_18/assessed European hake-hke-gsa17_18_stecf/assessed Common octopus-sa 17/no information
HRV	HRV-MBS-DFN-VL1218-NGI	2.68	49.46	Common sole-sol-gsa17/assessed Turbot-sa 17/no information Dogfish sharks nei-sa 17/no information
HRV	HRV-MBS-DRB-VL1824-NGI	2.11	52.69	Common sole-sol-gsa17/assessed European flat oyster-sa 17/no information Common cuttlefish-ctc-gsa17_18/assessed
HRV	HRV-MBS-DTS-VL0612-NGI	2.15	55.82	Norway lobster-nep-gsa17_18/assessed Red mullet-mut-gsa17_18/assessed Horned and musky octopuses-sa 17/no information European hake-hke-gsa17_18_stecf/assessed European hake-hke-gsa17_18/assessed Deep-water rose shrimp-dps-gsa17_18_19/assessed European squid-sa 17/no information Picarel-sa 17/no information Common octopus-sa 17/no information John dory-sa 17/no information
HRV	HRV-MBS-DTS-VL1218-NGI	2.24	61.72	Red mullet-mut-gsa17_18/assessed European hake-hke-gsa17_18/assessed European hake-hke-gsa17_18_stecf/assessed Deep-water rose shrimp-dps-gsa17_18_19/assessed Norway lobster-nep-gsa17_18/assessed Horned and musky octopuses-sa 17/no information European squid-sa 17/no information John dory-sa 17/no information



Country	Fleet	SHI	% of coverage	Major stocks
HRV	HRV-MBS-DTS-VL1824-NGI	2.36	77.93	Deep-water rose shrimp-dps-gsa17_18_19/assessed Norway lobster-nep-gsa17_18/assessed European hake-hke-gsa17_18_stecf/assessed European hake-hke-gsa17_18/assessed Red mullet-mut-gsa17_18/assessed
HRV	HRV-MBS-DTS-VL2440-NGI	2.33	77.64	Deep-water rose shrimp-dps-gsa17_18_19/assessed Norway lobster-nep-gsa17_18/assessed European hake-hke-gsa17_18_stecf/assessed European hake-hke-gsa17_18/assessed Red mullet-mut-gsa17_18/assessed
HRV	HRV-MBS-FPO-VL0006-NGI	1.57	47.54	Norway lobster-nep-gsa17_18/assessed Common octopus-sa 17/no information Common spiny lobster-sa 17/no information Gilthead seabream-sa 17/no information European lobster-sa 17/no information Black seabream-sa 17/no information
HRV	HRV-MBS-FPO-VL0612-NGI	1.53	73.97	Norway lobster-nep-gsa17_18/assessed Common octopus-sa 17/no information
HRV	HRV-MBS-HOK-VL0612-NGI	1.79	52.30	Atlantic bluefin tuna-bft-ea/assessed Gurnards-GUX/no information European hake-hke-gsa17_18/assessed European hake-hke-gsa17_18_stecf/assessed Swordfish-swo-med/assessed Red porgy-sa 17/no information Common dentex-sa 17/no information Red scorpionfish-sa 17/no information Common octopus-sa 17/no information
HRV	HRV-MBS-PS-VL1218-NGI	2.82	92.53	European pilchard(=Sardine)-pil-gsa17_18/assessed European anchovy-ane-gsa17_18/assessed
HRV	HRV-MBS-PS-VL1824-NGI	2.78	94.17	European pilchard(=Sardine)-pil-gsa17_18/assessed European anchovy-ane-gsa17_18/assessed
HRV	HRV-MBS-PS-VL2440-NGI	2.79	95.14	European pilchard(=Sardine)-pil-gsa17_18/assessed European anchovy-ane-gsa17_18/assessed
ITA	ITA-MBS-DTS-VL0612-NGI	2.14	46.52	Common sole-sol-gsa17/assessed Common cuttlefish-ctc-gsa17_18/assessed Red mullet-mut-gsa17_18/assessed Spottail mantis squillid-mts-gsa17_18/assessed Deep-water rose shrimp-dps-gsa17_18_19/assessed Caramote prawn-sa 18/no information Changeable nassa-sa 17/no information Spottail mantis squillid-mts-gsa17_18/assessed European hake-hke-gsa17_18/assessed European hake-hke-gsa17_18_stecf/assessed Horned octopus-sa 17/no information Marine molluscs nei-sa 18/no information Caramote prawn-sa 9/no information Musky octopus-sa 16/no information Horned octopus-sa 18/no information Musky octopus-sa 17/no information Silversides(=Sand smelts) nei-sa 17/no information Surmullet-sa 16/no information Brill-sa 17/no information Red mullet-mut-gsa09/assessed Common cuttlefish-sa 9/no information Marine molluscs nei-sa 17/no information Thinlip grey mullet-sa 17/no information European squid-sa 18/no information Common cuttlefish-sa 16/no information
ITA	ITA-MBS-DTS-VL1218-NGI	2.10	51.57	Giant red shrimp-ars-gsa18_19/assessed Norway lobster-nep-gsa17_18/assessed Common cuttlefish-ctc-gsa17_18/assessed Deep-water rose shrimp-dps-gsa17_18_19/assessed Spottail mantis squillid-mts-gsa17_18/assessed Deep-water rose shrimp-dps-gsa12_13_14_15_16/assessed Spottail mantis squillid-mts-gsa17/assessed Deep-water rose shrimp-dps-gsa09_10_11/assessed Common cuttlefish-sa 16/no information Horned octopus-sa 18/no information European squid-sa 16/no information European hake-hke-gsa17_18_stecf/assessed European hake-hke-gsa17_18/assessed Red mullet-mut-gsa09/assessed Giant red shrimp-ars-gsa09_10_11/assessed Norway lobster-sa 19/no information Gilthead seabream-sa 18/no information Norway lobster-nep-gsa09/assessed Red mullet-mut-gsa17_18/assessed European squid-sa 9/no information Caramote prawn-tgs-gsa17/assessed European hake-hke-gsa19/assessed Musky octopus-sa 18/no information European squid-sa 18/no information Norway lobster-sa 16/no information European hake-hke-gsa09_10_11/assessed European squid-sa 17/no information Blackbellied angler-sa 18/no information Musky octopus-sa 16/no information Broadtail shortfin squid-sa 18/no information Horned octopus-sa 9/no information Surmullet-sa 11/no information Musky octopus-sa 17/no information European hake-hke-gsa12_13_14_15_16/assessed Musky octopus-sa 11/no information Caramote prawn-sa 18/no information Blackbellied angler-sa 19/no information Broadtail shortfin squid-sa 9/no information Caramote prawn-sa 9/no information Common sole-sol-gsa17/assessed Broadtail shortfin squid-sa 19/no information Whiting-sa 17/no information Red mullet-mut-gsa10/assessed

Country	Fleet	SHI	% of coverage	Major stocks
ITA	ITA-MBS-DTS-VL1824-NGI	2.22	59.26	Deep-water rose shrimp-dps-gsa12_13_14_15_16/assessed Caramote prawn-tgs-gsa17/assessed Red mullet-mut-gsa17_18/assessed European hake-hke-gsa17_18_stecf/assessed European hake-hke-gsa17_18/assessed Deep-water rose shrimp-dps-gsa09_10_11/assessed Giant red shrimp-ars-gsa09_10_11/assessed Norway lobster-nep-gsa17_18/assessed Deep-water rose shrimp-dps-gsa17_18_19/assessed Norway lobster-nep-gsa09/assessed Common cuttlefish-ctc-gsa17_18/assessed Red mullet-mut-gsa09/assessed European hake-hke-gsa09_10_11/assessed Giant red shrimp-ars-gsa18_19/assessed Giant red shrimp-sa 16/no information Horned octopus-sa 9/no information Spottail mantis squillid-mts-gsa17_18/assessed Musky octopus-sa 17/no information Common sole-sol-gsa17/assessed European anchovy-ane-gsa09_10_11/assessed Spottail mantis squillid-mts-gsa17/assessed European hake-hke-gsa12_13_14_15_16/assessed Horned octopus-sa 17/no information European squid-sa 9/no information Blackbellied angler-sa 17/no information Norway lobster-sa 16/no information European flying squid-sa 17/no information Whiting-sa 17/no information Caramote prawn-sa 9/no information Broadtail shortfin squid-sa 9/no information European hake-hke-gsa09/assessed Common cuttlefish-sa 16/no information Swordfish-swo-med/assessed Common cuttlefish-sa 9/no information Blue and red shrimp-ara-gsa09/assessed Marine crustaceans nei-sa 18/no information European squid-sa 16/no information European squid-sa 17/no information European hake-hke-gsa19/assessed Blue and red shrimp-sa 10/no information Red mullet-mut-gsa10/assessed Musky octopus-sa 16/no information
ITA	ITA-MBS-HOK-VL1218-NGI	2.25	81.01	Swordfish-swo-med/assessed European hake-hke-gsa17_18_stecf/assessed European hake-hke-gsa17_18/assessed Albacore-alb-med/assessed Atlantic bluefin tuna-bft-ea/assessed
ITA	ITA-MBS-HOK-VL1824-NGI	1.74	91.01	Swordfish-swo-med/assessed Albacore-alb-med/assessed
ITA	ITA-MBS-PS-VL1218-NGI	1.66	43.91	European anchovy-ane-gsa09_10_11/assessed European anchovy-sa 19/no information Round sardinella-sa 10/no information Common dolphinfish-sa 10/no information European anchovy-ane-gsa17_18/assessed Marine fishes nei-sa 19/no information Marine fishes nei-sa 10/no information Atlantic bonito-sa 10/no information European pilchard(=Sardine)-pil-gsa17_18/assessed European anchovy-ane-gsa16/no information European pilchard(=Sardine)-sa 10/no information
ITA	ITA-MBS-PS-VL1824-NGI	1.51	58.07	European anchovy-ane-gsa09_10_11/assessed European anchovy-ane-gsa16/no information European pilchard(=Sardine)-sa 10/no information Greater amberjack-sa 16/no information
ITA	ITA-MBS-PS-VL2440-NGI	2.10	89.74	European anchovy-ane-gsa17_18/assessed Atlantic bluefin tuna-bft-ea/assessed
ITA	ITA-MBS-TBB-VL1218-NGI	2.28	67.97	Common sole-sol-gsa17/assessed Common cuttlefish-ctc-gsa17_18/assessed Marine molluscs nei-sa 17/no information Marine fishes nei-sa 17/no information
ITA	ITA-MBS-TBB-VL1824-NGI	2.02	76.11	Common sole-sol-gsa17/assessed Common cuttlefish-ctc-gsa17_18/assessed Purple dye murex-sa 17/no information
ITA	ITA-MBS-TBB-VL2440-NGI	2.47	68.94	Common sole-sol-gsa17/assessed Purple dye murex-sa 17/no information
ITA	ITA-MBS-TM-VL1218-NGI	2.57	91.15	European anchovy-ane-gsa17_18/assessed European pilchard(=Sardine)-pil-gsa17_18/assessed
ITA	ITA-MBS-TM-VL1824-NGI	2.64	83.21	European anchovy-ane-gsa17_18/assessed European pilchard(=Sardine)-pil-gsa17_18/assessed
ITA	ITA-MBS-TM-VL2440-NGI	2.52	91.37	European anchovy-ane-gsa17_18/assessed
MLT	MLT-MBS-HOK-VL1218-NGI	1.09	53.04	Atlantic bluefin tuna-bft-ea/assessed Swordfish-swo-med/assessed Atlantic mackerel-sa 15/no information Common dolphinfish-sa 13/no information Red scorpionfish-sa 14/no information Red porgy-sa 21/no information Common dolphinfish-sa 15/no information European hake-hke-gsa12_13_14_15_16/assessed
MLT	MLT-MBS-HOK-VL1824-NGI	1.58	47.54	Swordfish-swo-med/assessed Swordfish-sa 4/no information Silver scabbardfish-sa 21/no information Atlantic bluefin tuna-bft-ea/assessed
MLT	MLT-MBS-PGP-VL0612-NGI	1.39	52.66	Swordfish-swo-med/assessed Atlantic bluefin tuna-bft-ea/assessed Common dolphinfish-sa 15/no information Axillary seabream-sa 15/no information Silver scabbardfish-sa 15/no information Common octopus-sa 15/no information Red porgy-sa 15/no information Red scorpionfish-sa 15/no information
ROU	ROU-MBS-PG-VL0006-NGI	3.04	76.10	Turbot-tur-gsa29/assessed Thomas' rapa whelk-rpw-gsa29/assessed Pontic shad-sa 29/no information
ROU	ROU-MBS-PG-VL0612-NGI	3.42	83.40	Turbot-tur-gsa29/assessed Mediterranean horse mackerel-hmm-gsa29/assessed European anchovy-ane-gsa29/assessed
ROU	ROU-MBS-PMP-VL0612-NGI	2.29	81.53	Thomas' rapa whelk-rpw-gsa29/assessed
ROU	ROU-MBS-PMP-VL1218-NGI	2.36	99.98	Thomas' rapa whelk-rpw-gsa29/assessed
ROU	ROU-MBS-PMP-VL1824-NGI	2.26	100.00	Thomas' rapa whelk-rpw-gsa29/assessed
ROU	ROU-MBS-PMP-VL2440-NGI	2.27	100.00	Thomas' rapa whelk-rpw-gsa29/assessed
SVN	SVN-MBS-PS-VL1218-NGI	2.82	88.91	European pilchard(=Sardine)-pil-gsa17_18/assessed European anchovy-ane-gsa17_18/assessed

Table 6.1.3 List of fleet segment by country in OFR that in 2017 were out of balance according to the SHI indicator. Note that the SHI has been estimated according to 2014 Balance Indicator Guidelines (COM (2014) 545 Final), using 40% of the annual value of landings that came from assessed stocks as threshold (% of coverage).

Country	Fleet	SHI	% of coverage	Major stocks
ESP	ESP-OFR-HOK-VL2440-NGI	1.17	70.90	Yellowfin tuna-yft-atl/assessed Bigeye tuna-bet-atl/assessed Atlantic pomfret-34.1.3.2/no information
ESP	ESP-OFR-PS-VL40XX-NGI	1.05	90.54	Histioteuthis spp-34.3.3/no information Yellowfin tuna-yft-io/assessed Bigeye tuna-bet-io/assessed
FRA	FRA-OFR-HOK-VL0010-RE	1.11	51.48	Yellowfin tuna-yft-io/assessed Common dolphinfish-51.7/no information Albacore-alb-io/assessed Swordfish-swo-io/assessed Wahoo-51.7/no information Blue marlin-bum-io/assessed Groupers nei-51.7/no information Marlins-etc. nei/no information
FRA	FRA-OFR-PS-VL40XX-IWE	1.02	58.00	Skipjack tuna-skj-io/no information Yellowfin tuna-yft-io/assessed Yellowfin tuna-yft-atl/assessed

Table 6.1.4 List of fleet segment by country in Area 27 that in 2017 were out of balance according to the SAR indicator. Note that the SAR has been estimated according to 2014 Balance Indicator Guidelines (COM (2014) 545 Final).

Country	Fleet segment	SAR	Major stocks	Selection reason
BEL	BEL-NAO-TBB-VL2440-NGI	3	sol.27.7a /ple.27.7h-k /sol.27.7d	Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10
DEU	DEU-NAO-DFN-VL1218-NGI	3	cod.27.22-24/cod.27.47d20 /her.27.20-24	Catches on the stock is >10% of Fleet catches/Catches on the stock is >10% of Fleet catches/Catches on the stock is >10% of Fleet catches
DEU	DEU-NAO-DTS-VL1012-NGI	1	her.27.20-24	Catches on the stock is >10% of Fleet catches
DEU	DEU-NAO-DTS-VL1218-NGI	2	cod.27.22-24/her.27.20-24	Catches on the stock is >10% of Fleet catches/Catches on the stock is >10% of Fleet catches
DEU	DEU-NAO-DTS-VL1824-NGI	1	her.27.20-24	Catches on the stock is >10% of Fleet catches
DEU	DEU-NAO-DTS-VL2440-NGI	2	cod.27.22-24/cod.27.47d20	Catches on the stock is >10% of Fleet catches/Catches on the stock is >10% of Fleet catches
DEU	DEU-NAO-DTS-VL40XX-NGI	3	cod.27.1-2coast /reb.2127.dp/reb.2127.sp	Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10
DEU	DEU-NAO-PG-VL0010-NGI	1	her.27.20-24	Catches on the stock is >10% of Fleet catches
DEU	DEU-NAO-PG-VL1012-NGI	1	her.27.20-24	Catches on the stock is >10% of Fleet catches
DEU	DEU-NAO-TM-VL40XX-NGI	1	her.27.20-24	Catches on the stock due to the Fleet >10
DNK	DNK-NAO-DTS-VL1012-NGI	1	san.sa.5r	Catches on the stock is >10% of Fleet catches
DNK	DNK-NAO-DTS-VL1218-NGI	2	san.sa.5r/san.sa.2r	Catches on the stock is >10% of Fleet catches/Catches on the stock is >10% of Fleet catches
DNK	DNK-NAO-DTS-VL1824-NGI	5	dgs.27.nea/rjr-23a4/san.sa.2r/rng.27.3a /san.sa.5r	Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock is >10% of Fleet catches/Catches on the stock due to the Fleet >10/Catches on the stock is >10% of Fleet catches
DNK	DNK-NAO-DTS-VL2440-NGI	5	san.sa.5r/cod.27.47d20 /san.sa.2r/cod.27.22-24/dgs.27.nea	Catches on the stock is >10% of Fleet catches/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10
DNK	DNK-NAO-DTS-VL40XX-NGI	2	san.sa.2r/san.sa.2r/san.sa.5r/san.sa.5r	Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock is >10% of Fleet catches
DNK	DNK-NAO-PGP-VL0010-NGI	2	cod.27.22-24/ele.nea	Catches on the stock is >10% of Fleet catches/Catches on the stock due to the Fleet >10

Country	Fleet segment	SAR	Major stocks	Selection reason
DNK	DNK-NAO-PGP-VL1012-NGI	1	cod.27.22-24	Catches on the stock is >10% of Fleet catches
DNK	DNK-NAO-PGP-VL1218-NGI	2	cod.27.22-24/cod.27.47d20	Catches on the stock is >10% of Fleet catches/Catches on the stock is >10% of Fleet catches
DNK	DNK-NAO-PMP-VL0010-NGI	1	cod.27.22-24	Catches on the stock is >10% of Fleet catches
DNK	DNK-NAO-PMP-VL1824-NGI	2	cod.27.22-24/cod.27.47d20	Catches on the stock is >10% of Fleet catches/Catches on the stock is >10% of Fleet catches
DNK	DNK-NAO-TM-VL1218-NGI	3	san.sa.5r/san.sa.2r/her.27.20-24	Catches on the stock is >10% of Fleet catches/Catches on the stock is >10% of Fleet catches
DNK	DNK-NAO-TM-VL40XX-NGI	3	san.sa.2r/san.sa.5r/dgs.27.nea/san.sa.2r/san.sa.5r	Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10
ESP	ESP-NAO-DFN-VL1012-NGI	1	rju.8c	Catches on the stock due to the Fleet >10
ESP	ESP-NAO-DFN-VL1218-NGI	3	rju.8c/rju.27.9a/Bull Ray	Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10
ESP	ESP-NAO-DTS-VL1218-NGI	4	Sawfishes nei/Bull Ray/Guitarfishes/rju.27.9a	Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10
ESP	ESP-NAO-DTS-VL1824-NGI	6	Bluntnose sixgill shark/Gulper shark/rju.27.9a/Bull Ray/nep.fu.2627 /guq.27.nea	Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10
ESP	ESP-NAO-DTS-VL2440-NGI	4	nep.fu.31/guq.27.nea/hom.27.2a4a5b6a7a-ce-k7/nep.fu.25	Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10
ESP	ESP-NAO-DTS-VL40XX-NGI	5	cod.3no/wit.2j3kl/bli.nea/cod.27.1-2coast /pla.3lno	Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10
ESP	ESP-NAO-FPO-VL1012-IC	1	spk-world	Catches on the stock due to the Fleet >10
ESP	ESP-NAO-HOK-VL1218-NGI	1	rju.8c	Catches on the stock due to the Fleet >10
ESP	ESP-NAO-HOK-VL1824-NGI	1	sbr.27.6-8	Catches on the stock due to the Fleet >10
ESP	ESP-NAO-HOK-VL2440-LLD	1	sma.nea	Catches on the stock due to the Fleet >10
ESP	ESP-NAO-PGP-VL1824-NGI	1	bli.nea	Catches on the stock due to the Fleet >10
ESP	ESP-NAO-PGP-VL2440-NGI	2	bli.nea/sbr.27.6-8	Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10
ESP	ESP-NAO-PMP-VL0010-IC	1	Madeiran sardinella	Catches on the stock due to the Fleet >10
ESP	ESP-NAO-PMP-VL0010-NGI	3	rju.8c/rju.27.9a/Bull Ray	Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10
ESP	ESP-NAO-PS-VL0010-NGI	1	pil.27.8c9a	Catches on the stock is >10% of Fleet catches
ESP	ESP-NAO-PS-VL1012-NGI	1	hom.27.2a4a5b6a7a-ce-k7	Catches on the stock is >10% of Fleet catches
ESP	ESP-NAO-PS-VL1218-IC	1	Round Sardinella	Catches on the stock due to the Fleet >10
ESP	ESP-NAO-PS-VL1218-NGI	1	pil.27.8c9a	Catches on the stock due to the Fleet >10
ESP	ESP-NAO-PS-VL1824-NGI	1	pil.27.8c9a	Catches on the stock due to the Fleet >10
ESP	ESP-NAO-PS-VL2440-NGI	1	hom.27.2a4a5b6a7a-ce-k7	Catches on the stock due to the Fleet >10
EST	EST-NAO-PG-VL0010-NGI	1	sal.27.32	Catches on the stock due to the Fleet >10
FIN	FIN-NAO-PG-VL0010-NGI	1	sal.27.32	Catches on the stock due to the Fleet >10

Country	Fleet segment	SAR	Major stocks	Selection reason
FRA	FRA-NAO-DFN-VL0010-NGI	5	sal.27.neac/Basking shark/por-nea/Black dogfish/Mousse catshark	Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10
FRA	FRA-NAO-DFN-VL1012-NGI	3	sol.27.7d/Mousse catshark/Black dogfish	Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10
FRA	FRA-NAO-DFN-VL1218-NGI	1	Black dogfish	Catches on the stock due to the Fleet >10
FRA	FRA-NAO-DFN-VL1824-NGI	2	por-nea/Bluntnose sixgill shark	Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10
FRA	FRA-NAO-DRB-VL1824-NGI	1	ory-nea	Catches on the stock due to the Fleet >10
FRA	FRA-NAO-DTS-VL1012-NGI	2	Knifetooth dogfish/rju.27.7.bj	Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10
FRA	FRA-NAO-DTS-VL1218-NGI	2	Black dogfish/agn-nea	Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10
FRA	FRA-NAO-DTS-VL1824-NGI	5	cod.27.7.e-k /rjc.27.3a47d /ple.27.7h-k /gag.27.nea/rja.27.nea	Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10
FRA	FRA-NAO-DTS-VL2440-NGI	4	gag.27.nea/rhg-nea/cod.27.7.e-k /ple.27.7h-k	Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10
FRA	FRA-NAO-DTS-VL40XX-NGI	4	bli.27.5b67/rja.27.nea/cod.27.6a/rhg-nea	Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10
FRA	FRA-NAO-HOK-VL0010-NGI	2	ory-nea/bss.27.4bc7ad-h	Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10
FRA	FRA-NAO-MGO-VL0010-NGI	1	sal.27.neac	Catches on the stock due to the Fleet >10
FRA	FRA-NAO-MGP-VL1012-NGI	1	Knifetooth dogfish	Catches on the stock due to the Fleet >10
FRA	FRA-NAO-TM-VL1218-NGI	1	sal.27.neac	Catches on the stock due to the Fleet >10
FRA	FRA-NAO-TM-VL1824-NGI	1	whm.atl	Catches on the stock due to the Fleet >10
GBR	GBR-NAO-DFN-VL1824-NGI	1	dgs.27.nea	Catches on the stock due to the Fleet >10
GBR	GBR-NAO-DTS-VL0010-NGI	2	jad/spz-world	Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10
GBR	GBR-NAO-DTS-VL1218-NGI	1	rja.27.nea	Catches on the stock due to the Fleet >10
GBR	GBR-NAO-DTS-VL1824-NGI	7	cod.27.7a/rjb-celt/cod.27.22-24/cod.27.6b/whg.27.7a/cod.27.47d20 /cod.27.22-24/cod.27.6a/cod.27.47d20	Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10
GBR	GBR-NAO-DTS-VL2440-NGI	8	cod.27.47d20 /cod.27.22-24/cod.27.47d20 /agn-nea/cod.27.6a/cod.27.6b/rhg-nea/cod.27.22-24/whg.27.6a/bli.27.5b67	Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10
GBR	GBR-NAO-DTS-VL40XX-NGI	2	reg.27.1-2/cod.27.1-2coast	Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10
GBR	GBR-NAO-HOK-VL0010-NGI	1	bss.27.4bc7ad-h	Catches on the stock due to the Fleet >10

Country	Fleet segment	SAR	Major stocks	Selection reason
GBR	GBR-NAO-PGP-VL1012-NGI	1	sol.27.7d	Catches on the stock is >10% of Fleet catches
GBR	GBR-NAO-PMP-VL0010-NGI	1	rjc.27.3a47d	Catches on the stock is >10% of Fleet catches
GBR	GBR-NAO-TBB-VL2440-NGI	1	ple.27.7h-k	Catches on the stock due to the Fleet >10
GBR	GBR-NAO-TM-VL40XX-NGI	2	her.27.6a7bc/her.27.irls	Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10
IRL	IRL-NAO-DTS-VL0010-	1	her.27.irls	Catches on the stock is >10% of Fleet catches
IRL	IRL-NAO-DTS-VL1012-	1	her.27.irls	Catches on the stock is >10% of Fleet catches
IRL	IRL-NAO-DTS-VL1824-	5	cod.27.7.e-k /her.27.irls /cod.27.7a/sol.27.7a /whg.27.7a	Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10
IRL	IRL-NAO-DTS-VL2440-	5	cod.27.7a/her.27.irls /whg.27.6a/cod.27.6b/whg.27.7a	Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10
IRL	IRL-NAO-PMP-VL1218-	2	her.27.6a7bc/her.27.irls	Catches on the stock is >10% of Fleet catches/Catches on the stock is >10% of Fleet catches
IRL	IRL-NAO-TBB-VL1824-	1	sol.27.7a	Catches on the stock due to the Fleet >10
IRL	IRL-NAO-TM-VL1012-	2	her.27.6a7bc/her.27.irls	Catches on the stock is >10% of Fleet catches/Catches on the stock is >10% of Fleet catches
IRL	IRL-NAO-TM-VL1218-	1	her.27.irls	Catches on the stock is >10% of Fleet catches
IRL	IRL-NAO-TM-VL1824-	2	her.27.irls /her.27.6a7bc	Catches on the stock is >10% of Fleet catches/Catches on the stock is >10% of Fleet catches
IRL	IRL-NAO-TM-VL2440-	2	hom.27.2a4a5b6a7a-ce-k7/hom.27.2a4a5b6a7a-ce-k7/her.27.irls	Catches on the stock is >10% of Fleet catches/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10
IRL	IRL-NAO-TM-VL40XX-	2	her.27.irls /hom.27.2a4a5b6a7a-ce-k7/hom.27.2a4a5b6a7a-ce-k7	Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock is >10% of Fleet catches
NLD	NLD-NAO-PG-VL0010-NGI	1	bss.27.4bc7ad-h	Catches on the stock is >10% of Fleet catches
NLD	NLD-NAO-TM-VL40XX-NGI	2	her.27.6a7bc/whg.27.6a	Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10
POL	POL-NAO-DTS-VL40XX-	1	cod.27.1-2coast	Catches on the stock is >10% of Fleet catches
POL	POL-NAO-PG-VL0010-	1	ele.nea	Catches on the stock due to the Fleet >10
PRT	PRT-NAO-DFN-VL1218-NGI	2	Spiny butterfly ray/Longnose velvet dogfish	Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10
PRT	PRT-NAO-DTS-VL1824-NGI	1	nep.fu.2627 /nep.fu.2627	Catches on the stock due to the Fleet >10/Catches on the stock is >10% of Fleet catches
PRT	PRT-NAO-DTS-VL2440-NGI	1	nep.fu.2627	Catches on the stock due to the Fleet >10
PRT	PRT-NAO-DTS-VL40XX-IWE	5	wit.2j3kl/cod.27.1-2coast /pla.3lno/reg.27.1-2/cod.3no	Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10
PRT	PRT-NAO-HOK-VL0010-P3	1	spz-world	Catches on the stock due to the Fleet >10
PRT	PRT-NAO-HOK-VL2440-NGI	2	sma.nea/whm.atl	Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10
PRT	PRT-NAO-PGP-VL0010-NGI	3	whm.atl/Spiny butterfly ray/Longnose velvet dogfish	Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10
PRT	PRT-NAO-PMP-VL0010-NGI	1	pil.27.8c9a	Catches on the stock is >10% of Fleet catches
PRT	PRT-NAO-PS-VL0010-NGI	1	pil.27.8c9a	Catches on the stock is >10% of Fleet catches
PRT	PRT-NAO-PS-VL1012-NGI	1	pil.27.8c9a	Catches on the stock is >10% of Fleet catches

Country	Fleet segment	SAR	Major stocks	Selection reason
PRT	PRT-NAO-PS-VL1218-NGI	1	pil.27.8c9a	Catches on the stock is >10% of Fleet catches
PRT	PRT-NAO-PS-VL1824-NGI	1	pil.27.8c9a /pil.27.8c9a	Catches on the stock is >10% of Fleet catches/Catches on the stock due to the Fleet >10
PRT	PRT-NAO-PS-VL2440-NGI	2	pil.27.8c9a /spn-world/pil.27.8c9a	Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock is >10% of Fleet catches
SWE	SWE-NAO-DFN-VL0010-NGI	1	cod.27.22-24	Catches on the stock is >10% of Fleet catches
SWE	SWE-NAO-DFN-VL1012-NGI	2	her.27.20-24/cod.27.22-24	Catches on the stock is >10% of Fleet catches/Catches on the stock is >10% of Fleet catches
SWE	SWE-NAO-DFN-VL1218-NGI	1	cod.27.22-24	Catches on the stock is >10% of Fleet catches
SWE	SWE-NAO-DTS-VL0010-NGI	1	her.27.20-24	Catches on the stock is >10% of Fleet catches
SWE	SWE-NAO-DTS-VL1824-NGI	1	her.27.20-24	Catches on the stock is >10% of Fleet catches
SWE	SWE-NAO-FPO-VL0010-NGI	1	ele.nea/ele.nea	Catches on the stock is >10% of Fleet catches/Catches on the stock due to the Fleet >10
SWE	SWE-NAO-FPO-VL1012-NGI	1	her.27.20-24	Catches on the stock is >10% of Fleet catches
SWE	SWE-NAO-HOK-VL1012-NGI	1	cod.27.22-24	Catches on the stock is >10% of Fleet catches
SWE	SWE-NAO-TM-VL2440-NGI	3	san.sa.5r/her.27.20-24/her.27.20-24/san.sa.2r	Catches on the stock is >10% of Fleet catches/Catches on the stock due to the Fleet >10/Catches on the stock is >10% of Fleet catches/Catches on the stock is >10% of Fleet catches
SWE	SWE-NAO-TM-VL40XX-NGI	3	san.sa.2r/her.27.20-24/san.sa.5r	Catches on the stock is >10% of Fleet catches/Catches on the stock due to the Fleet >10/Catches on the stock is >10% of Fleet catches

Table 6.1.5 List of fleet segment by country in Area 37 that in 2017 were out of balance according to the SAR indicator. Note that the SAR has been estimated according to 2014 Balance Indicator Guidelines (COM (2014) 545 Final).

Country	Fleet segment	SAR	Major stocks	Selection reason
BGR	BGR-MBS-DFN-VL0612-NGI	1	tur-gsa29	Catches on the stock is >10% of Fleet catches
BGR	BGR-MBS-DFN-VL1824-NGI	1	dgs-gsa29/dgs-gsa29	Catches on the stock due to the Fleet >10/Catches on the stock is >10% of Fleet catches
BGR	BGR-MBS-HOK-VL0006-NGI	1	dgs-gsa29	Catches on the stock is >10% of Fleet catches
BGR	BGR-MBS-HOK-VL0612-NGI	1	dgs-gsa29	Catches on the stock is >10% of Fleet catches
BGR	BGR-MBS-HOK-VL1218-NGI	1	dgs-gsa29/dgs-gsa29	Catches on the stock due to the Fleet >10/Catches on the stock is >10% of Fleet catches
BGR	BGR-MBS-PGP-VL0612-NGI	2	tur-gsa29/dgs-gsa29	Catches on the stock is >10% of Fleet catches/Catches on the stock is >10% of Fleet catches
BGR	BGR-MBS-PMP-VL1218-NGI	2	dgs-gsa29/tur-gsa29	Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10
BGR	BGR-MBS-TM-VL0612-NGI	1	tur-gsa29	Catches on the stock is >10% of Fleet catches
BGR	BGR-MBS-TM-VL1218-NGI	1	dgs-gsa29	Catches on the stock due to the Fleet >10
ESP	ESP-MBS-DTS-VL1218-NGI	1	Sand Tiger Shark	Catches on the stock due to the Fleet >10

Country	Fleet segment	SAR	Major stocks	Selection reason
ESP	ESP-MBS-DTS-VL1824-NGI	8	gag.med/Sand Tiger Shark/Velvet belly/Basking shark/aaa-med/aa-med/spl-world/spl-med	Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10
ESP	ESP-MBS-DTS-VL2440-NGI	3	Velvet belly/gag.med/aaa-med	Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10
ESP	ESP-MBS-HOK-VL0612-LLD	1	Swordfish	Catches on the stock is >10% of Fleet catches
ESP	ESP-MBS-HOK-VL0612-NGI	1	sua-med	Catches on the stock due to the Fleet >10
ESP	ESP-MBS-HOK-VL1218-LLD	1	Swordfish/Swordfish	Catches on the stock due to the Fleet >10/Catches on the stock is >10% of Fleet catches
ESP	ESP-MBS-HOK-VL1824-LLD	2	Swordfish/Swordfish/sma.med	Catches on the stock is >10% of Fleet catches/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10
ESP	ESP-MBS-HOK-VL2440-LLD	1	Swordfish	Catches on the stock is >10% of Fleet catches
ESP	ESP-MBS-PMP-VL0612-NGI	1	gag.med	Catches on the stock due to the Fleet >10
ESP	ESP-MBS-PMP-VL1218-NGI	2	sua-med/gag.med	Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10
FRA	FRA-MBS-DFN-VL0612-NGI	1	agn-med	Catches on the stock due to the Fleet >10
FRA	FRA-MBS-DTS-VL1218-NGI	1	agn-med	Catches on the stock due to the Fleet >10
FRA	FRA-MBS-DTS-VL1824-NGI	1	Sandy ray	Catches on the stock due to the Fleet >10
FRA	FRA-MBS-FPO-VL0006-NGI	1	ele.med/ele.med	Catches on the stock is >10% of Fleet catches/Catches on the stock due to the Fleet >10
FRA	FRA-MBS-FPO-VL0612-NGI	1	ele.med/ele.med	Catches on the stock due to the Fleet >10/Catches on the stock is >10% of Fleet catches
FRA	FRA-MBS-HOK-VL0006-NGI	1	agn-med	Catches on the stock due to the Fleet >10
FRA	FRA-MBS-HOK-VL0612-NGI	1	Swordfish	Catches on the stock is >10% of Fleet catches
FRA	FRA-MBS-PGO-VL0006-NGI	1	agn-med	Catches on the stock due to the Fleet >10
FRA	FRA-MBS-PGP-VL0006-NGI	1	ele.med/ele.med	Catches on the stock due to the Fleet >10/Catches on the stock is >10% of Fleet catches
GRC	GRC-MBS-DTS-VL2440-NGI	1	sma.med	Catches on the stock due to the Fleet >10
HRV	HRV-MBS-HOK-VL1218-NGI	1	Swordfish	Catches on the stock is >10% of Fleet catches
HRV	HRV-MBS-PGO-VL0612-NGI	1	ele.med	Catches on the stock is >10% of Fleet catches
ITA	ITA-MBS-HOK-VL1218-NGI	1	Swordfish/Swordfish	Catches on the stock due to the Fleet >10/Catches on the stock is >10% of Fleet catches
ITA	ITA-MBS-HOK-VL1824-NGI	1	Swordfish/Swordfish	Catches on the stock due to the Fleet >10/Catches on the stock is >10% of Fleet catches
ITA	ITA-MBS-PGP-VL0612-NGI	1	por-med	Catches on the stock due to the Fleet >10
ITA	ITA-MBS-PGP-VL1218-NGI	1	Swordfish/Swordfish	Catches on the stock due to the Fleet >10/Catches on the stock is >10% of Fleet catches
ITA	ITA-MBS-PS-VL1218-NGI	1	por-med	Catches on the stock due to the Fleet >10
MLT	MLT-MBS-HOK-VL1218-NGI	1	Swordfish	Catches on the stock is >10% of Fleet catches



Country	Fleet segment	SAR	Major stocks	Selection reason
MLT	MLT-MBS-HOK-VL1824-NGI	1	Swordfish	Catches on the stock is >10% of Fleet catches
MLT	MLT-MBS-PGP-VL0612-NGI	1	Swordfish	Catches on the stock is >10% of Fleet catches
MLT	MLT-MBS-PMP-VL0612-NGI	1	Swordfish	Catches on the stock is >10% of Fleet catches
ROU	ROU-MBS-PG-VL0612-NGI	1	tur-gsa29/tur-gsa29	Catches on the stock due to the Fleet >10/Catches on the stock is >10% of Fleet catches
ROU	ROU-MBS-PMP-VL1218-NGI	1	tur-gsa29	Catches on the stock due to the Fleet >10

Table 6.1.6 List of fleet segment by country in OFR that in 2017 were out of balance according to the SAR indicator. Note that the SAR has been estimated according to 2014 Balance Indicator Guidelines (COM (2014) 545 Final).

Country	Fleet segment	SAR	Major stocks	Selection reason
ESP	ESP-OFR-DTS-VL40XX-NGI	4	wit.2j3kl/cod.3no/pla.3lno/ory-sea	Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10
FRA	FRA-OFR-PS-VL40XX-IWE	1	yft.iotc	Catches on the stock due to the Fleet >10
GBR	GBR-OFR-HOK-VL2440-NGI	1	Silky Shark	Catches on the stock due to the Fleet >10
LTU	LTU-OFR-TM-VL40XX-NEU	2	reb.2127.dp/reb.2127.sp	Catches on the stock due to the Fleet >10/Catches on the stock due to the Fleet >10
PRT	PRT-OFR-HOK-VL40XX-IWE	1	Southern Blufin Tuna	Catches on the stock due to the Fleet >10

## **7 TOR 5 – LIST OF FLEET SEGMENT OUT OF BALANCE IN OUTERMOST REGIONS OF FRANCE( RÉUNION, FRENCH GUIANA, MARTINIQUE, GUADALUPE AND MAYOTTE), PORTUGAL (MADEIRA AND AZORES) AND SPAIN (CANARY ISLANDS)**

### **7.1 Introductory Remarks for TOR 5**

EWG 19-13 was requested to respond to the following ToR:

*"For the Outermost Regions of France (Réunion, French Guiana, Martinique, Guadeloupe, Saint-Martin and Mayotte), Portugal (Madeira and Azores) and Spain (Canary Islands), list those fleet segments that according to the most updated set of data (2017 or later if available) for either the biological, economic or technical indicators in the European Commission Guidelines, 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. List the fleet segments for which information available does not allow to calculate the above indicators and conclude on balance. "*

### **7.2 OMR fleets at a glance**

There were 4,506 vessels in the EU OMR fleet in 86 fleet segments in 2017. The French OMR fleet comprised more than half of this, totalling 56.1%. The Portuguese fleet was 26.4% and the Spanish fleet 17.0%. Lithuania had 11 vessels, Italy 9 and Poland 2.

### **7.3 French Outermost Regions**

EWG 19-13 notes the ToR requests identification of biological, economic or technical indicators. EWG has therefore listed segments where one indicator is imbalanced. However, to determine imbalance in a fleet segment these indicators should be considered in combination and over time. The listing of the fleet segments below does not necessarily indicate imbalance in the fleet segment, only that at least one indicator shows imbalance in 2017 (Table 7.3.1).

Table 7.3.1 - List of Fleet Segments Out of Balance in French Outermost Regions. Out of balance (■), in balance (■) with no information (■) not relevant because of-cluster (■) by indicator.

Country	Cluster	Fleet Segment	Overseas Territory	SAR	SHI	RoFTA	CR/BER	Vessel Use Indicator	VUR 220
France	FRA OFR DFN0010 GF*	FRA OFR DFN0010 GF	GF						
France	FRA OFR DFN0010 GF*	FRA OFR HOK0010 GF	GF						
France	FRA OFR DFN1012 GF	FRA OFR DFN1012 GF	GF						
France	FRA OFR DTS1824 GF	FRA OFR DTS1824 GF	GF						
France	FRA OFR PGP0010 GF	FRA OFR PGP0010 GF	GF						
France	FRA OFR DFN0010 GP	FRA OFR DFN0010 GP	GP						
France	FRA OFR FPO0010 GP	FRA OFR FPO0010 GP	GP						
France	FRA OFR HOK0010 GP	FRA OFR HOK0010 GP	GP						
France	FRA OFR PGP0010 GP*	FRA OFR PGO0010 GP	GP						
France	FRA OFR PGP0010 GP*	FRA OFR PGP0010 GP	GP						
France	FRA OFR PGP1012 GP*	FRA OFR DFN1012 GP	GP						
France	FRA OFR PGP1012 GP*	FRA OFR FPO1012 GP	GP						
France	FRA OFR PGP1012 GP*	FRA OFR HOK1012 GP	GP						
France	FRA OFR PGP1012 GP*	FRA OFR PGP1012 GP	GP						
France	FRA OFR PS 0010 GP	FRA OFR PS 0010 GP	GP						
France	FRA OFR DFN0010 MQ	FRA OFR DFN0010 MQ	MQ						
France	FRA OFR FPO0010 MQ	FRA OFR FPO0010 MQ	MQ						
France	FRA OFR FPO1218 MQ*	FRA OFR FPO1218 MQ	MQ						
France	FRA OFR FPO1218 MQ*	FRA OFR FPO1824 MQ	MQ						
France	FRA OFR FPO1218 MQ*	FRA OFR HOK1218 MQ	MQ						
France	FRA OFR HOK0010 MQ	FRA OFR HOK0010 MQ	MQ						
France	FRA OFR HOK1012 MQ	FRA OFR HOK1012 MQ	MQ						
France	FRA OFR PGO0010 MQ*	FRA OFR PGO0010 MQ	MQ						
France	FRA OFR PGO0010 MQ*	FRA OFR PS 0010 MQ	MQ						
France	FRA OFR PGP0010 MQ	FRA OFR PGP0010 MQ	MQ						
France	FRA OFR HOK0010 RE*	FRA OFR HOK0010 RE	RE						

Country	Cluster	Fleet Segment	Overseas Territory	SAR	SHI	RoFTA	CR/BER	Vessel Use Indicator	VUR 220
France	FRA OFR HOK0010 RE*	FRA OFR HOK1012 RE	RE						
France	FRA OFR HOK1218 RE	FRA OFR HOK1218 RE	RE						
France	FRA OFR PGP0010 RE*	FRA OFR DFN0010 RE	RE						
France	FRA OFR PGP0010 RE*	FRA OFR PGO0010 RE	RE						
France	FRA OFR PGP0010 RE*	FRA OFR PGP0010 RE	RE						
France	FRA OFR HOK0010 YT*	FRA OFR DFN0010 YT	YT						
France	FRA OFR HOK0010 YT*	FRA OFR HOK0010 YT	YT						
France	FRA OFR HOK0010 YT*	FRA OFR PGP0010 YT	YT						

For the French outermost fleet segments where vessels are less than 12m in length, VUR 220 is not an appropriate variable to measure the current activity of these vessels (seasonality, part-time, etc.). A more appropriate level might be 180 days. In consequence, the VUR 220 indicator should not be considered for the assessment of potential imbalance for these particular fleet segments.

#### 7.4 Portuguese Outermost Regions

The data provided for the two Portuguese OMRS, Azores and Madeira, uses the geographical indicator to distinguish the OMR fleets and the balance indicators associated with those fleets. (Table 7.4.1)

Table 7.4.1 - List of Fleet Segments Out of Balance in Portuguese Outermost Regions. Out of balance ( ), in balance ( ) with no information ( ) not relevant because of-cluster ( ) by indicator.

Country	Cluster	Fleet Segment	Overseas Territory	SAR	SHI	RoFTA	CR/BER	Vessel Use Indicator	VUR 220
Portugal	PRT NAO DFN0010 P3	PRT NAO DFN0010 P3	Azores						
Portugal	PRT NAO HOK0010 P3	PRT NAO HOK0010 P3	Azores						
Portugal	PRT NAO HOK1012 P3	PRT NAO HOK1012 P3	Azores						
Portugal	PRT NAO HOK1218 P3	PRT NAO HOK1218 P3	Azores						
Portugal	PRT NAO HOK2440 P3 *	PRT NAO HOK2440 P3	Azores						

Country	Cluster	Fleet Segment	Overseas Territory	SAR	SHI	RoFTA	CR/BER	Vessel Use Indicator	VUR 220
Portugal	PRT NAO PGP0010 P3 *	PRT NAO PGP0010 P3	Azores						
Portugal	PRT NAO PS 0010 P3	PRT NAO PS 0010 P3	Azores						
Portugal	PRT NAO PS 1012 P3 *	PRT NAO PS 1012 P3	Azores						
Portugal	PRT NAO HOK0010 P2 *	PRT NAO HOK0010 P2	Madeira						
Portugal	PRT NAO HOK1218 P2	PRT NAO HOK1218 P2	Madeira						
Portugal	PRT NAO HOK1824 P2	PRT NAO HOK1824 P2	Madeira						
Portugal	PRT NAO HOK2440 P2	PRT NAO HOK2440 P2	Madeira						
Portugal	PRT NAO MGP0010 P2	PRT NAO MGP0010 P2	Madeira						
Portugal	PRT NAO MGP1824 P2 *	PRT NAO MGP1824 P2	Madeira						

## 7.5 Spanish Outermost Regions

### Canaries

The fleet segments for the Canaries were identified through the Geo indicator Code where IC denotes the Canary Islands, in NAO supra region.

Eleven of these segments have at least one economic or biological indicator that were out of balance for 2017. More detailed information is shown in the table 7.5.1.

Table 7.5.1 - List of Fleet Segments Out of Balance in Spanish Outermost Regions (Canaries). Out of balance ( ), in balance ( ) with no information ( ) not relevant because of-cluster ( ) by indicator

Country	Cluster	Fleet Segment	Overseas Territory	SAR	SHI	RoFTA	CR/BER	Vessel Use Indicator	VUR 220
Spain	ESP NAO FPO1012 IC *	ESPNAOFPOVL1012	Canary Islands						
Spain	ESP NAO FPO1012 IC *	ESPNAOFPOVL1218	Canary Islands						
Spain	ESP NAO HOK1012 IC *	ESPNAOHOKVL0010	Canary Islands						
Spain	ESP NAO HOK1012 IC *	ESPNAOHOKVL1012	Canary Islands						
Spain	ESP NAO HOK1218 IC	ESPNAOHOKVL1218	Canary Islands						
Spain	ESP NAO HOK2440 IC *	ESPNAOHOKVL1824	Canary Islands						

Country	Cluster	Fleet Segment	Overseas Territory	SAR	SHI	RoFTA	CR/BER	Vessel Use Indicator	VUR 220
Spain	ESP NAO HOK2440 IC *	ESPNAOHOKVL24 40	Canary Islands						
Spain	ESP NAO PMP0010 IC	ESPNAOPMPVL00 10	Canary Islands						
Spain	ESP NAO PMP0010 IC *	ESPNAOPMPVL00 10	Canary Islands						
Spain	ESP NAO PMP1012 IC *	ESPNAOPMPVL10 12	Canary Islands						
Spain	ESP NAO PMP1012 IC *	ESPNAOPMPVL12 18	Canary Islands						
Spain	ESP NAO PMP1012 IC *	ESPNAOPMPVL18 24	Canary Islands						
Spain	ESP NAO PMP1012 IC *	ESPNAOPMPVL24 40	Canary Islands						
Spain	ESP NAO PS 1218 IC *	ESPNAOPSVL101 2	Canary Islands						
Spain	ESP NAO PS 1218 IC *	ESPNAOPSVL121 8	Canary Islands						

The fleet segments operating in Moroccan waters were identified through the Geo indicator Code where MA denotes Morocco, in NAO supra region.

One of these segments had one economic indicator that was out of balance for 2017. More detailed information is shown in the table (7.5.2).

Table 7.5.2 - List of Fleet Segments Out of Balance in Spanish Outermost Regions (operating in Moroccan waters). Out of balance (red), in balance (green) with no information (grey) not relevant because of-cluster (yellow) by indicator.

Country	Cluster	Fleet Segment	Overseas Territory	SAR	SHI	RoFTA	CR/BER	Vessel Use Indicator	VUR 220
Spain	ESP NAO HOK1218 MA *	ESPNAOHOKVL10 12	Morocco						
Spain	ESP NAO HOK1218 MA *	ESPNAOHOKVL12 18	Morocco						
Spain	ESP NAO HOK1218 MA *	ESPNAOHOKVL18 24	Morocco						

## 7.6 Concluding Remarks for TOR 5

For 2017 ToR 5 is now fully addressed for the Portuguese, Spanish, and French OMRs as balance indicators are provided for each specific OMR fleet segment.

MS have clearly responded to the request in last year's report for the data to be provided and the report can now claim to deliver fairly comprehensive information not only on the fleet segments that are out of balance but also those that are in balance. There remain a number of fleet segments where it has not been possible for some indicators to be determined.



## 8 CONTACT DETAILS OF EWG 19-13 PARTICIPANTS

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>

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## 9 LIST OF ANNEXES

- ANNEX I - SUMMARY OF INDICATOR ISSUES AND ASSOCIATED COMMENTS AND PROPOSALS EVIDENCED IN THE EWG 16-09 AND AMENDED BY EWG 19-13
- Annex II – COMPARISON OF MEMBER STATES ESTIMATES OF BIOLOGICAL INDICATORS AND EWG 19-13 ESTIMATION FOR THE REFERENCE YEAR 2017
- Annex III – PERCENTAGE OF TOTAL LANDINGS DATA (VALUES) SUBMITTED BY MEMBER STATES FOR WHICH ONLY INFORMATION FOR AGGREGATED SPECIES GROUPS IS AVAILABLE IN 2017
- ANNEX IV – BIOLOGICAL INDICATOR STOCK REFERENCE LIST
- ANNEX V – SAR STOCK SELECTION
- ANNEX VI – PRIORITY LIST OF REQUIRED STOCK ASSESSMENTS

Electronic annexes are published on the meeting's web site on:

<https://stecf.jrc.ec.europa.eu/ewg1913>

List of electronic annexes documents:

1. EWG—19-13– Balance Capacity Tables

## 10 LIST OF BACKGROUND DOCUMENTS

Background documents are published on the meeting's web site on:

<https://stecf.jrc.ec.europa.eu/ewg1913>

List of background documents:

1. EWG-19-13 – Doc 1 - Declarations of invited and JRC experts (see also section 8 of this report – List of participants)
2. COM(2014) 545 final – Doc 2 - Guidelines for the analysis of the balance between fishing capacity and fishing opportunities according to Art 22 of Regulation (EU) No 1380/2013 of the European Parliament and the Council on the Common Fisheries Policy.

The following STECF reports used as background documents can be found on:

<http://stecf.jrc.ec.europa.eu/reports/balance>

1. 2018-10\_STECF 18-14 – Balance capacity\_JRC114767.pdf
2. 2017-10\_STECF 17-18 – Balance capacity\_JRC109762.pdf
3. 2016-10\_STECF 16-18 - Balance capacity\_JRC103772.pdf

4. 2015-10\_STECF 15-15 - Balance capacity\_JRC97991.pdf
5. 2015-10\_EWG 15-17 - SHI supplementary data.xlsx
6. 2015-10\_EWG 15-17 - Balance Indicators by Fleet Segments.xlsx
7. 2015-02\_STECF 15-02 - Balance capacity\_JRC94933.pdf
8. 2015-02\_STECF 15-02 - Balance capacity all tables.xlsx
9. 2014-06\_STECF 14-09 - Balance indicators\_JRC90403.pdf
- 10.2014-06\_STECF 14-09 - Balance indicators\_all tables\_JRC90403.zip
- 11.2013-11\_STECF 13-28 - Balance capacity\_JRC86350.pdf
- 12.2013-04\_STECF 13-08 - Balance indicators\_JRC81659.pdf
- 13.2012-11\_STECF 12-18 Balance capacity\_ JRC76704.pdf
- 14.2011-11\_STECF11-17- Balance capacity and fishing opportunities\_JRC67795.pdf
- 15.10-09\_SG-BRE 10-01 - Fleet capacity and fishing opportunities \_JRC61983.pdf

**11 ANNEX I - SUMMARY OF INDICATOR ISSUES AND ASSOCIATED COMMENTS AND PROPOSALS EVIDENCED IN THE EWG 16-09 AND AMENDED BY EWG 19-13**

<b>Sustainable Harvest Indicator (SHI)</b>	<b>Issues</b>	<b>Comments</b>
<p><b>Sustainable harvest indicator (SHI)</b></p>	<p>8. The indicator guidelines state that an SHI value above one could be an indication of imbalance if it has occurred for three consecutive years. This criterion may be interpreted as not being in line with the CFP, where it is stated: <i>"The maximum sustainable yield exploitation rate shall be achieved by 2015 where possible and, on a progressive, incremental basis at the latest by 2020 for all stocks."</i> Therefore, before 2020 an SHI indicator above 1 may reflect the outcome of political decisions to reach <math>F_{MSY}</math> not immediately, but by 2020.</p>	<p>8. Issue cannot be addressed without changing the guidelines. EWG 16-09 reaffirms the need for a dedicated EWG to revise indicator guidelines.</p>
	<p>9. Proposals for fishery management plans in the ICES area are currently taking into account <math>F_{MSY}</math> ranges; it is thus likely that <math>F_{MSY}</math> ranges which will serve as the basis for future management. SHI calculations are at present based on point estimates of <math>F_{MSY}</math>. SHI calculations could in future be revised to reflect the use of <math>F_{MSY}</math> ranges in management plans, a scenario for</p>	<p>9. EWG 16-09 indicator preparatory meeting looked into this issue and concluded that <math>F_{MSY}</math> ranges had not been adopted as the basis for management for any stocks in the ICES area by the 30<sup>th</sup> June 2016 (the cut-off date for the inclusion of new data the EWG 16-09 indicator preparatory meeting worked with).</p>

	<p>which the guidelines state: <i>'Where Fmsy is defined as a range, exceeding the upper end of the range is interpreted as "overfishing"'</i>. It follows that if <math>F_{MSY}</math> ranges instead of point estimates are used, this will have a substantial impact on SHI values because the upper limit of the <math>F_{MSY}</math> range is often considerably higher than the <math>F_{MSY}</math> point estimate.</p>	
	<p>10. The SHI may deliver a value of more than 1 for fleet segments which are not overcapacity with regards to their short term legally permitted harvest opportunities, i.e. fishing opportunities based on short term TACs.</p>	<p>10. Issue cannot be addressed without changing guidelines EWG 16-09 reaffirms the need for a dedicated EWG to revise indicator guidelines.</p>
	<p>11. The SHI, used in isolation to assess whether a particular fleet segment is in balance with its fishing opportunities could be misleading because it does not provide results about the extent to which a fleet segment relied on over-harvested stocks and secondly, does not provide any indication as to the overall contribution a fleet segment makes to the overall catch from an over-harvested stock.</p>	<p>11. Issue considered in STECF 15-15 (section 3.8 – 'Proposed Biological Indicators and Evaluation Tool'); STECF 15-15 proposal cannot be implemented without changing guidelines. EWG 16-09 reaffirms the need for a dedicated EWG to revise indicator guidelines.</p>
	<p>12. The SHI may deliver a value of less than 1 for fleet segments which partly rely on individual stocks harvested at rates above <math>F_{MSY}</math>.</p>	<p>12. Issue considered in STECF 15-15 (section 3.8 – 'Proposed Biological Indicators and Evaluation Tool'); STECF 15-15 proposal cannot be implemented without changing guidelines. EWG 16-09 reaffirms the</p>

		need for a dedicated EWG to revise indicator guidelines.
	13.The SHI may flag problems with a certain fleet segment despite the fact that the main problem lies with another fleet segment, which in turn may not necessarily be flagged.	13.Issue considered in STECF 15-15 (section 3.8 – ‘Proposed Biological Indicators and Evaluation Tool’); STECF 15-15 proposal cannot be implemented without changing guidelines. EWG 16-09 reaffirms the need for a dedicated EWG to revise indicator guidelines.
	14.SHI values calculated for different fleet segments may not be comparable. Small vessels in particular frequently harvest only a low number of stocks, leading to a high SHI when one of these stocks is overharvested. Fleet segments with larger vessels on the other hand generally fish more stocks in different areas. Therefore, their SHI is less sensitive to the overexploitation of particular stocks, and problems may be masked.	14.Issue considered in STECF 15-15 (section 3.8 – ‘Proposed Biological Indicators and Evaluation Tool’); STECF 15-15 proposal cannot be implemented without changing guidelines. EWG 16-09 reaffirms the need for a dedicated EWG to revise indicator guidelines.
	15.Interpretation of the SHI trend may be misleading by giving wrong signal of improvement for the cases where some of the stocks are contributing temporarily or permanently less to the total landing value, for example if these stocks are for some reasons priced less, have been recently depleted, or are on a collapsing trend. This is because in SHI the landings value for each stock is	15.Issue discussed in STECF 19-13. The EWG reaffirms the need for a dedicated EWG to revise indicator guidelines.



	used as a weighting factor in computing the weighted average over stocks.	
	16. Interpretation of the SHI trend may be misleading by giving wrong signal of improvement for the cases where some of the stocks have no longer reference points defined, provided that the concept of FMSY assuming long-term equilibrium is not considered appropriate, e.g. due to a large decline in productivity in later years. This is because SHI is computed only from the stocks with FMSY values available in the last 3 years.	16. Issue discussed in STECF 19-13. The EWG reaffirms the need for a dedicated EWG to revise indicator guidelines.
	17. The SHI values are computed at DCF fleet-segmentation level that could comprehend several different fisheries with possibly various SHI values if these fisheries SHI values were computed in isolation. Averaging SHI across fisheries and ecoregion might therefore not fit the purpose and give misleading indications.	17. Issue discussed in STECF 19-13. The EWG reaffirms the need for a dedicated EWG to revise indicator guidelines. This is a general issue also valid for the economic indicators.
<b>Stocks at Risk (SAR)</b>	7. According to the 2014 indicator guidelines (COM(2014) 545 final), 'if a fleet segment takes more than 10% of its catches from a stock which is at risk, this could be treated as an indicator of imbalance'. The Expert Group considers that this is not necessarily true, but it	7. Issue cannot be addressed without changing guidelines EWG 16-09 reaffirms the need for a dedicated EWG to revise indicator guidelines.

	<p>can be used to indicate that a fleet segment may be worthy of further investigation to determine whether it is not in balance with its fishing opportunities.</p>	
	<p>8. The indicator guidelines state that <math>B_{lim}</math> should be taken as threshold below which stocks are counted as stocks at risk. The definition in the CFP in Article 4 (18) for "inside safe biological limits" is: "<i>Stock within safe biological limits' means a stock with a high probability that its estimated spawning biomass at the end of the previous year is higher than the limit biomass reference point (<math>B_{lim}</math>)</i>". However, to monitor the performance of the common fisheries policy (see Article 50 of 1380/2013) the Commission has defined "outside safe biological limits" as SSB less than <math>B_{pa}</math> (where <math>B_{pa}</math> is defined), OR F is greater than <math>F_{pa}</math> (where <math>F_{pa}</math> is defined)<sup>6</sup>. To take the deterministic or median assessment values for SSB and contrast them with the <math>B_{lim}</math> reference point may be inconsistent with the criteria of "high probability" and the definition used to monitor the CFP. <math>B_{pa}</math> could be seen as more appropriate threshold since <math>B_{pa}</math> is</p>	<p>8. Issue cannot be addressed without changing guidelines. EWG 16-09 reaffirms the need for a dedicated EWG to revise indicator guidelines.</p>

<sup>6</sup> Scientific, Technical and Economic Committee for Fisheries (STECF) – Monitoring the performance of the Common Fisheries Policy (STECF-15-04). 2015. Publications Office of the European Union, Luxembourg, EUR XXXX EN, JRC XXXX, 147 pp.

	the SSB that gives a high probability to be above $B_{lim}$ given the uncertainties in stock assessments in the terminal year.	
	9. The current 10% threshold is arbitrary and has not been tested. A sensitivity analysis, using different percentage thresholds as a cut-off point in order to investigate the impact of different thresholds needs to be undertaken. In addition, currently only landings from EU fleets are used to calculate whether the landings of a certain fleet segment comprise more than 10% of the overall landings. The impact of EU fleets on stocks that are shared with non-EU countries may therefore be overestimated.	9. The EWG 16-09 indicator preparatory meeting discussed the possibility of testing threshold using new R code, and providing EWG 16-09 SAR indicators based on e.g. 3 different thresholds. Ultimately this issue can only be addressed by changing the guidelines. EWG 16-09 supports the proposal for a database which contains all data and information required for calculation of biological indicators (including catch data from non-EU countries), and which is updated every year (see section 3.5.1.3, STECF 15-15).
	10. With the exception of stocks assessed as being below the $B_{lim}$ biological level, identifying and categorizing 'stocks at risk' is subjective due to a range of terminology used in stock advice. The Expert Group suggests in future to provide two versions of the SAR; one based on $B_{lim}$ values (criterion a) and a second based on criteria b-d given in the Guidelines (COM (2014) 545 FINAL).	10. EWG 16-09 indicator preparatory meeting discussed this issue, in particular with regards to the interpretation of criterion b for Mediterranean stocks. Ultimately this issue cannot be addressed without changing guidelines. EWG 16-09 reaffirms the need for a dedicated EWG to revise indicator guidelines.
	11. In order to consider IUCN data in future (criterion d), the precise IUCN categories to be included in the SAR	11. EWG 16-09 indicator preparatory meeting discussed the issue of IUCN categories. The EWG 16-09 Prep. Meeting agreed with the approach taken by the

	<p>indicator calculations need to be agreed with the Commission.</p>	<p>expert selecting SAR to only consider species with a Critically Endangered (CR) status. Ultimately this issue cannot be addressed without changing guidelines. EWG 16-09 reaffirms the need for a dedicated EWG to revise indicator guidelines.</p>
	<p>12. In addition to the IUCN Red List and CITES, species lists from other conventions (e.g. OSPAR and CMS, Barcelona Convention, etc.) could in future be considered. A time consuming data gathering exercise would be necessary to include all these listings; such an exercise should be separated from the actual calculation of the indicator.</p>	<p>12. Issue cannot be addressed without changing guidelines. EWG 16-09 reaffirms the need for a dedicated EWG to revise indicator guidelines.</p>
<p><b>Economic &amp; technical indicators - general</b></p>	<p>2. Inconsistent clustering of fleet segments over time makes the interpretation of economic indicators for such clusters problematic.</p>	<p>3. Probable cases of inconsistent clustering were flagged during AER 1 and the EWG 16-09 indicator preparatory meeting was informed that some MS were able to improve on this. EWG 16-09 indicator preparatory meeting considers that it may not always possible to have consistent clusters, unless 'fake' or super clusters are used (which should not be encouraged). Moreover, the composition of fleet segments is always changing due to the 'dominance criteria' (listed in Commission Decision 2008/949/EC; Annex I, section A2.2), so there are inherent inconsistencies even when not</p>

		considering clusters. EWG 16-09 is currently unable to propose a solution to the issue of inconsistent clustering.
	4. Assessment of economic and technical indicators for small scale fleet segments is challenging. Economic indicators are generally calculated based on the assumption that fishing is the main economic activity of the fleet segments being assessed. This is often not the case for small-scale fishing fleets where fishing is often only a supplementary source of income.	3. EWG 16-09 considers that economic and technical indicators for small-scale fleet segments should always be interpreted with caution, and that local expert knowledge is generally required to accurately interpret indicator results/trends.
<b>Return on Investment (ROI) and/or Return on Fixed Tangible Assets (RoFTA)</b>	2. With regards to the application of the long term economic indicator ROI or RoFTA, the 2014 Balance Indicator Guidelines specify that the indicator is to be compared against the 'low risk long term interest rate'. The guidelines further suggest to use the ' <i>use the arithmetic average interest rate for the previous 5 years</i> '. Balance EWGs take this approach and e.g. the STECF 15-02 specifies that the ' <i>5-year average of the risk free long-term interest rate for each MS was used</i> '. On the other hand, the Annual Economic Report (AER) 2015 uses the 'real interest rate'.	2. EWG 16-09 indicator preparatory meeting notes that the lack of homogeneity in the methodology to estimate ROI and/or RoFTA by Balance EWGs (which use the approach given in the Commission guidelines) and the AER process was considered in detail by the 2016 AER meeting. It appears that the issue cannot be addressed without changing the Balance guidelines. EWG 16-09 reviewed the AER recommendations and reaffirms the suggestion for a dedicated EWG to revise indicator guidelines.
<b>Ratio between current revenue and</b>	2. Presentation / interpretation of trends: due to the volatile nature of variable costs associated with fishing, the CR/BER indicator values may fluctuate	3. EWG 16-09 indicator preparatory meeting considers that whilst short term volatility is informative, in the long-term it is not. Moreover, the long-term

<b>break-even revenue (CR/BER)</b>	considerably from one year to the next and commenting on trends which may be driven by the price of fuel for instance, does not necessarily help inform an assessment of fleet under- or over-capacity in relation to fishing opportunities.	approach overlaps with ROI or RoFTA. The long-term approach suggested in the guidelines should thus not be used and the EWG 16-09 balance indicator tables will as a result only present the short-term approach. EWG 16-09 reaffirms the need for a dedicated EWG to revise indicator guidelines.
<b>Inactive Fleet Indicators</b>	2. In some MS (esp. in the Mediterranean) there is high 'inactivity' for various reasons: many small vessels only operate part time / on a seasonal basis; fishers may own several boats, some of which are used as stand-by vessels for various reasons (see Finland / Italy /Malta 2015 annual reports).	2. EWG 16-09 considers that technical indicators always be interpreted with caution, and that local expert knowledge is generally required to accurately interpret indicator results/trends. This is in particular the case for small-scale fleet segments.
<b>Vessel Use Indicator</b>	3. Data on maximum days at sea (DAS) is not always submitted by MS, in which case a common theoretical maximum DAS of 220 days is used. The use of a theoretical DAS of 220 is not relevant for some fleet segments, in particular where fishing activities are seasonal.	3. STECF 15-15 considers that the use of a default value of 220 DAS to be used if no data on the maximum observed DAS is available should not be applied to vessels which measure less than 12 m in length. A clear methodology on how to calculate maximum DAS should be provide to MS to facilitate the calculation of correct values of maximum DAS. EWG 16-09 indicator preparatory meeting notes that an effort to standardise the calculation of DAS as well as fishing days was made by the second transversal variables workshop held in Nicosia in February 2016 (see Annex 5, Ribeiro et al., 2016). EWG 16-09 considers that this proposal should be

		<p>reviewed at a dedicated EWG to revise indicator guidelines.</p>
	<p>4. In some MS vessel use within fleet segments is not homogenous because only parts of the fleet are fishing full time for various reasons (e.g. fleet segments include a proportion of part-time fishers; older vessels being inactive during periods of maintenance or repair, breaks imposed on parts of fleet segments due to management measures with some vessels compensating by targeting other stocks and others remaining inactive).</p>	<p>4. EWG 16-09 considers that technical indicators always be interpreted with caution, and that local expert knowledge is generally required to accurately interpret indicator results/trends. This is in particular the case for small-scale fleet segments.</p>

**12 ANNEX II – COMPARISON OF MEMBER STATES ESTIMATES OF BIOLOGICAL INDICATORS AND EWG 19-13 ESTIMATION FOR THE REFERENCE YEAR 2017**

**SHI**

<b>Value of SHI for year 2017</b>			
<b>MS/Fleet segment</b>	<b>MS Fleet Report for 2018</b>	<b>EWG 19-13 estimate</b>	<b>Indicator values imply same status?</b>
<b>Belgium</b>			
BEL NAO DTS VL2440	1.02	1.06	Yes
BEL NAO TBB VL2440	1.04	0.99	No*
<b>Bulgaria</b>			
BGR MBS DFN VL0006	1.65	2.39	Yes
BGR MBS DFN VL0612	2.66	3.18	Yes
BGR MBS DFN VL1218	2.74	3.21	Yes
BGR MBS DFN VL1824	4.36	5.65	Yes
BGR MBS FPO VL0006	1.52	1.47	Yes
BGR MBS FPO VL0612	0.96	2.15	No
BGR MBS HOK VL0006	5.93	6.59	Yes



<b>Value of SHI for year 2017</b>			
<b>MS/Fleet segment</b>	<b>MS Fleet Report for 2018</b>	<b>EWG 19-13 estimate</b>	<b>Indicator values imply same status?</b>
BGR MBS HOK VL0612	8.88	9.47	Yes
BGR MBS HOK VL1218	11.75	11.63	Yes
BGR MBS PGP VL0006	1.60	3.25	Yes
BGR MBS PGP VL0612	7.98	6.74	Yes
BGR MBS PMP VL0006	1.57	2.25	Yes
BGR MBS PMP VL0612	1.83	2.29	Yes
BGR MBS PMP VL1218	3.08	2.81	Yes
BGR MBS PMP VL1824	2.02	2.52	Yes
BGR MBS PS VL0006	0.92	1.65	No
BGR MBS PS VL0612	1.28	2.21	Yes
BGR MBS PS VL1824	-	3.71	-
BGR MBS TBB VL0612	3.73	2.38	Yes
BGR MBS TBB VL1218	3.51	2.35	Yes
BGR MBS TBB VL1824	1.57	2.25	Yes
BGR MBS TM VL0612	2.01	3.24	Yes

<b>Value of SHI for year 2017</b>			
<b>MS/Fleet segment</b>	<b>MS Fleet Report for 2018</b>	<b>EWG 19-13 estimate</b>	<b>Indicator values imply same status?</b>
BGR MBS TM VL1218	1.29	2.19	Yes
BGR MBS TM VL1824	0.92	1.51	No
BGR MBS TM VL2440	0.87	1.34	No
<b>Croatia</b>			
HRV MBS DFN VL0612	-	2.61	-
HRV MBS DFN VL1218	1.34	2.68	Yes
HRV MBS DRB VL1824	-	2.11	-
HRV MBS DTS VL0612	1.13	2.15	Yes
HRV MBS DTS VL1218	1.18	2.24	Yes
HRV MBS DTS VL1824	1.71	2.36	Yes
HRV MBS DTS VL2440	1.67	2.33	Yes
HRV MBS FPO VL0006	0.88	1.57	No
HRV MBS FPO VL0612	1.20	1.53	Yes
HRV MBS HOK VL0612	-	1.79	-

<b>Value of SHI for year 2017</b>			
<b>MS/Fleet segment</b>	<b>MS Fleet Report for 2018</b>	<b>EWG 19-13 estimate</b>	<b>Indicator values imply same status?</b>
HRV MBS HOK VL1218	-	0.61	-
HRV MBS PS VL1218	1.40	2.82	Yes
HRV MBS PS VL1824	1.45	2.78	Yes
HRV MBS PS VL2440	1.50	2.79	Yes
<b>Cyprus</b>			
CYP MBS PGP1218 NGI	0.93	1.48	No
CYP MBS PS 2440 NGI	0.41	0.41	Yes
<b>Denmark</b>			
DNK NAO DTS VL0010	-	1.09	-
DNK NAO DTS VL1012	-	1.16	-
DNK NAO DTS VL1218	-	0.74	-
DNK NAO DTS VL1824	-	0.99	-
DNK NAO DTS VL2440	-	1.18	-
DNK NAO DTS VL40XX	-	1.10	-

<b>Value of SHI for year 2017</b>			
<b>MS/Fleet segment</b>	<b>MS Fleet Report for 2018</b>	<b>EWG 19-13 estimate</b>	<b>Indicator values imply same status?</b>
DNK NAO PGP VL1012	-	1.59	-
DNK NAO PGP VL1218	-	1.21	-
DNK NAO PMP VL0010	-	1.21	-
DNK NAO PMP VL1012	-	1.07	-
DNK NAO PMP VL1218	-	0.80	-
DNK NAO PMP VL1824	-	1.15	-
DNK NAO TMV VL1218	-	1.18	-
DNK NAO TMV VL40XX	-	1.08	-
<b>Estonia</b>			
EST NAO PGV VL1012	-	1.09	-
EST NAO TMV VL1218	-	1.17	-
EST NAO TMV VL1824	-	1.17	-
EST NAO TMV VL2440	-	1.17	-
<b>Finland</b>			

<b>Value of SHI for year 2017</b>			
<b>MS/Fleet segment</b>	<b>MS Fleet Report for 2018</b>	<b>EWG 19-13 estimate</b>	<b>Indicator values imply same status?</b>
FIN NAO TMV VL1218	-	1.13	-
FIN NAO TMV VL1824	-	1.13	-
<b>France area 37</b>			
FRA MBS DFN VL0006	-	2.91	-
FRA MBS DFN VL0612	-	3.75	-
FRA MBS DFN VL1218	-	7.39	-
FRA MBS HOK VL1218	-	0.39	-
FRA MBS HOK VL0612	-	0.88	-
FRA MBS PGP VL0006	-	3.02	-
FRA MBS PSV VL2440	-	0.34	-
FRA MBS PSV VL40XX	-	0.34	-
<b>France area 27</b>			
FRA NAO DFN VL1012	-	0.97	-
FRA NAO DFN VL1218	-	0.97	-

<b>Value of SHI for year 2017</b>			
<b>MS/Fleet segment</b>	<b>MS Fleet Report for 2018</b>	<b>EWG 19-13 estimate</b>	<b>Indicator values imply same status?</b>
FRA NAO DFN VL1824	-	0.96	-
FRA NAO DFN VL2440	-	0.97	-
FRA NAO DTS VL1218	-	1.07	-
FRA NAO DTS VL1824	-	1.15	-
FRA NAO MGP VL1824	-	0.85	-
FRA NAO DTS VL2440	-	1.2	-
FRA NAO MGP VL2440	-	0.95	-
FRA NAO DTS VL40XX	-	0.98	-
FRA NAO HOK VL0010	-	0.88	-
FRA NAO HOK VL1012	-	0.93	-
FRA NAO HOK VL1824	-	0.97	-
FRA NAO HOK VL2440	-	0.97	-
FRA NAO TMV VL0010	-	1.52	-
FRA NAO TMV VL1012	-	1.44	-
FRA NAO PSV VL1218	-	1.38	-

<b>Value of SHI for year 2017</b>			
<b>MS/Fleet segment</b>	<b>MS Fleet Report for 2018</b>	<b>EWG 19-13 estimate</b>	<b>Indicator values imply same status?</b>
FRA NAO PSV VL1824	-	1.16	-
FRA NAO TMV VL1218	-	1.06	-
FRA NAO TMV VL1824	-	0.96	-
FRA NAO TMV VL40XX	-	1.15	-
<b>France OFR</b>			
FRA OFR HOK VL0010	-	1.11	-
FRA OFR HOK VL1012	-	0.96	-
FRA OFR HOK VL1218	-	0.91	-
FRA OFR HOK VL1824	-	0.92	-
FRA OFR PSV VL40XX	-	1.02	-
<b>Germany</b>			
DEU NAO DFN VL1218	1.19	1.25	Yes
DEU NAO DTS VL2440	1.12	1.28	Yes
DEU NAO TBB VL2440	1.02	1.04	Yes

<b>Value of SHI for year 2017</b>			
<b>MS/Fleet segment</b>	<b>MS Fleet Report for 2018</b>	<b>EWG 19-13 estimate</b>	<b>Indicator values imply same status?</b>
DEU NAO TM VL40XX	1.35	1.18	Yes
DEU NAO DTS VL40XX	0.99	1.24	No
DEU NAO PG VL1012	1.29	1.55	Yes
DEU NAO DTS VL1218	1.33	1.63	Yes
DEU NAO DTS VL1824	1.12	1.20	Yes
DEU NAO DTS VL1012	1.27	1.55	Yes
DEU NAO DFN VL2440	1.24	1.22	Yes
DEU NAO PG VL0010	1.31	1.55	Yes
DEU NAO TBB VL1824	-	1.11	-
DEU NAO TBB VL1012	-	1.29	-
<b>Greece</b>			
GRC MBS PS VL1824	-	1.01	-
GRC MBS PS VL2440	-	0.98	-
<b>Ireland</b>			



<b>Value of SHI for year 2017</b>			
<b>MS/Fleet segment</b>	<b>MS Fleet Report for 2018</b>	<b>EWG 19-13 estimate</b>	<b>Indicator values imply same status?</b>
IRL NAO DFN VL1012	-	1.16	-
IRL NAO DFN VL1218	-	1.06	-
IRL NAO DFN VL1824	-	1.09	-
IRL NAO DFN VL2440	-	1.02	-
IRL NAO DTS VL1012	-	1.16	-
IRL NAO DTS VL1218	-	1.07	-
IRL NAO DTS VL1824	-	0.98	-
IRL NAO DTS VL2440	-	1.13	-
IRL NAO TBB VL1824	-	0.97	-
IRL NAO TBB VL2440	-	1.2	-
IRL NAO TM VL1218	-	1.44	-
IRL NAO TM VL1824	-	1.37	-
IRL NAO TM VL2440	-	1.08	-
IRL NAO TM VL40XX	-	1.17	-

<b>Value of SHI for year 2017</b>			
<b>MS/Fleet segment</b>	<b>MS Fleet Report for 2018</b>	<b>EWG 19-13 estimate</b>	<b>Indicator values imply same status?</b>
<b>Italy</b>			
ITA MBS DTS VL0612	-	2.14	-
ITA MBS DTS VL1218	-	2.1	-
ITA MBS DTS VL1824	-	2.22	-
ITA MBS HOK VL1218	-	2.25	-
ITA MBS HOK VL1824	-	1.74	-
ITA MBS PS VL1218	-	1.66	-
ITA MBS PS VL1824	-	1.51	-
ITA MBS PS VL2440	-	2.1	-
ITA MBS PS VL40XX	-	0.37	-
ITA MBS TBB VL1218	-	2.28	-
ITA MBS TBB VL1824	-	2.02	-
ITA MBS TBB VL2440	-	2.47	-
ITA MBS TM VL1218	-	2.57	-
ITA MBS TM VL1824	-	2.64	-

<b>Value of SHI for year 2017</b>			
<b>MS/Fleet segment</b>	<b>MS Fleet Report for 2018</b>	<b>EWG 19-13 estimate</b>	<b>Indicator values imply same status?</b>
ITA MBS TM VL2440	-	2.52	-
<b>Latvia</b>			
LVA NAO PGP0010 NGI	-	0.91	-
LVA NAO TM 1218 NGI	-	0.94	-
LVA NAO TM 2440 NGI	1.11	1.15	Yes
<b>Lithuania</b>			
LTU NAO TM 1824 NGI	1.14	1.19	Yes
LTU NAO TM 2440 NGI	1.13	1.20	Yes
LTU NAO TM 40XX NGI	1.12	1.21	Yes
LTU NAO DTS2440 NGI	1.15	1.22	Yes
LTU NAO DTS40XX NGI	1.15	1.21	Yes
<b>Malta</b>			
MLT MBS HOK1218 NGI	-	1.09	-

<b>Value of SHI for year 2017</b>			
<b>MS/Fleet segment</b>	<b>MS Fleet Report for 2018</b>	<b>EWG 19-13 estimate</b>	<b>Indicator values imply same status?</b>
MLT MBS HOK1824 NGI	-	1.58	-
MLT MBS PGP0612 NGI*	-	1.39	-
MLT MBS PS 1824 NGI*	-	0.35	-
<b>Netherlands</b>			
NLD NAO DTS 1824 NGI*	-	1.07	-
NLD NAO DTS 2440 NGI*	-	1.11	-
NLDNAOTMVL40XX	0.83	1.13	No
NLDNAOTBBVL40XX	0.89	1.03	No
NLDNAOTBBVL2440	0.89	1.05	No
<b>Poland</b>			
POL NAO TM VL1824	1.35	1.18	Yes
POL NAO TM VL2440	1.21	1.19	Yes
<b>Portugal</b>			
PRT NAO HOK2440 P3 *	-	0.97	-

<b>Value of SHI for year 2017</b>			
<b>MS/Fleet segment</b>	<b>MS Fleet Report for 2018</b>	<b>EWG 19-13 estimate</b>	<b>Indicator values imply same status?</b>
PRT NAO HOK2440 P2	1.05	1.05	Yes
PRT NAO HOK0010 P2 *	1.11	1.46	Yes
PRT NAO HOK1218 P2	1.11	1.38	Yes
PRT NAO MGP0010 P2	0.80	-	-
PRT NAO MGP1824 P2	3.24	0.78	No
PRT NAO DTS2440 NGI	-	0.90	-
PRT NAO MGO1012 NGI	-	0.39	-
PRT NAO PS 1218 NGI	-	1.24	-
PRT NAO PS 1824 NGI	-	1.30	-
PRT NAO PS 2440 NGI	-	1.30	-
<b>Romania</b>			
ROU MBS PMP VL2440	2.27	1.00	Yes
ROU MBS PMP VL1824	2.26	0.64	No
ROU MBS PMP VL1218	2.36	0.81	No

<b>Value of SHI for year 2017</b>			
<b>MS/Fleet segment</b>	<b>MS Fleet Report for 2018</b>	<b>EWG 19-13 estimate</b>	<b>Indicator values imply same status?</b>
ROU MBS PG VL0612	3.42	1.8	Yes
ROU MBS PMP VL0612	2.29	0.96	No
ROU MBS PG VL0006	3.04	0.7	No
<b>Slovenia</b>			
SVN MBS PS VL1218	-	2.82	-
<b>Spain area 27</b>			
ESP NAO DFN VL0010	-	1.18	-
ESP NAO DFN VL1218	-	1.30	-
ESP NAO DFN VL1824	1.44	1.59	Yes
ESP NAO DFN VL2440	-	1.66	-
ESP NAO DTS VL2440	1.21	1.21	Yes
ESP NAO DTS VL40XX	0.98	1.03	No*
ESP NAO HOK VL0010	-	1.05	-
ESP NAO HOK VL1012IC	1.40	0.76	No

<b>Value of SHI for year 2017</b>			
<b>MS/Fleet segment</b>	<b>MS Fleet Report for 2018</b>	<b>EWG 19-13 estimate</b>	<b>Indicator values imply same status?</b>
ESP NAO HOK VL1012NGI	1.40	1.49	Yes
ESP NAO HOK VL1218IC	1.27	0.97	No
ESP NAO HOK VL1218NGI	1.27	1.53	Yes
ESP NAO HOK VL1824NGI	1.03	1.33	Yes
ESP NAO HOK VL1824IC	1.03	1.18	Yes
ESP NAO HOK VL2440IC	0.81	1.21	No
ESP NAO HOK VL2440NGI	0.81	0.79	Yes
ESP NAO PGP VL1824	-	0.96	-
ESP NAO PGP VL2440	0.79	0.96	Yes
ESP NAO PMP VL1824	-	0.78	-
ESP NAO PMP VL2440	-	1.45	-
ESP NAO PMP VL1218	1.07	1.22	Yes
ESP NAO PMP VL1824	-	1.32	-
ESP NAO PMP VL2440	-	0.92	-
ESP NAO PS VL1012	-	0.70	-

<b>Value of SHI for year 2017</b>			
<b>MS/Fleet segment</b>	<b>MS Fleet Report for 2018</b>	<b>EWG 19-13 estimate</b>	<b>Indicator values imply same status?</b>
ESP NAO PS VL1012	-	0.90	-
ESP NAO PS VL2440	1.32	0.82	No
<b>Spain area 37</b>			
ESP MBS DTS VL1824	4.08	3.50	Yes
ESP MBS DTS VL2440	4.25	3.62	Yes
ESP MBS HOK VL0612	-	1.81	-
ESP MBS HOK VL1218LLD	2.09	1.68	Yes
ESP MBS HOK VL1218NGI	2.09	1.11	Yes
ESP MBS HOK VL2440NGI	-	3.10	-
ESP MBS HOK VL1824	-	1.62	-
ESP MBS HOK VL2440LLD	-	1.67	-
ESP MBS PMP VL1824	-	2.65	-
ESP MBS PMP VL2440	-	5.32	-
ESP MBS PS VL1218	1.54	1.41	Yes



<b>Value of SHI for year 2017</b>			
<b>MS/Fleet segment</b>	<b>MS Fleet Report for 2018</b>	<b>EWG 19-13 estimate</b>	<b>Indicator values imply same status?</b>
ESP MBS PS VL1824	1.55	1.44	Yes
ESP MBS PS VL2440	0.83	0.87	Yes
ESP MBS PS VL40XX	-	0.34	-
<b>Spain OFR</b>			
ESP OFR HOK VL1824	-	0.98	-
ESP OFR HOK VL2440	1.01	1.17	Yes
ESP OFR PS VL40XX	0.98	1.05	No*
<b>Sweden</b>			
SWE NAO DFN VL1012	-	1.78	-
SWE NAO FPO VL1012	-	0.33	-
SWE NAO DFN VL1218	-	2.16	-
SWE NAO FPO VL1218	-	0.32	-
SWE NAO DTS VL0010	-	0.53	-
SWE NAO DTS VL1012	-	0.56	-

<b>Value of SHI for year 2017</b>			
<b>MS/Fleet segment</b>	<b>MS Fleet Report for 2018</b>	<b>EWG 19-13 estimate</b>	<b>Indicator values imply same status?</b>
SWE NAO PSV VL1012	-	1.12	-
SWE NAO TMV VL1012	-	1.12	-
SWE NAO DTS VL1218	-	0.67	-
SWE NAO PSV VL1218	-	1.12	-
SWE NAO DTS VL1824	-	0.98	-
SWE NAO TMV VL1824	-	1.14	-
SWE NAO DTS VL2440	-	1.19	-
SWE NAO TMV VL2440	-	1.09	-
SWE NAO TMV VL40XX	-	1.05	-
<b>United Kingdom</b>			
GBR NAO DFN VL0010	-	0.9	-
GBR NAO DTS VL0010	-	0.96	-
GBR NAO DTS VL1218	-	0.94	-
GBR NAO DTS VL1824	-	0.96	-

<b>Value of SHI for year 2017</b>			
<b>MS/Fleet segment</b>	<b>MS Fleet Report for 2018</b>	<b>EWG 19-13 estimate</b>	<b>Indicator values imply same status?</b>
GBR NAO DTS VL40XX	-	0.97	-
GBR NAO HOK VL0010	-	0.93	-
GBR NAO HOK VL2440	-	0.96	-
GBR NAO TM VL1012	-	0.5	-
GBR NAO PGP VL1012	-	0.93	-
GBR NAO TBB VL1824	-	0.87	-
GBR NAO TBB VL2440	-	0.99	-
GBR NAO TBB VL40XX	-	0.96	-
GBR NAO DFN VL1218	-	1.07	-
GBR NAO DFN VL1824	-	1.09	-
GBR NAO DFN VL2440	-	1.12	-
GBR NAO DTS VL1012	-	1.04	-
GBR NAO DTS VL2440	-	1.22	-
GBR NAO TM VL2440	-	1.21	-
GBR NAO TM VL40XX	-	1.22	-

Value of SHI for year 2017			
MS/Fleet segment	MS Fleet Report for 2018	EWG 19-13 estimate	Indicator values imply same status?
<b>United Kingdom OFR</b>			
GBR OFR HOK VL40XX	-	0.9	-

*\*Although the differences in the balance indicator values for 2017 imply that status of the fleet segment is different, the magnitude of the difference is small.*

## SAR

Value of SAR for year 2017							
Member State	Fleet segment with estimation of SAR in MS Fleet report 2018	SAR value from MS Fleet report 2018	Fleet segment with estimation of SAR from EWG 19-13	SAR value from EWG 19-13	Indicator values imply same status?	Notes/Comments	
Belgium	DTSVL2440	0	-	-	Yes, but not in stock numbers.	-	
	PMPVL1824	0	-	-			
	TBBVL1824	0	-	-			
	TBBVL2440	2	BEL NAO TBB2440 NGI	3			
Bulgaria	-	-	BGR MBS PMP1218 NGI*	2	-	SAR not calculated in MS report.	
	-	-	BGR MBS PGP0612 NGI	2			
	-	-	BGR MBS HOK0612 NGI*	1			
	-	-	BGR MBS DFN0612 NGI	1			
	-	-	BGR MBS HOK0612 NGI*	1			

Value of SAR for year 2017							
Member State	Fleet segment with estimation of SAR in MS Fleet report 2018	SAR value from MS Fleet report 2018	Fleet segment with estimation of SAR from EWG 19-13	SAR value from 19-13 EWG	Indicator values same?	Indicator values same	Notes/Comments
	- - - -	- - - -	BGR MBS HOK0006 NGI BGR MBS TM 1218 NGI* BGR MBS TM 1218 NGI* BGR MBS DFN1218 NGI*	1 1 1 1			
Croatia	- -	- -	HRV MBS HOK0612 NGI* HRV MBS PGP0612 NGI*	1 1	-		MS report: "There were no stocks at risk targeted by Croatian fleet, as per available data"
Cyprus	-	-	-	-	-		MS report: "None of the stocks exploited by the Cyprus fishing fleet segments seems to meet the above criteria.  According to the criteria in the 2014 Balance Indicator Guidelines, the SAR indicator suggests that all fleet segments may be in

Value of SAR for year 2017						
Member State	Fleet segment with estimation of SAR in MS Fleet report 2018	SAR value from MS Fleet report 2018	Fleet segment with estimation of SAR from EWG 19-13	SAR value from 19-13 EWG	Indicator values same imply status?	Notes/Comments
						balance with their fishing opportunities."
Denmark	DTS VL0010	0	-	-	Yes, with some exceptions on stock numbers.	SAR available only for 2016 in MS report.
	PGP VL0010	3	DNK NAO PGP0010 NGI	2		
	PMP VL0010	1	DNK NAO PMP0010 NGI	1		
	DRB VL1012	0	-	-		
	DTS VL1012	1	DNK NAO DTS1012 NGI	1		
	PGP VL1012	2	DNK NAO PGP1012 NGI	1		
	PMP VL1012	0	-	-		
	DRB VL1218	-1	-	-		
	DTS VL1218	1	DNK NAO DTS1218 NGI	2		
	PGP VL1218	0	DNK NAO PGP1218 NGI	2		
	PMP VL1218	0	-	-		
	TBB VL1218	0	-	-		
	TM VL1218	3	DNK NAO TM 1218 NGI	3		
	DTS VL1824	4	DNK NAO DTS1824 NGI DNK NAO PMP1824 NGI	5		
	PMP VL1824	0	-	2		
	TBB VL1824	0	-	-		
	DTS VL2440	4	DNK NAO DTS2440 NGI	5		
	DTS VL40XX	3	DNK NAO DTS40XX NGI DNK NAO TM 40XX NGI	2		

Value of SAR for year 2017							
Member State	Fleet segment with estimation of SAR in MS Fleet report 2018	SAR value from MS Fleet report 2018	Fleet segment with estimation of SAR from EWG 19-13	SAR value from 19-13 EWG	Indicator values same?	Notes/Comments	
	TM VL2440	4		3			
Estonia	PG VL0010	0	EST NAO PG 0010 NGI	1	No	SAR available only for 2016 in MS report.	
	PG VL1012	-1	-	-			
	TM VL1218	-1	-	-			
	TM VL1824	-1	-	-			
	TM VL2440	-1	-	-			
Finland	-	-	FIN NAO PG 0010 NGI	1	-	SAR not calculated in MS report.	
France	-	-	FRA NAO DFN0010 NGI	5	-	SAR calculated in MS report with different segmentation.	
	-	-	FRA NAO DTS1824 NGI*	5			
	-	-	FRA NAO DTS40XX NGI	4			
	AT MdNMchest DTS VL2440	0	FRA NAO DTS2440 NGI*	4			
	-	-	FRA NAO DFN1012 NGI	3			
	AT MdNMchest HOK VL0010	0	FRA NAO HOK0010 NGI	2			
	-	-	FRA NAO DTS1218 NGI	2			
	-	-	FRA NAO DFN1824 NGI	2			
	-	-	FRA NAO DTS1012 NGI*	2			
	-	-	FRA MBS HOK0612 NGI	1			
	ME ME DFN VL1218	0	FRA MBS DFN0612 NGI	1			
	-	-	FRA NAO TM 1218 NGI	1			

Value of SAR for year 2017						
Member State	Fleet segment with estimation of SAR in MS Fleet report 2018	SAR value from MS Fleet report 2018	Fleet segment with estimation of SAR from EWG 19-13	SAR value from 19-13 EWG	Indicator values same?	Notes/Comments
	OM Mayotte PP HOK VL1218	0	FRA NAO TM 1824 NGI*	1		
	-	-	FRA NAO MGP1012 NGI*	1		
	AT MdNMchest MGP VL0010	0	FRA NAO MGO0010 NGI*	1		
	AT MdN_Mchest PGP VL0010	0	FRA MBS PGP0006 NGI	1		
	ME DTS VL1824	1	FRA MBS DTS1824 NGI*	1		
	-	-	FRA NAO DRB1218 NGI*	1		
	OM AFR_Oind PS_ VL40XX	0	FRA OFR PS 40XX IWE	1		
	-	-	FRA MBS DTS1824 NGI*	1		
	-	-	FRA MBS HOK0006 NGI	1		
	ME ME PGO VL0612	0	FRA MBS PGO0006 NGI	1		
	ME DTS VL2440	1	FRA MBS FPO0006 NGI	1		
	ME ELE VL0024	1	FRA MBS FPO0612 NGI	1		
	ME ME VL0012	1	FRA NAO DFN1218 NGI*	1		
	AT ELE VL0024	1	-	-		
	AT MCOE_Is MGP VL1218	0	-	-		
	AT GGIb HOK VL2440	0	-	-		
	AT MdN_Mchest PMP VL0010	0	-	-		
Germany	PG VL0010	1	DEU NAO PG 0010 NGI	1	Yes, with some exceptions on stock numbers.	-
	PG VL1012	1	DEU NAO PG 1012 NGI	1		
	DFN VL1218	1	DEU NAO DFN1218 NGI	3		
	DFN VL2440	0	-	-		



Value of SAR for year 2017						
Member State	Fleet segment with estimation of SAR in MS Fleet report 2018	SAR value from MS Fleet report 2018	Fleet segment with estimation of SAR from EWG 19-13	SAR value from 19-13 EWG	Indicator values same?	Notes/Comments
	TBB VL1012	0	-	-		
	TBB VL1218	0	-	-		
	TBB VL1824	0	-	-		
	TBB VL2440	0	-	-		
	TBB VL40XX	0	-	-		
	DTS VL1012	1	DEU NAO DTS1012 NGI*	1		
	DTS VL1218	2	DEU NAO DTS1218 NGI	2		
	DTS VL1824	1	DEU NAO DTS1824 NGI	1		
	DTS VL2440	0	DEU NAO DTS2440 NGI	2		
	DTS VL40XX	0	DEU NAO DTS40XX NGI	3		
	TM VL1218	1	-	-		
	TM VL1824	1	-	-		
	TM VL2440	1	-	-		
	TM VL40XX	0	DEU NAO TM 40XX NGI*	1		
Greece	-	-	GRC MBS DTS2440 NGI	1	-	SAR not calculated in MS report.
Ireland	DFN VL1218	0	-	-	-	SAR available only for 2016 in MS report.
	DFN VL1824	0	-	-		
	DFN VL2440	0	-	-		
	DRB VL1012	-1	-	-		

Value of SAR for year 2017							
Member State	Fleet segment with estimation of SAR in MS Fleet report 2018	SAR value from MS Fleet report 2018	Fleet segment with estimation of SAR from EWG 19-13	SAR value from 19-13 EWG	Indicator values same?	Notes/Comments	
	DRB VL1218	-1	-	-			
	DRB VL1824	-1	-	-			
	DRB VL2440	-1	-	-			
	FPO VL1218	0	-	-			
	FPO VL1824	-1	-	-			
	FPO VL2440	-1	-	-			
	HOK VL1012	0	-	-			
	HOK VL1218	-	-	-			
	HOK VL2440	-	-	-			
	PGP VL0010	-	-	-			
	PGP VL1012	-1	-	-			
	PMP VL1012	0	-	-			
	PMP VL1218	1	IRL NAO PMP1218 *	2			
	PMP VL1824	-	-	-			
	PS VL0010	-	-	-			
	PS VL2440	-	-	-			
	TBB VL0010	1	-	-			
	TBB VL1824	0	-	-			
	TBB VL2440	0	IRL NAO TBB2440 *	1			
	TM VL0010	-	-	-			
	TM VL1012	0	IRL NAO TM 1012 *	2			

Value of SAR for year 2017						
Member State	Fleet segment with estimation of SAR in MS Fleet report 2018	SAR value from MS Fleet report 2018	Fleet segment with estimation of SAR from EWG 19-13	SAR value from 19-13 EWG	Indicator values same?	Notes/Comments
	TM VL1218	0	IRL NAO TM 1218 *	1		
	TM VL1824	-	IRL NAO TM 1218 *	2		
	PS VL0010	-	-	-		
	DFN VL0010	0	-	-		
	DFN VL1012	0	-	-		
	DRB VL0010	0	-	-		
	DTS VL0010	1	IRL NAO DTS0010	1		
	DTS VL1012	0	IRL NAO DTS1012	1		
	DTS VL1218	0	-	-		
	DTS VL2440	4	IRL NAO DTS2440	5		
	FPO VL0010	0	-	-		
	FPO VL1012	0	-	-		
	HOK VL0010	0	-	-		
	TM VL40XX	2	IRL NAO TM 40XX	2		
	DTS VL1824	5	IRL NAO DTS1824	5		
	DTS VL40XX	-	-	-		
	TM VL2440	1	IRL NAO TM 2440	2		
Italy	-	-	ITA MBS PS 1218 NGI	1	-	SAR not calculated in MS report.
	-	-	ITA MBS PGP0612 NGI	1		
	-	-	ITA MBS HOK1218 NGI	1		
	-	-	ITA MBS PGP1218 NGI*	1		

Value of SAR for year 2017							
Member State	Fleet segment with estimation of SAR in MS Fleet report 2018	SAR value from MS Fleet report 2018	Fleet segment with estimation of SAR from EWG 19-13	SAR value from 19-13 EWG	Indicator values same?	Notes/Comments	
	-	-	ITA MBS HOK1824 NGI*	1			
Latvia	-	-	-	-	-	SAR not calculated in MS report.	
Lithuania	-	-	LTU OFR TM 40XX NEU*	1	-	SAR not calculated in MS report.	
Malta	- - - -	- - - -	MLT MBS PGP0612 NGI* MLT MBS HOK1218 NGI MLT MBS PMP0612 NGI MLT MBS HOK1824 NGI	1 1 1 1	-	SAR indicator not available for Malta for 2012-2017 (based on conclusion of STECG 18-14)	
The Netherlands	Demersal fleet Pelagic fleet	1 0	NLD NAO TM 40XX NGI* NLD NAO PG 0010 NGI*	2 1	-	SAR calculated in MS report with different segmentation.	
Poland	VL0010PG VL1012PG VL1218DFN VL1218DTS VL1824DT VL1824TM	1 2 0 1 1 0	POL NAO PG 0010 - - - - -	1 - - - - -	No	-	

Value of SAR for year 2017						
Member State	Fleet segment with estimation of SAR in MS Fleet report 2018	SAR value from MS Fleet report 2018	Fleet segment with estimation of SAR from EWG 19-13	SAR value from 19-13 EWG	Indicator values same?	Notes/Comments
	VL2440TM -	1 -	- POL NAO DTS40XX	- 1		
Portugal	- - - - - - - - - - - - -	- - - - - - - - - - - -	PRT NAO DTS40XX IWE PRT NAO PGP0010 NGI PRT NAO PS 2440 NGI PRT NAO HOK2440 NGI PRT NAO DFN1218 NGI PRT NAO PS 1218 NGI PRT NAO DTS1824 NGI PRT NAO PS 1824 NGI PRT NAO PS 1012 NGI PRT OFR HOK40XX IWE* PRT NAO PS 0010 NGI PRT NAO PMP0010 NGI PRT NAO HOK0010 P3 PRT NAO DTS2440 NGI	5 3 2 2 2 1 1 1 1 1 1 1 1 1 1	-	SAR not calculated in MS report.
Romania	- -	- -	ROU MBS PG 0612 NGI* ROU MBS PMP1218 NGI*	1 1	-	SAR not calculated in MS report.

Value of SAR for year 2017						
Member State	Fleet segment with estimation of SAR in MS Fleet report 2018	SAR value from MS Fleet report 2018	Fleet segment with estimation of SAR from EWG 19-13	SAR value from 19-13 EWG	Indicator values same?	Notes/Comments
Slovenia	-	-	-	-	-	SAR not calculated in MS report.
Spain	-	-	ESP MBS DTS1824 NGI	8	-	SAR calculated in MS report with different segmentation.
	-	-	ESP NAO DTS1824 NGI	6		
	-	-	ESP NAO DTS40XX NGI	5		
	-	-	ESP NAO DTS1218 NGI*	4		
	-	-	ESP OFR DTS40XX NGI	4		
	NAO DTS 6	1	ESP NAO DTS2440 NGI	4		
	-	-	ESP NAO DFN1218 NGI	3		
	-	-	ESP NAO PMP0010 NGI	3		
	-	-	ESP MBS DTS2440 NGI	3		
	-	-	ESP MBS HOK1824 LLD*	2		
	-	-	ESP MBS PMP1218 NGI*	2		
	-	-	ESP NAO PGP2440 NGI*	2		
	-	-	ESP NAO DFN1012 NGI*	1		
	-	-	ESP NAO HOK1218 NGI	1		
	-	-	ESP NAO PS 1012 NGI*	1		
	-	-	ESP NAO FPO1012 IC *	1		
	-	-	ESP MBS HOK0612 NGI	1		
	-	-	ESP NAO PS 1218 IC *	1		

Value of SAR for year 2017						
Member State	Fleet segment with estimation of SAR in MS Fleet report 2018	SAR value from MS Fleet report 2018	Fleet segment with estimation of SAR from EWG 19-13	SAR value from 19-13 EWG	Indicator values same?	Notes/Comments
	-	-	ESP NAO PS 2440 NGI	1		
	-	-	ESP NAO PMP0010 IC	1		
	-	-	ESP NAO PS 1218 NGI	1		
	-	-	ESP NAO HOK2440 LLD*	1		
	-	-	ESP MBS HOK1218 LLD*	1		
	-	-	ESP NAO PS 1824 NGI	1		
	-	-	ESP MBS HOK1824 LLD*	1		
	-	-	ESP MBS DTS1218 NGI	1		
	-	-	ESP MBS HOK1218 LLD*	1		
	-	-	ESP NAO HOK1824 NGI	1		
	-	-	ESP NAO PS 1012 NGI*	1		
	-	-	ESP NAO PGP2440 NGI*	1		
	-	-	ESP MBS PMP0612 NGI	1		
	MBS PGO3	1	-	-		
	MBS PGO 4	1	-	-		
Sweden	DFN VL0010	1	SWE NAO DFN0010 NGI*	1	No	SAR available only for 2015 in MS report.
	FPO VL0010	1	-	-		
	HOK VL0010	0	-	-		
	PGO VL0010	-	-	-		
	PGP VL0010	0	-	-		
	DFN VL1012	1	SWE NAO DFN1012 NGI*	1		

Value of SAR for year 2017						
Member State	Fleet segment with estimation of SAR in MS Fleet report 2018	SAR value from MS Fleet report 2018	Fleet segment with estimation of SAR from EWG 19-13	SAR value from EWG 19-13	Indicator values same?	Notes/Comments
	FPO VL1012	0	-	-		
	HOK VL1012	0	-	-		
	PGO VL1012	-	-	-		
	PGP VL1012	-1	-	-		
	DFN VL1218	1	SWE NAO DFN1218 NGI*	1		
	FPO VL1218	-1	-	-		
	HOK VL1218	0	-	-		
	HOK VL1824	-	-	-		
	DRB VL0010	-1	-	-		
	DRB VL1012	-	-	-		
	DTS VL0010	0	-	-		
	DTS VL1012	0	SWE NAO DTS1012 NGI*	1		
	PMP VL0010	-	-	-		
	PMP VL1012	-1	-	-		
	PS VL0010	-1	-	-		
	PS VL1012	-1	-	-		
	TM VL1012	-1	-	-		
	DTS VL1218	0	-	-		
	PMP VL1218	-1	-	-		
	PS VL1218	-1	-	-		
	TM VL1218	0	-	-		



Value of SAR for year 2017							
Member State	Fleet segment with estimation of SAR in MS Fleet report 2018	SAR value from MS Fleet report 2018	Fleet segment with estimation of SAR from EWG 19-13	SAR value from 19-13 EWG	Indicator values same?	Notes/Comments	
	DTS VL1824	0	SWE NAO DTS1824 NGI*	1			
	TM VL1824	-1	-	-			
	DTS VL2440	0	SWE NAO DTS2440 NGI*	3			
	MGP VL2440	-	-	-			
	MGP VL40XX	-	-	-			
	PS VL2440	-	-	-			
	PS VL40XX	0	-	-			
	TM VL 2440	0	-	-			
	TM VL40XX	0	-	-			
	-	-	SWE NAO DTS2440 NGI*	3			
	-	-	SWE NAO DFN1012 NGI*	2			
	-	-	SWE NAO DFN1012 NGI*	1			
	-	-	SWE NAO DFN0010 NGI*	1			
	-	-	SWE NAO DFN1012 NGI*	1			
UK	GBR A27 DTS2440	Exceeded	GBR NAO DTS2440 NGI	8	No	-	
	GBR A27 DTS1824	Exceeded	GBR NAO DTS1824 NGI	7			
	-	-	GBR NAO DTS0010 NGI	2			
	-	-	GBR NAO TM 40XX NGI*	2			
	GBR A27 TM40XX °	Exceeded	GBR NAO DTS40XX NGI*	2			
	-	-	GBR NAO HOK0010 NGI	1			
	-	-	GBR NAO DTS1218 NGI*	1			

Value of SAR for year 2017						
Member State	Fleet segment with estimation of SAR in MS Fleet report 2018	SAR value from MS Fleet report 2018	Fleet segment with estimation of SAR from EWG 19-13	SAR value from 19-13 EWG	Indicator values same?	Notes/Comments
	-	-	GBR NAO TBB2440 NGI*	1		
	-	-	GBR NAO HOK2440 NGI*	1		
	-	-	GBR NAO PGP0010 NGI*	1		
	-	-	GBR NAO PGP0010 NGI*	1		
	GBR A27 DFN2440 °	Exceeded	GBR NAO DFN2440 NGI*	1		
	GBR A27 DFN0010	Exceeded	-	-		
	GBR A27 DTS1012	Exceeded	-	-		
	GBR A27 DTS40XX °	Exceeded	-	-		
	GBR A27 HOK0010	Exceeded	-	-		

**13 ANNEX III – PERCENTAGE OF TOTAL LANDINGS DATA (VALUES) SUBMITTED BY MEMBER STATES FOR WHICH ONLY INFORMATION FOR AGGREGATED SPECIES GROUPS IS AVAILABLE IN 2017**

Country	Porportion of nei in the landings values	List of common name 'nei'
BEL	9.86	Anglerfishes nei/Common squids nei/Demersal percomorphs nei/Inshore squids nei/Jack and horse mackerels nei/Marine crustaceans nei/Marine fishes nei/Megrimms nei/Mulletts nei/Octopuses nei/Raja rays nei/Smooth-hounds nei/Various sharks nei
CYP	15.10	Barracudas nei/Bonitos nei/Common squids nei/Cuttlefishes nei/Dogfishes nei/Forkbeards nei/Guitarfishes nei/Jack and horse mackerels nei/Lizardfishes nei/Monkfishes nei/Mulletts nei/Ommastrephidae squids nei/Palinurid spiny lobsters nei/Penaeid shrimps nei/Picarels nei/Puffers nei/Rays and skates nei/Scomber mackerels nei/Spinefeet(=Rabbitfishes) nei/Squirrelfishes nei/Stingrays nei/Weeverfishes nei
DEU	1.62	Anglerfishes nei/Atlantic redfishes nei/Boarfishes nei/Dogfish sharks nei/Freshwater breams nei/Freshwater fishes nei/Jack and horse mackerels nei/Marine fishes nei/Megrimms nei/Mulletts nei/Raja rays nei/Sandeels(=Sandlances) nei/Sargo breams nei/Surmulletts(=Red mullets) nei/Trouts nei/Various squids nei/Wolffishes(=Catfishes) nei
DNK	12.68	Atlantic redfishes nei/Boarfishes nei/Cephalopods nei/Eelpouts nei/Gastropods nei/Gobies nei/Jack and horse mackerels nei/Marine crabs nei/Marine fishes nei/Mulletts nei/Raja rays nei/Rays and skates nei/Sandeels(=Sandlances) nei/Wolffishes(=Catfishes) nei

Country	Porportion of nei in the landings values	List of common name 'nei'
ESP	6.99	<p>Alfonsinos nei/Alloteuthis squids nei/Amberjacks nei/Anchovies nei/Angelfishes nei/Anglerfishes nei/Antarctic toothfishes nei/Aquatic invertebrates nei/Aristeid shrimps nei/Aristeus shrimps nei/Atlantic gobies nei/Atlantic redfishes nei/Balaenoptid whales nei/Baleen whales nei/Barbeled plunderfishes nei/Barracudas nei/Bathyrāja rays nei/Bigeyes nei/Black-Caspian Sea sprats nei/Boarfishes nei/Bonitos nei/Boxfishes nei/Brazilian groupers nei/Butterfishes nei/Butterfly rays nei/Callinectes swimcrabs nei/Carangids nei/Carcharhinus sharks nei/Carcinus crabs nei/Cardinal fishes nei/Cartilaginous fishes nei/Cephalopods nei/Chaceon geryons nei/Chars nei/Citharids nei/Clupeoids nei/Cnidarians nei/Combers nei/Common squids nei/Conger eels nei/Cranganid shrimps nei/Crangan shrimps nei/Crest-tail catsharks nei/Crocodile icefishes nei/Cusk-eels nei/Cuttlefishes nei/Daggerhead breams nei/Deania dogfishes nei/Deep-water sharks nei/Demersal percomorphs nei/Dentex nei/Diadromous fishes nei/Disc-fin squids nei/Dogfishes and hounds nei/Dogfishes nei/Dogfish sharks nei/Dolphinfishes nei/Dories nei/Drums nei/Eagle rays nei/Electric rays nei/Emperors(=Scavengers) nei/Filefishes nei/Finfishes nei/Flabellum cup corals nei/Flatfishes nei/Flyingfishes nei/Flying squids nei/Forkbeards nei/Frog shell nei/Fusiliers nei/Gadiformes nei/Gastropods nei/Geryons nei/Gigartina seaweeds nei/Gobies nei/Goose barnacles nei/Grenadiers nei/Groundfishes nei/Groupers nei/Guitarfishes nei/Gulper sharks nei/Gurnards nei/Hairtails nei/Hakes nei/Homarus lobsters nei/Hymenopenaeus shrimps nei/Indian mackerels nei/Inshore squids nei/Jack and horse mackerels nei/Jobfishes nei/Kelps nei/King crabs nei/Labrus wrasses nei/Lanternsharks nei/Lefteye flounders nei/Lings nei/Liocarcinus swimcrabs nei/Lizardfishes nei/Lobsters nei/Mackerels nei/Mactra surf clams nei/Maja spider crabs nei/Marine crabs nei/Marine crustaceans nei/Marine fishes nei/Marine molluscs nei/Meagres nei/Megrims nei/Menhadens nei/Merluccid hakes nei/Metanephrops lobsters nei/Metapenaeus shrimps nei/Mojarras(=Silver-biddies) nei/Monkfishes nei/Moras nei/Morays nei/Mulletts nei/Natantian decapods nei/Northern cods nei/Nototodarid flying squids nei/Nurse sharks nei/Nylon shrimps nei/Oarfishes nei/Octopuses nei/Ommastrephidae squids nei/Pacific shrimps nei/Palaemonid shrimps nei/Palaemon shrimps nei/Palaemonid spiny lobsters nei/Pandalid shrimps nei/Pandalopsis shrimps nei/Pandalus shrimps nei/Pandoras nei/Paranotothenia nei/Pargo breams nei/Pelagic fishes nei/Penaeid shrimps nei/Penaeus shrimps nei/Percoids nei/Picarels nei/Pilchards nei/Plesionika shrimps nei/Polystegan seabreams nei/Pompanos nei/Ponyfishes(=Slipmouths) nei/Portunus swimcrabs nei/Precious corals nei/Psammodontid sand skates nei/Puffers nei/Rainbow sardines nei/Raja rays nei/Rays and skates nei/Requiem sharks nei/Righteye flounders nei/River eels nei/Rocklings nei/Rock lobsters nei/Rosefishes nei/Salmonoids nei/Sandeels(=Sandlances) nei/Sand flounders nei/Sandlances nei/Sand smelts nei/Sardinellas nei/Sargo breams nei/Sauries nei/Scads nei/Scallops nei/Schedophilus nei/Sciaenids nei/Scorpaenid mackerels nei/Scorpionfishes nei/Seabasses nei/Sea chubs nei/Sea cucumbers nei/Seaweeds nei/Sepiella cuttlefishes nei/Sepioid bobtail squids nei/Shads nei/Sharpnose sharks nei/Shortfin squids nei/Silver pomfrets nei/Silversides(=Sand smelts) nei/Slimeheads nei/Slipper lobsters nei/Smooth-hounds nei/Snappers nei/Snipefishes nei/Snooks(=Robalos) nei/Solenocerid shrimps nei/Solen razor clams nei/Soles nei/Southeast Atlantic soles nei/Spadefishes nei/Spearfishes nei/Spear lobsters nei/Spinefeet(=Rabbitfishes) nei/Spiny lobsters nei/Spiny plunderfishes nei/Spiny turbots nei/Spirulina nei/Splitfins nei/Spotted dolphins nei/Squillids nei/Starfishes nei/Steenbrasses nei/Stingrays nei/Stolephorus anchovies nei/Stromboid conchs nei/Surf clams nei/Surmulletts(=Red mullets) nei/Symphodus wrasses nei/Thickback soles nei/Threadfin breams nei/Thresher sharks nei/Thumbstall squids nei/Tilefishes nei/Toadfishes nei/Todarodes flying squids nei/Tonguesole nei/Trisopterus nei/True tunas nei/Trumpeters nei/Tunas nei/Turbots nei/Tuskfishes nei/Variou sharks nei/Variou squids nei/Venus clams nei/Volutes nei/Weakfishes nei/Weeverfishes nei/Weevers nei/West African croakers nei/Whip lobsters nei/Wolffishes(=Catfishes) nei</p>

Country	Porportion of nei in the landings values	List of common name 'nei'
FIN	5.38	Trouts nei/Whitefishes nei
FRA	13.45	Alfonsinos nei/Amberjacks nei/Angelfishes nei/Atlantic gobies nei/Atlantic redfishes nei/Barracudas nei/Bigeyes nei/Bonitos nei/Boxfishes nei/Carangids nei/Carpet shells nei/Clupeoids nei/Combers nei/Cupped oysters nei/Dogfishes and hounds nei/Dogfish sharks nei/Emperors(=Scavengers) nei/Flatfishes nei/Flyingfishes nei/Forkbeards nei/Freshwater siluroids nei/Fusiliers nei/Gadiformes nei/Gastropods nei/Groupers nei/Inshore squids nei/Jack and horse mackerels nei/Jobfishes nei/Lanternsharks nei/Lefteye flounders nei/Lings nei/Lobsters nei/Mackerels nei/Marine crabs nei/Marine crustaceans nei/Marine fishes nei/Megrimms nei/Monkfishes nei/Morays nei/Mullets nei/Mytilus mussels nei/Natantian decapods nei/Pandoras nei/Pargo breams nei/Parrotfishes nei/Penaeus shrimps nei/Ratfishes nei/Rays and skates nei/Righteye flounders nei/Right-handed hermit crabs nei/Rocklings nei/Sandeels(=Sandlances) nei/Sargo breams nei/Scads nei/Scomber mackerels nei/Seabasses nei/Sea catfishes nei/Sea cucumbers nei/Seaweeds nei/Seerfishes nei/Shortfin squids nei/Silversides(=Sand smelts) nei/Slipper lobsters nei/Smooth-hounds nei/Snappers nei/Snooks(=Robalos) nei/Solen razor clams nei/Soles nei/Spiny lobsters nei/Squillids nei/Squirrelfishes nei/Stromboid conchs nei/Surgeonfishes nei/Surmulletts(=Red mullets) nei/Symphodus wrasses nei/Tellins nei/True tunas nei/Tunas nei/Various sharks nei/Various squids nei/Weakfishes nei/Weevers nei
GBR	9.99	Alfonsinos nei/Anglerfishes nei/Atlantic redfishes nei/Common squids nei/Dogfishes and hounds nei/Dogfish sharks nei/Flatfishes nei/Groundfishes nei/Jack and horse mackerels nei/Marine crabs nei/Marine molluscs nei/Megrimms nei/Mullets nei/Palinurid spiny lobsters nei/Pandalus shrimps nei/Periwinkles nei/Raja rays nei/Rocklings nei/Sandeels(=Sandlances) nei/Sea catfishes nei/Sea cucumbers nei/Sea urchins nei/Shortfin squids nei/Solen razor clams nei/Surf clams nei/Various sharks nei/Various squids nei/Venus clams nei/Weeverfishes nei/Wolffishes(=Catfishes) nei
GRC	2.96	Atlantic gobies nei/Carcharhinus sharks nei/Cephalopods nei/Dogfishes nei/Forkbeards nei/Gastropods nei/Jack and horse mackerels nei/Lings nei/Marine crabs nei/Marine crustaceans nei/Marine fishes nei/Monkfishes nei/Palaemonid shrimps nei/Raja rays nei/Sand smelts nei/Scomber mackerels nei/Smooth-hounds nei/Spinefeet(=Rabbitfishes) nei
HRV	4.05	Cephalopods nei/Dogfish sharks nei/Forkbeards nei/Gastropods nei/Groundfishes nei/Groupers nei/Jack and horse mackerels nei/Marine crustaceans nei/Marine fishes nei/Megrimms nei/Monkfishes nei/Mullets nei/Picarels nei/Raja rays nei/Righteye flounders nei/Scallops nei/Sea cucumbers nei/Various squids nei/Weevers nei
IRL	17.97	Abalones nei/Anglerfishes nei/Atlantic redfishes nei/Boarfishes nei/Common squids nei/Conger eels nei/Dogfishes and hounds nei/Dogfishes nei/Jack and horse mackerels nei/Mackerels nei/Megrimms nei/Monkfishes nei/Mullets nei/Palaemonid shrimps nei/Palinurid spiny lobsters nei/Pandalus shrimps nei/Penaeus shrimps nei/Periwinkles nei/Raja rays nei/Rays and skates nei/Scallops nei/Sea cucumbers nei/Soles nei/Surf clams nei/Surmulletts(=Red mullets) nei/True tunas nei/Various sharks nei/Various squids nei/Wolffishes(=Catfishes) nei
ITA	3.59	Alloteuthis squids nei/Common squids nei/Crest-tail catsharks nei/Dogfishes nei/Gastropods nei/Gobies nei/Marine crabs nei/Marine crustaceans nei/Marine fishes nei/Marine molluscs nei/Mullets nei/Ommastrephidae squids nei/Plesionika shrimps nei/Raja rays nei/Sandeels(=Sandlances) nei/Sargo breams nei/Scallops nei/Scorpionfishes nei/Silversides(=Sand smelts) nei/Soles nei/Turbots nei/Venus clams nei/Weeverfishes nei
LTU	0.50	Alfonsinos nei/Gobies nei/Trouts nei/Tunas nei

Country	Porportion of nei in the landings values	List of common name 'nei'
MLT	0.86	Dogfishes nei/Forkbeards nei/Groupers nei/Gurnards nei/Marine fishes nei/Mulletts nei/Picarels nei/Raja rays nei/Surmullets(=Red mullets) nei
NLD	0.01	Combers nei/Jack and horse mackerels nei/Marine fishes nei/Marine molluscs nei/Mulletts nei/Rays and skates nei/River prawns nei/Smooth-hounds nei/Soles nei/Tunas nei/Various sharks nei/Various squids nei
POL	0.37	Alfonsinos nei/Dentex nei/Freshwater fishes nei/Gobies nei/Marine fishes nei/Sandeels(=Sandlances) nei/Sturgeons nei/Various squids nei
PRT	9.38	Alfonsinos nei/Alloteuthis squids nei/Amberjacks nei/Anglerfishes nei/Atlantic gobies nei/Atlantic redfishes nei/Combers nei/Common squids nei/Conger eels nei/Cupped oysters nei/Drums nei/Flyingfishes nei/Forkbeards nei/Gastropods nei/Groupers nei/Gurnards nei/Hakes nei/Hammerhead sharks nei/Inshore squids nei/Jack and horse mackerels nei/Lefteye flounders nei/Limpets nei/Marine crustaceans nei/Marine fishes nei/Meagres nei/Megrims nei/Monkfishes nei/Morays nei/Mytilus mussels nei/Octopuses nei/Ommastrephidae squids nei/Palinurid spiny lobsters nei/Pandalid shrimps nei/Pandalus shrimps nei/Pargo breams nei/Picarels nei/Plesionika shrimps nei/Portunus swimcrabs nei/Raja rays nei/Rocklings nei/Sandeels(=Sandlances) nei/Sargo breams nei/Scads nei/Scorpionfishes nei/Seabasses nei/Seerfishes nei/Silversides(=Sand smelts) nei/Smooth-hounds nei/Spiny lobsters nei/Stingrays nei/Surmullets(=Red mullets) nei/Thickback soles nei/Tonguesole nei/Weevers nei/West African croakers nei/Wolffishes(=Catfishes) nei
ROU	0.36	Gobies nei
SVN	2.64	Anglerfishes nei/Jack and horse mackerels nei/Mulletts nei/Picarels nei/Rays and skates nei/Smooth-hounds nei/Weevers nei
SWE	5.23	Atlantic redfishes nei/Common squids nei/Sandeels(=Sandlances) nei/Whitefishes nei/Wolffishes(=Catfishes) nei



## 14 ANNEX IV – BIOLOGICAL INDICATOR STOCK REFERENCE LIST

The reference list shown below is currently used to divide commercial landings data at species level into stocks; see section 3.3 for further details. Stocks that are not divided are not included in the list. The resulting stock landings data were used in the calculation of the SHI and SAR indicator values for consideration by EWG 19-13.

Species code	Fishstock	Sub FAO Division	Splitting value
ANF	ank.27.78abd	27.7.B	3.7
ANF	ank.27.78abd	27.7.C.1	3.7
ANF	ank.27.78abd	27.7.C.2	3.7
ANF	ank.27.78abd	27.7.D	3.7
ANF	ank.27.78abd	27.7.E	3.7
ANF	ank.27.78abd	27.7.F	3.7
ANF	ank.27.78abd	27.7.G	3.7
ANF	ank.27.78abd	27.7.H	3.7
ANF	ank.27.78abd	27.7.J.1	3.7
ANF	ank.27.78abd	27.7.J.2	3.7
ANF	ank.27.78abd	27.7.K.1	3.7
ANF	ank.27.78abd	27.7.K.2	3.7
ANF	ank.27.78abd	27.8.A	3.7
ANF	ank.27.78abd	27.8.B	3.7
ANF	ank.27.78abd	27.8.D.1	3.7
ANF	ank.27.78abd	27.8.D.2	3.7
ANF	ank.27.8c9a	27.8.C	2.6
ANF	ank.27.8c9a	27.9.A	2.6
ANF	mon.27.78abd	27.7.B	1.4
ANF	mon.27.78abd	27.7.C.1	1.4
ANF	mon.27.78abd	27.7.C.2	1.4
ANF	mon.27.78abd	27.7.D	1.4
ANF	mon.27.78abd	27.7.E	1.4
ANF	mon.27.78abd	27.7.F	1.4
ANF	mon.27.78abd	27.7.G	1.4
ANF	mon.27.78abd	27.7.H	1.4
ANF	mon.27.78abd	27.7.J.1	1.4
ANF	mon.27.78abd	27.7.J.2	1.4
ANF	mon.27.78abd	27.7.K.1	1.4
ANF	mon.27.78abd	27.7.K.2	1.4
ANF	mon.27.78abd	27.8.A	1.4
ANF	mon.27.78abd	27.8.B	1.4
ANF	mon.27.78abd	27.8.D.1	1.4
ANF	mon.27.78abd	27.8.D.2	1.4
ANF	mon.27.8c9a	27.8.C	1.6
ANF	mon.27.8c9a	27.9.A	1.6



Species code	Fishstock	Sub FAO Division	Splitting value
CAP	cap.27.1-2	27.2.A	3.0
CAP	cap.27.1-2	27.2.A.1	3.0
CAP	cap.27.1-2	27.2.A.2	3.0
CAP	cap.27.2a514	27.2.A	1.5
CAP	cap.27.2a514	27.2.A.1	1.5
CAP	cap.27.2a514	27.2.A.2	1.5
COD	cod.27.1-2	27.1	1.0
COD	cod.27.1-2	27.1.A	1.0
COD	cod.27.1-2	27.1.B	1.0
COD	cod.27.1-2	27.2	1.0
COD	cod.27.1-2	27.2.A	1.0
COD	cod.27.1-2	27.2.A.1	1.0
COD	cod.27.1-2	27.2.A.2	1.0
COD	cod.27.1-2	27.2.B	1.0
COD	cod.27.1-2	27.2.B.1	1.0
COD	cod.27.1-2	27.2.B.2	1.0
COD	cod.27.1-2coast	27.1	25.8
COD	cod.27.1-2coast	27.1.A	25.8
COD	cod.27.1-2coast	27.1.B	25.8
COD	cod.27.1-2coast	27.2	25.8
COD	cod.27.1-2coast	27.2.A	25.8
COD	cod.27.1-2coast	27.2.A.1	25.8
COD	cod.27.1-2coast	27.2.A.2	25.8
COD	cod.27.1-2coast	27.2.B	25.8
COD	cod.27.1-2coast	27.2.B.1	25.8
COD	cod.27.1-2coast	27.2.B.2	25.8
HER	her.27.1-24a514a	27.4.A	1.5
HER	her.27.1-24a514a	27.5.A	1.1
HER	her.27.1-24a514a	27.5.A.1	1.1
HER	her.27.1-24a514a	27.5.A.2	1.1
HER	her.27.20-24	27.3.A	9.0
HER	her.27.25-2932	27.3.D.28	1.2
HER	her.27.28	27.3.D.28	6.4
HER	her.27.3a47d	27.3.A	1.1
HER	her.27.3a47d	27.4.A	3.0
HER	her.27.5a	27.5.A	11.9
HER	her.27.5a	27.5.A.1	11.9
HER	her.27.5a	27.5.A.2	11.9
HER	her.27.irls	27.7.A	1.4
HER	her.27.nirs	27.7.A	3.8
HKE	hke-gsa01_03	SA 1	2.0
HKE	hke-gsa01_03	SA 3	2.0

Species code	Fishstock	Sub FAO Division	Splitting value
HKE	hke-gsa01_05_06_07	SA 1	2.0
HKE	hke-gsa01_05_06_07	SA 5	2.0
HKE	hke-gsa01_05_06_07	SA 6	2.0
HKE	hke-gsa01_05_06_07	SA 7	2.0
HKE	hke-gsa02_03_04_05	SA 3	2.0
HKE	hke-gsa02_03_04_05	SA 5	2.0
HKE	hke-gsa06	SA 6	2.0
HKE	hke-gsa07	SA 7	2.0
HKE	hke-gsa09	SA 9	2.0
HKE	hke-gsa09_10_11	SA 9	2.0
HKE	hke-gsa17_18	SA 17	2.0
HKE	hke-gsa17_18	SA 18	2.0
HKE	hke-gsa17_18_stecf	SA 17	2.0
HKE	hke-gsa17_18_stecf	SA 18	2.0
LEZ	ldb.27.8c9a	27.8.C	1.2
LEZ	ldb.27.8c9a	27.9.A	1.2
LEZ	meg.27.8c9a	27.8.C	5.1
LEZ	meg.27.8c9a	27.9.A	5.1
MNZ	ank.27.78abd	27.7.B	3.7
MNZ	ank.27.78abd	27.7.C.1	3.7
MNZ	ank.27.78abd	27.7.C.2	3.7
MNZ	ank.27.78abd	27.7.D	3.7
MNZ	ank.27.78abd	27.7.E	3.7
MNZ	ank.27.78abd	27.7.F	3.7
MNZ	ank.27.78abd	27.7.G	3.7
MNZ	ank.27.78abd	27.7.H	3.7
MNZ	ank.27.78abd	27.7.J.1	3.7
MNZ	ank.27.78abd	27.7.J.2	3.7
MNZ	ank.27.78abd	27.7.K.1	3.7
MNZ	ank.27.78abd	27.7.K.2	3.7
MNZ	ank.27.78abd	27.8.A	3.7
MNZ	ank.27.78abd	27.8.B	3.7
MNZ	ank.27.78abd	27.8.D.1	3.7
MNZ	ank.27.78abd	27.8.D.2	3.7
MNZ	ank.27.8c9a	27.8.C	2.6
MNZ	ank.27.8c9a	27.9.A	2.6
MNZ	ank-gsa05	SA 5	2.0
MNZ	ank-gsa06	SA 6	2.0
MNZ	mon.27.78abd	27.7.B	1.4
MNZ	mon.27.78abd	27.7.C.1	1.4
MNZ	mon.27.78abd	27.7.C.2	1.4
MNZ	mon.27.78abd	27.7.D	1.4

Species code	Fishstock	Sub FAO Division	Splitting value
MNZ	mon.27.78abd	27.7.E	1.4
MNZ	mon.27.78abd	27.7.F	1.4
MNZ	mon.27.78abd	27.7.G	1.4
MNZ	mon.27.78abd	27.7.H	1.4
MNZ	mon.27.78abd	27.7.J.1	1.4
MNZ	mon.27.78abd	27.7.J.2	1.4
MNZ	mon.27.78abd	27.7.K.1	1.4
MNZ	mon.27.78abd	27.7.K.2	1.4
MNZ	mon.27.78abd	27.8.A	1.4
MNZ	mon.27.78abd	27.8.B	1.4
MNZ	mon.27.78abd	27.8.D.1	1.4
MNZ	mon.27.78abd	27.8.D.2	1.4
MNZ	mon.27.8c9a	27.8.C	1.6
MNZ	mon.27.8c9a	27.9.A	1.6
MNZ	mon-gsa01_05_06_07	SA 5	2.0
MNZ	mon-gsa01_05_06_07	SA 6	2.0
MON	ank.27.78abd	27.7.B	3.7
MON	ank.27.78abd	27.7.C.1	3.7
MON	ank.27.78abd	27.7.C.2	3.7
MON	ank.27.78abd	27.7.D	3.7
MON	ank.27.78abd	27.7.E	3.7
MON	ank.27.78abd	27.7.F	3.7
MON	ank.27.78abd	27.7.G	3.7
MON	ank.27.78abd	27.7.H	3.7
MON	ank.27.78abd	27.7.J.1	3.7
MON	ank.27.78abd	27.7.J.2	3.7
MON	ank.27.78abd	27.7.K.1	3.7
MON	ank.27.78abd	27.7.K.2	3.7
MON	ank.27.78abd	27.8.A	3.7
MON	ank.27.78abd	27.8.B	3.7
MON	ank.27.78abd	27.8.D.1	3.7
MON	ank.27.78abd	27.8.D.2	3.7
MON	mon.27.78abd	27.7.B	1.4
MON	mon.27.78abd	27.7.C.1	1.4
MON	mon.27.78abd	27.7.C.2	1.4
MON	mon.27.78abd	27.7.D	1.4
MON	mon.27.78abd	27.7.E	1.4
MON	mon.27.78abd	27.7.F	1.4
MON	mon.27.78abd	27.7.G	1.4
MON	mon.27.78abd	27.7.H	1.4
MON	mon.27.78abd	27.7.J.1	1.4
MON	mon.27.78abd	27.7.J.2	1.4

Species code	Fishstock	Sub FAO Division	Splitting value
MON	mon.27.78abd	27.7.K.1	1.4
MON	mon.27.78abd	27.7.K.2	1.4
MON	mon.27.78abd	27.8.A	1.4
MON	mon.27.78abd	27.8.B	1.4
MON	mon.27.78abd	27.8.D.1	1.4
MON	mon.27.78abd	27.8.D.2	1.4
MTS	mts-gsa17	SA 17	2.0
MTS	mts-gsa17_18	SA 17	2.0
MUT	mut-gsa15	SA 15	2.0
MUT	mut-gsa15_16	SA 15	2.0
MUT	mut-gsa15_16	SA 16	2.0
MUT	mut-gsa16	SA 16	2.0
NEP	nep.fu.10	27.4.A	288.0
NEP	nep.fu.11	27.6.A	4.2
NEP	nep.fu.12	27.6.A	3.4
NEP	nep.fu.13	27.6.A	2.1
NEP	nep.fu.14	27.7.A	18481.8
NEP	nep.fu.15	27.7.A	1.1
NEP	nep.fu.16	27.7.B	1.5
NEP	nep.fu.16	27.7.J	1.4
NEP	nep.fu.16	27.7.J.1	1.4
NEP	nep.fu.16	27.7.J.2	1.4
NEP	nep.fu.17	27.7.B	2.9
NEP	nep.fu.19	27.7.A	15.2
NEP	nep.fu.19	27.7.G	8.2
NEP	nep.fu.19	27.7.J	3.5
NEP	nep.fu.19	27.7.J.1	3.5
NEP	nep.fu.19	27.7.J.2	3.5
NEP	nep.fu.2021	27.7.G	2.9
NEP	nep.fu.22	27.7.G	1.9
NEP	nep.fu.25	27.8.C	1.3
NEP	nep.fu.2627	27.9.A	33.9
NEP	nep.fu.2829	27.9.A	1.3
NEP	nep.fu.30	27.9.A	5.1
NEP	nep.fu.31	27.8.C	3.9
NEP	nep.fu.32	27.4.A	42.2
NEP	nep.fu.33	27.4.B	6.3
NEP	nep.fu.34	27.4.B	15.4
NEP	nep.fu.5	27.4.B	5.3
NEP	nep.fu.6	27.4.B	3.4
NEP	nep.fu.7	27.4.A	1.2
NEP	nep.fu.8	27.4.B	3.4

Species code	Fishstock	Sub FAO Division	Splitting value
NEP	nep.fu.9	27.4.A	5.9
NOP	nop.27.3a4	27.3.A	1.5
NOP	nop.27.3a4	27.4.A	1.5
NOP	nop.27.3a4	27.4.B	1.5
NOP	nop.27.3a4	27.4.C	1.5
NOP	nop-34-june	27.3.A	2.9
NOP	nop-34-june	27.4.A	2.9
NOP	nop-34-june	27.4.B	2.9
NOP	nop-34-june	27.4.C	2.9
PIL	pil-gsa01	SA 1	2.0
PIL	pil-gsa01-03	SA 1	2.0
PIL	pil-gsa22	SA 22	2.0
PIL	pil-gsa22_23	SA 22	2.0
PRA	pra.27.3a4a	27.4.A	1.0
PRA	pra.27.4a	27.4.A	2285.2
REB	reb.2127.dp	21.1	1.1
REB	reb.2127.dp	21.2	1.1
REB	reb.2127.dp	27.12.A	1.1
REB	reb.2127.dp	27.12.A.1	1.1
REB	reb.2127.dp	27.12.A.2	1.1
REB	reb.2127.dp	27.12.A.3	1.1
REB	reb.2127.dp	27.12.A.4	1.1
REB	reb.2127.dp	27.12.B	1.1
REB	reb.2127.dp	27.12.C	1.1
REB	reb.2127.dp	27.14.A	1.5
REB	reb.2127.dp	27.14.B	1.7
REB	reb.2127.dp	27.14.B.1	1.7
REB	reb.2127.dp	27.14.B.2	1.7
REB	reb.2127.dp	27.5.A	1.5
REB	reb.2127.dp	27.5.A.1	1.5
REB	reb.2127.dp	27.5.A.2	1.5
REB	reb.2127.dp	27.5.B	1.1
REB	reb.2127.dp	27.5.B.1	1.1
REB	reb.2127.dp	27.5.B.1.A	1.1
REB	reb.2127.dp	27.5.B.1.B	1.1
REB	reb.2127.dp	27.5.B.2	1.1
REB	reb.2127.sp	21.1	13.4
REB	reb.2127.sp	21.2	13.4
REB	reb.2127.sp	27.12.A	13.4
REB	reb.2127.sp	27.12.A.1	13.4
REB	reb.2127.sp	27.12.A.2	13.4
REB	reb.2127.sp	27.12.A.3	13.4

Species code	Fishstock	Sub FAO Division	Splitting value
REB	reb.2127.sp	27.12.A.4	13.4
REB	reb.2127.sp	27.12.B	13.4
REB	reb.2127.sp	27.12.C	13.4
REB	reb.2127.sp	27.14.A	18.4
REB	reb.2127.sp	27.14.B	20.8
REB	reb.2127.sp	27.14.B.1	20.8
REB	reb.2127.sp	27.14.B.2	20.8
REB	reb.2127.sp	27.5.A	18.4
REB	reb.2127.sp	27.5.A.1	18.4
REB	reb.2127.sp	27.5.A.2	18.4
REB	reb.2127.sp	27.5.B	13.4
REB	reb.2127.sp	27.5.B.1	13.4
REB	reb.2127.sp	27.5.B.1.A	13.4
REB	reb.2127.sp	27.5.B.1.B	13.4
REB	reb.2127.sp	27.5.B.2	13.4
REB	reb.27.14b	27.14.B	8.7
REB	reb.27.14b	27.14.B.1	8.7
REB	reb.27.14b	27.14.B.2	8.7
REB	reb.27.5a14	27.14.A	3.6
REB	reb.27.5a14	27.14.B	4.1
REB	reb.27.5a14	27.14.B.1	4.1
REB	reb.27.5a14	27.14.B.2	4.1
REB	reb.27.5a14	27.5.A	3.6
REB	reb.27.5a14	27.5.A.1	3.6
REB	reb.27.5a14	27.5.A.2	3.6
RED	reb.2127.dp	21.1	1.1
RED	reb.2127.dp	21.2	1.1
RED	reb.2127.dp	27.12.A	3.0
RED	reb.2127.dp	27.12.A.1	3.0
RED	reb.2127.dp	27.12.A.2	3.0
RED	reb.2127.dp	27.12.A.3	3.0
RED	reb.2127.dp	27.12.A.4	3.0
RED	reb.2127.dp	27.12.B	3.0
RED	reb.2127.dp	27.12.C	3.0
RED	reb.2127.dp	27.14.A	3.0
RED	reb.2127.dp	27.14.B	3.0
RED	reb.2127.dp	27.14.B.1	3.0
RED	reb.2127.dp	27.14.B.2	3.0
RED	reb.2127.dp	27.5.A	3.0
RED	reb.2127.dp	27.5.A.1	3.0
RED	reb.2127.dp	27.5.A.2	3.0
RED	reb.2127.dp	27.5.B	3.0

Species code	Fishstock	Sub FAO Division	Splitting value
RED	reb.2127.dp	27.5.B.1	1.1
RED	reb.2127.dp	27.5.B.1.A	3.0
RED	reb.2127.dp	27.5.B.1.B	3.0
RED	reb.2127.dp	27.5.B.2	3.0
RED	reb.2127.sp	21.1	13.4
RED	reb.2127.sp	21.2	13.4
RED	reb.2127.sp	27.12.A	37.0
RED	reb.2127.sp	27.12.A.1	37.0
RED	reb.2127.sp	27.12.A.2	37.0
RED	reb.2127.sp	27.12.A.3	37.0
RED	reb.2127.sp	27.12.A.4	37.0
RED	reb.2127.sp	27.12.B	37.0
RED	reb.2127.sp	27.12.C	37.0
RED	reb.2127.sp	27.14.A	37.0
RED	reb.2127.sp	27.14.B	37.0
RED	reb.2127.sp	27.14.B.1	37.0
RED	reb.2127.sp	27.14.B.2	37.0
RED	reb.2127.sp	27.5.A	37.0
RED	reb.2127.sp	27.5.A.1	37.0
RED	reb.2127.sp	27.5.A.2	37.0
RED	reb.2127.sp	27.5.B	37.0
RED	reb.2127.sp	27.5.B.1	13.4
RED	reb.2127.sp	27.5.B.1.A	37.0
RED	reb.2127.sp	27.5.B.1.B	37.0
RED	reb.2127.sp	27.5.B.2	37.0
RED	reb.27.1-2	27.1	1.3
RED	reb.27.1-2	27.1.A	1.3
RED	reb.27.1-2	27.1.B	1.3
RED	reb.27.1-2	27.2.A	1.3
RED	reb.27.1-2	27.2.A.1	1.3
RED	reb.27.1-2	27.2.A.2	1.3
RED	reb.27.1-2	27.2.B	1.3
RED	reb.27.1-2	27.2.B.1	1.3
RED	reb.27.1-2	27.2.B.2	1.3
RED	reg.27.1-2	27.1	4.7
RED	reg.27.1-2	27.1.A	4.7
RED	reg.27.1-2	27.1.B	4.7
RED	reg.27.1-2	27.2.A	4.7
RED	reg.27.1-2	27.2.A.1	4.7
RED	reg.27.1-2	27.2.A.2	4.7
RED	reg.27.1-2	27.2.B	4.7
RED	reg.27.1-2	27.2.B.1	4.7

Species code	Fishstock	Sub FAO Division	Splitting value
RED	reg.27.1-2	27.2.B.2	4.7
RED	reg.27.561214	27.12.A	1.6
RED	reg.27.561214	27.12.A.1	1.6
RED	reg.27.561214	27.12.A.2	1.6
RED	reg.27.561214	27.12.A.3	1.6
RED	reg.27.561214	27.12.A.4	1.6
RED	reg.27.561214	27.12.B	1.6
RED	reg.27.561214	27.12.C	1.6
RED	reg.27.561214	27.14.A	1.6
RED	reg.27.561214	27.14.B	1.6
RED	reg.27.561214	27.14.B.1	1.6
RED	reg.27.561214	27.14.B.2	1.6
RED	reg.27.561214	27.5.A	1.6
RED	reg.27.561214	27.5.A.1	1.6
RED	reg.27.561214	27.5.A.2	1.6
RED	reg.27.561214	27.5.B	1.6
RED	reg.27.561214	27.5.B.1.A	1.6
RED	reg.27.561214	27.5.B.1.B	1.6
RED	reg.27.561214	27.5.B.2	1.6
RNG	rng.27.1245a8914ab	27.14.B	9.2
RNG	rng.27.1245a8914ab	27.5.A	9.2
RNG	rng.27.5a10b12ac14b	27.14.B	1.1
RNG	rng.27.5a10b12ac14b	27.5.A	1.1
SAN	san.sa.1r	27.4.B	1.7
SAN	san.sa.1r	27.4.C	1.3
SAN	san.sa.2r	27.4.B	6.7
SAN	san.sa.2r	27.4.C	4.9
SAN	san.sa.3r	27.3.A	1.0
SAN	san.sa.3r	27.4.A	1.1
SAN	san.sa.3r	27.4.B	4.1
SAN	san.sa.4	27.4.A	8.6
SAN	san.sa.4	27.4.B	31.2
SAN	san.sa.6	27.3.A	482.0



## 15 ANNEX V – SAR STOCK SELECTION

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2018	Sole	SOL	Sole (Solea solea) in Division 7.a (Irish Sea)	FALSE	a
2017	Sole	SOL	Sole (Solea solea) in Division 7.a (Irish Sea)	TRUE	a
2016	Sole	SOL	Sole (Solea solea) in Division 7.a (Irish Sea)	TRUE	a
2015	Sole	SOL	Sole (Solea solea) in Division 7.a (Irish Sea)	TRUE	a
2014	Sole	SOL	Sole (Solea solea) in Division 7.a (Irish Sea)	TRUE	a
2013	Sole	SOL	Sole (Solea solea) in Division 7.a (Irish Sea)	TRUE	a
2012	Sole	SOL	Sole (Solea solea) in Division 7.a (Irish Sea)	TRUE	a
2011	Sole	SOL	Sole (Solea solea) in Division 7.a (Irish Sea)	TRUE	a
2010	Sole	SOL	Sole (Solea solea) in Division 7.a (Irish Sea)	TRUE	a
2009	Sole	SOL	Sole (Solea solea) in Division 7.a (Irish Sea)	TRUE	a
2017	Sole	SOL	Sole (Solea solea) in divisions 8.c and 9.a (Cantabrian Sea and Atlantic Iberian waters)	FALSE	a
2016	Sole	SOL	Sole (Solea solea) in divisions 8.c and 9.a (Cantabrian Sea and Atlantic Iberian waters)	FALSE	a
2015	Sole	SOL	Sole (Solea solea) in divisions 8.c and 9.a (Cantabrian Sea and Atlantic Iberian waters)	FALSE	a
2014	Sole	SOL	Sole (Solea solea) in divisions 8.c and 9.a (Cantabrian Sea and Atlantic Iberian waters)	FALSE	a
2013	Sole	SOL	Sole (Solea solea) in divisions 8.c and 9.a (Cantabrian Sea and Atlantic Iberian waters)	FALSE	a
2012	Sole	SOL	Sole (Solea solea) in divisions 8.c and 9.a (Cantabrian Sea and Atlantic Iberian waters)	FALSE	a
2011	Sole	SOL	Sole (Solea solea) in divisions 8.c and 9.a (Cantabrian Sea and Atlantic Iberian waters)	FALSE	a
2010	Sole	SOL	Sole (Solea solea) in divisions 8.c and 9.a (Cantabrian Sea and Atlantic Iberian waters)	FALSE	a
2009	Sole	SOL	Sole (Solea solea) in divisions 8.c and 9.a	FALSE	a

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
			(Cantabrian Sea and Atlantic Iberian waters)		
2017	Whiting	WHG	Whiting (Merlangius merlangus) in Division 6.a (West of Scotland)	TRUE	ab
2016	Whiting	WHG	Whiting (Merlangius merlangus) in Division 6.a (West of Scotland)	TRUE	ab
2015	Whiting	WHG	Whiting (Merlangius merlangus) in Division 6.a (West of Scotland)	TRUE	ab
2014	Whiting	WHG	Whiting (Merlangius merlangus) in Division 6.a (West of Scotland)	TRUE	ab
2013	Whiting	WHG	Whiting (Merlangius merlangus) in Division 6.a (West of Scotland)	TRUE	ab
2012	Whiting	WHG	Whiting (Merlangius merlangus) in Division 6.a (West of Scotland)	TRUE	ab
2011	Whiting	WHG	Whiting (Merlangius merlangus) in Division 6.a (West of Scotland)	TRUE	a
2010	Whiting	WHG	Whiting (Merlangius merlangus) in Division 6.a (West of Scotland)	TRUE	ab
2009	Whiting	WHG	Whiting (Merlangius merlangus) in Division 6.a (West of Scotland)	TRUE	ab
2017	Whiting	WHG	Whiting in Division VIIa (Irish Sea)	TRUE	a
2016	Whiting	WHG	Whiting in Division VIIa (Irish Sea)	TRUE	a
2015	Whiting	WHG	Whiting in Division VIIa (Irish Sea)	TRUE	a
2014	Whiting	WHG	Whiting in Division VIIa (Irish Sea)	TRUE	a
2013	Whiting	WHG	Whiting in Division VIIa (Irish Sea)	TRUE	a
2012	Whiting	WHG	Whiting in Division VIIa (Irish Sea)	TRUE	a
2011	Whiting	WHG	Whiting in Division VIIa (Irish Sea)	TRUE	a
2010	Whiting	WHG	Whiting in Division VIIa (Irish Sea)	TRUE	a
2009	Whiting	WHG	Whiting in Division VIIa (Irish Sea)	TRUE	a
2017	saithe	POK	Saithe (Pollachius virens) in Division 5.b (Faroes grounds)	FALSE	a
2016	saithe	POK	Saithe (Pollachius virens) in Division 5.b (Faroes grounds)	FALSE	a
2015	saithe	POK	Saithe (Pollachius virens) in Division 5.b (Faroes grounds)	FALSE	a

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2014	saithe	POK	Saithe ( <i>Pollachius virens</i> ) in Division 5.b (Faroes grounds)	FALSE	a
2013	saithe	POK	Saithe ( <i>Pollachius virens</i> ) in Division 5.b (Faroes grounds)	FALSE	a
2012	saithe	POK	Saithe ( <i>Pollachius virens</i> ) in Division 5.b (Faroes grounds)	FALSE	a
2011	saithe	POK	Saithe ( <i>Pollachius virens</i> ) in Division 5.b (Faroes grounds)	FALSE	a
2010	saithe	POK	Saithe ( <i>Pollachius virens</i> ) in Division 5.b (Faroes grounds)	FALSE	a
2009	saithe	POK	Saithe ( <i>Pollachius virens</i> ) in Division 5.b (Faroes grounds)	FALSE	a
2017	saithe	POK	Saithe ( <i>Pollachius virens</i> ) in subareas 1 and 2 (Northeast Arctic)	FALSE	a
2016	saithe	POK	Saithe ( <i>Pollachius virens</i> ) in subareas 1 and 2 (Northeast Arctic)	FALSE	a
2015	saithe	POK	Saithe ( <i>Pollachius virens</i> ) in subareas 1 and 2 (Northeast Arctic)	FALSE	a
2014	saithe	POK	Saithe ( <i>Pollachius virens</i> ) in subareas 1 and 2 (Northeast Arctic)	FALSE	a
2013	saithe	POK	Saithe ( <i>Pollachius virens</i> ) in subareas 1 and 2 (Northeast Arctic)	FALSE	a
2012	saithe	POK	Saithe ( <i>Pollachius virens</i> ) in subareas 1 and 2 (Northeast Arctic)	FALSE	a
2011	saithe	POK	Saithe ( <i>Pollachius virens</i> ) in subareas 1 and 2 (Northeast Arctic)	FALSE	a
2010	saithe	POK	Saithe ( <i>Pollachius virens</i> ) in subareas 1 and 2 (Northeast Arctic)	FALSE	a
2009	saithe	POK	Saithe ( <i>Pollachius virens</i> ) in subareas 1 and 2 (Northeast Arctic)	FALSE	a
2017	saithe	POK	Saithe ( <i>Pollachius virens</i> ) in subareas 4 and 6, and in Division 3.a (North Sea, Rockall and West of Scotland, Skagerrak and Kattegat)	FALSE	a
2016	saithe	POK	Saithe ( <i>Pollachius virens</i> ) in subareas 4 and 6, and in Division 3.a (North Sea, Rockall and West of Scotland, Skagerrak and Kattegat)	FALSE	a
2015	saithe	POK	Saithe ( <i>Pollachius virens</i> ) in subareas 4 and 6, and	FALSE	a

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
			in Division 3.a (North Sea, Rockall and West of Scotland, Skagerrak and Kattegat)		
2014	saithe	POK	Saithe ( <i>Pollachius virens</i> ) in subareas 4 and 6, and in Division 3.a (North Sea, Rockall and West of Scotland, Skagerrak and Kattegat)	FALSE	a
2013	saithe	POK	Saithe ( <i>Pollachius virens</i> ) in subareas 4 and 6, and in Division 3.a (North Sea, Rockall and West of Scotland, Skagerrak and Kattegat)	FALSE	a
2012	saithe	POK	Saithe ( <i>Pollachius virens</i> ) in subareas 4 and 6, and in Division 3.a (North Sea, Rockall and West of Scotland, Skagerrak and Kattegat)	FALSE	a
2011	saithe	POK	Saithe ( <i>Pollachius virens</i> ) in subareas 4 and 6, and in Division 3.a (North Sea, Rockall and West of Scotland, Skagerrak and Kattegat)	FALSE	a
2010	saithe	POK	Saithe ( <i>Pollachius virens</i> ) in subareas 4 and 6, and in Division 3.a (North Sea, Rockall and West of Scotland, Skagerrak and Kattegat)	FALSE	a
2009	saithe	POK	Saithe ( <i>Pollachius virens</i> ) in subareas 4 and 6, and in Division 3.a (North Sea, Rockall and West of Scotland, Skagerrak and Kattegat)	FALSE	a
2017	spiny dogfish	DGS	Spurdog ( <i>Squalus acanthias</i> ) in the Northeast Atlantic	TRUE	b
2016	spiny dogfish	DGS	Spurdog ( <i>Squalus acanthias</i> ) in the Northeast Atlantic	TRUE	b
2015	spiny dogfish	DGS	Spurdog ( <i>Squalus acanthias</i> ) in the Northeast Atlantic	TRUE	b
2014	spiny dogfish	DGS	Spurdog ( <i>Squalus acanthias</i> ) in the Northeast Atlantic	TRUE	b
2013	spiny dogfish	DGS	Spurdog ( <i>Squalus acanthias</i> ) in the Northeast Atlantic	TRUE	b
2012	spiny dogfish	DGS	Spurdog ( <i>Squalus acanthias</i> ) in the Northeast Atlantic	TRUE	b

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2011	spiny dogfish	DGS	Spurdog ( <i>Squalus acanthias</i> ) in the Northeast Atlantic	TRUE	b
2010	spiny dogfish	DGS	Spurdog ( <i>Squalus acanthias</i> ) in the Northeast Atlantic	TRUE	b
2009	spiny dogfish	DGS	Spurdog ( <i>Squalus acanthias</i> ) in the Northeast Atlantic	TRUE	c
2017	horse mackerel	HOM, JAX	Horse mackerel ( <i>Trachurus trachurus</i> ) in Subarea 8 and divisions 2.a, 4.a, 5.b, 6.a, 7.a-c, and 7.e-k (the Northeast Atlantic)	FALSE	a
2016	horse mackerel	HOM, JAX	Horse mackerel ( <i>Trachurus trachurus</i> ) in Divisions IIa. IVa. Vb. VIa. VIIa-c. e-k. VIII (Western stock)	FALSE	a
2015	horse mackerel	HOM, JAX	Horse mackerel ( <i>Trachurus trachurus</i> ) in Divisions IIa. IVa. Vb. VIa. VIIa-c. e-k. VIII (Western stock)	FALSE	a
2014	horse mackerel	HOM, JAX	Horse mackerel ( <i>Trachurus trachurus</i> ) in Divisions IIa. IVa. Vb. VIa. VIIa-c. e-k. VIII (Western stock)	FALSE	a
2013	horse mackerel	HOM, JAX	Horse mackerel ( <i>Trachurus trachurus</i> ) in Divisions IIa. IVa. Vb. VIa. VIIa-c. e-k. VIII (Western stock)	FALSE	a
2012	horse mackerel	HOM, JAX	Horse mackerel ( <i>Trachurus trachurus</i> ) in Divisions IIa. IVa. Vb. VIa. VIIa-c. e-k. VIII (Western stock)	FALSE	a
2011	horse mackerel	HOM, JAX	Horse mackerel ( <i>Trachurus trachurus</i> ) in Divisions IIa. IVa. Vb. VIa. VIIa-c. e-k. VIII (Western stock)	FALSE	a
2010	horse mackerel	HOM, JAX	Horse mackerel ( <i>Trachurus trachurus</i> ) in Divisions IIa. IVa. Vb. VIa. VIIa-c. e-k. VIII (Western stock)	FALSE	a
2009	horse mackerel	HOM, JAX	Horse mackerel ( <i>Trachurus trachurus</i> ) in Divisions IIa. IVa. Vb. VIa. VIIa-c. e-k. VIII (Western stock)	FALSE	a
2017	Cod	COD	ICES Subarea 14 and NAFO Division 1.F (East Greenland, South Greenland)	FALSE	ab

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2016	Cod	COD	ICES Subarea 14 and NAFO Division 1.F (East Greenland, South Greenland)	FALSE	ab
2015	Cod	COD	ICES Subarea 14 and NAFO Division 1.F (East Greenland, South Greenland)	TRUE	b
2014	Cod	COD	ICES Subarea 14 and NAFO Division 1.F (East Greenland, South Greenland)	TRUE	b
2013	Cod	COD	ICES Subarea 14 and NAFO Division 1.F (East Greenland, South Greenland)	TRUE	b
2012	Cod	COD	ICES Subarea 14 and NAFO Division 1.F (East Greenland, South Greenland)	TRUE	b
2011	Cod	COD	ICES Subarea 14 and NAFO Division 1.F (East Greenland, South Greenland)	TRUE	b
2010	Cod	COD	ICES Subarea 14 and NAFO Division 1.F (East Greenland, South Greenland)	TRUE	b
2009	Cod	COD	ICES Subarea 14 and NAFO Division 1.F (East Greenland, South Greenland)	TRUE	b
2017	cod	COD	Cod (Gadus morhua) in Subarea 4, Division 7.d, and Subdivision 20 (North Sea, eastern English Channel, Skagerrak)	TRUE	a
2016	cod	COD	Cod (Gadus morhua) in Subarea 4, Division 7.d, and Subdivision 20 (North Sea, eastern English Channel, Skagerrak)	FALSE	a
2015	cod	COD	Cod (Gadus morhua) in Subarea 4, Division 7.d, and Subdivision 20 (North Sea, eastern English Channel, Skagerrak)	FALSE	a
2014	cod	COD	Cod (Gadus morhua) in Subarea 4, Division 7.d, and Subdivision 20 (North Sea, eastern English Channel, Skagerrak)	TRUE	a
2013	cod	COD	Cod (Gadus morhua) in Subarea 4, Division 7.d, and Subdivision 20	TRUE	a

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
			(North Sea, eastern English Channel, Skagerrak)		
2012	cod	COD	Cod (Gadus morhua) in Subarea 4, Division 7.d, and Subdivision 20 (North Sea, eastern English Channel, Skagerrak)	TRUE	a
2011	cod	COD	Cod (Gadus morhua) in Subarea 4, Division 7.d, and Subdivision 20 (North Sea, eastern English Channel, Skagerrak)	TRUE	a
2010	cod	COD	Cod (Gadus morhua) in Subarea 4, Division 7.d, and Subdivision 20 (North Sea, eastern English Channel, Skagerrak)	TRUE	a
2009	cod	COD	Cod (Gadus morhua) in Subarea 4, Division 7.d, and Subdivision 20 (North Sea, eastern English Channel, Skagerrak)	TRUE	a
2017	cod	COD	Cod (Gadus morhua) in divisions 7.e-k (western English Channel and southern Celtic Seas)	TRUE	a
2016	cod	COD	Cod (Gadus morhua) in divisions 7.e-k (western English Channel and southern Celtic Seas)	TRUE	a
2015	cod	COD	Cod (Gadus morhua) in divisions 7.e-k (western English Channel and southern Celtic Seas)	TRUE	a
2014	cod	COD	Cod (Gadus morhua) in divisions 7.e-k (western English Channel and southern Celtic Seas)	TRUE	a
2013	cod	COD	Cod (Gadus morhua) in divisions 7.e-k (western English Channel and southern Celtic Seas)	FALSE	a
2012	cod	COD	Cod (Gadus morhua) in divisions 7.e-k (western English Channel and southern Celtic Seas)	FALSE	a
2011	cod	COD	Cod (Gadus morhua) in divisions 7.e-k (western English Channel and southern Celtic Seas)	FALSE	a
2010	cod	COD	Cod (Gadus morhua) in divisions 7.e-k (western English Channel and southern Celtic Seas)	TRUE	a

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2009	cod	COD	Cod (Gadus morhua) in divisions 7.e-k (western English Channel and southern Celtic Seas)	TRUE	a
2017	cod	COD	Cod (Gadus morhua) in Subdivisions 22-24 (Western Baltic Sea)	TRUE	a
2016	cod	COD	Cod (Gadus morhua) in Subdivisions 22-24 (Western Baltic Sea)	TRUE	a
2015	cod	COD	Cod (Gadus morhua) in Subdivisions 22-24 (Western Baltic Sea)	FALSE	a
2014	cod	COD	Cod (Gadus morhua) in Subdivisions 22-24 (Western Baltic Sea)	FALSE	a
2013	cod	COD	Cod (Gadus morhua) in Subdivisions 22-24 (Western Baltic Sea)	TRUE	a
2012	cod	COD	Cod (Gadus morhua) in Subdivisions 22-24 (Western Baltic Sea)	FALSE	a
2011	cod	COD	Cod (Gadus morhua) in Subdivisions 22-24 (Western Baltic Sea)	TRUE	a
2010	cod	COD	Cod (Gadus morhua) in Subdivisions 22-24 (Western Baltic Sea)	TRUE	a
2009	cod	COD	Cod (Gadus morhua) in Subdivisions 22-24 (Western Baltic Sea)	FALSE	a
2017	cod	COD	Cod (Gadus morhua) in Division 6.a (West of Scotland)	TRUE	a
2016	cod	COD	Cod (Gadus morhua) in Division 6.a (West of Scotland)	TRUE	a
2015	cod	COD	Cod (Gadus morhua) in Division 6.a (West of Scotland)	TRUE	a
2014	cod	COD	Cod (Gadus morhua) in Division 6.a (West of Scotland)	TRUE	a
2013	cod	COD	Cod (Gadus morhua) in Division 6.a (West of Scotland)	TRUE	a
2012	cod	COD	Cod (Gadus morhua) in Division 6.a (West of Scotland)	TRUE	a
2011	cod	COD	Cod (Gadus morhua) in Division 6.a (West of Scotland)	TRUE	a
2010	cod	COD	Cod (Gadus morhua) in Division 6.a (West of Scotland)	TRUE	a
2009	cod	COD	Cod (Gadus morhua) in Division 6.a (West of Scotland)	TRUE	a



Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2017	cod	COD	Cod (Gadus morhua) in Subdivision 5.b.1 (Faroe Plateau)	FALSE	ab
2016	cod	COD	Cod (Gadus morhua) in Subdivision 5.b.1 (Faroe Plateau)	TRUE	b
2015	cod	COD	Cod (Gadus morhua) in Subdivision 5.b.1 (Faroe Plateau)	TRUE	ab
2014	cod	COD	Cod (Gadus morhua) in Subdivision 5.b.1 (Faroe Plateau)	TRUE	ab
2013	cod	COD	Cod (Gadus morhua) in Subdivision 5.b.1 (Faroe Plateau)	TRUE	ab
2012	cod	COD	Cod (Gadus morhua) in Subdivision 5.b.1 (Faroe Plateau)	TRUE	ab
2011	cod	COD	Cod (Gadus morhua) in Subdivision 5.b.1 (Faroe Plateau)	TRUE	ab
2010	cod	COD	Cod (Gadus morhua) in Subdivision 5.b.1 (Faroe Plateau)	TRUE	ab
2009	cod	COD	Cod (Gadus morhua) in Subdivision 5.b.1 (Faroe Plateau)	TRUE	ab
2017	cod	COD	Cod (Gadus morhua) in Subdivision 7a	FALSE	b
2016	cod	COD	Cod (Gadus morhua) in Subdivision 7a	TRUE	b
2015	cod	COD	Cod (Gadus morhua) in Subdivision 7a	TRUE	b
2014	cod	COD	Cod (Gadus morhua) in Subdivision 7a	TRUE	b
2013	cod	COD	Cod (Gadus morhua) in Subdivision 7a	TRUE	b
2012	cod	COD	Cod (Gadus morhua) in Subdivision 7a	TRUE	b
2011	cod	COD	Cod (Gadus morhua) in Subdivision 7a	TRUE	b
2010	cod	COD	Cod (Gadus morhua) in Subdivision 7a	TRUE	b
2009	cod	COD	Cod (Gadus morhua) in Subdivision 7a	TRUE	b
2017	Atlantic salmon	SAL	Subdivisions 22-31	FALSE	b
2016	Atlantic salmon	SAL	Subdivisions 22-31	FALSE	b
2015	Atlantic salmon	SAL	Subdivisions 22-31	FALSE	b
2014	Atlantic salmon	SAL	Subdivisions 22-31	FALSE	b
2013	Atlantic salmon	SAL	Subdivisions 22-31	TRUE	b
2012	Atlantic salmon	SAL	Subdivisions 22-31	TRUE	b
2011	Atlantic salmon	SAL	Subdivisions 22-31	TRUE	b
2010	Atlantic salmon	SAL	Subdivisions 22-31	FALSE	b
2009	Atlantic salmon	SAL	Subdivisions 22-31	FALSE	b

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2017	Atlantic salmon	SAL	Subdivision 32	TRUE	b
2016	Atlantic salmon	SAL	Subdivision 32	TRUE	b
2015	Atlantic salmon	SAL	Subdivision 32	TRUE	b
2014	Atlantic salmon	SAL	Subdivision 32	TRUE	b
2013	Atlantic salmon	SAL	Subdivision 32	TRUE	b
2012	Atlantic salmon	SAL	Subdivision 32	TRUE	b
2011	Atlantic salmon	SAL	Subdivision 32	TRUE	b
2010	Atlantic salmon	SAL	Subdivision 32	TRUE	b
2009	Atlantic salmon	SAL	Subdivision 32	TRUE	b
2017	porbeagle	POR	nea, nwa, sea, swa, med	TRUE	cd
2016	porbeagle	POR	nea, nwa, sea, swa, med	TRUE	cd
2015	porbeagle	POR	nea, nwa, sea, swa, med	TRUE	cd
2014	porbeagle	POR	nea, nwa, sea, swa, med	TRUE	cd
2013	porbeagle	POR	nea, nwa, sea, swa, med	TRUE	cd
2012	porbeagle	POR	nea, nwa, sea, swa, med	TRUE	c
2011	porbeagle	POR	nea, nwa, sea, swa, med	TRUE	c
2010	porbeagle	POR	nea, nwa, sea, swa, med	TRUE	c
2009	porbeagle	POR	nea, nwa, sea, swa, med	TRUE	c
2017	plaice	PLE	Plaice (Pleuronectes platessa) in Division 7.d (eastern English Channel)	FALSE	a
2016	plaice	PLE	Plaice (Pleuronectes platessa) in Division 7.d (eastern English Channel)	FALSE	a
2015	plaice	PLE	Plaice (Pleuronectes platessa) in Division 7.d (eastern English Channel)	FALSE	a
2014	plaice	PLE	Plaice (Pleuronectes platessa) in Division 7.d (eastern English Channel)	FALSE	a
2013	plaice	PLE	Plaice (Pleuronectes platessa) in Division 7.d (eastern English Channel)	FALSE	a
2012	plaice	PLE	Plaice (Pleuronectes platessa) in Division 7.d (eastern English Channel)	FALSE	a
2011	plaice	PLE	Plaice (Pleuronectes platessa) in Division 7.d (eastern English Channel)	FALSE	a
2010	plaice	PLE	Plaice (Pleuronectes platessa) in Division 7.d (eastern English Channel)	TRUE	a

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2009	plaice	PLE	Plaice ( <i>Pleuronectes platessa</i> ) in Division 7.d (eastern English Channel)	TRUE	a
2017	haddock	HAD	III, IV, VIa	FALSE	a
2016	haddock	HAD	III, IV, VIa	FALSE	a
2015	haddock	HAD	III, IV, VIa	FALSE	a
2014	haddock	HAD	III, IV, VIa	FALSE	a
2013	haddock	HAD	III, IV, VIa	FALSE	a
2012	haddock	HAD	III, IV, VIa	FALSE	a
2011	haddock	HAD	III, IV, VIa	FALSE	a
2010	haddock	HAD	III, IV, VIa	FALSE	a
2009	haddock	HAD	III, IV, VIa	FALSE	a
2017	anchovy	ANE	Anchovy ( <i>Engraulis encrasicolus</i> ) in Subarea 8 (Bay of Biscay)	FALSE	a
2016	anchovy	ANE	Anchovy ( <i>Engraulis encrasicolus</i> ) in Subarea 8 (Bay of Biscay)	FALSE	a
2015	anchovy	ANE	Anchovy ( <i>Engraulis encrasicolus</i> ) in Subarea 8 (Bay of Biscay)	FALSE	a
2014	anchovy	ANE	Anchovy ( <i>Engraulis encrasicolus</i> ) in Subarea 8 (Bay of Biscay)	FALSE	a
2013	anchovy	ANE	Anchovy ( <i>Engraulis encrasicolus</i> ) in Subarea 8 (Bay of Biscay)	FALSE	a
2012	anchovy	ANE	Anchovy ( <i>Engraulis encrasicolus</i> ) in Subarea 8 (Bay of Biscay)	FALSE	a
2011	anchovy	ANE	Anchovy ( <i>Engraulis encrasicolus</i> ) in Subarea 8 (Bay of Biscay)	FALSE	a
2010	anchovy	ANE	Anchovy ( <i>Engraulis encrasicolus</i> ) in Subarea 8 (Bay of Biscay)	FALSE	a
2009	anchovy	ANE	Anchovy ( <i>Engraulis encrasicolus</i> ) in Subarea 8 (Bay of Biscay)	TRUE	a
2017	bluefin tuna	BFT	Mediterranean	FALSE	b
2016	bluefin tuna	BFT	Mediterranean	FALSE	b
2015	bluefin tuna	BFT	Mediterranean	FALSE	b
2014	bluefin tuna	BFT	Mediterranean	FALSE	b
2013	bluefin tuna	BFT	Mediterranean	FALSE	b
2012	bluefin tuna	BFT	Mediterranean	FALSE	b
2011	bluefin tuna	BFT	Mediterranean	FALSE	b
2010	bluefin tuna	BFT	Mediterranean	FALSE	b
2009	bluefin tuna	BFT	Mediterranean	FALSE	b

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2017	bluefin tuna	BFT	Atlantic Ocean east of longitude 45° W	FALSE	b
2016	bluefin tuna	BFT	Atlantic Ocean east of longitude 45° W	FALSE	b
2015	bluefin tuna	BFT	Atlantic Ocean east of longitude 45° W	FALSE	b
2014	bluefin tuna	BFT	Atlantic Ocean east of longitude 45° W	FALSE	b
2013	bluefin tuna	BFT	Atlantic Ocean east of longitude 45° W	FALSE	b
2012	bluefin tuna	BFT	Atlantic Ocean east of longitude 45° W	FALSE	b
2011	bluefin tuna	BFT	Atlantic Ocean east of longitude 45° W	FALSE	b
2010	bluefin tuna	BFT	Atlantic Ocean east of longitude 45° W	FALSE	b
2009	bluefin tuna	BFT	Atlantic Ocean east of longitude 45° W	FALSE	b
2017	Turbot	TUR	Black Sea	TRUE	abc
2016	Turbot	TUR	Black Sea	TRUE	abc
2015	Turbot	TUR	Black Sea	TRUE	abc
2014	Turbot	TUR	Black Sea	TRUE	abc
2013	Turbot	TUR	Black Sea	TRUE	abc
2012	Turbot	TUR	Black Sea	TRUE	abc
2011	Turbot	TUR	Black Sea	TRUE	abc
2010	Turbot	TUR	Black Sea	TRUE	abc
2009	Turbot	TUR	Black Sea	TRUE	abc
2017	Nephrops	NEP	Norway lobster (Nephrops norvegicus) in Division 4.b, Functional Unit 6 (central North Sea, Farn Deep)	FALSE	a
2016	Nephrops	NEP	Norway lobster (Nephrops norvegicus) in Division 4.b, Functional Unit 6 (central North Sea, Farn Deep)	TRUE	a
2015	Nephrops	NEP	Norway lobster (Nephrops norvegicus) in Division 4.b, Functional Unit 6 (central North Sea, Farn Deep)	TRUE	a
2014	Nephrops	NEP	Norway lobster (Nephrops norvegicus) in Division 4.b, Functional Unit 6 (central North Sea, Farn Deep)	TRUE	a
2013	Nephrops	NEP	Norway lobster (Nephrops norvegicus) in Division 4.b, Functional Unit 6 (central North Sea, Farn Deep)	TRUE	a
2012	Nephrops	NEP	Norway lobster (Nephrops norvegicus) in Division 4.b, Functional Unit 6 (central North Sea, Farn Deep)	TRUE	a

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
			Unit 6 (central North Sea, Farn Deeps)		
2011	Nephrops	NEP	Norway lobster (Nephrops norvegicus) in Division 4.b, Functional Unit 6 (central North Sea, Farn Deeps)	FALSE	a
2010	Nephrops	NEP	Norway lobster (Nephrops norvegicus) in Division 4.b, Functional Unit 6 (central North Sea, Farn Deeps)	FALSE	a
2009	Nephrops	NEP	Norway lobster (Nephrops norvegicus) in Division 4.b, Functional Unit 6 (central North Sea, Farn Deeps)	FALSE	a
2017	Nephrops	NEP	IXa (FU 26 27)	TRUE	b
2016	Nephrops	NEP	IXa (FU 26 27)	TRUE	b
2015	Nephrops	NEP	IXa (FU 26 27)	TRUE	b
2014	Nephrops	NEP	IXa (FU 26 27)	TRUE	b
2013	Nephrops	NEP	IXa (FU 26 27)	TRUE	b
2012	Nephrops	NEP	IXa (FU 26 27)	TRUE	b
2011	Nephrops	NEP	IXa (FU 26 27)	TRUE	b
2010	Nephrops	NEP	IXa (FU 26 27)	TRUE	b
2009	Nephrops	NEP	IXa (FU 26 27)	TRUE	b
2017	Nephrops	NEP	Norway lobster (Nephrops norvegicus) in Division 8.c, Functional Unit 25 (southern Bay of Biscay and northern Galicia)	TRUE	b
2016	Nephrops	NEP	Norway lobster (Nephrops norvegicus) in Division 8.c, Functional Unit 25 (southern Bay of Biscay and northern Galicia)	TRUE	b
2015	Nephrops	NEP	Norway lobster (Nephrops norvegicus) in Division 8.c, Functional Unit 25 (southern Bay of Biscay and northern Galicia)	TRUE	b
2014	Nephrops	NEP	Norway lobster (Nephrops norvegicus) in Division 8.c, Functional Unit 25 (southern Bay of Biscay and northern Galicia)	TRUE	b
2013	Nephrops	NEP	Norway lobster (Nephrops norvegicus) in Division 8.c, Functional Unit 25 (southern Bay of	TRUE	b

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
			Biscay and northern Galicia)		
2012	Nephrops	NEP	Norway lobster (Nephrops norvegicus) in Division 8.c, Functional Unit 25 (southern Bay of Biscay and northern Galicia)	TRUE	b
2011	Nephrops	NEP	Norway lobster (Nephrops norvegicus) in Division 8.c, Functional Unit 25 (southern Bay of Biscay and northern Galicia)	TRUE	b
2010	Nephrops	NEP	Norway lobster (Nephrops norvegicus) in Division 8.c, Functional Unit 25 (southern Bay of Biscay and northern Galicia)	TRUE	b
2009	Nephrops	NEP	Norway lobster (Nephrops norvegicus) in Division 8.c, Functional Unit 25 (southern Bay of Biscay and northern Galicia)	TRUE	b
2017	Sandeel	SAN	Sandeel (Ammodytes spp.) in divisions 4.b-c and Subdivision 20, Sandeel Area 2r (central and southern North Sea)	TRUE	ab
2016	Sandeel	SAN	Sandeel (Ammodytes spp.) in divisions 4.b-c and Subdivision 20, Sandeel Area 2r (central and southern North Sea)	TRUE	ab
2015	Sandeel	SAN	Sandeel (Ammodytes spp.) in divisions 4.b-c and Subdivision 20, Sandeel Area 2r (central and southern North Sea)	TRUE	a
2014	Sandeel	SAN	Sandeel (Ammodytes spp.) in divisions 4.b-c and Subdivision 20, Sandeel Area 2r (central and southern North Sea)	TRUE	b
2013	Sandeel	SAN	Sandeel (Ammodytes spp.) in divisions 4.b-c and Subdivision 20, Sandeel Area 2r (central and southern North Sea)	TRUE	a
2012	Sandeel	SAN	Sandeel (Ammodytes spp.) in divisions 4.b-c and Subdivision 20, Sandeel Area 2r (central and southern North Sea)	TRUE	b
2011	Sandeel	SAN	Sandeel (Ammodytes spp.) in divisions 4.b-c and Subdivision 20,	FALSE	a

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
			Sandeel Area 2r (central and southern North Sea)		
2010	Sandeel	SAN	Sandeel ( <i>Ammodytes</i> spp.) in divisions 4.b-c and Subdivision 20, Sandeel Area 2r (central and southern North Sea)	TRUE	a
2009	Sandeel	SAN	Sandeel ( <i>Ammodytes</i> spp.) in divisions 4.b-c and Subdivision 20, Sandeel Area 2r (central and southern North Sea)	TRUE	a
2017	Sandeel	SAN	Division IIIa East (Kattegat) (SA 6)	FALSE	b
2016	Sandeel	SAN	Division IIIa East (Kattegat) (SA 6)	FALSE	b
2015	Sandeel	SAN	Division IIIa East (Kattegat) (SA 6)	FALSE	b
2014	Sandeel	SAN	Division IIIa East (Kattegat) (SA 6)	FALSE	b
2013	Sandeel	SAN	Division IIIa East (Kattegat) (SA 6)	FALSE	b
2012	Sandeel	SAN	Division IIIa East (Kattegat) (SA 6)	FALSE	b
2011	Sandeel	SAN	Division IIIa East (Kattegat) (SA 6)	FALSE	b
2010	Sandeel	SAN	Division IIIa East (Kattegat) (SA 6)	FALSE	b
2009	Sandeel	SAN	Division IIIa East (Kattegat) (SA 6)	FALSE	b
2017	Capelin	CAP	Subareas 5 and 14 and Division 2.a west of 5°W (Iceland and Faroes grounds, East Greenland, Jan Mayen area)	FALSE	b
2016	Capelin	CAP	Subareas 5 and 14 and Division 2.a west of 5°W (Iceland and Faroes grounds, East Greenland, Jan Mayen area)	FALSE	b
2015	Capelin	CAP	Subareas 5 and 14 and Division 2.a west of 5°W (Iceland and Faroes grounds, East Greenland, Jan Mayen area)	FALSE	b
2014	Capelin	CAP	in subareas 5 and 14 and Division 2.a west of 5°W (Iceland and Faroes grounds, East Greenland, Jan Mayen area)	TRUE	b
2013	Capelin	CAP	in subareas 5 and 14 and Division 2.a west of 5°W (Iceland and Faroes grounds, East Greenland, Jan Mayen area)	TRUE	b
2012	Capelin	CAP	in subareas 5 and 14 and Division 2.a west of 5°W (Iceland and Faroes	FALSE	b

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
			grounds, East Greenland, Jan Mayen area)		
2011	Capelin	CAP	in subareas 5 and 14 and Division 2.a west of 5°W (Iceland and Faroes grounds, East Greenland, Jan Mayen area)	TRUE	b
2010	Capelin	CAP	in subareas 5 and 14 and Division 2.a west of 5°W (Iceland and Faroes grounds, East Greenland, Jan Mayen area)	TRUE	b
2009	Capelin	CAP	in subareas 5 and 14 and Division 2.a west of 5°W (Iceland and Faroes grounds, East Greenland, Jan Mayen area)	TRUE	b
2017	Herring	HER	Herring (Clupea harengus) in subdivisions 20–24, spring spawners (Skagerrak, Kattegat, and wester	TRUE	a
2016	Herring	HER	Herring (Clupea harengus) in subdivisions 20–24, spring spawners (Skagerrak, Kattegat, and wester	TRUE	a
2015	Herring	HER	Herring (Clupea harengus) in subdivisions 20–24, spring spawners (Skagerrak, Kattegat, and wester	TRUE	a
2014	Herring	HER	Herring (Clupea harengus) in subdivisions 20–24, spring spawners (Skagerrak, Kattegat, and wester	TRUE	a
2013	Herring	HER	Herring (Clupea harengus) in subdivisions 20–24, spring spawners (Skagerrak, Kattegat, and wester	TRUE	a
2012	Herring	HER	Herring (Clupea harengus) in subdivisions 20–24, spring spawners (Skagerrak, Kattegat, and wester	TRUE	a
2011	Herring	HER	Herring (Clupea harengus) in subdivisions 20–24, spring spawners (Skagerrak, Kattegat, and wester	TRUE	a
2010	Herring	HER	Herring (Clupea harengus) in subdivisions 20–24, spring spawners (Skagerrak, Kattegat, and wester	TRUE	a
2009	Herring	HER	Herring (Clupea harengus) in subdivisions	TRUE	a



Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
			20–24, spring spawners (Skagerrak, Kattegat, and wester		
2017	Blue Ling	BLI	Blue ling ( <i>Molva dypterygia</i> ) in subareas 1, 2, 8, 9, and 12, and in divisions 3.a and 4.a (other areas)	TRUE	b
2016	Blue Ling	BLI	Blue ling ( <i>Molva dypterygia</i> ) in subareas 1, 2, 8, 9, and 12, and in divisions 3.a and 4.a (other areas)	TRUE	b
2015	Blue Ling	BLI	Blue ling ( <i>Molva dypterygia</i> ) in subareas 1, 2, 8, 9, and 12, and in divisions 3.a and 4.a (other areas)	TRUE	b
2014	Blue Ling	BLI	Blue ling ( <i>Molva dypterygia</i> ) in subareas 1, 2, 8, 9, and 12, and in divisions 3.a and 4.a (other areas)	TRUE	b
2013	Blue Ling	BLI	Blue ling ( <i>Molva dypterygia</i> ) in subareas 1, 2, 8, 9, and 12, and in divisions 3.a and 4.a (other areas)	TRUE	b
2012	Blue Ling	BLI	Blue ling ( <i>Molva dypterygia</i> ) in subareas 1, 2, 8, 9, and 12, and in divisions 3.a and 4.a (other areas)	TRUE	b
2011	Blue Ling	BLI	Blue ling ( <i>Molva dypterygia</i> ) in subareas 1, 2, 8, 9, and 12, and in divisions 3.a and 4.a (other areas)	TRUE	b
2010	Blue Ling	BLI	Blue ling ( <i>Molva dypterygia</i> ) in subareas 1, 2, 8, 9, and 12, and in divisions 3.a and 4.a (other areas)	TRUE	b
2009	Blue Ling	BLI	Blue ling ( <i>Molva dypterygia</i> ) in subareas 1, 2, 8, 9, and 12, and in divisions 3.a and 4.a (other areas)	TRUE	b
2017	Megrim	MEG	Megrim ( <i>Lepidorhombus whiffiagonis</i> ) in divisions 8.c and 9.a (Cantabrian Sea and Atlantic Iberian waters)	FALSE	a
2016	Megrim	MEG	Megrim ( <i>Lepidorhombus whiffiagonis</i> ) in divisions 8.c and 9.a (Cantabrian Sea and Atlantic Iberian waters)	FALSE	a

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2015	Megrim	MEG	Megrim ( <i>Lepidorhombus whiffiagonis</i> ) in divisions 8.c and 9.a (Cantabrian Sea and Atlantic Iberian waters)	FALSE	a
2014	Megrim	MEG	Megrim ( <i>Lepidorhombus whiffiagonis</i> ) in divisions 8.c and 9.a (Cantabrian Sea and Atlantic Iberian waters)	FALSE	a
2013	Megrim	MEG	Megrim ( <i>Lepidorhombus whiffiagonis</i> ) in divisions 8.c and 9.a (Cantabrian Sea and Atlantic Iberian waters)	FALSE	a
2012	Megrim	MEG	Megrim ( <i>Lepidorhombus whiffiagonis</i> ) in divisions 8.c and 9.a (Cantabrian Sea and Atlantic Iberian waters)	FALSE	a
2011	Megrim	MEG	Megrim ( <i>Lepidorhombus whiffiagonis</i> ) in divisions 8.c and 9.a (Cantabrian Sea and Atlantic Iberian waters)	FALSE	a
2010	Megrim	MEG	Megrim ( <i>Lepidorhombus whiffiagonis</i> ) in divisions 8.c and 9.a (Cantabrian Sea and Atlantic Iberian waters)	FALSE	a
2009	Megrim	MEG	Megrim ( <i>Lepidorhombus whiffiagonis</i> ) in divisions 8.c and 9.a (Cantabrian Sea and Atlantic Iberian waters)	TRUE	a
2017	Sprat	SPR	Sprat ( <i>Sprattus sprattus</i> ) in Subarea 4 (North Sea)	FALSE	a
2016	Sprat	SPR	Sprat ( <i>Sprattus sprattus</i> ) in Subarea 4 (North Sea)	FALSE	a
2015	Sprat	SPR	Sprat ( <i>Sprattus sprattus</i> ) in Subarea 4 (North Sea)	FALSE	a
2014	Sprat	SPR	Sprat ( <i>Sprattus sprattus</i> ) in Subarea 4 (North Sea)	FALSE	a
2013	Sprat	SPR	Sprat ( <i>Sprattus sprattus</i> ) in Subarea 4 (North Sea)	FALSE	a
2012	Sprat	SPR	Sprat ( <i>Sprattus sprattus</i> ) in Subarea 4 (North Sea)	TRUE	a
2011	Sprat	SPR	Sprat ( <i>Sprattus sprattus</i> ) in Subarea 4 (North Sea)	FALSE	a
2010	Sprat	SPR	Sprat ( <i>Sprattus sprattus</i> ) in Subarea 4 (North Sea)	FALSE	a
2009	Sprat	SPR	Sprat ( <i>Sprattus sprattus</i> ) in Subarea 4 (North Sea)	FALSE	a
2017	Blue Ling	BLI	Blue ling ( <i>Molva dypterygia</i> ) in Subarea 14 and Division 5.a (East Greenland and Iceland grounds)	FALSE	b

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2016	Blue Ling	BLI	Blue ling ( <i>Molva dypterygia</i> ) in Subarea 14 and Division 5.a (East Greenland and Iceland grounds)	FALSE	b
2015	Blue Ling	BLI	Blue ling ( <i>Molva dypterygia</i> ) in Subarea 14 and Division 5.a (East Greenland and Iceland grounds)	FALSE	b
2014	Blue Ling	BLI	Blue ling ( <i>Molva dypterygia</i> ) in Subarea 14 and Division 5.a (East Greenland and Iceland grounds)	FALSE	b
2013	Blue Ling	BLI	Blue ling ( <i>Molva dypterygia</i> ) in Subarea 14 and Division 5.a (East Greenland and Iceland grounds)	FALSE	b
2012	Blue Ling	BLI	Blue ling ( <i>Molva dypterygia</i> ) in Subarea 14 and Division 5.a (East Greenland and Iceland grounds)	TRUE	b
2011	Blue Ling	BLI	Blue ling ( <i>Molva dypterygia</i> ) in Subarea 14 and Division 5.a (East Greenland and Iceland grounds)	TRUE	b
2010	Blue Ling	BLI	Blue ling ( <i>Molva dypterygia</i> ) in Subarea 14 and Division 5.a (East Greenland and Iceland grounds)	TRUE	b
2009	Blue Ling	BLI	Blue ling ( <i>Molva dypterygia</i> ) in Subarea 14 and Division 5.a (East Greenland and Iceland grounds)	TRUE	b
2017	Herring	HER	Herring ( <i>Clupea harengus</i> ) in divisions 6.a and 7.b-c (West of Scotland, West of Ireland)	TRUE	a
2016	Herring	HER	Herring ( <i>Clupea harengus</i> ) in divisions 6.a and 7.b-c (West of Scotland, West of Ireland)	TRUE	a
2015	Herring	HER	Herring ( <i>Clupea harengus</i> ) in divisions 6.a and 7.b-c (West of Scotland, West of Ireland)	TRUE	a
2014	Herring	HER	Herring ( <i>Clupea harengus</i> ) in divisions 6.a and 7.b-c (West of	TRUE	a

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
			Scotland, West of Ireland)		
2013	Herring	HER	Herring (Clupea harengus) in divisions 6.a and 7.b-c (West of Scotland, West of Ireland)	TRUE	a
2012	Herring	HER	Herring (Clupea harengus) in divisions 6.a and 7.b-c (West of Scotland, West of Ireland)	FALSE	a
2011	Herring	HER	Herring (Clupea harengus) in divisions 6.a and 7.b-c (West of Scotland, West of Ireland)	FALSE	a
2010	Herring	HER	Herring (Clupea harengus) in divisions 6.a and 7.b-c (West of Scotland, West of Ireland)	FALSE	a
2009	Herring	HER	Herring (Clupea harengus) in divisions 6.a and 7.b-c (West of Scotland, West of Ireland)	FALSE	a
2017	Plaice	PLE	Plaice (Pleuronectes platessa) in divisions 7.h-k (Celtic Sea South, southwest of Ireland)	TRUE	a
2016	Plaice	PLE	Plaice (Pleuronectes platessa) in divisions 7.h-k (Celtic Sea South, southwest of Ireland)	TRUE	a
2015	Plaice	PLE	Plaice (Pleuronectes platessa) in divisions 7.h-k (Celtic Sea South, southwest of Ireland)	TRUE	a
2014	Plaice	PLE	Plaice (Pleuronectes platessa) in divisions 7.h-k (Celtic Sea South, southwest of Ireland)	TRUE	a
2013	Plaice	PLE	Plaice (Pleuronectes platessa) in divisions 7.h-k (Celtic Sea South, southwest of Ireland)	TRUE	a
2012	Plaice	PLE	Plaice (Pleuronectes platessa) in divisions 7.h-k (Celtic Sea South, southwest of Ireland)	TRUE	a
2011	Plaice	PLE	Plaice (Pleuronectes platessa) in divisions 7.h-k (Celtic Sea South, southwest of Ireland)	TRUE	a
2010	Plaice	PLE	Plaice (Pleuronectes platessa) in divisions 7.h-k (Celtic Sea South, southwest of Ireland)	TRUE	a

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2009	Plaice	PLE	Plaice ( <i>Pleuronectes platessa</i> ) in divisions 7.h-k (Celtic Sea South, southwest of Ireland)	TRUE	a
2017	Pollack	POL	IV (North Sea) and Division IIIa (Skagerrak-Kattegat)	FALSE	b
2016	Pollack	POL	IV (North Sea) and Division IIIa (Skagerrak-Kattegat)	TRUE	b
2015	Pollack	POL	IV (North Sea) and Division IIIa (Skagerrak-Kattegat)	TRUE	b
2014	Pollack	POL	IV (North Sea) and Division IIIa (Skagerrak-Kattegat)	TRUE	b
2013	Pollack	POL	IV (North Sea) and Division IIIa (Skagerrak-Kattegat)	TRUE	b
2012	Pollack	POL	IV (North Sea) and Division IIIa (Skagerrak-Kattegat)	FALSE	b
2011	Pollack	POL	IV (North Sea) and Division IIIa (Skagerrak-Kattegat)	FALSE	b
2010	Pollack	POL	IV (North Sea) and Division IIIa (Skagerrak-Kattegat)	FALSE	b
2009	Pollack	POL	IV (North Sea) and Division IIIa (Skagerrak-Kattegat)	FALSE	b
2017	Portuguese dogfish	CYO	North East Atlantic 27	TRUE	c
2016	Portuguese dogfish	CYO	North East Atlantic 27	TRUE	c
2015	Portuguese dogfish	CYO	North East Atlantic 27	TRUE	c
2014	Portuguese dogfish	CYO	North East Atlantic 27	TRUE	c
2013	Portuguese dogfish	CYO	North East Atlantic 27	TRUE	c
2012	Portuguese dogfish	CYO	North East Atlantic 27	TRUE	c
2011	Portuguese dogfish	CYO	North East Atlantic 27	TRUE	c
2010	Portuguese dogfish	CYO	North East Atlantic 27	TRUE	c
2009	Portuguese dogfish	CYO	North East Atlantic 27	TRUE	c
2017	Leaf-scale gluper shark	GUC	North East Atlantic 27	TRUE	c
2016	Leaf-scale gluper shark	GUC	North East Atlantic 27	TRUE	c
2015	Leaf-scale gluper shark	GUC	North East Atlantic 27	TRUE	c
2014	Leaf-scale gluper shark	GUC	North East Atlantic 27	TRUE	c
2013	Leaf-scale gluper shark	GUC	North East Atlantic 26	TRUE	c
2012	Leaf-scale gluper shark	GUC	North East Atlantic 25	TRUE	c
2011	Leaf-scale gluper shark	GUC	North East Atlantic 24	TRUE	c

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2010	Leaf-scale gluper shark	GUC	North East Atlantic 23	TRUE	c
2009	Leaf-scale gluper shark	GUC	ICES advice on fishing opportunities	TRUE	c
2017	Angel shark	AGN	Angel Shark in North East Atlantic 27	TRUE	cd
2016	Angel shark	AGN	Angel Shark in North East Atlantic 27	TRUE	cd
2015	Angel shark	AGN	Angel Shark in North East Atlantic 27	TRUE	cd
2014	Angel shark	AGN	Angel Shark in North East Atlantic 27	TRUE	cd
2013	Angel shark	AGN	Angel Shark in North East Atlantic 27	TRUE	cd
2012	Angel shark	AGN	Angel Shark in North East Atlantic 27	TRUE	cd
2011	Angel shark	AGN	Angel Shark in North East Atlantic 27	TRUE	d
2010	Angel shark	AGN	Angel Shark in North East Atlantic 27	TRUE	d
2009	Angel shark	AGN	Angel Shark in North East Atlantic 27	TRUE	d
2017	Orange roughy	ORY	Orange roughy (Hoplostethus atlanticus) in the Northeast Atlantic	TRUE	b
2016	Orange roughy	ORY	Orange roughy (Hoplostethus atlanticus) in the Northeast Atlantic	TRUE	b
2015	Orange roughy	ORY	Orange roughy (Hoplostethus atlanticus) in the Northeast Atlantic	TRUE	b
2014	Orange roughy	ORY	Orange roughy (Hoplostethus atlanticus) in the Northeast Atlantic	TRUE	b
2013	Orange roughy	ORY	Orange roughy (Hoplostethus atlanticus) in the Northeast Atlantic	TRUE	b
2012	Orange roughy	ORY	Orange roughy (Hoplostethus atlanticus) in the Northeast Atlantic	TRUE	b
2011	Orange roughy	ORY	Orange roughy (Hoplostethus atlanticus) in the Northeast Atlantic	TRUE	b
2010	Orange roughy	ORY	Orange roughy (Hoplostethus atlanticus) in the Northeast Atlantic	TRUE	b
2009	Orange roughy	ORY	Orange roughy (Hoplostethus atlanticus) in the Northeast Atlantic	FALSE	b
2017	Orange roughy	ORY	South Est Atlantic 47	TRUE	b
2016	Orange roughy	ORY	South Est Atlantic 47	TRUE	bc
2015	Orange roughy	ORY	South Est Atlantic 47	TRUE	bc
2014	Orange roughy	ORY	South Est Atlantic 47	TRUE	bc
2013	Orange roughy	ORY	South Est Atlantic 47	TRUE	bc
2012	Orange roughy	ORY	South Est Atlantic 47	TRUE	bc

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2011	Orange roughy	ORY	South Est Atlantic 47	TRUE	bc
2010	Orange roughy	ORY	South Est Atlantic 47	TRUE	bc
2009	Orange roughy	ORY	South Est Atlantic 47	TRUE	bc
2017	Haddock	HAD	Haddock (Melanogrammus aeglefinus) in Division 5.b (Faroes grounds)	FALSE	a
2016	Haddock	HAD	Haddock (Melanogrammus aeglefinus) in Division 5.b (Faroes grounds)	TRUE	a
2015	Haddock	HAD	Haddock (Melanogrammus aeglefinus) in Division 5.b (Faroes grounds)	TRUE	a
2014	Haddock	HAD	Haddock (Melanogrammus aeglefinus) in Division 5.b (Faroes grounds)	TRUE	a
2013	Haddock	HAD	Haddock (Melanogrammus aeglefinus) in Division 5.b (Faroes grounds)	TRUE	a
2012	Haddock	HAD	Haddock (Melanogrammus aeglefinus) in Division 5.b (Faroes grounds)	TRUE	a
2011	Haddock	HAD	Haddock (Melanogrammus aeglefinus) in Division 5.b (Faroes grounds)	TRUE	a
2010	Haddock	HAD	Haddock (Melanogrammus aeglefinus) in Division 5.b (Faroes grounds)	TRUE	a
2009	Haddock	HAD	Haddock (Melanogrammus aeglefinus) in Division 5.b (Faroes grounds)	TRUE	a
2017	Golden redfish	REG, RED	Golden redfish (Sebastes norvegicus) in subareas 1 and 2 (Northeast Arctic)	TRUE	b
2016	Golden redfish	REG, RED	Golden redfish (Sebastes norvegicus) in subareas 1 and 2 (Northeast Arctic)	TRUE	b
2015	Golden redfish	REG, RED	Golden redfish (Sebastes norvegicus) in subareas 1 and 2 (Northeast Arctic)	TRUE	b
2014	Golden redfish	REG, RED	Golden redfish (Sebastes norvegicus) in subareas 1 and 2 (Northeast Arctic)	TRUE	b
2013	Golden redfish	REG, RED	Golden redfish (Sebastes norvegicus) in subareas	TRUE	b

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
			1 and 2 (Northeast Arctic)		
2012	Golden redfish	REG, RED	Golden redfish ( <i>Sebastes norvegicus</i> ) in subareas 1 and 2 (Northeast Arctic)	TRUE	b
2011	Golden redfish	REG, RED	Golden redfish ( <i>Sebastes norvegicus</i> ) in subareas 1 and 2 (Northeast Arctic)	TRUE	b
2010	Golden redfish	REG, RED	Golden redfish ( <i>Sebastes norvegicus</i> ) in subareas 1 and 2 (Northeast Arctic)	TRUE	b
2009	Golden redfish	REG, RED	Golden redfish ( <i>Sebastes norvegicus</i> ) in subareas 1 and 2 (Northeast Arctic)	TRUE	b
2017	Beaked redfish	REB, RED	Beaked redfish ( <i>Sebastes mentella</i> ) in Division 14.b, demersal (Southeast Greenland)	FALSE	b
2016	Beaked redfish	REB, RED	Beaked redfish ( <i>Sebastes mentella</i> ) in Division 14.b, demersal (Southeast Greenland)	FALSE	b
2015	Beaked redfish	REB, RED	Beaked redfish ( <i>Sebastes mentella</i> ) in Division 14.b, demersal (Southeast Greenland)	FALSE	b
2014	Beaked redfish	REB, RED	Beaked redfish ( <i>Sebastes mentella</i> ) in Division 14.b, demersal (Southeast Greenland)	FALSE	b
2013	Beaked redfish	REB, RED	Beaked redfish ( <i>Sebastes mentella</i> ) in Division 14.b, demersal (Southeast Greenland)	FALSE	b
2012	Beaked redfish	REB, RED	Beaked redfish ( <i>Sebastes mentella</i> ) in Division 14.b, demersal (Southeast Greenland)	FALSE	b
2011	Beaked redfish	REB, RED	Beaked redfish ( <i>Sebastes mentella</i> ) in Division 14.b, demersal (Southeast Greenland)	FALSE	b
2010	Beaked redfish	REB, RED	Beaked redfish ( <i>Sebastes mentella</i> ) in Division 14.b, demersal (Southeast Greenland)	TRUE	b
2009	Beaked redfish	REB, RED	Beaked redfish ( <i>Sebastes mentella</i> ) in Division 14.b, demersal (Southeast Greenland)	TRUE	b
2017	Haddock	HAD	Haddock ( <i>Melanogrammus aeglefinus</i> ) in Division 6.b (Rockall)	FALSE	a



Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2016	Haddock	HAD	Haddock (Melanogrammus aeglefinus) in Division 6.b (Rockall)	FALSE	a
2015	Haddock	HAD	Haddock (Melanogrammus aeglefinus) in Division 6.b (Rockall)	FALSE	a
2014	Haddock	HAD	Haddock (Melanogrammus aeglefinus) in Division 6.b (Rockall)	TRUE	a
2013	Haddock	HAD	Haddock (Melanogrammus aeglefinus) in Division 6.b (Rockall)	TRUE	a
2012	Haddock	HAD	Haddock (Melanogrammus aeglefinus) in Division 6.b (Rockall)	FALSE	ab
2011	Haddock	HAD	Haddock (Melanogrammus aeglefinus) in Division 6.b (Rockall)	FALSE	ab
2010	Haddock	HAD	Haddock (Melanogrammus aeglefinus) in Division 6.b (Rockall)	FALSE	ab
2009	Haddock	HAD	Haddock (Melanogrammus aeglefinus) in Division 6.b (Rockall)	FALSE	ab
2017	Red seabream	SBR	Blackspot seabream (Pagellus bogaraveo) in subareas 6, 7, and 8 (Celtic Seas and the English Channel, Bay of Biscay)	TRUE	b
2016	Red seabream	SBR	Blackspot seabream (Pagellus bogaraveo) in subareas 6, 7, and 8 (Celtic Seas and the English Channel, Bay of Biscay)	TRUE	b
2015	Red seabream	SBR	Blackspot seabream (Pagellus bogaraveo) in subareas 6, 7, and 8 (Celtic Seas and the English Channel, Bay of Biscay)	TRUE	b
2014	Red seabream	SBR	Blackspot seabream (Pagellus bogaraveo) in subareas 6, 7, and 8 (Celtic Seas and the English Channel, Bay of Biscay)	TRUE	b
2013	Red seabream	SBR	Blackspot seabream (Pagellus bogaraveo) in subareas 6, 7, and 8	TRUE	b

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
			(Celtic Seas and the English Channel, Bay of Biscay)		
2012	Red seabream	SBR	Blackspot seabream (Pagellus bogaraveo) in subareas 6, 7, and 8 (Celtic Seas and the English Channel, Bay of Biscay)	TRUE	b
2011	Red seabream	SBR	Blackspot seabream (Pagellus bogaraveo) in subareas 6, 7, and 8 (Celtic Seas and the English Channel, Bay of Biscay)	TRUE	b
2010	Red seabream	SBR	Blackspot seabream (Pagellus bogaraveo) in subareas 6, 7, and 8 (Celtic Seas and the English Channel, Bay of Biscay)	TRUE	b
2009	Red seabream	SBR	Blackspot seabream (Pagellus bogaraveo) in subareas 6, 7, and 8 (Celtic Seas and the English Channel, Bay of Biscay)	TRUE	b
2017	Blue Ling	BLI	Blue ling (Molva dypterygia) in subareas 6-7 and Division 5.b (Celtic Seas, English Channel, and Faroes grounds)	FALSE	ab
2016	Blue Ling	BLI	Blue ling (Molva dypterygia) in subareas 6-7 and Division 5.b (Celtic Seas, English Channel, and Faroes grounds)	FALSE	ab
2015	Blue Ling	BLI	Blue ling (Molva dypterygia) in subareas 6-7 and Division 5.b (Celtic Seas, English Channel, and Faroes grounds)	FALSE	ab
2014	Blue Ling	BLI	Blue ling (Molva dypterygia) in subareas 6-7 and Division 5.b (Celtic Seas, English Channel, and Faroes grounds)	FALSE	ab
2013	Blue Ling	BLI	Blue ling (Molva dypterygia) in subareas 6-7 and Division 5.b (Celtic Seas, English Channel, and Faroes grounds)	FALSE	ab
2012	Blue Ling	BLI	Blue ling (Molva dypterygia) in subareas	TRUE	ab

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
			6-7 and Division 5.b (Celtic Seas, English Channel, and Faroes grounds)		
2011	Blue Ling	BLI	Blue ling (Molva dypterygia) in subareas 6-7 and Division 5.b (Celtic Seas, English Channel, and Faroes grounds)	TRUE	ab
2010	Blue Ling	BLI	Blue ling (Molva dypterygia) in subareas 6-7 and Division 5.b (Celtic Seas, English Channel, and Faroes grounds)	TRUE	ab
2009	Blue Ling	BLI	Blue ling (Molva dypterygia) in subareas 6-7 and Division 5.b (Celtic Seas, English Channel, and Faroes grounds)	TRUE	ab
2017	European eel	ELE	European eel (Anguilla anguilla) in North East Atlantic 27	TRUE	cd
2016	European eel	ELE	European eel (Anguilla anguilla) in North East Atlantic 27	TRUE	cd
2015	European eel	ELE	European eel (Anguilla anguilla) in North East Atlantic 27	TRUE	cd
2014	European eel	ELE	European eel (Anguilla anguilla) in North East Atlantic 27	TRUE	cd
2013	European eel	ELE	European eel (Anguilla anguilla) in North East Atlantic 27	TRUE	cd
2012	European eel	ELE	European eel (Anguilla anguilla) in North East Atlantic 27	TRUE	cd
2011	European eel	ELE	European eel (Anguilla anguilla) in North East Atlantic 27	TRUE	cd
2010	European eel	ELE	European eel (Anguilla anguilla) in North East Atlantic 27	TRUE	cd
2009	European eel	ELE	European eel (Anguilla anguilla) in North East Atlantic 27	TRUE	cd
2017	European eel	ELE	European eel (Anguilla anguilla) in Mediterraneana 37	TRUE	cd
2016	European eel	ELE	European eel (Anguilla anguilla) in Mediterraneana 37	TRUE	cd
2015	European eel	ELE	European eel (Anguilla anguilla) in Mediterraneana 37	TRUE	cd

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2014	European eel	ELE	European eel ( <i>Anguilla anguilla</i> ) in Mediterranean 37	TRUE	cd
2013	European eel	ELE	European eel ( <i>Anguilla anguilla</i> ) in Mediterranean 37	TRUE	cd
2012	European eel	ELE	European eel ( <i>Anguilla anguilla</i> ) in Mediterranean 37	TRUE	cd
2011	European eel	ELE	European eel ( <i>Anguilla anguilla</i> ) in Mediterranean 37	TRUE	cd
2010	European eel	ELE	European eel ( <i>Anguilla anguilla</i> ) in Mediterranean 37	TRUE	cd
2009	European eel	ELE	European eel ( <i>Anguilla anguilla</i> ) in Mediterranean 37	TRUE	cd
2017	Northern Shrimp	PRA	Northern shrimp ( <i>Pandalus borealis</i> ) on the Flemish Cap (NAFO 3M)	TRUE	ab
2016	Northern Shrimp	PRA	Northern shrimp ( <i>Pandalus borealis</i> ) on the Flemish Cap (NAFO 3M)	TRUE	ab
2015	Northern Shrimp	PRA	Northern shrimp ( <i>Pandalus borealis</i> ) on the Flemish Cap (NAFO 3M)	TRUE	ab
2014	Northern Shrimp	PRA	Northern shrimp ( <i>Pandalus borealis</i> ) on the Flemish Cap (NAFO 3M)	TRUE	ab
2013	Northern Shrimp	PRA	Northern shrimp ( <i>Pandalus borealis</i> ) on the Flemish Cap (NAFO 3M)	TRUE	ab
2012	Northern Shrimp	PRA	Northern shrimp ( <i>Pandalus borealis</i> ) on the Flemish Cap (NAFO 3M)	TRUE	a
2011	Northern Shrimp	PRA	Northern shrimp ( <i>Pandalus borealis</i> ) on the Flemish Cap (NAFO 3M)	TRUE	a
2010	Northern Shrimp	PRA	Northern shrimp ( <i>Pandalus borealis</i> ) on the Flemish Cap (NAFO 3M)	FALSE	a
2009	Northern Shrimp	PRA	Northern shrimp ( <i>Pandalus borealis</i> ) on the Flemish Cap (NAFO 3M)	TRUE	a
2017	Northern Shrimp	PRA	Northern shrimp ( <i>Pandalus borealis</i> ) on the Grand Bank (NAFO 3LNO)	TRUE	ab

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2016	Northern Shrimp	PRA	Northern shrimp (Pandalus borealis) on the Grand Bank (NAFO 3LNO)	TRUE	ab
2015	Northern Shrimp	PRA	Northern shrimp (Pandalus borealis) on the Grand Bank (NAFO 3LNO)	TRUE	ab
2014	Northern Shrimp	PRA	Northern shrimp (Pandalus borealis) on the Grand Bank (NAFO 3LNO)	TRUE	ab
2013	Northern Shrimp	PRA	Northern shrimp (Pandalus borealis) on the Grand Bank (NAFO 3LNO)	TRUE	ab
2012	Northern Shrimp	PRA	Northern shrimp (Pandalus borealis) on the Grand Bank (NAFO 3LNO)	FALSE	a
2011	Northern Shrimp	PRA	Northern shrimp (Pandalus borealis) on the Grand Bank (NAFO 3LNO)	FALSE	a
2010	Northern Shrimp	PRA	Northern shrimp (Pandalus borealis) on the Grand Bank (NAFO 3LNO)	FALSE	a
2009	Northern Shrimp	PRA	Northern shrimp (Pandalus borealis) on the Grand Bank (NAFO 3LNO)	FALSE	a
2017	Star Sturgeon	ACE	Star sturgeon (Acipenser stellatus) in Mediterranean and Black Sea 37	TRUE	d
2016	Star Sturgeon	ACE	Star sturgeon (Acipenser stellatus) in Mediterranean and Black Sea 37	TRUE	d
2015	Star Sturgeon	ACE	Star sturgeon (Acipenser stellatus) in Mediterranean and Black Sea 37	TRUE	d
2014	Star Sturgeon	ACE	Star sturgeon (Acipenser stellatus) in Mediterranean and Black Sea 37	TRUE	d
2013	Star Sturgeon	ACE	Star sturgeon (Acipenser stellatus) in Mediterranean and Black Sea 37	TRUE	d
2012	Star Sturgeon	ACE	Star sturgeon (Acipenser stellatus) in Mediterranean and Black Sea 37	TRUE	d
2011	Star Sturgeon	ACE	Star sturgeon (Acipenser stellatus) in Mediterranean and Black Sea 37	TRUE	d
2010	Star Sturgeon	ACE	Star sturgeon (Acipenser stellatus) in Mediterranean and Black Sea 37	TRUE	d
2009	Star Sturgeon	ACE	Star sturgeon (Acipenser stellatus) in Mediterranean and Black Sea 37	TRUE	d

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2017	Barbel Sturgeon	AAN	Barbel sturgeon (Acipenser nudiiventris) in Mediterranean and Black Sea 37	TRUE	d
2016	Barbel Sturgeon	AAN	Barbel sturgeon (Acipenser nudiiventris) in Mediterranean and Black Sea 37	TRUE	d
2015	Barbel Sturgeon	AAN	Barbel sturgeon (Acipenser nudiiventris) in Mediterranean and Black Sea 37	TRUE	d
2014	Barbel Sturgeon	AAN	Barbel sturgeon (Acipenser nudiiventris) in Mediterranean and Black Sea 37	TRUE	d
2013	Barbel Sturgeon	AAN	Barbel sturgeon (Acipenser nudiiventris) in Mediterranean and Black Sea 37	TRUE	d
2012	Barbel Sturgeon	AAN	Barbel sturgeon (Acipenser nudiiventris) in Mediterranean and Black Sea 37	TRUE	d
2011	Barbel Sturgeon	AAN	Barbel sturgeon (Acipenser nudiiventris) in Mediterranean and Black Sea 37	TRUE	d
2010	Barbel Sturgeon	AAN	Barbel sturgeon (Acipenser nudiiventris) in Mediterranean and Black Sea 37	TRUE	d
2009	Barbel Sturgeon	AAN	Barbel sturgeon (Acipenser nudiiventris) in Mediterranean and Black Sea 37	TRUE	d
2017	Atlantic Sturgeon	AAO	Atlantic Sturgeon (Acipenser oxyrhynchus) in Northeast Pacific 67, 77	TRUE	d
2016	Atlantic Sturgeon	AAO	Atlantic Sturgeon (Acipenser oxyrhynchus) in Northeast Pacific 67, 77	TRUE	d
2015	Atlantic Sturgeon	AAO	Atlantic Sturgeon (Acipenser oxyrhynchus) in Northeast Pacific 67, 77	TRUE	d
2014	Atlantic Sturgeon	AAO	Atlantic Sturgeon (Acipenser oxyrhynchus) in Northeast Pacific 67, 77	TRUE	d
2013	Atlantic Sturgeon	AAO	Atlantic Sturgeon (Acipenser oxyrhynchus) in Northeast Pacific 67, 77	TRUE	d
2012	Atlantic Sturgeon	AAO	Atlantic Sturgeon (Acipenser oxyrhynchus) in Northeast Pacific 67, 77	TRUE	d
2011	Atlantic Sturgeon	AAO	Atlantic Sturgeon (Acipenser oxyrhynchus) in Northeast Pacific 67, 77	TRUE	d

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2010	Atlantic Sturgeon	AAO	Atlantic Sturgeon (Acipenser oxyrhynchus) in Northeast Pacific 67, 77	TRUE	d
2009	Atlantic Sturgeon	AAO	Atlantic Sturgeon (Acipenser oxyrhynchus) in Northeast Pacific 67, 77	TRUE	d
2017	White Sturgeon	APN	White Sturgeon (Acipenser transmontanus) in Northwest Atlantic 27	TRUE	d
2016	White Sturgeon	APN	White Sturgeon (Acipenser transmontanus) in Northwest Atlantic 27	TRUE	d
2015	White Sturgeon	APN	White Sturgeon (Acipenser transmontanus) in Northwest Atlantic 27	TRUE	d
2014	White Sturgeon	APN	White Sturgeon (Acipenser transmontanus) in Northwest Atlantic 27	TRUE	d
2013	White Sturgeon	APN	White Sturgeon (Acipenser transmontanus) in Northwest Atlantic 27	TRUE	d
2012	White Sturgeon	APN	White Sturgeon (Acipenser transmontanus) in Northwest Atlantic 27	TRUE	d
2011	White Sturgeon	APN	White Sturgeon (Acipenser transmontanus) in Northwest Atlantic 27	TRUE	d
2010	White Sturgeon	APN	White Sturgeon (Acipenser transmontanus) in Northwest Atlantic 27	TRUE	d
2009	White Sturgeon	APN	White Sturgeon (Acipenser transmontanus) in Northwest Atlantic 27	TRUE	d
2017	Danube Sturgeon	APG	Danube Sturgeon (Acipenser gueldenstaedtii ) in Black Sea and Caspian Sea	TRUE	cd
2016	Danube Sturgeon	APG	Danube Sturgeon (Acipenser gueldenstaedtii ) in Black Sea and Caspian Sea	TRUE	cd
2015	Danube Sturgeon	APG	Danube Sturgeon (Acipenser gueldenstaedtii ) in Black Sea and Caspian Sea	TRUE	cd
2014	Danube Sturgeon	APG	Danube Sturgeon (Acipenser gueldenstaedtii ) in Black Sea and Caspian Sea	TRUE	cd

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2013	Danube Sturgeon	APG	Danube Sturgeon (Acipenser gueldenstaedtii ) in Black Sea and Caspian Sea	TRUE	cd
2012	Danube Sturgeon	APG	Danube Sturgeon (Acipenser gueldenstaedtii ) in Black Sea and Caspian Sea	TRUE	cd
2011	Danube Sturgeon	APG	Danube Sturgeon (Acipenser gueldenstaedtii ) in Black Sea and Caspian Sea	TRUE	cd
2010	Danube Sturgeon	APG	Danube Sturgeon (Acipenser gueldenstaedtii ) in Black Sea and Caspian Sea	TRUE	cd
2009	Danube Sturgeon	APG	Danube Sturgeon (Acipenser gueldenstaedtii ) in Black Sea and Caspian Sea	TRUE	cd
2017	Green Strugeon	AAM	Green Sturgeon (Acipenser medirostris) in Northwest Pacific 67, 77	TRUE	d
2016	Green Strugeon	AAM	Green Sturgeon (Acipenser medirostris) in Northwest Pacific 67, 77	TRUE	d
2015	Green Strugeon	AAM	Green Sturgeon (Acipenser medirostris) in Northwest Pacific 67, 77	TRUE	d
2014	Green Strugeon	AAM	Green Sturgeon (Acipenser medirostris) in Northwest Pacific 67, 77	TRUE	d
2013	Green Strugeon	AAM	Green Sturgeon (Acipenser medirostris) in Northwest Pacific 67, 77	TRUE	d
2012	Green Strugeon	AAM	Green Sturgeon (Acipenser medirostris) in Northwest Pacific 67, 77	TRUE	d
2011	Green Strugeon	AAM	Green Sturgeon (Acipenser medirostris) in Northwest Pacific 67, 77	TRUE	d
2010	Green Strugeon	AAM	Green Sturgeon (Acipenser medirostris) in Northwest Pacific 67, 77	TRUE	d
2009	Green Strugeon	AAM	Green Sturgeon (Acipenser medirostris) in Northwest Pacific 67, 77	TRUE	d
2017	Adriatic Sturgeon	AAA	Adriatic sturgeon (Acipenser nudiiventris) in Adriatic Sea 37	TRUE	d



Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2016	Adriatic Sturgeon	AAA	Adriatic sturgeon (Acipenser nudiiventris) in Adriatic Sea 37	TRUE	d
2015	Adriatic Sturgeon	AAA	Adriatic sturgeon (Acipenser nudiiventris) in Adriatic Sea 37	TRUE	d
2014	Adriatic Sturgeon	AAA	Adriatic sturgeon (Acipenser nudiiventris) in Adriatic Sea 37	TRUE	d
2013	Adriatic Sturgeon	AAA	Adriatic sturgeon (Acipenser nudiiventris) in Adriatic Sea 37	TRUE	d
2012	Adriatic Sturgeon	AAA	Adriatic sturgeon (Acipenser nudiiventris) in Adriatic Sea 37	TRUE	d
2011	Adriatic Sturgeon	AAA	Adriatic sturgeon (Acipenser nudiiventris) in Adriatic Sea 37	TRUE	d
2010	Adriatic Sturgeon	AAA	Adriatic sturgeon (Acipenser nudiiventris) in Adriatic Sea 37	TRUE	d
2009	Adriatic Sturgeon	AAA	Adriatic sturgeon (Acipenser nudiiventris) in Adriatic Sea 37	TRUE	d
2017	Basking shark	BSK	North East Atlantic 27 + Med 37	TRUE	d
2016	Basking shark	BSK	North East Atlantic 27 + Med 37	TRUE	d
2015	Basking shark	BSK	North East Atlantic 27 + Med 37	TRUE	d
2014	Basking shark	BSK	North East Atlantic 27 + Med 37	TRUE	d
2013	Basking shark	BSK	North East Atlantic 27 + Med 37	TRUE	d
2012	Basking shark	BSK	North East Atlantic 27 + Med 37	TRUE	d
2011	Basking shark	BSK	North East Atlantic 27 + Med 37	TRUE	d
2010	Basking shark	BSK	North East Atlantic 27 + Med 37	TRUE	d
2009	Basking shark	BSK	North East Atlantic 27 + Med 37	TRUE	d
2017	Sawfishes	RPA, RPC, RPM, RPP, RPZ, SAW	27.9, 31, 34, 37, 41, 51, 57	TRUE	d
2016	Sawfishes	RPA, RPC, RPM, RPP, RPZ, SAW	27.9, 31, 34, 37, 41, 51, 57	TRUE	d
2015	Sawfishes	RPA, RPC, RPM, RPP, RPZ, SAW	27.9, 31, 34, 37, 41, 51, 57	TRUE	d
2014	Sawfishes	RPA, RPC, RPM, RPP, RPZ, SAW	27.9, 31, 34, 37, 41, 51, 57	TRUE	d
2013	Sawfishes	RPA, RPC, RPM, RPP, RPZ, SAW	27.9, 31, 34, 37, 41, 51, 57	TRUE	d

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2012	Sawfishes	RPA, RPC, RPM, RPP, RPZ, SAW	27.9, 31, 34, 37, 41, 51, 57	TRUE	d
2011	Sawfishes	RPA, RPC, RPM, RPP, RPZ, SAW	27.9, 31, 34, 37, 41, 51, 57	TRUE	d
2010	Sawfishes	RPA, RPC, RPM, RPP, RPZ, SAW	27.9, 31, 34, 37, 41, 51, 57	TRUE	d
2009	Sawfishes	RPA, RPC, RPM, RPP, RPZ, SAW	27.9, 31, 34, 37, 41, 51, 57	TRUE	d
2017	Starry Ray	RJR	IIa, IIIa, IV, VIIId	TRUE	bc
2016	Starry Ray	RJR	IIa, IIIa, IV, VIIId	TRUE	bc
2015	Starry Ray	RJR	IIa, IIIa, IV, VIIId	TRUE	bc
2014	Starry Ray	RJR	IIa, IIIa, IV, VIIId	TRUE	c
2013	Starry Ray	RJR	IIa, IIIa, IV, VIIId	FALSE	c
2012	Starry Ray	RJR	IIa, IIIa, IV, VIIId	FALSE	c
2011	Starry Ray	RJR	IIa, IIIa, IV, VIIId	FALSE	c
2010	Starry Ray	RJR	IIa, IIIa, IV, VIIId	FALSE	c
2009	Starry Ray	RJR	IIa, IIIa, IV, VIIId	FALSE	c
2017	Great White shark	WSH	27.7-9, 31, 34, 37, 41, 51, 56	TRUE	d
2016	Great White shark	WSH	27.7-9, 31, 34, 37, 41, 51, 56	TRUE	d
2015	Great White shark	WSH	27.7-9, 31, 34, 37, 41, 51, 56	TRUE	d
2014	Great White shark	WSH	27.7-9, 31, 34, 37, 41, 51, 56	TRUE	d
2013	Great White shark	WSH	27.7-9, 31, 34, 37, 41, 51, 56	TRUE	d
2012	Great White shark	WSH	27.7-9, 31, 34, 37, 41, 51, 56	TRUE	d
2011	Great White shark	WSH	27.7-9, 31, 34, 37, 41, 51, 56	TRUE	d
2010	Great White shark	WSH	27.7-9, 31, 34, 37, 41, 51, 56	TRUE	d
2009	Great White shark	WSH	27.7-9, 31, 34, 37, 41, 51, 56	TRUE	d
2017	Comon skate Complex	RJB	Common skate (Dipturus batis-complex (blue skate (Dipturus batis) and flapper skate (Dipturus cf. intermedia)) in subareas 6-7 (excluding Division 7.d) (Celtic Seas and western English Channel)	TRUE	c
2016	Comon skate Complex	RJB	Common skate (Dipturus batis-complex (blue skate (Dipturus batis) and flapper skate (Dipturus cf. intermedia)) in subareas 6-7 (excluding Division	TRUE	c

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
			7.d) (Celtic Seas and western English Channel)		
2015	Comon skate Complex	RJB	Common skate (Dipturus batis-complex (blue skate (Dipturus batis) and flapper skate (Dipturus cf. intermedia)) in subareas 6-7 (excluding Division 7.d) (Celtic Seas and western English Channel)	TRUE	c
2014	Comon skate Complex	RJB	Common skate (Dipturus batis-complex (blue skate (Dipturus batis) and flapper skate (Dipturus cf. intermedia)) in subareas 6-7 (excluding Division 7.d) (Celtic Seas and western English Channel)	TRUE	c
2013	Comon skate Complex	RJB	Common skate (Dipturus batis-complex (blue skate (Dipturus batis) and flapper skate (Dipturus cf. intermedia)) in subareas 6-7 (excluding Division 7.d) (Celtic Seas and western English Channel)	TRUE	c
2012	Comon skate Complex	RJB	Common skate (Dipturus batis-complex (blue skate (Dipturus batis) and flapper skate (Dipturus cf. intermedia)) in subareas 6-7 (excluding Division 7.d) (Celtic Seas and western English Channel)	TRUE	c
2011	Comon skate Complex	RJB	Common skate (Dipturus batis-complex (blue skate (Dipturus batis) and flapper skate (Dipturus cf. intermedia)) in subareas 6-7 (excluding Division 7.d) (Celtic Seas and western English Channel)	FALSE	c
2010	Comon skate Complex	RJB	Common skate (Dipturus batis-complex (blue skate (Dipturus batis) and flapper skate (Dipturus cf. intermedia)) in subareas 6-7 (excluding Division 7.d) (Celtic Seas and western English Channel)	FALSE	c
2009	Comon skate Complex	RJB	Common skate (Dipturus batis-complex (blue skate (Dipturus batis)	FALSE	c

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
			and flapper skate (Dipturus cf. intermedia)) in subareas 6-7 (excluding Division 7.d) (Celtic Seas and western English Channel)		
2017	Whale shark	RHN	31, 34, 41, 51, 58	TRUE	d
2016	Whale shark	RHN	31, 34, 41, 51, 58	TRUE	d
2015	Whale shark	RHN	31, 34, 41, 51, 58	TRUE	d
2014	Whale shark	RHN	31, 34, 41, 51, 58	TRUE	d
2013	Whale shark	RHN	31, 34, 41, 51, 58	TRUE	d
2012	Whale shark	RHN	31, 34, 41, 51, 58	TRUE	d
2011	Whale shark	RHN	31, 34, 41, 51, 58	TRUE	d
2010	Whale shark	RHN	31, 34, 41, 51, 58	TRUE	d
2009	Whale shark	RHN	31, 34, 41, 51, 58	TRUE	d
2017	Smooth Lantern Shark	ETP	IIa, III, IV, VI, VII, VIII,IX, X	TRUE	c
2016	Smooth Lantern Shark	ETP	IIa, III, IV, VI, VII, VIII,IX, X	TRUE	c
2015	Smooth Lantern Shark	ETP	IIa, III, IV, VI, VII, VIII,IX, X	TRUE	c
2014	Smooth Lantern Shark	ETP	IIa, III, IV, VI, VII, VIII,IX, X	TRUE	c
2013	Smooth Lantern Shark	ETP	IIa, III, IV, VI, VII, VIII,IX, X	FALSE	c
2012	Smooth Lantern Shark	ETP	IIa, III, IV, VI, VII, VIII,IX, X	FALSE	c
2011	Smooth Lantern Shark	ETP	IIa, III, IV, VI, VII, VIII,IX, X	FALSE	c
2010	Smooth Lantern Shark	ETP	IIa, III, IV, VI, VII, VIII,IX, X	FALSE	c
2009	Smooth Lantern Shark	ETP	IIa, III, IV, VI, VII, VIII,IX, X	FALSE	c
2017	Tope Shark	GAG	with LL, IIa, III, IV, VI, VII, VIII,IX, X	TRUE	c
2016	Tope Shark	GAG	with LL, IIa, III, IV, VI, VII, VIII,IX, X	TRUE	c
2015	Tope Shark	GAG	with LL, IIa, III, IV, VI, VII, VIII,IX, X	TRUE	c
2014	tope Shark	GAG	with LL, IIa, III, IV, VI, VII, VIII,IX, X	TRUE	c
2013	tope Shark	GAG	with LL, IIa, III, IV, VI, VII, VIII,IX, X	FALSE	c
2012	tope Shark	GAG	with LL, IIa, III, IV, VI, VII, VIII,IX, X	FALSE	c
2011	tope Shark	GAG	with LL, IIa, III, IV, VI, VII, VIII,IX, X	FALSE	c
2010	tope Shark	GAG	with LL, IIa, III, IV, VI, VII, VIII,IX, X	FALSE	c
2009	Tope Shark	GAG	with LL, IIa, III, IV, VI, VII, VIII,IX, X	FALSE	c
2017	Giant Manta	RMB	all waters	TRUE	c
2016	Giant Manta	RMB	all waters	TRUE	c

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2015	Giant Manta	RMB	all waters	TRUE	c
2014	Giant Manta	RMB	all waters	TRUE	cd
2013	Giant Manta	RMB	all waters	TRUE	c
2012	Giant Manta	RMB	all waters	TRUE	c
2011	Giant Manta	RMB	all waters	TRUE	c
2010	Giant Manta	RMB	all waters	TRUE	c
2009	Giant Manta	RMB	all waters	TRUE	c
2017	Mobulas	MAN, RME, RMH, RMJ, RMK, RMM, RMU, RMR,RMT, RMO, RMV	all waters	TRUE	c
2016	Mobulas	MAN, RME, RMH, RMJ, RMK, RMM, RMU, RMR,RMT, RMO, RMV	all waters	TRUE	c
2015	Mobulas	MAN, RME, RMH, RMJ, RMK, RMM, RMU, RMR,RMT, RMO, RMV	all waters	TRUE	c
2014	Mobulas	MAN, RME, RMH, RMJ, RMK, RMM, RMU, RMR,RMT, RMO, RMV	all waters	TRUE	cd
2013	Mobulas	MAN, RME, RMH, RMJ, RMK, RMM, RMU, RMR,RMT, RMO, RMV	all waters	TRUE	c
2012	Mobulas	MAN, RME, RMH, RMJ, RMK, RMM, RMU, RMR,RMT, RMO, RMV	all waters	TRUE	c
2011	Mobulas	MAN, RME, RMH, RMJ, RMK, RMM, RMU, RMR,RMT, RMO, RMV	all waters	TRUE	c
2010	Mobulas	MAN, RME, RMH, RMJ, RMK, RMM, RMU, RMR,RMT, RMO, RMV	all waters	TRUE	c

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2009	Mobulas	MAN, RME, RMH, RMJ, RMK, RMM, RMU, RMR,RMT, RMO, RMV	all waters	TRUE	c
2017	Thornback Ray	RJC	Thornback ray ( <i>Raja clavata</i> ) in Subarea 4 and in divisions 3.a and 7.d (North Sea, Skagerrak, Kattegat, and eastern English Channel)	TRUE	c
2016	Thornback Ray	RJC	Thornback ray ( <i>Raja clavata</i> ) in Subarea 4 and in divisions 3.a and 7.d (North Sea, Skagerrak, Kattegat, and eastern English Channel)	TRUE	c
2015	Thornback Ray	RJC	Thornback ray ( <i>Raja clavata</i> ) in Subarea 4 and in divisions 3.a and 7.d (North Sea, Skagerrak, Kattegat, and eastern English Channel)	TRUE	c
2014	Thornback Ray	RJC	Thornback ray ( <i>Raja clavata</i> ) in Subarea 4 and in divisions 3.a and 7.d (North Sea, Skagerrak, Kattegat, and eastern English Channel)	TRUE	c
2013	Thornback Ray	RJC	Thornback ray ( <i>Raja clavata</i> ) in Subarea 4 and in divisions 3.a and 7.d (North Sea, Skagerrak, Kattegat, and eastern English Channel)	FALSE	c
2012	Thornback Ray	RJC	Thornback ray ( <i>Raja clavata</i> ) in Subarea 4 and in divisions 3.a and 7.d (North Sea, Skagerrak, Kattegat, and eastern English Channel)	FALSE	c
2011	Thornback Ray	RJC	Thornback ray ( <i>Raja clavata</i> ) in Subarea 4 and in divisions 3.a and 7.d (North Sea, Skagerrak, Kattegat, and eastern English Channel)	FALSE	c
2010	Thornback Ray	RJC	Thornback ray ( <i>Raja clavata</i> ) in Subarea 4 and in divisions 3.a and 7.d (North Sea, Skagerrak, Kattegat, and eastern English Channel)	FALSE	c
2009	Thornback Ray	RJC	Thornback ray ( <i>Raja clavata</i> ) in Subarea 4 and in divisions 3.a and 7.d (North Sea,	FALSE	c

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
			Skagerrak, Kattegat, and eastern English Channel)		
2017	Undulate ray	RJU	Undulate Ray inVIId-e, English Channel	FALSE	c
2016	Undulate ray	RJU	Undulate Ray inVIId-e, English Channel	TRUE	c
2015	Undulate ray	RJU	Undulate Ray inVIId-e, English Channel	TRUE	c
2014	Undulate ray	RJU	Undulate Ray inVIId-e, English Channel	TRUE	c
2013	Undulate ray	RJU	Undulate Ray inVIId-e, English Channel	TRUE	c
2012	Undulate ray	RJU	Undulate Ray inVIId-e, English Channel	TRUE	c
2011	Undulate ray	RJU	Undulate Ray inVIId-e, English Channel	TRUE	c
2010	Undulate ray	RJU	Undulate Ray inVIId-e, English Channel	TRUE	c
2009	Undulate ray	RJU	Undulate Ray inVIId-e, English Channel	TRUE	c
2017	Norwegian Skate	JAD	VIa, VIb, VIIa-c, VIIefghk	TRUE	c
2016	Norwegian Skate	JAD	VIa, VIb, VIIa-c, VIIefghk	TRUE	c
2015	Norwegian Skate	JAD	VIa, VIb, VIIa-c, VIIefghk	TRUE	c
2014	Norwegian Skate	JAD	VIa, VIb, VIIa-c, VIIefghk	TRUE	c
2013	Norwegian Skate	JAD	VIa, VIb, VIIa-c, VIIefghk	TRUE	c
2012	Norwegian Skate	JAD	VIa, VIb, VIIa-c, VIIefghk	TRUE	c
2011	Norwegian Skate	JAD	VIa, VIb, VIIa-c, VIIefghk	TRUE	c
2010	Norwegian Skate	JAD	VIa, VIb, VIIa-c, VIIefghk	TRUE	c
2009	Norwegian Skate	JAD	VIa, VIb, VIIa-c, VIIefghk	TRUE	b
2017	White Skate	RJA	White skate (Rostroraja alba) in the Northeast Atlantic	TRUE	bc
2016	White Skate	RJA	White skate (Rostroraja alba) in the Northeast Atlantic	TRUE	bc
2015	White Skate	RJA	White skate (Rostroraja alba) in the Northeast Atlantic	TRUE	bc
2014	White Skate	RJA	White skate (Rostroraja alba) in the Northeast Atlantic	TRUE	c
2013	White Skate	RJA	White skate (Rostroraja alba) in the Northeast Atlantic	TRUE	c
2012	White Skate	RJA	White skate (Rostroraja alba) in the Northeast Atlantic	TRUE	c

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2011	White Skate	RJA	White skate (Rostroraja alba) in the Northeast Atlantic	TRUE	c
2010	White Skate	RJA	White skate (Rostroraja alba) in the Northeast Atlantic	TRUE	c
2009	White Skate	RJA	White skate (Rostroraja alba) in the Northeast Atlantic	TRUE	c
2017	Guitarfishes	GTF, RHH, RBE, RBC,GUD, GUF, RBO, RBU, RBS, RBL, RBP, RBX, RBZ, RBR, RBT, GUZ, RZE	I, II, III, IV, V, VI, VII, VIII, IX, X and XII	TRUE	c
2016	Guitarfishes	GTF, RHH, RBE, RBC,GUD, GUF, RBO, RBU, RBS, RBL, RBP, RBX, RBZ, RBR, RBT, GUZ, RZE	I, II, III, IV, V, VI, VII, VIII, IX, X and XII	TRUE	c
2015	Guitarfishes	GTF, RHH, RBE, RBC,GUD, GUF, RBO, RBU, RBS, RBL, RBP, RBX, RBZ, RBR, RBT, GUZ, RZE	I, II, III, IV, V, VI, VII, VIII, IX, X and XII	TRUE	c
2014	Guitarfishes	GTF, RHH, RBE, RBC,GUD, GUF, RBO, RBU, RBS, RBL, RBP, RBX, RBZ, RBR, RBT, GUZ, RZE	I, II, III, IV, V, VI, VII, VIII, IX, X and XII	TRUE	c
2013	Guitarfishes	GTF, RHH, RBE, RBC,GUD, GUF, RBO, RBU, RBS, RBL, RBP, RBX, RBZ, RBR, RBT, GUZ, RZE	I, II, III, IV, V, VI, VII, VIII, IX, X and XII	TRUE	c
2012	Guitarfishes	GTF, RHH, RBE, RBC,GUD, GUF, RBO, RBU, RBS,	I, II, III, IV, V, VI, VII, VIII, IX, X and XII	TRUE	c



Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
		RBL, RBP, RBX, RBZ, RBR, RBT, GUZ, RZE			
2011	Guitarfishes	GTF, RHH, RBE, RBC,GUD, GUF, RBO, RBU, RBS, RBL, RBP, RBX, RBZ, RBR, RBT, GUZ, RZE	I, II, III, IV, V, VI, VII, VIII, IX, X and XII	TRUE	c
2010	Guitarfishes	GTF, RHH, RBE, RBC,GUD, GUF, RBO, RBU, RBS, RBL, RBP, RBX, RBZ, RBR, RBT, GUZ, RZE	I, II, III, IV, V, VI, VII, VIII, IX, X and XII	TRUE	c
2009	Guitarfishes	GTF, RHH, RBE, RBC,GUD, GUF, RBO, RBU, RBS, RBL, RBP, RBX, RBZ, RBR, RBT, GUZ, RZE	I, II, III, IV, V, VI, VII, VIII, IX, X and XII	FALSE	c
2017	Kitefin Shark, birdbeak dogfish leafscale gulper shark great lanternshark	SCK, ETR, DCA	Deep sea sharks I,IIa, IV, XIV	TRUE	c
2016	Kitefin Shark, birdbeak dogfish leafscale gulper shark great lanternshark	SCK, ETR, DCA	Deep sea sharks I,IIa, IV, XIV	TRUE	c
2015	Kitefin Shark, birdbeak dogfish leafscale gulper shark great lanternshark	SCK, ETR, DCA	Deep sea sharks I,IIa, IV, XIV	TRUE	c
2014	Kitefin Shark, birdbeak dogfish leafscale gulper shark great lanternshark	SCK, ETR, DCA	Deep sea sharks I,IIa, IV, XIV	TRUE	c
2013	Kitefin Shark, birdbeak dogfish leafscale gulper shark great lanternshark	SCK, ETR, DCA	Deep sea sharks I,IIa, IV, XIV	TRUE	c
2012	Kitefin Shark, birdbeak dogfish leafscale gulper	SCK, ETR, DCA	Deep sea sharks I,IIa, IV, XIV	TRUE	c

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
	shark great lanternshark				
2011	Kitefin Shark, birdbeak dogfish leafscale gulper shark great lanternshark	SCK, ETR, DCA	Deep sea sharks I,IIa, IV, XIV	TRUE	c
2010	Kitefin Shark, birdbeak dogfish leafscale gulper shark great lanternshark	SCK, ETR, DCA	Deep sea sharks I,IIa, IV, XIV	TRUE	c
2009	Kitefin Shark, birdbeak dogfish leafscale gulper shark great lanternshark	SCK, ETR, DCA	Deep sea sharks I,IIa, IV, XIV	FALSE	c
2017	Bigeye Thresher Shark	BTH	all waters	TRUE	c
2016	Bigeye Thresher Shark	BTH	all waters	TRUE	c
2015	Bigeye Thresher Shark	BTH	all waters	TRUE	c
2014	Bigeye Thresher Shark	BTH	all waters	TRUE	c
2013	Bigeye Thresher Shark	BTH	all waters	TRUE	c
2012	Bigeye Thresher Shark	BTH	all waters	TRUE	c
2011	Bigeye Thresher Shark	BTH	all waters	FALSE	c
2010	Bigeye Thresher Shark	BTH	all waters	FALSE	c
2009	Bigeye Thresher Shark	BTH	all waters	FALSE	c
2017	Oceanic White Tip	OSC	all waters	TRUE	cd
2016	Oceanic White Tip	OSC	all waters	TRUE	cd
2015	Oceanic White Tip	OSC	all waters	TRUE	cd
2014	Oceanic White Tip	OSC	all waters	TRUE	cd
2013	Oceanic White Tip	OSC	all waters	TRUE	cd
2012	Oceanic White Tip	OSC	all waters	TRUE	cd
2011	Oceanic White Tip	OSC	all waters	FALSE	cd
2010	Oceanic White Tip	OSC	all waters	FALSE	cd
2009	Oceanic White Tip	OSC	all waters	FALSE	cd
2017	Silky Shark	FAL	21, 27, 31, 34, 37, 41, 47, 48	TRUE	c
2016	Silky Shark	FAL	21, 27, 31, 34, 37, 41, 47, 48	TRUE	c
2015	Silky Shark	FAL	21, 27, 31, 34, 37, 41, 47, 48	TRUE	c
2014	Silky Shark	FAL	21, 27, 31, 34, 37, 41, 47, 48	TRUE	c
2013	Silky Shark	FAL	21, 27, 31, 34, 37, 41, 47, 48	TRUE	c

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2012	Silky Shark	FAL	21, 27, 31, 34, 37, 41, 47, 48	TRUE	c
2011	Silky Shark	FAL	21, 27, 31, 34, 37, 41, 47, 48	TRUE	c
2010	Silky Shark	FAL	21, 27, 31, 34, 37, 41, 47, 48	FALSE	c
2009	Silky Shark	FAL	21, 27, 31, 34, 37, 41, 47, 48	FALSE	c
2017	Hamerheads Sharks nei	SPN	Hamerhead Shark (Sphyrna lewini) all out of Mediterraneana	TRUE	d
2016	Hamerheads Sharks nei	SPN	Hamerhead Shark (Sphyrna lewini) all out of Mediterraneana	TRUE	d
2015	Hamerheads Sharks nei	SPN	Hamerhead Shark (Sphyrna lewini) all out of Mediterraneana	TRUE	d
2014	Hamerheads Sharks nei	SPN	Hamerhead Shark (Sphyrna lewini) all out of Mediterraneana	TRUE	d
2013	Hamerheads Sharks nei	SPN	Hamerhead Shark (Sphyrna lewini) all out of Mediterraneana	FALSE	d
2012	Hamerheads Sharks nei	SPN	Hamerhead Shark (Sphyrna lewini) all out of Mediterraneana	FALSE	d
2011	Hamerheads Sharks nei	SPN	Hamerhead Shark (Sphyrna lewini) all out of Mediterraneana	FALSE	d
2010	Hamerheads Sharks nei	SPN	Hamerhead Shark (Sphyrna lewini) all out of Mediterraneana	FALSE	d
2009	Hamerheads Sharks nei	SPN	Hamerhead Shark (Sphyrna lewini) all out of Mediterraneana	FALSE	d
2017	Sardine	PIL	27.8c, 27.9a	TRUE	b
2016	Sardine	PIL	27.8c, 27.9a	TRUE	b
2015	Sardine	PIL	27.8c, 27.9a	TRUE	b
2014	Sardine	PIL	27.8c, 27.9a	TRUE	b
2013	Sardine	PIL	27.8c, 27.9a	TRUE	b
2012	Sardine	PIL	27.8c, 27.9a	TRUE	b
2011	Sardine	PIL	27.8c, 27.9a	TRUE	b
2010	Sardine	PIL	27.8c, 27.9a	TRUE	b
2009	Sardine	PIL	27.8c, 27.9a	TRUE	b
2017	Anchovy	ANE	Anchovy in GSA 7	FALSE	b
2016	Anchovy	ANE	Anchovy in GSA 7	TRUE	b
2015	Anchovy	ANE	Anchovy in GSA 7	FALSE	b
2014	Anchovy	ANE	Anchovy in GSA 7	TRUE	b
2013	Anchovy	ANE	Anchovy in GSA 7	FALSE	b
2012	Anchovy	ANE	Anchovy in GSA 7	FALSE	b
2011	Anchovy	ANE	Anchovy in GSA 7	FALSE	b

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2010	Anchovy	ANE	Anchovy in GSA 7	FALSE	b
2009	Anchovy	ANE	Anchovy in GSA 7	FALSE	b
2017	sandeel	SAN	Shetland Area (SA 7)	TRUE	b
2016	sandeel	SAN	Shetland Area (SA 7)	TRUE	b
2015	sandeel	SAN	Shetland Area (SA 7)	TRUE	b
2014	sandeel	SAN	Shetland Area (SA 7)	TRUE	b
2013	sandeel	SAN	Shetland Area (SA 7)	TRUE	b
2012	sandeel	SAN	Shetland Area (SA 7)	TRUE	b
2011	sandeel	SAN	Shetland Area (SA 7)	TRUE	b
2010	sandeel	SAN	Shetland Area (SA 7)	TRUE	b
2009	sandeel	SAN	Shetland Area (SA 7)	TRUE	b
2017	Sardine	PIL	GSA 6	FALSE	b
2016	Sardine	PIL	GSA 6	FALSE	b
2015	Sardine	PIL	GSA 6	TRUE	b
2014	Sardine	PIL	GSA 6	TRUE	b
2013	Sardine	PIL	GSA 6	TRUE	b
2012	Sardine	PIL	GSA 6	FALSE	b
2011	Sardine	PIL	GSA 6	FALSE	b
2010	Sardine	PIL	GSA 6	TRUE	b
2009	Sardine	PIL	GSA 6	FALSE	b
2017	sandeel	SAN	Central Eastern North Sea (SA 3)	FALSE	a
2016	sandeel	SAN	Central Eastern North Sea (SA 3)	FALSE	a
2015	sandeel	SAN	Central Eastern North Sea (SA 3)	FALSE	a
2014	sandeel	SAN	Central Eastern North Sea (SA 3)	FALSE	a
2013	sandeel	SAN	Central Eastern North Sea (SA 3)	TRUE	a
2012	sandeel	SAN	Central Eastern North Sea (SA 3)	TRUE	b
2011	sandeel	SAN	Central Eastern North Sea (SA 3)	TRUE	b
2010	sandeel	SAN	Central Eastern North Sea (SA 3)	FALSE	a
2009	sandeel	SAN	Central Eastern North Sea (SA 3)	TRUE	a
2017	sandeel	SAN	Bergen Bank Area (SA 5)	TRUE	b
2016	sandeel	SAN	Bergen Bank Area (SA 5)	TRUE	b
2015	sandeel	SAN	Bergen Bank Area (SA 5)	TRUE	b
2014	sandeel	SAN	Bergen Bank Area (SA 5)	TRUE	b
2013	sandeel	SAN	Bergen Bank Area (SA 5)	TRUE	b
2012	sandeel	SAN	Bergen Bank Area (SA 5)	TRUE	b
2011	sandeel	SAN	Bergen Bank Area (SA 5)	TRUE	b
2010	sandeel	SAN	Bergen Bank Area (SA 5)	TRUE	b

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2009	sandeel	SAN	Bergen Bank Area (SA 5)	TRUE	b
2017	sandeel	SAN	Sandeel ( <i>Ammodytes</i> spp.) in divisions 4.b-c, Sandeel Area 1r (central and southern North Sea, Dogger Bank)	FALSE	b
2016	sandeel	SAN	Sandeel ( <i>Ammodytes</i> spp.) in divisions 4.b-c, Sandeel Area 1r (central and southern North Sea, Dogger Bank)	TRUE	b
2015	sandeel	SAN	Sandeel ( <i>Ammodytes</i> spp.) in divisions 4.b-c, Sandeel Area 1r (central and southern North Sea, Dogger Bank)	TRUE	a
2014	sandeel	SAN	Sandeel ( <i>Ammodytes</i> spp.) in divisions 4.b-c, Sandeel Area 1r (central and southern North Sea, Dogger Bank)	TRUE	a
2013	sandeel	SAN	Sandeel ( <i>Ammodytes</i> spp.) in divisions 4.b-c, Sandeel Area 1r (central and southern North Sea, Dogger Bank)	TRUE	a
2012	sandeel	SAN	Sandeel ( <i>Ammodytes</i> spp.) in divisions 4.b-c, Sandeel Area 1r (central and southern North Sea, Dogger Bank)	FALSE	a
2011	sandeel	SAN	Sandeel ( <i>Ammodytes</i> spp.) in divisions 4.b-c, Sandeel Area 1r (central and southern North Sea, Dogger Bank)	FALSE	a
2010	sandeel	SAN	Sandeel ( <i>Ammodytes</i> spp.) in divisions 4.b-c, Sandeel Area 1r (central and southern North Sea, Dogger Bank)	TRUE	b
2009	sandeel	SAN	Sandeel ( <i>Ammodytes</i> spp.) in divisions 4.b-c, Sandeel Area 1r (central and southern North Sea, Dogger Bank)	TRUE	b
2017	Spiny Dogfish	DGS	Spurdog ( <i>Squalus acanthias</i> ) in Black Sea GSA 29	TRUE	b
2016	Spiny Dogfish	DGS	Spurdog ( <i>Squalus acanthias</i> ) in Black Sea GSA 29	TRUE	b
2015	Spiny Dogfish	DGS	Spurdog ( <i>Squalus acanthias</i> ) in Black Sea GSA 29	TRUE	b
2014	Spiny Dogfish	DGS	Spurdog ( <i>Squalus acanthias</i> ) in Black Sea GSA 29	TRUE	b

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2013	Spiny Dogfish	DGS	Spurdog (Squalus acanthias) in Black Sea GSA 29	TRUE	b
2012	Spiny Dogfish	DGS	Spurdog (Squalus acanthias) in Black Sea GSA 29	TRUE	b
2011	Spiny Dogfish	DGS	Spurdog (Squalus acanthias) in Black Sea GSA 29	TRUE	b
2010	Spiny Dogfish	DGS	Spurdog (Squalus acanthias) in Black Sea GSA 29	TRUE	b
2009	Spiny Dogfish	DGS	Spurdog (Squalus acanthias) in Black Sea GSA 29	TRUE	b
2017	Smalltooth sand tiger	LOO	21.1, 27.8, 27.9, 27.10, 34.1.1, 34.1.2, 37	TRUE	d
2016	Smalltooth sand tiger	LOO	21.1, 27.8, 27.9, 27.10, 34.1.1, 34.1.2, 37	TRUE	d
2015	Smalltooth sand tiger	LOO	21.1, 27.8, 27.9, 27.10, 34.1.1, 34.1.2, 37	TRUE	d
2014	Smalltooth sand tiger	LOO	21.1, 27.8, 27.9, 27.10, 34.1.1, 34.1.2, 37	FALSE	d
2013	Smalltooth sand tiger	LOO	21.1, 27.8, 27.9, 27.10, 34.1.1, 34.1.2, 37	FALSE	d
2012	Smalltooth sand tiger	LOO	21.1, 27.8, 27.9, 27.10, 34.1.1, 34.1.2, 37	FALSE	d
2011	Smalltooth sand tiger	LOO	21.1, 27.8, 27.9, 27.10, 34.1.1, 34.1.2, 37	FALSE	d
2010	Smalltooth sand tiger	LOO	21.1, 27.8, 27.9, 27.10, 34.1.1, 34.1.2, 37	FALSE	d
2009	Smalltooth sand tiger	LOO	21.1, 27.8, 27.9, 27.10, 34.1.1, 34.1.2, 37	FALSE	d
2017	Sawback angelshark	SUA	27.9, 34.1.1, 34.1.2, 37	TRUE	cd
2016	Sawback angelshark	SUA	27.9, 34.1.1, 34.1.2, 37	TRUE	cd
2015	Sawback angelshark	SUA	27.9, 34.1.1, 34.1.2, 37	TRUE	cd
2014	Sawback angelshark	SUA	27.9, 34.1.1, 34.1.2, 37	TRUE	cd
2013	Sawback angelshark	SUA	27.9, 34.1.1, 34.1.2, 37	TRUE	cd
2012	Sawback angelshark	SUA	27.9, 34.1.1, 34.1.2, 37	TRUE	cd
2011	Sawback angelshark	SUA	27.9, 34.1.1, 34.1.2, 37	FALSE	cd
2010	Sawback angelshark	SUA	27.9, 34.1.1, 34.1.2, 37	FALSE	cd
2009	Sawback angelshark	SUA	27.9, 34.1.1, 34.1.2, 37	FALSE	cd
2017	Smoothback angelshark	SUT	27.9, 34, 37, 47	TRUE	cd
2016	Smoothback angelshark	SUT	27.9, 34, 37, 47	TRUE	cd
2015	Smoothback angelshark	SUT	27.9, 34, 37, 47	TRUE	cd
2014	Smoothback angelshark	SUT	27.9, 34, 37, 47	TRUE	d
2013	Smoothback angelshark	SUT	27.9, 34, 37, 47	FALSE	cd
2012	Smoothback angelshark	SUT	27.9, 34, 37, 47	FALSE	cd

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2011	Smoothback angelshark	SUT	27.9, 34, 37, 47	FALSE	d
2010	Smoothback angelshark	SUT	27.9, 34, 37, 47	FALSE	d
2009	Smoothback angelshark	SUT	27.9, 34, 37, 47	FALSE	d
2017	Maltese Ray	JAM	Maltese ray (Leucoraja melitensis) in Mediteranea 37	TRUE	cd
2016	Maltese Ray	JAM	Maltese ray (Leucoraja melitensis) in Mediteranea 37	TRUE	cd
2015	Maltese Ray	JAM	Maltese ray (Leucoraja melitensis) in Mediteranea 37	TRUE	cd
2014	Maltese Ray	JAM	37	TRUE	cd
2013	Maltese Ray	JAM	Maltese ray (Leucoraja melitensis) in Mediteranea 37	TRUE	c
2012	Maltese Ray	JAM	Maltese ray (Leucoraja melitensis) in Mediteranea 37	TRUE	c
2011	Maltese Ray	JAM	Maltese ray (Leucoraja melitensis) in Mediteranea 37	FALSE	d
2010	Maltese Ray	JAM	Maltese ray (Leucoraja melitensis) in Mediteranea 37	FALSE	d
2009	Maltese Ray	JAM	Maltese ray (Leucoraja melitensis) in Mediteranea 37	FALSE	d
2017	Spiny butterfly ray	RGL	27.8c, 27.9, 34.1.1, 34.1.2, 37	TRUE	d
2016	Spiny butterfly ray	RGL	27.8c, 27.9, 34.1.1, 34.1.2, 37	TRUE	d
2015	Spiny butterfly ray	RGL	27.8c, 27.9, 34.1.1, 34.1.2, 37	TRUE	d
2014	Spiny butterfly ray	RGL	27.8c, 27.9, 34.1.1, 34.1.2, 37	TRUE	d
2013	Spiny butterfly ray	RGL	27.8c, 27.9, 34.1.1, 34.1.2, 37	FALSE	d
2012	Spiny butterfly ray	RGL	27.8c, 27.9, 34.1.1, 34.1.2, 37	FALSE	d
2011	Spiny butterfly ray	RGL	27.8c, 27.9, 34.1.1, 34.1.2, 37	FALSE	d
2010	Spiny butterfly ray	RGL	27.8c, 27.9, 34.1.1, 34.1.2, 37	FALSE	d
2009	Spiny butterfly ray	RGL	27.8c, 27.9, 34.1.1, 34.1.2, 37	FALSE	d
2017	Bull Ray	MPO	27.9, 34.1.1, 34.1.2, 37	TRUE	d
2016	Bull Ray	MPO	27.9, 34.1.1, 34.1.2, 37	TRUE	d
2015	Bull Ray	MPO	27.9, 34.1.1, 34.1.2, 37	TRUE	d
2014	Bull Ray	MPO	27.9, 34.1.1, 34.1.2, 37	TRUE	d
2013	Bull Ray	MPO	27.9, 34.1.1, 34.1.2, 37	FALSE	d
2012	Bull Ray	MPO	27.9, 34.1.1, 34.1.2, 37	FALSE	d

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2011	Bull Ray	MPO	27.9, 34.1.1, 34.1.2, 37	FALSE	d
2010	Bull Ray	MPO	27.9, 34.1.1, 34.1.2, 37	FALSE	d
2009	Bull Ray	MPO	27.9, 34.1.1, 34.1.2, 37	FALSE	d
2017	Sand Tiger Shark	CCT	34.1.1, 34.1.2, 37	TRUE	d
2016	Sand Tiger Shark	CCT	34.1.1, 34.1.2, 37	TRUE	d
2015	Sand Tiger Shark	CCT	34.1.1, 34.1.2, 37	TRUE	d
2014	Sand Tiger Shark	CCT	34.1.1, 34.1.2, 37	TRUE	d
2013	Sand Tiger Shark	CCT	34.1.1, 34.1.2, 37	FALSE	d
2012	Sand Tiger Shark	CCT	34.1.1, 34.1.2, 37	FALSE	d
2011	Sand Tiger Shark	CCT	34.1.1, 34.1.2, 37	FALSE	d
2010	Sand Tiger Shark	CCT	34.1.1, 34.1.2, 37	FALSE	d
2009	Sand Tiger Shark	CCT	34.1.1, 34.1.2, 37	FALSE	d
2017	Greenland Shark	GSK	27.5, 27.6, 27.7, 27.9, 27.10	TRUE	c
2016	Greenland Shark	GSK	27.5, 27.6, 27.7, 27.9, 27.10	TRUE	c
2015	Greenland Shark	GSK	27.5, 27.6, 27.7, 27.9, 27.10	TRUE	c
2014	Greenland Shark	GSK	27.5, 27.6, 27.7, 27.9, 27.10	TRUE	c
2013	Greenland Shark	GSK	27.5, 27.6, 27.7, 27.9, 27.10	TRUE	c
2012	Greenland Shark	GSK	27.5, 27.6, 27.7, 27.9, 27.10	TRUE	c
2011	Greenland Shark	GSK	27.5, 27.6, 27.7, 27.9, 27.10	FALSE	c
2010	Greenland Shark	GSK	27.5, 27.6, 27.7, 27.9, 27.10	FALSE	c
2009	Greenland Shark	GSK	27.5, 27.6, 27.7, 27.9, 27.10	FALSE	c
2017	Southern Blufin Tuna	SBF	47.C.,47.D, 51.6, 51.7, 51.8, 58, 57.2, 57.3, 57.4, 57.5, 57.6, 81	TRUE	d
2016	Southern Blufin Tuna	SBF	47.C.,47.D, 51.6, 51.7, 51.8, 58, 57.2, 57.3, 57.4, 57.5, 57.6, 81	TRUE	d
2015	Southern Blufin Tuna	SBF	47.C.,47.D, 51.6, 51.7, 51.8, 58, 57.2, 57.3, 57.4, 57.5, 57.6, 81	TRUE	d
2014	Southern Blufin Tuna	SBF	47.C.,47.D, 51.6, 51.7, 51.8, 58, 57.2, 57.3, 57.4, 57.5, 57.6, 81	TRUE	d
2013	Southern Blufin Tuna	SBF	47.C.,47.D, 51.6, 51.7, 51.8, 58, 57.2, 57.3, 57.4, 57.5, 57.6, 81	TRUE	d
2012	Southern Blufin Tuna	SBF	47.C.,47.D, 51.6, 51.7, 51.8, 58, 57.2, 57.3, 57.4, 57.5, 57.6, 81	TRUE	d
2011	Southern Blufin Tuna	SBF	47.C.,47.D, 51.6, 51.7, 51.8, 58, 57.2, 57.3, 57.4, 57.5, 57.6, 81	TRUE	d



Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2010	Southern Blufin Tuna	SBF	47.C.,47.D, 51.6, 51.7, 51.8, 58, 57.2, 57.3, 57.4, 57.5, 57.6, 81	TRUE	d
2009	Southern Blufin Tuna	SBF	47.C.,47.D, 51.6, 51.7, 51.8, 58, 57.2, 57.3, 57.4, 57.5, 57.6, 81	TRUE	d
2017	Blackchin guitarfish	RBC	37	TRUE	c
2016	Blackchin guitarfish	RBC	37	TRUE	c
2015	Blackchin guitarfish	RBC	37	TRUE	c
2014	Blackchin guitarfish	RBC	37	TRUE	c
2013	Blackchin guitarfish	RBC	37	TRUE	c
2012	Blackchin guitarfish	RBC	37	TRUE	c
2011	Blackchin guitarfish	RBC	37	FALSE	c
2010	Blackchin guitarfish	RBC	37	FALSE	c
2009	Blackchin guitarfish	RBC	37	FALSE	c
2017	Sandy ray	RJI	Sandy ray (Leucoraja circularis) in Mediteranea 37	TRUE	c
2016	Sandy ray	RJI	Sandy ray (Leucoraja circularis) in Mediteranea 37	TRUE	c
2015	Sandy ray	RJI	Sandy ray (Leucoraja circularis) in Mediteranea 37	TRUE	c
2014	Sandy ray	RJI	Sandy ray (Leucoraja circularis) in Mediteranea 37	TRUE	c
2013	Sandy ray	RJI	Sandy ray (Leucoraja circularis) in Mediteranea 37	TRUE	c
2012	Sandy ray	RJI	Sandy ray (Leucoraja circularis) in Mediteranea 37	TRUE	c
2011	Sandy ray	RJI	Sandy ray (Leucoraja circularis) in Mediteranea 37	FALSE	c
2010	Sandy ray	RJI	Sandy ray (Leucoraja circularis) in Mediteranea 37	FALSE	c
2009	Sandy ray	RJI	Sandy ray (Leucoraja circularis) in Mediteranea 37	FALSE	c
2017	Common guitarfish	RBX	37	TRUE	c
2016	Common guitarfish	RBX	37	TRUE	c
2015	Common guitarfish	RBX	37	TRUE	c
2014	Common guitarfish	RBX	37	TRUE	c
2013	Common guitarfish	RBX	37	TRUE	c
2012	Common guitarfish	RBX	37	TRUE	c
2011	Common guitarfish	RBX	37	FALSE	c
2010	Common guitarfish	RBX	37	FALSE	c

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2009	Common guitarfish	RBX	37	FALSE	c
2017	Alopiidae	BTH, ALV, PTH, THR	51, 57	TRUE	c
2016	Alopiidae	BTH, ALV, PTH, THR	51, 57	TRUE	c
2015	Alopiidae	BTH, ALV, PTH, THR	51, 57	TRUE	c
2014	Alopiidae	BTH, ALV, PTH, THR	51, 57	TRUE	c
2013	Alopiidae	BTH, ALV, PTH, THR	51, 57	TRUE	c
2012	Alopiidae	BTH, ALV, PTH, THR	51, 57	TRUE	c
2011	Alopiidae	BTH, ALV, PTH, THR	51, 57	FALSE	c
2010	Alopiidae	BTH, ALV, PTH, THR	51, 57	FALSE	c
2009	Alopiidae	BTH, ALV, PTH, THR	51, 57	FALSE	c
2017	Tusk	USK	Tusk ( <i>Brosme brosme</i> ) in Subarea 12, excluding Division 12.b (Southern Mid-Atlantic Ridge)	TRUE	b
2016	Tusk	USK	Tusk ( <i>Brosme brosme</i> ) in Subarea 12, excluding Division 12.b (Southern Mid-Atlantic Ridge)	TRUE	b
2015	Tusk	USK	Tusk ( <i>Brosme brosme</i> ) in Subarea 12, excluding Division 12.b (Southern Mid-Atlantic Ridge)	TRUE	b
2014	Tusk	USK	Tusk ( <i>Brosme brosme</i> ) in Subarea 12, excluding Division 12.b (Southern Mid-Atlantic Ridge)	TRUE	b
2013	Tusk	USK	Tusk ( <i>Brosme brosme</i> ) in Subarea 12, excluding Division 12.b (Southern Mid-Atlantic Ridge)	TRUE	b
2012	Tusk	USK	Tusk ( <i>Brosme brosme</i> ) in Subarea 12, excluding Division 12.b (Southern Mid-Atlantic Ridge)	FALSE	b
2011	Tusk	USK	Tusk ( <i>Brosme brosme</i> ) in Subarea 12, excluding Division 12.b (Southern Mid-Atlantic Ridge)	FALSE	b
2010	Tusk	USK	Tusk ( <i>Brosme brosme</i> ) in Subarea 12, excluding Division 12.b (Southern Mid-Atlantic Ridge)	FALSE	b
2009	Tusk	USK	Tusk ( <i>Brosme brosme</i> ) in Subarea 12, excluding Division 12.b (Southern Mid-Atlantic Ridge)	FALSE	b
2017	Gulper Shark	CWO		TRUE	c
2016	Gulper Shark	CWO		TRUE	c

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2015	Gulper Shark	CWO		TRUE	c
2014	Gulper Shark	CWO		TRUE	c
2013	Gulper Shark	CWO		TRUE	c
2012	Gulper Shark	CWO		TRUE	c
2011	Gulper Shark	CWO		FALSE	c
2010	Gulper Shark	CWO		FALSE	c
2009	Gulper Shark	CWO		FALSE	c
2017	Longnose velvet dogfish	CYP		TRUE	b
2016	Longnose velvet dogfish	CYP		TRUE	b
2015	Longnose velvet dogfish	CYP		TRUE	b
2014	Longnose velvet dogfish	CYP		TRUE	b
2013	Longnose velvet dogfish	CYP		TRUE	b
2012	Longnose velvet dogfish	CYP		TRUE	b
2011	Longnose velvet dogfish	CYP		TRUE	b
2010	Longnose velvet dogfish	CYP		TRUE	b
2009	Longnose velvet dogfish	CYP		FALSE	bc
2017	Tope Shark	GAG	all 37 with LL, bottom set net and tuna trap	TRUE	c
2016	Tope Shark	GAG	all 37 with LL, bottom set net and tuna trap	TRUE	c
2015	Tope Shark	GAG	all 37 with LL, bottom set net and tuna trap	TRUE	c
2014	Tope Shark	GAG	all 37 with LL, bottom set net and tuna trap	TRUE	c
2013	Tope Shark	GAG	all 37 with LL, bottom set net and tuna trap	TRUE	c
2012	Tope Shark	GAG	all 37 with LL, bottom set net and tuna trap	TRUE	c
2011	Tope Shark	GAG	all 37 with LL, bottom set net and tuna trap	FALSE	c
2010	Tope Shark	GAG	all 37 with LL, bottom set net and tuna trap	FALSE	c
2009	Tope Shark	GAG	all 37 with LL, bottom set net and tuna trap	FALSE	c
2017	sandeel	SAN	Northern and Central North Sea	FALSE	a
2016	sandeel	SAN	Northern and Central North Sea	FALSE	a
2015	sandeel	SAN	Northern and Central North Sea	TRUE	b
2014	sandeel	SAN	Northern and Central North Sea	TRUE	b
2013	sandeel	SAN	Northern and Central North Sea	TRUE	b
2012	sandeel	SAN	Northern and Central North Sea	TRUE	b

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2011	sandeel	SAN	Northern and Central North Sea	FALSE	b
2010	sandeel	SAN	Northern and Central North Sea	TRUE	a
2009	sandeel	SAN	Northern and Central North Sea	TRUE	a
2017	Cunene horse mackerel	HMZ	Cunene horse mackerel (Trachurus trecae) in South CECAF	FALSE	b
2016	Cunene horse mackerel	HMZ	Cunene horse mackerel (Trachurus trecae) in South CECAF	FALSE	b
2015	Cunene horse mackerel	HMZ	Cunene horse mackerel (Trachurus trecae) in South CECAF	FALSE	b
2014	Cunene horse mackerel	HMZ	Cunene horse mackerel (Trachurus trecae) in South CECAF	FALSE	b
2013	Cunene horse mackerel	HMZ	Cunene horse mackerel (Trachurus trecae) in South CECAF	FALSE	b
2012	Cunene horse mackerel	HMZ	Cunene horse mackerel (Trachurus trecae) in South CECAF	FALSE	b
2011	Cunene horse mackerel	HMZ	Cunene horse mackerel (Trachurus trecae) in South CECAF	FALSE	b
2010	Cunene horse mackerel	HMZ	Cunene horse mackerel (Trachurus trecae) in South CECAF	FALSE	b
2009	Cunene horse mackerel	HMZ	Cunene horse mackerel (Trachurus trecae) in South CECAF	FALSE	b
2017	Sole	SOL	Sole (Solea solea) in subdivisions 20-24	FALSE	a
2016	Sole	SOL	Sole (Solea solea) in subdivisions 20-24	FALSE	a
2015	Sole	SOL	Sole (Solea solea) in subdivisions 20-24	FALSE	a
2014	Sole	SOL	Sole (Solea solea) in subdivisions 20-24	FALSE	a
2013	Sole	SOL	Sole (Solea solea) in subdivisions 20-24	TRUE	a
2012	Sole	SOL	Sole (Solea solea) in subdivisions 20-24	FALSE	a
2011	Sole	SOL	Sole (Solea solea) in subdivisions 20-24	FALSE	a
2010	Sole	SOL	Sole (Solea solea) in subdivisions 20-24	FALSE	a
2009	Sole	SOL	Sole (Solea solea) in subdivisions 20-24	FALSE	a
2009	Knifetooth dogfish	SYR		FALSE	c
2010	Knifetooth dogfish	SYR		FALSE	c
2011	Knifetooth dogfish	SYR		FALSE	c
2012	Knifetooth dogfish	SYR		FALSE	c
2013	Knifetooth dogfish	SYR		FALSE	c

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2014	Knifetooth dogfish	SYR		FALSE	c
2017	Knifetooth dogfish	SYR		TRUE	c
2016	Knifetooth dogfish	SYR		TRUE	c
2015	Knifetooth dogfish	SYR		TRUE	c
2017	Undulate ray	RJU	Undulate Ray in VIII a-b Nothern & Central Bay of Biscay	FALSE	bc
2016	Undulate ray	RJU	Undulate Ray in VIII a-b Nothern & Central Bay of Biscay	TRUE	bc
2015	Undulate ray	RJU	Undulate Ray in VIII a-b Nothern & Central Bay of Biscay	TRUE	bc
2014	Undulate ray	RJU	Undulate Ray in VIII a-b Nothern & Central Bay of Biscay	TRUE	bc
2013	Undulate ray	RJU	Undulate Ray in VIII a-b Nothern & Central Bay of Biscay	TRUE	bc
2012	Undulate ray	RJU	Undulate Ray in VIII a-b Nothern & Central Bay of Biscay	TRUE	bc
2011	Undulate ray	RJU	Undulate Ray in VIII a-b Nothern & Central Bay of Biscay	TRUE	bc
2010	Undulate ray	RJU	Undulate Ray in VIII a-b Nothern & Central Bay of Biscay	TRUE	bc
2009	Undulate ray	RJU	Undulate Ray in VIII a-b Nothern & Central Bay of Biscay	TRUE	bc
2017	cod	COD	Cod (Gadus morhua) in NAFO divisions 1.A-E, offshore (West Greenland)	TRUE	b
2016	cod	COD	Cod (Gadus morhua) in NAFO divisions 1.A-E, offshore (West Greenland)	TRUE	b
2015	cod	COD	Cod (Gadus morhua) in NAFO divisions 1.A-E, offshore (West Greenland)	TRUE	b
2014	cod	COD	Cod (Gadus morhua) in NAFO divisions 1.A-E, offshore (West Greenland)	TRUE	b
2013	cod	COD	Cod (Gadus morhua) in NAFO divisions 1.A-E, offshore (West Greenland)	TRUE	b
2012	cod	COD	Cod (Gadus morhua) in NAFO divisions 1.A-E, offshore (West Greenland)	TRUE	b
2011	cod	COD	Cod (Gadus morhua) in NAFO divisions 1.A-E,	TRUE	b

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
			offshore (West Greenland)		
2010	cod	COD	Cod ( <i>Gadus morhua</i> ) in NAFO divisions 1.A–E, offshore (West Greenland)	TRUE	b
2009	cod	COD	Cod ( <i>Gadus morhua</i> ) in NAFO divisions 1.A–E, offshore (West Greenland)	TRUE	b
2017	Sea bass	BSS	Sea bass ( <i>Dicentrarchus labrax</i> ) in divisions 4.b–c, 7.a, and 7.d–h (central and southern North Sea, Irish Sea, English Channel, Bristol Channel, and Celtic Sea)	TRUE	ab
2016	Sea bass	BSS	Sea bass ( <i>Dicentrarchus labrax</i> ) in divisions 4.b–c, 7.a, and 7.d–h (central and southern North Sea, Irish Sea, English Channel, Bristol Channel, and Celtic Sea)	FALSE	a
2015	Sea bass	BSS	Sea bass ( <i>Dicentrarchus labrax</i> ) in divisions 4.b–c, 7.a, and 7.d–h (central and southern North Sea, Irish Sea, English Channel, Bristol Channel, and Celtic Sea)	FALSE	a
2014	Sea bass	BSS	Sea bass ( <i>Dicentrarchus labrax</i> ) in divisions 4.b–c, 7.a, and 7.d–h (central and southern North Sea, Irish Sea, English Channel, Bristol Channel, and Celtic Sea)	FALSE	a
2013	Sea bass	BSS	Sea bass ( <i>Dicentrarchus labrax</i> ) in divisions 4.b–c, 7.a, and 7.d–h (central and southern North Sea, Irish Sea, English Channel, Bristol Channel, and Celtic Sea)	FALSE	a
2012	Sea bass	BSS	Sea bass ( <i>Dicentrarchus labrax</i> ) in divisions 4.b–c, 7.a, and 7.d–h (central and southern North Sea, Irish Sea, English Channel, Bristol Channel, and Celtic Sea)	FALSE	a
2011	Sea bass	BSS	Sea bass ( <i>Dicentrarchus labrax</i> ) in divisions 4.b–c, 7.a, and 7.d–h (central and southern North Sea, Irish Sea, English Channel, Bristol Channel, and Celtic Sea)	FALSE	a

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2010	Sea bass	BSS	Sea bass ( <i>Dicentrarchus labrax</i> ) in divisions 4.b-c, 7.a, and 7.d-h (central and southern North Sea, Irish Sea, English Channel, Bristol Channel, and Celtic Sea)	FALSE	a
2009	Sea bass	BSS	Sea bass ( <i>Dicentrarchus labrax</i> ) in divisions 4.b-c, 7.a, and 7.d-h (central and southern North Sea, Irish Sea, English Channel, Bristol Channel, and Celtic Sea)	FALSE	a
2017	Swordfish	SWO	all 37	TRUE	a
2016	Swordfish	SWO	all 37	TRUE	a
2015	Swordfish	SWO	all 37	TRUE	a
2014	Swordfish	SWO	all 37	TRUE	a
2013	Swordfish	SWO	all 37	FALSE	a
2012	Swordfish	SWO	all 37	FALSE	a
2011	Swordfish	SWO	all 37	FALSE	a
2010	Swordfish	SWO	all 37	FALSE	a
2009	Swordfish	SWO	all 37	FALSE	a
2017	Greenland Halibut	GHL	Greenland halibut ( <i>Reinhardtius hippoglossoides</i> ) in subareas 5, 6, 12, and 14 (Iceland and Faroes grounds, West of Scotland, North of Azores, East of Greenland)	FALSE	b
2016	Greenland Halibut	GHL	Greenland halibut ( <i>Reinhardtius hippoglossoides</i> ) in subareas 5, 6, 12, and 14 (Iceland and Faroes grounds, West of Scotland, North of Azores, East of Greenland)	FALSE	b
2015	Greenland Halibut	GHL	Greenland halibut ( <i>Reinhardtius hippoglossoides</i> ) in subareas 5, 6, 12, and 14 (Iceland and Faroes grounds, West of Scotland, North of Azores, East of Greenland)	FALSE	b
2014	Greenland Halibut	GHL	Greenland halibut ( <i>Reinhardtius hippoglossoides</i> ) in subareas 5, 6, 12, and 14 (Iceland and Faroes	FALSE	b

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
			grounds, West of Scotland, North of Azores, East of Greenland)		
2013	Greenland Halibut	GHL	Greenland halibut (Reinhardtius hippoglossoides) in subareas 5, 6, 12, and 14 (Iceland and Faroes grounds, West of Scotland, North of Azores, East of Greenland)	FALSE	b
2012	Greenland Halibut	GHL	Greenland halibut (Reinhardtius hippoglossoides) in subareas 5, 6, 12, and 14 (Iceland and Faroes grounds, West of Scotland, North of Azores, East of Greenland)	TRUE	b
2011	Greenland Halibut	GHL	Greenland halibut (Reinhardtius hippoglossoides) in subareas 5, 6, 12, and 14 (Iceland and Faroes grounds, West of Scotland, North of Azores, East of Greenland)	FALSE	b
2010	Greenland Halibut	GHL	Greenland halibut (Reinhardtius hippoglossoides) in subareas 5, 6, 12, and 14 (Iceland and Faroes grounds, West of Scotland, North of Azores, East of Greenland)	FALSE	b
2009	Greenland Halibut	GHL	Greenland halibut (Reinhardtius hippoglossoides) in subareas 5, 6, 12, and 14 (Iceland and Faroes grounds, West of Scotland, North of Azores, East of Greenland)	FALSE	b
2017	Roughhead Grenadier	RHG	Roughhead grenadier (Macrourus berglax) in the Northeast Atlantic	TRUE	b
2016	Roughhead Grenadier	RHG	Roughhead grenadier (Macrourus berglax) in the Northeast Atlantic	TRUE	b
2015	Roughhead Grenadier	RHG	Roughhead grenadier (Macrourus berglax) in the Northeast Atlantic	TRUE	b



Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2014	Roughhead Grenadier	RHG	Roughhead grenadier (Macrourus berglax) in the Northeast Atlantic	TRUE	b
2013	Roughhead Grenadier	RHG	Roughhead grenadier (Macrourus berglax) in the Northeast Atlantic	TRUE	b
2012	Roughhead Grenadier	RHG	Roughhead grenadier (Macrourus berglax) in the Northeast Atlantic	TRUE	b
2011	Roughhead Grenadier	RHG	Roughhead grenadier (Macrourus berglax) in the Northeast Atlantic	TRUE	b
2010	Roughhead Grenadier	RHG	Roughhead grenadier (Macrourus berglax) in the Northeast Atlantic	TRUE	b
2009	Roughhead Grenadier	RHG	Roughhead grenadier (Macrourus berglax) in the Northeast Atlantic	TRUE	b
2017	Capelin	CAP	Northeast Arctic excluding Division 2.a west of 5°W	TRUE	ab
2016	Capelin	CAP	Northeast Arctic excluding Division 2.a west of 5°W	TRUE	ab
2015	Capelin	CAP	Northeast Arctic excluding Division 2.a west of 5°W	TRUE	a
2014	Capelin	CAP	Northeast Arctic excluding Division 2.a west of 5°W	FALSE	b
2013	Capelin	CAP	Northeast Arctic excluding Division 2.a west of 5°W	FALSE	b
2012	Capelin	CAP	Northeast Arctic excluding Division 2.a west of 5°W	FALSE	b
2011	Capelin	CAP	Northeast Arctic excluding Division 2.a west of 5°W	FALSE	b
2010	Capelin	CAP	Northeast Arctic excluding Division 2.a west of 5°W	FALSE	b
2009	Capelin	CAP	Northeast Arctic excluding Division 2.a west of 5°W	FALSE	b
2017	Roughsnout grenadier	TSU	Roughsnout grenadier (Trachyrincus scabrus) in the northeast Atlantic	TRUE	b
2016	Roughsnout grenadier	TSU	Roughsnout grenadier (Trachyrincus scabrus) in the northeast Atlantic	TRUE	b
2015	Roughsnout grenadier	TSU	Roughsnout grenadier (Trachyrincus scabrus) in the northeast Atlantic	TRUE	b
2014	Roughsnout grenadier	TSU	Roughsnout grenadier (Trachyrincus scabrus) in the northeast Atlantic	TRUE	b

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2013	Roughsnout grenadier	TSU	Roughsnout grenadier (Trachyrincus scabrus) in the northeast Atlantic	TRUE	b
2012	Roughsnout grenadier	TSU	Roughsnout grenadier (Trachyrincus scabrus) in the northeast Atlantic	TRUE	b
2011	Roughsnout grenadier	TSU	Roughsnout grenadier (Trachyrincus scabrus) in the northeast Atlantic	TRUE	b
2010	Roughsnout grenadier	TSU	Roughsnout grenadier (Trachyrincus scabrus) in the northeast Atlantic	TRUE	b
2009	Roughsnout grenadier	TSU	Roughsnout grenadier (Trachyrincus scabrus) in the northeast Atlantic	TRUE	b
2017	Sole	SOL	Sole (Solea solea) in Division 7.d (eastern English Channel)	TRUE	a
2016	Sole	SOL	Sole (Solea solea) in Division 7.d (eastern English Channel)	FALSE	a
2015	Sole	SOL	Sole (Solea solea) in Division 7.d (eastern English Channel)	FALSE	a
2014	Sole	SOL	Sole (Solea solea) in Division 7.d (eastern English Channel)	FALSE	a
2013	Sole	SOL	Sole (Solea solea) in Division 7.d (eastern English Channel)	FALSE	a
2012	Sole	SOL	Sole (Solea solea) in Division 7.d (eastern English Channel)	FALSE	a
2011	Sole	SOL	Sole (Solea solea) in Division 7.d (eastern English Channel)	FALSE	a
2010	Sole	SOL	Sole (Solea solea) in Division 7.d (eastern English Channel)	FALSE	a
2009	Sole	SOL	Sole (Solea solea) in Division 7.d (eastern English Channel)	FALSE	a
2017	cod	COD	Cod (Gadus morhua) in Division 6.b (Rockall)	TRUE	b
2016	cod	COD	Cod (Gadus morhua) in Division 6.b (Rockall)	TRUE	b
2015	cod	COD	Cod (Gadus morhua) in Division 6.b (Rockall)	FALSE	b
2014	cod	COD	Cod (Gadus morhua) in Division 6.b (Rockall)	FALSE	b
2013	cod	COD	Cod (Gadus morhua) in Division 6.b (Rockall)	FALSE	b
2012	cod	COD	Cod (Gadus morhua) in Division 6.b (Rockall)	FALSE	b
2011	cod	COD	Cod (Gadus morhua) in Division 6.b (Rockall)	FALSE	b
2010	cod	COD	Cod (Gadus morhua) in Division 6.b (Rockall)	FALSE	b

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2009	cod	COD	Cod (Gadus morhua) in Division 6.b (Rockall)	FALSE	b
2017	cod	COD	Cod (Gadus morhua) in Subdivision 21 (Kattegat)	FALSE	b
2016	cod	COD	Cod (Gadus morhua) in Subdivision 21 (Kattegat)	FALSE	b
2015	cod	COD	Cod (Gadus morhua) in Subdivision 21 (Kattegat)	TRUE	b
2014	cod	COD	Cod (Gadus morhua) in Subdivision 21 (Kattegat)	TRUE	b
2013	cod	COD	Cod (Gadus morhua) in Subdivision 21 (Kattegat)	TRUE	b
2012	cod	COD	Cod (Gadus morhua) in Subdivision 21 (Kattegat)	TRUE	b
2011	cod	COD	Cod (Gadus morhua) in Subdivision 21 (Kattegat)	TRUE	b
2010	cod	COD	Cod (Gadus morhua) in Subdivision 21 (Kattegat)	TRUE	b
2009	cod	COD	Cod (Gadus morhua) in Subdivision 21 (Kattegat)	TRUE	b
2017	cod	COD	Cod (Gadus morhua) in subareas 1 and 2 (Norwegian coastal waters cod)	TRUE	b
2016	cod	COD	Cod (Gadus morhua) in subareas 1 and 2 (Norwegian coastal waters cod)	TRUE	b
2015	cod	COD	Cod (Gadus morhua) in subareas 1 and 2 (Norwegian coastal waters cod)	TRUE	b
2014	cod	COD	Cod (Gadus morhua) in subareas 1 and 2 (Norwegian coastal waters cod)	TRUE	b
2013	cod	COD	Cod (Gadus morhua) in subareas 1 and 2 (Norwegian coastal waters cod)	TRUE	b
2012	cod	COD	Cod (Gadus morhua) in subareas 1 and 2 (Norwegian coastal waters cod)	TRUE	b
2011	cod	COD	Cod (Gadus morhua) in subareas 1 and 2 (Norwegian coastal waters cod)	TRUE	b
2010	cod	COD	Cod (Gadus morhua) in subareas 1 and 2 (Norwegian coastal waters cod)	TRUE	b
2009	cod	COD	Cod (Gadus morhua) in subareas 1 and 2 (Norwegian coastal waters cod)	TRUE	b
2017	Beaked redfish	REB, RED	Beaked redfish (Sebastes mentella) in ICES subareas 5, 12, and 14	TRUE	ab

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
			(Iceland and Faroes grounds, north of Azores, east of Greenland) and NAFO subareas 1+2 (deep pelagic stock > 500 m)		
2016	Beaked redfish	REB, RED	Beaked redfish ( <i>Sebastes mentella</i> ) in ICES subareas 5, 12, and 14 (Iceland and Faroes grounds, north of Azores, east of Greenland) and NAFO subareas 1+2 (deep pelagic stock > 500 m)	TRUE	a
2015	Beaked redfish	REB, RED	Beaked redfish ( <i>Sebastes mentella</i> ) in ICES subareas 5, 12, and 14 (Iceland and Faroes grounds, north of Azores, east of Greenland) and NAFO subareas 1+2 (deep pelagic stock > 500 m)	TRUE	a
2014	Beaked redfish	REB, RED	Beaked redfish ( <i>Sebastes mentella</i> ) in ICES subareas 5, 12, and 14 (Iceland and Faroes grounds, north of Azores, east of Greenland) and NAFO subareas 1+2 (deep pelagic stock > 500 m)	TRUE	b
2013	Beaked redfish	REB, RED	Beaked redfish ( <i>Sebastes mentella</i> ) in ICES subareas 5, 12, and 14 (Iceland and Faroes grounds, north of Azores, east of Greenland) and NAFO subareas 1+2 (deep pelagic stock > 500 m)	TRUE	a
2012	Beaked redfish	REB, RED	Beaked redfish ( <i>Sebastes mentella</i> ) in ICES subareas 5, 12, and 14 (Iceland and Faroes grounds, north of Azores, east of Greenland) and NAFO subareas 1+2 (deep pelagic stock > 500 m)	TRUE	a
2011	Beaked redfish	REB, RED	Beaked redfish ( <i>Sebastes mentella</i> ) in ICES subareas 5, 12, and 14 (Iceland and Faroes grounds, north of Azores, east of Greenland) and NAFO subareas 1+2	TRUE	a

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
			(deep pelagic stock > 500 m)		
2010	Beaked redfish	REB, RED	Beaked redfish ( <i>Sebastes mentella</i> ) in ICES subareas 5, 12, and 14 (Iceland and Faroes grounds, north of Azores, east of Greenland) and NAFO subareas 1+2 (deep pelagic stock > 500 m)	TRUE	a
2009	Beaked redfish	REB, RED	Beaked redfish ( <i>Sebastes mentella</i> ) in ICES subareas 5, 12, and 14 (Iceland and Faroes grounds, north of Azores, east of Greenland) and NAFO subareas 1+2 (deep pelagic stock > 500 m)	TRUE	a
2017	American Plaice	PLA	American plaice in Division 3M	TRUE	ab
2016	American Plaice	PLA	American plaice in Division 3M	TRUE	ab
2015	American Plaice	PLA	American plaice in Division 3M	TRUE	ab
2014	American Plaice	PLA	American plaice in Division 3M	TRUE	ab
2013	American Plaice	PLA	American plaice in Division 3M	TRUE	ab
2012	American Plaice	PLA	American plaice in Division 3M	TRUE	ab
2011	American Plaice	PLA	American plaice in Division 3M	TRUE	a
2010	American Plaice	PLA	American plaice in Division 3M	TRUE	a
2009	American Plaice	PLA	American plaice in Division 3M	TRUE	a
2017	Witch Flounder	WIT	Witch flounder in Divisions 2J + 3KL	TRUE	ab
2016	Witch Flounder	WIT	Witch flounder in Divisions 2J + 3KL	TRUE	ab
2015	Witch Flounder	WIT	Witch flounder in Divisions 2J + 3KL	TRUE	ab
2014	Witch Flounder	WIT	Witch flounder in Divisions 2J + 3KL	TRUE	ab
2013	Witch Flounder	WIT	Witch flounder in Divisions 2J + 3KL	TRUE	a
2012	Witch Flounder	WIT	Witch flounder in Divisions 2J + 3KL	TRUE	a
2011	Witch Flounder	WIT	Witch flounder in Divisions 2J + 3KL	TRUE	a
2010	Witch Flounder	WIT	Witch flounder in Divisions 2J + 3KL	TRUE	a
2009	Witch Flounder	WIT	Witch flounder in Divisions 2J + 3KL	TRUE	a
2017	Undulate ray	RJU	Undulate ray ( <i>Raja undulata</i> ) in divisions 7.b	TRUE	b

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
			and 7.j (west and southwest of Ireland)		
2016	Undulate ray	RJU	Undulate ray (Raja undulata) in divisions 7.b and 7.j (west and southwest of Ireland)	TRUE	b
2015	Undulate ray	RJU	Undulate ray (Raja undulata) in divisions 7.b and 7.j (west and southwest of Ireland)	TRUE	bc
2014	Undulate ray	RJU	Undulate ray (Raja undulata) in divisions 7.b and 7.j (west and southwest of Ireland)	TRUE	bc
2013	Undulate ray	RJU	Undulate ray (Raja undulata) in divisions 7.b and 7.j (west and southwest of Ireland)	TRUE	bc
2012	Undulate ray	RJU	Undulate ray (Raja undulata) in divisions 7.b and 7.j (west and southwest of Ireland)	TRUE	bc
2011	Undulate ray	RJU	Undulate ray (Raja undulata) in divisions 7.b and 7.j (west and southwest of Ireland)	TRUE	bc
2010	Undulate ray	RJU	Undulate ray (Raja undulata) in divisions 7.b and 7.j (west and southwest of Ireland)	TRUE	bc
2009	Undulate ray	RJU	Undulate ray (Raja undulata) in divisions 7.b and 7.j (west and southwest of Ireland)	TRUE	bc
2017	Undulate ray	RJU	Undulate ray (Raja undulata) in Division 9.a (Atlantic Iberian waters)	TRUE	b
2016	Undulate ray	RJU	Undulate ray (Raja undulata) in Division 9.a (Atlantic Iberian waters)	TRUE	b
2015	Undulate ray	RJU	Undulate ray (Raja undulata) in Division 9.a (Atlantic Iberian waters)	TRUE	b
2014	Undulate ray	RJU	Undulate ray (Raja undulata) in Division 9.a (Atlantic Iberian waters)	FALSE	b
2013	Undulate ray	RJU	Undulate ray (Raja undulata) in Division 9.a (Atlantic Iberian waters)	FALSE	b
2012	Undulate ray	RJU	Undulate ray (Raja undulata) in Division 9.a (Atlantic Iberian waters)	FALSE	b
2011	Undulate ray	RJU	Undulate ray (Raja undulata) in Division 9.a (Atlantic Iberian waters)	FALSE	b
2010	Undulate ray	RJU	Undulate ray (Raja undulata) in Division 9.a (Atlantic Iberian waters)	FALSE	b

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2009	Undulate ray	RJU	Undulate ray (Raja undulata) in Division 9.a (Atlantic Iberian waters)	FALSE	b
2017	Undulate ray	RJU	Undulate ray (Raja undulata) in Division 8.c (Cantabrian Sea)	TRUE	b
2016	Undulate ray	RJU	Undulate ray (Raja undulata) in Division 8.c (Cantabrian Sea)	TRUE	b
2015	Undulate ray	RJU	Undulate ray (Raja undulata) in Division 8.c (Cantabrian Sea)	TRUE	b
2014	Undulate ray	RJU	Undulate ray (Raja undulata) in Division 8.c (Cantabrian Sea)	FALSE	b
2013	Undulate ray	RJU	Undulate ray (Raja undulata) in Division 8.c (Cantabrian Sea)	FALSE	b
2012	Undulate ray	RJU	Undulate ray (Raja undulata) in Division 8.c (Cantabrian Sea)	FALSE	b
2011	Undulate ray	RJU	Undulate ray (Raja undulata) in Division 8.c (Cantabrian Sea)	FALSE	b
2010	Undulate ray	RJU	Undulate ray (Raja undulata) in Division 8.c (Cantabrian Sea)	FALSE	b
2009	Undulate ray	RJU	Undulate ray (Raja undulata) in Division 8.c (Cantabrian Sea)	FALSE	b
2017	Cuckoo ray	RJN	Cuckoo ray (Leucoraja naevus) in Subarea 4 and Division 3.a (North Sea, Skagerrak, and Kattegat)	FALSE	b
2016	Cuckoo ray	RJN	Cuckoo ray (Leucoraja naevus) in Subarea 4 and Division 3.a (North Sea, Skagerrak, and Kattegat)	FALSE	b
2015	Cuckoo ray	RJN	Cuckoo ray (Leucoraja naevus) in Subarea 4 and Division 3.a (North Sea, Skagerrak, and Kattegat)	FALSE	b
2014	Cuckoo ray	RJN	Cuckoo ray (Leucoraja naevus) in Subarea 4 and Division 3.a (North Sea, Skagerrak, and Kattegat)	FALSE	b
2013	Cuckoo ray	RJN	Cuckoo ray (Leucoraja naevus) in Subarea 4 and Division 3.a (North Sea, Skagerrak, and Kattegat)	FALSE	b
2012	Cuckoo ray	RJN	Cuckoo ray (Leucoraja naevus) in Subarea 4 and Division 3.a (North	TRUE	b

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
			Sea, Skagerrak, and Kattegat)		
2011	Cuckoo ray	RJN	Cuckoo ray ( <i>Leucoraja naevus</i> ) in Subarea 4 and Division 3.a (North Sea, Skagerrak, and Kattegat)	TRUE	b
2010	Cuckoo ray	RJN	Cuckoo ray ( <i>Leucoraja naevus</i> ) in Subarea 4 and Division 3.a (North Sea, Skagerrak, and Kattegat)	TRUE	b
2009	Cuckoo ray	RJN	Cuckoo ray ( <i>Leucoraja naevus</i> ) in Subarea 4 and Division 3.a (North Sea, Skagerrak, and Kattegat)	TRUE	b
2017	White Grouper	GPW	White grouper ( <i>Epinephelus aeneus</i> ) in Mauritania, Senegal and Gambia	TRUE	b
2016	White Grouper	GPW	White grouper ( <i>Epinephelus aeneus</i> ) in Mauritania, Senegal and Gambia	TRUE	b
2015	White Grouper	GPW	White grouper ( <i>Epinephelus aeneus</i> ) in Mauritania, Senegal and Gambia	TRUE	b
2014	White Grouper	GPW	White grouper ( <i>Epinephelus aeneus</i> ) in Mauritania, Senegal and Gambia	TRUE	b
2013	White Grouper	GPW	White grouper ( <i>Epinephelus aeneus</i> ) in Mauritania, Senegal and Gambia	TRUE	b
2012	White Grouper	GPW	White grouper ( <i>Epinephelus aeneus</i> ) in Mauritania, Senegal and Gambia	TRUE	b
2011	White Grouper	GPW	White grouper ( <i>Epinephelus aeneus</i> ) in Mauritania, Senegal and Gambia	TRUE	b
2010	White Grouper	GPW	White grouper ( <i>Epinephelus aeneus</i> ) in Mauritania, Senegal and Gambia	TRUE	b
2009	White Grouper	GPW	White grouper ( <i>Epinephelus aeneus</i> ) in Mauritania, Senegal and Gambia	TRUE	b
2017	Stripped marlin	MLS	Striped marlin ( <i>Tetrapturus audax</i> ) in the Indian Ocean	TRUE	b
2016	Stripped marlin	MLS	Striped marlin ( <i>Tetrapturus audax</i> ) in the Indian Ocean	TRUE	b



Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2015	Stripped marlin	MLS	Striped marlin (Tetrapturus audax) in the Indian Ocean	TRUE	b
2014	Stripped marlin	MLS	Striped marlin (Tetrapturus audax) in the Indian Ocean	TRUE	b
2013	Stripped marlin	MLS	Striped marlin (Tetrapturus audax) in the Indian Ocean	TRUE	b
2012	Stripped marlin	MLS	Striped marlin (Tetrapturus audax) in the Indian Ocean	FALSE	b
2011	Stripped marlin	MLS	Striped marlin (Tetrapturus audax) in the Indian Ocean	FALSE	b
2010	Stripped marlin	MLS	Striped marlin (Tetrapturus audax) in the Indian Ocean	FALSE	b
2009	Stripped marlin	MLS	Striped marlin (Tetrapturus audax) in the Indian Ocean	FALSE	b
2017	Orange roughy	ORY	Orange Roughy (Hoplostethus atlanticus) in South Est Pacific Ocean	TRUE	b
2016	Orange roughy	ORY	Orange Roughy (Hoplostethus atlanticus) in South Est Pacific Ocean	TRUE	b
2015	Orange roughy	ORY	Orange Roughy (Hoplostethus atlanticus) in South Est Pacific Ocean	TRUE	b
2014	Orange roughy	ORY	Orange Roughy (Hoplostethus atlanticus) in South Est Pacific Ocean	TRUE	b
2013	Orange roughy	ORY	Orange Roughy (Hoplostethus atlanticus) in South Est Pacific Ocean	TRUE	b
2012	Orange roughy	ORY	Orange Roughy (Hoplostethus atlanticus) in South Est Pacific Ocean	TRUE	b
2011	Orange roughy	ORY	Orange Roughy (Hoplostethus atlanticus) in South Est Pacific Ocean	TRUE	b
2010	Orange roughy	ORY	Orange Roughy (Hoplostethus atlanticus) in South Est Pacific Ocean	TRUE	b
2009	Orange roughy	ORY	Orange Roughy (Hoplostethus atlanticus) in South Est Pacific Ocean	TRUE	b
2017	Roundnose grenadier	RNG	Roundnose grenadier (Coryphaenoides	TRUE	b

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
			rupestris) in Division 3.a (Skagerrak and Kattegat)		
2016	Roundnose grenadier	RNG	Roundnose grenadier (Coryphaenoides rupestris) in Division 3.a (Skagerrak and Kattegat)	TRUE	b
2015	Roundnose grenadier	RNG	Roundnose grenadier (Coryphaenoides rupestris) in Division 3.a (Skagerrak and Kattegat)	TRUE	b
2014	Roundnose grenadier	RNG	Roundnose grenadier (Coryphaenoides rupestris) in Division 3.a (Skagerrak and Kattegat)	FALSE	b
2013	Roundnose grenadier	RNG	Roundnose grenadier (Coryphaenoides rupestris) in Division 3.a (Skagerrak and Kattegat)	FALSE	b
2012	Roundnose grenadier	RNG	Roundnose grenadier (Coryphaenoides rupestris) in Division 3.a (Skagerrak and Kattegat)	FALSE	b
2011	Roundnose grenadier	RNG	Roundnose grenadier (Coryphaenoides rupestris) in Division 3.a (Skagerrak and Kattegat)	FALSE	b
2010	Roundnose grenadier	RNG	Roundnose grenadier (Coryphaenoides rupestris) in Division 3.a (Skagerrak and Kattegat)	FALSE	b
2009	Roundnose grenadier	RNG	Roundnose grenadier (Coryphaenoides rupestris) in Division 3.a (Skagerrak and Kattegat)	FALSE	b
2017	Angel shark	AGN	Angel Shark in Mediteranea	TRUE	cd
2016	Angel shark	AGN	Angel Shark in Mediteranea	TRUE	cd
2015	Angel shark	AGN	Angel Shark in Mediteranea	TRUE	cd
2014	Angel shark	AGN	Angel Shark in Mediteranea	TRUE	cd
2013	Angel shark	AGN	Angel Shark in Mediteranea	TRUE	cd
2012	Angel shark	AGN	Angel Shark in Mediteranea	TRUE	cd
2011	Angel shark	AGN	Angel Shark in Mediteranea	FALSE	cd
2010	Angel shark	AGN	Angel Shark in Mediteranea	FALSE	cd
2009	Angel shark	AGN	Angel Shark in Mediteranea	FALSE	cd
2017	Scalloped Hammerhead Shark	SPL	Scalloped Hammerhead Shark (Sphyrna lewini) in Mediterraneana	TRUE	c
2016	Scalloped Hammerhead Shark	SPL	Scalloped Hammerhead Shark (Sphyrna lewini) in Mediterraneana	TRUE	c

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2015	Scalloped Hammerhead Shark	SPL	Scalloped Hammerhead Shark ( <i>Sphyrna lewini</i> ) in Mediterraneana	TRUE	c
2014	Scalloped Hammerhead Shark	SPL	Scalloped Hammerhead Shark ( <i>Sphyrna lewini</i> ) in Mediterraneana	TRUE	c
2013	Scalloped Hammerhead Shark	SPL	Scalloped Hammerhead Shark ( <i>Sphyrna lewini</i> ) in Mediterraneana	TRUE	c
2012	Scalloped Hammerhead Shark	SPL	Scalloped Hammerhead Shark ( <i>Sphyrna lewini</i> ) in Mediterraneana	TRUE	c
2011	Scalloped Hammerhead Shark	SPL	Scalloped Hammerhead Shark ( <i>Sphyrna lewini</i> ) in Mediterraneana	FALSE	c
2010	Scalloped Hammerhead Shark	SPL	Scalloped Hammerhead Shark ( <i>Sphyrna lewini</i> ) in Mediterraneana	FALSE	c
2009	Scalloped Hammerhead Shark	SPL	Scalloped Hammerhead Shark ( <i>Sphyrna lewini</i> ) in Mediterraneana	FALSE	c
2017	Great Hammerhead Shark	SPK	Great Hammerhead ( <i>Sphyrna mokarran</i> ) Shark in Mediterraneana	TRUE	c
2016	Great Hammerhead Shark	SPK	Great Hammerhead ( <i>Sphyrna mokarran</i> ) Shark in Mediterraneana	TRUE	c
2015	Great Hammerhead Shark	SPK	Great Hammerhead ( <i>Sphyrna mokarran</i> ) Shark in Mediterraneana	TRUE	c
2014	Great Hammerhead Shark	SPK	Great Hammerhead ( <i>Sphyrna mokarran</i> ) Shark in Mediterraneana	TRUE	c
2013	Great Hammerhead Shark	SPK	Great Hammerhead ( <i>Sphyrna mokarran</i> ) Shark in Mediterraneana	TRUE	c
2012	Great Hammerhead Shark	SPK	Great Hammerhead ( <i>Sphyrna mokarran</i> ) Shark in Mediterraneana	TRUE	c
2011	Great Hammerhead Shark	SPK	Great Hammerhead ( <i>Sphyrna mokarran</i> ) Shark in Mediterraneana	FALSE	c
2010	Great Hammerhead Shark	SPK	Great Hammerhead ( <i>Sphyrna mokarran</i> ) Shark in Mediterraneana	FALSE	c
2009	Great Hammerhead Shark	SPK	Great Hammerhead ( <i>Sphyrna mokarran</i> ) Shark in Mediterraneana	FALSE	c
2017	Smooth Hammerhead Shark	SPK	Smooth Hammerhead ( <i>Sphyrna zygaena</i> ) Shark in Mediterraneana	TRUE	c
2016	Smooth Hammerhead Shark	SPZ	Smooth Hammerhead ( <i>Sphyrna zygaena</i> ) Shark in Mediterraneana	TRUE	c
2015	Smooth Hammerhead Shark	SPZ	Smooth Hammerhead ( <i>Sphyrna zygaena</i> ) Shark in Mediterraneana	TRUE	c

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2014	Smooth Hammerhead Shark	SPZ	Smooth Hammerhead (Sphyrna zygaena) Shark in Mediterranean	TRUE	c
2013	Smooth Hammerhead Shark	SPZ	Smooth Hammerhead (Sphyrna zygaena) Shark in Mediterranean	TRUE	c
2012	Smooth Hammerhead Shark	SPZ	Smooth Hammerhead (Sphyrna zygaena) Shark in Mediterranean	TRUE	c
2011	Smooth Hammerhead Shark	SPZ	Smooth Hammerhead (Sphyrna zygaena) Shark in Mediterranean	FALSE	c
2010	Smooth Hammerhead Shark	SPZ	Smooth Hammerhead (Sphyrna zygaena) Shark in Mediterranean	FALSE	c
2009	Smooth Hammerhead Shark	SPZ	Smooth Hammerhead (Sphyrna zygaena) Shark in Mediterranean	FALSE	c
2017	Scalloped Hammerhead Shark	SPL	Scalloped Hammerhead Shark (Sphyrna lewini) all out of Mediteranea	TRUE	d
2016	Scalloped Hammerhead Shark	SPL	Scalloped Hammerhead Shark (Sphyrna lewini) all out of Mediteranea	TRUE	d
2015	Scalloped Hammerhead Shark	SPL	Scalloped Hammerhead Shark (Sphyrna lewini) all out of Mediteranea	TRUE	d
2014	Scalloped Hammerhead Shark	SPL	Scalloped Hammerhead Shark (Sphyrna lewini) all out of Mediteranea	TRUE	d
2013	Scalloped Hammerhead Shark	SPL	Scalloped Hammerhead Shark (Sphyrna lewini) all out of Mediteranea	FALSE	d
2012	Scalloped Hammerhead Shark	SPL	Scalloped Hammerhead Shark (Sphyrna lewini) all out of Mediteranea	FALSE	d
2011	Scalloped Hammerhead Shark	SPL	Scalloped Hammerhead Shark (Sphyrna lewini) all out of Mediteranea	FALSE	d
2010	Scalloped Hammerhead Shark	SPL	Scalloped Hammerhead Shark (Sphyrna lewini) all out of Mediteranea	FALSE	d
2009	Scalloped Hammerhead Shark	SPL	Scalloped Hammerhead Shark (Sphyrna lewini) all out of Mediteranea	FALSE	d
2017	Great Hammerhead Shark	SPK	Great Hammerhead (Sphyrna mokaran) Shark all out of Mediterranean	TRUE	d
2016	Great Hammerhead Shark	SPK	Great Hammerhead (Sphyrna mokaran) Shark all out of Mediterranean	TRUE	d
2015	Great Hammerhead Shark	SPK	Great Hammerhead (Sphyrna mokaran) Shark all out of Mediterranean	TRUE	d
2014	Great Hammerhead Shark	SPK	Great Hammerhead (Sphyrna mokaran)	TRUE	d

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
			Shark all out of Mediterranea		
2013	Great Hammerhead Shark	SPK	Great Hammerhead (Sphyrna mokaran) Shark all out of Mediterranea	FALSE	d
2012	Great Hammerhead Shark	SPK	Great Hammerhead (Sphyrna mokaran) Shark all out of Mediterranea	FALSE	d
2011	Great Hammerhead Shark	SPK	Great Hammerhead (Sphyrna mokaran) Shark all out of Mediterranea	FALSE	d
2010	Great Hammerhead Shark	SPK	Great Hammerhead (Sphyrna mokaran) Shark all out of Mediterranea	FALSE	d
2009	Great Hammerhead Shark	SPK	Great Hammerhead (Sphyrna mokaran) Shark all out of Mediterranea	FALSE	d
2017	Smooth Hammerhead Shark	SPK	Smooth Hammerhead (Sphyrna zygaena) Shark world out of Mediterranea	TRUE	d
2016	Smooth Hammerhead Shark	SPZ	Smooth Hammerhead (Sphyrna zygaena) Shark world out of Mediterranea	TRUE	d
2015	Smooth Hammerhead Shark	SPZ	Smooth Hammerhead (Sphyrna zygaena) Shark world out of Mediterranea	TRUE	d
2014	Smooth Hammerhead Shark	SPZ	Smooth Hammerhead (Sphyrna zygaena) Shark world out of Mediterranea	TRUE	d
2013	Smooth Hammerhead Shark	SPZ	Smooth Hammerhead (Sphyrna zygaena) Shark world out of Mediterranea	FALSE	d
2012	Smooth Hammerhead Shark	SPZ	Smooth Hammerhead (Sphyrna zygaena) Shark world out of Mediterranea	FALSE	d
2011	Smooth Hammerhead Shark	SPZ	Smooth Hammerhead (Sphyrna zygaena) Shark world out of Mediterranea	FALSE	d
2010	Smooth Hammerhead Shark	SPZ	Smooth Hammerhead (Sphyrna zygaena) Shark world out of Mediterranea	FALSE	d
2009	Smooth Hammerhead Shark	SPZ	Smooth Hammerhead (Sphyrna zygaena) Shark world out of Mediterranea	FALSE	d

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2017	Hammerheads Sharks nei	SPN	Hammerhead Shark (Sphyrna lewini) in Mediterranean	TRUE	c
2016	Hammerheads Sharks nei	SPN	Hammerhead Shark (Sphyrna lewini) in Mediterranean	TRUE	c
2015	Hammerheads Sharks nei	SPN	Hammerhead Shark (Sphyrna lewini) in Mediterranean	TRUE	c
2014	Hammerheads Sharks nei	SPN	Hammerhead Shark (Sphyrna lewini) in Mediterranean	TRUE	c
2013	Hammerheads Sharks nei	SPN	Hammerhead Shark (Sphyrna lewini) in Mediterranean	FALSE	c
2012	Hammerheads Sharks nei	SPN	Hammerhead Shark (Sphyrna lewini) in Mediterranean	FALSE	c
2011	Hammerheads Sharks nei	SPN	Hammerhead Shark (Sphyrna lewini) in Mediterranean	FALSE	c
2010	Hammerheads Sharks nei	SPN	Hammerhead Shark (Sphyrna lewini) in Mediterranean	FALSE	c
2009	Hammerheads Sharks nei	SPN	Hammerhead Shark (Sphyrna lewini) in Mediterranean	FALSE	c
2017	Atlantic salmon	SAL	Atlantic Salmon in Atlantic ocean, southern complex	TRUE	b
2016	Atlantic salmon	SAL	Atlantic Salmon in Atlantic ocean, southern complex	TRUE	b
2015	Atlantic salmon	SAL	Atlantic Salmon in Atlantic ocean, southern complex	TRUE	b
2014	Atlantic salmon	SAL	Atlantic Salmon in Atlantic ocean, southern complex	TRUE	b
2013	Atlantic salmon	SAL	Atlantic Salmon in Atlantic ocean, southern complex	TRUE	b
2012	Atlantic salmon	SAL	Atlantic Salmon in Atlantic ocean, southern complex	FALSE	b
2011	Atlantic salmon	SAL	Atlantic Salmon in Atlantic ocean, southern complex	TRUE	b
2010	Atlantic salmon	SAL	Atlantic Salmon in Atlantic ocean, southern complex	FALSE	b
2009	Atlantic salmon	SAL	Atlantic Salmon in Atlantic ocean, southern complex	TRUE	b
2017	Friiled shark	HXC	Friiled shark	TRUE	c
2016	Friiled shark	HXC		TRUE	c
2015	Friiled shark	HXC		FALSE	c

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2015	Frilled shark	HXC		TRUE	c
2013	Frilled shark	HXC		FALSE	c
2012	Frilled shark	HXC		FALSE	c
2011	Frilled shark	HXC		FALSE	c
2010	Frilled shark	HXC		FALSE	c
2009	Frilled shark	HXC		FALSE	c
2017	Sailfin roughshark	OXN	Sailfin roughshark	TRUE	c
2016	Sailfin roughshark	OXN		TRUE	c
2015	Sailfin roughshark	OXN		TRUE	c
2014	Sailfin roughshark	OXN		FALSE	c
2013	Sailfin roughshark	OXN		FALSE	c
2012	Sailfin roughshark	OXN		FALSE	c
2011	Sailfin roughshark	OXN		FALSE	c
2010	Sailfin roughshark	OXN		FALSE	c
2009	Sailfin roughshark	OXN		FALSE	c
2017	Deep-water catsharks	API	Deep-water catsharks	TRUE	c
2016	Deep-water catsharks	API	Deep-water catsharks	TRUE	c
2015	Deep-water catsharks	API	Deep-water catsharks	TRUE	c
2014	Deep-water catsharks	API	Deep-water catsharks	FALSE	c
2013	Deep-water catsharks	API	Deep-water catsharks	FALSE	c
2012	Deep-water catsharks	API	Deep-water catsharks	FALSE	c
2011	Deep-water catsharks	API	Deep-water catsharks	FALSE	c
2010	Deep-water catsharks	API	Deep-water catsharks	FALSE	c
2009	Deep-water catsharks	API	Deep-water catsharks	FALSE	c
2017	Bluntnose sixgill shark	SBL	Bluntnose sixgill shark	TRUE	c
2016	Bluntnose sixgill shark	SBL		TRUE	c
2015	Bluntnose sixgill shark	SBL		TRUE	c
2014	Bluntnose sixgill shark	SBL		FALSE	c
2013	Bluntnose sixgill shark	SBL		FALSE	c
2012	Bluntnose sixgill shark	SBL		FALSE	c
2011	Bluntnose sixgill shark	SBL		FALSE	c
2010	Bluntnose sixgill shark	SBL		FALSE	c
2009	Bluntnose sixgill shark	SBL		FALSE	c

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2017	Mousse catshark	GAM	Mousse catshark	TRUE	c
2016	Mousse catshark	GAM		TRUE	c
2015	Mousse catshark	GAM		TRUE	c
2014	Mousse catshark	GAM		FALSE	c
2013	Mousse catshark	GAM		FALSE	c
2012	Mousse catshark	GAM		FALSE	c
2011	Mousse catshark	GAM		FALSE	c
2010	Mousse catshark	GAM		FALSE	c
2009	Mousse catshark	GAM		FALSE	c
2017	Velvet belly	ETX	Velvet belly (Etmopterus spinax)	TRUE	c
2016	Velvet belly	ETX		TRUE	c
2015	Velvet belly	ETX		TRUE	c
2014	Velvet belly	ETX		FALSE	c
2013	Velvet belly	ETX		FALSE	c
2012	Velvet belly	ETX		FALSE	c
2011	Velvet belly	ETX		FALSE	c
2010	Velvet belly	ETX		FALSE	c
2009	Velvet belly	ETX		FALSE	c
2017	Black dogfish	CFB	Black dogfish	TRUE	c
2016	Black dogfish	CFB		TRUE	c
2015	Black dogfish	CFB		TRUE	c
2014	Black dogfish	CFB		FALSE	c
2013	Black dogfish	CFB		FALSE	c
2012	Black dogfish	CFB		FALSE	c
2011	Black dogfish	CFB		FALSE	c
2010	Black dogfish	CFB		FALSE	c
2009	Black dogfish	CFB		FALSE	c
2017	Northern Shrimp	PRA	Northern shrimp (Pandalus borealis) in divisions 3.a and 4.a East (Skagerrak and Kattegat and northern North Sea in the Norwegian Deep)	FALSE	a
2016	Northern Shrimp	PRA	Northern shrimp (Pandalus borealis) in divisions 3.a and 4.a East (Skagerrak and Kattegat and northern North Sea in the Norwegian Deep)	FALSE	a
2015	Northern Shrimp	PRA	Northern shrimp (Pandalus borealis) in divisions 3.a and 4.a East (Skagerrak and Kattegat and northern	FALSE	a



Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
			North Sea in the Norwegian Deep)		
2014	Northern Shrimp	PRA	Northern shrimp ( <i>Pandalus borealis</i> ) in divisions 3.a and 4.a East (Skagerrak and Kattegat and northern North Sea in the Norwegian Deep)	FALSE	a
2013	Northern Shrimp	PRA	Northern shrimp ( <i>Pandalus borealis</i> ) in divisions 3.a and 4.a East (Skagerrak and Kattegat and northern North Sea in the Norwegian Deep)	TRUE	a
2012	Northern Shrimp	PRA	Northern shrimp ( <i>Pandalus borealis</i> ) in divisions 3.a and 4.a East (Skagerrak and Kattegat and northern North Sea in the Norwegian Deep)	TRUE	a
2011	Northern Shrimp	PRA	Northern shrimp ( <i>Pandalus borealis</i> ) in divisions 3.a and 4.a East (Skagerrak and Kattegat and northern North Sea in the Norwegian Deep)	FALSE	a
2010	Northern Shrimp	PRA	Northern shrimp ( <i>Pandalus borealis</i> ) in divisions 3.a and 4.a East (Skagerrak and Kattegat and northern North Sea in the Norwegian Deep)	FALSE	a
2009	Northern Shrimp	PRA	Northern shrimp ( <i>Pandalus borealis</i> ) in divisions 3.a and 4.a East (Skagerrak and Kattegat and northern North Sea in the Norwegian Deep)	FALSE	a
2018	Sole	SOL	Sole ( <i>Solea solea</i> ) in divisions 8.c and 9.a (Cantabrian Sea and Atlantic Iberian waters	FALSE	a
2018	Whiting	WHG	Whiting ( <i>Merlangius merlangus</i> ) in Division 6.a (West of Scotland)	TRUE	ab
2018	Whiting	WHG	Whiting ( <i>Merlangius merlangus</i> ) in Division VIIa (Irish Sea)	TRUE	a
2018	saithe	POK	Saithe ( <i>Pollachius virens</i> ) in Division 5.b (Faroes grounds)	FALSE	a

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2018	saithe	POK	Saithe ( <i>Pollachius virens</i> ) in subareas 1 and 2 (Northeast Arctic)	FALSE	a
2018	saithe	POK	Saithe ( <i>Pollachius virens</i> ) in subareas 4 and 6, and in Division 3.a (North Sea, Rockall and West of Scotland, Skagerrak and Kattegat)	FALSE	a
2018	spiny dogfish	DGS	Spurdog ( <i>Squalus acanthias</i> ) in the Northeast Atlantic	TRUE	b
2018	horse mackerel	HOM, JAX	Horse mackerel ( <i>Trachurus trachurus</i> ) in Subarea 8 and divisions 2.a, 4.a, 5.b, 6.a, 7.a-c, and 7.e-k (the Northeast Atlantic)	FALSE	a
2018	Cod	COD	ICES Subarea 14 and NAFO Division 1.F (East Greenland, South Greenland)	FALSE	ab
2018	cod	COD	Cod ( <i>Gadus morhua</i> ) in Subarea 4, Division 7.d, and Subdivision 20 (North Sea, eastern English Channel, Skagerrak)	TRUE	a
2018	cod	COD	Cod ( <i>Gadus morhua</i> ) in divisions 7.e-k (western English Channel and southern Celtic Seas)	TRUE	a
2018	cod	COD	Cod ( <i>Gadus morhua</i> ) in Subdivisions 22-24 (Western Baltic Sea)	FALSE	a
2018	cod	COD	Cod ( <i>Gadus morhua</i> ) in Division 6.a (West of Scotland)	TRUE	a
2018	cod	COD	Cod ( <i>Gadus morhua</i> ) in Subdivision 5.b.1 (Faroe Plateau)	FALSE	ab
2018	cod	COD	Cod ( <i>Gadus morhua</i> ) in Subdivision 7a	FALSE	b
2018	Atlantic salmon	SAL	Subdivisions 22-31	FALSE	b
2018	Atlantic salmon	SAL	Subdivision 32	TRUE	b
2018	porbeagle	POR	nea, nwa, sea, swa, med	TRUE	cd
2018	plaice	PLE	Plaice ( <i>Pleuronectes platessa</i> ) in Division 7.d (eastern English Channel)	FALSE	a
2018	haddock	HAD	III, IV, VIa	FALSE	a
2018	anchovy	ANE	Anchovy ( <i>Engraulis encrasicolus</i> ) in Subarea 8 (Bay of Biscay)	FALSE	a
2018	bluefin tuna	BFT	Mediterranean	FALSE	b

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2018	bluefin tuna	BFT	Atlantic Ocean east of longitude 45° W	FALSE	b
2018	Turbot	TUR	Black Sea	TRUE	abc
2018	Nephrops	NEP	Norway lobster (Nephrops norvegicus) in Division 4.b, Functional Unit 6 (central North Sea, Farn Deeps)	FALSE	a
2018	Nephrops	NEP	IXa (FU 26 27)	TRUE	b
2018	Nephrops	NEP	Norway lobster (Nephrops norvegicus) in Division 8.c, Functional Unit 25 (southern Bay of Biscay and northern Galicia)	TRUE	b
2018	Sandeel	SAN	Sandeel (Ammodytes spp.) in divisions 4.b-c and Subdivision 20, Sandeel Area 2r (central and southern North Sea)	TRUE	b
2018	Sandeel	SAN	Division IIIa East (Kattegat) (SA 6)	FALSE	b
2018	Capelin	CAP	Subareas 5 and 14 and Division 2.a west of 5°W (Iceland and Faroes grounds, East Greenland, Jan Mayen area)	FALSE	b
2018	Herring	HER	Herring (Clupea harengus) in subdivisions 20-24, spring spawners (Skagerrak, Kattegat, and wester	TRUE	a
2018	Blue Ling	BLI	Blue ling (Molva dypterygia) in subareas 1, 2, 8, 9, and 12, and in divisions 3.a and 4.a (other areas)	TRUE	b
2018	Megrim	MEG	Megrim (Lepidorhombus whiffiagonis) in divisions 8.c and 9.a (Cantabrian Sea and Atlantic Iberian waters)	FALSE	a
2018	Sprat	SPR	Sprat (Sprattus sprattus) in Subarea 4 (North Sea)	FALSE	a
2018	Blue Ling	BLI	Blue ling (Molva dypterygia) in Subarea 14 and Division 5.a (East Greenland and Iceland grounds)	FALSE	b
2018	Herring	HER	Herring (Clupea harengus) in divisions 6.a and 7.b-c (West of Scotland, West of Ireland)	TRUE	b
2018	Plaice	PLE	Plaice (Pleuronectes platessa) in divisions 7.h-k (Celtic Sea South, southwest of Ireland)	TRUE	a

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2018	Pollack	POL	IV (North Sea) and Division IIIa (Skagerrak-Kattegat)	FALSE	b
2018	Portuguese dogfish	CYO	North East Atlantic 27	TRUE	c
2018	Leaf-scale gluper shark	GUC	North East Atlantic 27	TRUE	c
2018	Angel shark	AGN	Angel Shark in North East Atlantic 27	TRUE	cd
2018	Orange roughy	ORY	Orange roughy (Hoplostethus atlanticus) in the Northeast Atlantic	TRUE	b
2018	Orange roughy	ORY	South Est Atlantic 47	TRUE	bc
2018	Haddock	HAD	Haddock (Melanogrammus aeglefinus) in Division 5.b (Faroes grounds)	FALSE	a
2018	Golden redfish	REG, RED	Golden redfish (Sebastes norvegicus) in subareas 1 and 2 (Northeast Arctic)	TRUE	b
2018	Beaked redfish	REB, RED	Beaked redfish (Sebastes mentella) in Division 14.b, demersal (Southeast Greenland)	FALSE	b
2018	Haddock	HAD	Haddock (Melanogrammus aeglefinus) in Division 6.b (Rockall)	FALSE	a
2018	Red seabream	SBR	Blackspot seabream (Pagellus bogaraveo) in subareas 6, 7, and 8 (Celtic Seas and the English Channel, Bay of Biscay)	TRUE	b
2018	Blue Ling	BLI	Blue ling (Molva dypterygia) in subareas 6-7 and Division 5.b (Celtic Seas, English Channel, and Faroes grounds)	FALSE	ab
2018	European eel	ELE	European eel (Anguilla anguilla) in North East Atlantic 27	TRUE	cd
2018	European eel	ELE	European eel (Anguilla anguilla) in Mediterraneana 37	TRUE	cd
2018	Northern Shrimp	PRA	Northern shrimp (Pandalus borealis) on the Flemish Cap (NAFO 3M)	TRUE	ab
2018	Northern Shrimp	PRA	Northern shrimp (Pandalus borealis) on the Grand Bank (NAFO 3LNO)	TRUE	ab
2018	Star Sturgeon	ACE	Star sturgeon (Acipenser stellatus) in Mediterraneana and Black Sea 37	TRUE	d

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2018	Barbel Sturgeon	AAN	Barbel sturgeon (Acipenser nudiventris) in Mediterranean and Black Sea 37	TRUE	d
2018	Atlantic Sturgeon	AAO	Atlantic Sturgeon (Acipenser oxyrhynchus) in Northeast Pacific 67, 77	TRUE	d
2018	White Sturgeon	APN	White Sturgeon (Acipenser transmontanus) in Northwest Atlantic 27	TRUE	d
2018	Danube Sturgeon	APG	Danube Sturgeon (Acipenser gueldenstaedtii ) in Black Sea and Caspian Sea	TRUE	cd
2018	Green Strugeon	AAM	Green Sturgeon (Acipenser medirostris) in Northwest Pacific 67, 77	TRUE	d
2018	Adriatic Sturgeon	AAA	Adriatic sturgeon (Acipenser nudiventris) in Adriatic Sea 37	TRUE	d
2018	Basking shark	BSK	North East Atlantic 27 + Med 37	TRUE	d
2018	Sawfishes	RPA, RPC, RPM, RPP, RPZ, SAW	27.9, 31, 34, 37, 41, 51, 57	TRUE	d
2018	Starry Ray	RJR	IIa, IIIa, IV, VIIId	TRUE	bc
2018	Great White shark	WSH	27.7-9, 31, 34, 37, 41, 51, 56	TRUE	d
2018	Comon skate Complex	RJB	Common skate (Dipturus batis-complex (blue skate (Dipturus batis) and flapper skate (Dipturus cf. intermedia)) in subareas 6-7 (excluding Division 7.d) (Celtic Seas and western English Channel)	TRUE	c
2018	Whale shark	RHN	31, 34, 41, 51, 58	TRUE	d
2018	Smooth Lantern Shark	ETP	IIa, III, IV, VI, VII, VIII, IX, X	TRUE	c
2018	Tope Shark	GAG	with LL, IIa, III, IV, VI, VII, VIII, IX, X	TRUE	c
2018	Giant Manta	RMB	all waters	TRUE	c
2018	Mobulas	MAN, RME, RMH, RMJ, RMK, RMM, RMU, RMR, RMT, RMO, RMV	all waters	TRUE	c
2018	Thornback Ray	RJC	Thornback ray (Raja clavata) in Subarea 4 and in divisions 3.a and 7.d (North Sea, Skagerrak, Kattegat, and eastern English Channel)	TRUE	c

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2018	Undulate ray	RJU	Undulate Ray inVIIId-e, English Channel	FALSE	c
2018	Norwegian Skate	JAD	VIa, VIb, VIIa-c, VIIefghk	TRUE	c
2018	White Skate	RJA	White skate (Rostroraja alba) in the Northeast Atlantic	TRUE	bc
2018	Guitarfishes	GTF, RHH, RBE, RBC,GUD, GUF, RBO, RBU, RBS, RBL, RBP, RBX, RBZ, RBR, RBT, GUZ, RZE	I, II, III, IV, V, VI, VII, VIII, IX, X and XII	TRUE	c
2018	Kitefin Shark, birdbeak dogfish leafscale gulper shark great lanternshark	SCK, ETR, DCA	Deep sea sharks I,IIa, IV, XIV	TRUE	c
2018	Bigeye Thresher Shark	BTH	all waters	TRUE	c
2018	Oceanic White Tip	OSC	all waters	TRUE	cd
2018	Silky Shark	FAL	21, 27, 31, 34, 37, 41, 47, 48	TRUE	c
2018	Hamerheads Sharks nei	SPN	Hamerhead Shark (Sphyrna lewini) all out of Mediterraneana	TRUE	d
2018	Sardine	PIL	27.8c, 27.9a	TRUE	b
2018	Anchovy	ANE	Anchovy in GSA 7	FALSE	b
2018	sandeel	SAN	Shetland Area (SA 7)	TRUE	b
2018	Sardine	PIL	GSA 6	FALSE	b
2018	sandeel	SAN	Central Eastern North Sea (SA 3)	FALSE	a
2018	sandeel	SAN	Bergen Bank Area (SA 5)	TRUE	b
2018	sandeel	SAN	Sandeel (Ammodytes spp.) in divisions 4.b-c, Sandeel Area 1r (central and southern North Sea, Dogger Bank)	FALSE	b
2018	Spiny Dogfish	DGS	Spurdog (Squalus acanthias) in Black Sea GSA 29	TRUE	b
2018	Smalltooth sand tiger	LOO	21.1, 27.8, 27.9, 27.10, 34.1.1, 34.1.2, 37	TRUE	d
2018	Sawback angelshark	SUA	27.9, 34.1.1, 34.1.2, 37	TRUE	cd
2018	Smoothback angelshark	SUT	27.9, 34, 37, 47	TRUE	cd
2018	Maltese Ray	JAM	Maltese ray (Leucoraja melitensis) in Mediteranea 37	TRUE	cd
2018	Spiny butterfly ray	RGL	27.8c, 27.9, 34.1.1, 34.1.2, 37	TRUE	d
2018	Bull Ray	MPO	27.9, 34.1.1, 34.1.2, 37	TRUE	d

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2018	Sand Tiger Shark	CCT	34.1.1, 34.1.2, 37	TRUE	d
2018	Greenland Shark	GSK	27.5, 27.6, 27.7, 27.9, 27.10	TRUE	c
2018	Southern Blufin Tuna	SBF	47.C.,47.D, 51.6, 51.7, 51.8, 58, 57.2, 57.3, 57.4, 57.5, 57.6, 81	TRUE	d
2018	Blackchin guitarfish	RBC	37	TRUE	c
2018	Sandy ray	RJI	Sandy ray ( <i>Leucoraja circularis</i> ) in Mediteranea 37	TRUE	c
2018	Common guitarfish	RBX	37	TRUE	c
2018	Alopiidae	BTH, ALV, PTH, THR	51, 57	TRUE	c
2018	Tusk	USK	Tusk ( <i>Brosme brosme</i> ) in Subarea 12, excluding Division 12.b (Southern Mid-Atlantic Ridge)	TRUE	b
2018	Gulper Shark	CWO		TRUE	c
2018	Longnose velvet dogfish	CYP		TRUE	b
2018	Tope Shark	GAG	all 37 with LL, bottom set net and tuna trap	TRUE	c
2018	sandeel	SAN	Northern and Central North Sea	FALSE	a
2018	Cunene horse mackerel	HMZ	Cunene horse mackerel ( <i>Trachurus trecae</i> ) in South CECAF	TRUE	b
2018	Sole	SOL	Sole ( <i>Solea solea</i> ) in subdivisions 20–24	FALSE	a
2018	Knifetooth dogfish	SYR		TRUE	c
2018	Undulate ray	RJU	Undulate Ray in VIII a-b Nothern & Central Bay of Biscay	FALSE	bc
2018	cod	COD	Cod ( <i>Gadus morhua</i> ) in NAFO divisions 1.A–E, offshore (West Greenland)	TRUE	b
2018	Sea bass	BSS	Sea bass ( <i>Dicentrarchus labrax</i> ) in divisions 4.b–c, 7.a, and 7.d–h (central and southern North Sea, Irish Sea, English Channel, Bristol Channel, and Celtic Sea)	FALSE	a
2018	Swordfish	SWO	all 37	TRUE	a
2018	Greenland Halibut	GHL	Greenland halibut ( <i>Reinhardtius hippoglossoides</i> ) in subareas 5, 6, 12, and 14 (Iceland and Faroes grounds, West of Scotland, North of Azores, East of Greenland)	FALSE	b

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2018	Roughhead Grenadier	RHG	Roughhead grenadier ( <i>Macrourus berglax</i> ) in the Northeast Atlantic	TRUE	b
2018	Capelin	CAP	Northeast Arctic excluding Division 2.a west of 5°W	FALSE	ab
2018	Roughsnout grenadier	TSU	Roughsnout grenadier ( <i>Trachyrincus scabrus</i> ) in the northeast Atlantic	TRUE	b
2018	Sole	SOL	Sole ( <i>Solea solea</i> ) in Division 7.d (eastern English Channel)	FALSE	a
2018	cod	COD	Cod ( <i>Gadus morhua</i> ) in Division 6.b (Rockall)	TRUE	b
2018	cod	COD	Cod ( <i>Gadus morhua</i> ) in Subdivision 21 (Kattegat)	FALSE	b
2018	cod	COD	Cod ( <i>Gadus morhua</i> ) in subareas 1 and 2 (Norwegian coastal waters cod)	TRUE	b
2018	Beaked redfish	REB, RED	Beaked redfish ( <i>Sebastes mentella</i> ) in ICES subareas 5, 12, and 14 (Iceland and Faroes grounds, north of Azores, east of Greenland) and NAFO subareas 1+2 (deep pelagic stock > 500 m)	TRUE	ab
2018	American Plaice	PLA	American plaice in Division 3M	TRUE	ab
2018	Witch Flounder	WIT	Witch flounder in Divisions 2J + 3KL	TRUE	ab
2018	Undulate ray	RJU	Undulate ray ( <i>Raja undulata</i> ) in divisions 7.b and 7.j (west and southwest of Ireland)	TRUE	b
2018	Undulate ray	RJU	Undulate ray ( <i>Raja undulata</i> ) in Division 9.a (Atlantic Iberian waters)	TRUE	b
2018	Undulate ray	RJU	Undulate ray ( <i>Raja undulata</i> ) in Division 8.c (Cantabrian Sea)	TRUE	b
2018	Cuckoo ray	RJN	Cuckoo ray ( <i>Leucoraja naevus</i> ) in Subarea 4 and Division 3.a (North Sea, Skagerrak, and Kattegat)	FALSE	b
2018	White Grouper	GPW	White grouper ( <i>Epinephelus aeneus</i> ) in Mauritania, Senegal and Gambia	TRUE	b
2018	Stripped marlin	MLS	Striped marlin ( <i>Tetrapturus audax</i> ) in the Indian Ocean	TRUE	b
2018	Orange roughy	ORY	Orange Roughy ( <i>Hoplostethus atlanticus</i> ) in South Est Pacific Ocean	TRUE	b



Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2018	Roundnose grenadier	RNG	Roundnose grenadier ( <i>Coryphaenoides rupestris</i> ) in Division 3.a (Skagerrak and Kattegat)	TRUE	b
2018	Angel shark	AGN	Angel Shark in Mediteranea	TRUE	cd
2018	Scalloped Hammerhead Shark	SPL	Scalloped Hammerhead Shark ( <i>Sphyrna lewini</i> ) in Mediterraneana	TRUE	c
2018	Great Hammerhead Shark	SPK	Great Hammerhead ( <i>Sphyrna mokarran</i> ) Shark in Mediterraneana	TRUE	c
2018	Smooth Hammerhead Shark	SPK	Smooth Hammerhead ( <i>Sphyrna zygaena</i> ) Shark in Mediterraneana	TRUE	c
2018	Scalloped Hammerhead Shark	SPL	Scalloped Hammerhead Shark ( <i>Sphyrna lewini</i> ) all out of Mediteranea	TRUE	d
2018	Great Hammerhead Shark	SPK	Great Hammerhead ( <i>Sphyrna mokaran</i> ) Shark all out of Mediterraneana	TRUE	d
2018	Smooth Hammerhead Shark	SPK	Smooth Hammerhead ( <i>Sphyrna zygaena</i> ) Shark world out of Mediterraneana	TRUE	d
2018	Hammerheads Sharks nei	SPN	Hammerhead Shark ( <i>Sphyrna lewini</i> ) all out of Mediterraneana	TRUE	c
2018	Atlantic salmon	SAL	Atlantic Salmon in Atlantic ocean, southern complex	TRUE	b
2018	Friiled shark	HXC	Friiled shark	TRUE	c
2018	Sailfin roughshark	OXN	Sailfin roughshark	TRUE	c
2018	Deep-water catsharks	API	Deep-water catsharks	TRUE	c
2018	Bluntnose sixgill shark	SBL	Bluntnose sixgill shark	TRUE	c
2018	Mousse catshark	GAM	Mousse catshark	TRUE	c
2018	Velvet belly	ETX	Velvet belly ( <i>Etmopterus spinax</i> )	TRUE	c
2018	Black dogfish	CFB	Black dogfish	TRUE	c
2018	Northern Shrimp	PRA	Northern shrimp ( <i>Pandalus borealis</i> ) in divisions 3.a and 4.a East (Skagerrak and Kattegat and northern North Sea in the Norwegian Deep)	FALSE	a
2009	cod	COD	Cod ( <i>Gadus morhua</i> ) in subdivisions 24–32, eastern Baltic stock (eastern Baltic Sea)	FALSE	a
2010	cod	COD	Cod ( <i>Gadus morhua</i> ) in subdivisions 24–32, eastern Baltic stock (eastern Baltic Sea)	FALSE	a

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2011	cod	COD	Cod (Gadus morhua) in subdivisions 24–32, eastern Baltic stock (eastern Baltic Sea)	FALSE	a
2012	cod	COD	Cod (Gadus morhua) in subdivisions 24–32, eastern Baltic stock (eastern Baltic Sea)	FALSE	a
2013	cod	COD	Cod (Gadus morhua) in subdivisions 24–32, eastern Baltic stock (eastern Baltic Sea)	TRUE	a
2014	cod	COD	Cod (Gadus morhua) in subdivisions 24–32, eastern Baltic stock (eastern Baltic Sea)	FALSE	a
2015	cod	COD	Cod (Gadus morhua) in subdivisions 24–32, eastern Baltic stock (eastern Baltic Sea)	FALSE	a
2016	cod	COD	Cod (Gadus morhua) in subdivisions 24–32, eastern Baltic stock (eastern Baltic Sea)	FALSE	a
2017	cod	COD	Cod (Gadus morhua) in subdivisions 24–32, eastern Baltic stock (eastern Baltic Sea)	FALSE	a
2018	Cod	COD	Cod (Gadus morhua) in subdivisions 24–32, eastern Baltic stock (eastern Baltic Sea)	TRUE	a
2009	Galapagos Damsel	AZE	Azurina eupalama in Pacific	TRUE	d
2010	Galapagos Damsel	AZE	Azurina eupalama in Pacific	TRUE	d
2011	Galapagos Damsel	AZE	Azurina eupalama in Pacific	TRUE	d
2012	Galapagos Damsel	AZE	Azurina eupalama in Pacific	TRUE	d
2013	Galapagos Damsel	AZE	Azurina eupalama in Pacific	TRUE	d
2014	Galapagos Damsel	AZE	Azurina eupalama in Pacific	TRUE	d
2015	Galapagos Damsel	AZE	Azurina eupalama in Pacific	TRUE	d
2016	Galapagos Damsel	AZE	Azurina eupalama in Pacific	TRUE	d
2017	Galapagos Damsel	AZE	Azurina eupalama in Pacific	TRUE	d
2018	Galapagos Damsel	AZE	Galapagos Damsel (Azurina eupalama) in Pacific	TRUE	d
2009	Whitespotted Wedgefish	RCD	Rhynchobatus djiddensis in Northern Indian Ocean	TRUE	d
2010	Whitespotted Wedgefish	RCD	Rhynchobatus djiddensis in Northern Indian Ocean	TRUE	d
2011	Whitespotted Wedgefish	RCD	Rhynchobatus djiddensis in Northern Indian Ocean	TRUE	d

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2012	Whitespotted Wedgefish	RCD	Rhynchobatus djiddensis in Northern Indian Ocean	TRUE	d
2013	Whitespotted Wedgefish	RCD	Rhynchobatus djiddensis in Northern Indian Ocean	TRUE	d
2014	Whitespotted Wedgefish	RCD	Rhynchobatus djiddensis in Northern Indian Ocean	TRUE	d
2015	Whitespotted Wedgefish	RCD	Rhynchobatus djiddensis in Northern Indian Ocean	TRUE	d
2016	Whitespotted Wedgefish	RCD	Rhynchobatus djiddensis in Northern Indian Ocean	TRUE	d
2017	Whitespotted Wedgefish	RCD	Rhynchobatus djiddensis in Northern Indian Ocean	TRUE	d
2018	Whitespotted Wedgefish	RCD	Whitespotted Wedgefish (Rhynchobatus djiddensis) in Northern Indian Ocean	TRUE	d
2009	Seventyfour seabream	SEV	Polysteganus undulosus in Southern Indian Ocean	TRUE	d
2010	Seventyfour seabream	SEV	Polysteganus undulosus in Southern Indian Ocean	TRUE	d
2011	Seventyfour seabream	SEV	Polysteganus undulosus in Southern Indian Ocean	TRUE	d
2012	Seventyfour seabream	SEV	Polysteganus undulosus in Southern Indian Ocean	TRUE	d
2013	Seventyfour seabream	SEV	Polysteganus undulosus in Southern Indian Ocean	TRUE	d
2014	Seventyfour seabream	SEV	Polysteganus undulosus in Southern Indian Ocean	TRUE	d
2015	Seventyfour seabream	SEV	Polysteganus undulosus in Southern Indian Ocean	TRUE	d
2016	Seventyfour seabream	SEV	Polysteganus undulosus in Southern Indian Ocean	TRUE	d
2017	Seventyfour seabream	SEV	Polysteganus undulosus in Southern Indian Ocean	TRUE	d
2018	Seventyfour seabream	SEV	Seventyfour seabream (Polysteganus undulosus) in Southern Indian Ocean	TRUE	d
2009	Halavi Guitarfish	RBH	Glaucostegus halavi in Northern Indian Ocean	FALSE	d
2010	Halavi Guitarfish	RBH	Glaucostegus halavi in Northern Indian Ocean	FALSE	d
2011	Halavi Guitarfish	RBH	Glaucostegus halavi in Northern Indian Ocean	FALSE	d
2012	Halavi Guitarfish	RBH	Glaucostegus halavi in Northern Indian Ocean	FALSE	d
2013	Halavi Guitarfish	RBH	Glaucostegus halavi in Northern Indian Ocean	FALSE	d
2014	Halavi Guitarfish	RBH	Glaucostegus halavi in Northern Indian Ocean	FALSE	d
2015	Halavi Guitarfish	RBH	Glaucostegus halavi in Northern Indian Ocean	FALSE	d
2016	Halavi Guitarfish	RBH	Glaucostegus halavi in Northern Indian Ocean	FALSE	d
2017	Halavi Guitarfish	RBH	Glaucostegus halavi in Northern Indian Ocean	FALSE	d

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2018	Halavi Guitarfish	RBH	Halavi Guitarfish (Glaucostegus halavi) in Northern Indian Ocean	TRUE	d
2009	Nassau Grouper	GPN	Epinephelus striatus in Caribbean Sea	FALSE	d
2010	Nassau Grouper	GPN	Epinephelus striatus in Caribbean Sea	FALSE	d
2011	Nassau Grouper	GPN	Epinephelus striatus in Caribbean Sea	FALSE	d
2012	Nassau Grouper	GPN	Epinephelus striatus in Caribbean Sea	FALSE	d
2013	Nassau Grouper	GPN	Epinephelus striatus in Caribbean Sea	FALSE	d
2014	Nassau Grouper	GPN	Epinephelus striatus in Caribbean Sea	FALSE	d
2015	Nassau Grouper	GPN	Epinephelus striatus in Caribbean Sea	FALSE	d
2016	Nassau Grouper	GPN	Epinephelus striatus in Caribbean Sea	TRUE	d
2017	Nassau Grouper	GPN	Epinephelus striatus in Caribbean Sea	TRUE	d
2018	Nassau Grouper	GPN	Nassau grouper (Epinephelus striatus) in Caribbean Sea	TRUE	d
2009	Corfu toothcarp	VLX	Valencia letourneuxi in Mediteranee Inionian Sea 37.2.2	TRUE	d
2010	Corfu toothcarp	VLX	Valencia letourneuxi in Mediteranee Inionian Sea 37.2.2	TRUE	d
2011	Corfu toothcarp	VLX	Valencia letourneuxi in Mediteranee Inionian Sea 37.2.2	TRUE	d
2012	Corfu toothcarp	VLX	Valencia letourneuxi in Mediteranee Inionian Sea 37.2.2	TRUE	d
2013	Corfu toothcarp	VLX	Valencia letourneuxi in Mediteranee Inionian Sea 37.2.2	TRUE	d
2014	Corfu toothcarp	VLX	Valencia letourneuxi in Mediteranee Inionian Sea 37.2.2	TRUE	d
2015	Corfu toothcarp	VLX	Valencia letourneuxi in Mediteranee Inionian Sea 37.2.2	TRUE	d
2016	Corfu toothcarp	VLX	Valencia letourneuxi in Mediteranee Inionian Sea 37.2.2	TRUE	d
2017	Corfu toothcarp	VLX	Valencia letourneuxi in Mediteranee Inionian Sea 37.2.2	TRUE	d
2018	Corfu toothcarp	VLX	Corfu toothcarp (Valencia letourneuxi) in Mediteranee Inionian Sea 37.2.2	TRUE	d
2009	Valencia toothcarp	VHS	Valencia hispanica in Western Mediteranea 37.1.2, 37.1.1	TRUE	d

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2010	Valencia toothcarp	VHS	Valencia hispanica in Western Mediteranea 37.1.2, 37.1.1	TRUE	d
2011	Valencia toothcarp	VHS	Valencia hispanica in Western Mediteranea 37.1.2, 37.1.1	TRUE	d
2012	Valencia toothcarp	VHS	Valencia hispanica in Western Mediteranea 37.1.2, 37.1.1	TRUE	d
2013	Valencia toothcarp	VHS	Valencia hispanica in Western Mediteranea 37.1.2, 37.1.1	TRUE	d
2014	Valencia toothcarp	VHS	Valencia hispanica in Western Mediteranea 37.1.2, 37.1.1	TRUE	d
2015	Valencia toothcarp	VHS	Valencia hispanica in Western Mediteranea 37.1.2, 37.1.1	TRUE	d
2016	Valencia toothcarp	VHS	Valencia hispanica in Western Mediteranea 37.1.2, 37.1.1	TRUE	d
2017	Valencia toothcarp	VHS	Valencia hispanica in Western Mediteranea 37.1.2, 37.1.1	TRUE	d
2018	Valencia toothcarp	VHS	Valencia toothcarp (Valencia hispanica) in Western Mediteranea 37.1.2, 37.1.1	TRUE	d
2009	Giant Seabass	TEJ	Stereolepis gigas in Pacific Ocean	TRUE	d
2010	Giant Seabass	TEJ	Stereolepis gigas in Pacific Ocean	TRUE	d
2011	Giant Seabass	TEJ	Stereolepis gigas in Pacific Ocean	TRUE	d
2012	Giant Seabass	TEJ	Stereolepis gigas in Pacific Ocean	TRUE	d
2013	Giant Seabass	TEJ	Stereolepis gigas in Pacific Ocean	TRUE	d
2014	Giant Seabass	TEJ	Stereolepis gigas in Pacific Ocean	TRUE	d
2015	Giant Seabass	TEJ	Stereolepis gigas in Pacific Ocean	TRUE	d
2016	Giant Seabass	TEJ	Stereolepis gigas in Pacific Ocean	TRUE	d
2017	Giant Seabass	TEJ	Stereolepis gigas in Pacific Ocean	TRUE	d
2018	Giant Seabass	TEJ	Giant Seabass (Stereolepis gigas) in Pacific Ocean	TRUE	d
2009	Japanese huchen	HUP	Hucho perryi inNorth-Western Pacific Ocean	TRUE	d
2010	Japanese huchen	HUP	Hucho perryi inNorth-Western Pacific Ocean	TRUE	d
2011	Japanese huchen	HUP	Hucho perryi inNorth-Western Pacific Ocean	TRUE	d
2012	Japanese huchen	HUP	Hucho perryi inNorth-Western Pacific Ocean	TRUE	d

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2013	Japanese huchen	HUP	Hucho perryi inNorth-Western Pacific Ocean	TRUE	d
2014	Japanese huchen	HUP	Hucho perryi inNorth-Western Pacific Ocean	TRUE	d
2015	Japanese huchen	HUP	Hucho perryi inNorth-Western Pacific Ocean	TRUE	d
2016	Japanese huchen	HUP	Hucho perryi inNorth-Western Pacific Ocean	TRUE	d
2017	Japanese huchen	HUP	Hucho perryi inNorth-Western Pacific Ocean	TRUE	d
2018	Japanese huchen	HUP	Japanese huchen (Hucho perryi) in North-Western Pacific Ocean	TRUE	d
2009	European hake	HKE	European hake (Merluccius merluccius) Moroccan stock	FALSE	b
2010	European hake	HKE	European hake (Merluccius merluccius) Moroccan stock	FALSE	b
2011	European hake	HKE	European hake (Merluccius merluccius) Moroccan stock	FALSE	b
2012	European hake	HKE	European hake (Merluccius merluccius) Moroccan stock	FALSE	b
2013	European hake	HKE	European hake (Merluccius merluccius) Moroccan stock	FALSE	b
2014	European hake	HKE	European hake (Merluccius merluccius) Moroccan stock	FALSE	b
2015	European hake	HKE	European hake (Merluccius merluccius) Moroccan stock	FALSE	b
2016	European hake	HKE	European hake (Merluccius merluccius) Moroccan stock	FALSE	b
2017	European hake	HKE	European hake (Merluccius merluccius) Moroccan stock	TRUE	b
2018	Shortfin Mako	SMA	Shortfin Mako (Isurus oxyrinchus) in Mediteranea	TRUE	d
2009	Shortfin Mako	SMA	Shortfin Mako (Isurus oxyrinchus) in Mediteranea	FALSE	d
2010	Shortfin Mako	SMA	Shortfin Mako (Isurus oxyrinchus) in Mediteranea	FALSE	d
2011	Shortfin Mako	SMA	Shortfin Mako (Isurus oxyrinchus) in Mediteranea	FALSE	d
2012	Shortfin Mako	SMA	Shortfin Mako (Isurus oxyrinchus) in Mediteranea	FALSE	d
2013	Shortfin Mako	SMA	Shortfin Mako (Isurus oxyrinchus) in Mediteranea	FALSE	d

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2014	Shortfin Mako	SMA	Shortfin Mako ( <i>Isurus oxyrinchus</i> ) in Mediteranea	FALSE	d
2015	Shortfin Mako	SMA	Shortfin Mako ( <i>Isurus oxyrinchus</i> ) in Mediteranea	FALSE	d
2016	Shortfin Mako	SMA	Shortfin Mako ( <i>Isurus oxyrinchus</i> ) in Mediteranea	TRUE	d
2017	Shortfin Mako	SMA	Shortfin Mako ( <i>Isurus oxyrinchus</i> ) in Mediteranea	TRUE	d
2009	Daggernose Shark	CIO	Daggernose Shark ( <i>Isogomphodon oxyrhynchus</i> )	TRUE	d
2010	Daggernose Shark	CIO	Daggernose Shark ( <i>Isogomphodon oxyrhynchus</i> )	TRUE	d
2011	Daggernose Shark	CIO	Daggernose Shark ( <i>Isogomphodon oxyrhynchus</i> )	TRUE	d
2012	Daggernose Shark	CIO	Daggernose Shark ( <i>Isogomphodon oxyrhynchus</i> )	TRUE	d
2013	Daggernose Shark	CIO	Daggernose Shark ( <i>Isogomphodon oxyrhynchus</i> )	TRUE	d
2014	Daggernose Shark	CIO	Daggernose Shark ( <i>Isogomphodon oxyrhynchus</i> )	TRUE	d
2015	Daggernose Shark	CIO	Daggernose Shark ( <i>Isogomphodon oxyrhynchus</i> )	TRUE	d
2016	Daggernose Shark	CIO	Daggernose Shark ( <i>Isogomphodon oxyrhynchus</i> )	TRUE	d
2017	Daggernose Shark	CIO	Daggernose Shark ( <i>Isogomphodon oxyrhynchus</i> )	TRUE	d
2018	Daggernose Shark	CIO	Daggernose Shark ( <i>Isogomphodon oxyrhynchus</i> )	TRUE	d
2018	European hake	HKE	European hake ( <i>Merluccius merluccius</i> ) Moroccan stock	TRUE	b
2009	Deep-water rose shrimp	DPS	<i>Parapenaeus longirostris</i> in CECAF 34.1.11 34.1.12 34.1.13	FALSE	b
2010	Deep-water rose shrimp	DPS	<i>Parapenaeus longirostris</i> in CECAF 34.1.11 34.1.12 34.1.13	FALSE	b
2011	Deep-water rose shrimp	DPS	<i>Parapenaeus longirostris</i> in CECAF 34.1.11 34.1.12 34.1.13	FALSE	b
2012	Deep-water rose shrimp	DPS	<i>Parapenaeus longirostris</i> in CECAF 34.1.11 34.1.12 34.1.13	FALSE	b

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2013	Deep-water rose shrimp	DPS	Parapenaeus longirostris in CECAF 34.1.11 34.1.12 34.1.13	FALSE	b
2014	Deep-water rose shrimp	DPS	Parapenaeus longirostris in CECAF 34.1.11 34.1.12 34.1.13	FALSE	b
2015	Deep-water rose shrimp	DPS	Parapenaeus longirostris in CECAF 34.1.11 34.1.12 34.1.13	FALSE	b
2016	Deep-water rose shrimp	DPS	Parapenaeus longirostris in CECAF 34.1.11 34.1.12 34.1.13	TRUE	b
2017	Deep-water rose shrimp	DPS	Parapenaeus longirostris in CECAF 34.1.11 34.1.12 34.1.13	TRUE	b
2018	Deep-water rose shrimp	DPS	Deep-water rose shrimp (Parapenaeus longirostris) in CECAF 34.1.11 34.1.12 34.1.13	TRUE	b
2009	Rubberlip grunt	GBR	Plectorhynchus mediterraneus in CECAF 34.1.11 34.1.12	FALSE	b
2010	Rubberlip grunt	GBR	Plectorhynchus mediterraneus in CECAF 34.1.11 34.1.12	FALSE	b
2011	Rubberlip grunt	GBR	Plectorhynchus mediterraneus in CECAF 34.1.11 34.1.12	FALSE	b
2012	Rubberlip grunt	GBR	Plectorhynchus mediterraneus in CECAF 34.1.11 34.1.12	FALSE	b
2013	Rubberlip grunt	GBR	Plectorhynchus mediterraneus in CECAF 34.1.11 34.1.12	FALSE	b
2014	Rubberlip grunt	GBR	Plectorhynchus mediterraneus in CECAF 34.1.11 34.1.12	FALSE	b
2015	Rubberlip grunt	GBR	Plectorhynchus mediterraneus in CECAF 34.1.11 34.1.12	FALSE	b
2016	Rubberlip grunt	GBR	Plectorhynchus mediterraneus in CECAF 34.1.11 34.1.12	FALSE	b
2017	Rubberlip grunt	GBR	Plectorhynchus mediterraneus in CECAF 34.1.11 34.1.12	FALSE	b
2018	Rubberlip grunt	GBR	Rubberlip grunt (Plectorhynchus mediterraneus) in CECAF 34.1.11 34.1.12	TRUE	b
2009	Witch	WIT	Witch (Glyptocephalus cynoglossus) in Subarea 4 and divisions 3.a and 7.d (North Sea, Skagerrak and Kattegat, eastern English Channel)	TRUE	a
2010	Witch	WIT	Witch (Glyptocephalus cynoglossus) in Subarea 4 and divisions 3.a and	TRUE	a



Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
			7.d (North Sea, Skagerrak and Kattegat, eastern English Channel)		
2011	Witch	WIT	Witch (Glyptocephalus cynoglossus) in Subarea 4 and divisions 3.a and 7.d (North Sea, Skagerrak and Kattegat, eastern English Channel)	TRUE	a
2012	Witch	WIT	Witch (Glyptocephalus cynoglossus) in Subarea 4 and divisions 3.a and 7.d (North Sea, Skagerrak and Kattegat, eastern English Channel)	FALSE	a
2013	Witch	WIT	Witch (Glyptocephalus cynoglossus) in Subarea 4 and divisions 3.a and 7.d (North Sea, Skagerrak and Kattegat, eastern English Channel)	FALSE	a
2014	Witch	WIT	Witch (Glyptocephalus cynoglossus) in Subarea 4 and divisions 3.a and 7.d (North Sea, Skagerrak and Kattegat, eastern English Channel)	FALSE	a
2015	Witch	WIT	Witch (Glyptocephalus cynoglossus) in Subarea 4 and divisions 3.a and 7.d (North Sea, Skagerrak and Kattegat, eastern English Channel)	FALSE	a
2016	Witch	WIT	Witch (Glyptocephalus cynoglossus) in Subarea 4 and divisions 3.a and 7.d (North Sea, Skagerrak and Kattegat, eastern English Channel)	FALSE	a
2017	Witch	WIT	Witch (Glyptocephalus cynoglossus) in Subarea 4 and divisions 3.a and 7.d (North Sea, Skagerrak and Kattegat, eastern English Channel)	FALSE	a
2018	Witch	WIT	Witch (Glyptocephalus cynoglossus) in Subarea 4 and divisions 3.a and 7.d (North Sea, Skagerrak and Kattegat, eastern English Channel)	FALSE	a
2009	Yellowfin Tuna	YFT	Yellowfin tuna in Indian Ocean	FALSE	a
2010	Yellowfin Tuna	YFT	Yellowfin tuna in Indian Ocean	FALSE	a
2011	Yellowfin Tuna	YFT	Yellowfin tuna in Indian Ocean	FALSE	a
2012	Yellowfin Tuna	YFT	Yellowfin tuna in Indian Ocean	FALSE	a

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2013	Yellowfin Tuna	YFT	Yellowfin tuna in Indian Ocean	FALSE	a
2014	Yellowfin Tuna	YFT	Yellowfin tuna in Indian Ocean	FALSE	a
2015	Yellowfin Tuna	YFT	Yellowfin tuna in Indian Ocean	FALSE	a
2016	Yellowfin Tuna	YFT	Yellowfin tuna in Indian Ocean	FALSE	a
2017	Yellowfin Tuna	YFT	Yellowfin tuna in Indian Ocean	FALSE	a
2018	Yellowfin Tuna	YFT	Yellowfin tuna (Thunnus albacares) in Indian Ocean	TRUE	a
2009	Atlantic White Marlin	WHM	White Marlin (Tetrapturus albidus) in Atlantic Ocean.	TRUE	a
2010	Atlantic White Marlin	WHM	White Marlin (Tetrapturus albidus) in Atlantic Ocean.	TRUE	a
2011	Atlantic White Marlin	WHM	White Marlin (Tetrapturus albidus) in Atlantic Ocean.	TRUE	a
2012	Atlantic White Marlin	WHM	White Marlin (Tetrapturus albidus) in Atlantic Ocean.	TRUE	a
2013	Atlantic White Marlin	WHM	White Marlin (Tetrapturus albidus) in Atlantic Ocean.	TRUE	a
2014	Atlantic White Marlin	WHM	White Marlin (Tetrapturus albidus) in Atlantic Ocean.	TRUE	a
2015	Atlantic White Marlin	WHM	White Marlin (Tetrapturus albidus) in Atlantic Ocean.	TRUE	a
2016	Atlantic White Marlin	WHM	White Marlin (Tetrapturus albidus) in Atlantic Ocean.	TRUE	a
2017	Atlantic White Marlin	WHM	White Marlin (Tetrapturus albidus) in Atlantic Ocean.	TRUE	a
2018	Atlantic White Marlin	WHM	White Marlin (Tetrapturus albidus) in Atlantic Ocean.	TRUE	a
2009	Shortfin Mako	SMA	Shortfin Mako in North Atlantic Ocean	TRUE	a
2010	Shortfin Mako	SMA	Shortfin Mako in North Atlantic Ocean	TRUE	a
2011	Shortfin Mako	SMA	Shortfin Mako in North Atlantic Ocean	TRUE	a
2012	Shortfin Mako	SMA	Shortfin Mako in North Atlantic Ocean	TRUE	a
2013	Shortfin Mako	SMA	Shortfin Mako in North Atlantic Ocean	TRUE	a
2014	Shortfin Mako	SMA	Shortfin Mako in North Atlantic Ocean	TRUE	a
2015	Shortfin Mako	SMA	Shortfin Mako in North Atlantic Ocean	TRUE	a

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2016	Shortfin Mako	SMA	Shortfin Mako in North Atlantic Ocean	TRUE	a
2017	Shortfin Mako	SMA	Shortfin Mako in North Atlantic Ocean	TRUE	a
2018	Shortfin Mako	SMA	Shortfin Mako ( <i>Isurus oxyrinchus</i> ) in North Atlantic Ocean	TRUE	a
2009	Herring	HER	Herring ( <i>Clupea harengus</i> ) in divisions 7.a South of 52°30'N, 7.g-h, and 7.j-k (Irish Sea, Celtic Sea, and southwest of Ireland)	FALSE	a
2010	Herring	HER	Herring ( <i>Clupea harengus</i> ) in divisions 7.a South of 52°30'N, 7.g-h, and 7.j-k (Irish Sea, Celtic Sea, and southwest of Ireland)	FALSE	a
2011	Herring	HER	Herring ( <i>Clupea harengus</i> ) in divisions 7.a South of 52°30'N, 7.g-h, and 7.j-k (Irish Sea, Celtic Sea, and southwest of Ireland)	FALSE	a
2012	Herring	HER	Herring ( <i>Clupea harengus</i> ) in divisions 7.a South of 52°30'N, 7.g-h, and 7.j-k (Irish Sea, Celtic Sea, and southwest of Ireland)	FALSE	a
2013	Herring	HER	Herring ( <i>Clupea harengus</i> ) in divisions 7.a South of 52°30'N, 7.g-h, and 7.j-k (Irish Sea, Celtic Sea, and southwest of Ireland)	FALSE	a
2014	Herring	HER	Herring ( <i>Clupea harengus</i> ) in divisions 7.a South of 52°30'N, 7.g-h, and 7.j-k (Irish Sea, Celtic Sea, and southwest of Ireland)	FALSE	a
2015	Herring	HER	Herring ( <i>Clupea harengus</i> ) in divisions 7.a South of 52°30'N, 7.g-h, and 7.j-k (Irish Sea, Celtic Sea, and southwest of Ireland)	FALSE	a
2016	Herring	HER	Herring ( <i>Clupea harengus</i> ) in divisions 7.a South of 52°30'N, 7.g-h, and 7.j-k (Irish Sea, Celtic Sea, and southwest of Ireland)	FALSE	a
2017	Herring	HER	Herring ( <i>Clupea harengus</i> ) in divisions 7.a South of 52°30'N, 7.g-h, and 7.j-k (Irish	TRUE	a

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
			Sea, Celtic Sea, and southwest of Ireland)		
2018	Herring	HER	Herring ( <i>Clupea harengus</i> ) in divisions 7.a South of 52°30'N, 7.g-h, and 7.j-k (Irish Sea, Celtic Sea, and southwest of Ireland)	TRUE	a
2018	Whiting	WHG	Whiting ( <i>Merlangius merlangus</i> ) in divisions 7.b-c and 7.e-k (southern Celtic Seas and western English Channel)	TRUE	a
2017	Whiting	WHG	Whiting ( <i>Merlangius merlangus</i> ) in divisions 7.b-c and 7.e-k (southern Celtic Seas and western English Channel)	FALSE	a
2016	Whiting	WHG	Whiting ( <i>Merlangius merlangus</i> ) in divisions 7.b-c and 7.e-k (southern Celtic Seas and western English Channel)	FALSE	a
2015	Whiting	WHG	Whiting ( <i>Merlangius merlangus</i> ) in divisions 7.b-c and 7.e-k (southern Celtic Seas and western English Channel)	FALSE	a
2014	Whiting	WHG	Whiting ( <i>Merlangius merlangus</i> ) in divisions 7.b-c and 7.e-k (southern Celtic Seas and western English Channel)	FALSE	a
2013	Whiting	WHG	Whiting ( <i>Merlangius merlangus</i> ) in divisions 7.b-c and 7.e-k (southern Celtic Seas and western English Channel)	FALSE	a
2012	Whiting	WHG	Whiting ( <i>Merlangius merlangus</i> ) in divisions 7.b-c and 7.e-k (southern Celtic Seas and western English Channel)	FALSE	a
2011	Whiting	WHG	Whiting ( <i>Merlangius merlangus</i> ) in divisions 7.b-c and 7.e-k (southern Celtic Seas and western English Channel)	FALSE	a
2010	Whiting	WHG	Whiting ( <i>Merlangius merlangus</i> ) in divisions 7.b-c and 7.e-k	FALSE	a

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
			(southern Celtic Seas and western English Channel)		
2009	Whiting	WHG	Whiting (Merlangius merlangus) in divisions 7.b-c and 7.e-k (southern Celtic Seas and western English Channel)	FALSE	a
2009	Witch Flounder	WIT	Witch flounder in Divisions 3N + 3O	FALSE	a
2010	Witch Flounder	WIT	Witch flounder in Divisions 3N + 3O	FALSE	a
2011	Witch Flounder	WIT	Witch flounder in Divisions 3N + 3O	FALSE	a
2012	Witch Flounder	WIT	Witch flounder in Divisions 3N + 3O	FALSE	a
2013	Witch Flounder	WIT	Witch flounder in Divisions 3N + 3O	FALSE	a
2014	Witch Flounder	WIT	Witch flounder in Divisions 3N + 3O	FALSE	a
2015	Witch Flounder	WIT	Witch flounder in Divisions 3N + 3O	FALSE	a
2016	Witch Flounder	WIT	Witch flounder in Divisions 3N + 3O	FALSE	a
2017	Witch Flounder	WIT	Witch flounder in Divisions 3N + 3O	FALSE	a
2018	Witch Flounder	WIT	Witch flounder in Divisions 3N + 3O	TRUE	a
2009	Capelin	CAP	Capelin in Divisions 3N + 3O	TRUE	ab
2010	Capelin	CAP	Capelin in Divisions 3N + 3O	TRUE	ab
2011	Capelin	CAP	Capelin in Divisions 3N + 3O	TRUE	ab
2012	Capelin	CAP	Capelin in Divisions 3N + 3O	TRUE	ab
2013	Capelin	CAP	Capelin in Divisions 3N + 3O	TRUE	ab
2014	Capelin	CAP	Capelin in Divisions 3N + 3O	TRUE	ab
2015	Capelin	CAP	Capelin in Divisions 3N + 3O	TRUE	ab
2016	Capelin	CAP	Capelin in Divisions 3N + 3O	TRUE	ab
2017	Capelin	CAP	Capelin in Divisions 3N + 3O	TRUE	ab
2018	Capelin	CAP	Capelin in Divisions 3N + 3O	TRUE	ab
2009	Cod	COD	Cod in Divisions 3N + 3O	TRUE	ab
2010	Cod	COD	Cod in Divisions 3N + 3O	TRUE	ab
2011	Cod	COD	Cod in Divisions 3N + 3O	TRUE	ab
2012	Cod	COD	Cod in Divisions 3N + 3O	TRUE	ab
2013	Cod	COD	Cod in Divisions 3N + 3O	TRUE	ab
2014	Cod	COD	Cod in Divisions 3N + 3O	TRUE	ab

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2015	Cod	COD	Cod in Divisions 3N + 3O	TRUE	ab
2016	Cod	COD	Cod in Divisions 3N + 3O	TRUE	ab
2017	Cod	COD	Cod in Divisions 3N + 3O	TRUE	ab
2018	Cod	COD	Cod in Divisions 3N + 3O	TRUE	ab
2009	Sole	SOL	Sole ( <i>Solea solea</i> ) in Division 7.d (eastern English Channel)	TRUE	a
2010	Sole	SOL	Sole ( <i>Solea solea</i> ) in Division 7.d (eastern English Channel)	FALSE	a
2011	Sole	SOL	Sole ( <i>Solea solea</i> ) in Division 7.d (eastern English Channel)	FALSE	a
2012	Sole	SOL	Sole ( <i>Solea solea</i> ) in Division 7.d (eastern English Channel)	FALSE	a
2013	Sole	SOL	Sole ( <i>Solea solea</i> ) in Division 7.d (eastern English Channel)	FALSE	a
2014	Sole	SOL	Sole ( <i>Solea solea</i> ) in Division 7.d (eastern English Channel)	FALSE	a
2015	Sole	SOL	Sole ( <i>Solea solea</i> ) in Division 7.d (eastern English Channel)	FALSE	a
2016	Sole	SOL	Sole ( <i>Solea solea</i> ) in Division 7.d (eastern English Channel)	FALSE	a
2017	Sole	SOL	Sole ( <i>Solea solea</i> ) in Division 7.d (eastern English Channel)	FALSE	a
2018	Sole	SOL	Sole ( <i>Solea solea</i> ) in Division 7.h-k (Celtic Sea South, southwest of Ireland)	FALSE	a
2009	Toothfish	TOA, TOT, TOP	Toothfish ( <i>Dissostichus</i> spp.) in Antarctic 48.5	FALSE	c
2010	Toothfish	TOA, TOT, TOP	Toothfish ( <i>Dissostichus</i> spp.) in Antarctic 48.5	FALSE	c
2011	Toothfish	TOA, TOT, TOP	Toothfish ( <i>Dissostichus</i> spp.) in Antarctic 48.5	FALSE	c
2012	Toothfish	TOA, TOT, TOP	Toothfish ( <i>Dissostichus</i> spp.) in Antarctic 48.5	FALSE	c
2013	Toothfish	TOA, TOT, TOP	Toothfish ( <i>Dissostichus</i> spp.) in Antarctic 48.5	FALSE	c
2014	Toothfish	TOA, TOT, TOP	Toothfish ( <i>Dissostichus</i> spp.) in Antarctic 48.5	FALSE	c
2015	Toothfish	TOA, TOT, TOP	Toothfish ( <i>Dissostichus</i> spp.) in Antarctic 48.5	FALSE	c
2016	Toothfish	TOA, TOT, TOP	Toothfish ( <i>Dissostichus</i> spp.) in Antarctic 48.5	FALSE	c
2017	Toothfish	TOA, TOT, TOP	Toothfish ( <i>Dissostichus</i> spp.) in Antarctic 48.5	FALSE	c
2018	Toothfish	TOA, TOT, TOP	Toothfish ( <i>Dissostichus</i> spp.) in Antarctic 48.6	FALSE	c
2018	Nephrops	NEP	Norway lobster ( <i>Nephrops norvegicus</i> ) in	TRUE	b

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
			Division 8.c, Functional Unit 31 (southern Bay of Biscay and Cantabrian Sea)		
2017	Nephrops	NEP	Norway lobster (Nephrops norvegicus) in Division 8.c, Functional Unit 31 (southern Bay of Biscay and Cantabrian Sea)	TRUE	b
2016	Nephrops	NEP	Norway lobster (Nephrops norvegicus) in Division 8.c, Functional Unit 31 (southern Bay of Biscay and Cantabrian Sea)	TRUE	b
2015	Nephrops	NEP	Norway lobster (Nephrops norvegicus) in Division 8.c, Functional Unit 31 (southern Bay of Biscay and Cantabrian Sea)	TRUE	b
2014	Nephrops	NEP	Norway lobster (Nephrops norvegicus) in Division 8.c, Functional Unit 31 (southern Bay of Biscay and Cantabrian Sea)	TRUE	b
2013	Nephrops	NEP	Norway lobster (Nephrops norvegicus) in Division 8.c, Functional Unit 31 (southern Bay of Biscay and Cantabrian Sea)	TRUE	b
2012	Nephrops	NEP	Norway lobster (Nephrops norvegicus) in Division 8.c, Functional Unit 31 (southern Bay of Biscay and Cantabrian Sea)	TRUE	b
2011	Nephrops	NEP	Norway lobster (Nephrops norvegicus) in Division 8.c, Functional Unit 31 (southern Bay of Biscay and Cantabrian Sea)	TRUE	b
2010	Nephrops	NEP	Norway lobster (Nephrops norvegicus) in Division 8.c, Functional Unit 31 (southern Bay of Biscay and Cantabrian Sea)	TRUE	b
2009	Nephrops	NEP	Norway lobster (Nephrops norvegicus) in Division 8.c, Functional Unit 31 (southern Bay of Biscay and Cantabrian Sea)	TRUE	b

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2009	Round sardinella	SAA	Round sardinella (Sardinella aurita) in North CECAF	TRUE	b
2010	Round sardinella	SAA	Round sardinella (Sardinella aurita) in North CECAF	TRUE	b
2011	Round sardinella	SAA	Round sardinella (Sardinella aurita) in North CECAF	TRUE	b
2012	Round sardinella	SAA	Round sardinella (Sardinella aurita) in North CECAF	TRUE	b
2013	Round sardinella	SAA	Round sardinella (Sardinella aurita) in North CECAF	TRUE	b
2014	Round sardinella	SAA	Round sardinella (Sardinella aurita) in North CECAF	TRUE	b
2015	Round sardinella	SAA	Round sardinella (Sardinella aurita) in North CECAF	TRUE	b
2016	Round sardinella	SAA	Round sardinella (Sardinella aurita) in North CECAF	TRUE	b
2017	Round sardinella	SAA	Round sardinella (Sardinella aurita) in North CECAF	TRUE	b
2018	Round sardinella	SAA	Round sardinella (Sardinella aurita) in North CECAF	TRUE	b
2009	Madeiran sardinella	SAE	Madeiran sardinella (Sardinella madarensis) in North CECAF	TRUE	b
2010	Madeiran sardinella	SAE	Madeiran sardinella (Sardinella madarensis) in North CECAF	TRUE	b
2011	Madeiran sardinella	SAE	Madeiran sardinella (Sardinella madarensis) in North CECAF	TRUE	b
2012	Madeiran sardinella	SAE	Madeiran sardinella (Sardinella madarensis) in North CECAF	TRUE	b
2013	Madeiran sardinella	SAE	Madeiran sardinella (Sardinella madarensis) in North CECAF	TRUE	b
2014	Madeiran sardinella	SAE	Madeiran sardinella (Sardinella madarensis) in North CECAF	TRUE	b
2015	Madeiran sardinella	SAE	Madeiran sardinella (Sardinella madarensis) in North CECAF	TRUE	b
2016	Madeiran sardinella	SAE	Madeiran sardinella (Sardinella madarensis) in North CECAF	TRUE	b
2017	Madeiran sardinella	SAE	Madeiran sardinella (Sardinella madarensis) in North CECAF	TRUE	b



Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2018	Madeiran sardinella	SAE	Madeiran sardinella (Sardinella madarensis) in North CECAF	TRUE	b
2009	Sardinellas nei	SIX	Sardinella (Sardinella spp) in North CECAF	TRUE	b
2010	Sardinellas nei	SIX	Sardinella (Sardinella spp) in North CECAF	TRUE	b
2011	Sardinellas nei	SIX	Sardinella (Sardinella spp) in North CECAF	TRUE	b
2012	Sardinellas nei	SIX	Sardinella (Sardinella spp) in North CECAF	TRUE	b
2013	Sardinellas nei	SIX	Sardinella (Sardinella spp) in North CECAF	TRUE	b
2014	Sardinellas nei	SIX	Sardinella (Sardinella spp) in North CECAF	TRUE	b
2015	Sardinellas nei	SIX	Sardinella (Sardinella spp) in North CECAF	TRUE	b
2016	Sardinellas nei	SIX	Sardinella (Sardinella spp) in North CECAF	TRUE	b
2017	Sardinellas nei	SIX	Sardinella (Sardinella spp) in North CECAF	TRUE	b
2018	Sardinellas nei	SIX	Sardinella (Sardinella spp) in North CECAF	TRUE	b
2009	Bonga shad	BOA	Bonga shad (Ethmalosa fimbriata) in North CECAF	TRUE	b
2010	Bonga shad	BOA	Bonga shad (Ethmalosa fimbriata) in North CECAF	TRUE	b
2011	Bonga shad	BOA	Bonga shad (Ethmalosa fimbriata) in North CECAF	TRUE	b
2012	Bonga shad	BOA	Bonga shad (Ethmalosa fimbriata) in North CECAF	TRUE	b
2013	Bonga shad	BOA	Bonga shad (Ethmalosa fimbriata) in North CECAF	TRUE	b
2014	Bonga shad	BOA	Bonga shad (Ethmalosa fimbriata) in North CECAF	TRUE	b
2015	Bonga shad	BOA	Bonga shad (Ethmalosa fimbriata) in North CECAF	TRUE	b
2016	Bonga shad	BOA	Bonga shad (Ethmalosa fimbriata) in North CECAF	TRUE	b
2017	Bonga shad	BOA	Bonga shad (Ethmalosa fimbriata) in North CECAF	TRUE	b
2018	Bonga shad	BOA	Bonga shad (Ethmalosa fimbriata) in North CECAF	TRUE	b
2009	Round sardinella	SAA	Round sardinella (Sardinella aurita) in South CECAF	TRUE	b

Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2010	Round sardinella	SAA	Round sardinella (Sardinella aurita) in South CECAF	TRUE	b
2011	Round sardinella	SAA	Round sardinella (Sardinella aurita) in South CECAF	TRUE	b
2012	Round sardinella	SAA	Round sardinella (Sardinella aurita) in South CECAF	TRUE	b
2013	Round sardinella	SAA	Round sardinella (Sardinella aurita) in South CECAF	TRUE	b
2014	Round sardinella	SAA	Round sardinella (Sardinella aurita) in South CECAF	TRUE	b
2015	Round sardinella	SAA	Round sardinella (Sardinella aurita) in South CECAF	TRUE	b
2016	Round sardinella	SAA	Round sardinella (Sardinella aurita) in South CECAF	TRUE	b
2017	Round sardinella	SAA	Round sardinella (Sardinella aurita) in South CECAF	TRUE	b
2018	Round sardinella	SAA	Round sardinella (Sardinella aurita) in South CECAF	TRUE	b
2009	Madeiran sardinella	SAE	Madeiran sardinella (Sardinella madarensis) in South CECAF	TRUE	b
2010	Madeiran sardinella	SAE	Madeiran sardinella (Sardinella madarensis) in South CECAF	TRUE	b
2011	Madeiran sardinella	SAE	Madeiran sardinella (Sardinella madarensis) in South CECAF	TRUE	b
2012	Madeiran sardinella	SAE	Madeiran sardinella (Sardinella madarensis) in South CECAF	TRUE	b
2013	Madeiran sardinella	SAE	Madeiran sardinella (Sardinella madarensis) in South CECAF	TRUE	b
2014	Madeiran sardinella	SAE	Madeiran sardinella (Sardinella madarensis) in South CECAF	TRUE	b
2015	Madeiran sardinella	SAE	Madeiran sardinella (Sardinella madarensis) in South CECAF	TRUE	b
2016	Madeiran sardinella	SAE	Madeiran sardinella (Sardinella madarensis) in South CECAF	TRUE	b
2017	Madeiran sardinella	SAE	Madeiran sardinella (Sardinella madarensis) in South CECAF	TRUE	b
2018	Madeiran sardinella	SAE	Madeiran sardinella (Sardinella madarensis) in South CECAF	TRUE	b
2009	Sardinellas nei	SIX	Sardinella (Sardinella spp) in South CECAF	TRUE	b

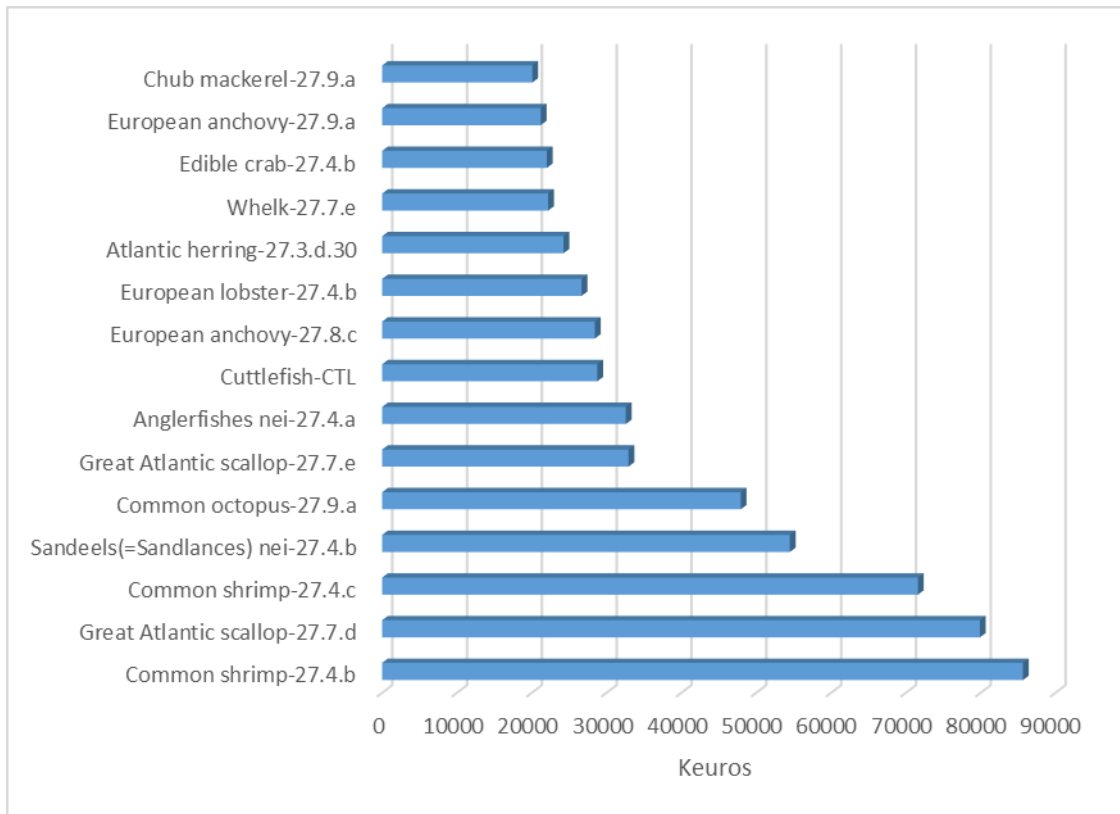
Year	Specie	FAO_Code	Stock_Description	SAR	Criteria
2010	Sardinellas nei	SIX	Sardinella (Sardinella spp) in South CECAF	TRUE	b
2011	Sardinellas nei	SIX	Sardinella (Sardinella spp) in South CECAF	TRUE	b
2012	Sardinellas nei	SIX	Sardinella (Sardinella spp) in South CECAF	TRUE	b
2013	Sardinellas nei	SIX	Sardinella (Sardinella spp) in South CECAF	TRUE	b
2014	Sardinellas nei	SIX	Sardinella (Sardinella spp) in South CECAF	TRUE	b
2015	Sardinellas nei	SIX	Sardinella (Sardinella spp) in South CECAF	TRUE	b
2016	Sardinellas nei	SIX	Sardinella (Sardinella spp) in South CECAF	TRUE	b
2017	Sardinellas nei	SIX	Sardinella (Sardinella spp) in South CECAF	TRUE	b
2018	Sardinellas nei	SIX	Sardinella (Sardinella spp) in South CECAF	TRUE	b
2009	Atlantic horse mackerel	HOM	Atlantic horse mackerel (Trachurus trachurus) in North CECAF	FALSE	a
2010	Atlantic horse mackerel	HOM	Atlantic horse mackerel (Trachurus trachurus) in North CECAF	FALSE	a
2011	Atlantic horse mackerel	HOM	Atlantic horse mackerel (Trachurus trachurus) in North CECAF	FALSE	a
2012	Atlantic horse mackerel	HOM	Atlantic horse mackerel (Trachurus trachurus) in North CECAF	FALSE	a
2013	Atlantic horse mackerel	HOM	Atlantic horse mackerel (Trachurus trachurus) in North CECAF	FALSE	a
2014	Atlantic horse mackerel	HOM	Atlantic horse mackerel (Trachurus trachurus) in North CECAF	FALSE	a
2015	Atlantic horse mackerel	HOM	Atlantic horse mackerel (Trachurus trachurus) in North CECAF	FALSE	a
2016	Atlantic horse mackerel	HOM	Atlantic horse mackerel (Trachurus trachurus) in North CECAF	TRUE	ab
2017	Atlantic horse mackerel	HOM	Atlantic horse mackerel (Trachurus trachurus) in North CECAF	TRUE	ab
2018	Atlantic horse mackerel	HOM	Atlantic horse mackerel (Trachurus trachurus) in North CECAF	TRUE	ab
2009	Cunene horse mackerel	HMZ	Cunene horse mackerel (Trachurus trecae) in North CECAF	TRUE	ab
2010	Cunene horse mackerel	HMZ	Cunene horse mackerel (Trachurus trecae) in North CECAF	TRUE	ab
2011	Cunene horse mackerel	HMZ	Cunene horse mackerel (Trachurus trecae) in North CECAF	TRUE	ab

<b>Year</b>	<b>Specie</b>	<b>FAO_Code</b>	<b>Stock_Description</b>	<b>SAR</b>	<b>Criteria</b>
2012	Cunene horse mackerel	HMZ	Cunene horse mackerel (Trachurus trecae) in North CECAF	TRUE	ab
2013	Cunene horse mackerel	HMZ	Cunene horse mackerel (Trachurus trecae) in North CECAF	TRUE	ab
2014	Cunene horse mackerel	HMZ	Cunene horse mackerel (Trachurus trecae) in North CECAF	TRUE	ab
2015	Cunene horse mackerel	HMZ	Cunene horse mackerel (Trachurus trecae) in North CECAF	TRUE	ab
2016	Cunene horse mackerel	HMZ	Cunene horse mackerel (Trachurus trecae) in North CECAF	TRUE	ab
2017	Cunene horse mackerel	HMZ	Cunene horse mackerel (Trachurus trecae) in North CECAF	TRUE	ab
2018	Cunene horse mackerel	HMZ	Cunene horse mackerel (Trachurus trecae) in North CECAF	TRUE	ab

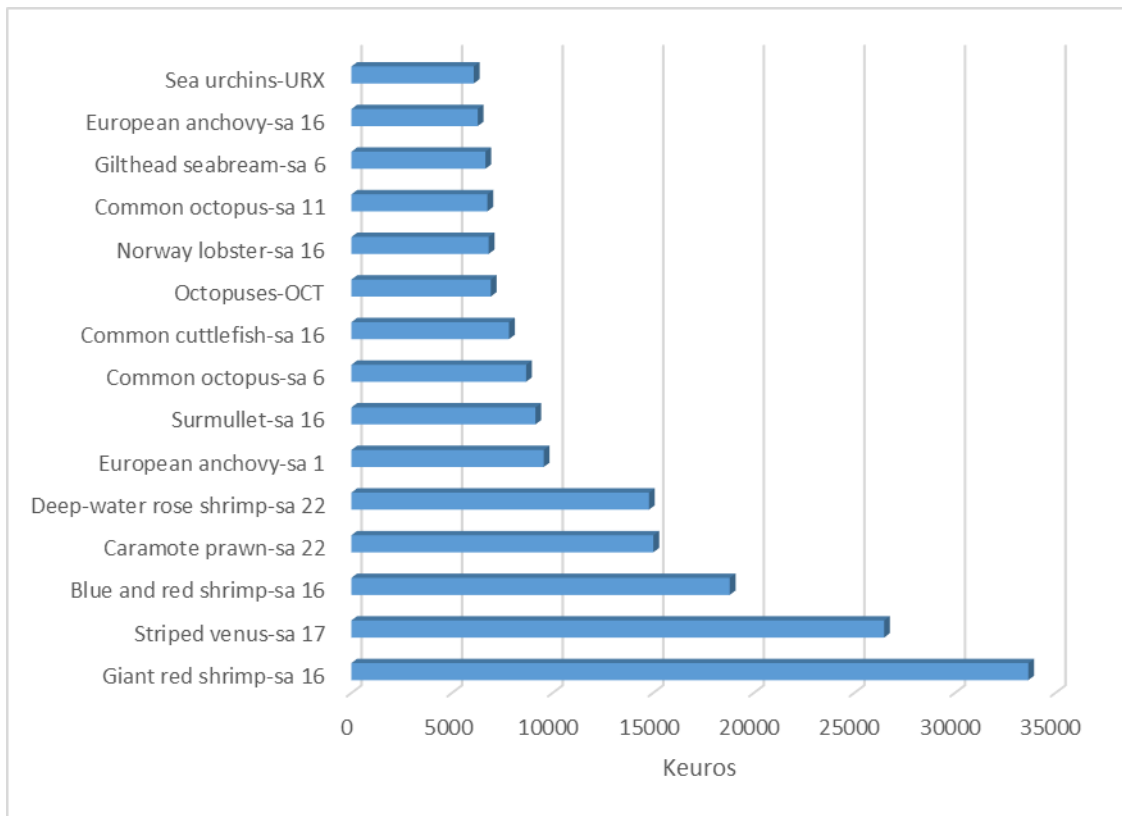
## 16 ANNEX VI – PRIORITY LIST OF REQUIRED STOCK ASSESSMENTS

A list of 15 most important stocks in FAO major fishing Area 27 (Northeast Atlantic), Area 37 (Mediterranean and Black Sea), and OFR, based on catch values, which are targeted by fleet segments of the European fishing fleet for which no stock assessment data is available in 2017. Carrying out assessments for these stocks should be a priority in order to improve the coverage of biological indicators.

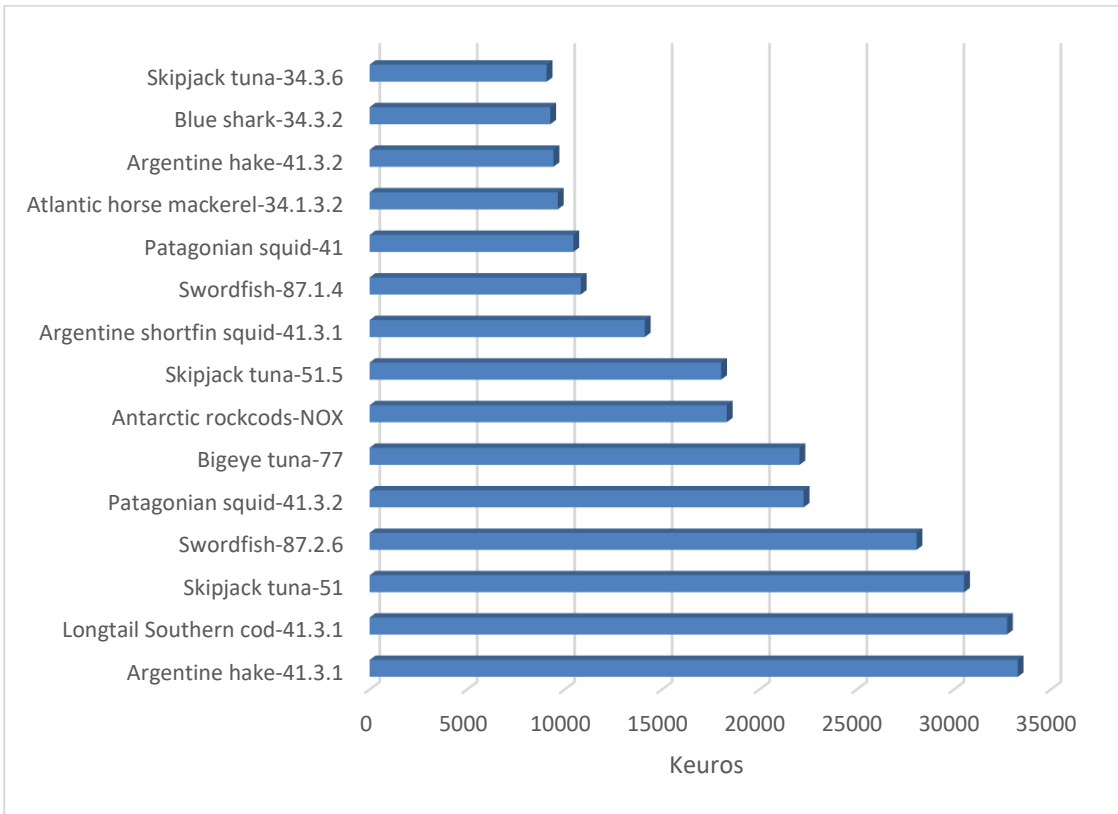
### Area 27



Area 37



OFR







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## STECF

The Scientific, Technical and Economic Committee for Fisheries (STECF) has been established by the European Commission. The STECF is being consulted at regular intervals on matters pertaining to the conservation and management of living aquatic resources, including biological, economic, environmental, social and technical considerations.

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