

# 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-21-16)

Edited by John Casey and Jarno Virtanen



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# EWG-21-16 report:

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#### **ABSTRACT**

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, based on DCF information and in line with the Commission Guidelines. Using data submitted by Member States under the 2021 DCF Economic data call and the most recent scientific assessments on stock status and their exploitation rates, values for the technical, economic and biological indicators were computed for the years 2008-2019 (apart from SAR which was calculated from 2009 onwards) and analysed as specified in the European Commission Guidelines, by the STECF EWG-21-16 virtual meeting, held from the 25-29 October 2021. For each Member State, country chapters are provided and include: (1) an overview of whether, according to the Commission Guidelines, fleet segments can be considered in or out of balance with their fishing opportunities; (2) an assessment on whether the Member State fleet report provides a sound and comprehensive analysis of balance between fleet capacity and fishing opportunity; (3) a comparison of the indicator values, trends and assessment of balance by fleet segment found in the fleet reports with those calculated by the EWG, highlighting any discrepancies and, where possible, identifying the reasons for such discrepancies and (4) an assessment on whether the measures in the new or revised action plans are appropriately targeted, timebound and likely to contribute to redressing the imbalance in the fleet segments concerned. The report also lists the fleet segments that were indicated to be out of balance with their fishing opportunities, together with the fish stocks and fishing areas on which they rely. A list of fleet segments for which information available does not allow to calculate the indicators and conclude on balance is also given in the 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-21-16)

## Request to the STECF

The STECF is requested to review the report of STECF Expert Working Group 21-16 meeting, evaluate the findings and make any appropriate comments and recommendations. The STECF is requested to assess the extent to which the STECF Expert Working Group 21-16 delivered on its Terms of Reference.

The STECF is in particular requested to assess the following findings presented by the STECF Expert Working Group 21-16 and to formulate its conclusions and recommendations on each of them:

- The assessment of both the status and trends of the balance situation of EU fleet segments in line with the Commission guidelines (COM(2014)545). Task 1
- The findings on whether, in accordance with the Commission Guidelines (COM(2014)545), the annual national fleet reports submitted by 31 May 2021 present an appropriate and complete analysis of balance between fleet capacity and fishing opportunity for each Member States' fleet segments. Task 2
- The observed discrepancies between the national balance assessments and those carried out by STECF Expert Working group 21-16 and the reasons for those as identified by the STECF Expert Working group. Task 2.
- The opinions provided for each concerned Member State whether the proposed measures in new or revised action plans submitted with the most recent fleet reports are likely to redress the imbalance in the fleet segments concerned. Task 2.d
- The assessment of the balance situation in the outermost regions, especially with regard to the absence of data required to undertake an assessment for the fleet segments concerned. Task 3. No information reliable for biological indicators.

#### **STECF** comments

STECF reviewed the report of EWG 21-16 and observes that all the ToRs were addressed.

Values for the following indicators as specified in The Commission guidelines (COM(2014) 545) are presented for the period 2009-2019:

## **Biological indicators**

- Sustainable harvest indicator (SHI). SHI values are not considered if the landing values that are included in the SHI / total landings value ratio is less than 40% (SHI>40%).
- Stocks at risk indicator (SAR).

## **Economic indicators**

- Return on investment (ROI) and/or Return on Fixed Tangible Assets (RoFTA).
- Ratio between current revenue and break-even revenue (CR/BER).

# **Technical indicators**

- The inactive fleet indicators (IV).
- The vessel use indicator (VUR)

In addition, values for the following indicators were also computed by the EWG:

- Economic dependency indicator (EDI)
- Number of overfished stocks (NOS)

STECF notes that the terms "in balance" and "out of balance" (imbalance) and analogous terms, are used strictly in relation to the criteria given in the Commission guidelines (COM (2014) 545 Final). Such terms are used to describe a favourable (in balance) or unfavourable (out of balance) situation based on the value computed for specific indicators in relation to the threshold specified for such indicators. Trends in indicator values are expressed over different time-periods which vary by indicator and Member State. Comparisons between indicator values as computed by the EWG and those in the National fleet reports for 2020 submitted by Member States by 31 May 2021 are based on reference year 2019 unless specifically mentioned in the report.

Assessment of both the status and trends of the balance situation of EU fleet segments including the outermost regions.

Table 1 presents the number of segments used for the calculation of each indicator, for the whole EU and split by each sea area (North Atlantic Ocean, Mediterranean and Black Seas and Other Fishing regions). It also includes the number of segments that are in balance, out of balance, and the trend assessment of the indicators, as reported by the EWG 21-06.

For the whole EU, out of 629 active fleet segments in 2019, landings in weight and value were available for approximately 90% of them. Of these 629 active fleet segments only 31% of them were considered meaningful to assess balance or imbalance (SHI $\geq$ 40%) and 69% for the case of SAR. Economic indicator values (CR/BER and RoFTA) were available for 61% of the total active fleet segments, while for RoI this percentage reduced to 17%.

For all the segments for which the EWG 21-06 considered meaningful to assess balance or imbalance, for the case of SHI>40% indicator, the majority were out of balance (67%) and for the case of SAR the majority were in balance (52%). In the case of all the economic indicators, a majority of the segments were in balance (>64%). Finally, for the case of technical indicator VUR, half of the segments were in balance and other half, out of balance.

In the North Atlantic Ocean (NAO) the SHI could be estimated and meaningfully to be assessed (SHI>40%) for the 37% of the 368 fleet segments of this area, with 67% of them out of balance and 33% in balance. The SAR was estimated for 77% of the total segments in this area, half in balance and half out of balance. Economic indicators values (CR/BER and RoFTA) were available for 61% of the total active fleet segments in this area, while for RoI this percentage was 17%. The majority of the fleet segments considering these three economic indicators were in balance (73%, 71% and 62% for CR/BER, RoFTA and RoI, respectively). Finally, for the case of the VUR technical indicator, half of the segments were in balance and other half, out of balance.

For SHI, none or no clear trend was possible to obtain for 52% of the fleet segments in the NAO. 31% of the fleet segments had an improving trend, 16% a deteriorating trend, and 1% were considered to have a no clear trend. For the three economic indicators, the majority of the segments had a deteriorating trend. Finally, no clear overall picture could be depicted by the technical indicators as for the majority of the segments (68%), there was no clear trend.

Table 1. Total number of segments and by sea-basin as calculated by the EWG 21-06, considered in balance and out of balance and their trend, by each balance indicator.

				Biological		Economic		Technical		
Area			Total	SHI>40%	SAR	Cr/BER	RoFTA	RoI	VUR	IV
	Coverage	Total	629	195	434	382	382	107	543	139
EU	Balance	In balance		70	226	265	261	68	278	126
		Out of Balance		125	208	117	121	39	265	13
	Coverage	Total	368	135	282	223	223	78	334	78
	Balance	In balance		45	146	163	158	48	173	68
		Out of Balance		90	136	60	65	30	161	10
NAO		Deteriorating		21	NA	122	139	41	15	16
		Improving		42	NA	70	76	30	24	17
	Trend	No clear		61	NA	23	0	1	227	34
		Flat		1	NA	0	0	0	10	0
		Not calculated		10	NA	8	8	6	58	11
	Coverage	Total	203	43	143	139	139	22	178	44
	Balance	In balance		12	77	90	91	17	80	41
		Out of Balance		31	66	49	48	5	98	3
MBS		Deteriorating		5	NA	36	37	6	15	9
		Improving		19	NA	54	68	8	12	14
	Trend	No clear		4	NA	15	0	0	82	18
		Flat		1	NA	0	0	0	13	0
		Not calculated		14	NA	34	34	8	56	3
	Coverage	Total	58	17	9	20	20	7	31	17
	Balance	In balance		13	3	12	12	3	25	17
		Out of Balance		4	6	8	8	4	6	0
OFR		Deteriorating		2	NA	9	12	3	2	1
		Improving		2	NA	6	6	2	2	4
	Trend	No clear		10	NA	3	0	0	16	10
		Flat		0	NA	0	0	0	3	0
		Not calculated		3	NA	2	2	2	8	2

In the Mediterranean and Black Seas (MBS) the SHI could be estimated and meaningfully to be assessed (SHI>40%) for the 21% of the 203 fleet segments in this area. 72% of them were out of balance and 18% in balance. The SAR was estimated for 70% of the total segments in this area, half in balance and half out of balance. Economic indicator values (CR/BER and RoFTA) were available for 68% of the total active fleet segments in this area, while for RoI this percentage reduced to 11%. For these indicators the majority of them were in balance (65%, 65% and 77% for CR/BER, RoFTA and RoI, respectively). Finally, for the case of the VUR technical indicator, 45% of the segments were in balance and 55% out of balance.

In the MBS, for SHI, the trend was improving for 44% of the fleet segments, 12% had a deteriorating trend and for the rest, the trend could not be calculated (33%), was not clear (9%) or flat (2%). For the three economic indicators, an improving trend was calculated for the 39%, 49% and 36% of the fleet segments, considering the CR/BER, RoFTA and RoI, respectively, while it was deteriorating for 26%, 27% and 27%, respectively. For the majority of the remaining segments the trend could not be calculated. Finally, no clear overall picture could be depicted by the technical indicators, as for the majority of segments (78%) there was no clear trend, or it could not be calculated. STECF notes this was likely to be expected, since many segments are small-scale part time segments for which VUR is most likely largely uninformative.

In the Other Fishing Regions (OFR) the SHI could be estimated and meaningfully to be assessed for the 29% of the 58 fleet segments in this area, the majority of these 17 segments with a not a clear trend (59%). The coverage for the SAR indicator was even lower (16%). For the limited number of segments for which economic indicators could be computed (34%, 34% and 12% for CR/BER, RoFTA and RoI, respectively), the majority were found to be in balance. The sparse data indicate that the economic situation appeared to be worsening. The technical indicators imply that the fleet segments were generally in balance with their fishing opportunities in 2019 although the coverage for VUR was of only half of the total fleet segments in this area. No clear trend could be depicted for the majority of these segments for VUR.

Discrepancies between the national balance assessments and those carried out by STECF EWG 21-16

6 out of 23 fleet reports submitted by Member States were prepared fully in line with the Commission guidelines. The 17 other MS followed the guidelines to varying degrees. The reasons why, as extracted from the EWG 21-16 report, are listed in Table 2 below. The specific reasons vary by Member State but can be summarised as follows:

- Use of different fleet segmentation than the DCF as requested by the Commission quidelines.
- Omission of segments (not even capacity data is reported by Member State).
- Use of the indicator values computed by the STECF in the year prior to the year the fleet report is submitted (mainly SHI).
- Lack of available indicators reported (mainly SAR).
- Lack of rationale to explain an "in balance" situation when the EWG calculated indicators show the opposite.
- Not providing an action plan for the segments considered out of balance.

Table 2 presents a summarized breakdown by Member State of the EWG 21-16 findings on whether the fleet report is in accordance with the Commission Guidelines (COM(2014)545) and if the EWG found discrepancies between the national and the EWG calculations.

Table 2. Summary of the EWG assessment on whether the MS fleet reports were prepared in line with the Commission guidelines and the calculations equal those made by the EWG 21-06.

		Indicators:	
Member State	National report follows Commission guidelines (CG)	Comparison between MS report and EWG 21-16 calculations	EWG 21-16 Comments
Belgium	Yes	Discrepancies found.	The MS considered all segments to be in balance. No action plan presented.
Bulgaria	No	Similar	Different methodology than in the CG, for F, SAR and technical indicators.
Croatia	Yes	Similar	Lack of explicit SAR indicator.
Cyprus	Almost	Similar	Lack of explicit SAR indicator.
Denmark	No	Not provided	SHI and SAR not provided. No action plan provided.
Estonia	No	Not provided	Biological indicators for year 2019 were not calculated and MS present the values extracted from the EWG 20-11
Finland	No	Not provided	None of the indicators are provided. No action plan.
France	No	No	The fleet segmentation differs between the national report and the one used by the EWG.  The MS considers that the economic and technical indicators are not relevant for their assessment of balance.
Germany	Yes	Similar	No comments from the EWG.
Greece	No	No	Extensive information but not following the guidelines. No explicit assessment of balance by the MS.

Ireland	No	No	Biological indicator values are not based on the most recent data. The MS considers that the DCF segmentation is not adequate.
Italy	No	No	Indicators are reported separately by segment and GSA, this makes the comparison impossible.
Latvia	Almost	Similar	SAR indicator not provided. No new action plan.
Lithuania	Yes	Similar	No action plan for the distant water fleet.
Malta	Almost	Similar	No SHI (explained in the MS report) nor SAR.
Netherlands	Almost	No	No additional information as requested in point 9 of the CG.
Poland	Almost	Similar	Divergences in the years used among the indicators.
Portugal	No	Not provided	Lack of rationale on providing the main conclusion of being in balance for all fleet segments.
Romania	Almost	Similar	Six SAR estimates missing in the MS fleet report but calculated by the EWG.
Slovenia	Almost	Similar	Different methodology for SAR and some discrepancies in CR/BER for some indicators.
Spain	Yes	No	Large discrepancies in the identification of SAR.
Sweden	No	No	Different segmentation used by the MS and SAR not provided.
United Kingdom	Yes	Yes	Not action plan provided.

Opinions provided for each concerned Member State whether the proposed measures in new or revised action plans submitted with the most recent fleet reports are likely to redress the imbalance in the fleet segments concerned.

Regarding the action plans submitted, the majority were not sufficiently detailed regarding the precise measures to be implemented or their objectives and targets for

reducing the perceived imbalance in the fleet segments concerned (as requested by the Commission guidelines). Furthermore, the information provided was not sufficient for the EWG to quantitatively assess whether such measures would be sufficient to address any perceived imbalance or whether any stated objectives are likely to be met in a defined timeframe (Table 3).

Table 3. Summary of the EWG assessment of the action plans submitted in the Member States reports.

Member State	New or revised action plan submitted	EWG 21-16 comments
Belgium	No	No comments from the EWG.
Bulgaria	Yes	How actions are to be implemented and the expected effect from such measures on overcapacity in the fleet is neither described nor assessed. The EWG could not assess if the actions proposed will influence the balance.
Croatia	Yes	Not clear objectives, and no quantitative evaluation and timeframe. The EWG could not assess if the actions proposed will influence the balance.
Cyprus	Yes	Partial of only some segments. The EWG could not assess if the actions proposed will influence the balance.
Denmark	No	The MS considers its management system to be well functioning in order to secure a balance.
Estonia	No	The Member State states that vessels belonging to the same fishery should be analysed together as dividing them into smaller subsets might distort the results. Based on that the MS did not provide a new or revised action plan.
Finland	No	The MS considers its management system to be well functioning in order to secure a balance.
France	Yes	An update from the one submitted in 2020. The level of details differs from segment to segment. The EWG could not assess if the actions proposed will influence the balance.
Germany	Yes	Describes the targets measures and timeframes to be used.
Greece	No	No comments from the EWG.

Ireland	No	The MS considers that structural imbalance does not exist, so no action plan is proposed.	
Italy Yes		A revision is presented. The EWG could not assess if the actions proposed will influence the balance.	
Latvia	Yes	An update of the action plan submitted in 2019. The EWG could not assess if the actions proposed will influence the balance.	
Lithuania	Yes	Only for the Baltic Sea fleets but not for the Distant water fleet. The EWG could not assess if the actions proposed will influence the balance.	
Malta	No	Resubmitted the 2019 plan. More a statement of intent to improve monitoring. The EWG could not assess if the actions proposed will influence the balance.	
Netherlands	No	The MS considers its management system to be well functioning in order to secure a balance	
Poland	Yes	Targets, tools and timeframes for the action plan are clearly stated. However, the EWG could not assess if the actions proposed will influence the balance.	
Portugal	No	The MS considers its management system to be well functioning in order to secure a balance.	
Romania	Yes	Seems an update of previous ones. The EWG could not assess if the actions proposed will influence the balance.	
Slovenia	No	The MS considers that all fleet segments are in balance.	
Spain	Yes	Objectives well defined but the timeframe not specified. The EWG could not assess if the actions proposed will influence the balance.	
Sweden	Yes	The EWG could not assess if the actions proposed will influence the balance.	
United Kingdom	No	UK leaving the EU.	

STECF notes that, in general, for the action plans presented in national fleet reports, the EWG 21-16 was not able to assess if the actions proposed will influence the imbalance. The main reasons were in cases the lack of quantitative objectives and/or the timeframe for the actions proposed.

# **STECF conclusions**

STECF concludes that all terms of reference were successfully addressed by the EWG 21-16 to the extent possible.

Based on the findings in the EWG 21-16 report and the indicators and criteria specified in the Commission guidelines, the following general conclusions can be drawn:

- The biological indicators for the North Atlantic Ocean (NAO) basin suggest that most of the fleet segments appear out of balance, although for fleet segments for which a meaningful trend in SHI can be computed, the majority show an improving trend. Conversely, the economic indicators suggest that most fleet segments are in balance, although overall the trends indicate a worsening situation related to the increasing evolution of the main cost items of the fleets.
- For the Mediterranean and Black Sea (MBS), according to the biological indicators, most of the fleet segments are out of balance. Conversely, the economic indicators suggest that most fleet segments are in balance. The number of segments for which trends for these indicators were calculated was low compared to the total number of segments in the MBS, making any trend assessment unreliable for the whole MBS sea basin.
- For the case of technical indicators, no clear trend can be depicted for the NAO and MBS. STECF reiterates the conclusion of PLEN 20-03 that the use of VUR indicator is misleading for small scale segments and/or seasonal fisheries, given that their maximum days is very variable.
- No reliable assessment of the balance and of the trends could be made for the
  majority of the OFR segments due to lack of data. However, STECF is aware that
  for the French OMRs, an expanded data collection programme commenced in 2021
  and a similarly-expanded programme has been proposed in the French DCF Work
  plan for 2022-2024 (see also ToR 5.7 in this report). STECF considers that this is
  likely to improve the data coverage in this region.
- Many Member States' annual fleet reports were not prepared strictly in line with the Commission guidelines but the extent to which departures from the guidelines influence Member States' overall assessment of balance in their fleet segments cannot be determined.
- Where there is a difference between the calculation of the indicators made by the EWG and those reported in the Member States' fleet reports, the EWG cannot validate the action plans submitted by the Member States, because the segments considered out of balance by the Member States and those identified based on the EWG estimations, differ.
- None of the fleet reports for 2020 provide data and information that demonstrate
  how the measures in new or revised action plans are intended to redress any
  imbalance in the fleet segments identified as such. Furthermore, many action
  plans do not provide any timeframe for implementation of the measures or explicit
  targets as requested by the Commission guidelines.
- None of the fleet reports provide a clear assessment of the previous action plans on how these have affected the imbalance situation of the fleet segments concerned.
- In most cases, concluding on whether the fleet reports from Member States reports provide a sound and comprehensive analysis of balance between capacity and fishing opportunities is not possible, because the rationale for determining whether a fleet segment is or is not in balance with its fishing opportunities is not explained in sufficient detail or is not explained at all in the national reports.

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

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# **EXPERT WORKING GROUP EWG-21-16 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

(STECF-21-16)

Virtual meeting, 25 - 29 of October 2021

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

#### Introduction

## Terms of Reference for EWG-21-16

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, based on DCF information and in line with the Commission Guidelines (COM (2014) 545). Where possible, evaluation should use data reference years 2011 to 2020.

## **Terms of reference**

An Expert group of the STECF (Chair, Dr John Casey), EWG 21-16, will be convened from 25 to 29 October 2021 to undertake the following tasks and report to the STECF.

1. Based on the data submitted by Member States<sup>1</sup> under the 2021 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>2</sup>.

JRC will provide tabulated values (in the same format as the Member State indicator tables in the STECF 16-09 data table for all indicators as detailed in items i) to vi) below, covering all Member State fleet segments wherever the necessary data are available. Values for the following indicators to be provided as specified in the 2014 Balance Indicator Guidelines<sup>3</sup>:

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

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<sup>&</sup>lt;sup>1</sup> References to Member States in these ToR include the UK

<sup>&</sup>lt;sup>2</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 1380/201 3 of the European Parliament and the Council on the Common Fisheries Policy.

<sup>&</sup>lt;sup>3</sup> Id.

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

- 2. The Expert group is requested to provide country chapters containing the following information for each Member State, in order to allow the STECF to issue an informed advice both as regard the balance situation of the fleet segments and concerning the quality of the assessment provided by the Member States in their national fleet reports and, where relevant, action plans:
- a. Based on the biological, economic or technical indicator values and their recent trends as computed under task 1, provide an overview of whether, according to the Commission Guidelines (COM (2014) 545) fleet segments can be considered in or out of balance with their fishing opportunities.
- b. For each fleet segment, compare the biological, economic or technical indicator values as computed under task 1 with the equivalent values and trends in the fleet reports submitted by the Member State under Article 22.2 and 22.3 of Regulation (EU) 1380/2013. Highlight any discrepancies between the Member State's assessment of balance between capacity and fishing opportunities and the Expert group's assessment based on the indicator values computed under task 1. Where possible, identify the reasons for such discrepancies.
- c. Assess whether the fleet report submitted by the Member State by 31 May 2021 under Article 22.2 and 22.3 of Regulation (EU) 1380/2013 provides a sound and comprehensive analysis of balance between fleet capacity and fishing opportunity of all the Member State's fleet segments, based on DCF information, in line with the Commission guidelines COM(2014)545. This assessment should include an examination whether the annual report appropriately addresses previous STECF findings regarding discrepancies between the Member State's assessment of balance between capacity and fishing opportunities and the Expert group's assessment.
- d. Comment on whether the measures in the new or revised action plans submitted with the fleet reports by 31 May 2021 are appropriately targeted, timebound and are likely to contribute to redressing the imbalance in the fleet segments concerned.
- 3. The Expert group is requested to list for the Outermost Regions of France (Reunion, French Guiana, Martinique, Guadeloupe, Saint-Martin and Mayotte), Portugal (Madeira and Azores) and Spain (Canary Islands), those fleet segments that according to the most updated set of data (2019 or later if available) for either the biological, economic or technical indicators in the Commission Guidelines, as computed by the STECF, were indicated to be out of balance with their fishing opportunities. The list should contain information on the fish stocks on which such segments rely and the fishing area to which such segments are attributed. Separate lists should be provided for each indicator. The fish stocks on which a fleet segment is reliant shall be determined by ranking the landings from all stocks caught by that fleet segment in descending order in terms of landings value and listing those stocks that account for at least 75% of the total value of the landings by that fleet segment. The Expert group is furthermore requested to provide a list of the fleet segments for which information available does not allow to calculate the above indicators and to indicate for which indicators what kind of information was not available.

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

## General Considerations Regarding the Assessment of 'Balance'

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 Commission guidelines (COM (2014) 545 FINAL) for assessing the balance between capacity and fishing opportunities<sup>4</sup>. Furthermore, numerous suggestions for modification and improvement have also been provided in previous reports.

All such critisisms and suggestions have been endorsed by the STECF and remain valid.

In this report, the terms "in balance" and "out of balance" and analogous terms, are used strictly in relation to the criteria given in the Commission guidelines (COM (2014) 545 Final). Such terms are used to describe a favourable (in balance) or unfavourable (out of balance) situation based on the value computed for specific indicators in relation to the threshold specified for such indicators.

# Data availability and the sustainable harvest indicator (SHI)

The Expert group notes that in reporting indicator values for the Sustainable Harvest Indicator (SHI) in their annual fleet reports, some Member States use the indicator values computed by the STECF in the year prior to the year the fleet report is submitted. In a number of cases, the fleet report submitted by 31 May 2021, presents the SHI and SAR indicator values computed by Expert Working Group 20-11, which may or may not be based on data up to and including 2019.

For many stocks, especially those in area 27, the most recent estimates for F available in January to May 2021, will be from assessments carried out in 2020 and in most cases the most recent estimate of F will be up to and including the years 2019. Hence, the SHI values in the fleet report submitted in 2021 ought to be computed using such estimates. In principle Member states ought to be able to provide such estimates since they have both the economic and stock assessment data to do so.

If the SHI estimates presented in the 2021 Member States' fleet reports are not based on the most recent data on the value of landings and scientific estimates for  $F/F_{MSY}$ , the Expert group notes that the Member State's analysis of the balance between fleet capacity and fishing opportunities is not strictly in line with the Commission guidelines.

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 $<sup>^4</sup>$  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; STECF report 19-13; 3.4 and ANNEX I.

Furthermore, when the indicator values presented in the fleet report are derived from the report of the STECF EWG 20-11, no comparison between the values in the fleet report and those computed by the STECF EWG 21-16 was carried out.

#### Task 1 - Assessment of Balance Indicators

## Background

All indicators provided and used in the STECF EWG 21-16 were calculated according to the 2014 Commission guidelines (COM (2014) 545 final<sup>5</sup>. The Commission's 2014 Commission 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.

#### Provision of Indicator Values

#### Indicator Calculation Process

Economic and technical indicators for the period 2008-2019 were prepared by the STECF EWG 21-06 (2021 Annual Economic Report on the EU Fishing Fleet). The SAR and SHI indicator values were prepared under ad hoc contracts.

All indicator values were reviewed at a preparatory expert group held at the JRC in Ispra, Italy, from 20-23 September 2021. The values used for this report were those finalised and agreed following the preparatory expert group on 1 October 2021. Indicators, data sources and other relevant information regrding their computation are listed in Table 3.2.1.1.

A table containing all the balance indicators by Member State (MS) and fleet segment (supra-region<sup>6</sup> + fishing technology + vessel length) was compiled by the JRC and provided to EWG 21-16. Indicator values were computed for each year over the period 2008-2019.

Specific details on computing indicator values are given in Annex I to this report.

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<sup>&</sup>lt;sup>5</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>6</sup> The DCF supra-regions are: (1) Area 27 = Baltic Sea, North Sea, Eastern Arctic, NAFO; Extended North-Western waters (ICES areas V, VI and VII) and Southern Western waters; (2) Area 37 = Mediterranean Sea and Black Sea; (3) OFR = Other Fishing Regions.

**Table 3.2.1.1** - Indicators provided to experts at EWG 21-16.

Indic	ator	Calculate d by	Comments
	SHI Sustainable Harvest	Jerome Guitton	1. Calculated by landings value for 2008-2020* for every EU fleet segment for which data were available (2020 data are provisional and may be subject to change):
	Indicator		Data sources for stock assessment parameters included the ICES and ICCAT for fleet segments operating in Area 27.
			<ul> <li>For fleet segments operating in Area 37 the data sources far stock assessment parameters included:</li> </ul>
			<ul> <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> </ul>
			b. Tuna fisheries stock assessment
			For fleet segments operating in Outermost regions the data sources for stock
			a. CECAF Working group
ators			b. South Pacific Regional Fishery Management Organization
dic			c. Tuna commissions
Biological indicators			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. EDI, NOS, NSR have been provided .
			4. ToR 4: the output was described in the term of reference. For each Member State, those fleet segments that according to the 2019 values for either i) the SHI 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	Armelle Jung	Calculated for 2009-2020* for all fleet segments for which data were available.
	Risk Indicator	Jerome Guitton	Selection of the stocks at risk was prepare by Armelle Jung:
			<ul> <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 15/09/2021).</li> </ul>
			<ul> <li>For fleet segments operating in Area 37, the most recent GFCM/SAC and STECF stock assessment reports were taken into account.</li> </ul>
			<ul> <li>For fleet segments operating in other areas (OFR), STECF stock assessment reports and RFMO's reports were considered.</li> </ul>
			<ul> <li>Additional information was taken from Council Regulations fixing annual fishing opportunities; from GFCM, ICCAT, CECAF, IOTOC, SEAFO, NAFO or SPRFMO scientific assessments reports, advices or recommendations;</li> </ul>
			• Extraction from CR (Critically Endangered) and EN (Endangered) IUCN list for marine fishes (Actinopterygii and Elasmobranchii) was updated for 2021. The species for which some data are present in the landing data base were added to the SAR list.
			CITES fish listing was updated for species classified to Annex I and II (Washington Convention).
			3. After mapping species landings and catches to rebuild stocks catches, SAR indicator values were provided by fleet segment using a SQL script developed by Jerome Guitton.
Econo mic	ROI or RoFTA	JRC	1. Calculated using the same principle as STECF EWG 21-03;
E .	The Return on		2. The target reference value to which the indicator value is compared is the 2019 risk-free interest rate. The

	Investment (ROI) or Return on Fixed Tangible Assets (RoFTA)		<ul> <li>most recent 5-year average (2015-2019) is also used, as stipulated in the 2014 Commission guidelines.</li> <li>3. Calculated for years 2008-2019, the most recent year for which DCF economic data are available.</li> <li>4. Values are in real terms, i.e., nominal values adjusted for inflation (base=2015)</li> </ul>
	CR/BER Current revenue as proportion of break- even revenue	JRC	<ol> <li>Calculated for years 2008-2019, the most recent year for which DCF economic data are available.</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>
Technical/inactivity indicators	Fleet segment utilisation indicator Average Days at Sea / Maximum Days at Sea	JRC	<ol> <li>Calculated for years 2008-2019.</li> <li>Calculated when MS provided either maximum observed days at sea (DAS) for each fleet segment or maximum theoretical DAS.</li> <li>The EWG also used the value of 220 maximum theoretical days at sea (VUR<sub>220</sub>) per fleet segment, as stipulated in the 2014 Commission guidelines, to accommodate cases where the relevant information was not provided by MS.</li> </ol>
Techni	Inactive vessels per length category	JRC	1. Number and proportion of inactive vessels, in number, GT and kW for years 2008-2019.

Data sources: 2021 DCF Fleet Economic Data Call; ICES online stock assessment database; JRC STECF stock assessment database; GFCM stock assessment database; CITES species list; IUCN Red List.

# 1.1.1 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 2021 call for fleet economic scientific data concerning 2008-2019/20 issued by DG MARE in January 2021. 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).

<sup>\*</sup>based on provisional data

The 2021 fleet economic data call requested transversal and economic data covering years from 2008 to 2019/20. Capacity data (GT, kW, no. of vessels) was requested up to and including 2020, while employment and economic parameters were requested up to and including 2019. Most effort and all landings data were requested up to and including 2020, albeit on a voluntary basis, to allow for economic performance nowcasts to be estimated for 2020 and projections for 2021. 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. 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, most countries submitted most of the parameters requested under the fleet economic data 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 or for confidentiality reasons.

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

Specific data issues at MS level, which can affect the quality and coverage of the balance indicators will be summarised in the 2021 AER.

Numbers of active fishing vessels by member state and region are given in Table 3.2.2.1 and Table 3.2.2.2 respectively.

Table 3.2.2.1 Number of active vessels by length group and supra-region for each Member State in 2019

MS		NAO						MBS					MBS				OFR				EU Total	
IVIS	VL0010	VL1012	VL1218	VL1824	VL2440	VL40XX	Total	VL0006	VL0612	VL1218	VL1824	VL2440	VL40XX	Total	VL0010	VL1012	VL1218	VL1824	VL2440	VL40XX	Total	EU IOLAI
BEL		1	3	28	33		65															65
BGR								408	631	56	17	11		1,123								1,123
СҮР								365	369	34		6		774								774
DEU	647	58	130	84	25	12	956															956
DNK	793	93	204	66	34	29	1,219															1,219
ESP	4,184	386	597	241	301	14	5,723	108	1,058	370	387	154	2	2,079			2	2	113	88	205	8,007
EST	1,134	43	3	6	19	5	1,210															1,210
FIN	1,182	54	17	7	15	4	1,279															1,279
FRA	1,356	656	377	202	108	14	2,713	296	838	23	32	47	7	1,243	1,444	92	17	19	1	22	1,595	5,551
GBR	3,399	312	417	210	165	40	4,543												1	4	5	4,548
GRC								3,845	6,992	323	208	160		11,528								11,528
HRV								3,715	2,122	237	70	72		6,216								6,216
IRL	998	153	80	80	76	20	1,407															1,407
ITA								2,059	5,238	2,440	792	329	8	10,866						8	8	10,874
LTU	58	3		2	16	1	80													7	7	87
LVA	196		11		37		244															244
MLT								331	297	18	29	6		681								681
NLD	170	19	24	174	60	71	518															518
POL	517	117	54	53	46	2	789															789
PRT	2,855	237	280	120	120	10	3,622					1		1					13	4	17	3,640
ROU								14	97	22	1	4		138								138
SVN								26	36	11				73								73
SWE	548	161	79	39	21	9	857															857
EU Total	18,037	2,293	2,276	1,312	1,076	231	25,225	11,167	17,678	3,534	1,536	790	17	34,722	1,444	92	19	21	128	133	1,837	61,784

**Table 3.2.2.2** Number of inactive vessels by length group and supra-region for each Member State in 2019

MS			N.A	40			NAO	MBS				MBS	OFR						OFR	EU total		
IVIS	VL0010	VL1012	VL1218	VL1824	VL2440	VL40XX	Total	VL0006	VL0612	VL1218	VL1824	VL2440	VL40XX	Total	VL0010	VL1012	VL1218	VL1824	VL2440	VL40XX	Total	Lototai
BEL			1	1	1		3															3
BGR								268	444	9	1			722								722
СҮР								41	38	4		1		84								84
DEU	325	18	9	3	2	1	358															358
DNK	439	3	6	4			452															452
ESP	574	26	40	10	13		663	60	205	41	10	6		322			3	2	14	3	22	1,007
EST	578	26	1				605															605
FIN	1,818	101	5	1	2		1,927															1,927
FRA	139	27	10	9	3		188	56	111	5	2	1		175	555	35	1	8			599	962
GBR	1,329	60	32	13	15	3	1,452															1,452
GRC								1,288	1,159	56	34	10		2,547								2,547
HRV								685	747	108	34	39		1,613								1,613
IRL	437	85	14		3		539															539
ITA								295	730	94	4	2	5	1,130					1		1	1,131
LTU	35	6	1	2	10		54													3	3	57
LVA	80						80															80
MLT								128	92	2	6	2		230								230
NLD	139	14	15	17	17	4	206															206
POL	19	14	2	5	1		41															41
PRT	3,998	79	122	37	27	4	4,267															4,267
ROU								3	21					24								24
SVN								31	29	4	1			65								65
SWE	229	35	10	3	2		279															279
EU Total	10,139	494	268	105	96	12	11,114	2,855	3,576	323	92	61	5	6,912	555	35	4	10	15	6	625	18,651

## 1.1.2 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 MS 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 availability of stock assessment information. When this 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.

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 2021 data call, Latvia, which appears to have full coverage for most of the indicators, provided data only on the Baltic Sea fleet, since no data on the 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 2021 with missing landings in value that can be identified is presented in Table 3.2.3.2.

**Table 3.2.3.1** Coverage of each balance indicator in terms of landed value submitted by MS for the reference year 2019. SHI = coverage of fleet segments for which SHI could be calculated; SHI > = 0% = 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.

MS	SAR	SHI	SHI>40%	CR/BER	RoFTA	RoI*	VUR (MaxSeaDays)
BEL	100%	100%	99%	100%	100%	0%	100%
BGR	99%	99%	0%	97%	97%	0%	100%
CYP	94%	91%	0%	91%	91%	0%	0%
DEU	100%	100%	84%	66%	66%	0%	66%
DNK	100%	97%	82%	100%	100%	100%	0%
ESP	74%	99%	45%	98%	98%	70%	100%
EST	74%	100%	74%	84%	84%	84%	0%
FIN	84%	100%	75%	100%	100%	100%	100%
FRA	83%	95%	63%	73%	73%	0%	77%
GBR	98%	98%	72%	68%	68%	68%	100%
GRC	41%	98%	3%	99%	99%	0%	100%
HRV	95%	100%	79%	99%	99%	0%	100%
IRL	88%	88%	74%	61%	61%	0%	97%
ITA	98%	100%	51%	99%	99%	39%	100%
LTU	99%	100%	99%	75%	75%	75%	100%
LVA	87%	100%	100%	100%	100%	0%	100%
MLT	85%	100%	29%	100%	100%	85%	100%
NLD	100%	100%	72%	100%	100%	100%	100%
POL	100%	100%	53%	100%	100%	0%	100%
PRT	90%	98%	28%	100%	100%	0%	100%
ROU	100%	100%	8%	67%	67%	67%	100%
SVN	100%	100%	38%	100%	100%	0%	100%
SWE	100%	100%	90%	33%	33%	0%	100%
EU fleet	86%	98%	57%	87%	87%	43%	89%

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

**Table 3.2.3.2** Summary table showing for each Member State the number of fleet segments for which economic data and landings in value were available in 2019, the number of active fleet segments, and the active fleet segments in 2019 with missing values.

MS	Supra	No. of No. of No. of fleet active inactive		Data avail	ability (by no. of fleet segments)		Data pr	ovision format	Fleet segments with missing landings value	Fleet segments with 1 or more essential economic variable	
IVIS	region				Landings in value	Landings in weight	Economic data	Landings data	Economic data	or weight	rieet segments with the indice essential economic variable
BEL	NAO	12	9	3	4	4	1 4	Aggregate fleet segments			
BGR	MBS	28	24	4	24	24	1 17	Fleet segment	Aggregate fleet segments		
CYP	MBS	11	7	4	7	7	7 6	Fleet segment	Aggregate fleet segments		(1) MBS PS 2440 NGI
DEU	NAO	28	22	6	14	14	1 13	Aggregate fleet segments			(1) NAO TM 40XX NGI*
DNK	NAO	23	19	4	19	19	9 19	Fleet segment			
	MBS	34	29	5	29	29	9 20				(1) MBS FP00612 NGI
ESP	NAO	59	49	10	49	49	9 29	Fleet segment	Aggregate fleet segments		(3) NAO FPO1012 IC *, NAO PMP1218 NGI, NAO HOK1218 MA *
	OFR	14	10	4	10	10	6				
EST	NAO	9	6	3	5	5	5 3	Fleet segment	Aggregate fleet segments		(1) EST NAO DTS40XX IWE
FIN	NAO	13	8	5	5	5	5 5	Aggregate fleet segments			
	MBS	33	28	5	28	28	3 17				
	NAO	58	53	5	52	52					
FRA	OFR	53	39	14	35	35		Fleet segment	Aggregate fleet segments	(1) OFR PGP0010 MF * (possibly more segments but they are clustered)	(13) OFR PG00010 MQ, OFR PGP0010 RE *, OFR PGP0010 MF*, OFR FP00010 MQ, OFR DFN0010 MQ, OFR DFN0010 YT*, OFR HOK0010 MQ, OFR PGP0010 MQ*, OFR HOK0010 RE*, OFR PS 40XX IWE, OFR HOK0010 YT*, OFR HOK1012 MQ*, OFR DTS1824 GF
	NAO	51	45	6	45	45	5 27	Fleet segment	Aggregate fleet segments		(2) NAO TM 40XX NGI*, NAO DTS40XX NGI*
GBR	OFR	3	3		3	3	3	Fleet segment	Aggregated fleet segment (NAO)		
GRC	MBS	27	22	5	19	19	9 16	Aggregate fleet segments			
HRV	MBS	37	32	5	31	31	1 23	Fleet segment	Aggregate fleet segments		
IRL	NAO	33	29	4	29	29	9 11	Fleet segment	Aggregate fleet segments		(10) NAO TM 1218*, NAO TBB2440*, NAO DFN0010, NAO FP00010, NAO TM 1012*, NAO DTS0010, NAO
	MBS	32	26	6	26	26	5 22				DRB0010, NAO TM 40XX, NAO HOK1012*, NAO HOK0010
ITA	OFR	3		1		2		Fleet segment	Aggregate fleet segments		(1) OFR PS 40XX IWE
	NAO	13		- 5	_	8		Fleet segment	Aggregate fleet segments		(2) 511115 15341112
LTU	OFR	3		1	_	2		Fleet segment	Aggregate fleet segments		
LVA	NAO	4		1		3		Fleet segment	. Sp. Spice neer segments		
MLT	MBS	23		5		10		Aggregate fleet segments			
NLD	NAO	30		6		11		Aggregate fleet segments			
POL	NAO	21		5		10		Aggregate fleet segments			(3) NAO TM 40XX, NAO DTS40XX, NAO FPO 2440
. 31	MBS	1			1	10		Fleet segment			(-),
PRT	NAO	71		16		50		Aggregate fleet segments			
	OFR	2		10	2	2		Fleet segment			
ROU	MBS	8	6	2		6		Fleet segment	Aggregate fleet segments		
SVN	MBS	14		4		3		Aggregate fleet segments	. 90. space neer segments		
SWE	NAO	27	22	5		22		Fleet segment	Aggregate fleet segments		
	fleet	778							APPLEPATE HEEF SERVICIES		
EU 1	rieet	/78	629	149	561	56	4 382				

## 1.1.3 Biological Indicator Visualisation Tool

The expert responsible for the calculation of the SHI values (J. Guitton), 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: <a href="http://sirs.agrocampus-ouest.fr/stecf\_balance\_2021/">http://sirs.agrocampus-ouest.fr/stecf\_balance\_2021/</a>

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 time-series 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 Commission guidelines, and (ii) the alternative indicators suggested in STECF reports 15-02 and 15-15.

The expert group 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.

# 1.2 Indicator Findings – Regional Overviews

Out of 629 active fleet segments in 2019 (61,784 vessels), landings in weight were available for 564 fleet segments or aggregate fleet segments, while value of landings were available for 561 segments. SHI indicator values were available for 505 segments, of which 195 were considered meaningful to assess balance or inbalance (SHI≥40%). Economic indicator values (CR/BER and RoFTA) were available for 382 fleet segments or aggregate fleet segments. RoI values were available for 107 fleet segments or aggregate fleet segments from 10 Member States.

The SAR indicator was available for 434 fleet segments in 2019. According to the criteria in the 2014 Commission guidelines, EWG 21-16 notes that the SAR results indicate that there were 226 segments that may have been in balance with their fishing opportunities (SAR=0) and 208 segments that may have not been in balance with their fishing opportunities, as follows:

- 1 segment (0.5%) with 13 stocks-at-risk,
- 3 segments (1.4%) with 10 stocks-at-risk,
- 1 segment (0.5%) with 8 stocks-at-risk,
- 5 segments (2%) with 7 stocks-at-risk,
- 3 segments (1.4%) with 5 stocks-at-risk,
- 11 segments (5%) with 4 stocks-at-risk,
- 19 segments (9%) with 3 stocks-at-risk,
- 42 segments (20%) with 2 stocks-at-risk,
- 123 segments (59%) with 1 stock-at-risk.

For each region (NAO, MBS and OFR) the number of fleet segments x number of stocks at risk are given in Table 3.3.1.

**Table 3.3.1.** Summary table for SAR values for 2019, showing the number of fleet segments at regional level (NAO, MBS and OFR) per number of SAR found.

CD					Number o	of SAR				
SR	0	1	2	3	4	5	7	8	10	13
NAO	146	73	25	15	10	3	5	1	3	1
MBS	77	46	16	3	1					
OFR	3	4	1	1						
EU fleet	226	123	42	19	11	3	5	1	3	1

#### 1.2.1 NAO – North Atlantic

Out of 368 active fleet segments in 2019, landings in weight were provided for 326 fleet segments or aggregate fleet segments, while value of landings were provided for 323 segments, i.e., not provided for 3 segments.

#### Sustainable Harvest Indicator (SHI)

SHI indicator values were available for 368 segments, of which 233 could not 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 135 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 65% of the total value of the landings in 2019 provided by MS, and were as follows:

- 33% (45 segments) may be in balance with their fishing opportunities;
- 67% (90 segments) may not be in balance with their fishing opportunities.

For 21 (16%) segments, an increasing (deteriorating) trend was assessed for SHI while a decreasing (improving) trend was observed for 42 (31%) segments. A further 61 (45%) segments had no clear trend, 1 segment had a null/flat trend and no trend could be calculated for the remaining 10 (7%) segments.

## Stocks at Risk Indicator (SAR)

SAR indicator was available for 282 fleet segments, of which 136 segments may not have been in balance with their fishing opportunities in 2019. According to the criteria in the 2014 Commission guidelines, EWG 21-16 notes that the SAR results indicate that:

- 1 segment with 13 stocks-at-risk,
- 3 segments with 10 stocks-at-risk,
- 1 segment with 8 stocks-at-risk,
- 5 segments with 7 stocks-at-risk,
- 3 segments with 5 stocks-at-risk,
- 10 segments with 4 stocks-at-risk,
- 15 segments with 3 stocks-at-risk,
- 25 segments with 2 stocks-at-risk,
- 73 segments with 1 stock-at-risk.

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

The number of fleet segments or aggregate fleet segments for which *RoI* is available for 2019 in the North Atlantic region (NAO) is 78 and the number of segments for which trends are calculated is 72.

According to the criteria in the 2014 Commission guidelines, the EWG notes that the RoI indicator values for the 78 fleet segments indicate that:

- 62% (48 segments) may be in balance with their fishing opportunities.
- 33% (26 segments) may not be in balance with their fishing opportunities;
- 5% (4 segments) classified as insufficiently profitable.

For 30 (38%) segments, an increasing trend was assessed for RoI while a decreasing trend was observed for 41 (53%) segments. A further segment had no clear trend and no trend could be calculated for the remaining 6 (8%) segments.

RoFTA is available for 223 fleet segments. According to the criteria in the 2014 Commission guidelines, the EWG notes that the RoFTA indicator values for the 223 fleet segments indicate that:

- 71% (158 segments) may be in balance with their fishing opportunities.
- 27% (61 segments) may not be in balance with their fishing opportunities;
- 2% (4 segments) are classified as insufficiently profitable.

For 76 (34%) segments, an increasing trend was assessed for RoFTA while a decreasing trend was observed for 139 (62%) segments. No trend could be calculated for the remaining 8 (4%) segments.

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

The number of fleet segments for which the CR/BER indicator is available is 223.

According to the criteria in the 2014 Commission guidelines the Expert group notes that the CR/BER indicator values for the 223 fleet segments for which balance/out of balance was calculated indicate that:

- 73% (163 segments) may be in balance with their fishing opportunities.
- 27% (60 segments) may not be in balance with their fishing opportunities;

An increasing trend for CR/BER was assessed for 70 (31%) fleet segments while a decreasing trend was observed for 122 (55%) segments. A further 23 (10%) fleet segments had no clear trend and no trend could be calculated for the remaining 8 (4%) segments.

# The Vessel Use Indicator (or Vessel Utilisation ratio)

The Vessel Use Indicator (VUR) was available for 334 fleet segments<sup>7</sup> in NAO in 2019. According to the criteria in the 2014 Commission Guidelines, the expert group notes the VUR indicator values indicate that:

- 52% (173 segments) may be in balance with their fishing opportunities;
- 48% (161 segments) may not be in balance with their fishing opportunities.

A decreasing trend for the Vessel Use Indicator was assessed for 15 (4%) fleet segments while an increasing trend was observed for 24 (7%) segments. No clear trend was found for 227 (68%) segments, a null/flat trend was found for 10 (3%) segments and no trend could be calculated for the remaining 58 (17%) segments.

# The Inactive Fleet Indicators

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<sup>&</sup>lt;sup>7</sup> The VUR value calculated for an aggregate segment (cluster) is applied to all the fleet segments in the cluster.

The EU inactive fleets in the North Atlantic (NAO) comprised 78 segments in 2019, of which 87% (68 segments) were in balance and 13% (10 segments) were out of balance, according to the guidelines.

Overall, 17 (21%) fleet segments showed a decreasing (improving) trend in the number of inactive vessels and 16 (22%) showed an increasing (deteriorating) trend. A further 34 (44%) segments showed no clear trend and no trend could be calculated for the remaining 11 (14%) segments.

# 3.3.2 MBS - Mediterranean and Black Sea (area 37)

Out of 203 active fleet segments in 2019, landings in weight and value were provided for 184 fleet segments or aggregate fleet segments.

# Sustainable Harvest Indicator (SHI)

SHI indicator values were available for 158 segments, of which 115 could not 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 43 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 35% of the total value of the landings in 2019 provided by MS, and were as follows:

- 28% (12 segment) may be in balance with their fishing opportunities;
- 72% (31 segments) may not be in balance with their fishing opportunities.

For 5 (12%) segments, an increasing (deteriorating) trend was assessed for SHI while a decreasing (improving) trend was observed for 19 (44%) segments. A further 4 (9%) segments had no clear trend, 1 segment (2%) showed a flat trend and no trend could be calculated for the remaining 14 (33%) segments.

#### Stocks at Risk Indicator (SAR)

SAR indicator was available for 143 fleet segments, of which 66 segments may not have been in balance with their fishing opportunities in 2019. According to the criteria in the 2014 Commission guidelines, EWG 21-16 notes that the SAR results indicate that there were:

- 1 segment with 4 stocks-at-risk,
- 3 segments with 3 stocks-at-risk,
- 16 segments with 2 stocks-at-risk,
- 46 segments with 1 stock-at-risk.

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

The number of fleet segments or aggregate fleet segments for which RoI is available for 2019 in the Mediterranean and Black Sea (MBS) is 22 and the number of segments for which trends are calculated is 14.

According to the criteria in the 2014 Commission guidelines, the EWG notes that the RoI indicator values for the 22 fleet segments indicate that:

- 77% (17 segments) may be in balance with their fishing opportunities.
- 23% (5 segments) may not be in balance with their fishing opportunities.

For 8 (36%) segments, an increasing trend was assessed for RoI while a decreasing trend was observed for 6 (27%) segments. No trend could be calculated for the remaining 8 (36%) segments.

RoFTA is available for 139 fleet segments. According to the criteria in the 2014 Commission guidelines, the EWG notes that the RoFTA indicator values for the 139 fleet segments indicate that:

- 65% (91 segments) may be in balance with their fishing opportunities.
- 33% (46 segments) may not be in balance with their fishing opportunities;
- 1% (2 segments) are classified as not sufficiently profitable.

For 68 (49%) segments, an increasing trend was assessed for RoFTA while a decreasing trend was observed for 37 (27%) segments. No trend could be calculated for the remaining 34 (24%) segments.

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

The number of fleet segments for which the *CR/BER* indicator is available is 139.

According to the criteria in the 2014 Commission guidelines EWG notes that the CR/BER indicator values for the 139 fleet segments for which balance/out of balance was calculated indicate that:

- 65% (90 segments) may be in balance with their fishing opportunities.
- 35% (49 segments) may not be in balance with their fishing opportunities;

An increasing trend for CR/BER was assessed for 54 (39%) fleet segments while a decreasing trend was observed for 36 (26%) segments. A further 15 (11%) segments had no clear trend and no trend could be calculated for the remaining 34 (24%) segments.

# The Vessel Use Indicator (or Vessel Utilisation ratio)

The Vessel Use Indicator (VUR) was available for 178 fleet segments in MBS in 2019. According to the criteria in the 2014 Commission guidelines EWG notes that the VUR indicator values indicate that:

- 45% (80 segments) may be in balance with their fishing opportunities;
- 55% (98 segments) may not be in balance with their fishing opportunities.

A decreasing trend for the Vessel Use Indicator was assessed for 15 (8%) fleet segments while an increasing trend was observed for 12 (7%) segments. No clear trend was found for 82 (46%) segments, 13 (7%) segments showed a flat trend and no trend could be calculated for the remaining 56 (31%) segments.

#### The Inactive Fleet Indicators

The EU inactive fleets in the MBS comprised 44 segments in 2019, of which 93% (41 segments) were in balance and 7% (3 segments) were out of balance, according to the quidelines.

Overall, 14 (32%) fleet segments showed a decreasing (improving) trend in the number of inactive vessels and 9 (20%) segments showed an increasing (deteriorating) trend. A further 18 (41%) segments showed no clear trend and no trend could be calculated for the remaining 3 (7%) segments.

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

Out of 58 active fleet segments in 2019, landings in weight and value were provided for 54 fleet segments or aggregate fleet segments.

# Sustainable Harvest Indicator (SHI)

SHI indicator values were available for 44 segments, of which 27 could not 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 17 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 59% of the total value of the landings in 2019 provided by MS, and were as follows:

- 76% (13 segments) may be in balance with their fishing opportunities;
- 24% (4 segments) may not be in balance with their fishing opportunities.

Overall, 2 (12%) segments showed an increasing (deteriorating) trend, 2 (12%) segments showed a decreasing (improving) trend and 10 (59%) segments showed no clear trend. No trend could be calculated for the remaining 3 (18%) segments.

# Stocks at Risk Indicator (SAR)

SAR indicator was available for 9 fleet segments, of which 6 segments may not have been in balance with their fishing opportunities in 2019. According to the criteria in the 2014 Commission guidelines, EWG 21-16 notes that the SAR results indicate that there were:

- 1 segment with 3 stocks-at-risk,
- 1 segment with 2 stocks-at-risk,
- 4 segments with 1 stock-at-risk.

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

The number of fleet segments or aggregate fleet segments for which *RoI* is available for 2019 in OFR is 7 and the number of segments for which trends are calculated is 5.

According to the criteria in the 2014 Commission guidelines, the EWG notes that the RoI indicator values for the 7 segments indicate that:

- 43% (3 segments) may be in balance with their fishing opportunities.
- 29% (2 segments) may not be in balance with their fishing opportunities,
- 29% (2 segments) were found to be insufficiently profitable.

For 2 (29%) segments, an increasing trend was assessed for RoI while a decreasing trend was observed for 3 (43%) segments. No trend could be calculated for the remaining 2 segments.

RoFTA is available for 20 fleet segments (or clustered fleet segment). According to the criteria in the 2014 Commission guidelines, the EWG notes that the RoFTA indicator values for the 20 segments indicate that:

- 60% (12 segments) may be in balance with their fishing opportunities.
- 40% (8 segments) may not be in balance with their fishing opportunities.

For 6 (30%) segments, an increasing trend was assessed for RoFTA while a decreasing trend was observed for 12 (60%) segments. No trend could be calculated for the remaining 2 (10%) segments.

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

The number of fleet segments for which the CR/BER indicator is available is 20.

According to the criteria in the 2014 Commission guidelines EWG notes that the CR/BER indicator values for the 20 segments for which balance/out of balance was calculated indicate that:

- 60% (12 segments) may be in balance with their fishing opportunities.
- 40% (8 segments) may not be in balance with their fishing opportunities;

An increasing trend for CR/BER was assessed for 6 (30%) segments while a decreasing trend was observed for 9 (45%) segments. A further 3 (15%) segments had no clear trend and no trend could be calculated for the remaining 2 (10%) segments.

# The Vessel Use Indicator (or Vessel Utilisation ratio)

The Vessel Use Indicator (VUR) was available for 31 fleet segments in OFR in 2019. According to the criteria in the 2014 Commission guidelines EWG notes that the VUR indicator values indicate that:

- 81% (25 segments) may be in balance with their fishing opportunities;
- 19% (6 segments) may not be in balance with their fishing opportunities.

An increasing trend was observed for 2 (6%) segments and a decreasing trend was observed for 2 segments. No clear trend was found for 16 (52%) segments, a null/flat trend was found for 3 segments and no trend could be calculated for the remaining 8 (26%) segments.

#### The Inactive Fleet Indicators

The EU inactive fleets in the OFR comprised 17 segments in 2019, all of which were in balance, according to the guidelines.

Overall, 1 segment showed an increasing (deteriorating) trend, 4 segments showed a decreasing (improving) trend, 10 segments showed no clear trend and no trend could be calculated for the remaining 2 segments.

#### 3.3.4 Overview of indicators and trends for each region

Table 3.3.2 provides a summary of balance indicators and trends by fishing region.

**Table 3.3.2** Summary table of balance indicator values for 2019 and trends over the period 2015-2019 at regional level (NAO, MBS and OFR). The number of fleet segments in balance, out of balance or insufficiently profitable with improved, worsened and no trends are shown. For SHI and inactivity indicators, decreasing trends indicate improvement; for economic indicators and VUR, increasing trends indicate improvement.

	Status	SHI		SAR	CR/E	BER		Rol			RoFT	A	VI	JR	Inactive v	vessels #
SR	Trend	in balance	out of balance	#SAR	in balance	out of balance	in balance	out of balance	Insufficientl y profitable	in balance		Insufficiently profitable	in balance	out of balance	in balance	out of balance
	Increasing	2	19		61	9	23	7		65	11		20	4	12	4
	Decreasing	23	19		77	45	19	18	4	87	48	4	3	12	14	3
NAO	No clear trend	17	44		19	4		1					109	118	33	1
	Flat/null		1										10			
	No trend calculated	3	7		6	2	6			6	2		31	27	9	2
	NAO TOTAL	45	90	136	163	60	48	26	4	158	61	4	173	161	68	10
	Increasing		5		48	6	6	2		57	10	1	10	2	8	1
	Decreasing	6	13		17	19	6			18	19		2	13	12	2
MBS	No clear trend	1	3		9	6							38	44	18	
	Flat/null	1											13			
	No trend calculated	4	10		16	18	5	3		16	17	1	17	39	3	
	MBS TOTAL	12	31	66	90	49	17	5		91	46	2	80	98	41	3
	Increasing	2			5	1	1		1	5	1		2		1	
	Decreasing	2			3	6	1	2		5	7		1	1	4	
OFR	No clear trend	7	3		2	1							14	2	10	
	Flat/null												3			
	No trend calculated	2	1		2		1		1	2			5	3	2	
	OFR TOTAL	13	4	6	12	8	3	2	2	12	8		25	6	17	
	Balance result - EU fleet	70	125	208	265	117	68	33	6	261	115	6	278	265	126	13
Inc	licator coverage EU fleet	195		208	38	2		107			382		54	13	13	9

## North Atlantic Ocean (NAO)

Out of 135 fleet segments in the NAO for which the SHI could be estimated and meaningfully to assessed, 90 segments were *out of balance* and 45 *in balance* with fishing opportunities in 2019. For segments for which a trend in SHI could be detected the situation was improving for 42 segments, and worsening for 21. Null or no clear trend could be observed for 62 segments.

According to each of the economic indicators, the majority of fleet segments in the NAO were *in balance* with their fishing opportunities in 2019 but overall, the situation appeared to be deteriorating.

No clear overall picture could be depicted by the technical indicators as for the majority of segments, there was no clear trend.

#### Mediterranean and Black Seas (MBS)

Out of 43 fleet segments in the MBS for which the SHI could be estimated and meaningfully to assessed, 31 segments were *out of balance* and 12 *in balance* with their fishing opportunities in 2019. For segments for which a trend in SHI could be detected the situation was improving for 19 segments, and worsening for 5. Null or no clear trend could be observed for 5 segments.

According to each of the the economic indicators, the majority of fleet segments in the NAO were *in balance* with their fishing opportunities in 2019 and overall, the situation appeared to be improving

The technical indicators suggest that the majority of fleet segemnts were *out of balance* with their fishing opportunities in 2019, although this is to be expected, since many segments are small-scale part time segments for which VUR is most likely largely uninformative.

#### Other fishing regions (OFR)

Values for all indicators could be computed only for a small number of fleet segments. Out of 17 fleet segments for which the SHI could be estimated and meaningfully to assessed, 4 segments were *out of balance* and 13 segments *in balance* with fishing opportunities in 2019. For segments for which a trend in SHI could be detected the situation appeared to be improving for 2 segments, and worsening for 2. Null or no clear trend was observed for 10 segments.

For the limited number of segments for which economic indicators could be computed, the majority were found to be *in balance* with their fishing opportunities in 2019. The sparse data indicate that the economic situation appeared to be worsening.

The technical indicators imply that the fleet segments were generally *in balance* with their fishing opportunities in 2019.

#### 1.3 Task 2 - Indicator Findings - National Sections

#### Introduction

In this section, the following information is presented for each Member State in response to **Task 2** of the terms of reference. Unless specifically mentioned, indicator values are for the reference year 2019 or 2020 for capacity indicators.

**Task 2a.** *Overview of indicator findings:* For each indicator, an overview of indicator values for fleet segments and whether according to the guidelines (COM (2014) 545 Final) they are in balance or out of balance with fishing opportunities is given. Indicator values referred to, are those computed by the EWG 21-16 based on data submitted by Member States under the 2021 fleet economic data call and the most recent assessments and advice for relevant scientific bodies on stock status and exploitation rates. Where applicable, trends in indicator values are also summarised as increasing, decreasing or no clear trend. Since an increasing or decreasing trend indicates an improving or worsening situation depending on the indicator, the trend descriptors increasing and decreasing in the text are written in green (improving situation) or red (worsening situation) font. No clear trend is is written in blue font.

A synthesis of indicator values and trends for each Member State is given at the end of each national section.

In addition to the indicators in the Commission guidelines, the Expert group 21-16 has routinely computed values for the EDI and the NOS indicator, following the approach proposed in EWG 18-14 and further proposed in STECF 20-11.

**Task 2b. Comparison of indicators:** For each fleet segment, the biological, economic and technical indicator values as computed under task 1 were compared with the equivalent values and trends in the fleet reports submitted by the Member State under Article 22.2 and 22.3 of Regulation (EU) 1380/2013. Discrepancies between such values were highlighted and where possible the reasons for such discrepancies were identified.

**Tasks 2c. Assessment of fleet report.** This section provides the EWG opinion on whether the report submitted by 31 May 2021 by the Member State under Article 22.2 and 22.3 of Regulation (EU) 1380/2013 provides a sound and comprehensive analysis of balance between fleet capacity and fishing opportunity of all fleet segments, based on DCF information and in line with the Commission guidelines COM(2014)545. This assessment also includes an examination whether the annual report appropriately addresses previous STECF findings regarding discrepancies between the Member State's assessment of balance between capacity and fishing opportunities and the Expert group's assessment.

**Task 2d.** *Measures in new action plans.* The Report presents a summary of measures proposed in new or revised action plans and whether they are appropriately targeted, timebound and are likely to contribute to redressing the imbalance in the fleet segments concerned.

1.3.1 Belgium (BEL)

Overview of indicator findings

Area 27

There were 12 fleet segments in the Belgian fleet in 2019, of which 9 were active. Of the 9 active fleet segments, landings and economic data were provided aggregated in 4 fleet segments.

# Sustainable Harvest Indicator (SHI)

Out of 9 active fleet segments in 2019, SHI indicator values were available for 4 fleet segments.

SHI indicator values for 1 fleet segment cannot be used meaningfully to assess the balance or imbalance because the indicator value is based on stocks that comprise less than 40% of the total value of landings by this fleet segment.

The 3 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 98.59% of the total value of the landings in 2019 provided by MS, and were as follows:

• 3 segments may *not be in balance* with their fishing opportunities.

Trends were available for the 3 fleet segments:

- 1 segment displayed a decreasing (improving) trend,
- 2 segments displayed no clear trend.

# Stocks at Risk Indicator (SAR)

SAR indicator was available for all the 4 active fleet segments in 2019. For 3 active fleet segments in 2019, one or more stocks-at-risk were detected:

- 1 fleet segment may be in balance with its fishing opportunities,
- 1 fleet segment with 4 stocks-at-risk,
- 2 fleet segments with 1 stock-at-risk.

# Number of Overharvested Stocks (NOS)

The number of fleet segments and the number of stocks classified as overharvested (NOS) expressed as a proportion (%) of the total number of stocks exploited by such fleet segments are given in the table below.

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

# Economic Dependency Indicator (EDI)

The numbers of segments corresponding to varying levels of economic dependency (EDI) values are 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		4		

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

RoI was not calculated.

## RoFTA was calculated for 4 segments:

- 2 segments were in balance with their fishing opportunities,
- 2 segments were *out of balance* with their fishing opportunities.

# 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:

- 2 segments were in balance with their fishing opportunities.
- 2 segments were out of balance with their fishing opportunities.

# Trends were calculated for 4 segments:

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

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

The data required to calculate VUR (i.e., maximum days-at-sea) were provided by the MS and thus, VUR<sub>220</sub> is not analyzed here.

# VUR was calculated for 9 segments\*:

• All 9 segments were in balance with their fishing opportunities.

#### Trends were calculated for 9 segments:

- 8 segments displayed no clear trend
- 1 segment displayed a decreasing trend.

#### The Inactive Fleet Indicators

In total, inactive vessels accounted for 4.4% of the total number of vessels, 2.2% of the total GT and 2.9% of the total kW. At the national level, inactive vessels accounted for less than 20% of the fleet, i.e., were *in balance* in all 3 categories (#, GT and kW).

In 2019, there were 3 inactive vessel length groups (VL1218, VL1824 and VL2440). In previous years (2008-2016), these length classes were clustered into one segment (VL2440). Trends were available for all 3 segments; overall trends for all 3 categories showed a decreasing (improving) trend.

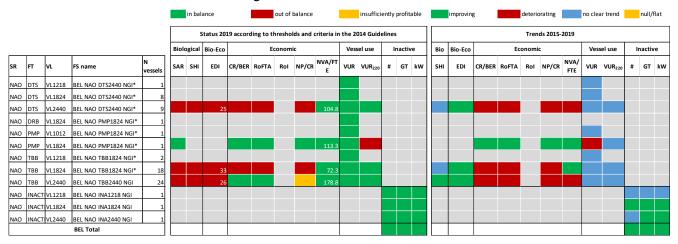
# Synthesis of indicators and trends

Based on indicator values for 2019 and trends over 2015-2019 and according to the criteria in the Commission guidelines, the majority of the fleet segments appear to be out of balance with fishing opportunities. The exception is BEL NAO PMP 1824 NGI for which

<sup>\*</sup>The VUR value calculated for an aggregate segment (cluster) is applied to all the fleet segments in the cluster.

all values indicate that the segment is in balance. The economic indicators suggest that the BEL NAO TBB2440 NGI segment may also be in balance, although the trends for all the economic and technical values show a deterioration, while the SHI is improving.

These observations are not completely in line with the assessment of balance in the Member States' fleet report submitted in 2021, where the two most important fleet segments BEL NAO TBB1824 NGI and BEL NAO TBB2440 NGI are assessed as being in balance with their fishing opportunities. Consequently, no action plan was proposed by the Member State for imbalanced segments.



#### Comparison of indicator values

Indicator values computed by the EWG 21-16 and those in the fleet report submitted by 31 May 2021 are compared in Annex II to this report.

## Sustainable Harvest Indicator (SHI)

In the MS report, the SHI values were presented for 2011 to 2020. However, the comparison between SHI values reported in the Belgium annual fleet report and those estimated in the framework of EWG 21-16 were only conducted for 2019 and revealed different outputs for the 3 fleets where the SHI may be considered as meaningful to assess balance or imbalance. For BEL NAO DTS2440 NGI\*, BEL NAO TBB1824 NGI\* and BEL NAO TBB2440 NGI the EWG noticed that the fleets were "out of balance" (SHI = 1.09-1.45), while the Belgian report indicated "in balance" (SHI = 0.91). In addition, for the fleet BEL NAO PMP1824 NGI\*, the Belgian report estimated the fleet "out of balance", while the EWG 21-16 considered the SHI indicator as not meaningful for this fleet. The EWG notes that such a discrepancy in the estimated SHI-values may be due to a change in the estimate of F/FMSY for the year 2019 following the stock assessment of sole in the eastern English Channel (sol.27.7d) in 2021. The updated value F/FMSY for 2019, might not have been considered in the Belgian fleet report.

Indicator trends were not provided in the fleet report. No comparison was possible.

## Stocks at Risk Indicator (SAR)

In 3 out of 4 segments, discrepancies have been observed in the calculation of SAR between the MS annual fleet report and the ones estimated in the framework of the EWG 21-16. According to the MS fleet report in 2019, no SAR were detected in BEL NAO DTS2440 NGI\* and BEL NAO TBB1824 NGI\* and the segments were assessed as being "in balance", while according to EWG 21-16, one SAR was detected for each of the

mentioned segments. For BEL NAO TBB2440 NGI, 2 SAR were identified in the MS fleet report, while according the EWG21-16, 4 SAR were detected for this segment. The MS fleet report considered this segment to be "in balance" despite the 2 SAR identified, because for both identified SAR (ple.27.7h-k and sol.27.7a) catches were marginal in relation to the quantity landed by the fleet segment.

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

The comparison between CR/BER reported in the MS annual fleet report and those estimated in the framework of EWG 21-16 similar outputs for all values: BEL NAO PMP1824 NGI\* and BEL NAO TBB2440 NGI were "in balance" in 2019 while BEL NAO TBB1824 NGI\* and BEL NAO DTS2440 NGI\* were "not in balance".

The MS report pointed out that BEL NAO PMP1824 NGI\* was not really a fleet segment but rather a heterogeneous group of three remaining fishing vessels. So, the Belgium report considered all fleet segments "in balance" according to the CR/BER indicator.

Indicator trends were not provided in the fleet report. No comparison was possible.

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

The comparison between RoFTA reported in the MS annual fleet report and those estimated in the framework of EWG 21-16 revealed different values of indicator but similar outputs for all values, and similar to CR/BER indicator: BEL NAO PMP1824 NGI\* and BEL NAO TBB2440 NGI were "in balance" in 2019 while BEL NAO TBB1824 NGI\* and BEL NAO DTS2440 NGI\* were "not in balance".

Indicator trends were not provided in the fleet report. No comparison was possible.

#### The Vessel Use Indicator (VUR) and/or Vessel Use Indicator 220 (VUR220)

The comparison between VUR reported in the MS annual fleet report and those estimated in the framework of EWG 21-16 revealed similar outputs for all segments except for the segment BEL NAO DTS2440 NGI\* where the segment is in balance according EWG21-16 framework and out of balance according Belgian fleet report.

The comparison between VUR 220 reported in the MS annual fleet report and those estimated in the framework of EWG 21-16 revealed similar outputs for all values.

# **Inactive Fleet Indicator**

The comparison between Inactive vessels indicator reported in the MS annual fleet report and those estimated in the framework of EWG 21-16 revealed similar outputs for all values.

#### Assessment of fleet report

The fleet report submitted by Belgium provides sound and comprehensive analysis of balance between fleet capacity and fishing opportunity of all fleet segments.

The fleet report submitted by Belgium is in line with the Commission guidelines COM(2014)545.

The current Belgian management system is considered by the MS to be well functioning in order to secure a balance between fishing opportunities and capacity. The main fleet segments were assessed to be in balance in fleet report for 2019. Therefore, no action plan is proposed by the Member State.

Contrary to the EWG 20-11 report, where the assessment of the indicators leads to a similar interpretation regarding the balance or imbalance of the Belgian fishing fleet segments, discrepancies in indicator values and their subsequent interpretation led to different conclusions on balance between the MS fleet report and the outcome of the EWG 21-16.

Since no discrepancies between the EWG 20-11 findings and the fleet report for 2019 were highlighted in the EWG 20-11 report, no specific issues needed to be addressed by the MS in its fleet report for 2021.

## Measures in action plans

No new or revised action plan was proposed.

## 1.3.2 Bulgaria (BGR)

## Overview of indicator findings

#### Area 37

There were 28 fleet segments in the Bulgarian fleet in 2019, of which 24 were active. Of the 24 active fleet segments, landing data were provided for all segments while economic data were available to calculate the indicators for 17 aggregated fleet segments.

# Sustainable Harvest Indicator (SHI)

Out of 24 fleet segments active in 2019, SHI indicator values were available for 17 fleet segments.

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 1 fleet segment for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 0.32% of the total value of the landings in 2019 provided by MS, and was as follows:

• 1 fleet segment may *not be in balance* with its fishing opportunities.

No trends could be calculated.

# Stocks-at-Risk Indicator (SAR)

The SAR indicator was available for 24 fleet segments in 2019. For 6 fleet segments, one or more stocks-at-risk were detected:

- 18 fleet segments may be in balance with their fishing opportunities;
- 1 segment with 2 stocks-at-risk,
- 5 segments with 1 stock-at-risk.

# Number of Overharvested Stocks (NOS)

The number of fleet segments and the number of stocks classified as overharvested (NOS) expressed as a proportion (%) of the total number of stocks exploited by such fleet segments are given in the table below:

Proportion of NOS	0-25%	25- 50%	50- 75%	75-100%
N of fleet segments				17

# Economic Dependency Indicator (EDI)

The numbers of segments corresponding to varying levels of economic dependency (EDI) values are shown in the table below. Fleet segments reported are those for which F/Fmsy is calculated and landings are available.

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

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

RoI was not calculated.

RoFTA was calculated for the 17 segments:

- · 11 segments were in balance with their fishing opportunities,
- 6 segments were *out of balance* with their fishing opportunities.

Trends could be calculated for 13 segments:

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

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

CR/BER was calculated for 17 segments:

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

Trends could be calculated for 13 segments:

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

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

The data required to calculate VUR (i.e., maximum days-at-sea) were provided by the MS and thus, VUR<sub>220</sub> is not analysed here.

VUR was calculated for all 24 segments\*:

- · 17 segments were in balance with their fishing opportunities,
- 7 segments were *out of balance* with their fishing opportunities.

Trends could be calculated for 18 segments:

- 4 segments displayed an increasing trend,
- 1 segment displayed a null/flat trend,
- · 13 segments displayed no clear trend.

\*The VUR value calculated for an aggregate segment (cluster) is applied to all the fleet segments in the cluster.

#### The Inactive Fleet Indicators

In 2019, 4 vessel length classes had inactive vessels (VL0006, VL0612, VL1218 and VL1824).

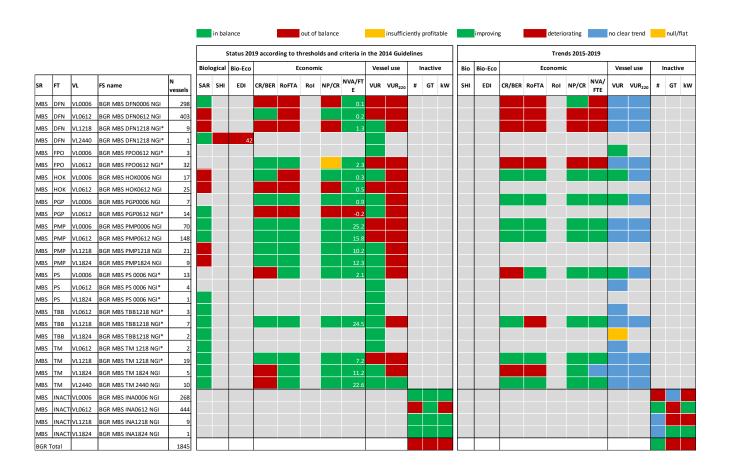
The total inactive fleet accounted for 39.1% of the total number of vessels, 21.8% of the total GT and 29.8% of the total kW. At the national level, inactive vessels accounted for more than 20% of the fleet in all 3 categories (#, GT and kW), and thus, *out of balance*, and displayed increasing (deteriorating) trends except in number of vessels (decreasing trend).

The fleet segment with the highest level of inactivity was the VL0612 group with 24.1% in terms of number of vessels, 14.8% in GT and 21.8% in kW. The other 3 length groups were *in balance* for the 3 categories (#, GT and kW).

## Synthesis of indicators and trends

The status of fleet segments and trends for the Bulgarian fleet in Black Sea Region is shown below. Based on indicator values for 2019 and trends over 2015-2019 and according to the criteria in the Commission guidelines, three fleet segments are out of balance and six fleets are in balance for all economic indicators. The remaining segments show values mostly in balance, with the exception of three segments PS VL0006, TBB VL1218 and TM VL1824 detected out of balance based on negative results for RoFTA and CR/BER indicators. The SHI could only be meaningfully assessed for one fleet segment (DFN1218 NGI\*). The SHI indicated DFN VL12 18 to be out of balance. Yet, the SAR indicator suggested the segment to be in balance, as well as for 12 other fleet segments. The SAR values indicated imbalance for six fleet segments.

The above observations are not always in line with the 2019 balance indicator values in assessment of balance is based on indicator values for the five most recent the Member States' fleet report submitted in 2021. However, the Member State's years and the action plan accompanying the fleet report includes 15 segments that may also be out of balance according to the indicator values listed above .



#### Comparison of indicator values

A comparison of the indicator values computed by the EWG 21-16 and those in the fleet report submitted by 31 May 2021 are given in Annex II to this report. Points of note for each indicator are listed below.

## Sustainable Harvest Indicator (SHI)

The comparison between SHI reported in the MS annual fleet report and those estimated in the framework of EWG 21-16 revealed different outputs for most values. Such discrepancies are probably because when calculating indicator values for the SHI, the EWG 21-16 excluded information on the status of stocks in the Black Sea if the most recent year for which a value for  $F/F_{MSY}$  was 2017 or earlier. The outcome was that SHI could be meaningfully assessed by EWG 21-16 for one segment.

The EWG 21-16 notes that it is not clear from the fleet report whether the MS took into account whether the SHI could be meaningfully assessed due to the lack of values of F and  $F_{MSY}$  for more than 60% of the stocks that constitute the catch, as stated in the Commission guidelines.

Indicator trends were not provided in the fleet report and also could not be calculated by EWG 21-16. No comparison was possible.

# Stocks at Risk Indicator (SAR)

The MS annual fleet report used 2020 as a reference year for the SAR indicator. The comparison between EWG 21-16 and the MS was therefore made based on the SAR indicator reported in the 2020 fleet report. Here, the MS stated that the SAR indicator for 2019 could not be calculated, as catches in 2019 did not exceed 10% of the biomass

from the research surveys of target species. However, according to the Commission guidelines, catches should be compared to the total catches of all species of the fleet segment and to the total (international) catches by species to decide whether a stock-atrisk is exploited by the fleet segment. Catches should not be compared to total biomass estimated from scientific surveys.

As the MS assessed that none of the fleet segments exploit stocks-at-risk (as catches were less than 10% than biomass estimated from research surveys), the MS assessed all fleet segments may be in balance with regards to the SAR indicator. EWG 21-16 concluded that the SAR value for 13 segments indicated that they may be in balance, but that 6 fleet segments exploited one or two stocks-at-risk, and thus may not be in balance.

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

The comparison between CR/BER reported in the MS annual fleet report and those estimated in the framework of EWG 21-16 revealed discrepancies — for most of the values. However, the Member State and EWG 21-16 assessments regarding whether fleet segments are likely to be "in balance" or "out of balance" are generally in line with each other. The only exceptions were the fleets DFN VL1218, PGP VL0006, TM VL1824 and TM VL2440 for which the EWG 21-16 values indicate "out of balance" and those in the MS fleet report indicate "in balance". The reasons for the discrepancies in the values is not clear.

The value of the CR/BER indicator for 11 segments in the fleet report was higher than 1. This means that these segments are profitable and able to cover their costs. The highest indicator value is observed for segment PMP VL0612, PMP VL0006 and TM VL2440. Calculations are also made for the CR/BER ratio with loss of benefits included which is calculated as a product of the value of the capital assets and the average interest rate on long-term low risk investments for Bulgaria for the period 2014-2019. In long-term, the indicator has a positive value of over 1 in 9 of the segments, including 26% (315 vessels) of the fleet. For 4 segments (DFN VL0006, PS VL0006, DFN VL0612 and TM VL1824), this ratio is positive but below 1 and with a negative value for the other 2 segments, which are unprofitable in short-term and in long-term.

Indicator trends were not provided in the fleet report. No comparison was possible.

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

The comparison for the ROI reported in the MS fleet report and those estimated in the framework of EWG 21-16 is not possible due to only RoFTA was estimated by EWG.

There is a significant increase provided in the fleet report for the ROI indicator for the segments PMP VL0612, followed by PGP VL0006 and FPO VL0612. In both segments with the largest number of fishing vessels (DFN VL0006 and DFN VL0612), the rate of return on investment increased a bit, but the value for DFN VL0006 remained negative. The ROI values for the other segments show overcapitalisation, which in the long run also makes them economically ineffective.

#### The Vessel Use Indicator (VUR) and/or Vessel Use Indicator 220 (VUR220)

The MS annual fleet report did not provide information for VUR and VUR220. Yet, the MS provided a detailed description of a different approach to estimate the technical indicator.

Indicator trends were not provided in the fleet report. No comparison was possible.

#### Inactive Fleet Indicator

Inactive vessels have been reported as total number per year and are not split by fleet segments in the annual fleet report. Hence no comparison with the EWG 21-16 indicator values was possible. The information in the fleet report stated that the highest level of unused capacity is observed for the small-scale vessels less than 12 meters. This could be explained by the seasonal nature of fisheries, low return on funds, repair activities etc.

#### Assessment of fleet report

The fleet report submitted by Bulgaria provides sound and comprehensive analysis of balance between fleet capacity and fishing opportunity of all fleet segments. However, time series were only provided for the technical indicator. The biological and economic indicators were provided for the two most recent years (2019 and 2020).

The Action plan is prepared in accordance with Article 22 of the Regulation (EU) 1380/2013 and is not entirely in line with Commission guidelines (COM/2014/545). F or the SAR and technical indicators the MS uses different methodology.

The fleet report asserts that implementation of fisheries management measures adopted in recent years at European and regional level has led to improved management of marine resources and their sustainable exploitation. With regards to previous STECF observations regarding segments that appeared out of balance, a new action plan has been provided which includes such segments.

# Measures in action plans

The new action plan provided by the MS is based on its overall assessment and comparison of technical, economic and biological indicators for 2016-2020. It includes actions aimed at reducing the fishing fleet in the segments where a structural overcapacity has been identified.

The action plan includes the following specific objectives:

- a) reducing the impact of fisheries on the marine environment, including avoiding and reducing, as far as possible, unwanted catches;
- b) protection and restoration of aquatic biodiversity and aquatic ecosystems;
- c) ensuring a balance between fishing capacity and available fishing opportunities;
- d) improving the competitiveness and viability of enterprises in the fisheries sector, including the small- scale coastal fleet, and improving safety and working conditions;
- e) providing support for enhanced technological development and innovation, including energy efficiency and knowledge transfer;
- f) developing professional training, new skills and lifelong learning.

The fleet segments addressed in the Action plan and that are assessed by the MS to be out of balance are as follows:

- VL0006 DFN, PS, PMP, FPO, HOK, PGP
- VL0612 DFN, FPO, HOK, PGP, PMP
- VL1218 DFN, PMP, TM

# - VL1824 TM

The following measures and actions are included in the action plan with time frame for implementation until 31st December 2023:

Measure	Action
Administrative measures	Termination of the validity of the license for commercial fishing for inactive vessels and the authorisations for the right to conduct commercial fishing issued on its basis, if the vessel has not been engaged in fishing activity for two consecutive years. Vessels with suspended licenses on this basis shall be officially withdrawn from the fishing vessel register, and the released capacity shall remain in favour of the State and shall subsequently be distributed among fishing vessels wishing to enter the fishing fleet register.
Support for fishing vessel owners and fishermen to cope with the economic consequences of the outbreak of COVID-19 due to the temporary cessation of fishing activities.	economic losses and to help fishing vessels owners and fishermen who has suspended the fishing activities, to overcome the negative economic consequences and to preserve jobs in
	Construction of new and modernization of the infrastructure of existing ports/construction of boat docks.
Diversification and new forms of income.	Activities contributing to the diversification of fishermen's income through the development of complementary activities related to fisheries such as: investments on board vessels, fishing tourism, restaurants, environmental services

	related to fisheries and educational activities in the field of fisheries.
Added value, product quality and use of unwanted catches.	Investments that add value to fishery products, in particular by allowing fishermen to process, market and sell their own catches directly and to invest innovatively on-board vessels, leading to increase the quality of fishery products, as well as activities that will make it possible to improve the competitiveness and viability of the coastal fleet.
Production and marketing plans.	Supporting the preparation and implementation of the production and marketing plans of producer organizations and associations of producer organizations in accordance with the provisions and 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 village areas;  - reducing the environmental impact of fishing.
Conservation and restoration of marine biodiversity and ecosystems and compensation regimes in the framework of sustainable fishing activities.	<ul> <li>Campaigns for the collection of waste and lost fishing gear;</li> <li>Assist the country in fulfilling its obligations to implement the guidelines for the integration of environmental and climate change policies, creating more favourable conditions for the development of aquatic flora and fauna, including by supporting the preparation of management plans for protected areas and their implementation;</li> <li>Provide support for employability and labour mobility in the communities in coastal and inland waterway regions that depend on fisheries and aquaculture, including diversification of activities within</li> </ul>

the	fisheries	sector	as	well	as	in	other
sect	ors of the	maritim	ne e	conor	ny		

The proposed action plan is largely a statement of intent to improve fishery sector activities until the end of 2023. The objectives and measures are well explained. However, the information on how the actions are to be implemented and the expected effect from such measures on overcapacity in the fleet is not described or assessed. Hence, it is unclear whether the targets are likely to be achieved within the time frame, and whether implemented actions will affect the balance between capacity of the fleet and its fishing opportunities.

# 1.3.3 Croatia (HRV)

## Overview of indicator findings

## Area 37

There were 37 fleet segments in the Croatian fleet in 2019, of which 32 were active. Of the 32 active segments, landings data were provided for 31 segments while economic data were provided aggregated by 23 fleet segments.

## Sustainable Harvest Indicator (SHI)

Out of 32 fleet segments active in 2019, SHI indicator values were available for 31.

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 15 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 79.24% of the total value of the landings in 2019 provided by MS, and were as follows:

• All 15 fleet segments may not be in balance with their fishing opportunities;

Trends could be calculated for 9 fleet segments:

- 5 segments displayed a decreasing (improving) trend,
- 3 segments displayed an increasing (deteriorating) trend,
- 1 segment displayed no clear trend.

## Stocks at Risk Indicator (SAR)

SAR indicator was available for all the 24 active fleet segments in 2019

According to the criteria in the 2014 Balance Indicator Guidelines, EWG 21-16 notes that the 2019 SAR indicator values indicate:

- 17 fleet segments may be in balance with their fishing opportunities;
- 1 fleet segment with SAR: 2 SAR stock *may not be in balance* with their fishing opportunities.
- 6 fleet segments with SAR: 1 SAR stock *may not be in balance* with their fishing opportunities.

## Number of Overharvested Stocks (NOS)

The number of fleet segments and the number of stocks classified as overharvested (NOS) expressed as a proportion (%) of the total number of stocks exploited by such fleet segments are given in the table below.

Proportion of NOS	0-25%	25-50%	50-75%	75-100%
N of fleet segments		1	7	23

# Economic Dependency Indicator (EDI)

The numbers of segments corresponding to varying levels of economic dependency (EDI) values are shown in the table below. Fleet segments reported are those for which  $F/F_{msy}$  is calculated and landings are available.

EDI value	0-25%	25-50%	50-75%	75-100%	
N of fleet segments	15	2	8	6	

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

In 2019 RoI was not calculated for any fleet segment.

RoFTA was calculated for 23 segments:

- 12 segments were in balance with their fishing opportunities,
- 11 segments were out of balance with their fishing opportunities,

Trends could be calculated for 11 segments:

- 9 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 23 segments:

- 12 segments were in balance with their fishing opportunities,
- 11 segments were *out of balance* with their fishing opportunities.

Trends could be calculated for 11 segments:

- 9 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>)

The data required to calculate VUR (i.e., maximum days-at-sea) were provided by the MS and thus, VUR<sub>220</sub> is not analysed here.

VUR was calculated for 32 segments:

- 14 segments were in balance with their fishing opportunities,
- 18 segments were *out of balance* with their fishing opportunities.

Trends could be calculated for 17 segments:

- 1 segment displayed an increasing trend,
- 3 segments displayed a flat trend,
- 13 segments displayed no clear trend.

## The Inactive Fleet Indicators

In 2019, 5 vessel length classes had inactive vessels (VL0006, VL0612, VL1218 VL1824 and VL2440).

The Croatian inactive fleet accounted for 20.6% of the total number of vessels, 28.96% of the GT and 29.13% of the kW. At the national level, inactive vessels accounted for more than 20% of the fleet in all 3 categories (#, GT and kW), and thus, *out of balance*, but overall displayed decreasing (improving) trends.

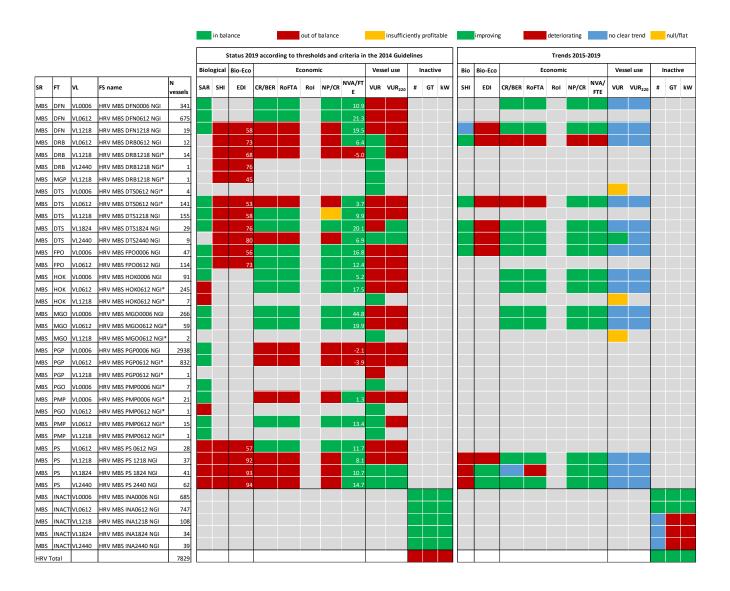
By length group, all 5 segments were *in balance* (<20%) and displayed decreasing or no clear trends for vessel numbers (#).

## Synthesis of indicators and trends

Based on indicator values for 2019 and trends over 2014-2019 and according to the criteria in the Commission guidelines, the majority of fleet segments appear to *out of balance* with fishing opportunities. The biological indicators suggest that all segments for which

meaningful SHI is available may also be *out of balance*, but trends in SHI for some segment show an improving situation (decreasing trend in SHI).

These observations are in line with the assessment of balance in the Member States' fleet report submitted in 2021 and there is an action plan implemented for imbalanced segments.



## Comparison of indicator values

Indicator values\_computed by the EWG 21-16 and those in the fleet report submitted by 31 May 2020 are compared in Annex II.

# <u>Area 37</u>

#### Sustainable Harvest Indicator (SHI)

In the MS annual fleet report the SHI has been provided for the reference year 2019.

The comparison between biological indicators reported in the MS annual fleet report and those estimated in the framework of EWG 21-16 revealed similar outputs in terms of fleet segment status for SHI for most segments.

The only exceptions were the fleets DFN VL12-18 and FPO VL00-06, for which the status in the EWG 21-16 estimation "out of balance", and for which the MS annual report indicated "in balance". Moreover, in the MS annual fleet report the following 2 fleet segments were not considered: DRB VL24-40 and MPG VL12-18. The reasons for both

dissimilarities could be in the different list of stocks used to estimate F/F<sub>MSY</sub> average to be used in SHI calculation.

The MS presented an overview of available and significant SHI per fleet segment for the period 2012-2019, but no comparison with EWG 21-16 outputs in term of trends could be made as no trend assessment was presented by the MS. However, in MS annual report a general decreasing pattern is observed in DTS fleet segments as also seen in EWG 21-16 indicator values.

## Stocks at Risk Indicator (SAR)

In the MS annual fleet report no SAR has been provided explicitly for the reference year 2019 as estimated by the EWG 21-16. However, the MS annual fleet report outlined that the targeting stocks which are considered at risk, as small pelagic species (sardine and anchovy) and large pelagic species (Bluefin tuna and swordfish) are all managed according to catch reduction schemes (ANE, PIL) or quotas (BFT, SWO).

In addition, the MS annual fleet report made clear reference to MGO fleet segment targeting red coral, a species determined classified as endangered according to the IUCN "red list" and in Croatia assessed as critically endangered. However, the EWG 21-16 notes that there is no estimate for the SAR indicator for the fleet segment in question in the annual fleet report for 2020.

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

The comparison between CR/BER reported in the MS annual fleet report and those estimated in the framework of EWG 21-16 revealed similar outputs.

The MS fleet report, for the 23 clustered fleet segments in 2019 CR/BER (short-term return) indicates that for:

- 12 segments values are over threshold,
- 11 segments values are below threshold.

In the MS annual fleet report an increasing trend for CR/BER was assessed for 17 fleet segments while a decreasing trend was observed for 4 segments. No significant trend is observed for 2 segments. Differently the EWG 21-16 analysed the trend only for 14 fleet segments, but showing positive patterns for most of them.

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

The comparison between RoFTA reported in the MS annual fleet report and those estimated in the framework of EWG 21-16 revealed similar outputs for all values.

In MS fleet report ROFTAS indicates for 23 segments the following:

- 11 fleet segments values are out of balance;
- 12 fleet segments are in balance; while
- None are considered as not sufficiently profitable.

An increasing trend for RoFTA in the MS annual fleet report was assessed for 20 fleet segments while a decreasing trend was observed for 3 segments. Differently the EWG 21-16 analysed the trend only for 14 fleet segments, but showing positive patterns for most of them.

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

The comparison between VUR reported in the MS annual fleet report and those estimated in the framework of EWG 21-16 revealed similar outputs for most values.

Regarding MS fleet report, the 23 segments showed:

- 8 segments were in balance,
- 15 segments were out of balance.

Regarding the trends for the MS fleet report outputs were as follows:

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

MS annual fleet report treated 23 segments, while EWG calculations are based on 32 segments. The differences is related to the fact that MS annual fleet report did not estimate VUR for fleet segments containing only one vessel (e.g.: DRB VL2440, MGP VL1218, etc.)

# The Inactive Fleet Indicators

Inactive vessels have been reported as number, GT and kW in the MS annual fleet report and were the same as those computed by the EWG 21-16.

## Assessment of fleet report

The national assessment of overall balance status per fleet segment provided in MS annual fleet report was made taking into consideration firstly the available biological indicators (SHI - Sustainable Harvest Indicator). Fleet segments for which SHI was not available, technical, economic and social indicators were used for the assessment, but also additional information on fleet behaviour. Overall, the main MS annual fleet report outputs are in line with the EWG 21-16 results, indication that based on the criteria in the Commission guidelines, most of the Croatian fleets may be imbalanced.

The fleet report submitted by Croatia provides accurate picture of the fleets and comprehensive analysis of balance between fleet capacity and fishing opportunity of all fleet segments, characterized by a long time series of balance indicators. However, the fleet report submitted by Croatia is not completely in line with the Commission guidelines COM (2014)545, due to the lack of explicit SAR indicator.

Based on the Overall status of the analysed fleet segments Croatia present a revised action plan concerning imbalanced segments.

# Measures in action plans

The Action plan is an update and continuation of the Action plan from 2018, 2019 and 2020.

The MS report says: Pursuant to Action plan presented in the Fleet report for previous years, significant actions took place which resulted with overall improvement in some fleet segments.

However, due to a high dependency of PS segments on only two species (sardine and anchovy) and their exploitation status, they are still showing imbalance. In addition, this imbalance of PS segments is also a result of their economic performance which is largely influenced by the low price of small pelagic fish in Croatia.

During the past period and during the implementation of Action plan from previous Fleet reports Croatia implemented capacity reduction affecting PS and DTS segments through permanent cessation of fishing activities. This was not the only measure foreseen but due to its significance and the fact that permanent cessation can be applied only to vessels with high activity it is considered to be highly efficient in addressing imbalance. For this

reason, further implementation of this measure has been foreseen in the next period as well its implementation for DRB segment. In addition, MGO segment targeting red coral was selected in the action plan, with the aim to constraint number of vessels and establishing catch limits in line with the authorization process carried out in 2021.

Measures for PS, DTS and DRB fleet segments 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. The proposed actions for the years 2021 to 2022 are as follows:

Flee	et ment	Measure	Targets	Timeframe	
	VL0612	<ul><li>Limitation of effort (whole period)</li><li>Time and spatial</li></ul>	- Improvement of SHI (Improvement of stock status of target species following CECM emergency)		
	VL1218	regulation (whole period) pursuant to GFCM and national legal framework	following GFCM emergency measures for 2019-2021 and improvement of recruitment through time-		
	VL1824	(including temporary closures of 30 days in sardine and	spatial regulation)  – Improvement of economic performances (Further		
PS	VL2440	anchovy spawning period as well as spatio-temporal regulation in channel areas)  Temporary cessation  Respecting the provision of decrease of catch level in comparison to 2014 level (5% per year 2019-2021) pursuant to GFCM emergency measures for 2019-2021 and further on based on the new GFCM MAP for small pelagic expected to be adopted in 2021  Permanent cessation – further decreasing of the fishing capacity  Buy-off of fishing gears  Improvement of	increase of average price at first sale with impact on economic indicators, aiming to maintain the level as assessed in this Fleet report)	Most of the measures will be implemented during 2022 upon approval of OP for EMFF and it will be continued in 2023	

		survey and stock assessment (cont.)		
	VL0006	<ul> <li>Continue to implement the new MP (2020 onwards)</li> </ul>	<ul> <li>Improvement of SHI         <ul> <li>(Improvement of stock status of target species</li> </ul> </li> </ul>	
	VL0612	<ul> <li>Maintaining authorised capacity</li> </ul>	following GFCM MP and improvement of recruitment	
	VL1218	throughout 2021 and implement permanent	through time-spatial regulation and FRA implementation)	
DTS	VL1824	cessation scheme  – Limitation and reduction of fishing	<ul> <li>Improvement of economic performances</li> <li>(Further increase of</li> </ul>	
	VL2440	effort (2020 onwards)  Time and spatial regulation (whole period) pursuant to GFCM and national legal framework (including temporary closure of 30 days)  Temporary cessation for at least 30 days (2020 onwards)  Buy-off of fishing gears  Permanent cessation  Prolongation of Jabuka FRA and possible implementation of additional no-take zones (depending on scientific recommendation)  Improvement in MSC (cont.)	average price at first sale through improvement of catch composition (benefits of FRA) with impact on economic indicators aiming to achieve positive trends over 2020-21 period)	Most of the measures will be implemented during 2022 upon approval of OP for EMFAF and it will be continued in 2023
DRB	VL0612	- Limitation of capacity through authorisation	<ul> <li>Improvement of SHI (Improvement of stock</li> </ul>	Most of the measures will be

	VL0006	process  Decrease of active capacity through buy-off of authorised gears  Permanent cessation of fishing activity  Temporary cessation based on scientific advice  Revision of spatiotemporal management measures  Improvement of economic performances (Further increase of average price at first sale with impact on economic indicators, aiming to improve level as assessed in this Fleet report)  Fleet report  Status of target species  Improvement of economic performances (Further increase of average price at first sale with impact on economic indicators, aiming to improve level at first sale with impact on economic indicators, aiming to improve level as assessed in this Fleet report)  Temporary cessation based on scientific advice  Revision of spatiotemporal management measures  Improvement in MSC (cont.)
MGO red coral	VL0612	Buy-off of authorised gears Reduction of fleet capacity for over This measure 50% will be implemented
	VL1218	in 2022

In comparison to the previous action plan the present is revised with four further fleet segments (DRB and MGO red coral).

The action plan clearly sets out the timeframe but the objectives/targets are broad and not specific (with the exception of MGO red coral) and there is not a quantitative evaluation to determine whether the targets are likely to be achieved either within the time frame or at some future time. A similar conclusion was made by EWG 20-11 in 2020.

## 1.3.4 *Cyprus (CYP)*

# Overview of indicator findings

## Area 37

There were 11 fleet segments in the Cypriot fleet in 2019, of which 7 were active. Of the 7 active segments, landings data were provided for 7 segments and economic data were provided for 6 segments. Due to confidentiality reasons, sensitive data were not provided for PS VL2440, with only one vessel.

# Sustainable Harvest Indicator (SHI)

Out of the 7 fleet segments active in 2019, SHI indicator values were available for 6. However, according to the criteria in the 2014 Commission 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.

## Stocks at Risk Indicator (SAR)

SAR indicator was available for all the 7 fleet segments active in 2019. According to the criteria in the 2014 Balance Indicator Guidelines, EWG 21-16 notes that the 2019 SAR indicator values indicate:

- 6 fleet segments may be in balance with their fishing opportunities;
- 1 fleet segment with 1 stocks-at-risk,

## Number of Overharvested Stocks (NOS)

The number of fleet segments and the number of stocks classified as overharvested (NOS) expressed as a proportion (%) of the total number of stocks exploited by such fleet segments are given in the table below.

Proportion of NOS	0-25%	25-50%	50-75%	75-100%
N of fleet segments			2	4

## Economic Dependency Indicator (EDI)

The numbers of segments corresponding to varying levels of economic dependency (EDI) values are shown in the table below. Fleet segments reported are those for which  $F/F_{msy}$  is calculated and landings are available.

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

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

RoI was not calculated.

RoFTA was calculated for 6 segments:

- 2 segments were in balance with their fishing opportunities,
- 4 segments were out of balance with their fishing opportunities.

Trends were calculated for the 6 segments:

- 4 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 6 segments:

- 2 segments were in balance with their fishing opportunities,
- 4 segments were *out of balance* with their fishing opportunities.

Trends were calculated for the 6 segments:

- 2 segments displayed an increasing trend,
- 2 segments displayed a decreasing trend,
- 2 segments displayed no clear trend.

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

The data required to calculate VUR (i.e., maximum days-at-sea) were not provided by the MS. VUR<sub>220</sub> is analysed here.

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

• All 7 segments were *out of balance* with their fishing opportunities.

Trends could be calculated for 7 segments:

- 2 segments displayed a decreasing trend,
- 5 segments displayed no clear trend.

#### The Inactive Fleet Indicators

In 2019, 4 length classes included inactive vessels (VL0006, VL0612, VL1218 and VL2440).

The Cypriot inactive fleet accounted for 9.8% of the total number of vessels, 9.7% of the GT and 11.2% of the kW. At the national level, inactive vessels accounted for less than 20% of the fleet in all 3 categories (#, GT and kW), and thus, *in balance*, and displayed decreasing (improving) trends.

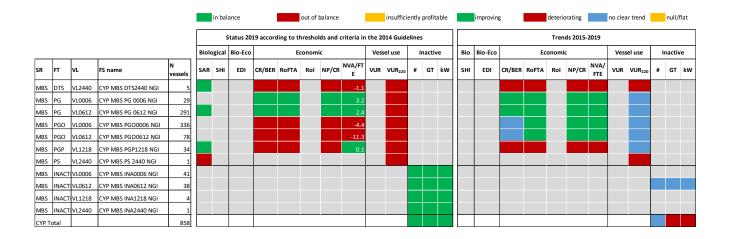
# Synthesis of indicators and trends

Based on indicator values for 2019 and trends over 2015-2019 and according to the criteria in the Commission guidelines, the majority of fleet segments appear to out of balance with fishing opportunities. As in the fleet report for 2019, the PG 0006 and PG 0612 segments for CR/BER and RoFTA values indicate in balance. The available trends in CR/BER and RoFTA show either an improving situation or no trend.

The SHI indicators cannot be used meaningfully to assess the balance or imbalance. The SAR indicator shows that PS VL2440 may not be in balance with its fishing opportunities.

These observations revel some differences in the assessment of balance in the Member States' fleet submitted in 2021. SAR indicator is not reported in the annual fleet report for 2020. For SHI, the annual fleet report for 2020, indicated 5 fleet segments "in balance" and 2 fleet segments "out of balance", while the EWG 21-16 provides no status because the landings value of assessed stocks comprises <40% of the total value. For the economic indicators, there are differences in the values but the balance/imbalance status for the segments concerned are generally similar.

There is an action plan proposed for the imbalanced demersal trawlers (DTS VL2440) only. The aim is to secure a balance between capacity and fishing opportunities by permanent cessation of two trawlers over an unspecified 2-years period. No action plan is proposed for other segments that appear to be out of balance.



# Comparison of indicator values

A comparison Indicator values\_computed by the EWG 21-16 and those in the fleet report submitted in May 2021 are given in Annex II. Points of note for each indicator are listed below.

#### Sustainable Harvest Indicator (SHI)

In the MS annual fleet report the SHI has been provided for the reference year 2019.

The comparison between biological indicators reported in the MS annual fleet report and those estimated in the framework of EWG 21-16 revealed some discrepancies in terms of fleet segment status for SHI in 3 fleet segments, for which the MS annual report indicated "in balance" and the EWG 21-16 estimation does not provide status due to <40% landing value of assessed stocks. The EWG is unable to identify the reasons for such discrepancies.

Indicator trends were provided only for the period 2017-2019 in the fleet report.

#### Stocks at Risk Indicator (SAR)

In the MS annual fleet report no SAR indicator values were provided for the reference year 2019, while EWG 21-16 highlighted 6 fleet segments in balance with their fishing opportunities and 1 fleet segment with 1 stock at risk (SAR=1).

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

In the EWG 21-16 report presented six segments whereas in the Cyprus fleet report there are only four.

The comparison between CR/BER reported in the MS annual fleet report and those estimated in the framework of EWG 21-16 could be made for 4 segments only. Two segments PGO VL0006 the PGO VL VL0612 were absent from the fleet report.

Both the PGO VL0006 and PGO VL VL0612 segments appear out of balance according to the EWG 21-16 estimates but as there were no estimates provided by the MS, no comparison was possible for these segments.

Of the four segments that could be compared, there were some differences in the indicator value.

No trends analysis could be undertaken as date for 2 years only were provided in the fleet report.

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

In the EWG 21-16 report presented six segments whereas in the Cyprus fleet report there are only four.

The comparison between RoFTA reported in the MS annual fleet report and those estimated in the framework of EWG 21-16 could be made for 4 segments only. Two segments PGO VL0006 the PGO VL VL0612 were absent from the fleet report.

Both the PGO VL0006 and PGO VL VL0612 segments appear out of balance in the calculation by EWG 21-16 but as there were no estimates provided by the MS, no comparison was possible for these segments.

Of the four that could be compared, there were some differences in the indicator value.

No trends analysis could be undertaken as date for 2 years only were provided in the fleet report.

#### Vessel Use Indicator (VUR) and/or Vessel Use Indicator 220 (VUR220)

A discrepancy has been observed in the calculation of VUR between the MS annual fleet report and the ones estimated in the framework of the EWG 21-16.

In the MS annual fleet report the VUR Indicator was calculated as the ratio between days at sea and maximum days at sea for each length group in kW for active and in GT for passive gear.

EWG 21-16 reported the VUR220 because the data reported by the MS under DCF did not provide information on the maximum observed days at sea per fleet segment and the theoretical maximum number of days was used for the calculation.

Nevertheless, despite the difference in the basis for the indicators, the trends in VUR and VUR220 were similar as was the numbers of segments for which the indicators were available.

#### Inactive Fleet Indicator

Inactive vessels have been reported as number, GT and kW in the MS annual fleet report, and they revealed similar outputs in term of fleet segment as those estimated in the framework of the EWG 21-16 dataset.

## Assessment of fleet report

The fleet report submitted by Cyprus provides a sound and comprehensive analysis of balance between fleet capacity and fishing opportunity of all fleet segments largely in accordance with the Commission guidelines, the main exception being that values for the SAR indicator were missing from the report.

The fleet report provides an action plan for one segment (DTS VL2440) only. No action plan proposed for the PGO VL0006 and PGO VL VL0612 segments which according to the economic indicators may be out of balance. However, in its fleet report, the MS

concluded that economic indicators of the PGP 1812 fleet segment do not properly reflect its economic performance.

# Measures in action plans

An action plan is proposed for the fleet segment DTS VL2440. The proposed measure is the permanent cessation of fishing activities for two trawlers from a segment total of 5 trawlers operating in the territorial waters of Cyprus should the vessel owners volunteer to decommission their vessels. A time frame of 2 years is given for reaching the target for permanent cessation.

If the vessel owners do not voluntarily decommission their vessels, the plan proposes to introduce a mesh size change by replacing the current 50mm diamond mesh codend by a 40 mm square mesh codend in the north-west part of Cyprus. An additional measure that is currently under consideration is a closed area for trawling in the north-west part of Cyprus. A decision on whether this will also be implemented will be taken following expiry of the 2-year implementation period.

However, with the data and information provided in the fleet report submitted by Cyprus and the action plan, the EWG 21-16 is unable to determine whether the measures proposed will have any influence on the balance between capacity and fishing opportunities.

# 1.3.5 Denmark (DNK)

# Overview of indicator findings

#### Area 27

There were 23 fleet segments in the Danish fleet in 2019, of which 19 were active. Landings and economic data were provided for 19 segments.

# Sustainable Harvest Indicator (SHI)

Out of 19 fleet segments active in 2019, SHI indicator values were available for 18.

According to the criteria in the 2014 Commission 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 13 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 82.17% % of the total value of the landings in 2019 provided by MS, and were as follows:

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

Trends were calculated for 13 fleet segments:

- 1 segment displayed an increasing (deteriorating) trend,
- 5 segments displayed a decreasing (improving) trend,
- 7 segments displayed no clear trend.

# Stocks at Risk Indicator (SAR)

SAR indicator was available for 19 fleet segments in 2019.

• 5 segments may be in balance with their fishing opportunities;

- 2 segments with 10 stocks-at-risk,
- 2 segments with 7 stocks-at-risk,
- 1 segment with 5 stocks-at-risk,
- 3 segments with 4 stocks-at-risk,
- 1 segment with 3 stocks-at-risk,
- 2 segments with 2 stocks-at-risk,
- 3 segments with 1 stocks-at-risk.

# Number of Overharvested Stocks (NOS)

The number of fleet segments and the number of stocks classified as overharvested (NOS) expressed as a proportion (%) of the total number of stocks exploited by such fleet segments are given in the table below.

	0-25%	25-50%	50-75%	75-100%
N of fleet segments		8	9	

## Economic Dependency Indicator (EDI)

The numbers of segments corresponding to varying levels of economic dependency (EDI) values are 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	7		

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

RoI was calculated for 19 segments:

- 8 segments were in balance with their fishing opportunities,
- 10 segments were out of balance with their fishing opportunities,
- 1 segment was not sufficiently profitable.

# Trends were calculated for 19 segments:

- 5 segments displayed an increasing trend,
- 14 segments displayed a decreasing trend.

#### RoFTA was calculated for 19 segments:

- 8 segments were in balance with their fishing opportunities,
- 10 segments were *out of balance* with their fishing opportunities
- 1 segment was found to be insufficiently profitable.

# Trends were calculated for 18 segments:

- 4 segments displayed an increasing trend,
- 14 segments displayed a decreasing trend.

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

CR/BER was calculated for 19 segments:

- 11 segments were in balance with their fishing opportunities,
- 8 segments were *out of balance* with their fishing opportunities.

## Trends were calculated for 18 segments:

- 5 segments displayed an increasing trend,
- 12 segments displayed a decreasing trend,
- 1 segment displayed no clear trend.

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

The data required to calculate VUR (i.e., maximum days-at-sea) were not provided by the MS and thus, VUR<sub>220</sub> is analysed here.

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

- 5 segments were in balance with their fishing opportunities,
- 14 segments were *out of balance* with their fishing opportunities.

# Trends were calculated for the 19 segments:

• All segments displayed no clear trend.

### The Inactive Fleet Indicators

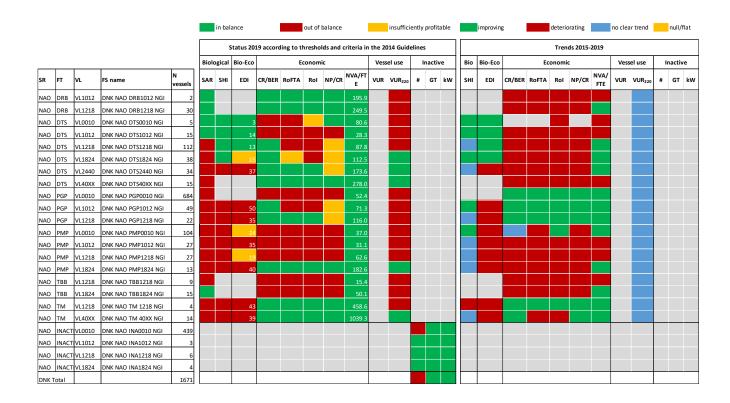
In 2019, 4 length classes included inactive vessels (VL0010, VL1012, VL1218 and VL1824).

The Danish inactive fleet accounted for 27% of the total number of vessels, 3.5% of the GT and 9.2% of the kW. At the national level, inactive vessels accounted for less than 20% of the fleet in 2 categories (GT and kW), and thus, *in balance*. In terms of number, the fleet was found to be *out of balance*. No trends could be calculated (only data relative to 2008-2011 and 2019 were available).

#### Synthesis of indicators and trends

Based on indicator values for 2019 and trends over 2014-2019 and according to the criteria in the Commission guidelines, an overview of the indicators presents a mixed picture for 2019. Two fleets are in balance for all indicators and the majority of fleet segments appear to be out of balance with fishing opportunities.

These observations are mostly in line with the assessment of balance in the Member States' fleet report submitted in 2021 although no action plan was proposed for imbalanced segments.



## Comparison of indicator values

<u>Indicator values</u> computed by the EWG 21-16 and those in the fleet report submitted by 31 May 2021 are compared in Annex II.

# Sustainable Harvest Indicator (SHI)

Denmark presented SHI values calculated by the STECF EWG 20-11 and extracts from the JRC website, where 2018 values were reported.

Since Denmark used EWG 20-11 data for their assessment, no comparison was made.

# Stocks at Risk Indicator (SAR)

The SAR values reported in the MS annual fleet report for year 2018, are the same as the values reported in EWG 20-11.

Since Denmark used EWG 20-11 data for their assessment, no comparison was made.

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

The comparison between CR/BER reported in the MS annual fleet report and those estimated in the framework of EWG 21-16 revealed similar outputs for all values. The outcome, imbalance or balance is the same for all fleet segments.

The same is true for the trends over the period 2015-2019 where similar results arise between the MS annual fleet report and EWG 21-16 estimates.

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

The comparison between ROI reported in the MS annual fleet report and those estimated in the framework of EWG 21-16 revealed similar outputs for most values, although in MS fleet report there was no estimate for the segment DTS0010.

There were two further exceptions; fleets PGP1012 and DTS1824, for which the status according to the EWG 21-16 estimates were "out of balance", and for which the MS annual report indicated "in balance".

The trends between the MS annual fleet report and EWG 21-16 for the period 2015-2019 were comparable.

## The Vessel Use Indicator (VUR) and/or Vessel Use Indicator 220 (VUR220)

In the MS annual fleet report, the VUR Indicator was calculated as the ratio between days at sea and maximum days at sea for each length group and gear type. A table reporting the maximum observed days at sea per fleet segment was included in Annex 4 of the MS annual fleet report.

Some discrepancies were observed in the values for VUR220 between the MS annual fleet report and those estimated in the framework of the EWG 21-16 since the outcome, imbalance or balance is not the same for all fleet segments. Specifically, the difference is shown in 4 fleet segments (DTS VL1824, DTS VL40XX, TBB VL1218 and TM VL1218).

EWG 21-16 reported the VUR220 because the data reported by the MS under DCF did not provide information on the maximum observed days at sea per fleet segment and the theoretical maximum number of days (220) was used for the calculation.

Trends were provided in the MS annual fleet report. There are no clear trends in either the estimates of VUR in the MS fleet report or the values for VUR220 estimated by the EWG 21-16.

# <u>Inactive Fleet Indicator</u>

Inactive vessels have been reported as number, GT and kW for year 2020 in the MS annual fleet report, but the EWG 21-16 dataset provides data for year 2019 so they are not compared.

# Assessment of fleet report

The fleet report submitted by Denmark provides some analysis of balance between fleet capacity and fishing opportunity of all fleet segments and its conclusions are based mainly on the status and trends of the different balance indicators. However, none of the biological indicators (SHI and SAR) requested by the Commission were presented for the year 2019 and no comparison with the indicator values computed by the EWG 21-16 could be made.

The current Danish management system is considered by the MS to be well functioning in order to secure a balance between fishing opportunities and capacity and no action plan was proposed.

The Expert group concludes that while the Member State's assessment of the balance between fleet capacity and fishing opportunities may be valid, the content of the fleet report 2020 submitted by 31 May 2021 is not in line with the Commission's Guidelines.

Furthermore, the information presented in the Danish fleet report for 2020 is insufficient to judge the extent to which the Member State's assessment of balance is sound and comprehensive.

## Measures in action plans

The current Danish management system in general is considered by the MS to be well functioning in order to secure a balance between fishing opportunities and capacity. MS provides explanation for each imbalanced segments based on the indicators' results, where they explain why they do not propose an action plan. The information presented in the report is insufficient for the EWG 21-16 to have an opinion.

# 1.3.6 Estonia (EST)

# Overview of indicator findings

# Area 27

There were 9 fleet segments in the Estonian fleet in 2019, of which 6 were active. Of the 6 active segments, landings data were provided for 5 segments and economic data were provided aggregated in 3 fleet segments.

# Sustainable Harvest Indicator (SHI)

Out of fleet 6 segments active in 2019, 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 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 73.58% of the total value of the landings in 2019 provided by MS, and were as follows

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

Trends could be calculated for 3 fleet segments:

- 2 segments displayed an increasing (deteriorating) trend,
- 1 segment displayed no clear trend.

### Stocks at Risk Indicator (SAR)

SAR indicator was available for all the 5 active fleet segments in 2019

According to the criteria in the 2014 Balance Indicator Guidelines, EWG 21-16 notes that the 2019 SAR indicator values indicate:

- 4 fleet segments may be in balance with their fishing opportunities;
- 1 fleet segment with SAR: 1 SAR stock may not be in balance with their fishing opportunities.

# Number of Overharvested Stocks (NOS)

The number of fleet segments and the number of stocks classified as overharvested (NOS) expressed as a proportion (%) of the total number of stocks exploited by such fleet segments are given in the table below.

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

# Economic Dependency Indicator (EDI)

The numbers of segments corresponding to varying levels of economic dependency (EDI) values are shown in the table below. Fleet segments reported are those for which  $F/F_{msy}$  is calculated and landings are available.

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

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

RoI was calculated for 3 segments:

- 2 segments were in balance with their fishing opportunities,
- 1 segment was out of balance with its fishing opportunities,

Trends were calculated for 3 segments:

- 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 3 segments:

- 2 segments were in balance with their fishing opportunities,
- 1 segment was *out of balance* with its fishing opportunities.

Trends were calculated for the 3 segments:

- 2 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>)

The data required to calculate VUR (i.e., maximum days-at-sea) were not provided by the MS and thus, VUR<sub>220</sub> is analysed here.

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

• All 3 segments were out of balance with their fishing opportunities,

Trends were calculated for the 3 segments:

• All 3 segments displayed no clear trend.

# The Inactive Fleet Indicators

In 2019, 3 vessel length groups had inactive vessels (VL0010, VL1012 and VL1218).

The total inactive fleet accounted for 33.3% of the total number of vessels, 5.3% of the total GT and 16.9% of the total kW. At the national level, inactive vessels accounted for

more than 20% of the number of vessels but less than 20% for the other 2 categories (GT and kW), while all displayed increasing trends.

# By length group:

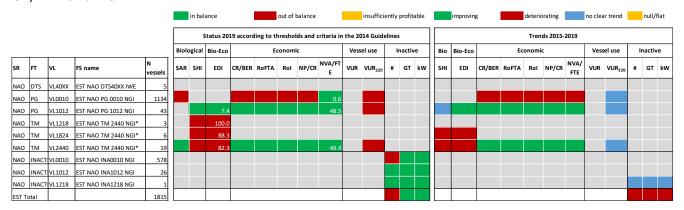
- 2 segments were in balance in terms of number of vessels,
- 1 segment was out of balance in terms of number of vessels,
- 3 segments were in balance in terms of GT,
- 3 segments were in balance in terms of kW.

Trends could only be calculated for one segment (VL1218); for which no clear trend was found for all 3 categories (#, GT and kW).

### Synthesis of indicators and trends

Based on indicator values for 2019 and trends over 2015-2019 and according to the criteria in the Commission guidelines, the majority of fleet segments appear to be out of balance with fishing opportunities, when looking at the biological indicators. The technical indicator  $VUR_{220}$  is unfavourable for all segments, but the MS report underlines that the technical indicator (calculated on a theoretical level of activity) is not relevant to assess imbalances and calculates a different indicator based on ratio in kW/days.

Only the PG VL1012 segment shows favourable indicators and trends. For the PG VL0010 segment (which refers to the majority of vessels, 1134) all indicator values except NVA/FTE are unfavourable and all economic indicators show a declining trend. The biological indicators suggest that the TM VL 1218, TM VL 1824 and TM VL 2440 segments may also be out of balance, although the economic data cluster TM VL 2440 which represents the 3 segments shows good economic performance and increasing trend in CR/BER and ROI.



### Comparison of indicator values

A comparison Indicator values\_computed by the EWG 21-16 and those in the fleet report submitted by 31 May 2021 are given in Annex II. Points of note for each indicator are listed below.

## Sustainable Harvest Indicator (SHI)

Estonia presented SHI values calculated by the STECF EWG 20-11 and extracts from the JRC website, where 2018 values were reported. Since Estonia used EWG 20-11 data for their assessment, no comparison was made.

#### Stocks at Risk Indicator (SAR)

In the MS annual fleet report no values for SAR or trends are provided Hence a comparison with SAR values calculated by EWG 21-16 was not possible.

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

The comparison between CR/BER reported in the MS annual fleet report and those estimated in the framework of EWG 21-16 revealed similar status although the values of the indicator were slightly different.

The discrepancies are due to the way the indicator is calculated. In the MS fleet report, opportunity costs of capital are excluded from the calculation of the CR/BER whereas the EWG includes the opportunity Costs of capital. Whether to include opportunity costs of capital in the calculation is optional in the guidelines.

In the MS annual fleet report, trends were presented in chart and were only available for 2 segments: EST NAO PG 1012 NGI and EST NAO PG 0010 NGI. The comparison between CR/BER trends presented in the MS annual fleet report and those estimated in the framework of EWG 20-11 revealed different outputs for one segment (EST NAO PG 1012 NGI). The difference in calculation explained above could explain this discrepancy.

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

A discrepancy has been observed in the values of ROI between the MS annual fleet report and those estimated in the framework of the EWG 21-16, but the status of the fleet segments with respect to being in or out of balance were the same.

The discrepancies are due to the data used to calculate the indicator. The MS annual fleet report used 5-year average low risk long term interest rate of LTU and LVA while EWG 20-11 used 5-year average low risk long term interest rate of Estonia.

The comparison between ROI trends in the MS annual fleet report and those estimated in the framework of EWG 20-11 revealed different outputs for EST NAO PG 1012 NGI. The difference in calculation explained above could explain this discrepancy.

## The Vessel Use Indicator (VUR) and/or Vessel Use Indicator 220 (VUR220)

A different approach has been observed for the calculation of VUR between the MS annual fleet report and the ones estimated in the framework of the EWG 21-16.

In the MS annual fleet report the VUR Indicator was presented in a table as ratio between the average effort and the observed maximum effort in kWdays per fleet segment for the period 2015-2020 and only for segments in length classes VL1218-VL40XX.

EWG 21-16 reported VUR220 because the data presented by the MS under DCF did not provide information on the maximum observed days at sea per fleet segment and the theoretical maximum number of 220 days was used for the calculation.

A comparison between VUR values for 2019 is not appropriate because the basis for the indicator calculations was different.

Comparison between VUR trends was also not appropriate.

## **Inactive Fleet Indicator**

The information on the number of inactive vessels in 2020 has been provided in the MS annual fleet report for fishing vessels in length classes VL1218-VL2440 only. Estonia considers that computing the proportion of inactive vessels in the coastal fleet length

classes VL0010 and VL1012 is not meaningful due to the dependency of these fisheries on the season, directed species and fishing gear used.

EWG 21-16 notes that a comparison for Inactive Fleet Indicator is not appropriate. The MS annual fleet report provides the number of vessels for 2020, while the WG indicator is based on vessel numbers in 2019.

## Assessment of fleet report

The fleet report submitted by Estonia seems to provide a sound and comprehensive analysis of the balance between fleet capacity and fishing opportunity of all fleet segments.

The fleet report submitted by Estonia, because of using last year data from EWG 20-11 report for biological indicators, is not completely in line with the Commission guidelines COM(2014)545. Indeed, while the values of the economic and technical indicators are based on data for the period of 2015-2019, the biological indicators for year 2019 were not calculated and MS present the values extracted from the EWG 20-11 report. Moreover, the biological indicators (SHI and SAR) and economic indicators are not provided for the high seas fleet segment VL40XX due to lack of data or issues of confidentiality (low number of vessels in the segment).

In its report, Estonia consider that the assessment does not clearly demonstrate that the fishing capacity is not effectively balanced with fishing opportunities and does not identify structural overcapacity.

The Estonia fleet report notes that the lack of data for most recent years and for some fleet segments in STECF report 20-11 makes it difficult to provide a comprehensive analysis of the balance between fleets, fishing possibilities and fishing capacity.

Further, MS pointed out that vessels belonging to the same fishery should be analysed together as dividing them into smaller subsets might distort the results and thus the results of the calculation of some indicator should be taken with caution.

Finally, the Estonian fisheries management (based on individual transferrable quotas and individual transferrable efforts) is considered by the MS as an effective tool for keeping capacity in structural balance with fishing opportunities.

Taking in to account all the consideration above, therefore, no action plans was proposed by MS.

# Measures in action plans

No new or revised action plans were proposed.

### 1.3.7 Finland (FIN)

## Overview of indicator findings

#### Area 27

There were 13 fleet segments in the Finnish fleet in 2019, of which 8 were active. Of the 8 active segments, landings and economic data were provided aggregated in 5 fleet segments.

### Sustainable Harvest Indicator (SHI)

Out of the 8 fleet segments active in 2019, SHI indicator values were available for 5. According to the criteria in the 2014 Commission guidelines, the SHI indicator values for 2 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 3 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 75.24% of the total value of the landings in 2019 provided by MS, and were as follows:

• All 3 fleet segments may be out of balance with their fishing opportunities.

Trends were calculated for 3 segments:

• All 3 fleet segments displayed an increasing (deteriorating) trend.

## Stocks at Risk Indicator (SAR)

SAR indicator was available for 3 fleet segments in 2019.

- 2 segments may be in balance.
- 1 segment may be out of balance, with two stocks at risk.

# Number of Overharvested Stocks (NOS)

The number of fleet segments and the number of stocks classified as overharvested (NOS) expressed as a proportion (%) of the total number of stocks exploited by such fleet segments are given in the table below.

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

# Economic Dependency Indicator (EDI)

The numbers of segments corresponding to varying levels of economic dependency (EDI) values are 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

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

RoI was calculated for 5 segments:

- 1 segment was in balance with its fishing opportunities,
- 4 segments were *out of balance* with their fishing opportunities

Trends could be calculated for 4 segments:

- 4 segments displayed an increasing trend
- 1 segment displayed no clear trend.

# RoFTA was calculated for 5 segments:

- 2 segments were in balance with their fishing opportunities,
- 3 segments were *out of balance* with their fishing opportunities.

### Trends were calculated for 5 segments:

All 5 segments displayed an increasing trend.

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

CR/BER was calculated for 5 segments:

- 2 segments were in balance with their fishing opportunities,
- 3 segments were *out of balance* with their fishing opportunities.

# Trends for the 5 segments were as follows:

All 5 segments displayed an increasing trend.

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

The data required to calculate VUR (i.e., maximum days-at-sea) were provided by the MS and thus, VUR<sub>220</sub> is not analyzed here.

# VUR was calculated for 8 segments:

- 3 segments were in balance with their fishing opportunities,
- 5 segments were *out of balance* with their fishing opportunities.

### Trends were calculated for 5 segments:

• All 8 segments displayed no clear trend.

#### The Inactive Fleet Indicators

In 2019, 5 vessel length classes had inactive vessels (VL0010, VL1012, VL1218, VL1824 and VL1824).

The total inactive fleet accounted for 60.1% of the total number of vessels, 30.0% of the total GT and 50.7% of the total kW. At the national level, inactive vessels accounted for more than 20% of the fleet in all 3 categories (#, GT and kW), and thus, *out of balance*, and displayed increasing (deteriorating) trends.

# By vessel length group:

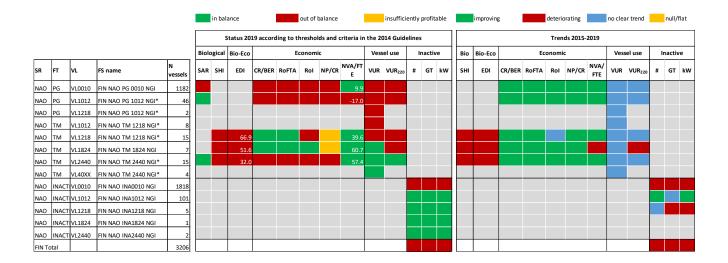
- 4 segments were *in balance* in all 3 categories
- 1 segment (VL0010) was *out of balance* and displayed an increasing (deteriorating) trend in all 3 categories.

# Synthesis of indicators and trends

Based on the biological STECF indicator estimations, three Finnish segments (NAO TM1218, NAO TM1824 and NAO TM2440) may be out of balance with their fishing opportunities, as the SHI-values are higher than 1 (with an increasing trend), indicating that they rely financially to a great extent on overfished stocks (F/Fmsy > 1).

When considering the economic indicators for 2019, the situation may be interpreted differently. The economic indicators CR/BER, ROI ad RoFTA are all assessed as being in balance for the segment NAO TM1824, in contrast to 2018 when all were out of balance for this segment. For NAO TM1218 CR/BER and RoFTA are in balance, while ROI is out of balance. For this fleet segment CR/BER and RoFTA show an increasing trend while there is no clear trend for ROI. For NAO TM2440 all economic indicators were assessed as being out of balance and all showed an increasing trend.

Therefore, according to the Commission guidelines, the segment NAO TM1824 may be considered as being out of balance with its fishing opportunities. Additionally, the segment NAO PG0010 may also be considered as being out of balance with its fishing opportunities, because all indicators considered (SAR, CR/BER, ROI RoFTA, VUR, VUR220) indicate an imbalance.



# Comparison of indicator values

The balance between the fleet and resources was examined by referring to the indicators defined in the Commission's guidelines COM(2014)545. The conclusion by the MS was that the Finnish fishing fleet and the fishing opportunities are in balance. However, this examination is rather descriptive and no segment-specific indicator values in support of their conclusions with respect to being in or out of balance were provided in the report. Hence comparisons with the values computed by the EWG cannot be made.

### Sustainable Harvest Indicator (SHI)

In the 2021 Finnish annual fleet report SHI values have not been provided for the reference year 2019. The biological indicators for a number of segments were discussed in the Finnish fleet report, however no calculation of SHI has been made. The fleet report notes that for three segments from biologically assessed fish stocks (where F and  $F_{MSY}$  are available), two segments are said to be in a good state, while the third is in a poor state. One segment accounts for 45% of the value of landings, while the other two segments are <40%. According to EWG 21-16 estimations, two segments cannot be assessed and three segments are assessed as being out of balance. Due to the lack of information in the fleet report, we are not able to make any comparisons.

The MS, in its fleet report, reiterates that the biological indicator (SHI), calculated by EWG 20-11, using 2018 data, "was not sufficiently accurate to reflect the situation or current status of the fleet segments concerned". The MS rather points to the fact that the Finnish fishing fleet has decreased continuously since Finland joined the European Union

and has remained below the permitted limits, that Finland has not exceeded the quota since 1996 and mentions several arguments for the Finnish fleet being in balance with its fishing opportunities.

No trend was presented for this indicator in the fleet report.

## Stocks at Risk Indicator (SAR)

In the Finnish annual fleet report no SAR-values have been provided for the reference year 2019 or any other previous years.

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

In the Finnish annual fleet report no CR/BER-values have been provided for the reference year 2019 or any other previous years.

Consequently, no trend was presented for this indicator.

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

In the Finnish annual fleet report no ROI or RoFTA-values have been provided for the reference year 2019 or any other previous years.

Consequently, no trends were presented for these indicators.

# The Vessel Use Indicator (VUR) and/or Vessel Use Indicator 220 (VUR220)

In the Finnish annual fleet report no VUR or VUR220-values have been provided for the reference year 2019 or any other previous years.

Consequently, no trends were presented for these indicators.

#### Inactive Fleet Indicator

Inactive vessels have not been reported in the Finnish fleet report.

# Assessment of fleet report

The fleet report submitted by Finland provides some analysis of balance between fleet capacity and fishing opportunity of all fleet segments and its conclusions are based mainly on ongoing capacity reductions and compliance with quota regulations, and not on the status and trends of the different balance indicators. None of the biological, economic or technical indicators requested by the Commission have been calculated by the MS, or, if they have been, were not submitted in the annual report. Nevertheless, the MS did supply some biological, economic or technical analysis on the state of the most important fleet segments.

The current Finnish management system is considered by the MS to be well functioning in order to secure a balance between fishing opportunities and capacity and no action plan was proposed.

The Expert group concludes that while the Member State's assessment of the balance between fleet capacity and fishing opportunities may be valid, the content of the Finnish fleet report 2020 submitted by 31 May 2021 is not in line with the Commission's Guidelines. None of the values for biological, economic or technical indicators requested

were presented in the fleet report and no comparison with the indicator values computed by the EWG 21-16 could be made. Furthermore, the information presented in the Finnish fleet report for 2020 is insufficient to judge the extent to which the Member State's assessment of balance is sound and comprehensive.

# Measures in action plans

No new or revised action plans were proposed.

### 1.3.8 France (FRA)

# Overview of indicator findings

There were 144 fleet segments in the French national fleet in 2019, of which 120 were active fleet segments. Indicator results are presented below by Supra-region.

### Area 27

In the French North Atlantic fleet, there were 58 fleet segments in 2019, of which 53 were active. Of the 53 active segments, landings data were provided for 52 segments and economic data for 31 aggregated fleet segments.

# Sustainable Harvest Indicator (SHI)

Out of 52 fleet segments active in 2019, SHI indicator values were available for 51.

SHI indicator values for 32 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 19 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 68.4% of the total value of the landings in 2019 provided by MS, and were as follows:

- 10 segments may be in balance with their fishing opportunities;
- 9 segments may be *out of balance* with their fishing opportunities.

Trends could be calculated for 17 fleet segments:

- 1 segment displayed an increasing (deteriorating) trend,
- 7 segments displayed a decreasing (improving) trend,
- 9 segments displayed no clear trend.

### Stocks at Risk Indicator (SAR)

SAR indicator was available for 52 active fleet segments in 2019. For 20 fleet segments, one or more stocks-at-risk were detected:

- 32 fleet segments may be in balance with their fishing opportunities;
- 1 segment with 8 stocks-at-risk,
- 1 segment with 7 stocks-at-risk,
- 1 segment with 5 stocks-at-risk,
- 1 segment with 4 stocks-at-risk,
- 3 segments with 3 stocks-at-risk,
- 2 segments with 2 stocks-at-risk,

• 11 segments with 1 stock-at-risk.

# Number of Overharvested Stocks (NOS)

The number of fleet segments and the number of stocks classified as overharvested (NOS) expressed as a proportion (%) of the total number of stocks exploited by such fleet segments are given in the table below.

Proportion of NOS	0-25%	25-50%	50-75%	75-100%
N of fleet segments		20	28	1

### Economic Dependency Indicator (EDI)

The numbers of segments corresponding to varying levels of economic dependency (EDI) values are shown in the table below. Fleet segments reported are those for which  $F/F_{msy}$  is calculated and landings are available.

EDI values	0-25%	25-50%	50-75%	75-100%
N of fleet segments	42	5	2	2

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

RoI was not calculated.

RoFTA was calculated for 31 segments:

- 23 segments were *in balance* with their fishing opportunities
- 8 segments were *out of balance* with their fishing opportunities.

Trends could be calculated for 30 segments:

- 8 segments displayed an increasing trend,
- 22 segments displayed a decreasing trend.

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

CR/BER was calculated for 31 segments:

- 23 segments were in balance with their fishing opportunities
- 8 segments were *out of balance* with their fishing opportunities.

Trends could be calculated for 30 segments:

- 8 segments displayed an increasing trend,
- 17 segments displayed a decreasing trend,
- 5 segments displayed no clear trend.

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

The data required to calculate VUR (i.e., maximum days-at-sea) were provided by the MS and thus, VUR<sub>220</sub> is not analysed here.

VUR was calculated for 52 segments:

- 26 segments were in balance with their fishing opportunities,
- 26 segments were out of balance with their fishing opportunities,

### Trends could be calculated for 48 segments:

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

\*The VUR value calculated for an aggregate segment (cluster) is applied to all the fleet segments in the cluster.

# The Inactive Fleet Indicators

In 2019, 5 vessel length classes had inactive vessels (VL0010, VL1012, VL1218 VL1824 and VL2440).

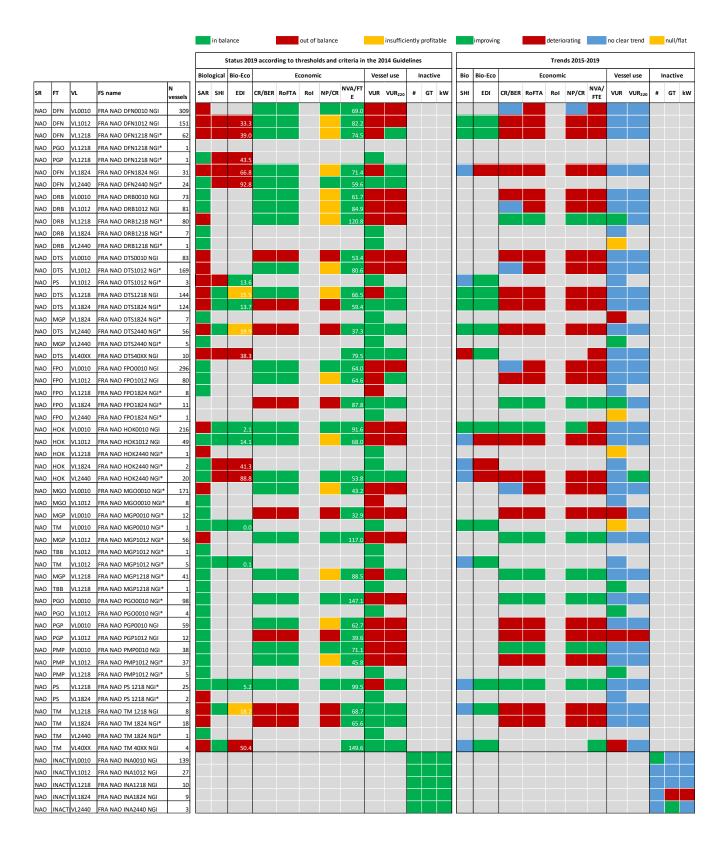
The French Area 27 inactive fleet accounted for 2.9% of the total number of vessels, 1.5% of the total GT and 1.9% of the total kW. At the North Atlantic fleet level, inactive vessels accounted for less than 20% of the fleet in all 3 categories (#, GT and kW), and thus, were *in balance*.

By length group, all 5 segments were *in balance* (<20%) and all displayed no clear trend for vessel numbers (#) apart from the VL0010 segment that displayed a decreasing (improving) trend. The inactive segment VL1824 displayed an increasing (deteriorating) trend for GT and kW.

### Synthesis of indicators and trends (Area 27 NAO)

The status of fleet segments and trends for the French fleet in Area 27 is shown below.

An overview of status and trends for the French fleet in all regions is given below in the subsection headed "Status and trends for the French fleet in all regions".



### Area 37

There were 33 fleet segments in the French Mediterranean fleet in 2019, of which 28 were active. Of the 28 active segments, landings data were available for 28 segments and economic data aggregated by 17 fleet segments.

# Sustainable Harvest Indicator (SHI)

Out of 28 fleet segments active in 2019, SHI indicator values were available for 22.

According to the criteria in the 2014 Commission guidelines, the SHI indicator values for all 20 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 2 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 0.5% of the total value of the landings in 2019 provided by MS, and were as follows:

- 2 segments may be in balance with their fishing opportunities;
- 0 segments may be *out of balance* with their fishing opportunities.

Trends could be calculated for 2 fleet segments:

- 1 segment displayed a decreasing (improving) trend,
- 1 segment displayed no clear trend.

### Stocks at Risk Indicator (SAR)

SAR indicator was available for 28 fleet segments in 2019. For 12 fleet segments in 2019, one or more stock at risk were detected:

- 16 fleet segments may be in balance with their fishing opportunities;
- 1 segment with 2 stocks-at-risk,
- 11 segments with 1 stock-at-risk.

#### Number of Overharvested Stocks (NOS)

The number of fleet segments and the number of stocks classified as overharvested (NOS) expressed as a proportion (%) of the total number of stocks exploited by such fleet segments are given in the table below.

Proportion of NOS	0-25%	25-50%	50-75%	75-100%
N of fleet segments		11	4	4

# Economic Dependency Indicator (EDI)

The numbers of segments corresponding to varying levels of economic dependency (EDI) values are shown in the table below. Fleet segments reported are those for which  $F/F_{msy}$  is calculated and landings are available.

EDI value	0-25%	25-50%	50-75%	75-100%
N of fleet segments	22			

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

RoI was not calculated.

# RoFTA was calculated for 17 segments:

- 15 segments were in balance with their fishing opportunities,
- 2 segments were *out of balance* with their fishing opportunities.

### Trends were calculated for the 17 segments:

- 14 segments 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 17 segments:

- 15 segments were in balance with their fishing opportunities,
- 2 segments were *out of balance* with their fishing opportunities.

### Trends for the 17 segments were as follows:

- 12 segments displayed an increasing trend
- 2 segments displayed a decreasing trend,
- 3 segments displayed no clear trend.

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

# VUR could be calculated for 10 segments:

- 3 segments were in balance with their fishing opportunities,
- 7 segments were out of balance with their fishing opportunities.

# Trends could be calculated for 9 segments:

- 3 segments displayed an increasing trend,
- 1 segment displayed a decreasing trend,
- 3 segments displayed no clear trend
- 2 segments displayed a null/flat trend.

### The Inactive Fleet Indicators (MBS)

In 2019, 5 vessel length classes in the MBS fleet had inactive vessels.

The total inactive fleet accounted for 2.7% of the total number of vessels, 0.3% of the total GT and 1.1% of the total kW. At the Mediterranean fleet level, inactive vessels accounted for less than 20% of the fleet in all 3 categories (#, GT and kW), and thus, were in balance.

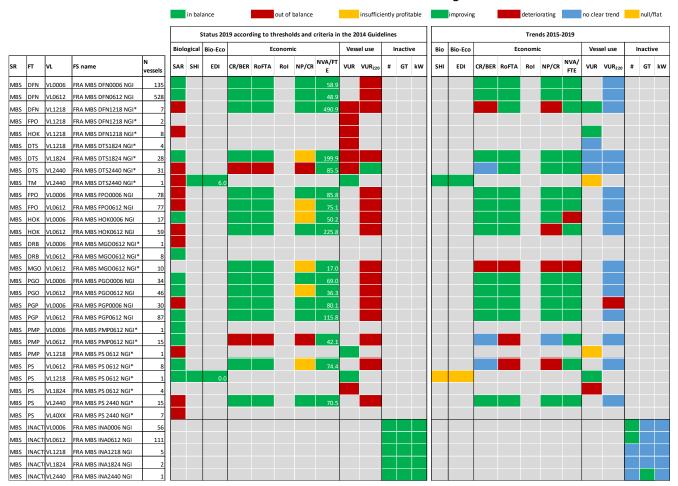
By length group, all 6 segments were *in balance* (<20%) and all displayed no clear trend for vessel numbers (#), apart from the VL0006 segment, which displayed a decreasing (improving) trend for vessel numbers.

### Synthesis of indicators and trends (Area 37, MBS)

<sup>\*</sup>The VUR value calculated for an aggregate segment (cluster) is applied to all the fleet segments in the cluster.

The status of fleet segments and trends for the French fleet in Area 37 is shown below.

An overview of status and trends for the French fleet in all regions is given below in the subsection headed "Status and trends for the French fleet in all regions".



### **OFR**

There were 53 fleet segments in the French OFR fleet in 2019, of which 39 were active. Of the 39 active segments, landings data were available for 35 segments and economic data for 10 fleet segments.

#### Sustainable Harvest Indicator (SHI)

Out of 39 fleet segments active in 2019, SHI indicator values were available for 27.

According to the criteria in the 2014 Commission 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 9 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 78.5% of the total value of the landings in 2019 provided by MS, and were as follows:

- 7 segments may be in balance with their fishing opportunities;
- 2 segments may be out of balance with their fishing opportunities.

Trends could be calculated for 8 fleet segments:

• 8 segments displayed no clear trend.

# Stocks at Risk Indicator (SAR)

SAR indicator was available for 35 fleet segments in 2019. The 2019 SAR indicator values indicate:

• 35 fleet segments may be in balance with their fishing opportunities<sup>8</sup>.

## Number of Overharvested Stocks (NOS)

The number of fleet segments and the number of stocks classified as overharvested (NOS) expressed as a proportion (%) of the total number of stocks exploited by such fleet segments are given in the table below.

Proportion of NOS	0-25%	25-50%	50-75%	75-100%
N of fleet segments		13	9	

# Economic Dependency Indicator (EDI)

The numbers of segments corresponding to varying levels of economic dependency (EDI) values are shown in the table below. Fleet segments reported are those for which  $F/F_{msy}$  is calculated and landings are available.

EDI value	0-25%	25-50%	50-75%	75-100%
N of fleet segments	20	5	2	

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

RoFTA was calculated for 10 segments:

- 6 segments were in balance with their fishing opportunities,
- 4 segments were *out of balance* with their fishing opportunities.

Trends could be calculated for 9 segments:

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

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

CR/BER was calculated for 10 segments:

- 6 segments were in balance with their fishing opportunities,
- 4 segments were *out of balance* with their fishing opportunities.

Trends could be calculated for 9 segments:

<sup>&</sup>lt;sup>8</sup> There were no reported landings of stocks at risk from segments in the OFR.

- 2 segments displayed an increasing trend,
- 5 segments displayed a decreasing trend,
- 2 segments displayed no clear trend.

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

Note:  $VUR_{220}$  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 was calculated for 12 segments:

- 6 segments were in balance with their fishing opportunities,
- 6 segments were out of balance with their fishing opportunities,

### Trends could be calculated for 9 segments:

- 1 segment displayed an increasing trend,
- 1 segment displayed a decreasing trend,
- 6 segments displayed no clear trend
- 1 segment displayed a null/flat trend.

### The Inactive Fleet Indicators

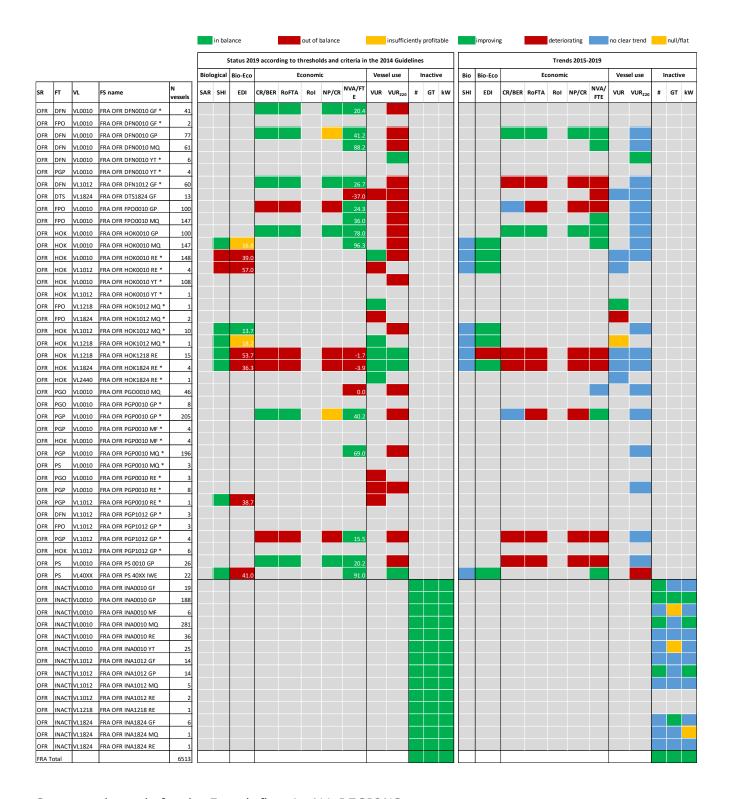
In 2019, 4 vessel length classes by outermost region fleets, totalling 14 segments, had inactive vessels.

The total inactive fleet accounted for 9.2% of the total number of vessels, 1.3% of the total GT and 7.6% of the total kW. At the OMR fleet level, inactive vessels accounted for less than 20% of the fleet in all 3 categories (#, GT and kW), and thus, were *in balance* and displayed a decreasing (improving) trend.

#### Synthesis of indicators and trends (Other fishing regions; OFR)

The status of fleet segments and trends for the French fleet in Other Fishing Regions is shown below.

An overview of status and trends for the French fleet in all regions is given below in the subsection headed "Status and trends for the French fleet in all regions".



# Status and trends for the French fleet in ALL REGIONS

Based on the indicator values for 2019 and trends over 2015-2019 and according to the criteria in the Commission guidelines, for the majority of fleet segments the technical indicators show imbalance, whereas the biological indicators could not be estimated for all observed segments. While the economic indicators characterize a profitable fishery, no clear trend in indicator values was observed.

These observations are not in line with the assessment of balance in the Member States' fleet report submitted in 2021 where the fleet segmentation differs from that used by the Expert group. Furthermore, the assessment in the fleet report is based only on the values for the biological indicators.

According to the estimated value by EWG 21-16, the economic indicators CR/BER and RoFTA show that most of the French fleet segments appear to be in balance with their fishing opportunities in Areas 27 and 37, with often increasing trends. The estimates provided by fishing areas for economic indicators RoFTA and CR/BER show a profitable fishery for 23 out of 31 segments in the North Atlantic (Area 27) and 15 out of 17 segments in Mediterranean Sea (Area 37). Similarly for the latter two indices, 6 out of 10 segments were in balance in the OFR. An opposite pattern is observed for the technical indicator (VUR<sub>220</sub>), where imbalance is detected for the biggest share of calculated segments in all areas: 26 out of 52 segments were imbalanced n Area 27; 7 out of 10 segments in Area 37 and 6 out of 12 segments in OFR. No clear trend is observed for the technical indicator in all fishing areas.

The biological indicator SHI suggests that more than half of the fleet segments for each of the three areas are in balance, and that for the majority of fleet segments there is no trend or a decreasing trend. However, for Area 37, the two segments that could be meaningfully assessed covered less than 1% of the landings value. The majority of segments in Area 27 and 37 do not have any stocks-at-risk (30 out 52 segments, and 16 out of 28 segments, respectively). However, 9 segments in Area 27 and one segment in Area 37 were dependent on multiple stocks-at-risk. There were no reported landings of stocks at risk from segments in the OFR.

## Comparison of indicator values

The French fleet report lists a fleet segmentation that is entirely different to that used by the Expert group. For this reason, there is no possibility to compare indicator values for equivalent fleet segments.

## Assessment of fleet report

The indicator values calculated by France are based on data for the year 2019 and appear to have been computed only partly in line with the Commission guidelines COM(2014)545. However, the Fleet report notes that the SHI is based on landed volume and not on landed value as prescribed in the Commission guidelines. Furthermore, the indicator values were not provided in the report. Yet, the MS did provide a detailed description about the different approaches and methodology used for the analysis provided in the fleet report.

The Member States' assessment of balance seems to be based on biological indicators (SHI, SAR, NOS) and the EDI. Segments were considered to be out of balance by the MS when one of the following conditions was met:

- the SAR indicator or SHI indicator is negative (greater than 1) over at least the last three years assessed in the fleet report of 2021, i.e., 2017 to 2019;
- segments fishing overharvested stock for at least the last three years assessed in the fleet report of 2021 (i.e., 2017 to 2019) and where the economic dependence on these overharvested stocks is greater than 40%.

The MS considers that the economic and technical indicators are not relevant for their assessment of balance. The MS argues that reasons for detected imbalance for technical and economic indicators could be caused by poor management, seasonal or complementary activity of the segments, and are not directly related to stock conditions.

Furthermore, the MS mentions that results for economic and technical indicators are incomplete and weakened by the fact that variables were reported only for segments comprising more than three vessels (in accordance with the rules on confidentiality applied to statistical data). Therefore, the economic and technical indicators could not be fully conclusive given the variety of fishing strategies existing within a fleet segment, leading to results which were difficult to use by the MS in its balance assessment.

According to the MS Fleet Report, out of a total of 198 fleet segments, 5 were assessed to be out of balance, 99 were in balance, 80 segments could not be assessed (58 due to a paucity of relevant data and information or which comprised less than three vessels and 22 which require further monitoring) and 14 were inactive segments. The MS noted that 80 segments could not be assessed for several potential reasons, such as additional information needs to be collected or further monitoring before an assessment can be made or confidentiality reasons.

The EWG 21-16 notes that the MS' 2021 fleet report does not contain the analysis based on all balance indicators proposed by the Guidelines: biological, economic, and technical. Yet, a detailed description and reasons for the adjusted methodology and balance assessment are provided and well described in the fleet report. However, detailed indicators estimations are not included in the report. Due to that reason, it is impossible to make a check or compare the results with EWG estimations.

The EWG 21-16 notes that the MS' fleet report does not provide complete information on the fleet composition in terms of number of vessels per fleet segment and the landings value of fleet segments by stock. Together with the lack of information on the indicator values, the EWG 21-16 does not have all information available to evaluate the MS' assessment of balance and whether it can be considered sound and comprehensive. Additionally, the Fleet Report presents a significant reduction in the number of segments from 232 to 198 considered for the period 2011-2019, but how this reduction has affected the fleet composition and how this may have changed the overall balance of the fleet is not described.

With regards to previous STECF findings on discrepancies between the Member State's assessment and the Expert group's assessment, the MS still used a different fleet segmentation and did not provide indicator values in the fleet report. This means a direct comparison with the indicators as calculated by STECF is not possible. The MS explained in the fleet report for 2020, the difference in number of segments in 2019 compared to 2018 and identified which segments accounted for the difference. Yet, the large decrease in segments across the period 2011-2019 was still not explained. The MS' assessment on balance between capacity and fishing opportunities is still based on biological indicators only. Finally, the number of segments not assessed by the MS was not further quantified in terms of number of vessels and landings in relation to the entire fleet.

For the above reasons, the EWG considers that the fleet report is not strictly in line with the Commission guidelines.

## Measures in action plans

The Action plan provided in the Annex 4 of the Fleet report 2021 is an update and continuation from the 2016, 2018 and 2019 action plans. It includes five fleet segments considered to be out of balance in 2019. A complete and detailed description about previous action plan implementation was provided per segment and action in Annex 3 to the fleet report.

There are three main amendments to the action plan:

i) the length class for one segment (see table below) was extended from VL0010m as listed in the 2020 action plan to VL0024m.

Fleet Report Action plan 2020	Fleet Report 2021 updates for Action plan
Fleet segment: Vessels of between 0 and 10 metres fishing for eel in the Mediterranean as a subsidiary activity.	

- ii) The fishing capacity reduction targets are planned for 2022;
- iii) The fleet segment identified by the MS as 'Purse seine vessels of 12 to 18 metres fishing for European pilchard (PIL.27.8abd) in the Bay of Biscay (AT GG\_Ib PS\_VL1218)' is not included in the 2021 Action plan anymore, as it was not considered to be out of balance any longer by the MS in the 2021 Fleet report.

The plans of the MS to restore a sustainable balance between fishing capacity and fishing opportunities in imbalanced segments comprise the following actions:

- Maintenance of the current authorisation system, which prohibits any increase in vessel capacity or sale of vessels, failing which fishing licences are permanently withdrawn.
- Implementation of assisted management measures intended to reduce fishing effort in imbalanced segments.
- Optimising the regulatory, technical and administrative measures to balance fishing capacity with fishing opportunities.
- Temporary closures envisaged under GFCM; seasonal ban in the Gulf of Lion in order to protect juvenile hake in particular; conversion of vessels to methods other than 'gangui' (pair trawl) fishing.
- Increasing selectivity of fishing gear, where appropriate by funding research to rebalance the stock(s) concerned more quickly.
- Steering the renewal and redeployment of the fleet towards balanced segments, with assistance for temporary cessation of activity where appropriate.

The EWG 21-16 notes that the 2021 fleet report does not contain a new action plan. According to the information provided about implementation of previous action plans, the length class for one segment operating in Area 37 with special eel fishing licence was extended from VL0010 to VL0024 metres. The fleet report 2021 does not provide information about the reason for such change.

The segment 'Purse seine vessels of 12 to 18 metres fishing for European pilchard (PIL.27.8abd) in the Bay of Biscay (AT GG\_Ib PS\_VL1218)' listed in the previous action plan is not reported in the 2021 Action plan. The main reason according to the MS is that the measures to reduce the capacity for the segment were already implemented in 2020. The measures implied the block for issuing fishing licences to the segment and the progress in drawing up a management plan for European pilchard, in particular in the South West Waters Advisory Council.

The EWG 21-16 notes that the French updated Action Plan includes the five fleet segments considered to be out of balance in 2019 according to the Fleet report, and that

it presents a wide range of general as well as more specific measures for these fleet segments. The objectives, tools and timeframes are all well described in relation to the measures identified in the Action Plan for the five segments that the MS considers to be out of balance. The implementation of the previous Action plan is described in detail in Annex 3 of the Fleet report. The implementation for fishing capacity reduction targets for five segments included in the updated action plan were prolonged for 2022.

## 1.3.9 Germany (DEU)

## Overview of indicator findings

### Area 27

There were 28 fleet segments in 2019, of which 22 were active. Of the 22 active segments, landings data were provided for 14 fleet segments and economic data for 13 fleet segments.

## Sustainable Harvest Indicator (SHI)

Out of fleet segments active in 2019, 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 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 9 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 83.66% of the total value of the landings in 2019 provided by MS, and were as follows

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

Trends were available for the 9 fleet segments:

- 2 fleet segments displayed a decreasing (improving) trend,
- 7 fleet segments displayed no clear trend.

### Stocks at Risk Indicator (SAR)

SAR indicator was available for all the 14 active fleet segments in 2019

According to the criteria in the 2014 Balance Indicator Guidelines, EWG 21-16 notes that the 2019 SAR indicator values indicate:

- 4 fleet segments may be in balance with their fishing opportunities;
- 1 fleet segment with 7 stocks at risk
- 2 fleet segments with 3 stocks at risk
- 4 fleet segments with 2 stocks at risk
- 3 fleet segments with 1 stock at risk

# Number of Overharvested Stocks (NOS)

The number of fleet segments and the number of stocks classified as overharvested (NOS) expressed as a proportion (%) of the total number of stocks exploited by such fleet segments are given in the table below.

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

### Economic Dependency Indicator (EDI)

The numbers of segments corresponding to varying levels of economic dependency (EDI) values are shown in the table below. Fleet segments reported are those for which  $F/F_{msy}$  is calculated and landings are available.

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

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

RoI was not calculated.

RoFTA was calculated for 13 segments:

- 6 segments were in balance with their fishing opportunities,
- 7 segments were *out of balance* with their fishing opportunities.

Trends were calculated for 13 segments:

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

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

CR/BER was calculated for 13 segments:

- 6 segments were in balance with their fishing opportunities,
- 7 segments were *out of balance* with their fishing opportunities.

Trends were calculated for 13 segments:

- 4 segments displayed an increasing trend,
- 7 segments displayed a decreasing trend,
- 2 segments displayed no clear trend.

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

The data required to calculate VUR (i.e., maximum days-at-sea) were provided by the MS and thus, VUR<sub>220</sub> is not analysed here.

VUR was calculated for the 17 segments\*:

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

Trends for the 16 segments were as follows:

- 3 segments displayed an increasing trend,
- 13 segments displayed no clear trends.

### The Inactive Fleet Indicators

In 2019, 6 vessel length segments had inactive vessels (VL0010, VL1012, VL1218, VL1824, VL2440 and VL40XX).

The German inactive fleet accounted for 27.2% of the total number of vessels, 4.1% of the total GT and 9.1% of the total kW. At the national level, inactive vessels accounted for more than 20% of the fleet in vessel number and thus, was *out of balance*, and overall displayed an increasing (deteriorating) trend. All segments were *in balance* in terms of GT and kW.

The segment with the highest level of inactivity was the VL0010 segment at 24.7% in terms of number of vessels and 4.2% in kW.

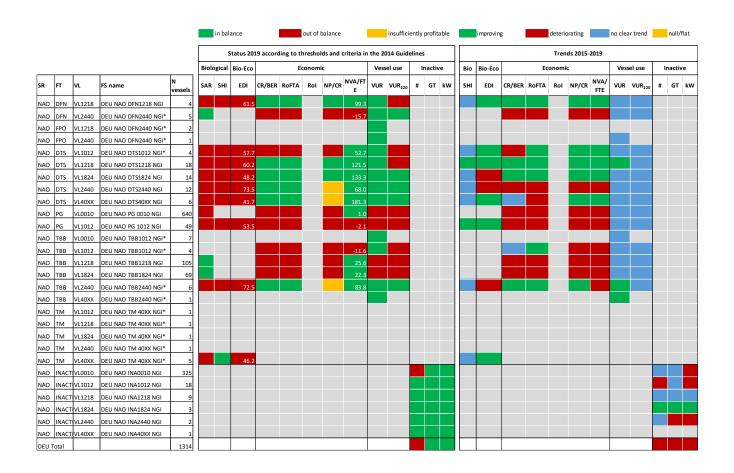
# Synthesis of indicators and trends

Based on biological indicator values (SHI and SAR) for 2019 and trends over the period 2015 to 2019 and in accordance with the criteria in the Commission guidelines, almost all fleet segments appear to be out of balance with fishing opportunities and where trends in SHI can be computed, such trends are all indicating an improving situation.

For six fleet segments the economic indicators are indicating "in balance" and the trend is improving for most of them. Four segments were out of balance according to the technical indicator (VUR).

All biological, economic, and technical indicators are out of balance for the PG 0010 NGI and PG 1012 NGI fleet segments.

<sup>\*</sup>The VUR value calculated for an aggregate segment (cluster) is applied to all the fleet segments in the cluster.



#### Comparison of indicator values

A comparison Indicator values\_computed by the EWG 21-16 and those in the fleet report submitted by 31 May 2021 are given in Annex II. Points of note for each indicator are listed below.

# Sustainable Harvest Indicator (SHI)

In the MS annual fleet report, the SHI has been provided for the reference year 2019. The comparison between SHI reports in the MS annual fleet report and those estimated in the framework of EWG 21-16 revealed similar outputs for most values with the exception of one discrepancy for DEU NAO DTS 40XX NGI segment that results "in balance" (SHI=0.97) in the MS fleet report whereas the EWG 21-16 indicates out of balance.

Indicator trends were not provided in the fleet report. No comparison was undertaken by the EWG 21-16.

#### Stocks at Risk Indicator (SAR)

In the MS annual fleet report the SAR has been provided for the reference year 2019.

The comparison between SAR reported in the MS annual fleet report and those estimated in the framework of EWG 21-16 revealed similar outputs for most values apart from one discrepancy for the DEU NAO TBB1012 NGI\* segment. The EWG 21-16 did not computed an estimate for SAR for this segment, while in the MS annual report was indicated "in balance".

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

The comparisons between CR/BER reported in the MS annual fleet report and those estimated in the framework of EWG 21-16 revealed similar outputs for all values.

Trends are similar for this indicator.

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

As for the CR/BER indicator, the comparisons between RoFTA reported in the MS annual fleet report and those estimated in the framework of EWG 21-16 revealed similar outputs for all values.

Trends are similar for this indicator.

### The Vessel Use Indicator (VUR) and/or Vessel Use Indicator 220 (VUR220)

In the MS annual fleet report, the VUR Indicator was calculated as the ratio between days at sea and maximum days at sea for each length group and gear type. Some explanation on technical indicator calculations was included in the MS annual fleet report.

A discrepancy has been observed in the calculation of VUR between the MS annual fleet report and that of the estimation in the framework of the EWG 20-11. The status in the EWG 21-16 estimation was "in balance" for DEU NAO DTS1218 NGI, DEU NAO DTS1824 NGI and DEU NAO DTS2440 NGI segments for which the MS annual report indicated "out of balance".

The EWG 21-16 calculated indicator trends for only 2 segments. For these 2 segments, the trends observed in the MS annual fleet report were the same (improving).

#### Inactive Fleet Indicator

The tables in the MS fleet report contain only the total number of vessels in each fleet segment. The number of inactive vessels were reported embedded in the text of the report, but no values for the inactive fleet indicator were provided by the MS. To make the comparison with the EWG 21-16 values the EWG computed the missing indicator values. The comparison indicated the same value for the inactive fleet indicator for all fleet segments.

To facilitate such a comparison in future the Member State is urged to provide for each segment, the total number of vessels, the number of inactive vessels and the inactive fleet indicator values in a summary table similar to that provided with the fleet report.

### Assessment of fleet report

The fleet report submitted by Germany provides sound, comprehensive and updated analysis of the balance between fleet capacity and fishing opportunities for all fleet segments in line with the Commission guidelines COM(2014)545.

The Member State concludes that overall, fishing capacity and fishing opportunities are well balanced in the most important fleet segments with the biggest share of catches.

However, some marked imbalance was identified in relation to small-scale coastal segments particularly those in the Baltic Sea.

These observations are generally largely in line with the indicator values computed by the EWG 21-16.

## Measures in action plans

The 2020 report on the balance between the fishing capacity and fishing opportunities of the German fleet shows that there has been a marked deterioration in some balance indicator values for certain fleet segments particularly those fishing in the Baltic Sea. The fleet report attributes such deterioration to a significant decline in cod stocks across the Baltic Sea and in herring stocks in the western Baltic, which are the most important stocks for German fishers.

The action plan proposes specific measures for some fleet segments (see table below) and clearly indicate baseline for targets and measures to be set for the fleet segments concerned.

Fleet segments included in action plan

Fleet	Explanation	Stocks fished*	
segment			
PG VL0010	Passive gear, vessels less than 10 meters	Baltic Sea stocks	
PG VL1012	Passive gear, vessels 10-12 m	Western Baltic cod and herring	
DFN VL1218	Static net vessels, 12-18 m	Western Baltic herring	
FPO VL1218	Pot fishing vessels, 12-18 m	Western Baltic herring	
DTS VL0010	Demersal trawlers, up to 10 m	Western Baltic cod and herring	
DTS VL1012	Demersal trawlers, 10-12 m	Cod, herring and dab across the Baltic	
DTS VL1218	Demersal trawlers, 12-18 m	Baltic Sea and Kattegat stocks	
DTS VL1824	Demersal trawlers, 18-24 m (only Baltic Sea vessels according to MAF-BMEL)	Baltic and North Sea stocks	
DTS VL2440	Demersal trawlers, 24-40 m (only Baltic Sea vessels according to MAF-BMEL)	Baltic and North Sea stocks	
TM VL1824	Pelagic trawlers, 18-24 m	Western Baltic herring	
TM VL2440	Pelagic trawlers, 24-40 m	Herring and sprat across the Baltic	

The German Action Plan presents a wide range of 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. Measures includes:

- Permanent cessation of fishing activities targeting cod and herring in the Baltic (western Baltic herring, western and eastern cod).
- Shifting relevant fishing opportunities to coastal fisheries
- Marketing support
- Temporary cessation of fishing activities

EWG notes that targets and measures are well described. Moreover, all the measures are calibrated for each imbalanced fleet segment and are likely to contribute to some improvements in all balance indicators. However, the proposed capacity reductions through decommissioning are unlikely to result in such improvements in the short-term because much depends on how the future development of the stocks of cod and herring in the Baltic Sea.

EWG notes that all the relevant central-government and federal-state authorities will take part in the evaluation of the action plan, and that the relevant industry associations and research institutes are also involved.

## 1.3.10 Greece (GRC)

## Overview of indicator findings

#### Area 37

There were 27 fleet segments in 2020, of which 22 were active. Of the 22 active segments, landings data were provided aggregated in 19 fleet segments and economic data were provided aggregated in 16 fleet segments.

## Sustainable Harvest Indicator (SHI)

Out of 22 fleet segments active in 2019, SHI indicator values were available for 14.

According to the criteria in the 2014 Commission 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 2 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, indicates that both of them are *in balance* with their fishing opportunities, but with no trend indicated.

#### Stocks at Risk Indicator (SAR)

SAR indicator values was calculated for four segments while for two of them one or more stocks at risk was detected:

• 2 segments with stock-at-risk.

## Number of Overharvested Stocks (NOS)

The number of fleet segments and the number of stocks classified as overharvested (NOS) expressed as a proportion (%) of the total number of stocks exploited by such fleet segments are given in the table below.

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

## Economic Dependency Indicator (EDI)

The numbers of segments corresponding to varying levels of economic dependency (EDI) values are shown in the table below. Fleet segments reported are those for which  $F/F_{msy}$  is calculated and landings are available.

EDI value	0-25%	25-50%	50-75%	75-100%
N of fleet segments	14			

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

RoI was not calculated.

RoFTA was calculated for 16 segments:

- 9 segments were in balance with their fishing opportunities,
- 6 segments were out of balance with their fishing opportunities,
- 1 segment was found to be *insufficiently* profitable.

Trends could be calculated for 5 segments:

All 5 segments displayed an increasing trend.

# 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 *out of balance* with their fishing opportunities.

Trends could be 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>)

The data required to calculate VUR (i.e., maximum days-at-sea) were provided by the MS and thus, VUR220 is not analysed here.

VUR was calculated for the 22 segments\*:

- 6 segments were in balance with their fishing opportunities,
- 16 segments were *out of balance* with their fishing opportunities.

Trends could be calculated for 6 segments:

- 4 segments displayed an increasing trend,
- 2 segments displayed no clear trend.

# The Inactive Fleet Indicators

In 2019, 5 vessel length classes had inactive vessels (VL0006, VL0612, VL1218, VL1824 and VL2440). The Greek inactive fleet accounted for 18.1% of the total number of vessels, 12.5% of the total GT and 15.1% of the total kW. At the national level, inactive

<sup>\*</sup>The VUR value calculated for an aggregate segment (cluster) is applied to all the fleet segments in the cluster.

vessels accounted for less than 20% of the fleet in all 3 categories (#, GT and kW), and thus, *in balance* but displayed increasing (deteriorating) trends.

The largest percentage of inactive vessels was present in segment VL0612 with 9% in number of vessels.

By vessel length group:

- 3 segments displayed an increasing (deteriorating) trend in vessel number,
- 1 segment displayed a decreasing (improving) trend in all 3 categories.

## Synthesis of indicators and trends

Based on indicator values for 2019 and trends over 2015-2019 and according to the criteria in the Commission guidelines, a mixed picture emerges regarding the segments that appear in or out of balance with fishing opportunities.

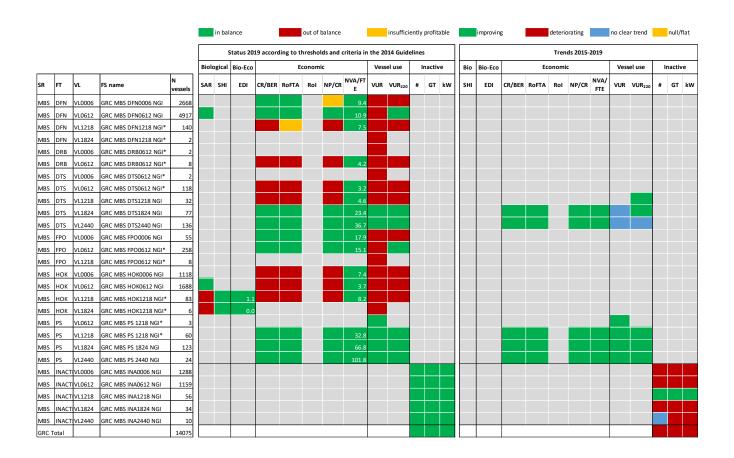
The four purse seine segments score well on all available indicators, but without a meaningful SHI available.

The two larger demersal trawlers/seiners (vessel length 18-40 m) are in balance based on all economic and technical indicators, including positive trends. On the other side, smaller demersal trawlers/seiners and dredge segments (vessel length 6-18 m) based on economic and technical indicators may be out of balance.

Fleet segments using pots and/or traps all seem to be out of balance based on the technical indicator, but in balance, based on economic indicators. Hook segments seem to be out of balance based on the economic and technical indicators, while two hook segments have SHI<1.0 (in balance) but at the same time exploiting one stock at risk. The pots and/or traps segments performed well on the economic indicators but with technical indicators indicating imbalance.

The three drift/fixed netters segments perform differently on the economic and technical indicators. One seems to be out of balance based on all indicators, whereas the remaining two segments seem to be balanced based on the economic indicators an out of balance based on the technical indicator.

The inactive fleet indicator suggests balance for all four inactive fleet segments. One fleet segment showed a decreasing trend, and the other three, increasing.



## Comparison of indicator values

A comparison of Indicator values computed by the EWG 21-16 and those in the fleet report submitted by 31 May 2021 are given in Annex II. Points of note for each indicator are listed below.

# Sustainable Harvest Indicator (SHI)

In the MS annual fleet report the SHI has been provided for clustered fleet segments only. Therefore, a comparison with values from EWG 21-16 is not possible.

# Stocks at Risk Indicator (SAR)

In the MS annual fleet report the SAR has not been provided while EWG 21-16 provided SAR for 4 fleet segments. Therefore, a comparison of values is not possible.

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

In the MS annual fleet report the CR/BER has not been provided. Therefore, a comparison with values from EWG 21-16 is not possible.

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

The comparison between RoFTA reported in the MS annual fleet report and those estimated in the framework of EWG 21-16 revealed different outputs for all values, however the balance indication is the same for all available segments.

The MS annual fleet report did not provide a time series of the indicator or any conclusion based on the indicators. Therefore, no comparison can be made with the trend calculated by EWG 21-16.

## The Vessel Use Indicator (VUR) and/or Vessel Use Indicator 220 (VUR220)

The VUR and VUR220 reported in the MS annual fleet reports are not comparable with values from EWG 21-16 as they refer to clustered fleet segments.

#### **Inactive Fleet Indicator**

The comparison between the inactive fleet indicator (based on number of vessels and calculated by EWG) reported in the MS annual fleet report and by EWG 21-16 revealed similar outputs for all values.

The MS annual fleet report did not calculate any value or the trend for the indicator. Therefore, no comparison was possible.

## Assessment of fleet report

The fleet report submitted by Greece provides a comprehensive analysis of the fleet capacity and its development. In general, the annual report contains an extensive information on biological surveys, landing obligation, inspection and fleet management, however such information was not used to assess the balance between capacity and fishing opportunities and therefore in that respect, is largely uninformative.

The current Greek management system is considered by the MS to be suffering from the delayed implementation of the national fisheries data collection programme. Data collected in previous years is incomplete, leading to difficulties with analysing the balance between fishing opportunities and capacity in accordance with Commission guidelines. The Member States' fleet report submitted in 2021 did not explicitly assess the fleet segments in terms of 'in balance' or 'out of balance' in accordance with the Commission guidelines, and no action plan was provided.

Based on the arguments above, it is evident that the Greek fleet report for 2020 does not provide a sound and comprehensive analysis of the balance between fleet capacity and fishing opportunities in accordance with the Commission guidelines.

### Measures in action plans

No new or revised action plans were proposed.

# Overview of indicator findings

#### Area 27

There were 33 fleet segments in 2019, of which 29 were active. Of the 29 active segments, landings data were available for 29 fleet segments and economic data were available to calculate the indicators for 11 aggregated segments.

# Sustainable Harvest Indicator (SHI)

Out of fleet segments active in 2019, landings in value have been provided aggregated in 29 fleet segments and SHI indicator values were available for 24.

According to the criteria in the 2014 Balance Indicator Guidelines, the SHI indicator values for 9 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 74.14% of the total value of the landings in 2019 provided by MS, and were as follows

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

Trends could be calculated for 15 fleet segments:

- 1 segment displayed a decreasing (improving) trend,
- 5 segments displayed an increasing (deteriorating) trend,
- 9 segments displayed no clear trend.

#### Stocks at Risk Indicator (SAR)

SAR indicator was available for all the 29 active fleet segments in 2019

According to the criteria in the 2014 Balance Indicator Guidelines, EWG 21-16 notes that the 2019 SAR indicator values indicate:

- 20 fleet segments may be in balance with their fishing opportunities;
- 3 fleet segments with SAR: 4 SAR stock may not be in balance with their fishing opportunities.
- 6 fleet segments with SAR: 1 SAR stock may not be in balance with their fishing opportunities.

# Number of Overharvested Stocks (NOS)

The number of fleet segments and the number of stocks classified as overharvested (NOS) expressed as a proportion (%) of the total number of stocks exploited by such fleet segments are given in the table below.

Proportion of NOS	0-25%	25-50%	50-75%	75-100%

N of fleet segments	4	15	3	
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# Economic Dependency Indicator (EDI)

The numbers of segments corresponding to varying levels of economic dependency (EDI) values are shown in the table below. Fleet segments reported are those for which  $F/F_{msy}$  is calculated and landings are available.

EDI value	0-25%	25-50%	50-75%	75-100%
N of fleet segments	14	7	1	2

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

RoI was not calculated.

RoFTA was calculated for 11 segments:

- 6 segments were in balance with their fishing opportunities,
- 5 segments were *out of balance* with their fishing opportunities.

Trends could be calculated for 10 segments:

- 6 segments displayed an increasing trend,
- 4 segments displayed a decreasing trend.

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

CR/BER was calculated for 11 segments:

- 6 segments were in balance with their fishing opportunities,
- 5 segments were *out of balance* with their fishing opportunities.

Trends could be calculated for only 10 segments:

- 5 segments displayed an increasing trend,
- 4 segments displayed a decreasing trend,
- 1 segment displayed no clear trend.

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

The data required to calculate VUR (i.e., maximum days-at-sea) were provided by the MS and thus, VUR is analysed here.

VUR was calculated for 26 segments\*:

- 11 segments were in balance with their fishing opportunities,
- 15 segments were *out of balance* with their fishing opportunities.

Trends could only be calculated for 5 segments:

- 1 segment displayed a decreasing trend,
- 3 segments displayed no clear trend,
- 1 segment displayed a null/flat trend.

<sup>\*</sup>The VUR value calculated for an aggregate segment (cluster) is applied to all the fleet segments in the cluster.

#### The Inactive Fleet Indicators

In 2019, 4 vessel length classes had inactive vessels (VL0010, VL1012, VL1218 and VL2440). The Irish inactive fleet accounted for 27.7% of the total number of vessels, 4.2% of GT and 14% of the total kW. At the national level, inactive vessels accounted for more than 20% of the fleet in vessel number and thus, was *out of balance* and displayed a decreasing (improving) trend.

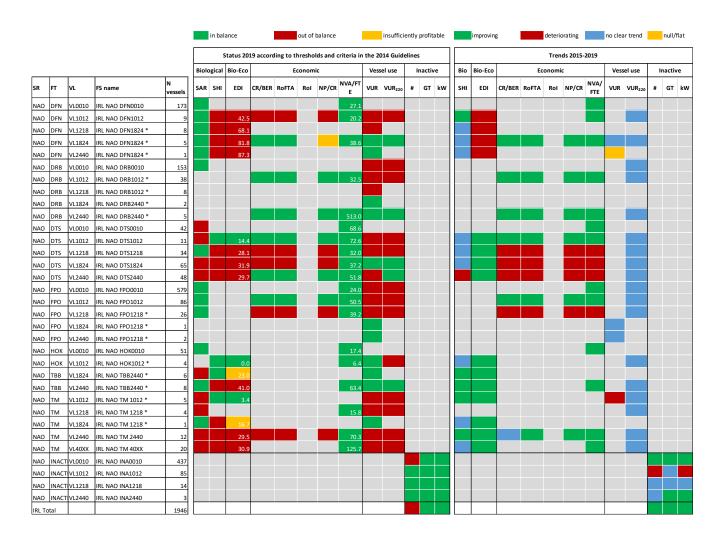
The segment with the highest level of inactivity is the VL0010 segment at 22.5% in terms of number of vessels and 5.8% in kW.

# Synthesis of indicators and trends

One or more indicator values could be computed for all active fleet segments and for the majority of segments values for at least two of the indicators could be computed.

An overview of the indicators presents a mixed picture for 2019. SHI values were computed for 15 segments 4 of which appear to be in balance. In terms of trends in the SHI, the situation appears to either be worsening or there are no clear trends.

The situation regarding economic indicators is also mixed but for most segments for which an economic indicator could be computed, the situation in 2019 was unfavourable. Trends in economic indicators are also mixed and there are only 6 fleet segments for which the situation in 2019 is favourable and the trend over 2015-2019 is improving for 5 of them.



## Comparison of indicator values

A comparison Indicator values\_computed by the EWG 21-16 and those in the fleet report submitted by 31 May 2021 are given in Annex II. Points of note for each indicator are listed below.

# Sustainable Harvest Indicator (SHI)

Ireland presented SHI values calculated by the STECF EWG 20-11 and extracts from the JRC website on 12th April 2021, where 2018 values were reported.

According to fleet report, although according to the SHI, values for 13 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, Ireland concludes that there were no clear trend in indicators of balance between the fleet and the resource in 2018. Further Ireland does not consider that it is valid to state that the stock is over-exploited each time F is slightly above Fmsy, in fact the fleet report indicates there is a range around Fmsy that is consistent with maximising yield and the Precautionary Approach. Stocks are only over exploited when they are consistently fished above Fpa.

Since Ireland used EWG 20-11 data for their assessment. No comparison was made.

Values for period 2008-2018 are provided in the fleet report. No comparison was made with the EWG 21-16 indicator values.

# Stocks at Risk Indicator (SAR)

Ireland by studying the fleets' catch profile that were indicated out of balance by STECF EWG 20-11, conclude that Irish fleets take minor catches of the vulnerable stocks, and that there is not sufficient information to assess whether fleets take more than 10% of the landings of the vulnerable stocks.

Since Ireland used EWG 20-11 data for their assessment no comparison can be made by EWG 21-16.

Values for period 2008-2018 are provided in the fleet report. No comparison was made with the EWG 21-16 indicator values.

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

According to the MS fleet report, the results of CR/BER are positive for all segments except DTS1824, while the EWG 21-16 identified five segments "out of balance": DFN 1012, DTS 1218, DTS 1824, FPO 1218 \* and TM 2440.

The comparison between CR/BER reported in the MS annual fleet report and those estimated in the framework of EWG 20-11 revealed different outputs for most of the values. The discrepancies are due to the data used to calculate the indicator. Furthermore, as opposed to EWG 21-06 (AER) and EWG 21-16, the MS calculates and reports indicator values for fleet segments even when essential variables (e.g., fuel costs, consumption of fixed capital, etc.) are missing for these.

The comparison of trends between the MS annual fleet report and the EWG 21-16 could be done for 10 segments and showed different results for 5 segments.

#### Return on Fixed Tangible Assets (RoFTA)

In the MS annual fleet report, RoFTA was calculated for 18 segments and only one segment was qualified as "out of balance": DTS1824. The EWG 21-16 identified five segments "out of balance": DFN 1012, DTS 1218, DTS 1824, FPO 1218 \* and TM 2440.

The discrepancies are due to the method of calculation of the indicator: Ireland calculated the indicator with the 5-year average interest rate from the ECB to Ireland while EWG 21-16 used the real interest rate. Furthermore, as opposed to EWG 21-06 (AER) and EWG 21-16, the MS calculates and reports indicator values for fleet segments even when essential variables (e.g., fuel costs, consumption of fixed capital, etc.) are missing for these.

The comparison of trends between the MS annual fleet report and the EWG 21-16 could be done for 10 segments and showed different results for 7 segments. These differences are explained by the discrepancies in the calculations presented above.

# The Vessel Use Indicator (VUR)

The MS annual fleet report did not provide information for VUR and VUR220.

Indicator trends were not provided in the fleet report. No comparison was possible.

# Assessment of fleet report

The Irish fleet report for 2020 provides sound and comprehensive estimates for the balance indicators which are derived from the EWG 20-11 report. However, because the biological indicator values are not based on the most recent data from scientific

assessments, the report is not entirely in line with the Commission guidelines COM(2014)545.

In the fleet report, the Member State considers that basing the indicator values on the segmentation used by the Expert group (DCF segmentation) does not allow proper assessment of highly diverse nature of the fleet or range of natural variations within fleet segments. The Member State consider that the technical indicators as currently set down, do not allow for the highly diverse nature of the fleet or the range of natural variation within these segments.

Based on the available information, Ireland considers that structural imbalance does not exist in any of its fleet segments and no action plans are proposed.

# Measures in action plans

No new or revised action plans were proposed.

#### 1.3.12 Italy (ITA)

# Overview of indicator findings

There were 35 fleet segments in 2019, of which 28 were active. Of the 28 active segments, landings were provided for 28 fleet segments and economic data were provided aggregated for 23 fleet segments.

## Sustainable Harvest Indicator (SHI)

#### Area 37

Out of 26 fleet segments active in 2019, SHI indicator values were available for 25.

According to the criteria in the 2014 Balance Indicator Guidelines, the SHI indicator values for 13 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 12 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 51.15% of the total value of the landings in 2019 provided by MS, and were as follows:

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

Trends could be calculated for 7 fleet segments:

- 4 fleet segments displayed a decreasing trend,
- 1 fleet segment displayed no clear trend,
- 2 fleet segments displayed increasing trend.

## Stocks at Risk Indicator (SAR)

Out of 26 fleet segments active in 2019, SAR indicator was available for 24.

According to the criteria in the 2014 Balance Indicator Guidelines, EWG 21-16 notes that the 2019 SAR indicator values indicate:

- 12 fleet segments may be in balance with their fishing opportunities;
- 1 fleet segment with 3 stocks-at-risk,
- 6 fleet segments with 2 stocks-at-risk,

• 5 fleet segments with 1 stock-at-risk.

## Number of Overharvested Stocks (NOS)

The number of fleet segments and the number of stocks classified as overharvested (NOS) expressed as a proportion (%) of the total number of stocks exploited by such fleet segments are given in the table below.

Proportion of NOS	0-25%	25-50%	50-75%	75-100%
N of fleet segments	1		2	21

# Economic Dependency Indicator (EDI)

The numbers of segments corresponding to varying levels of economic dependency (EDI) values are shown in the table below. Fleet segments reported are those for which  $F/F_{msy}$  is calculated and landings are available.

EDI value	0-25%	25-50%	50-75%	75-100%
N of fleet segments	13	5	4	3

### **OFR**

#### Sustainable Harvest Indicator (SHI)

Out of the 2 active fleet segments in 2019, SHI indicator values were available for both.

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 fleet segment for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 53.31% of the total value of the landings in 2019 provided by MS, and was in balance with its fishing opportunities.

#### Stocks at Risk Indicator (SAR)

SAR indicator was available for all the 2 active fleet segments in 2019.

According to the criteria in the 2014 Balance Indicator Guidelines, EWG 21-16 notes that the 2019 SAR indicator values indicate that the fleet segments may be in balance with their fishing opportunities.

# Number of Overharvested Stocks (NOS)

The proportional distribution of NOS for the 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

# 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	1		

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

There were 35 fleet segments in the Italian fleet in 2019 of which 28 were active. After clustering 23 segments were available for analysis.

RoI was calculated for 6 segments:

- 4 segments were in balance with their fishing opportunities,
- 2 segments were out of balance.

Trends could be calculated for 1 segment:

• 1 segment displayed a decreasing trend.

RoFTA was calculated for 23 segments:

- 16 segments were in balance with their fishing opportunities,
- 6 segments were out of balance with their fishing opportunities,
- 1 segment was not sufficiently profitable.

Trends could be calculated for 19 segments:

- 12 segments displayed an increasing trend,
- 7 segments displayed a decreasing trend.

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

CR/BER was calculated for 23 segments:

- 17 segments were in balance with their fishing opportunities,
- 6 segments were *out of balance*.

Trends could be calculated for 19 segments:

- 8 segments displayed an increasing trend,
- 6 segments displayed a decreasing trend,
- 5 segments displayed no clear trend.

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

The data required to calculate VUR (i.e., maximum days-at-sea) were provided by the MS and thus, VUR<sub>220</sub> is not analysed here.

VUR was calculated for 28 segments\*:

- 6 segments were in balance with their fishing opportunities,
- 22 segments were *out of balance* with their fishing opportunities.

Trends could be calculated for 21 segments:

- 7 segments displayed a decreasing trend,
- 14 segments displayed no clear trend.

#### The Inactive Fleet Indicators

In 2019, 6 vessel length segments in MBS (VL0006, VL0612, VL1218, VL1824, VL2440 and VL40XX) and 1 vessel length segment (VL2440) in OFR had inactive vessels.

The inactive Italian fleet accounted for 9.4% of the total number of vessels, 3.5% of the total GT and 5.0% of the total kW.

At the national level, inactive vessels accounted for less than 20% of the fleet in in all 3 categories (#, GT and kW) and thus, was *in balance*, and displayed an increasing (deteriorating) trend in number of vessels but a decreasing (improving) trend in the other 2 categories (GT and kW).

The segment with the highest levels of inactivity was the VL0612 group at 6.1% of the total number of vessels.

## By vessel length group:

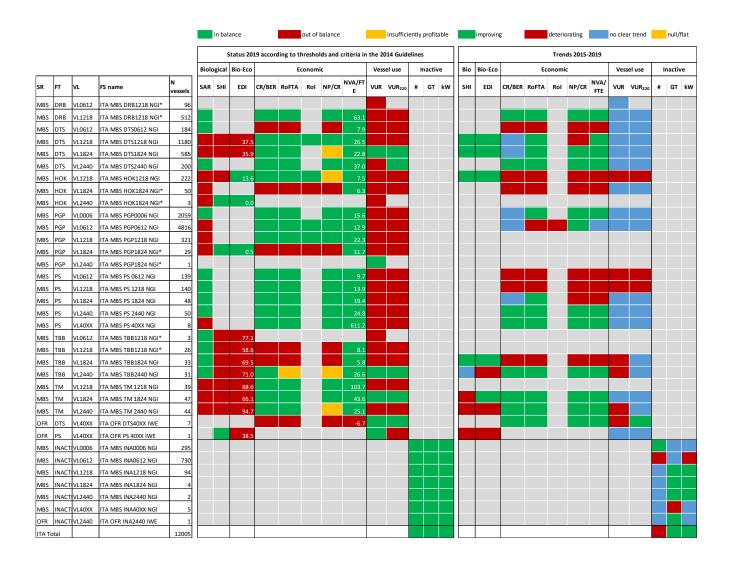
All 7 segments were in balance in all 3 categories, with varying trends.

#### Synthesis of indicators and trends

Based on indicator values for 2019 and trends over 2015-2019 and according to the criteria in the Commission guidelines, for biological variables most fleet segments appear to be out of balance with fishing opportunities. The majority of fleet segments, excepting MBS DTS 0612 NGI, MBS PGP 1824 NGI, MBS TBB 1218 NGI, MBS TBB 1824 NGI, MBS HOK 1824 NGI and OFR DTS 40XX IWE, appeared in balance for economic variables. Less than half of segments show a deteriorating trend or no clear trend for economic indicators. 21% by number of active segments appear to be in balance according to VUR variables. While most segments show no clear trend in VUR, 35% show a worsening trend

The above observations cannot be directly compared to the Member States' fleet report submitted in 2021, due to a different reporting methodology.

<sup>\*</sup>The VUR value calculated for an aggregate segment (cluster) is applied to all the fleet segments in the cluster.



## Comparison of indicator values

The Italian annual fleet report is based on a fleet segmentation by GSA, which is different to that used by EWG 21-16. Therefore, a comparison between indicator values computed by the Expert group with those prepared by the Member State cannot be made.

# Assessment of fleet report

While the segmentation used for the Italian fleet report uses the standard fleet segmentation adopted under the DCF, indicator values for the Mediterranean and Black Sea (area 37) are reported separately by segment and GSA. Because stock assessments and management are GSA-based, the EWG 21-16 considers that providing indicator values in such a way, may lead to a more informative indication of potential overcapacity than providing indicator values by segment for the entire area 37. On the contrary, if a particular fleet segment fishes several different GSAs, the indicator values will be based on more stocks than those for a single GSA.

Such an approach differs from that adopted by most other Member States, the present EWG and by the STECF and it could be argued that it is not in line with the Commission Guidelines, which aim to provide a common methodology for the assessment of the balance over time between fleet capacity and fishing opportunities at fleet segment level.

It also prevents any comparison between the indicator values estimated by the EWG 21-16.

Nevertheless, the fleet report submitted by Italy provides sound and comprehensive analysis of balance in line with Commission guidelines for the fleet segmentation presented in the fleet report. Based on its analysis the Member State presents an action plan to significantly reduce fishing mortality through a series of measures, the majority of which have already been implemented.

# Measures in action plans

The Italian action plan aims to significantly reduce the fishing mortality through the combined effect of different measures. The main target of the plan is to reduce the fishing effort for demersal species. The EWG notes that the plan includes a continuation of measures already established prior to and including 2020.

### These measures include:

- Effort reduction in fishing days in 2020 and 2021.
- In GSAs 9, 10 and 11 Italy already closed the fishery for DTS VL2440 in June 2021.
- In GSA 16 for DTS VL1824, Italy put in place automatic control and monitoring of fishing days for activities that can only be carried out by previously authorised vessels included in the official list published in Executive Decree No 9141500 of 17 September 2020.
- In GSAs 17 and 18 anchovies and sardines caught with PS VL1218 and VL2440 remain subject to the restrictive measures of Recommendation GFCM/42/2018/8 from 2019 to 2021.
- In GSA 17 the fleet segments DTS VL0612, VL1218, VL1824 and VL2440 and TBB VL1218, VL1824 and VL2440 are subject to automatic control and monitoring of fishing days for activities that can only be carried out by previously authorised vessels included in the official list published in Executive Decree No 9141513 of 17 September 2020.
- In GSA 18 last year Italy began to look into the possible establishment of new FRAs for DTS VL1824 and VL2440.
- In GSA 19 for DTS VL1218 and VL1824, in line with what applies to the other GSAs, a list of vessels authorised to catch Argentine red shrimp (ARA) and red and blue shrimp (ARS) has been drawn up and was published in Executive Decree No 9141521 of 17 September 2020. For HOK VL1218, Italy intends to set up a pilot project introducing targeted measures (e.g., more selective gears, temporary closures and area closures, etc.), in particular as regards fishing activity specifically targeting hake (HKE).
- Based on the results of RITMARE and MINOUW projects on sorting grids mounted on bottom trawls to minimise catches of undersized individuals of deepwater rose shrimp and European hake, Italy intends to promote their large-scale use in commercial fishing.
- To ensure wider use of the e-logbook, in 2021 Italy extended the obligation to record catches electronically to all trawl vessels irrespective of overall length.
- Italy will improve the monitoring and enforcing of the fishing ban in the FRAs of the Strait of Sicily and in the Pomo Pit.

The EWG notes that the information presented in the Italian fleet report is insufficient to quantitatively assess whether the proposed measures in the action plan will result in a reduction in fishing mortality on demersal species or the extent to which any potential imbalance between capacity and fishing opportunities for Italian fleet segments will be affected.

#### 1.3.13 Latvia (LVA)

# Overview of indicator findings

### Area 27

There were 4 fleet segments in the Latvian fleet in 2019, of which 3 were active. Of the 3 active segments, landings and economic data were provided for all segments.

#### Sustainable Harvest Indicator (SHI)

Out of 3 active fleet segments in 2019, SHI indicator values were available for all of them.

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 2019 provided by MS, and were as follows:

- 2 fleet segments may be in balance with their fishing opportunities;
- 1 fleet segment may be *out of balance* with its fishing opportunities.

Trends were calculated for the 3 fleet segments with no trend found in all 3 of them.

# Stocks at Risk Indicator (SAR)

SAR indicator was available for all the 3 active fleet segments in 2019.

According to the criteria in the 2014 Balance Indicator Guidelines, the 2019 SAR indicator values indicate that 2 fleet segments may be in balance with their fishing opportunities.

# Number of Overharvested Stocks (NOS)

The number of fleet segments and the number of stocks classified as overharvested (NOS) expressed as a proportion (%) of the total number of stocks exploited by such fleet segments are given in the table below.

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

## Economic Dependency Indicator (EDI)

The numbers of segments corresponding to varying levels of economic dependency (EDI) values are 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

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

RoI was not calculated.

RoFTA was calculated for 3 segments:

- 1 segment was in balance with its fishing opportunities,
- 2 segments were *out of balance* with their fishing opportunities.

Trends were calculated for 3 segments:

- 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 3 segments:

- 1 segment was in balance with their fishing opportunities,
- 2 segments were *out of balance* with their fishing opportunities .

Trends were calculated for 3 segments:

- 1 segment 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>)

The data required to calculate VUR (i.e., maximum days-at-sea) were provided by the MS and thus, VUR<sup>220</sup> is not analysed here.

VUR was calculated for 3 segments:

- 1 segment was in balance with its fishing opportunities,
- 2 segments were *out of balance* with their fishing opportunities.

Trends were calculated for 3 segments:

• All 3 segments displayed no clear trend.

#### The Inactive Fleet Indicators

In 2019, 1 vessel length segment had inactive vessels (VL0010).

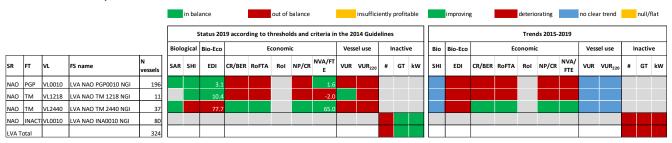
The total inactive Latvian vessels account for 24.7% of the total number of vessels, 2.4% of the total GT and 4.9% of the total kW.

At the national level, inactive vessels accounted for more than 20% of the fleet in number of vessels and thus, was *out of balance*, and displayed an increasing trend. The inactive segment was in balance in terms on GT and kW but displayed an increasing trend for both.

#### Synthesis of indicators and trends

Based on indicator values for 2019 and trends over 2015-2019 and according to the criteria in the Commission guidelines, the majority of fleet segments appear to be in balance with fishing opportunities. The biological indicators suggest that all fleet segments may be in balance with the exception of TM VL2440 where SHI indicates some potential imbalance and no clear trend. However, the values of CR/BER and RoFTA show an improving situation for the segment. From an economic point of view some indications of imbalance show for segments PGO VL0010 and TN VL1218 for which CR/BER and RoFTA are negative with a decreasing trend.

The above observations are largely in line with the assessment of balance in the Member States' fleet report submitted in 2021.



## Comparison of indicator values

A comparison Indicator values\_computed by the EWG 21-16 and those in the fleet report submitted by 31 May 2021 are given in Annex II. Points of note for each indicator are listed below.

### Sustainable Harvest Indicator (SHI)

In the MS annual fleet report the SHI has been provided for the reference year 2019 for two fleet segments. While there are small differences in the data between the national report and the EWG calculations the indications of whether segments are in balance or not is the same for both datasets.

Data were not provided in the Member State's report for the PGP-VL0010-NGI segment, but it was computed by the EWG.

The trend for the SHI in the VL1218 TM fleet segment shows a decline, whereas the SHI for the VL2440 TM segmen shows an increasing trend.

# Stocks at Risk Indicator (SAR)

In the MS annual fleet report the SAR was not been provided.

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

Discrepancies were found between the MS annual fleet report and those estimated in the framework of EWG 21-16, specially for the VL0010 PGP fleet segment. For all fleet segments the indicator values from the MS annual fleet report are lower than the one calculated by the EWG. Two fleet segments (PGP VL0010 and TM VL1218 TM VL2440) reveal negative values for this indicator and one (TM VL2440) positive value.

Trends are similar for this indicator with an increase in VL2440 TM and a decrease on VL0010 PGP and VL1218 TM.

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

In the Latvian annual fleet report ROI was calculated where RoFTA was estimated by EWG 21-16. Hence no direct comparison was carried out

The balance status in terms of balance for both indicators revealed similar outputs:

- 1 segment was in balance with its fishing opportunities,
- 2 segments were out of balance with their fishing opportunities.

No trend assessment was presented by the MS.

#### Inactive Fleet Indicator

Inactive vessels information is missing from the EWG 21-16 dataset for VL1218 and VL2440 but were presented in MS annual report. The IFI indicator for the segment VL1218 shows zeros in last four years, as there were no inactive vessels in this segment. For the segment VL2440 the IFI indicator is increased in last two years by 4.8% and 6.1%, respectively. This segment is not in balance.

# Assessment of fleet report

The fleet report submitted by Latvia provides sound and comprehensive analysis of balance between fleet capacity and fishing opportunity of all fleet segments and is generally in line with the Commission guidelines COM (2014)545.

The fleet balance was assessed using all biological, economic and technical indicators (SHI, ROI, CR/BER and VUR and IFI) for the time period 2015-2019 except for the values for the SAR indicator which was not provided in the fleet report.

No new action plan has been proposed for imbalanced segments, although the action plan submitted with the fleet report for 2019 is being implemented.

## Measures in action plans

Based on biological and technical indicators Latvia is implementing the action plan provided with the fleet report in 2019, in order to reduce fleet capacity for VL2440 TM fleet segment.

This will be achieved through the permanent withdrawal from fishing activity of a number of vessels which were involved in the Baltic cod fishery. The plan is especially relevant to the vessels in the VL2440 segment that target only or mainly Baltic cod. Such vessels temporary ceased their activities started from spring 2019, following the national and European Commission emergency measures to protect the eastern Baltic cod stock and have remained inactive throughout 2020 in compliance with the EU Council regulation prohibiting targeted fishing for Baltic cod.

The explicit objective of the proposed measures is to reduce fleet capacity by reducing the number of vessels that formerly were involved in the cod fishery. As indicated in the EWG 20-11 report, the reasons behind that objective are not explicit and the likely effects of such a reduction on the balance between capacity and fishing opportunities cannot be foreseen. However the EWG notes that the status of the VL2440 segment can be evaluated after the action plan has been fully-implemented and the decommissioning of relevant vessels has been completed.

# 1.3.14 Lithuania (LTU)

## Overview of indicator findings

There were 16 fleet segments in the Lithuanian national fleet in 2019, of which 10 were active (8 in NAO and 2 in OFR). Of the 10 active segments, landings data were available for 10 segments while economic data were provided aggregated by 4 fleet segments.

# Sustainable Harvest Indicator (SHI)

Area 27

Out of 8 fleet segments active in 2019, SHI indicator values were available for 6.

According to the criteria in the 2014 Commission guidelines, the SHI indicator values for 2 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 four fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 87.28% of the total value of the landings in 2019 provided by MS, and were as follows:

• 4 fleet segments may be out of balance with their fishing opportunities.

Trends were available for three fleet segments:

- 2 fleet segments displayed an increasing (deteriorating) trend,
- 1 fleet segment displayed no clear trend.

## **OFR**

The two 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 2019 provided by MS, and were as follows:

- 1 fleet segment may be *in balance* with their fishing opportunities.
- 1 fleet segment may be *out of balance* with its fishing opportunities.

Trends were available for the two fleet segments:

- 1 fleet segment displayed an increasing (deteriorating) trend,
- 1 fleet segment displayed no clear trend.

#### Stocks at Risk Indicator (SAR)

SAR indicator was available for 7 fleet segments in NAO and 2 in OFR:

#### Area 27

- 4 fleet segments appear to be in balance.
- 2 fleet segments appear out of balance with 1 stock-at-risk.
- 1 fleet segment appear out of balance with 2 stocks-at-risk.

# <u>OFR</u>

- 1 fleet segment appear to be in balance.
- 1 fleet segments appear out of balance with 3 stocks-at-risk.

## Number of Overharvested Stocks (NOS)-Area27

The number of fleet segments and the number of stocks classified as overharvested (NOS) expressed as a proportion (%) of the total number of stocks exploited by such fleet segments are given in the table below:

Proportion of NOS	0-25%	25-50%	50-75%	75-100%
N of fleet segments			1	5

# Economic Dependency Indicator (EDI)-Area 27

The numbers of segments corresponding to varying levels of economic dependency (EDI) values are 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	3

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

RoI was calculated for 4 segments:

- 2 segments were in balance with their fishing opportunities,
- 1 segment was out of balance with its fishing opportunities,
- 1 segment was found to be insufficiently profitable.

Trends were calculated for the 4 segments:

- 3 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 4 segments:

- 3 segments were in balance with their fishing opportunities,
- 1 segment was out of balance with its fishing opportunities,

Trends for the 4 segments were as follows:

- 2 segments displayed an increasing trend,
- 1 segment displayed a decreasing trend,
- 1 segment displayed no clear trend.

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

The data required to calculate VUR (i.e., maximum days-at-sea) were provided by the MS and thus, VUR<sub>220</sub> is not analysed here.

VUR was calculated for 10 segments\*:

- 9 segments were in balance with their fishing opportunities,
- 1 segment was *out of balance* with its fishing opportunities.

Trends were calculated for 8 segments:

• 6 segments displayed no clear trend,

2 segments displayed a null/flat trend.

\*The VUR value calculated for an aggregate segment (cluster) is applied to all the fleet segments in the cluster.

## The Inactive Fleet Indicators

In 2019, 6 vessel length segments had inactive vessels (VL0010, VL1012, VL1218, VL1824, VL2440 and VL40XX).

The Lithuanian inactive fleet accounted for 39.6% of the total number of vessels, 8.7% of the total GT and 15.9% of the total kW.

At the national level, inactive vessels accounted for more than 20% of the fleet in 2 categories (# and kW), and thus, was *out of balance* and displayed increasing (deteriorating) trends in all 3 categories (#, GT and kW)

The segments with the highest level of inactivity were the VL0010 segment at 24.3% in terms of number of vessels and VL40XX with 5.2% of GT and 8.5% of kW.

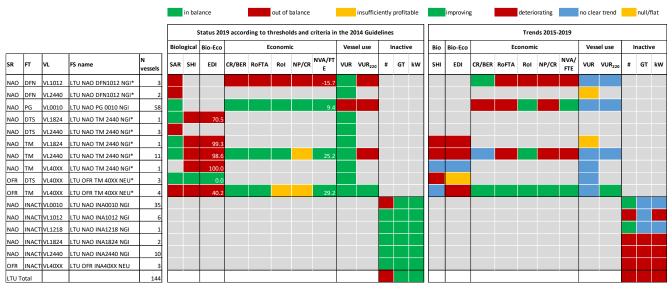
# By vessel length group:

- 1 segment was out of balance in terms of vessel numbers,
- 5 segments were in balance in all 3 categories.

#### Synthesis of indicators and trends

Based on biological indicator values for 2019 and trends over 2014-2019, and according to the criteria in the Commission guidelines, eight fleet segments appear not to be in balance with fishing opportunities. Five of the fleet segments are considered out of balance for SHI, and four are out of balance according to SAR only one of which is out of balance for SHI. The MS fleet report agrees with EWG 21-16 in this analysis. The economic indicators suggest that the fleet segments NAO PG 0010, NAO TM 2440 and the distant fleet OFR TM 40XX are in balance with fishing opportunities, while NAO DFN 1012 is out of balance.

The above observations are largely in line with the assessment of balance in the Member States' fleet report submitted in 2020 where the MS proposes an action plan for the fleet segments NAO DFN 1012 and NAO DTS 2440. However, it does not propose any action plan for the distant fleet segment OFR TM 40XX.



# Comparison of indicator values

A comparison Indicator values\_computed by the EWG 21-16 and those in the fleet report submitted by 31 May 2021 are given in Annex II. Points of note for each indicator are listed below.

# Sustainable Harvest Indicator (SHI)

In the MS annual fleet report the SHI has been provided for the reference year 2019.

Despite the fact that the Lithuanian Baltic Sea fleet in 2019 consisted of 9 fleet segments SHI was estimated for only 4 of these segments, all of which were out of balance. The four segments for which SHI was estimated are NAO DTS 1824, NAO TM 1824, NAO TM 2440 and NAO TM 40XX.

A comparison between indicator values in the MS Fleet reports for 2021 and the values for equivalent fleet segments as estimated by EWG 21-16 indicate that the status of the 4 segments for which a comparison can be made remains the same. There are similar outputs for all values. All fleet segments are out of balance.

The SHI values for 2 of the segments estimated for the period 2013-2019 show an increasing trend, while one segment shows no clear trend.

The MS did not provide SHI values for the OFR fleet segments. The EWG estimated that one OFR segment was in balance while the second was out of balance.

## Stocks at Risk Indicator (SAR)

In the MS annual fleet report the SAR has been provided for the reference years 2017 – 2019 for 8 NAO fleet segments, and 2 OFR segments.

The comparison between SAR reported in the MS annual fleet report for NAO segments and those estimated in the framework of EWG 21-16 revealed the same outputs for all values bar two. The EWG 21-16 SAR value indicates two segments, NAO DTS 1824 and NAO TM 2440, as being in balance where the MS assessed them as out of balance.

For the OFR fleet segments the MS and EWG 21-16 are in agreement on their status, with one fleet segment in balance and the second segment out of balance.

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

In the MS annual fleet report the CR/BER ratio has been provided for the reference years 2015-2019 for 4 fleet segments.

A comparison between indicator values in the MS Fleet reports for 2021 and the values for equivalent fleet segments as estimated by EWG 21-16 for the year 2019 show the same estimations for all the fleet segments. Data has not been presented by the MS for the fleet segment NAO DTS 2440, as it had been in previous years, instead the MS has listed this information as confidential.

Three segments, NAO TM 2440, NAO PG 0010 and OFR TM 40XX were all found to be in balance, while NAO DFN 1012 was found to be out of balance.

Based on EWG 21-16 analysis the fleet segments NAO DFN 1012 and OFR TM 40-XX show an increasing trend for the period 2015-2019, whereas the small-scale fleet NAO PG 0010 shows a decreasing trend, and NAO TM 2440 shows no clear trend.

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

In the MS annual fleet report RoFTA indicator is provided for the reference years 2015-2019 for 4 fleet segments, whereas ROI, which takes into account the intangible assets is only estimated since 2017 due to the fact that Lithuania introduced a system of transferrable fishing rights in December 2016. ROI is estimated for the same fleet segments as RoFTA.

EWG 21-16 estimated RoFTA and ROI for four fleet segments. Three of these segments were in agreement between the MS fleet report and the EWG 21-16 calculations. For the fleet segment NAO TM 2440 however MS calculations are nearly double those estimated by the EWG. EWG 21-16 provided no data for the fleet segment NAO DTS 2440, and in the MS annual report information in this segment is reported as confidential.

Potential overcapacity in MS report is indicated for the distant fleet segment (OFR TM 40XX) since RoFTA has been negative during the period 2015-2018 and ROI for 2017-2018. In 2019 however, RoFTA turned positive for this segment, showing the segment is in balance, however ROI was found to be insufficiently profitable. Potential overcapacity is still indicated for NAO DFN 1012, the segment is out of balance for both RoFTA and ROI, The NAO TM 2440 segment shows long-term economic efficiency and is in balance for both RoFTA and ROI. During the period 2015-2019 RoFTA had a negative value only for 2017. The small-scale fleet segment, NAO PG 0010, operating in coastal areas indicate long-term capital productivity since both indicators RoFTA for the period 2015-2019 and ROI for the period 2017-2019) are well above the risk-free long-term interest rate.

Based on EWG 21-16 analysis the fleet segments NAO DFN 1012, NAO PG 0010 and NAO TM2440 operating in Baltic Sea show a decreasing trend for the period 2015-2019 for RoFTA, while the fleet segment OFR TM 40XX shows an increasing trend. For ROI only NAO DFN 1012 is showing a decreasing trend, while for the other three segments the trend is increasing.

#### The Vessel Use Indicator (VUR) and/or Vessel Use Indicator 220 (VUR220)

In the MS annual fleet report the VUR Indicator was calculated as the ratio between the average effort per vessel in a fleet segment and the observed maximum effort expended by a vessel in the segment for each length group and gear type. The MS says that the theoretical maximum days at sea (220 days) cannot be used for the small-scale fleet segments due to part time/seasonal fishing activities and thus, it did not calculate the VUR<sub>220</sub>.

EWG 21-16 only reported VUR<sub>220</sub> information for four fleet segments.

Data from EWG 21-16 agree with the data provided by the MS, and show that all fleet segments appear to be in balance, apart from NAO PG 0010. EWG 21-16 data indicates there is no clear trend in the data for any fleet segment, whereas the MS assesses the data as showing an increasing trend for four fleet segments.

#### **Inactive Fleet Indicator**

Inactive vessels have been reported as number, GT and kW in the MS annual fleet report. EWG 21-16 estimates that all indicators are in balance, apart from the number of vessels in NAO INA0010 which is out of balance.

This indicator is decreasing in the number of vessels category for two fleet segments, increasing in all categories for three segments and showing no clear trend in the GT and kW categories for three segments.

#### Assessment of fleet report

The fleet report submitted by Lithuania provides sound and comprehensive analysis of balance between fleet capacity and fishing opportunity of all fleet segments in line with the Commission guidelines COM(2014)545, apart from the fact that no action plan is proposed for the distant water fleet segment (OFR TM 40XX) for which the SHI and SAR indicate potential imbalance.

A comparison between indicator values in the MS Fleet reports for 2021 and the values for equivalent fleet segments, as estimated by EWG 21-16, show that many of the indicators for all the segments for which a comparison can be made are similar. The majority of indicators are showing similar values and trends.

The current Lithuanian management system is considered by the MS not to be functioning well in attempting to secure a balance between fishing opportunities and capacity and an action plan has therefore been proposed.

Specifically, the 2021 annual report on sustainable balance between fishing capacity and fishing opportunities of Lithuania shows an imbalance in fleet segment NAO DFN 1012, which consists of 10-12 m length vessels, fishing by passive gears in Baltic Sea coastal area, and of 24-40 m length vessels, fishing by passive gears (gillnets) in Baltic Sea. The report cites the main reason of this imbalance being due to the very poor status of Eastern Baltic cod resources. These sectors show that all the indicators (biological, economic and technical), are out of balance, except for the economic indicators (CR/BER, RoFTA/ROI and NPM) for the fleet segment NAO TM 2440.

Another fleet segment which had previous problems of overcapacity and economic inefficiency is the distant fleet (OFR TM 40XX) which operates outside EU waters. In this case the biological indicators appear out of balance, however the economic and technical indicators appear to be in balance.

An action plan has been proposed for the Baltic Sea fleet but no action plan is proposed for the distant water fleet segment.

### Measures in action plans

The eastern Baltic cod is in poor condition. Due to the importance of this stock for the landings for the fleet segments NAO DFN 1012, NAO DTS 2440 and NAO TM 2440 operating in Baltic Sea the following measures have been proposed by Lithuania in order to reduce the pressure on the stock:

- System of transferable fishing concessions (TFC) as an effective tool to address overcapacity. In Lithuania the TFC system was introduced in 2016. MS says that it is too early to evaluate the effectiveness of this measure.
- Scrapping scheme with public compensation for permanent cessation of fishing for reducing overcapacity, if relevant amendment of Regulation (EU) No. 508/2014 allows it.

With the information currently available, it is not possible to judge the extent to which the proposed measures are likely to reduce pressure on the eastern Baltic cod stock.

1.3.15 Malta (MLT)

### Overview of indicator findings

Area 37

There were 23 fleet segments in 2019, of which 18 were active. Of the 18 active segments, landings and economic data were provided aggregated in 10 fleet segments.

# Sustainable Harvest Indicator (SHI)

Out of 10 active fleet segments in 2019, SHI indicator values were available for 10.

According to the criteria in the 2014 Commission guidelines, the SHI indicator values for 8 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 2 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 28.57% of the total value of the landings in 2019 provided by MS, and were as follows:

• 2 fleet segments may be *in balance* with their fishing opportunities.

Trends were available for the 2 fleet segments:

- 1 fleet segment displayed a decreasing (improving) trend.
- 1 fleet segment displayed no clear trend.

# Stocks at Risk Indicator (SAR)

SAR indicator was available for 10 fleet segments in 2019

- 5 fleet segments may be in balance with their fishing opportunities.
- 5 fleet segments with 1 stock-at-risk may not be in balance with their fishing opportunities.

## Number of Overharvested Stocks (NOS)

The number of fleet segments and the number of stocks classified as overharvested (NOS) expressed as a proportion (%) of the total number of stocks exploited by such fleet segments are given in the table below.

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

#### Economic Dependency Indicator (EDI)

The numbers of segments corresponding to varying levels of economic dependency (EDI) values are shown in the table below. Fleet segments reported are those for which  $F/F_{msy}$  is calculated and landings are available.

EDI value	0-25%	25-50%	50-75%	75-100%
N of fleet segments	10			

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

RoI was calculated for 9 segments:

- 6 segments were in balance with their fishing opportunities,
- 3 segments were *out of balance* with their fishing opportunities.

Trends could be calculated for 7 segments:

- 6 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 10 segments:

- 6 segments were in balance with their fishing opportunities,
- 4 segments were *out of balance* with their fishing opportunities.

# Trends could be calculated for 10 segments:

- 5 segments displayed an increasing trend,
- 3 segments displayed a decreasing trend,
- 2 segments displaye no clear trend.

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

The data required to calculate VUR (i.e., maximum days-at-sea) were provided by the MS and thus, VUR<sub>220</sub> is not analysed here.

# VUR was calculated for 18 segments\*:

- 11 segments were in balance with their fishing opportunities,
- 7 segments were *out of balance* with their fishing opportunities.

# Trends could be calculated for 14 segments:

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

# The Inactive Fleet Indicators

In 2019, 5 vessel length segments had inactive vessels (VL0006, VL0612, VL1218, VL1824 and VL2440).

The Maltese inactive fleet accounted for 25.2% of the total number of vessels, 19.5% of the total GT and 22.5% of the total kW. At the national level, inactive vessels accounted for more than 20% of the fleet in vessel number and thus, was *out of balance* but displayed decreasing (improving) trends.

The segments with the highest level of inactivity were the VL0006 segment with 14% in terms of number of vessels, the VL0612 segment with 10.7% of the kW and VL1824 with 9.3% of GT.

## By vessel length group:

- All segments were in balance in all 3 categories (#, GT and kW),
- 3 segments displayed decreasing or no clear trends in all 3 categories (#, GT and kW).

### Synthesis of indicators and trends

<sup>\*</sup>The VUR value calculated for an aggregate segment (cluster) is applied to all the fleet segments in the cluster.

Based on indicator values for 2019 and trends over 2015-2019 and according to the criteria in the Commission guidelines, almost half of the fleet segments appear to be out of balance with their fishing opportunities. The fleet segments HOK1218 NGI and HOK1824 NGI\* may be considered in balance with fishing opportunities despite 1 identified SAR in each of the segments, because the SHI and economic indicator values do not indicate imbalance. Additionally, in HOK1824 NGI the trend in SHI value is decreasing (improving). No SHI-value is meaningful for MGO1824 NGI\*, but the remaining indicators (except for VUR220) indicate that this segment may be in balance with its fishing opportunities. In terms of economic and technical indicators, HOK1218 NGI, HOK1824 NGI, MGO1824 NGI and PS1824 NGI segments appear to be in balance for CR/BER, RoFTA, ROI and VUR. The PGP0006 NGI segment seems to be out of balance for the same indicators. Increasing trends appear in CR/BER, RoFTA and ROI for fleet segments HOK1824 NGI and PGP0612 NGI.

These observations, based on economic and technical indicators, are largely in line with the assessment of balance in the Member States' fleet report submitted in 2021.

						in balance out of balance insufficiently profitable					improving	3		deterio	rating		no clea	r trend	ı	null/flat	_								
						Status 2019 according to thresholds and criteria in the 2014 Guidelines										Trend	ls 2015-	2019											
					Biolo	ogical	Bio-Eco		Ec	onomi	с		Vess	el use	lr	active	•	Bio Bio-Eco Economic				Vessel use Inactiv		active					
SR	FT	VL	FS name	N vessels	SAR	SHI	EDI	CR/BER	RoFTA	Rol	NP/CR	NVA/FT E	VUR	VUR <sub>220</sub>	#	GT	kW	SHI	EDI	CR/BER	RoFTA	RoI	NP/CR	NVA/ FTE	VUR	VUR <sub>220</sub>	#	GT kV	v
MBS	DTS	VL1824	MLT MBS DTS2440 NGI*	8																									
MBS	DTS	VL2440	MLT MBS DTS2440 NGI*	5								15.6																	
MBS	нок	VL1218	MLT MBS HOK1218 NGI	12			1.6					10.7																	
MBS	нок	VL1824	MLT MBS HOK1824 NGI	18			0.7					26.5																	
MBS	MGO	VL0612	MLT MBS MGO0612 NGI	16								0.5																	
MBS	MGO	VL1218	MLT MBS MGO1824 NGI*	4																									
MBS	MGO	VL1824	MLT MBS MGO1824 NGI*	1								9.4																	
MBS	PMP	VL1824	MLT MBS MGO1824 NGI*	1																									
MBS	DFN	VL0006	MLT MBS PGP0006 NGI*	5																									
MBS	PGP	VL0006	MLT MBS PGP0006 NGI*	295								-0.5																	
MBS	нок	VL0006	MLT MBS PGP0006 NGI*	6																									
MBS	PGP	VL0612	MLT MBS PGP0612 NGI*	118								8.7																	
MBS	нок	VL0612	MLT MBS PGP0612 NGI*	36																									
MBS	PMP	VL0006	MLT MBS PMP0006 NGI	25								1.4																	
MBS	PMP	VL0612	MLT MBS PMP0612 NGI	127								3.4																	
MBS	PS	VL1218	MLT MBS PS 1824 NGI*	2																									
MBS	PS	VL1824	MLT MBS PS 1824 NGI*	1								83.9																	
MBS	PS	VL2440	MLT MBS PS 1824 NGI*	1																									
MBS	INACT	VL0006	MLT MBS INA0006 NGI	128																									4
MBS	INACT	VL0612	MLT MBS INA0612 NGI	92																									
MBS	INACT	VL1218	MLT MBS INA1218 NGI	2																									
MBS	INACT	VL1824	MLT MBS INA1824 NGI	6																									
MBS	INACT	VL2440	MLT MBS INA2440 NGI	2																									
MLT 1	otal			911																									

# Comparison of indicator values

A comparison Indicator values computed by the EWG 21-16 and those in the fleet report submitted by 31 May 2021 are given in Annex II. Points of note for each indicator are listed below.

# Sustainable Harvest Indicator (SHI)

No SHI-values were presented in the MS fleet report for the reference year 2019. The explanation given in the MS fleet report is that the necessary information from relevant stock assessments was not available before the deadline for submission of the fleet report 2021.

#### Stocks at Risk Indicator (SAR)

The MS annual fleet report did not provide information for SAR in the reference year 2019. A general statement is made that overall, the SAR indicator is not available for Malta for 2012-2018, since during this period, the Maltese fleet did not exploit any stocks at high biological risk as defined by the 2014 indicator guidelines (COM (2014) 545 Final), with the exception of one stock, swordfish in the Mediterranean. However, no explanation is given, why no information on SAR is available for the reference year 2019.

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

The comparison between CR/BER reported in the MS annual fleet report and those estimated in the framework of EWG 21-16 revealed similar outputs for most values.

The exception was segments MLT MBS DTS2440 NGI\* for which the status in the EWG 21-16 estimation was "in balance" and for which the MS annual report indicated "out of balance" and MLT MBS PGP0612 NGI\* which was assessed as out of balance in EWG 21 – 16 and as in balance in Maltese fleet report.

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

The comparison between ROI reported in the MS annual fleet report and those estimated in the framework of EWG 21-16 revealed similar outputs for most values.

The only exception was the fleet MLT MBS DTS2440 NGI\*, for which the status in the EWG 21-16 estimation was "in balance" and for which the MS annual report indicated "out of balance".

#### The Vessel Use Indicator (VUR) and/or Vessel Use Indicator 220 (VUR220)

The comparison between VUR reported in the MS annual fleet report and those estimated in the framework of EWG 21-16 revealed the same outputs for all values.

Over the period 2014-2018 no trend in VUR was observed for HOK VL 1218, HOK VL1824 and MGO VL0612, while a declining (worsening) trend is observed for PMP VL0006 and PMP VL0612.

# Inactive Fleet Indicator

The comparison between inactive fleet indicator reported in the MS annual fleet report and those estimated in the framework of EWG 21-16 revealed same outputs for all values in 2020.

The trend analyzed for the period 2014-2018 shows a decreasing trend for three inactive segments. For two of the segments there is no trend in terms of number of vessels.

## Assessment of fleet report

The fleet report submitted by Malta provides sound and comprehensive analysis of balance between fleet capacity and fishing opportunity for all fleet segments and is generally in line with the Commission guidelines COM(2014)545.

Although SHI- values for the reference year 2019 were not provided in the fleet report, the reasons why are explained by the Member State. However, no reasons are given for not providing SAR-values for the reference year 2019.

Since no discrepancies were raised by the STECF in the previous (EWG 20-11) report, no specific issues were addressed by the MS in its 2021 fleet report. However, the EWG 20-

11 observation that the action plan accompanying the fleet report for 2019 submitted in 2020, has not been acknowledged or addressed in the 2021 fleet report. The EWG 20-11 observation was that the action plan was largely a statement of intent to improve monitoring activities that are not time-bound and the objectives and targets are unclear.

No new action plan is proposed for fleet segments that may not be in balance with their fishing opportunities. However, the action plan presented with the fleet report for 2019 is resubmitted.

The action plan was compiled by taking into consideration the trend analysis of the economic performance of the Maltese fishing fleet and the trend analysis of the two economic indicators for the years 2008-2019. This consideration is suggested in the 2014 guidelines (COM (2014) 545 Final), whereby it states that the Common Fisheries Policy refers to balance (and imbalance) over time rather than one single year. Hence Malta considered several years rather than a single year when compiling the action plan.

# Measures in action plan

The proposed action plan is still largely a statement of intent to improve monitoring activities that are not time-bound. The objectives and targets are not sufficiently explicit and are therefore unclear.

In the absence of clearly stated objectives and targets and more detail of the specific measures to be implemented, EWG 21-16 is unable to comment on the likely effects of the proposed measures. A more detailed description of the objectives (i.e. areas, species) for the DFN and FPO segments would allow for a proper assessment on the likely effects of the proposed measures. A thorough review of the results of the proposed conservation measures for DFN and FPO segments aimed at increasing biomass by 2020 conducted by the MS and presented in next year's fleet report would be helpful in assessing the suucess of the proposed action plan.

### 1.3.16 Netherlands (NLD)

# Overview of indicator findings

#### Area 27

There were 30 fleet segments in 2019, of which 24 were active. Of the 24 active segments, landings and economic data were provided aggregated for 11 fleet segments.

#### Sustainable Harvest Indicator (SHI)

Out of 24 active fleet segments in 2019, SHI indicator values were available for 11.

According to the criteria in the 2014 Commission 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 6 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 71.75% of the total value of the landings in 2019 provided by MS, and were as follows:

- 1 segment may be in balance with its fishing opportunities;
- 5 segments may be *out of balance* with their fishing opportunities.

Trends were available for 5 fleet segments:

- 2 segments displayed a decreasing (deteriorating) trend,
- 4 segment displayed no clear trend.

# Stocks-at-Risk Indicator (SAR)

SAR indicator was available for 11 fleet segments in 2019. According to the criteria in the 2014 Balance Indicator Guidelines, 2019 SAR indicator values indicate:

- 5 segments may be in balance with their fishing opportunities
- 1 segment with 3 stocks-at-risk,
- 2 segments with 2 stocks-at-risk,
- 3 segments with 1 stock-at-risk

# Number of Overharvested Stocks (NOS)

The number of fleet segments and the number of stocks classified as overharvested (NOS) expressed as a proportion (%) of the total number of stocks exploited by such fleet segments are given in the table below.

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

#### Economic Dependency Indicator (EDI)

The numbers of segments corresponding to varying levels of economic dependency (EDI) values are shown in the table below. Fleet segments reported are those for which  $F/F_{msy}$  is calculated and landings are available.

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

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

RoI was calculated for 11 segments:

- 7 segments were in balance with their fishing opportunities,
- 4 segment was *out of balance* with their fishing opportunities.

Trends were calculated for 11 segments:

- 6 segments displayed an increasing trend,
- 5 segments displayed a decreasing trend.

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

CR/BER was calculated for 11 segments:

- 7 segments were *in balance* with their fishing opportunities
- 4 segment was out of balance with their fishing opportunities.

Trends were calculated for 11 segments:

- 5 segments displayed an increasing trend,
- 6 segments displayed a decreasing trend.

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

The data required to calculate VUR (i.e., maximum days-at-sea) were provided by the MS and thus, VUR<sub>220</sub> is not analysed here.

# VUR was calculated for 24 segments:

- 9 segments were in balance with their fishing opportunities,
- 15 segments were *out of balance* with their fishing opportunities.

# Trends were calculated for 11 segments.

- 1 segment displayed an increasing trend.
- 5 segments displayed a decreasing trend.
- 15 segments displayed no clear trend.

#### The Inactive Fleet Indicators

In 2019, 6 vessel length classes had inactive vessels (VL0010, VL1012, VL1218, VL1824, VL2440 and VL40XX).

The Dutch inactive fleet accounted for 28.5% of the total number of vessels, 4.8% of the total GT and 8.2% of the total kW. At the national level, inactive vessels accounted for more than 20% of the fleet in vessel number and thus, was *out of balance* and displayed an increasing (deteriorating) trend.

The segment with the highest level of inactivity is the VL0010 segment with 19.2% of the number of vessels.

#### It was reported that:

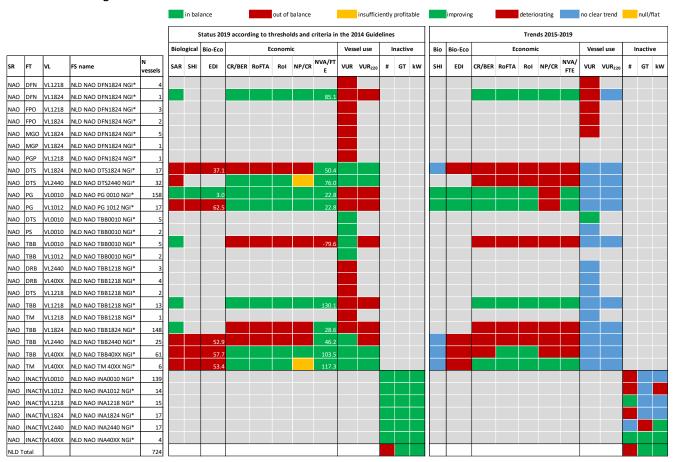
- All fleet segments were in balance for the number of vessels, the GT and the kW,
- In terms of inactive vessels, trends could be calculated for all segments.
   Increasing (deteriorating) trends were recorded for VL0010, VL1012 and VL1824.
   Decreasing (improving) trends were recorded for VL1218, and VL40XX. No trend was recorded for VL2440.

# Synthesis of indicators and trends

Based on indicator values for 2019 and trends over 2015-2019 and according to the criteria in the Commission guidelines, the majority of fleet segments appeared to be out of balance or indicate some potential imbalance with fishing opportunities. In particular, SAR, SHI, ROI, RoFTA and CR/BER indicators suggest that segments DTS VL1824 and TBB VL2440 are not in balance with a worsening situation (decreasing trend) for ROI, RoFTA and CR/BER. The PG VL1012, TBB VL2440 and TBB VL40XX segments indicate some potential imbalance according to the SHI and SAR values, although these segments display good economic performance and increasing trends in RoFTA and ROI. Exceptions exist for fleet segments DFN VL1824, PG VL0010 and TBB VL1218, where fleets appear to be in balance for SAR, CR/BER, RoFTA and ROI and with an increasing trend for ROI, RoFTA and CR/BER.

<sup>\*</sup>The VUR value calculated for an aggregate segment (cluster) is applied to all the fleet segments in the cluster.

The above observations are largely in line with the assessment of balance in the Member States' fleet report submitted in 2021 although no action plan was proposed for imbalanced segments.



#### Comparison of indicator values

A comparison Indicator values\_computed by the EWG 21-16 and those in the fleet report submitted by 31 May 2021 are given in Annex II. Points of note for each indicator are listed below.

## Sustainable Harvest Indicator (SHI)

In the MS annual fleet report the SHI has been provided for the reference year 2019.

The comparison between biological indicators reported in the MS annual fleet report and those estimated in the framework of EWG 26-11 revealed similar outputs in terms of fleet segment status for SHI for most values segments.

The fleet segment TM 40XX was found to be out of balance in the EWG 21-16 estimates while it was the opposite in the fleet report.

The observed trends in the SHI in the fleet report were similar to those estimated by the EWG 21-16 and indicate an improving situation (decreasing trend for 4 segments and no clear trend for 1 segment.

#### Stocks at Risk Indicator (SAR)

In the MS annual fleet report the SAR has been provided for the reference year 2019.

The comparison between biological indicators reported in the MS annual fleet report and those estimated in the framework of EWG 21-16 revealed some discrepancies in the value of the SAR for 4 fleet segments. EWG 21-16 estimates 3 fleet segments to be out of balance (DTS1824, DTS2440, TM40XX) and for these segments the MS does not provide estimates for the SAR indicator. Conversely, the MS fleet report provides 1 SAR indicator for fleet segment PG0010 indicating it is out of balance whereas, no SAR value was computed by the Expert group.

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

The comparison between CR/BER reported in the MS annual fleet report and those estimated in the framework of EWG 21-16 revealed the same outputs for all values.

Values for the period 2013-2019 are provided accompanied by trend indication for 2 segments (TBB VL1218 and TM VL40XX) with an increasing trend. A non-significant trend at 5% is indicated for the other 9 segments and no comparison on the trend was possible for them.

Trends based on EWG 21-16 calculations for the 11 segments were as follows:

- 5 segments (including TBB VL1218 and TM VL40XX) displayed an increasing trend,
- 6 segments displayed a decreasing trend.

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

The comparison between ROI reported in the MS annual fleet report and those estimated in the framework of EWG 21-16 revealed the same outputs for all values.

Values for the period 2013-2019 are provided accompanied by trend indication for 2 segments (TBB VL1218 and TM VL40XX) with an increasing trend. A non-significant trend at 5% is indicated for the other 9 segments and no comparison on the trend was possible for them.

Trends based on EWG 21-16 calculations for the 11 segments were as follows:

- 6 segments (including TBB VL1218 and TM VL40XX) displayed an increasing trend,
- 5 segments displayed a decreasing trend.

# Net profit margin

The comparison between NPM reported in the MS annual fleet report and those estimated in the framework of EWG 21-16 revealed the same outputs for all values.

Values for the period 2013-2019 are provided accompanied by trend indication for 2 segments (TBB VL1218 and TM VL40XX) with an increasing trend. A non-significant trend at 5% is indicated for the other 9 segments and no comparison on the trend was possible for them.

# The Vessel Use Indicator (VUR) and/or Vessel Use Indicator 220 (VUR220)

The comparison between VUR reported in the MS annual fleet report and those estimated in the framework of EWG 21-16 revealed similar outputs for all values.

Values for the period 2013-2019 are provided. In the MS annual fleet report the VUR Indicator was calculated as the ratio between days at sea and maximum days at sea for each length group and gear type. A table reporting the maximum observed days at sea per fleet segment was included in the MS annual fleet report (Table 12).

VUR was calculated for 11 segments:

- 6 segments were in balance with their fishing opportunities,
- 5 segment was *out of balance* with their fishing opportunities.

Trend assessment for VUR was provided by the MS and showed no clear or no trend.

Trends based on EWG 20-11 calculations based on VUR for the 11 segments were as follows:

- 10 segments displayed no trend (or no trend could be calculated),
- 1 segment displayed decreasing trend.

## Inactive Fleet Indicator

Inactive vessels have been reported as number, GT and kW in the MS annual fleet report, and they revealed similar outputs in term of fleet segment as the ones estimated in the framework of the EWG 21-16 dataset.

# Assessment of fleet report

The fleet report submitted by Netherlands generally provide a sound and comprehensive analysis of the balance between fleet capacity and fishing opportunities for all fleet segments but it is not completely in line with the Commission guidelines COM (2014)545.

Although some of the EWG 20-11 findings are reflected in the fleet report submitted by Netherlands, the report does not contain the information required under point 9 of the Commission guidelines COM (2014)545 which specifies additional information that should be included.

Although some of the fleet segments show indications of imbalance according to the SHI and SAR indicators, the reasons for not considering them as such are explained in the fleet report. For most fleet segments with SHI>1 and/or SAR>0, North Sea sole stock assessment and its different perception based on the 2020 stock benchmark is partly the reason for this result and for setting the TAC levels for 2019. According to the information presented in the Netherlands fleet report, the 2020 situation of North Sea sole stock biomass show that is outside safe biological limits, as for 2019.

Furthermore, the MS points out that at the time the TACs are set, indicators do not consider actual knowledge on the stock the and consideration should be given to revising their calculation.

The current Netherlands management system is considered by the MS to be well functioning in order to secure a balance between fishing opportunities and capacity and no action plan is proposed for any fleet segments. The rationale behind such a judgement is further elaborated in the fleet report.

# Measures in action plans

No new or revised action plans were proposed.

# 1.3.17 Poland (POL)

# Overview of indicator findings

## Area 27

There were 21 fleet segments in 2019, of which 16 were active. Of the 16 active segments, weight of landings was provided aggregated by 10 segments, value of landings and economic data were provided aggregated by 7 fleet segments.

# Sustainable Harvest Indicator (SHI)

Out of the 16 fleet segments active in 2019, landings in value have been provided aggregated into 10 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 2 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 53.14% of the total value of the landings in 2019 provided by MS, and were as follows:

• 2 fleet segments may be out of balance with their fishing opportunities;

Trend was available for 1 fleet segment:

• 1 fleet segment displayed an increasing (deteriorating) trend.

# Stocks at Risk Indicator (SAR)

SAR indicator was available for 9 fleet segments in 2019:

- 3 fleet segments may be in balance with their fishing opportunities,
- 6 fleet segments with 1 stock-at-risk.

## Number of Overharvested Stocks (NOS)

The number of fleet segments and the number of stocks classified as overharvested (NOS) expressed as a proportion (%) of the total number of stocks exploited by such fleet segments are given in the table below.

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

#### Economic Dependency Indicator (EDI)

The numbers of segments corresponding to varying levels of economic dependency (EDI) values are shown in the table below. Fleet segments reported are those for which  $F/F_{msy}$  is calculated and landings are available.

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

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

RoI was not calculated.

RoFTA was calculated for 7 segments:

- 3 segments were in balance with their fishing opportunities,
- 4 segments were *out of balance* with their fishing opportunities.

Trends were calculated for 6 segments:

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

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

CR/BER was calculated for 7 segments:

- 3 segments were in balance with their fishing opportunities,
- 4 segments were *out of balance* with their fishing opportunities.

Trends were calculated for 6 segments:

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

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

VUR was calculated for 16 segments\*:

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

Trends could be calculated for 10 segments:

- 1 segment displayed a decreasing trend,
- 9 segments displayed no clear trend.

### The Inactive Fleet Indicators

In 2019, 5 vessel length segments had inactive vessels (VL0010, VL1012, VL1218, VL1824 and VL2440).

The Polish inactive fleet accounted for 4.9% of the total number of vessels, 1.9% of the total GT and 3.1% of the total kW. At the national level, inactive vessels accounted for less than 20% of the fleet in all 3 categories and thus, was *in balance* and displayed a decreasing (improving) trend in all 3 categories.

By vessel length group:

• All segments were in balance for all 3 categories (#, GT and kW),

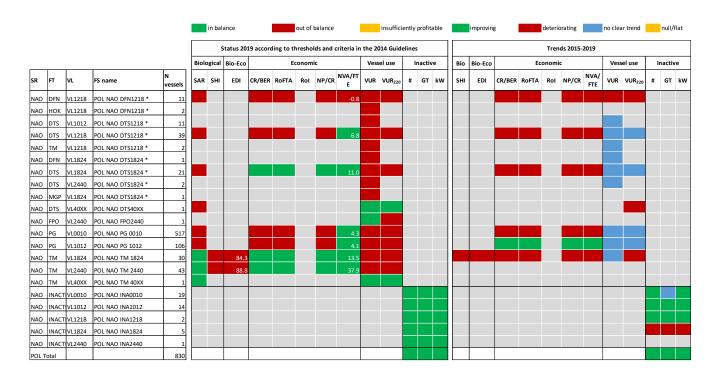
<sup>\*</sup>The VUR value calculated for an aggregate segment (cluster) is applied to all the fleet segments in the cluster.

• 1 segment (VL1824) displayed an increasing (deteriorating) trend in all 3 categories.

### Synthesis of indicators and trends

Based on indicator values for 2019 and trends over 2013-2019 and according to the criteria in the Commission guidelines, the majority of fleet segments appear to be out of balance with fishing opportunities. In particular, all segments with exception of segments PG VL1012, stand out as the economic and biologic indicators imply a decreasing trend. More than half of segments could be also considered as out of balance according to the SAR, RoFTA, CR/BER, and VUR values. As in previous year segments TM VL1824 and TM VL2440 indicate some potential imbalance according to the SHI value for 2019. However, the trend is indicating an improving situation for the SHI.

These observations are largely in line with the assessment of balance in the Member States' fleet report submitted in 2021 and an action plan is proposed for all segments assessed by the Member State to be imbalanced.



# Comparison of indicator values

A comparison Indicator values\_computed by the EWG 21-16 and those in the fleet report submitted by 31 May 2021 are given in Annex II. Points of note for each indicator are listed below.

### Sustainable Harvest Indicator (SHI)

In the Fleet Report submitted by Poland SHI is presented for 2018 - 2020.

The comparison between SHI values reported in the MS annual fleet report and those estimated in the framework of EWG 21-16 was made for 2019 in view of data

comparability and reveals some minor discrepancies. Nevertheless, the outputs in terms of fleet segments status with respect to being in or out of balance are very similar.

Trend comparison is possible only for the segment VL1824 TM, and it is increasing for EWG 21-16 and no trend in the national fleet report.

# Stocks at Risk Indicator (SAR)

In the Fleet Report submitted by Poland SAR is presented for 2018 - 2020.

The comparison between SAR values reported in the MS annual fleet report and those estimated in the framework of EWG 21-16 was made for 2019 in view of data comparability and reveals some discrepancies. In particular, TM VL1824 and TM 2440 were in balance for EWH 21-16, while the fleet report reported these fleet segments as out of balance for SAR.

In the absence of trend for SAR in the framework of EWG 21-16 a comparison between trends is not possible.

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

In the Fleet Report submitted by Poland CR/BER is presented for 2017 - 2019.

Some discrepancies have been observed between CR/BER reported in the MS annual fleet report and those estimated in the framework of EWG 21-16. The same outputs have been approached for 4 segments in both EWG and MS calculation, where for DTS VL1218, DFN VL1824 and PG VL1012 were different.

The trend outputs are the same except for segments PG VL0010 and DTS VL 1824 where the estimated trend by EWG 21-16 is "decreasing" while in the MS annual report it is shown as "increasing". Discrepancies may be due to the difference in the time period used to determine the trends (EWG 21-16 trends are based on a time period of more than three years).

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

RoFTA calculations are not presented within the Fleet Report submitted by Poland. MS calculated and provided ROI. No ROI was calculated by EWG 21-16 for Poland.

In the absence of RoFTA calculations in the MS report, a comparison between trends is not possible.

# The Vessel Use Indicator (VUR) and/or Vessel Use Indicator 220 (VUR220)

A discrepancy has been observed in the calculation of VUR between the MS annual fleet report and the ones estimated in the framework of the EWG 21-16.

Nevertheless, the outputs in terms of fleet segments status are the same with the exception of fleet segments DTS VL40XX, FPO VL2440 and TM VL40XX for which the MS did not provide indicator values.

The estimates for the EWG 21-16 do not provide any clear trend.

#### Inactive Fleet Indicator

Inactive vessels have been reported as number, GT and kW in the MS annual fleet report. However, a discrepancy has been observed in the indicator between the MS

annual fleet report and the ones estimated in the framework of the EWG 21-16. EWG 21-16 suggests this is due to the different method of calculation (Poland presented the indicator as a proportion of inactive vessels of the fleet segment instead of the total fleet). Nevertheless, the outputs in terms of fleet segments status are the same between EWG 21-16 and MS report.

# Assessment of fleet report

Analysis and evaluation of the balance between fishing capacity and fishing opportunities are provided in the Poland fleet report by fleet segment for three consecutive years', as follows:

- biological indicators (SHI and SAR) for 2018 2020;
- economic indicators (ROI and CR/BER) for 2017 2019;
- technical indicators (VUR and Inactive Vessel indicator) for 2018 2020.

With the exception of the distant water fleet (vessels over 40m fishing outside Baltic Sea), the assessment of balance between fleet capacity and fishing opportunities in the report appears sound and comprehensive and largely in line with Commission guidelines COM(2014)545.

In the Fleet Report submitted by Poland, it is noted 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 there is imbalance between fishing capacity and available fish stocks.

The Fleet Report provides information about several management measures carried out by Poland related to permanent cessation of fishing capacity by 40 percent. The current Poland management system is considered by aid for a temporary (6 months) cessation of fishing activities in accordance with Regulation No 508/2014.

## Measures in action plans

EWG 21-16 notes that in the action plan comprehensive analyses have been performed for all indicators. The conclusion in Poland fleet report is that more data and improved methods of analysis and evaluation are needed to interpret the indicators. Over a period of three years, Poland is planning to develop holistic balance assessment methods and a data collection system enabling better structuring and modelling of fleet scenarios. Temporary cessation of fishing activities, as referred to in Article 33 of Regulation (EU) No 508/2014, applies to Baltic Sea fleet segments for period 2014 to 2020.

In the fleet report, Poland has concluded that structural overcapacity exists in its some of the fishing fleet segments and a relevant action plan is provided. Targets, tools and timeframes for the Action plan are clearly stated.

However, with the data and information provided in the fleet report submitted by Poland and the associated action plan, the EWG 21-16 cannot determine whether the measures proposed will achieve the plan's stated objectives or have any influence on the balance between capacity and fishing opportunities.

## 1.3.18 Portugal (PRT)

## Overview of indicator findings

There were 74 fleet segments in 2019, of which 58 were active. Of the 58 active segments, landings and economic data were provided aggregated by 53 fleet segments.

#### Area 27

#### Sustainable Harvest Indicator (SHI)

Out of 55 active fleet segments in 2019 in Area27, SHI indicator values were available for 46.

According to the criteria in the 2014 Commission guidelines, the SHI indicator values for 38 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 8 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 30.17%% of the total value of the landings in 2019 provided by MS, and were as follows:

- 7 fleet segments may be in balance with their fishing opportunities,
- •1 fleet segment may be *out of balance* with their fishing opportunities.

Trends could be calculated for 8 segments:

- 1 fleet segment displayed an increasing (deteriorating) trend,
- 6 fleet segments displayed a decreasing (improving) trend,
- 1 fleet segment displayed no clear trend.

#### Stocks at Risk Indicator (SAR)

SAR indicator was available for 50 fleet segments in 2019.

- 35 segments may be in balance with their fishing opportunities;
- 1 fleet segment with 5 stocks-at-risk,
- 1 fleet segment with 4 stocks-at-risk,
- 1 fleet segment with 3 stocks-at-risk,
- 3 fleet segments with 2 stocks-at-risk,
- 9 fleet segments with 1 stock-at-risk.

# Number of Overharvested Stocks (NOS)

The number of fleet segments and the number of stocks classified as overharvested (NOS) expressed as a proportion (%) of the total number of stocks exploited by such fleet segments are given in the table below.

Proportion of NOS	0-25%	25-50%	50-75%	75-100%
N of fleet segments	10	19	2	2

# Economic Dependency Indicator (EDI)

The numbers of segments corresponding to varying levels of economic dependency (EDI) values are shown in the table below. Fleet segments reported are those for which  $F/F_{msy}$  is calculated and landings are available.

EDI values	0-25%	25-50%	50-75%	75-100%
N of fleet segments	44	2	1	

# Return on Investment (RoI) and/or Return on Fixed Tangible Assets (RoFTA) RoI was not calculated.

RoFTA was calculated for 53 segments:

- 45 segments were in balance with their fishing opportunities,
- 6 segments were out of balance with their fishing opportunities,
- 2 segments were insufficiently profitable.

Trends could be calculated for 52 segments:

- 16 segments displayed an increasing trend.
- 36 segments displayed a decreasing trend.

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

CR/BER was calculated for 53 segments:

- 46 segments were in balance with their fishing opportunities,
- 7 segments were *out of balance* with their fishing opportunities.

Trends could be calculated for 52 segments:

- 13 segments displayed an increasing trend,
- 35 segments displayed a decreasing trend,
- 4 segments displayed no clear trend.

# The Vessel Use Indicator (VUR) and/or Vessel Use Indicator 220 (VUR220)

The data required to calculate VUR (i.e., maximum days-at-sea) were provided by the MS and thus, VUR<sub>220</sub> is not analysed here.

VUR was calculated for all 58 segments\*:

- 38 segments were in balance with their fishing opportunities,
- 20 segments were out of balance with their fishing opportunities,

Trends could be calculated for 52 segments:

- 12 segments displayed an increasing trend,
- 40 segments displayed no clear trend.

\*The VUR value calculated for an aggregate segment (cluster) is applied to all the fleet segments in the cluster.

#### The Inactive Fleet Indicators

In 2019, 16 fleet segments with 6 vessel length segments had inactive vessels (VL0010, VL1012, VL1218, VL1824, VL2440 and VL40XX). Data were provided for the mainland (NGI) Madeira (P2) and Azores (P3) fleets. Only the mainland fleet contained inactive vessels in the VL40XX segment.

The Portuguese inactive fleet accounted for 54% of the total number of vessels, 22.6% of the total GT and 24.2% of the total kW. At the national level, inactive vessels accounted for more than 20% of the fleet in all 3 categories (#, GT and kW), and thus, *out of balance*. Apart from the increasing (deteriorating) trend of VL0010, and the decreasing (improving) trend of VL2440 the other length segments displayed no general clear trends.

#### **OFR**

#### Sustainable Harvest Indicator (SHI)

Out of 2 fleet segments active in 2019, landings in value have been provided aggregated in 2 fleet segments and SHI indicator values were available for both.

According to the criteria in the 2014 Commission guidelines, the SHI indicator values for 2 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)

SAR indicator was available for all the 2 active fleet segments in 2019.

• 2 fleet segments may be in balance with their fishing opportunities.

# Number of Overharvested Stocks (NOS)

The number of fleet segments and the number of stocks classified as overharvested (NOS) expressed as a proportion (%) of the total number of stocks exploited by such fleet segments are given in the table below.

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

## Economic Dependency Indicator (EDI)

The numbers of segments corresponding to varying levels of economic dependency (EDI) values are shown in the table below. Fleet segments reported are those for which  $F/F_{msy}$  is calculated and landings are available.

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

Return on Investment (RoI) and/or Return on Fixed Tangible Assets (RoFTA)
RoI was not calculated.

There are two active fleet segments and RoFTA was calculated for both of them:

- 1 segment (HOK VL2440) was in balance with its fishing opportunities,
- 1 segment (HOK VL40XX) was out of balance with its fishing opportunities.

Trends were calculated for both segments and both of them displayed a decreasing trend.

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

CR/BER was calculated for 2 segments:

- 1 segment was in balance with its fishing opportunities,
- 1 segment was *out of balance* with its fishing opportunities.

Trends could be calculated for both segments.

Both segments displayed a decreasing trend,

#### The Vessel Use Indicator (VUR) and/or Vessel Use Indicator 220 (VUR220)

VUR was calculated for both segments:

• both segments were in balance with their fishing opportunities,

Trends could be calculated for both segments:

- 1 segment (HOK VL2440) displayed an increasing trend,
- 1 segment (HOK VL40XX) displayed no clear trend.

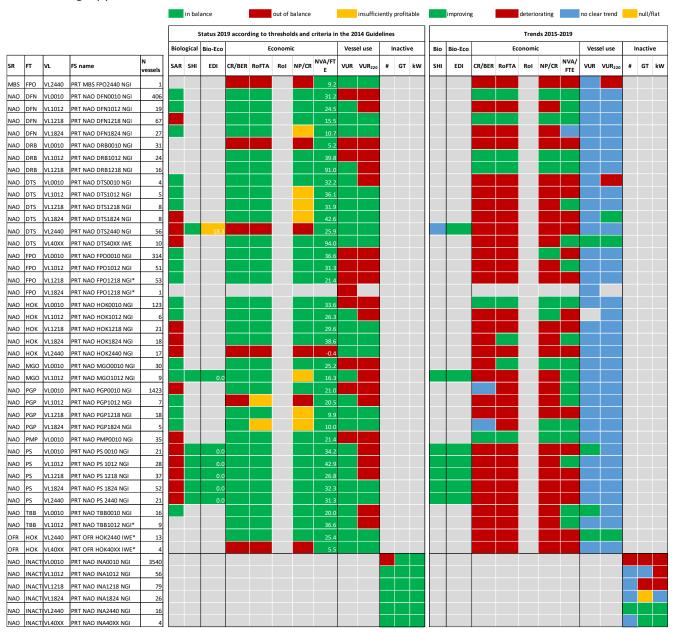
## The Inactive Fleet Indicators

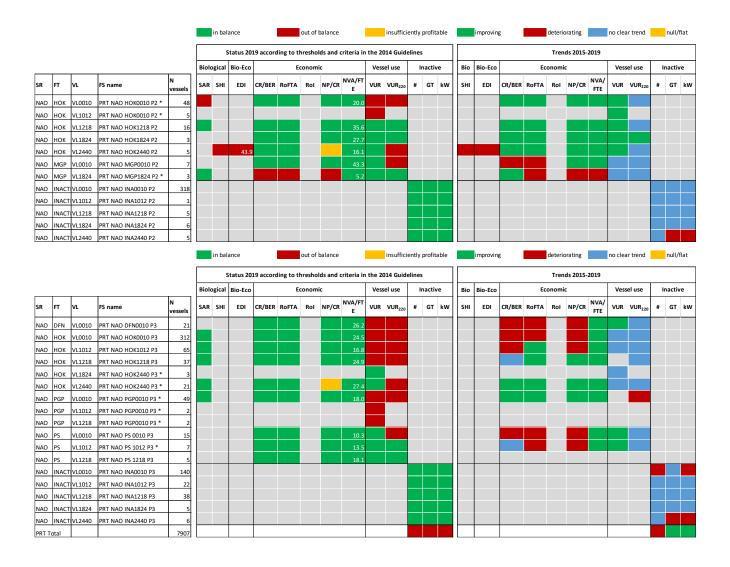
There is no inactive fleet segment in Portuguese fleet in OFR.

## Synthesis of indicators and trends

Based on the STECF indicator estimates for the economic indicators, the majority of fleet segments in the Portuguese fishery are in balance. A general conclusion with regard to the Portuguese fleet about the balance or imbalance with regards to the biological indicators is not possible, due to the low number of available and meaningful values for SHI and SAR. A meaningful SHI value is available for only 30% of the total landings from the Portuguese fleet in area 27.

Based on indicator values for 2019 and trends over 2015-2019 and according to the criteria in the Commission guidelines, an overview of the indicators presents one OFR fleet in balance for all economic indicators and the other appears to be out of balance with fishing opportunities.





# Comparison of indicator values

Indicator values computed by the EWG 21-16 and those in the fleet report submitted by 31 May 2021 are compared in Annex II to this report.

#### Sustainable Harvest Indicator (SHI)

In the Member State report, SHI-values have been presented for the Madeiran fleet segments only.

Although differences exist in the SHI values for segments that could be compared, such differences have no effect on the assessment of balance as the indicator values are based on stocks that comprise less than 40% of the total value of landings by those fleet segments.

Indicator trends were not provided in the fleet report. No comparison was possible.

# Stocks at Risk Indicator (SAR)

In the Portuguese annual fleet report the information has been provided subdivided into the mainland fleet, the Azores and the Madeiran fleets. SAR-values have been presented for the Madeiran fleet segments only. SAR value was provided for 5 segments by the Member State where only one was in accordance with the values computed by the EWG 21-16.

Indicator trends were not provided in the fleet report. No comparison was possible.

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

In the Portuguese annual fleet report the CR/BER-values have been provided for the reference years 2015-2019. The CR/BER ratio was estimated for 37 segments subdivided into the mainland fleet, the Azores and the Madeiran fleets.

There were 53 segments estimated for the EWG 21-16 (16 segments more than in the MS Fleet Report). A comparison between indicator values in MS Fleet Report and data estimated for EWG 21-16 show small discrepancies in values which do not affect the overall results. No significant discrepancies are observed for any of the fleet segments that could be compared.

The estimates for the EWG 21-16 show negative trends for most of the fleet segments. The same is true for the MS fleet Report. It is noted that the small-scale segment DRB VL0010 is the only segment whose CR/BER ratio is below 1 from 2017 to 2020. It could be explained with the part- time vessels activity in the segment.

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

In the Portuguese annual fleet report the RoFTA-values have been provided for the reference years 2017-2020. The RoFTA ratio was estimated for 37 segments subdivided into the mainland fleet, the Azores and the Madeiran fleets.

There were 53 segments estimated for the EWG 21-16 (16 segments more than in the MS Fleet Report). A comparison between indicator values in MS Fleet Report and data estimated for EWG 21-16 show significant discrepancies in values in most segments but it does not affect the final results in any fleet segment. In most cases the values estimated by EWG 21-16 are much higher than those estimated by MS. The MS assessment in the Fleet Report shows the potential over-capitalisation for three fleet segments (DRB0010, DTS1218, HOK2440,) with RoFTA indicator below 0.01 for the year 2019

The estimates for the EWG 21-16 in most of the fleet segments show a decreasing trend. The MS Report show a decreasing trend (period 2017-2020) for only one segment HOK VL2440 where the RoFTA is below zero from 2018 to 2020 but not for 2017.

#### The Vessel Use Indicator (VUR) and/or Vessel Use Indicator 220 (VUR220)

In the Portuguese annual fleet report the VUR -values have been provided for the reference years 2017-2020 subdivided into the mainland fleet, the Azores and the

Madeiran fleets. The VUR ratio was estimated for 35 segments. The VUR assumption was based on max-days-observed.

There were 58 segments estimated for the EWG 21-16 (23 segments more than in the MS Fleet Report). Discrepancies are detected for nearly all segments that could be compared between the EWG 21-16 and MS Fleet Report. The reason for the discrepancies is unknown.

The estimates for the EWG 21-16 do not provide a clear trend.

#### **Inactive Fleet Indicator**

Inactive vessels have been reported in the Portuguese fleet report as number, GT and kW for years 2016 to 2020. The numbers presented in the fleet report are the same to those computed by the EWG. All the fleet segments are in balance except for the vessel length category VL0010 where the inactive vessels reached nearly 45%, in number, of the total vessels of this vessel length category.

Indicator trends were not provided in the fleet report but as the numbers were the same as those used by the EWG, apart from the increasing trend of vessel length VL0010, and the decreasing trend of VL2440, the other length segments displayed no general clear trends.

# Assessment of fleet report

The fleet report submitted by Portugal provides sound and comprehensive analysis of balance between fleet capacity and fishing opportunity of all fleet segments.

Based on the combined analysis of the results of the vessel use, biological sustainability and economic indicators, the MS concludes in the Fleet Report that the Portuguese fleet is in balance with its fishing opportunities in the case of all fleet segments. The rationale for making such a conclusion is not explained in the MS fleet report and the EWG therefore notes that the absence of such a rationale may not be in line with Commission Guidelines.

The current Portuguese management system including measures to control fishing capacity is considered by the MS to be well functioning, in order to secure the balance between fishing opportunities and capacity for all imbalanced-fleet segments and no specific action plan is proposed for segments that appear imbalanced according to specific indicator values.

#### Measures in action plans

No new or revised action plans were proposed.

1.3.19 Romania (ROU)

Overview of indicator findings

Area 37

There were 8 fleet segments in 2019, of which 6 were active. Of the 6 active segments, landings data were provided for all 6 segments while economic data for aggregated by 4 fleet segments.

## Sustainable Harvest Indicator (SHI)

Out of 6 fleet segments active in 2019, landings in value have been provided for 1 fleet segment and SHI indicator values were available for 1.

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 1 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 8.01% of the total value of the landings in 2019 provided by MS, and this fleet segment was out of balance with its fishing opportunities.

## Stocks at Risk Indicator (SAR)

SAR indicator was available for all the 6 active fleet segments in 2019.

According to the criteria in the 2014 Balance Indicator Guidelines, EWG notes that the 2019 SAR indicator values indicate:

- 4 fleet segments may be in balance with their fishing opportunities;
- 2 fleet segments with 1 stock at risk

# Number of Overharvested Stocks (NOS)

The number of fleet segments and the number of stocks classified as overharvested (NOS) expressed as a proportion (%) of the total number of stocks exploited by such fleet segments are given in the table below.

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

# Economic Dependency Indicator (EDI)

The numbers of segments corresponding to varying levels of economic dependency (EDI) values are shown in the table below. Fleet segments reported are those for which F/Fmsy is calculated and landings are available.

EDI value	0-25%	25-50%	50-75%	75-100%
N of fleet segments	5		1	

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

RoI was calculated for 4 segments:

• All 4 segments were in balance with their fishing opportunities.

Trends were calculated for the 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:

• All 4 segments were in balance with their fishing opportunities.

Trends were calculated for 4 segments:

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

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

The data required to calculate VUR (i.e., maximum days-at-sea) were provided by the MS and thus, VUR<sub>220</sub> is not analysed here.

VUR was calculated for 6 segments:

- 2 segments were in balance with their fishing opportunities,
- 4 segments were *out of balance* with their fishing opportunities.

Trends for the 4 segments were as follows:

- 3 segments displayed a decreasing trend,
- 3 segments displayed no clear trend.

#### The Inactive Fleet Indicators

In 2019, 2 vessel length segments had inactive vessels (VL0006 and VL0612).

The Romanian inactive fleet accounted for 14.8% of the total number of vessels, 2.4% of the total GT and 0.2% of the total kW. At the national level, inactive vessels accounted for less than 20% of the fleet and thus, was *in balance* and displayed decreasing (improving) trends in all 3 categories.

The segment with the highest level of inactivity is the VL0612 segment with 12.9% of the number of vessels and 2.3% of the GT.

By vessel length group:

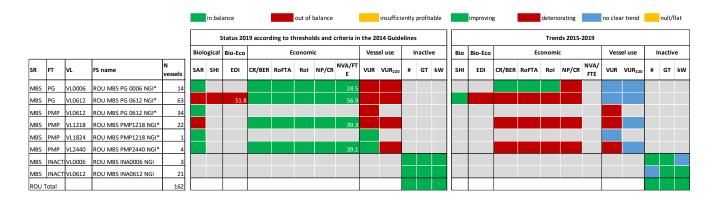
• All segments were *in balance* for all 3 categories and mostly displayed decreasing trends.

# Synthesis of indicators and trends

Based on biological and economic indicator values for 2019 and according to criteria in the Commission guidelines, the majority of the fleet segments appear to be in balance with fishing opportunities although the trend over 2015-2019 shows a worsening situation. Exceptions exist for fleet segment PG VL0612, where SAR and SHI reveal indications of imbalance and fleet segment PMP VL1218, where fleet appear to be out of balance for SAR. Decreasing trends (improving situation) appear for SHI for fleet

segment PG VL0612. CR/BER and RoFTA reveal a decreasing trend in PG VL0612, PMP VL1218 and PMP VL2440 segments.

The above observations are in line with the assessment of balance in the Member States' fleet report submitted in 2021. Based on the SHI, only one fleet segment is out of balance and the trend in the SHI for that segment shows an improving situation.



## Comparison of indicator values

A comparison Indicator values\_computed by the EWG 21-16 and those in the fleet report submitted by 31 May 2021 are given in Annex II. Points of note for each indicator are listed below.

## Sustainable Harvest Indicator (SHI)

In the MS annual fleet report just one segment appears as imbalanced (PG 6-12m). This is in line with the EWG 21-16 outcome for the same fleet segment.

#### Stocks at Risk Indicator (SAR)

SAR indicator values were not calculated for any of the segments because Romanian catches are below 10% of stocks at risk. EWG 21-16 estimated SAR values for all fleet segments, with two of them being out of balance (PG VL-0612, and PMP VL1218) while the others were estimated to be in balance.

Indicator trends were not provided in the fleet report. No comparison was possible.

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

In the MS annual fleet report the CR/BER ratio has been provided for the reference years 2018-2019. The comparison between CR/BER reported in the MS annual fleet report and the values for equivalent fleet segments as estimated by EWG 21-16 for the year 2019 revealed minor discrepancies for all values. These discrepancies do not affect to the result for the balance or imbalance of the fleet segments.

As indicator trends were provided in the fleet report for two years (2018 and 2019) only, no comparison was made with the EWG 21-16 trends.

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

In the MS annual fleet report ROI has been provided for the reference years 2018-2019. The comparison between ROI reported in the MS annual fleet report and the values for equivalent fleet segments as estimated by EWG 21-16 for the year 2019 revealed more significant discrepancies for just one segment. This discrepancy does not affect to the result for the balance or imbalance of the fleet segment.

As indicator trends were provided in the fleet report for two years (2018 and 2019) only, no comparison was made with the EWG 21-16 trends.

# The Vessel Use Indicator (VUR) and/or Vessel Use Indicator 220 (VUR220)

In the MS annual fleet report the VUR Indicator was calculated as the ratio between days at sea and maximum days at sea for each length group and gear type for the reference years 2013-2019. A table reporting the current effort, and the maximum observed days at sea per fleet segment was included in Annex 2 of the MS annual fleet report.

Major discrepancies have been observed in the calculation of VUR between the MS annual fleet report and the ones estimated in the framework of the EWG 21-16 for two segments (PMP VL1824 and PMP VL2440). Such discrepancies affected the assessment of the balance/imbalance of those fleet segments. The EWG 21-16 indicator values suggest that the fleets are in balance whereas fleet report indicates that they are out of balance.

Some discrepancies have been observed in the calculation of VUR between the MS annual fleet report and the ones estimated in the framework of the EWG 21-16 for the remaining fleet segments. These small discrepancies do not affect to the result for the balance or imbalance of the fleet segments.

In the fleet report, indicator trends for each segment is provided as a comparison between two values - the average value for the period 2013-2018 and the value for 2019.

Segments for VUR trend	Increasing	No trend	Decreasing
EWG 21-16	3	3	
MS Fleet Report	5		1

#### Assessment of fleet report

The fleet report submitted by Romania provides sound and comprehensive analysis of balance between fleet capacity and fishing opportunity of all fleet segments for which indicator values were available and is generally in line with the Commission guidelines (COM (2014)545).

According to the assessment made by Romania, the only segment for which SHI is available (PG VL0612) is indicated to be imbalanced. Although EWG 21-16 estimated SAR values for 6 fleet segments, this information was not provided in the fleet report. SAR indicator values were not calculated for any of the segments because Romanian catches are below 10% of stocks at risk.

The report presents an action plan which is similar to that presented with the fleet report for 2019 submitted in 2020. The current action plan includes all fleet segments assessed by the Member State to be out of balance with fishing opportunities and includes two additional segments compared to the action plan submitted in 2020.

## Measures in action plans

The Action plan submitted by Romania was compiled based on analysis of the economic and technical indicators only and seems to be an update and continuation of the Action plan from 2020. Most of the proposed measures seem to be the same as those proposed in 2020.

The current Action plan proposes economic and technical measures for six fleet segments (two additional segments compared to the 2020 action plan) and indicates a number of measures that have been selected for each fleet segment. These measures are broadranging and their objectives and targets are unclear.

The time frame for the implementation of the measures proposed is to end in 2022. Some measures are already being implemented by Romania in in accordance with the action plan from 2020. No potential effects of the proposed measures are presented in the MS report. The lack of relevant information means that the EWG is unable to assess of the potential effects of the proposed measures.

#### 1.3.20 Slovenia (SVN)

## Overview of indicator findings

#### Area 37

There were 14 fleet segments in 2019, of which 10 were active. Of the 10 active segments, landings and economic data were provided aggregated by 3 fleet segments.

#### Sustainable Harvest Indicator (SHI)

Out of 3 aggregated segments in 2019, SHI indicator values were available for 3.

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 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 1 fleet segment for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 37.54% of the total value of the landings in 2019 provided by MS, and was as follows:

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

## Stocks at Risk Indicator (SAR)

SAR indicator was available for all the 3 active fleet segments in 2019

According to the criteria in the 2014 Balance Indicator Guidelines, EWG 17-08 notes that the 2019 SAR indicator values indicate:

• 3 fleet segments may be in balance with their fishing opportunities;

## Number of Overharvested Stocks (NOS)

The number of fleet segments and the number of stocks classified as overharvested (NOS) expressed as a proportion (%) of the total number of stocks exploited by such fleet segments are given in the table below.

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

# Economic Dependency Indicator (EDI)

The numbers of segments corresponding to varying levels of economic dependency (EDI) values are shown in the table below. Fleet segments reported are those for which  $F/F_{msy}$  is calculated and landings are available.

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

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

RoI was not calculated.

RoFTA was calculated for 3 segments:

- 2 segments were in balance with their fishing opportunities,
- 1 segment was *out of balance* with their fishing opportunities.

Trends were calculated for 3 segments:

- 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 3 segments:

- 1 segment was in balance with their fishing opportunities,
- 2 segments were *out of balance* with its fishing opportunities.

Trends were calculated for 3 segments:

- 1 segment 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>)

VUR was calculated for 10 segments:

• All 10 segments were *out of balance* with their fishing opportunities.

Trends were calculated for 7 segments:

• All 7 segments displayed no clear trend.

#### The Inactive Fleet Indicators

In 2019, 4 vessel length segments had inactive vessels (VL0006, VL0612, VL1218 and VL1824).

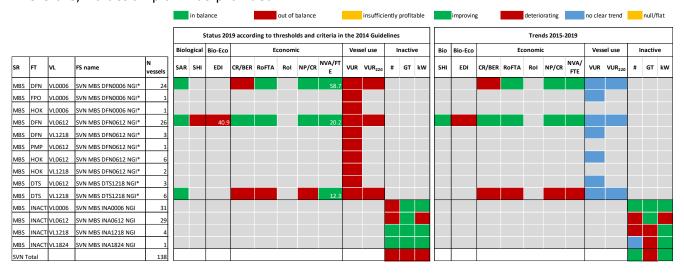
The Slovenian inactive fleet accounted for 47.1% of the total number of vessels, 45.7% of the total GT and 36.6% of the total kW. At the national level, inactive vessels accounted for more than 20% of the fleet in 2 categories (VL0006 and VL0612) in number and thus, were *out of balance* and displayed a decreasing trend for GT.

The segments with the highest level of inactivity were the VL0006 segment with 22.5% of the number of vessels, VL0612 segment with 26.5% of the kW and VL1824 segment with 16.9% of the GT.

## Synthesis of indicators and trends

Based on indicator values for 2019 and trends over 2015-2019 and according to the criteria in the Commission guidelines, the majority of fleet segments appear to be in balance with fishing opportunities when looking at the economic indicators, but not when looking at the technical indicator. The DTS 1218 NGI segment seems out of balance based on all indicators (except for SAR and NVA/FTE) and the situation seems to be worsening (decreasing trend in economic indicators)

The indicator values are largely in line with the assessment of balance in the Member States' fleet report submitted in 2020, but conclusions on the balance of fleet segments differ in some cases. The Member State points out the indicators alone are not suitable for assessing the balance, particularly not for a small-sized fleet such as in Slovenia. Therefore, no action plan was provided.



## Comparison of indicator values

A comparison Indicator values\_computed by the EWG 21-16 and those in the fleet report submitted by 31 May 2020 are given in Annex II. Points of note for each indicator are listed below.

# Sustainable Harvest Indicator (SHI)

Slovenia did not present any values for the SHI in the fleet report. Hence no comparison could be made. The reason given in the fleet report was that a meaningful SHI value could not be computed for any of its fleet segments because less than 40% of their

landings value comprised stocks for which estimates of  $F/F_{MSY}$  were available. None of its fleet segments had more than 40%

In contrast however, the EWG 21-16 computed a meaningful estimate SHI for DFN 0612, because according to the available data almost 40% of landings' value of this fleet segment are from stocks for which an estimate for  $F/_{FMSY}$  is available. The observed discrepancy MS did not take into account the stock assessments carried out by GFCM WGs early in 2021.

Indicator trends were not explicitly commented in the MS fleet report, but time series from 2016 is available for 7 fleet segments in term of percentage landing value of assessed stock. However, in most of the cases SHI cannot be used meaningfully (<40%) and comparison between EWG 21-16 SHI trends and MS fleet report SHI trends was not possible.

# Stocks at Risk Indicator (SAR)

The EWG 21-16 calculated SAR for 3 fleet segments. The MS annual fleet report provided SAR values for five fleet segments, but based on an adjusted formula and other criteria compared to the Commission guidelines COM(2014)545. The MS explained in its report that because most stocks do not have biomass reference points available, they chose as a criterion for a stock to be at risk if the scientific advice was: "reduce fishing mortality". SAR outputs for the 3 fleet segments present both in EWG 21-16 and MS fleet report were the same (in balance).

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

For three fleet segments the CR/BER was calculated by EWG 21-16, only one segment could be compared with the value in the MS fleet report, because the MS used a clustered fleet segmentation for two fleet segments. This was due to the provisions on personal data in accordance with the General Data Protection Regulation, vessels from the DFN VL1218 segment were joined with the vessels in the DFN VL0612 and vessels from the DTS VL0612 segment were joined with the vessels in the DTS VL1218 segment for the calculation of the indicator; therefore the segments share the same indicator value.

An important discrepancy with the EWG 21-16 estimate was found in the indicator values for one fleet segment (DFN VL0006), which indicated the segment to be in balance in MS annual fleet report. The reason for the discrepancy is that the calculation in the fleet report is for a clustered segment and not just the value for DFN VL0006 computed by the EWG 21-16.

Indicator trends were not explicitly commented in the MS fleet report, but time series from 2015 was available for 4 fleet segments. EWG 21-16 trends were similar to MS fleet report trends only or DTS VL1218. Discrepancies in trends observed for DFN fleet segments are possibly related to the different clustering.

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

For three fleet segments the RoFTA was calculated by EWG 21-16, only one segment could be compared with the value in the MS fleet report, because the MS used a clustered fleet segmentation for two fleet segments. This was due to the provisions on personal data in accordance with the General Data Protection Regulation, vessels from the DFN VL1218 segment were joined with the vessels in the DFN VL0612 and vessels from the DTS VL0612 segment were joined with the vessels in the DTS VL1218 segment

for the calculation of the indicator; therefore the segments share the same indicator value.

No discrepancy was found in the indicator for the one fleet segment that was possible to compare.

Indicator trends were not explicitly commented in the MS fleet report, but time series from 2015 was available for 4 fleet segments. EWG 21-16 trends were similar to MS fleet report trends.

## The Vessel Use Indicator (VUR) and/or Vessel Use Indicator 220 (VUR220)

For 10 fleet segments the VUR was calculated for by EWG 21-16. The MS fleet report estimated the VUR only for five segments.

No discrepancy in the indicator outputs was found in the five segments for which a comparison could be made (DFN and DTS).

Indicator trends were not explicitly commented in the MS fleet report, but time series from 2015 was available for 6 fleet segments. Both EWG 21-16 trends and MS fleet report trends did not provide a clear pattern for all fleet segments.

#### Inactive Fleet Indicator

The comparison between the inactive fleet indicator reported in the MS annual fleet report and those estimated in the framework of EWG 21-16 revealed almost the same outputs for all values.

Indicator trends were not explicitly commented in the MS fleet report, but time series from 2008 was available for 4 inactive segments and for the entire Slovenia national inactive fleet. EWG 21-16 trends and MS fleet report trends showed a similar pattern for all inactive segments as well as for the entire MS fleet.

#### Assessment of fleet report

The fleet report submitted by Slovenia provides sound and comprehensive analysis of balance between fleet capacity and fishing opportunity of all fleet segments, providing useful time series of balance indicators.

In general, the Slovenian fleet report submitted by Slovenia is in line with the Commission guidelines COM(2014)545, but the methodology to estimate the SAR indicator was different to that specified in the guidelines.

The current Slovenian management system is considered by the MS to be effective in implementing a balance between fishing opportunities and capacity.

More details are provided in the fleet report for 2020 compared to previous fleet reports on the rationale behind the Member State's assessment that all fleet segments are in balance.

The annual fleet report, states that Slovenia is committed to contribute to achieving of the objectives of the Common Fisheries Policy but, at the same time, it needs to be taken into consideration that Slovenian fishery sector and its landings are extremely low if compared with the other countries (i. e.: Italy and Croatia) exploiting the same stocks. Therefore, the contribution of the Slovenian fisheries sector to achieving MSY can only be proportional to the actual size and impact of the Slovenian fishing fleets.

No particular comments were made by EWG 20-11, which needed a reply or a revision in 2021 Slovenia annual fleet report. However, the MS annual fleet report did not clarify the

differences observed in EWG 20-11 for some indicators outputs (e.g.: CR/BER for DFN VL0006) and did not change the approach to estimate SAR indicator.

# Measures in action plans

No new or revised action plans were proposed.

# 1.3.21 Spain (ESP)

## Overview of indicator findings

There were 107 fleet segments in 2019, of which 88 were active. Of the 88 active segments, landings data were provided for 88 fleet segments and economic data aggregated by 55 fleet segments. Results are presented by main supra-region below.

#### Area 27

There were 59 fleet segments in 2019, of which 49 were active. Of the 49 active segments, landings data were provided for 49 fleet segments and economic data were available for 29 aggregated fleet segments.

# Sustainable Harvest Indicator (SHI)

Out of 49 active fleet segments in 2019, SHI indicator values were available for 47.

According to the criteria in the 2014 Commission guidelines, the SHI indicator values for 34 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 13 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 39.60% of the total value of the landings in 2019 provided by MS, and were as follows:

- 10 fleet segments may not be in balance with their fishing opportunities,
- 3 fleet segments may be in balance with their fishing opportunities.

Trends were available for the 11 fleet segments:

- 5 fleet segments displayed an increasing (deteriorating) trend,
- 6 fleet segments displayed a decreasing (improving) trend.

# Stocks at Risk Indicator (SAR)

SAR indicator was available for 49 fleet segments in 2019:

- 27 fleet segments may be in balance with their fishing opportunities;
- 1 fleet segment with 7 stocks-at-risk may not be in balance with its fishing opportunities,
- 6 fleet segments with 3 stocks-at-risk may not be in balance with their fishing opportunities,
- 5 fleet segments with 2 stocks-at-risk may not be in balance with their fishing opportunities,
- 10 fleet segments with 1 stock-at-risk may not be in balance with their fishing opportunities.

## Number of Overharvested Stocks (NOS)

The number of fleet segments and the number of stocks classified as overharvested (NOS) expressed as a proportion (%) of the total number of stocks exploited by such fleet segments are given in the table below.

Proportion of NOS	0-25%	25-50%	50-75%	75-100%
N of fleet segments	7	21	11	8

#### Economic Dependency Indicator (EDI)

The numbers of segments corresponding to varying levels of economic dependency (EDI) values are shown in the table below. Fleet segments reported are those for which  $F/F_{msy}$  is calculated and landings are available.

EDI Value	0-25%	25-50%	50-75%	75-100%
N of fleet segments	37	5	4	1

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

RoI was calculated for 10 segments:

- 8 segments were *in balance* with their fishing opportunities
- 1 segment was out of balance with its fishing opportunities,
- 1 segment was found to be insufficiently profitable.

Trends could be 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 29 segments:

- 24 segments were in balance with their fishing opportunities,
- 5 segments were *out of balance* with their fishing opportunities.

Trends could be calculated for 26 segments:

- 6 segments displayed an increasing trend,
- 18 segments displayed a decreasing trend,
- 2 segments displayed no clear trend.

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

The data required to calculate VUR (i.e., maximum days-at-sea) were provided by the MS and thus, VUR<sub>220</sub> is not analysed here.

VUR was calculated for the 49 segments\*:

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

Trends could be calculated for 40 segments:

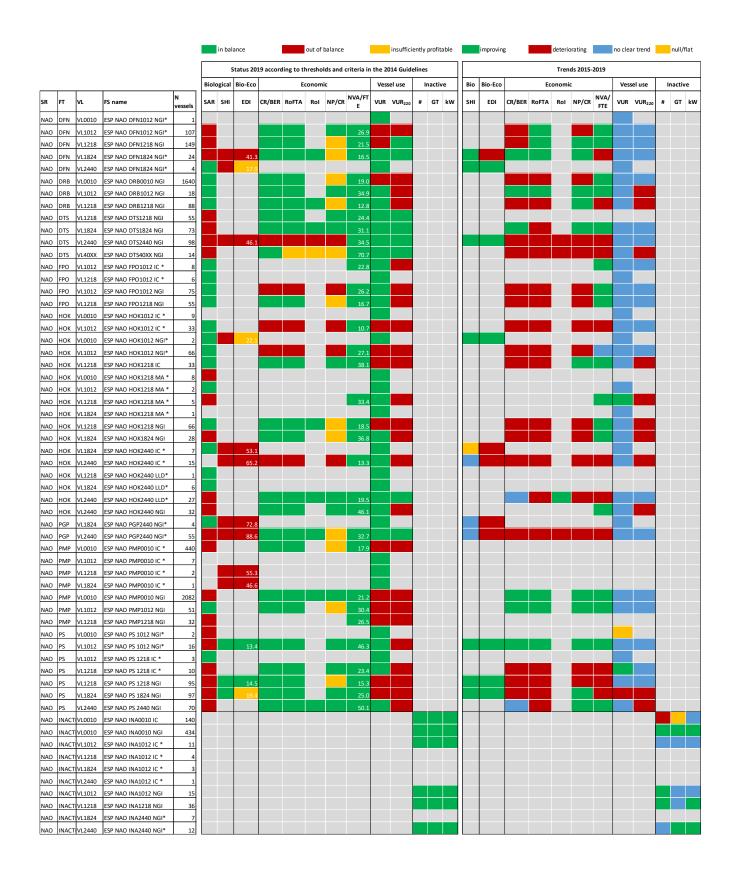
- 2 segments displayed an increasing trend,
- 1 segment displayed a decreasing trend,
- 36 segments displayed no clear trend,
- 1 segment displayed a null/flat trend.

\*The VUR value calculated for an aggregate segment (cluster) is applied to all the fleet segments in the cluster.

# Synthesis of indicators and trends (Area 27 NAO)

The status of fleet segments and trends for the Spanish fleet in Area 27 is shown below.

An overview of status and trends for the Spanish fleet in all regions is given below in the subsection headed "Status and trends for the Spanish fleet in all regions".



#### Area 37

There were 34 fleet segments in 2019, of which 29 were active. Of the 29 active segments, landings data were provided for 29 fleet segments and economic data aggregated by 20 fleet segments.

## Sustainable Harvest Indicator (SHI)

Out of 29 fleet segments active in 2019, SHI indicator values were available for 24.

According to the criteria in the 2014 Commission guidelines, the SHI indicator values for 17 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 7 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 45.84% of the total value of the landings in 2019 provided by MS, and were as follows:

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

Trends were available for the 7 fleet segments:

- 3 fleet segments displayed an increasing (deteriorating) trend,
- 4 fleet segments displayed a decreasing (improving) trend.

#### Stocks at Risk Indicator (SAR)

SAR indicator was available for 29 active fleet segments in 2019:

- 10 fleet segments may be in balance with their fishing opportunities,
- 1 fleet segment with 4 stocks-at-risk may not be in balance with its fishing opportunities,
- 2 fleet segments with 3 stocks-at-risk may not be in balance with their fishing opportunities,
- 5 fleet segments with 2 stocks-at-risk may not be in balance with their fishing opportunities,
- 11 fleet segments with 1 stock-at-risk may not be in balance with their fishing opportunities.

# Number of Overharvested Stocks (NOS)

The proportional distribution of NOS for the 24 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	3	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	20	2	2	

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

RoI was calculated for 3 segments:

• All 3 segments were in balance with their fishing opportunities,

Trends could be calculated for 2 segments:

- 1 segment displayed an increasing trend
- 1 segment displayed a decreasing trend.

#### RoFTA was calculated for 20 segments:

- 14 segments were in balance with their fishing opportunities,
- 6 segments were out of balance with their fishing opportunities.

## Trends could be calculated for 14 segments:

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

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

CR/BER was calculated for 20 segments:

- 14 segments were in balance with their fishing opportunities,
- 6 segments were out of balance with their fishing opportunities,

# Trends could be calculated for 14 segments:

- 3 segments displayed an increasing trend,
- 9 segments displayed a decreasing trend,
- 2 segments displayed no clear trend.

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

The data required to calculate VUR (i.e., maximum days-at-sea) were provided by the MS and thus,  $VUR_{220}$  is not analysed here.

## VUR was calculated for the 29 segments\*:

- 22 segments were in balance with their fishing opportunities,
- 7 segments were out of balance with their fishing opportunities,

# Trends were calculated for 25 segments:

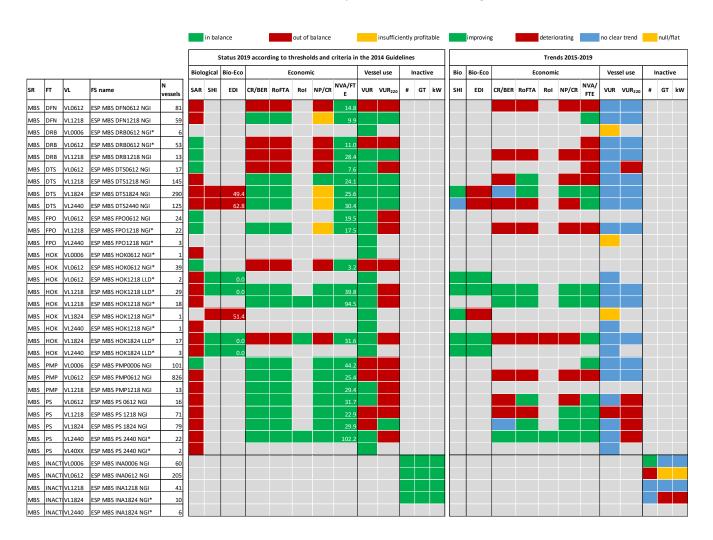
- 1 segment displayed a decreasing trend,
- 21 segments displayed no clear trend,
- 3 segments displayed a null/flat trend.

<sup>\*</sup>The VUR value calculated for an aggregate segment (cluster) is applied to all the fleet segments in the cluster.

# Synthesis of indicators and trends (Area 37, MBS)

The status of fleet segments and trends for the Spanish fleet in Area 37 is shown below.

An overview of status and trends for the Spanish fleet in all regions is given below in the subsection headed "Status and trends for the Spanish fleet in all regions".



#### <u>OFR</u>

There were 14 fleet segments in 2019, of which 10 were active. Of the 10 active segments, landings data were provided for 10 fleet segments and economic data aggregated by 6 fleet segments.

#### Sustainable Harvest Indicator (SHI)

Out of 10 fleet segments active in 2019, SHI indicator values were available for 8.

According to the criteria in the 2014 Commission 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 2 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 49.05% of the total value of the landings provided by the MS, and were as follows:

- 1 fleet segment may be in balance with its fishing opportunities,
- 1 fleet segment may not be in balance with its fishing opportunities.

Trend was available for 1 fleet segment:

• 1 fleet segment displayed a decreasing (deteriorating) trend.

## Stocks at Risk Indicator (SAR)

SAR indicator was available for 10 fleet segments in 2019

- 7 fleet segments may be in balance with their fishing opportunities,
- 3 fleet segments with 1 stock-at-risk, which may not be in balance with their fishing opportunities.

## 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		4	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	5	2		1

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

RoI was calculated for 6 segments:

- 3 segments were in balance with their fishing opportunities,
- 2 segments were out of balance with their fishing opportunities,
- 1 segment was found to be insufficiently profitable.

Trends could be 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 6 segments:

- 4 segments were in balance with their fishing opportunities,
- 2 segments were *out of balance* with their fishing opportunities.

Trends could be calculated for 5 segments:

- 2 segments displayed an increasing trend,
- 2 segments displayed a decreasing trend,
- 1 segment displayed no clear trend.

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

The data required to calculate VUR (i.e., maximum days-at-sea) were provided by the MS and thus, VUR<sub>220</sub> is not analysed here.

## VUR was calculated for 10 segments:

• All 10 segments were in balance with their fishing opportunities.

## Trends could be calculated for 6 segments:

- 5 segments displayed no clear trend,
- 1 segment displayed a null/flat trend.

## The Inactive Fleet Indicators (all regions)

In 2019, 19 segments in the 3 supra-regions had inactive vessels.

The Spanish inactive fleet accounted for 11.2% of the total number of vessels, 4.2% of the GT and 5.7% of the kW. At the national level, inactive vessels accounted for less than 20% of the fleet in vessel number and thus, were *in balance*.

# By vessel length group:

• All segments were *in balance* for all 3 categories (#, GT and kW) and displayed decreasing (improving) trends, overall.

## Synthesis of indicators and trends (Other fishing regions; OFR)

The status of fleet segments and trends for the Spanish fleet in Other Fishing Regions is shown below.

An overview of status and trends for the Spanish fleet in all regions is given below in the subsection headed "Status and trends for the Spanish fleet in all regions".

<sup>\*</sup>The VUR value calculated for an aggregate segment (cluster) is applied to all the fleet segments in the cluster.



# Status and trends for the Spanish fleet in ALL REGIONS

Based on the biological indicator values for 2019 and trends over 2015-2019 and according to the criteria in the Commission guidelines, most fleet segments for SAR and SHI appear to be not in balance with their fishing opportunities, because for segments, where both indicators are available, at least one indicator identifies the segment as being "out of balance". However, only 25% of the available SHI values for the fleet segments (79 segments) are considered as being meaningful 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. When considering the SAR indicator alone, a total of 50% of the fleet segments maybe in balance with their fishing opportunities (meaning that no SAR were identified). The trend in SHI however, shows an improving situation (decreasing trend in SHI) for 50% of the (meaningful) segments.

The economic data indicate that 85% of fleet segments are in balance with their fishing opportunities, although a number of these are indicating a deteriorating trend.

VUR data indicate that 23% of fleet segments are out of balance with their fishing opportunities. Two segments (ESP NAO HOK1218 MA\*, ESP NAO PS 1218 IC \*) indicate an improving trend and also two segments (ESP MBS PS 1218 NGI, ESP NAO PS 1824 NGI) show a declining trend. For all other segments there is no clear trend in the 2015 – 2019 data.

The above observations are largely in line with the assessment of balance in the Member States' fleet report submitted in 2021, apart from the biological indicators. For SHI and SAR data there were a number of segments where MS and EWG data were in disagreement.

## Comparison of indicator values

A comparison Indicator values\_computed by the EWG 21-16 and those in the fleet report submitted by 31 May 2021 are given in Annex II. Points of note for each indicator are listed below.

## Sustainable Harvest Indicator (SHI)

SHI indicator value for 57 fleet segments cannot be used meaningfully to assess 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.

Of the remaining 22 segments, most of the segments indicate similar values for SHI and the resulting assessments regarding the balance of the fleet segments. However, in some fleet segments (e.g. ESP NAO PGP2440 NGI\*, ESP MBS HOK1218 LLD\*, ESP MBS HOK1824 LLD\*, ESP NAO PGP2440 NGI\*) the conclusions regarding the balance or imbalance of those fleet segments are contradictory. For some segments (e.g. ESP MBS HOK1218 LLD\*) the assessment by EWG21-16 is "in balance", while the MS fleet report interpretation is "out of balance" and for other segments (e.g. ESP NAO PGP2440 NGI\*) it is the other way around.

Indicator trends were not provided in the fleet report. No comparison was possible.

#### Stocks at Risk Indicator (SAR)

Results for this indicator were provided for 2019. Only in 9 fleet segments SAR were identified (1 SAR each), which is in stark contrast to the results of EWG21-16, identifying 44 fleet segments (50% of all fleet segments) containing at least 1 SAR.

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

No discrepancies were found between the MS annual fleet report and those estimated in the framework of EWG 21-16. However no comparison could be made for 33 fleet segments listed in the fleet report but which were not calculated by the EWG 21-16.

Fifty-five fleet segments were in balance while 13 were out of balance.

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

ROI data was not reported.

The comparison between RoFTA reported in the MS annual fleet report and those estimated in the framework of EWG 20-11 revealed similar outputs. However no comparison could be made for 33 fleet segments listed in the fleet report but which were not calculated by the EWG 21-16.

Fifty-five fleet segments were in balance while 13 were out of balance.

## The Vessel Use Indicator (VUR) and/or Vessel Use Indicator 220 (VUR220)

The MS fleet report didn't provide any data on VUR220, instead they reported data for VUR. Comparison of the VUR data reported in the MS annual fleet report and those estimated in the framework of EWG 21-16 revealed similar outputs for most indicator values.

In 13 fleet segments of 88 reported, however, the MS report differed from the EWG report as to whether segments were in or out of balance. The MS calculated seven segments to be out of balance while the EWG estimated them to be in balance. The MS calculated 6 segments to be in balance, however the EWG found it to be out of balance.

#### Inactive Fleet Indicator

The comparison between Inactive vessels indicator reported in the MS annual fleet report and those estimated in the framework of EWG 21-16 revealed similar outputs for most values.

In three fleet segments of 11 reported, however, the MS report differed from the EWG report as to whether segments were in or out of balance. The MS calculated three segments to be out of balance while the EWG estimated all segments to be in balance.

# Assessment of fleet report

The fleet report submitted by Spain provides sound and comprehensive analysis of balance between fleet capacity and fishing opportunity of all fleet segments.

The fleet report submitted by Spain is in line with the Commission guidelines COM(2014)545.

The MS fleet report reported on 88 fleet segments in the Spanish fleet in 2019, 11 of which were stated to be out of balance, and the remaining 77 segments were in balance. The large discrepancies in the identification of SAR between the MS and EWG21-16 should carefully be checked when writing next year's fleet report.

Issues raised by the EWG 20-11 in relation to last year's fleet report (SAR not provided for any segments and while the total number of fleet segments listed in the report was 67, data were presented for only 60) were addressed in the 2021 fleet report by Spain. Also, the partially broad objectives in last year's action plan have been elaborated in the action plan accompanying the report submitted in 2021.

An action plan has been proposed to contribute towards improvements for those segments assessed by the MS to be imbalanced.

## Measures in action plans

The MS has presented an updated action plan for the fleet segments not being in balance with their fishing opportunities. The plan proposes a number of measures to contribute towards improvements in the imbalanced fleet segments.

The Action Plan indicates appropriate measures that have been selected for each fleet segment on the basis of the reasons identified as determining factors in its imbalance which are explained in the fleet report. The objectives of the plan are established for each fleet and focus on lowering the SHI down to values below 1 (= fleet segment being in balance with its fishing opportunities with regards to this biological indicator).

The time frame for the implementation of this plan will be two years.

The planned measures will be based on the activity of selected fleet segments and will include effort reduction, resource recovery measures and data collection improvements.

Effort reduction will mainly be achieved through allocation of fishing opportunities (TAC and quotas) and the temporary or permanent closure of fishing areas, but also through limitations in the permitted fishing depth in the sardine and anchovy fisheries in the Mediterranean Sea (area 37) as well as the maximum soaking times of gillnets in the North Atlantic (area 27) .

The plan also provides for an increase in data collection and analysis by the implementation of monitoring plans (Southern hake, Tropical tuna).

The objectives are clearly defined (lowering the SHI to < 1) and can therefore be measured and evaluated. While the action plan is to be implemented with a period of 2 years, the timeframe for achieving the stated objective is not specified.

With the data and information available, the EWG is not able to assess whether the proposed measures are likely to deliver the stated objective.

## 1.3.22 Sweden (SWE)

# Overview of indicator findings

#### Area 27

There were 27 fleet segments in 2019, of which 22 were active. Of the 22 active segments, landings data were provided for all segments and economic data for 7 aggregate segments.

#### Sustainable Harvest Indicator (SHI)

Out of 27 fleet segments active in 2019, landings in value have been provided aggregated in 22 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 7 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 90.34% of the total value of the landings in 2019 provided by MS, and were as follows

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

Trends could be calculated for 15 fleet segments:

- 8 fleet segments displayed an increasing (deteriorating) trend,
- 2 fleet segments displayed a decreasing (improving) trend,
- 3 fleet segments displayed no clear trend.

#### Stocks at Risk Indicator (SAR)

SAR indicator was available for all the 22 active fleet segments in 2019

According to the criteria in the 2014 Balance Indicator Guidelines, EWG 17-08 notes that the 2019 SAR indicator values indicate:

- 11 fleet segments may be in balance with their fishing opportunities;
- 1 fleet segment with 3 stocks at risk
- 4 fleet segments with 2 stocks at risk
- 6 fleet segments with 1 stock at risk

#### Number of Overharvested Stocks (NOS)

The number of fleet segments and the number of stocks classified as overharvested (NOS) expressed as a proportion (%) of the total number of stocks exploited by such fleet segments are given in the table below.

Proportion of NOS	0-25%	25-50%	50-75%	75-100%
N of fleet segments	2	12	5	2

# Economic Dependency Indicator (EDI)

The numbers of segments corresponding to varying levels of economic dependency (EDI) values are shown in the table below. Fleet segments reported are those for which  $F/F_{msy}$  is calculated and landings are available.

EDI value	0-25%	25-50%	50-75%	75-100%
N of fleet segments	12	4	3	2

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

RoI was not calculated.

## RoFTA was calculated for 7 segments:

- 6 segments were in balance with their fishing opportunities,
- 1 segment was out of balance with its fishing opportunities,

## Trends were calculated for 7 segments:

- 3 segments displayed an increasing trend,
- 4 segments displayed a decreasing trend.

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

#### CR/BER was calculated for 7 segments:

- 6 segments were in balance with their fishing opportunities,
- 1 segment was out of balance with its fishing opportunities,

#### Trends were calculated for 7 segments:

- 2 segments displayed an increasing trend,
- 2 segments displayed a decreasing trend,
- 3 segments displayed no clear trend.

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

The data required to calculate VUR (i.e., maximum days-at-sea) were provided by the MS and thus, VUR<sub>220</sub> is not analysed here.

# VUR was calculated for the 22 segments\*:

- 3 segments were in balance with their fishing opportunities,
- 19 segments were out of balance with their fishing opportunities.

#### Trends were calculated for the 22 segments:

• All segments displayed no clear trend.

# The Inactive Fleet Indicators

In 2019, 5 vessel length segments had inactive vessels; VL0010, VL1012, VL1218, VL1824 and VL2440.

<sup>\*</sup>The VUR value calculated for an aggregate segment (cluster) is applied to all the fleet segments in the cluster.

The Swedish inactive fleet accounted for 24.6% of the total number of vessels, 6.3% of the total GT and 12.6% of the total kW. At the national level, inactive vessels accounted for more than 20% of the fleet in vessel number and thus, was *out of balance* and displayed an increasing (deteriorating) trend. No trends could be calculated for the aggregated segments.

The segment with the highest level of inactivity were the VL0010 segment with 20.2% of the number of vessels and 6.8% of the kW.

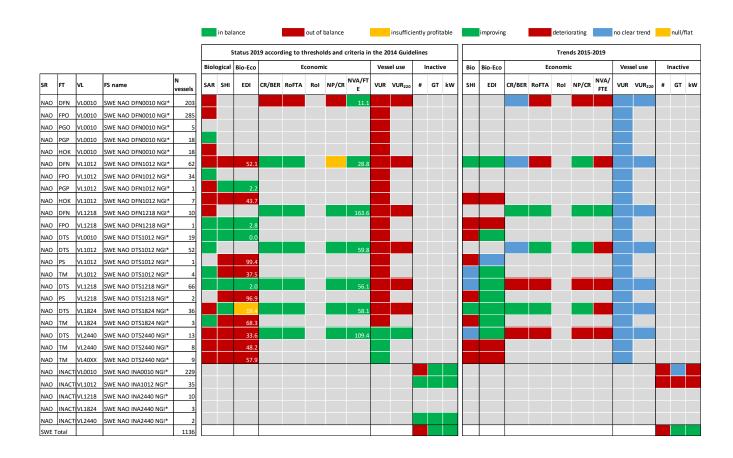
## By vessel length group:

- 1 segment was *out of balance* in terms of vessel number and displayed an increasing trend,
- 2 segments were in balance for all 3 categories (#, GT and kW).

#### Synthesis of indicators and trends

Based on indicator values for 2019 and trends over the periods 2015 to 2019 inclusive; according to the criteria in the Commission guidelines, most of fleet segments appear to be out of balance with fishing opportunities. The economic indicators reported by cluster showed favourable results for all segments except for passive gear < 10m while the technical indicators are unfavourable for all segments except for active gear > 24m. Both the biological indicators showed imbalance having most of the fleet segments with SAR out of balance and SHI out of balance with most trends increasing. However, despite the biological indicator values in 2019, for the fleet segment DFN VL1012 the trend in SHI shows an improving situation (decreasing trend).

These observations cannot be properly compared with the assessment of balance in the Member States' fleet report submitted in 2020, due to mismatches in the fleet segments indicated by MS for economic, technical, and biological indicators and the indicators computed in the framework of EWG 20-11. The Expert group notes that the Member State concluded that fleet segments which use passive gears are imbalanced, but MS do not interpret it as overcapacity and no action plan was proposed for such segments.



#### Comparison of indicator values

The biological indicator values in the Swedish fleet report for 2020 relate to the period 2008-2018 and are those given in the report of the EWG 20-11 provided. However, such values are not explicitly used by the MS in its assessment of balance. Furthermore, the segmentation used for the balance assessment by the Member State differs from that used by the EWG 20-11 and the EWG 21-16. Hence a direct comparison between biological indicator values used by the Member State and those computed by EWG 21-16 could not be made.

A comparison between the indicator values computed by the EWG 21-16 and those in the fleet report submitted by 31 May 2021 are given in Annex II. Points of note for each indicator are listed below.

#### Sustainable Harvest Indicator (SHI)

SHI indicator values were not presented in the fleet report so no comparison with EWG 21-16 estimates were made

#### Stocks at Risk Indicator (SAR)

SAR indicator values were not presented in the fleet report so no comparison with EWG 21-16 estimates were made

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

The comparisons between CR/BER reported in the MS annual fleet report and those estimated in the framework of EWG 21-16 revealed similar outputs for all values.

In the Swedish report, economic data are available for the segments named "passive gear" or "active gear" by vessel length group. These data correspond to the economic data reported by cluster by the EWG 21-16 and named DFN and DTS by vessel length

group. So the data were comparable for all clusters SWE NAO DFN0010 NGI\*, SWE NAO DFN1012 NGI\*, SWE NAO DFN1218 NGI\*, SWE NAO DTS1012 NGI\*, SWE NAO DTS1218 NGI\*, SWE NAO DTS1824 NGI\* and SWE NAO DTS2440 NGI\*.

Trends are similar for this indicator.

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

As for the CR/BER indicator, the comparisons between RoFTA reported in the MS annual fleet report and those estimated in the framework of EWG 21-16 revealed similar outputs for all values. As for CR/BER, all clusters were comparable.

Trends are similar for this indicator.

## The Vessel Use Indicator (VUR) and/or Vessel Use Indicator 220 (VUR220)

In the MS annual fleet report, the VUR Indicator was calculated as the ratio between days at sea and maximum observed days at sea for each length group and gear type.

A discrepancy has been observed in the calculation of VUR between the MS annual fleet report and that of the estimation in the framework of the EWG 20-11 for the year 2019. The status in the EWG 21-16 estimation was "in balance" for SWE NAO DTS2440 NGI but the MS annual report indicated "out of balance".

The difference could be due to different input data.

Indicator trends was provided for the period 2018-2020 in the fleet report while the EWG 21-16 comments on the period 2015-2019. No comparison was possible.

#### Inactive Fleet Indicator

In the MS annual fleet report the inactive fleet indicator values were reported for two length classes only (<12m and >12m). The EWG was able to compare the values for 2019 by aggregating values according to such length groups and the results were similar.

The trends over time were not reported in the Swedish fleet report and no comparison with the trends estimated by the EWG 21-16 was undertaken.

#### Assessment of fleet report

The fleet report submitted by Sweden provides accurate picture of the fleets and comprehensive analysis of the balance between fleet capacity and fishing opportunities for all fleet segments designated by the Member State in the report. However, the fleet segments were not identified in accordance with the fleet classification specified in the fleet economic data call under the DCF. Segments were designated as active or passive gear groups and further classified by length group. The fleet report also does not contain any values for the SAR indicator.

For the above reasons, the Swedish fleet report is not strictly in line with the Commission quidelines COM(2014) 545

The Swedish fleet report for 2020 concludes that there is imbalance in some segments and proposes an action plan incorporating measures for reducing identified overcapacity among vessels previously targeting cod in the Baltic Sea

# Measures in action plans

The measure proposed in the action plan is permanent cessation of fishing activities for 17 vessels, representing 2.0 percent of the tonnage and 2.1 percent of the kW of the Swedish fleet. The plan is to remove from the fleet some vessels that previously obtained the majority of their income from cod in the Baltic Sea and whose economic performance is critically bad (as indicated by the economic indicators in the fleet report.

The report asserts that the AP should contribute to reduce the imbalance between fishing capacity and fishing at latest by 2023.

EWG 21-16 noted that the removal of 17 vessels (approximately 2% of the tonnage and kW capacity) two of which are already inactive, is unlikely to have a major influence on the capacity of the Swedish fleet to catch fish. In the absence of relevant data and specific information on which vessels are to be decommissioned and to which segment they belong, the potential to redress any potential imbalance in the segments concerned cannot be assessed.

## 1.3.23 United Kingdom (GBR)

## Overview of indicator findings

#### Area 27

There were 54 fleet segments in 2019 of which 48 were active. Of the 48 active segments, landings data were provided for 45 fleet segments and for economic data aggregated by 29 fleet segments.

## Sustainable Harvest Indicator (SHI)

Out of 42 fleet segments active in 2019, SHI indicator values were available for 40.

According to the criteria in the 2014 Commission 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 19 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 70% of the total value of the landings in 2019 provided by MS, and were as follows:

- 12 segments may be in balance with their fishing opportunities,
- 7 segments may be *out of balance* with their fishing opportunities.

Trends could be calculated for 18 fleet segments:

- 10 segments displayed a decreasing (improving) trend,
- 8 segments displayed no clear trend.

# Stocks at Risk Indicator (SAR)

SAR indicator was available for 11 fleet segments in 2019. For all 11 fleet segments, one or more stocks-at-risk were detected:

- 2 segments with 5 stocks-at-risk,
- 2 segments with 2 stocks-at-risk,
- 7 segments with 1 stock-at-risk.

## Number of Overharvested Stocks (NOS)

The number of fleet segments and the number of stocks classified as overharvested (NOS) expressed as a proportion (%) of the total number of stocks exploited by such fleet segments are given in the table below.

Proportion of NOS	0-25%	25-50%	50-75%	75-100%
N of fleet segments	2	31	7	0

#### Economic Dependency Indicator (EDI)

The numbers of segments corresponding to varying levels of economic dependency (EDI) values are shown in the table below. Fleet segments reported are those for which  $F/F_{msy}$  is calculated and landings are available.

EDI value	0-25%	25-50%	50-75%	75-100%
N of fleet segments	35	4	2	0

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

RoI was calculated for 29 segments for the base year 2019:

- 20 segments were in balance with their fishing opportunities,
- 7 segments were *out of balance* with their fishing opportunities
- 2 segments were *not sufficiently profitable*.

Trends calculated for the 29 segments were:

- 10 segments displayed an increasing trend,
- 19 segments displayed a decreasing trend.

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

CR/BER was calculated for 27 segments for 2019:

- 23 segments were in balance with their fishing opportunities,
- 4 segments were out of balance with their fishing opportunities.

Trends were calculated for the 27 segments:

- 11 segments displayed an increasing trend,
- 12 segments displayed a decreasing trend,
- 4 segments displayed no clear trend.

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

The data required to calculate VUR (i.e., maximum days-at-sea) were provided by the MS and thus, VUR220 is not analysed here.

VUR was calculated for 48 segments\*:

- 20 segments were in balance with their fishing opportunities,
- 28 segments were *out of balance* with their fishing opportunities.

Trends were calculated for 42 segments:

- 1 segment displayed an increasing trend,
- 2 segments displayed a decreasing trend,
- 36 segments displayed no clear trend,
- 3 segments displayed a null/flat trend.

#### The Inactive Fleet Indicators

In 2019, 6 vessel length segments had inactive vessels (VL0010, VL1012, VL1218, VL1824, VL2440 and VL40XX). The UK inactive fleet accounted for 24.2% of the total number of vessels, 4.9% of the GT and 10.9% of the kW. At the national level, inactive vessels accounted for more than 20% of the fleet in vessel numbers and thus, was *out of balance* but displayed a decreasing (improving) trend.

The fleet segments with the highest levels of inactivity are the VL0010 group at 22.2% in terms of number of vessels, 1.5% of GT and 7.2% of kW.

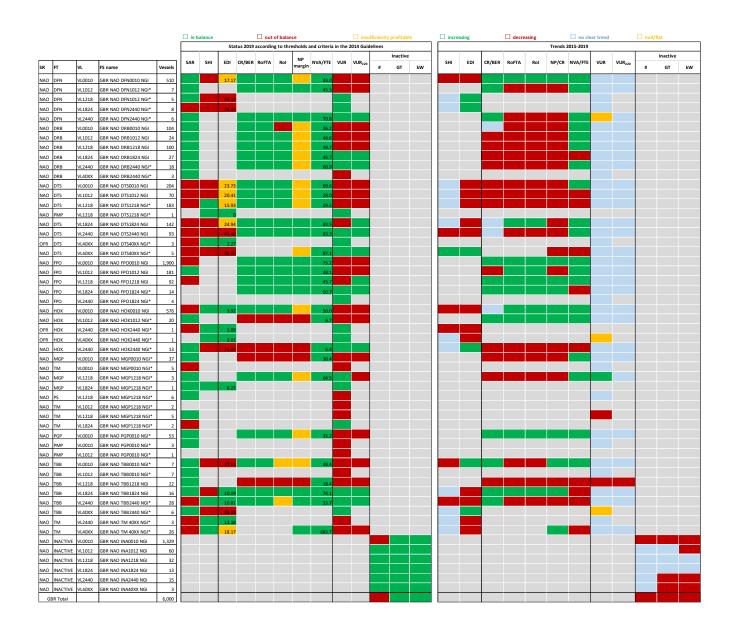
By vessel length group:

- 1 segment was *out of balance* in terms of vessel numbers and displayed a decreasing trend,
- 5 segments were *in balance* for all 3 categories (Number, GT and kW) and showed no clear trend.

#### Synthesis of indicators and trends

Based on indicator values for 2019 and trends over 2015-2019, for those fleet segments for which a meaningful SHI could be computed (19 segments), seven segments are indicated to be out of balance and for all segments the situation seems to be worsening (increasing trend in SHI value) or there is no clear trend. In general, the economic indicators suggest that the vast majority of fleet segments were in balance in 2019 although the trends in economic indicators vary between segments. No new action plan has been published.

<sup>\*</sup>The VUR value calculated for an aggregate segment (cluster) is applied to all the fleet segments in the cluster.



#### Comparison of Indicator Values

A comparison of indicator values\_computed by the EWG 20-11 and those in the fleet report submitted by 31 May 2020 are given in Annex II. Points of note for each indicator are listed below.

### Sustainable Harvest Indicator (SHI)

In the MS annual fleet report the SHI estimations are those produced by JRC (EWG 20-11) for the reference year 2019. Therefore, no comparisons were made.

#### Stocks at Risk Indicator (SAR)

In the MS annual fleet report the SHI estimations are the ones produced by JRC (EWG 20-11) for the reference year 2019. Therefore, no comparison was made.

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

In the MS's annual fleet report the ROI indicator is provided for the reference years 2016-2019. The RoFTA indicator is not provided.

A comparison between indicator values in the MS's Fleet report for 2020 and the values for equivalent fleet segments as estimated by EWG 21-16 for the year 2019 reveals different estimates for many segments. Also, for nine fleet segments the status according to the Expert group estimates differs from that given in the fleet report.

ROI was calculated for 27 segments:

- 20 segments were in balance with their fishing opportunities,
- 7 segments were out of balance with their fishing opportunities,

The MS's Fleet Report suggests that 7 fleet segments are potentially out of balance, the potentiality being due to methodological constraints set out in the report.

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

In the MS's annual fleet report the CR/BER ratio has been provided for the reference years 2016-2019.

A comparison between the MS's Fleet reports for 2020 and equivalent fleet segments as estimated by EWG 21-16 for the year 2019 show similar values for CR/BER and the same status for all the fleet segments.

CR/BER was calculated for 27 segments:

- 23 segments were in balance with their fishing opportunities,
- 4 segments were out of balance with their fishing opportunities,

### The Vessel Use Indicator (VUR) and/or Vessel Use Indicator 220 (VUR220)

A comparison between indicator values in the MS's Fleet Report for 2020 and the values for equivalent fleet segments as estimated by EWG 21-16 for the year 2019 reveals the same output for all the values and the same status for all the fleet segments.

VUR was calculated for 29 segments:

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

#### Inactive Fleet Indicator

Inactive vessels have been reported as Number, GT and kW in the MS annual fleet report. The inactive fleet indicator is estimated by the MS as a percentage of the number of vessels for 2018 to 2020 for the following vessel – length category segments:

- VL0010
- VL1012
- VL1218
- VL1824
- VL2440
- VL40XX

The inactive fleet indicator for the segment with vessel length class VL0010 is more than 25%, indicating technical inefficiency in each year. For the rest of the segments the indicator is below 20% and generally below 13%.

#### Action Plans

No action plan was provided with the fleet report for 2020. As from 1<sup>st</sup> January 2021 the United Kingdom became an independent coastal state under the provisions of the United Nations Convention on the Law of the Sea and the MS's Fleet Report states that an action

plan as under Article 22(4) of Regulation (EU) No 1380/2013, "Adjustment and management of fishing capacity" has therefore not been provided. However, the report alludes to actions proposed "aimed largely at supporting stock recovery and sustainable harvesting. ...... these measures, along with our quota management system and associated arrangements for quota trading are sufficient to balance fishing opportunities."

### Assessment of Fleet Report

Apart from the absence of an action plan, the Fleet Report submitted by the United Kingdom provides a sound and comprehensive analysis of the balance between fleet capacity and fishing opportunity of all fleet segments in line with the Commission guidelines, COM(2014) 545.

#### 2 TASK 3- FLEET SEGMENTS IN THE OUTERMOST REGIONS

#### 2.1 Introduction

EWG 21-16 was requested to respond to the following ToR:

"The Expert group is requested to list for the Outermost Regions of France (Réunion, French Guiana, Martinique, Guadeloupe, Saint-Martin and Mayotte), Portugal (Madeira and Azores) and Spain (Canary Islands), those fleet segments that according to the most updated set of data (2019 or later if available) for either the biological, economic or technical indicators in the Commission Guidelines, as computed by the STECF, were indicated to be out of balance with their fishing opportunities. The list should contain information on the fish stocks on which such segments rely and the fishing area to which such segments are attributed. Separate lists should be provided for each indicator. The fish stocks on which a fleet segment is reliant shall be determined by ranking the landings from all stocks caught by that fleet segment in descending order in terms of landings value and listing those stocks that account for at least 75% of the total value of the landings by that fleet segment.

The Expert group is furthermore requested to provide a list of the fleet segments for which information available does not allow to calculate the above indicators and to indicate for which indicators what kind of information was not available."

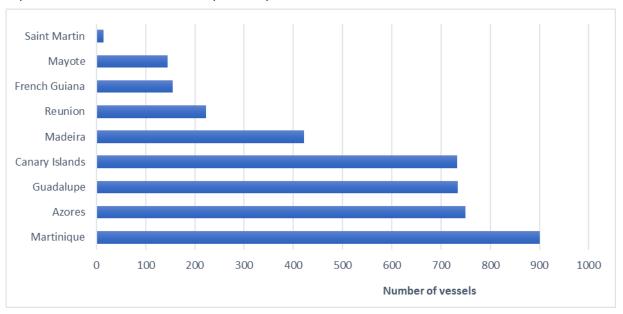
Since 2019 (STECF 19-13) MS fleets from the OMRs could be distinguished from their mainland fleets by the introduction of geographical indicator (Geo-indicator) in the DCF fleet economic data call. For Spain and France consistent historical data for OMR regions only can be obtained from 2017 (three years of time series). Furthermore, as explained in the sections below, there are significant shortages of data and information on the fleets and fisheries in the OMRs.

In response to the request to identify fleet segments that are imbalanced according to the biological, economic or technical indicators, the EWG has listed segments where imbalance is indicated by at least one indicator value. However, the EWG notes that the assessment whether a fleet segment is in or out of balance should be made using a combination of indicators and their trends over a number of years. Hence it cannot be concluded that the fleet segments listed in the sections below are imbalanced, just that the computed value for 2019 for at least one indicator are indicated to be imbalanced according to the criteria in the Commission guidelines.

For the technical indicator Vessel Utilization Ratio EWG 21-16 chose to compute the  $VUR_{220}$  indicator in cases where maximum number of days at sea were not provided by Member States and VUR could not be computed.

## 2.2 OMR fleets at a glance

The EU OMR fleet totaled 4 076 vessels in 2019. The French OMR fleet was the most numerous, accounting for 53% of all reported vessels. The Portuguese and Spanish fleets represented 29% and 18% respectively.



Number of vessels for the OMRs

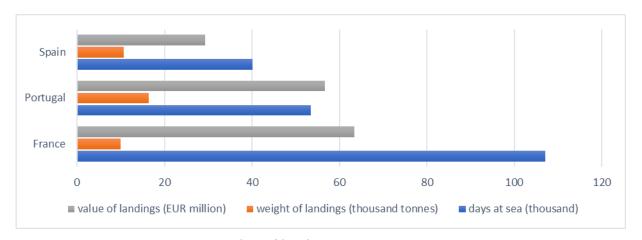
Martinique, with 901 vessels, was the largest OMR fleet (by number), followed by Azores (750), Guadeloupe (734), Canary Islands (733), Madeira (422) La Reunion (223), French Guiana (155), Mayotte (144) and Saint Martin (14).

About 93% of the vessels in OMR belong to the small-scale coastal fleet (SSCF).



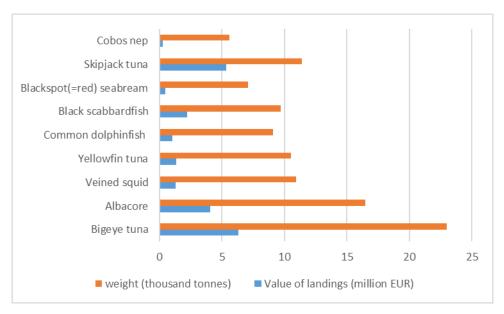
Gross tonnage (GT) of the OMRs

Comparing the number of vessels with GT, it can be concluded that Martinique is mainly composed by small scale fleet (22% in number of vessels and 7% in GT). On the contrary, the Azores, Canary Islands and French Guiana fleet segments are composed of bigger vessels with 32% and 23% and 12% of the total tonnage respectively.



Most representative species in value of landings

The OMR fleet spent 201 thousand days at sea in 2019, to land approximately 37 thousand tonnes of seafood valued at EUR 149 million.



Most representative species

Tuna and other large pelagic species represent a significant part of the landings with Bigeye tuna and Albacore the largest components by value of landings, followed by veined squid, yellowfin tuna, common dolphinfish and black scabbardfish.

The Azores, Canary Islands and Guadeloupe fleets were the most important in terms of landing value (with landed value of 28.5%, 19.6% and 16.4% respectively), followed Reunion by (10.0%), Madeira (9.4%) Martinique (8.9%) and French Guyana (4.3%) and Mayotte (2.7%)

The 2021 Annual Economic Report (STECF 21-08) provides more details on the OMR fleets and their economic performance.

### 2.3 French Outermost Regions

The data provided for the six French OMRs, uses the geographical indicator to distinguish the OMR fleets and the balance indicators associated with those fleets (Table 4.3.1).

The SAR indicator was not available mainly due to an absence of relevant stock assessment results.

Table 4.3.1 - List of Fleet Segments in French Outermost Regions in 2019.

Out of balance ( ), in balance ( ) with no information ( )

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

For each OMR and for those segments that are indicated to be out of balance, a list of the fish stocks on which segments rely are described in the following sub-sections.

Due to the lack of data collection in French outmost regions and a paucity of stocks assessment results, values for the biological indicators are unavailable for most segments; no SAR indicator was computed for 2019 and the SHI si available for only 6 clustered segments.

The technical indicator is the most well-known information for OFR fleet segments with VUR: 8 clusters and  $VUR_{220}$ : 21 clusters. However, the EWG notes that each of these indicators considered in isolation are wholly uninformative with regard to assessing balance.

In 2019, the economic indicators Rofta and CR/BER were computed for 9 clustered segments.

#### **FRENCH GUIANA**

3 clusters were studied: FRA OFR DFN0010 GF\* and FRA OFR DFN1012 GF\* and FRA OFR DTS1824 GF. EWG was not be able to compute the biological indicators because of the absence of appropriate stock assessments for species in the areas concerned. The biologic as the economic ones were in balance for the clustered segments FRA OFR DFN0010 GF\* and FRA OFR DFN1012 GF\*.

Segment - FRA OFR DFN0010 GF \* Imbalance indicators - VUR<sub>220</sub>

Species/area	31	41.1.1	Total	%
Green weakfish	47 679	648 178	695 857	36.6%
Acoupa weakfish	113 965	403 393	517 358	27.2%
Crucifix sea catfish	28 859	204 793	233 652	12.3%

Most representative species in value of landings (€)

	2015	2016	2017	2018	2019
Rofta (%)		60.6	81.4	64.8	40.6
CR/BER		2.2	2.5	2.2	1.7
VUR220	0.46	0.51	0.38	0.38	0.53

Historical indicators for the last five years

# Segment - FRA OFR DFN1012 GF \*

#### Imbalance indicators - VUR<sub>220</sub>

Species/area	31	41.1.1	Total	%
Acoupa weakfish	1 542 082	302 168	1 844 250	54.2%
Green weakfish	491 148	532 891	1 024 039	30.1%

	2015	2016	2017	2018	2019
Rofta (%)		80.6	62.0	50.7	38.9
CR/BER		3.4	2.5	2.2	1.9
VUR220	0.55	0.56	0.50	0.50	0.61

#### FRA OFR DTS1824 GF

#### Imbalance indicators - VUR

Specie	34.1.1	34.1.2	Total	%
Penaeus shrimps nei	905 820	127 362	1 033 182	88.9%

	2015	2016	2017	2018	2019
VUR			0.4	0.5	0.4

Historical indicators for the last five years

#### **GUADELOUPE**

6 imbalance clusters were studied: FRA OFR DFN0010 GP and FRA OFR FPO0010 GP and FRA OFR HOK0010 GP and FRA OFR PGP0010 GP \* and FRA OFR PGP1012 GP\* and FRA OFR PS 0010 GP. EWG was not be able to compute the biological indicators because of the absence of appropriate stock assessments for species in the areas concerned. As expected, in 2019, for all these clusters, the technical indicator VUR220 was always under 1 even when economic indicators were in balance.

### Segment -FRA OFR DFN0010 GP

### Imbalance indicator - VUR<sub>220</sub>

Species/area	31	%
Stromboid conchs nei	1 340 606	37.3%
Parrotfishes nei	1 004 192	27.9%
Caribbean spiny lobster	456 942	12.7%

	2015	2016	2017	2018	2019
Rofta (%)		-4.9	2.4	9.3	1.4
CR/BER		0.9	1.1	1.3	1.1
VUR220	0.45	0.46	0.39	0.37	0.37

Segment - FRA OFR FPO0010 GP Imbalance indicators - Rofta, CR/BER

Species/area	31	%
Caribbean spiny lobster	387 625	15.2%
Parrotfishes nei	327 408	12.8%
Filefishes, leatherjackets nei	311 052	12.2%
Snappers nei	270 803	10.6%
Stromboid conchs nei	209 160	8.2%
Groupers nei	179 356	7.0%
Grunts, sweetlips nei	128 150	5.0%
Red lionfish	114 355	4.5%

Most representative species in value of landings  $(\mathbf{\xi})$ 

	2015	2016	2017	2018	2019
Rofta (%)		-5.7	- 16.9	-9.2	- 16.4
CR/BER		0.9	0.7	0.9	0.7
VUR220	0.38	0.41	0.34	0.34	0.30

Historical indicators for the last five years

For biological indicators, the serious absence of catch and landings data for the most important species in the catches of the segment prevents any computation and assessment of the SHI and SAR balance indicators.

Segment - FRA OFR HOK0010 GP

### Imbalance indicators - VUR<sub>220</sub>

Species/area	31	%
Common dolphinfish	2 783 660	47.3%
Yellowfin tuna	1 495 334	25.4%
Stromboid conchs nei	385 880	6.6%

Most representative species in value of landings (€)

	2015	2016	2017	2018	2019
Rofta (%)		8.9	4.3	18.0	16.2
CR/BER		1.4	1.2	2.0	1.9
VUR220	0.32	0.31	0.26	0.27	0.30

Historical indicators for the last five years

Segment - FRA OFR PGP0010 GP

Imbalance indicators - VUR<sub>220</sub>

Species/area	31	%
Common dolphinfish	2 667 756	24.7%
Parrotfishes nei	1 278 706	11.9%
Yellowfin tuna	1 243 745	11.5%
Stromboid conchs nei	1 216 249	11.3%
Caribbean spiny lobster	1 022 412	9.5%
Filefishes, leatherjackets nei	623 513	5.8%

Most representative species in value of landings  $(\mathbf{\xi})$ 

	2015	2016	2017	2018	2019
Rofta (%)		12.5	-5.5	5.2	0.9
CR/BER		1.3	0.9	1.2	1.1
VUR220	0.40	0.40	0.39	0.38	0.43

Historical indicators for the last five years

Segment - FRA OFR PGP1012 GP\*
Imbalance indicators - Rofta, CR/BER

Species/area	31	%
Grouper nei	199 882	33.4%
Common dolphinfish	70 267	11.8%
Yellowfin tuna	53 808	9.0%
Snappers nei	39 556	6.6%
Caribbean spiny lobster	37 690	6.3%
Stromboid conchs nei	33 132	5.5%
Parrotfishes nei	31 571	5.3%

Most representative species in value of landings  $(\mathbf{\xi})$ 

	2015	2016	2017	2018	2019
Rofta (%)		-0.3	-7.8	-5.8	- 12.6
CR/BER		1.0	0.6	0.7	0.4
VUR220	0.43	0.46	0.36	0.15	0.35

Since 2017, this fleet is considered as imbalanced regarding economic and technical indicators.

For biological indicators SHI and SAR, the absence of catch and landings data for the most important species in the catches of the segment prevents any computation and assessment of the balance indicators.

Segment - FRA OFR PS 0010 GP Imbalance indicators - VUR<sub>220</sub>

Species/area	31	%
Yellowtail snapper	428 801	37.6%
Hemiramphus spp	113 786	10.0%
Needlefishes, etc. nei	111 218	9.8%
Bigeye scad	98 798	8.7%
Stromboid conchs nei	55 813	4.9%
Caribbean spiny lobster	50 958	4.5%

Most representative species in value of landings (€)

	2015	2016	2017	2018	2019
Rofta (%)		86.5	32.4	30.3	25.9
CR/BER		3.5	1.9	2.1	1.7
VUR220	0.36	0.36	0.32	0.11	0.39

Historical indicators for the last five years

### **MARTINIQUE**

The fleet in this region comprises 8 segments. However, there is insufficient information available to provide an assessment on balance for this regional fleet. Based on the information, available i.e., SHI and VUR values for 4 fleet segments in 2019, these segments appear to have been in balance with their fishing opportunities.

### FRA OFR DFN0010 MQ

Species/area	31	%
Stromboid conchs nei	763 798	66.2%
Hemiramphus spp	51 058	4.4%
Caribbean spiny lobster	50 493	4.4%

Most representative species in value of landings (€)

	2015	2016	2017	2018	2019
VUR <sub>220</sub>	0.12	0.12	0.09	0.10	0.11

Historical indicators for the last five years

### **Segment - FRA OFR FP00010 MQ**

#### Imbalance indicators - VUR<sub>220</sub>

Species/area	31	%
Caribbean spiny lobster	390 469	28.2%
Sea egg	17 0961	12.3%
Marine fishes nei	106 588	7.7%
Snappers nei	89 599	6.5%
Stromboid conchs nei	66 829	4.8%
Yellowfin tuna	63 006	4.6%
Parrotfishes nei	59 979	4.3%
Filefishes, leatherjackets nei	55 913	4.0%
Yellowtail snapper	54 458	3.9%

	2015	2016	2017	2018	2019
VUR <sub>220</sub>	0.08	0.09	0.06	0.07	0.10

# Segment - FRA OFR HOK0010 MQ Imbalance indicators - VUR<sub>220</sub>

Species/area	31	%
Yellowfin tuna	1 139 018	35.2%
Common dolphinfish	622 519	19.2%
Blue marlin	543 665	16.8%
Tunas nei	174 708	5.4%

Most representative species in value of landings (€)

	2015	2016	2017	2018	2019
VUR220	0.10	0.11	0.10	0.12	0.12
SHI	1.0	1.1	1.0	1.0	1.0

Historical indicators for the last five years

# Segment - FRA OFR HOK1012 MQ Imbalance indicators - VUR<sub>220</sub>

Species/area	31	%
Snappers nei	399 392	54.0%
Yellowfin tuna	149 333	20.2%
Common dolphinfish	61 980	8.4%

	2015	2016	2017	2018	2019
VUR220	0.06	0.09	0.27	0.18	0.20
SHI		1.1	1.0	1.0	1.0

Segment - FRA OFR PGO0010 MQ \* Imbalance indicators - VUR<sub>220</sub>

Species/area	31	%	
Bigeye scad	133 325	33.0%	
Mackerel scad	69 799	17.3%	
Sea egg	43 397	10.7%	
Stromboid conchs nei	34 589	8.6%	
Hemiramphus spp	21 801	5.4%	

Most representative species in value of landings (€)

	2015	2016	2017	2018	2019
VUR <sub>220</sub>	0.08	0.18	0.07	0.08	0.08

Historical indicators for the last five years

Segment - FRA OFR PGP0010 MQ \* Imbalance indicators - VUR<sub>220</sub>

Species/area	31	%
Stromboid conchs nei	1 237 450	19.2%
Yellowfin tuna	1 035 364	16.0%
Caribbean spiny lobster	619 776	9.6%
Sea egg	573 581	8.9%
Common dolphinfish	539 759	8.4%
Blue marlin	521 725	8.1%
Marine fishes nei	237 784	3.7%
Filefishes, leatherjackets nei	174 313	2.7%

	2015	2016	2017	2018	2019
VUR <sub>220</sub>	0.19	0.24	0.18	0.20	0.24

#### **REUNION**

4 imbalanced clusters were studied: FRA OFR HOK0010 RE \*and FRA OFR FPO0010 GP and FRA OFR HOK1218 RE and FRA OFR HOK1824 RE \*. EWG was not able to conclude on biological indicator for the clustered segments. However, SHI was calculated for two fleet segments HOK0010 and HOK0012 (parts of HOK0010 RE \* cluster).

Segment - FRA OFR HOK0010 RE \* Imbalance indicators - SHI, VUR

Species/area	51.7	%
Yellowfin tuna	1 627 591	23.1%
Common dolphinfish	893 756	12.7%
Swordfish	890 522	12.7%
Wahoo	656 116	9.3%
Blue marlin	577 819	8.2%
Albacore	502 066	7.1%
Brilliant pomfret	428 682	6.1%

	2015	2016	2017	2018	2019
VUR			0.38	0.33	0.40

	SHI				
	2015	2016	2017	2018	2019
HOK0010	1.24	1.05	1.15	1.17	1.12
HOK1012	1.23	0.99	0.93	0.93	1.04

SHI indicates imbalance for this fleet segment due to high dependence on Striped Marlin F/Fmsy = 1.99; Blue Marlin F/Fmsy = 1.48; Bigeye tuna F/Fmsy = 1.21 and Yellowfin tuna catches F/Fmsy = 1.20

Segment - FRA OFR HOK1218 RE Imbalance indicators - Rofta, CR/BER

Species/area	51.6	51.7	51.8	Total	%
Swordfish	1 265 481	1 185 304	2 4 4 8	2 453 234	43.1%
Yellowfin tuna	589 406	620 629	994	1211029	21.3%
Albacore	587 260	483 459	743	1 071 462	18.8%
Bigeye tuna	152 973	300 368	212	453 553	8.0%
Blue marlin	181 787	136 231	1413	319431	5.6%

Most representative species in value of landings (€)

	2015	2016	2017	2018	2019
Rofta (%)	-8.5	- 18.6	- 104.5	- 47.3	- 74.0
CR/BER	0.70	0.40	-1.05	- 0.43	1.09

Historical indicators for the last five years

For biological indicators, the serious absence of catch and landings data for the most important species in the catches of the segment, prevents any computation and assessment of the balance indicators.

Segment - FRA OFR HOK1824 RE Imbalance indicators - Rofta, CR/BER

Species/area	34	51.6	51.7	51.8	Total	%
Skipjack tuna	1 209 953					32.9%
Swordfish		824 279	273 482	4 053	1 101 813	29.9%
Yellowfin tuna	417 223	172 130	139 898	774	312 803	19.8%

Most representative species in value of landings (€)

	2015	2016	2017	2018	2019
Rofta (%)	- 25.6	- 18.1	- 50.7	- 23.5	- 35.8
CR/BER	0.10	0.10	- 0.83	- 0.27	0.80

Historical indicators for the last five years

Segment - FRA OFR PGP0010 RE \* Imbalance indicators - VUR

Species/area	51.7	%
Yellowfin tuna	53 928	13.8%
Swordfish	53 853	13.8%
Albacore	49 009	12.5%
Common dolphinfish	35 466	9.1%
Natantian decapods nei	30 415	7.8%
Bigeye scad	23 321	6.0%
Spiny lobsters nei	22 302	6%
Wahoo	18 629	5.7%
Blue marlin	18 404	4.8%

Most representative species in value of landings (€)

	2015	2016	2017	2018	2019
VUR <sub>220</sub>	0.36	0.50	0.33	0.35	0.31

Historical indicators for the last five years

### **MAYOTTE**

The fleet in this region comprises 2 clustered segments, 1 of which were assessed to be out of balance according to at least one balance indicator

Species collected by DCF are not reported to species level and no stock assessments are carried out. Hence, the SHI could not be estimated.

Segment - FRA OFR HOK0010 YT \*
Imbalance indicators - VUR<sub>220</sub>

Species/area	51.6	%
Marine fishes nei	538 040	16.0%
Emperors(=Scavengers) nei	435 742	13.0%
Snappers nei	363 704	10.8%
Yellowfin tuna	352 963	10.5%
Carangids nei	282 097	8.4%
Skipjack tuna	238 650	7.1%
Green jobfish	159 078	4.7%
Groupers nei	145 746	4.3%

Most representative species in value of landings (€)

	2015	2016	2017	2018	2019
VUR220	0.37	0.42	0.37	0.42	0.44

Most representative species in value of landings (€)

### 2.4 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 4.4.1)

Table 4.4.1 - List of Fleet Segments indicators in Portuguese Outermost Regions in 2019. Out of balance ( ) with no information ( )

		Status 2019 according to thresholds and criteria in the 2014 Guidelines						
Overseas territory	Fleet segment	SAR	SHI	RoFTA	CR/BER	VUR	VUR220	
	PRT NAO DFN0010 P3							
	PRT NAO HOK0010 P3							
	PRT NAO HOK1012 P3							
	PRT NAO HOK1218 P3							
Azores	PRT NAO HOK2440 P3 *							
	PRT NAO PGP0010 P3							
	PRT NAO PS 0010 P3							
	PRT NAO PS 1012 P3							
	PRT NAO PS 1218 P3							
	PRT NAO HOK0010 P2 *							
	PRT NAO HOK1218 P2							
Madeira	PRT NAO HOK1824 P2							
iriauella	PRT NAO HOK2440 P2							
	PRT NAO MGP0010 P2							
	PRT NAO MGP1824 P2 *							

For each OMR and for those segments that are indicated to be out of balance, a list of the fish stocks on which segments rely are described in the following sub-sections.

#### **AZORES**

In this region no data is available for SHI, but all economic data are available and according to economic indicators all segments are in balance. There is information for VUR for all segments although it is not a meaningful indicator to assess balance if used in isolation.

Segment - PRT NAO DFN0010 P3 Imbalance indicators - VUR, VUR<sub>220</sub>

Species/area	27.10.a	%	
Parrotfish	287 918	59.4%	
Yellowmouth barracuda	33 675	7.0%	
Grey triggerfish	22 373	4.6%	
Thicklip grey mullet	13 134	2.7%	
White trevally	11 485	2.4%	

Most representative species in value of landings (€)

	2015	2016	2017	2018	2019
SAR	0	0	0	0	
Rofta (%)	39.1	309.3	40.6	49.7	45.3
CR/BER	3.12	5.88	3.26	3.21	2.99
VUR	0.40	0.50	0.48	0.60	0.64

Historical indicators for the last five years

Segment - PRT NAO HOK0010 P3
Imbalance indicators - VUR, VUR<sub>220</sub>

Species/area	27.10.a	27.9.a	Total	%
Veined squid	3 882 005		3 882 005	36.6%
Blackspot(=red) seabream	3 115 081		3 115 081	29.4%
Wreckfish	389 220		389 220	3.7%
Red porgy	381 722	2 315	384 037	3.6%
Alfonsino	317 194		317 194	3.0%

Most representative species in value of landings (€)

	2015	2016	2017	2018	2019
SAR	0	0	1	0	0
Rofta (%)	26.1	129.6	25.7	21.9	32.5
CR/BER	2.54	3.72	2.52	2.04	2.54
VUR	0.30	0.32	0.28	0.31	0.30

Historical indicators for the last five years

## Segment - PRT NAO HOK1012 P3

## Imbalance indicators - VUR, VUR<sub>220</sub>

Species/area	27.10.a	34.1.2	Total	%
Veined squid	3 992 415		3 992 415	42.9%
Blackspot(=red) seabream	1 952 011		1 952 011	21.0%
Blackbelly rosefish	419 643		419 643	4.5%
Bigeye tuna	371 066	35 430	406 496	4.4%
Alfonsino	380 312		380 312	4.1%

Most representative species in value of landings  $(\mathbf{\in})$ 

	2015	2016	2017	2018	2019
SAR	1	0	0	0	0
Rofta (%)	29.4	23.9	25.9	34.1	36.8
CR/BER	2.67	2.12	2.59	2.41	2.23

Segment - PRT NAO HOK1218 P3
Imbalance indicators - VUR, VUR<sub>220</sub>

Species/area	27.10.a	34.1.2	Total	%
Veined squid	1 396 750		1 396 750	21.0%
Bigeye tuna	735 368	245 119	980 487	14.7%
Blackspot(=red) seabream	935 969		935 969	14.1%
Skipjack tuna	837 463	4 348	841 811	12.7%
Blackbelly rosefish	613 364		613 364	9.2%
Albacore	108 145	244 984	353 129	5.3%

Most representative species in value of landings (€)

	2015	2016	2017	2018	2019
SAR	0	0	0	0	0
Rofta (%)	32.7	12.5	21.3	27.7	45.2
CR/BER	2.93	1.48	2.10	1.92	2.67
VUR		0.50		0.67	0.62

Historical indicators for the last five years

# Segment - PRT NAO PGP0010 P3 \*

### Imbalance indicators - VUR

Species/area	27.10.a	%
Veined squid	280 914	15.9%
Parrotfish	260 030	14.7%
Blue jack mackerel	162 605	9.2%
Grey triggerfish	100 603	5.7%

Surmullet	86 191	4.9%
Blackspot(=red) seabream	76 123	4.3%
Dusky grouper	66 118	3.7%
Axillary seabream	56 920	3.2%
Yellowmouth barracuda	56 306	3.2%
Common spiny lobster	51 879	2.9%
Forkbeard	45 964	2.6%
Red scorpionfish	45 467	2.6%
Red porgy	41 159	2.3%

Most representative species in value of landings (€)

	2015	2016	2017	2018	2019
SAR					0
Rofta (%)	3.7	71.1	14.7	10.4	41.4
CR/BER	1.10	3.62	1.76	1.70	2.83
VUR				0.94	0.54

Historical indicators for the last five years

#### **MADEIRA**

The fleet in this region comprises 6 segments, 5 of which were assessed to be out of balance according to at least one balance indicator. VUR values are available for all segments and SAR values are available for 3 segments.

Segment - PRT NAO HOK0010 P2 \*
Imbalance indicators - SAR, VUR, VUR<sub>220</sub>

Species/area	34.1.2	%
Black scabbardfish	709 325	32.7%
Bigeye tuna	526 132	24.2%
Pink dentex	277 050	12.8%

Atlantic bluefin tuna	205 282	9.5%	

Most representative species in value of landings (€)

	2015	2016	2017	2018	2019
SAR	0	0	0	0	1
Rofta (%)	20.5	19.3	28.1	39.4	71.4
CR/BER	2.09	1.75	2.20	2.97	4.48
VUR	0.27	0.32	0.24	0.38	0.39

Historical indicators for the last five years

SAR indicates imbalance for this fleet segment due to high dependence linked to stocks biologically vulnerable or stocks considered biologically at risk such as Black scabbardfish and Bigeye tuna.

Segment - PRT NAO HOK2440 P2 Imbalance indicators - SHI, VUR<sub>220</sub>

Species/area	27.10.a	34.1.2	Total	%
Albacore		1 376 669	1 376 669	47.7%
Bigeye tuna	40 395	1 225 207	1 265 602	43.9%

Most representative species in value of landings (€)

SHI indicates imbalance for this fleet segment due to high dependence on Bigeye tuna catches (43.9%)  $F/F_{msy}=1.43$ 

	2015	2016	2017	2018	2019
SHI					1.4
Rofta (%)	- 19.2	4.5	50.7	15.3	5.7
CR/BER	- 0.23	1.11	5.22	1.98	1.21

VUR	0.48	0.42	0.55	1.0	1.0
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Segment - PRT NAO MGP1824 P2 \*
Imbalance indicators - CR/BER, RoFTA

Species/area		34.1.2	%
Chub mack	erel	247 975	49.9%
Blue mackerel	jack	214 488	43.2%

Most representative species in value of landings (€)

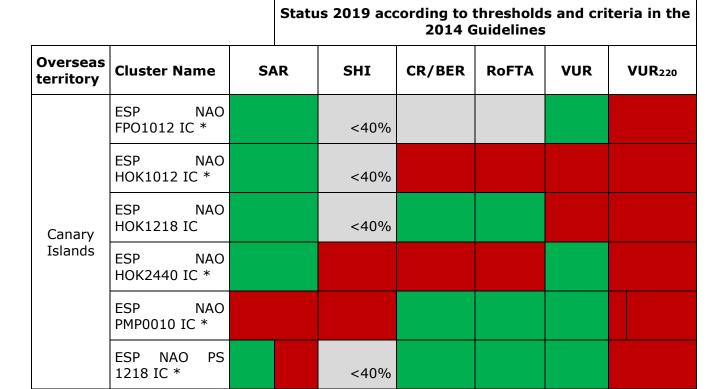
	2015	2016	2017	2018	2019
SAR	0	1	0	0	0
Rofta (%)	3.3	-7.8	0.9	20.3	- 12.0
CR/BER	1.11	0.36	0.98	2.42	0.46
VUR	0.90	0.91	1.00	1.00	1.00

Historical indicators for the last five years

### 2.5 Spanish Outermost Regions

The data provided for the Spanish OMR, Canary Islands, uses the geographical indicator to distinguish the OMR fleets and the balance indicators associated with those fleets.  $(Table\ 4.5.1)$ 

Table 4.5.1 - List of Fleet Cluster Segments Indicators in Canary Islands. Out of balance ( ), in balance ( ) with no information ( )



SAR, SHI and VUR have been calculated for each segment (13 in total) comprising the 6 clusters, however, CR/BER and RoFTA were calculated just for the 6 clusters to maintain commercial confidentiality.

For FPO1012IC economic indicators have not been calculated because the variable "annual depreciation costs" has not submitted.

For each OMR and for those segments that are indicated to be out of balance, a list of the fish stocks on which segments rely are described in the following sub-sections.

ESP NAO HOK1012 IC \*

Imbalance indicators – CR/BER, Rofta, VUR

Specie	34.1.1	34.1.2	Total	%
Skipjack tuna		705 231	705 231	23.4%
Bigeye tuna		678 052	678 052	22.5%
Atlantic bluefin tuna	7 348	582 195	589 544	19.6%

Albacore 465 673 465 673 15.5%	Albacore	465 673	465 673	15.5%
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Most representative species in value of landings (€)

	2017	2018	2019
CR/BER	7,4	3,2	-1,8
ROFTA	173,1	81,7	-81,1

Historical indicators for the last three years

Regarding VUR, in this Cluster segment, we can find 9 vessels from the segment  ${\tt HOK0010IC}$ , and 33 vessels from the segment  ${\tt HOK1012IC}$ .

	VUR			
	2017	2018	2019	
HOK0010IC	1,00	1,00	1,00	
HOK1012IC	0,59	0,54	0,53	

Historical indicators for the last three years

# **ESP NAO HOK1218 IC**

### Imbalance indicator - VUR

Specie	34.1.1	34.1.2	Total	%
Bigeye tuna		1 679 281	1 679 281	38.7%
Albacore		1 013 462	1 013 462	23.4%
Skipjack tuna	14 925	537 686	552 611	12.7%
Atlantic bluefin tuna		480 820	480 820	11.1%

	2017	2018	2019
SAR	0	0	0
Rofta (%)	136.2	22.0	52.2

CR/BER	6.72	1.79	5.31
VUR	0.60	0.65	0.60

**ESP NAO HOK2440 IC \*** 

### Imbalance indicators – SHI, Rofta, CR/BER

Specie	34.1.1	34.1.2	Total	%
Bigeye Tuna	64 000	5 309 887	5 373 887	62.4%
Albacore		2 021 882		23.5%

Most representative species in value of landings (€)

	2017	2018	2019
SAR		0	0
SHI	1.42	1.43	1.43
Rofta (%)	30.4	- 53.2	- 44.6
CR/BER	0.36	- 0.78	0.11
VUR	0.96	0.95	0.98

Historical indicators for the last three years

This cluster is composed by two segments: HOK1824 and HOK2440. For both SHI indicates unbalance due to high dependence of caches of Bigeye tuna (62.41%)  $F/F_{msy} = 1.21$ 

**ESP NAO PMP0010 IC \*** 

### Inbalance indicators - SAR, SHI, VUR

Specie	34.1.1	34.1.2	Total	%
Parrotfish		1 501 455	1 501 455	13.6%
Pink dentex		931 232	931 232	8.4%
Skipjack tuna		819 285	819 285	7.4%

Atlantic bluefin tuna	35 408	759 204	794 612	7.2%
Red porgy		763 045	763 045	6.9%
Bigeye tuna		591 147	591 147	5.4%
Splendid alfonsino		389 647	389 647	3.5%
Albacore		364 237	364 237	3.3%
White trevally		343 236	343 236	3.1%
Dusky grouper		257 369	257 369	2.3%
Grey triggerfish		224 330	224 330	2.0%
European hake		218 320	218 320	2.0%
Wahoo		193 542	193 542	1.8%
Surmullet		178 503	178 503	1.6%
Narwal shrimp		173 142	173 142	1.6%
Striped soldier shrimp		156 253	156 253	1.4%
Yellowfin tuna		151 468	151 468	1.4%
Common pandora		151 383	151 383	1.4%
Redbanded seabream		150 944	150 944	1.4%

Most representative species in value of landings (€)

	2017	2018	2019
SAR		4	8
SHI		1.13	1.29
Rofta (%)		- 87.2	29.1
CR/BER		- 3.00	1.95
VUR		0.31	0.28

Historical indicators for the last three years

The selecting stock for SAR was Madeira Sardinella in 2019.

SHI indicates unbalance for this fleet segment due to their caches of Bigeye tuna  $F/F_{msy} = 1.43$ 

In this cluster segment we can find four segments: PMP0010 (440 vessels), PMP1012 (7vessels), PMP1218 (2 vessels) and PMP1824 (1 vessels). VUR and SHI has been calculated for the 4 segments.

		VUR			SHI	
Segment	2017	2018	2019	2017	2018	2019
PMP0010IC		0,31	0,28		1,13	1,29
PMP1012IC		1,0	1,0		1,37	1,42
PMP1218IC		1,0	1,0			1,43
PMP1824IC			1,0			1,43

### **ESP NAO PS1218 IC \***

### **Imbalance indicators - SAR**

Specie		34.1.2	%
Blue mackerel	jack	710 352	40.6%
Atlantic mackerel	chub	605 334	34.6%

Most representative species in value of landings (€)

	SAR				
	2017	2018	2019		
PS1012	0	0	0		
PS1218	1	1	2		

Historical indicators for the last three years

	2017	2018	2019
Rofta (%)	156.8	78.3	97.8
CR/BER	2.62	4.84	2.40

VUR	0.85	0.89	1.00
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This clustered segment is composed by two segments: PS1012 and PS1218.

PS1012 shows a balanced SAR.

PS1218 shows an imbalanced SAR. The selecting stock for SAR was Round Sardinella in 2019.

## 2.6 Summary

	Fleet segments (FS)		SAR	SHI	Rofta	CR/BER	VUR	VUR <sub>220</sub> total	VUR <sub>220</sub>
	23	Assessed FS	0	6	10	10	7	23	16
France		Imbalance	0	1	4	4	3	23	15
	% imb	alance	-	17	40	40	43	100	94
	15	Assessed FS	8	1	15	15	15	15	0
Portugal		Imbalance	1	1	1	1	6	10	0
	% imba		13	100	7	7	40	67	-
	6	Assessed FS	6	2	5	5	6	6	0
Spain		Imbalance	1	2	2	2	2	6	0
	% imb	alance	17	100	40	40	33	100	-
Total 44	44	Assessed FS	14	9	30	30	28	44	16
		Imbalance	2	4	7	7	11	39	15
	% imb	alance	14	44	23	23	39	89	94

The table presented above summarizes the information on balance indicators and their assessment available for each OMR by Member state for the year 2019. 44 fleet segments were presented in the OMRs (Saint Martin did not present any fleet segment).

To compute balance indicators for the segments for which no indicator can be provided require estimates of  $F/F_{MSY}$  (or a proxy for  $F/F_{MSY}$ ) for stocks exploited by such segments be obtained from up-to-date stock assessments undertaken by relevant fisheries bodies. In addition, landings in weight and value for such stocks by each segment also need to be collected and made available. By Member States preferably via the fleet economic data call.

There is a significant lack of data to compute the biological indicators; the SAR could be computed for only 32% and the SHI only 21% of the 44 fleet segments identified in the OMRs. For the French OMRs, no information was available to compute the SAR indicator for any segments and the SHI could be computed for 6 segments out of 23 (27%). For Portuguese OMRs, the SAR indicator was computed for 8 out of 15 segments (53%, but the SHI was available for only 1 segment (<7%). For Spanish OMRs, only 6 segments were identified, and the SAR was available for all 6, whereas the SHI could be compute for only 2. The bigeye tuna stock with F/Fmsy = 1.43 is responsible for the imbalance for fleet segments of Portugal and Spain OMRs indicated by the SHI. The imbalanced Portuguese segment according to the SAR indicator is attributed to catches of bigeye tune, and catches of sardinella account for the SAR imbalance in the Spanish segment.

In the fleet report for 2020, economic information for the French OMRs was provided for the same 10 fleet segments reported in their national fleet report for 2019. For nine of those segments, economic indicator values are available for the years 2016 to 2019 inclusive.

Martinique, Mayote and Saint Martin did not provide economic data to calculate the economic indicators. Reunion Island only provide economic information for higher length fishing vessels (HOK1218 and HOK1824). For the segment HOK0010 which represented 84% of the fleet, in number of vessels, Réunion Islands did not provide economic information. French Guiana did not provide information for the DTS1824 fleet segment which counted 60 vessels in 2019. The 2021 Annual Economic Report (STECF 21-08) will provide more details on the OMR economic performance of the fleets.

Spain provided economic information for their 6 segments, however for ESP NAO FPO1012IC economic indicator has not been calculated because the variable "annual depreciation costs" has not submitted.

For the technical indicators (VUR) the technical indicator  $VUR_{220}$  (considering the maximum days at sea equal to 220 days) where assessed when the MS didn't provided the maximum days at sea for the fleet segment to calculate the VUR indicator. Lack of information were observed for 16 French fleet segments for this variable.

According to 2014 Commission guidelines the economic and biological indicators should be calculated for a period of at least three years to assess balance.

		SAR	SHI	Rofta	CR/BER	VUR	VUR <sub>220</sub> total	VUR <sub>220</sub>
	Imbalance 2019	0	1	4	4	3	23	15
France	Structural imbalance	0	1	4	4	3	23	15
	Imbalance 2019	1	1	1	1	6	11	0
Portugal	Structural imbalance	0	0	0	0	5	11	0
	Imbalance 2019	1	2	2	2	2	6	0
Spain	Structural imbalance	1	2	1	1	2	6	0
Total	Imbalance 2019	2	4	7	7	11	40	15
local	Structural imbalance	1	3	5	5	10	40	15

Structural imbalance for the indicators according to the Guidelines (imbalance in the last three years)

Using the guidelines approach 4 fleet segments revels structural imbalance for biologic indicators, 5 on economic indicators and 25 on technical indicators.

	Fleet segment
	FRA OFR HOK0010 RE *
Biologic	ESP NAO HOK2440 IC *
Diologic	ESP NAO PMP0010 IC *9
	ESP NAO PS 1218 IC *
	FRA OFR FPO0010 GP
	FRA OFR PGP1012 GP *
Economic	FRA OFR HOK1218 RE
	FRA OFR HOK1824 RE *
	ESP NAO HOK2440 IC

### 2.6.1 Biological Data Requirements

<sup>&</sup>lt;sup>9</sup> Based only on information from the last two years (no information for 2017).

The ability to calculate and the reliability of the biological indicators for each big area is mainly data dependent:

- 1. We need to urgently increase our knowledge on stocks and improve stock assessments. In particular, information on fishing mortality and reference points for as many stocks as possible is needed, together with stock assessments that are validated by the RFMOs. Outside Area 27 and 37 with ICES and GFCM, TUNA RFMOs are effective in producing estimates for F and F<sub>msy</sub>, even if the assessment process, involving many different countries is challenging. Other RFMOs are rather less effective (due to the lack of data or/and of cooperation between the countries to develop a common fisheries policy). For the Canary Islands for example, there are few (or none) formal stock assessments except for some tuna species. We also need catches information at the stock level, that means with good species identification with full reporting at species-specific level and spatial catches with sufficient detailed scale. In Mayotte, as example, the first species caught is "Marine Fishes nei" (cf. Figure 4.6.1). Such species reporting is impossible to specific stocks. An analogous problem arises if the spatial declaration of the catches is too large or not given.
- 2. In Outermost regions (as for other Long distant RFMO's or Mediterranean case) Blim is not a reference point that is routinely computed during stock assessments. To properly perform SAR calculation, EWG pre meeting also mentioned the need to agree on a proxy value for Blim when not available. The Expert group suggests that a value equivalent to 50% x BMSY could be a good candidate as a proxy for Blim.
- 3. A large number of harvested stocks in Outermost region are not assessed. This point was raised by STECF EWG 19-19 dedicated to Outermost regions e.g. for Martinique, Mayotte and Gadeloupe, 90% of the species landed are not subject to a stock assessment. To improve the knowledge base of fishery-dependent and independent data, an increase in sampling coverage and intensity is required. DG MARE should take steps to ensure that an appropriate level of sampling in the OMRs is contained in the National Work plans for the Member States concerned before such plans are approved.

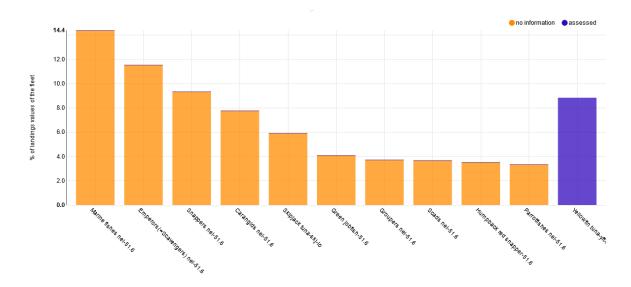


Figure 4.6.1. Lack of information for Mayotte island, many species cannot be linked to stock as there are declared as Nei.

- 1. If we want to improve and extend information on balance indicators in the OMRs there is a need to:
- 2. strengthen tuna stocks assessments
- 3. improve Fisheries Information system with properly sampled catches at the specie-specific and geographical scale
- 4. to strengthen RFMos to evaluate other stocks

# 2.7 Stocks on which fleet segments are reliant – Outermost regions

The stocks on which fleet segments that are indicated to be out of balance are reliant, are given in Table 4.7.1.

The fish stocks on which a fleet segment is reliant is 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

Table 4.7.1

Fleet	Species / Stocks that account for t 75% of the total landings values of the fleet
	hkm-34.1_3/assessed Striped red shrimp-47.1.1/no information
	dps_34.3.1/assessed Striped red shrimp-47.1.2/no information
	Benguela hake-34.3.1/no information dps_34.3.6/assessed
ESP-OFR-DTS-VL2440-	Striped red shrimp-34.3.1/no information Striped red shrimp-
NGI-NO-	34.3.6/no information Senegalese hake-34.3.1/no information

	Red mullet-34.3.1/no information Common octopus-34.3.1/no information
ESP-OFR-DTS- VL40XX-NGI-NO-	Argentine hake-41.3.1/no information Argentine hake-41.3.2/no information Patagonian squid-41.3.2/no information Patagonian grenadier-41.3.2/no information Senegalese hake-34.3.1/no information Argentine shortfin squid-41.3.1/no information Pink cusk-eel-41.3.1/no information
ESP-OFR-HOK- VL1218-NGI-NO-	hkm-34.1_3/assessed
ESP-OFR-HOK- VL1824-NGI-NO-	Atlantic pomfret-34.1.3/no information Splendid alfonsino-34.1.3/no information Atlantic pomfret-34.3.1/no information
ESP-OFR-HOK- VL2440-NGI-NO-	Skipjack tuna-34.3.1/no information Atlantic pomfret-34.1.3/no information yft-atl/assessed
FRA-OFR-HOK- VL0010-RE	yft-io/assessed Common dolphinfish-51.7/no information swo-io/assessed Wahoo-51.7/no information bum-io/assessed alb-io/assessed Brilliant pomfret-51.7/no information
FRA-OFR-HOK- VL1012-RE	swo-io/assessed yft-io/assessed bum-io/assessed
FRA-OFR-HOK- VL2440-IWE	Skipjack tuna-34/no information yft-atl/assessed
FRA-OFR-PGP-VL0010- RE	yft-io/assessed Common dolphinfish-51.7/no information Spiny lobsters nei-51.7/no information Wahoo-51.7/no information bum-io/assessed Bigeye scad-51.7/no information alb-io/assessed Brilliant pomfret-51.7/no information Surgeonfishes nei-51.7/no information Groupers nei-51.7/no information
FRA-OFR-PGP-VL0010- YT	Indian mackerel-51.6/no information Needlefishes, etc. nei-51.6/no information Marine fishes nei-51.6/no information Carangids nei-51.6/no information Fusiliers nei-51.6/no information Parrotfishes nei-51.6/no information Snappers nei-51.6/no information Emperors(=Scavengers) nei-51.6/no information Scads nei-51.6/no information
ITA-OFR-DTS-VL40XX- IWE	Common octopus-34.3.1.3/no information Common octopus-34.3.3/no information Marine fishes nei-34.3.3/no information Marine fishes nei-34.3.1.3/no information Common cuttlefish-34.3.1.3/no information Mediterranean scaldfish-34.3.3/no information Angler(=Monk)-34.3.3/no information
LTU-OFR-TM-VL40XX- NEU	hom_34/assessed Chub mackerel-34.1.3.2/no information Chub mackerel-34.1.3.1/no information Chub mackerel-34.3.1.1/no information

# 3 TASK 4 - STOCKS ON WHICH FLEET SEGMENTS ARE RELIANT - ALL REGIONS

ANNEX III lists for each Member State, 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.

Annex III is available both as a Table in Microsoft word and as a Microsoft Excel workbook.

# 4 CONTACT DETAILS OF EWG-21-16 PARTICIPANTS

¹ - Information on EWG participant's 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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## 5 **LIST OF ANNEXES**

Annex I — Methods of calculating indicators and trends – appended to report

Annex I A - Biological indicator stock reference list - appended to report

Annex I B - SAR stock selection - separate Excel file

Annex II - Comparison of indicator values - separate Excel file

Annex III - Stocks on which fleet segments are reliant - separate in Word and Excel

formats

# 6 LIST OF BACKGROUND DOCUMENTS

Background documents are published on the meeting's web site on: <a href="http://stecf.jrc.ec.europa.eu/web/stecf/ewg2011">http://stecf.jrc.ec.europa.eu/web/stecf/ewg2011</a>

List of background documents:

EWG-21-16 – Doc 1 - Declarations of invited and JRC experts (see also section 6 of this report – List of participants)

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

https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52014DC0545

Fleet capacity reports 2020

https://ec.europa.eu/oceans-and-fisheries/fisheries/rules/fishing-fleet-capacities/fleet-capacity-reports-2020 en

#### **ANNEXES**

# Annex I - Methods of calculating indicators and trends

# A1.1 Sustainable Harvest Indicator (SHI)

According 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 / Fmsy > 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 economic data call), using the following formula:

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

In which, Fi is the fishing mortality available for stock i from scientific assessments (e.g. ICES, STECF, GFCM, ICCAT, IOTC advice) and Vi is the value of landings from stock i. Data on Fi (mean F) and FMSY 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 by STECF working group compiled was by (https://stecf.jrc.ec.europa.eu/web/stecf/dd/medbs/sambs). In addition, information on F/Fmsv was scrutinized from GFCM Stock Assessment (http://www.fao.org/gfcm/data/safs/en/) kindly provided **GFCM** by secretariat. Information tuna / tuna-like species was obtained from (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) as well as in SPRFMO (e.g., jack mackerel, www.sprfmo.int). CECAF report was also used for area 34. The full indicator time series (2009-2021) was updated based on the most recent assessments available (2020 or 2021 is most cases) and FMSY point estimates.

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 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 hake (HKE) in GSAs1 two assessments are carried out; one for hke in GSAs 1 and a second for hke in GSAs 1, and 3 combined. Therefore, 50% of the total landings value from GSA 10 is associated with the value of  $F/F_{MSY}$  resulting for the GSA 1 assessment and 50% to that for GSAs 1 and 3.

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:

- <u>Stock Assessment Selection</u> 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 20-11 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 2016 or more recently.
- 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 FMSY 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.
- EWG 19-13 Prep. Meeting participants noted that the list of F/FMSY 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 FMSY 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 (<a href="http://www.fao.org/gfcm/data/safs/en/">http://www.fao.org/gfcm/data/safs/en/</a>). 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/FMSY 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 FMSY differed, both assessments were retained and the SHI calculations were based on an average of the two assessment results.

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. The Expert Group 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.

# A1.2 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 european fleets total catches from a stock at risk, the 2014 Balance Indicator Guidelines suggest that this could be treated as an indication of imbalance.

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 either regarding the total catch of the stock or the total catch of the fleet segment. 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 Blim; 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 A1.1. 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. A1.1, 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.

	Land	lings (weig	ghts)				Land	lings (% b	y FS)	
	Stock A	Stock B	Stock C			10	Stock A	Stock B	Stock C	
FS1	25	3	3	31		FS1	80.645	9.677	9.677	100.000
FS2	2	30	0	32	1	FS2	6.250	93.750	0.000	100.000
FS3	11	0	100	111		FS3	9.910	0.000	90.090	100.000
FS4	3	10	30	43		FS4	6.977	23.256	69.767	100.000
FS5	7	75	0	82		FS5	8.537	91.463	0.000	100.000
	48	118	133			::::::::::::::::::::::::::::::::::::::				
		1						1		
	Landin	ngs (% by S	тоск)				Cross	-table FS-	Stock	
	Landin Stock A	gs (% by S	STOCK)				Cross Stock A	s-table FS-	Stock Stock C	
FS1	- (A)					FS1				
	Stock A	Stock B	Stock C			FS1 FS2	Stock A	Stock B	Stock C	
FS2	Stock A 52.083	Stock B 2.542	Stock C 2.256		<b></b>		Stock A	Stock B	Stock C	
FS1 FS2 FS3 FS4	52.083 4.167	Stock B 2.542 25.424	2.256 0.000		<b></b>	FS2	Stock A  1 0	Stock B 0 1	Stock C 0 0	
FS2 FS3	Stock A 52.083 4.167 22.917	2.542 25.424 0.000	Stock C 2.256 0.000 75.188		<b>→</b>	FS2 FS3	Stock A  1  0  1	0 1 0	0 0 1	

Figure A1.1. Example of pre-processing of landings data for the computation of the SAR indicator

During the preparatory meeting EWG 20-20, more than 300 stocks were examined. For 2018 Balance Group, 206 items were considered at risk for at least one year of the time period 2009-2017. They are representing over 200 stocks considering that some regulation relates to groups (e.g. Mobula listing in CITES count for one item but al

The total number of Stocks as Risk increased from 2012 to 2017, 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 A1.2-A1.3).

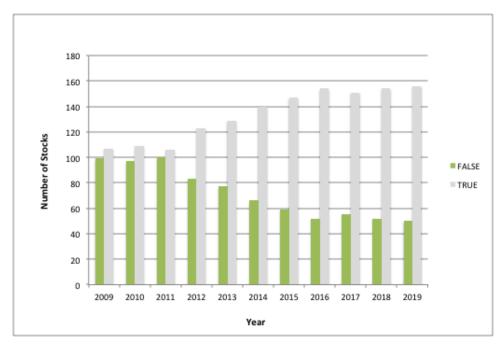


Figure A1.2 - Distribution of the number of SAR per year (TRUE = Stock is considered at risk; FALSE = Stock is not considered at risk).

For 2018, about a third of the stock were selected based on quantitative data (SSB/B lim), another third was selected due to RFMO's advices based on quantitative data different from Blim and the remaining third were linked to some listing in International conventions (IUCN or CITES).

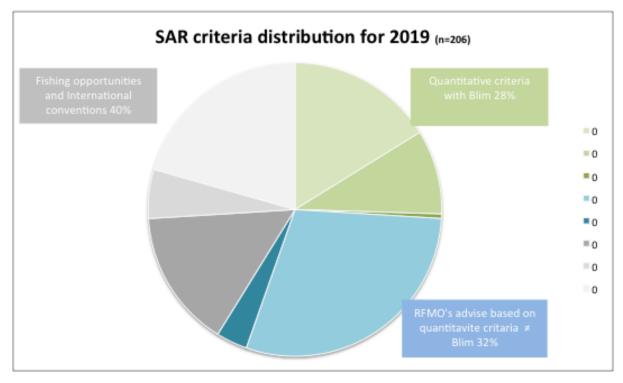


Figure A1.3 - Distribution of SAR per selecting criteria (a to d) in 2019.

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 for years 2009 – 2020 are given in Annex IA to this report.

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:

- <u>Committee for Central for Eastern Atlantic (CECAF)</u> 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 selction as well as Madeiran sardinella, Round sardinella both for north and south CECAF.
- When B<sub>lim</sub> was not available a proxy of 0.4 SSB<sub>msy</sub> 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, due to the
  co-vid crisis; the deadline taken into acount was the 06/07/2020. 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 purspose of evaluation oft he fishing activity on the environement 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, some progress was noticeable since 3 years in term of quality and clarity of the RFMO's advice.

- 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. National regulations together with National expert knowledge may also prove to be informative regarding the identification of SARs, especially regarding localised areas and stocks
- There is a need to take into account other International conventions in defining a SAR for fish and other marine organisms (echinoderms, crustaceans, molluscs)? Candidates include the Bonn, Bern, Ospar, Barcelona, SPAW, CMS, etc.
- A 'State of the Stocks' EWG exercise who be profitable to provide a reference document of the status of all stocks worldwide together with their SAR classification. Such an exercise requires convening a small, dedicated expert group. The current process, where the classification by 2 contracted experts is not ideal. The report from that exercise would provide a publically-available reference document which would also increase transparency in the SAR assessment process.
- While the current balance/capacity exercise focuses on fleet segments and exploited fish resources, consideration may need to be given to extending the scope to include fisheries impacts on habitats and ecosystems. Recently, ICES started to worked on a selection of habitats in order to build a VEM's index (Vulnerable Marine Ecosystem) and evaluate the impact of fisheries on ecosystems in the framework of an EU request. However, so far we have a list of VEM but not really linked it to fisheries. This may be worth further consideration as a means to progress along such lines.

# A1.3. Return on Investment (RoI) and/or Return on Fixed Tangible Assets (RoFTA)

According the 2014 Commission 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 21-16 as:

Net profit / (value of physical capital + value of quota and other fishing rights) where,

Net profit = (Income from landings + other income + income from leasing out quota) - (crew wage + unpaid labour + energy costs + repair costs + other variable costs + other non-variable costs + lease/rental payments for quota or value of quota + 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

Net profit / (value of physical capital);

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 consumption of fixed capital is not provided. Conevrsely, RoI is calculated if at least one of the following is provided: income from leasing out quota, lease/rental payments for quota or value of quota and other fishing rights

EWG 21-16 applied the criteria from the 2014 Commission guidelines to comment on whether fleet segments where `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 when RoI is not available. RoI is only available for countries that provide data on fishing rights (income, costs /or estimated value of fishing rights).

# **Indicator Trends**

Trends were calculated according to the filters detailed below for the years 2015 – 2019 (Table 3.3.3.1).

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

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

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

# A1.4. Ratio Current Revenue and Break-Even Revenue (CR/BER)

According to the 2014 Commission guidelines (COM 2014, 545 final), the ratio between current revenue and break-even revenue measures the economic capability of the fleet

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

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 recommende 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:

Current revenue (CR) / Break Even Revenue (BER)

## In which:

CR = income from landings + other income
BER = fixed costs / (1-[variable costs / current revenue])

## In which:

Fixed costs = other non-variable costs + annual depreciation + opportunity cost of capital

## And,

Variable costs = crew wage + unpaid labour + energy costs + repair costs + 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 2015 - 2019 (Table 3.3.4.1).

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

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

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

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

## A1.5.The Inactive Fleet Indicators

According to the 2014 Commission 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 2015 – 2019 (Table 3.3.5.1).

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

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

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

## A1.6.The Vessel Use Indicator

According to the 2014 Commission 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  $VUR_{220}$  per fleet segment based on a reference DAS of 220 days.

## **Indicator Trends**

Trends were calculated according to the filters detailed below for the years 2015 - 2019

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

(Table 3.3.6.1).

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

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

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

# **Annex IA – Biological Indicator Stock Reference List**

The reference list shown below is currently used to divide commercial landings data at species level into stocks. Stocks that are not divided are not included in the list. The resulting stock ladings data were used in the calculation of the SHI and SAR indicator values for consideration by EWG 21-16.

species_code	fishstock	sub_division_fao	splitting_value
ANE	ane-gsa09	SA 9	2
ANE	ane-gsa09_10_11	SA 9	2
ANF	ank.27.78abd	27.7.A	3.7
ANF	ank.27.78abd	27.7.B	3.7
ANF	ank.27.78abd	27.7.C	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	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	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	3.7
ANF	ank.27.78abd	27.8.D.1	3.7
ANF	ank.27.78abd	27.8.D.2	3.7

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

ANF	ank.27.8c9a	27.8.C	2.5
ANF	ank.27.8c9a	27.9.A	2.5
ANF	mon.27.78abd	27.7.A	1.4
ANF	mon.27.78abd	27.7.B	1.4
ANF	mon.27.78abd	27.7.C	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	1.4
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	1.4
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	1.4
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
ARA	ara-gsa06	SA 6	2
ARA	ara-gsa06_07	SA 6	2
CAP	cap.27.1-2	27.2.A.1	3
CAP	cap.27.1-2	27.2.A.2	3
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.A	1
COD	cod.27.1-2	27.1.B	1
COD	cod.27.1-2	27.2.A	1
COD	cod.27.1-2	27.2.A.1	1
COD	cod.27.1-2	27.2.A.2	1
COD	cod.27.1-2	27.2.B	1
COD	cod.27.1-2	27.2.B.1	1
COD	cod.27.1-2	27.2.B.2	1
COD	cod.27.1-2	27.1.A	21.4
COD	cod.27.1-2coast	27.1.A 27.1.B	21.4
COD	cod.27.1-2coast	27.2.A	21.4
COD	cod.27.1-2coast	27.2.A.1	21.4

COD	cod.27.1-2coast	27.2.A.2	21.4
COD	cod.27.1-2coast	27.2.B	21.4
COD	cod.27.1-2coast	27.2.B.1	21.4
COD	cod.27.1-2coast	27.2.B.2	21.4
СТС	ctc-gsa17	SA 17	2
СТС	ctc-gsa17_18	SA 17	2
HER	her.27.1-24a514a	27.4.A	1.4
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	8.1
HER	her.27.3a47d	27.3.A	1.1
HER	her.27.3a47d	27.4.A	3.5
HER	her.27.5a	27.5.A.1	13
HER	her.27.5a	27.5.A.2	13
HER	her.27.irls	27.7.A	1.5
HER	her.27.nirs	27.7.A	3.1
НКЕ	hke-gsa01	SA 1	3
HKE	hke-gsa01_03	SA 1	3
НКЕ	hke-gsa01_03	SA 3	2
HKE	hke-gsa01_05_06_07	SA 1	3
НКЕ	hke-gsa01_05_06_07	SA 5	3
НКЕ	hke-gsa01_05_06_07	SA 6	2
НКЕ	hke-gsa01_05_06_07	SA 7	2
HKE	hke-gsa02_03_04_05	SA 3	2
HKE	hke-gsa02_03_04_05	SA 5	3
HKE	hke-gsa05	SA 5	3
HKE	hke-gsa06	SA 6	2
HKE	hke-gsa07	SA 7	2
HKE	hke-gsa08_09_10_11	SA 10	2
HKE	hke-gsa08_09_10_11	SA 11	2
HKE	hke-gsa08_09_10_11	SA 9	3
HKE	hke-gsa09	SA 9	3
НКЕ	hke-gsa09_10_11	SA 10	2
HKE	hke-gsa09 10 11	SA 11	2
HKE	hke-gsa09_10_11	SA 9	3
HKE	hke-gsa17_18	SA 17	2
HKE	hke-gsa17 18	SA 18	2
HKE	hke-gsa17_18_stecf	SA 17	2
HKE	hke-gsa17_18_stecf	SA 18	2
LEZ	ldb.27.8c9a	27.8.C	1.3
LEZ	ldb.27.8c9a	27.9.A	1.3
LEZ	meg.27.8c9a	27.8.C	4.8
LEZ	meg.27.8c9a	27.9.A	4.8

MNZ	ank.27.78abd	27.7.A	3.7
MNZ	ank.27.78abd	27.7.B	3.7
MNZ	ank.27.78abd	27.7.C	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	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	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	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	2.5
MNZ	ank.27.8c9a	27.9.A	2.5
MNZ	mon.27.78abd	27.7.A	1.4
MNZ	mon.27.78abd	27.7.B	1.4
MNZ	mon.27.78abd	27.7.C	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
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	1.4
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	1.4
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	1.4
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
MON	ank.27.78abd	27.7.A	3.7
MON	ank.27.78abd	27.7.B	3.7
MON	ank.27.78abd	27.7.C	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	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	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	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.A	1.4
MON	mon.27.78abd	27.7.B	1.4
MON	mon.27.78abd	27.7.C	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	1.4
MON	mon.27.78abd	27.7.J.1	1.4
MON	mon.27.78abd	27.7.J.2	1.4
MON	mon.27.78abd	27.7.K	1.4
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	1.4

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
MTS	mts-gsa17_18	SA 17	2
MUT	mut-gsa12_14	SA 14	2
MUT	mut-gsa13-14	SA 14	2
MUT	mut-gsa15	SA 15	2
MUT	mut-gsa15_16	SA 15	2
MUT	mut-gsa15_16	SA 16	2
MUT	mut-gsa16	SA 16	2
NEP	nep.fu.10	27.4.A	307
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	21962.7
NEP	nep.fu.15	27.7.A	1.1
NEP	nep.fu.16	27.7.B	1.4
NEP	nep.fu.16	27.7.J	1.3
NEP	nep.fu.16	27.7.J.1	1.3
NEP	nep.fu.16	27.7.J.2	1.3
NEP	nep.fu.17	27.7.B	3.5
NEP	nep.fu.19	27.7.A	16.1
NEP	nep.fu.19	27.7.G	9
NEP	nep.fu.19	27.7.J	4.1
NEP	nep.fu.19	27.7.J.1	4.1
NEP	nep.fu.19	27.7.J.2	4.1
NEP	nep.fu.2021	27.7.G	2.6
NEP	nep.fu.22	27.7.G	2
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.32	27.4.A	29.1
NEP	nep.fu.33	27.4.B	6.5
NEP	nep.fu.34	27.4.B	13.5
NEP	nep.fu.5	27.4.B	5.4
NEP	nep.fu.6	27.4.B	3.3
NEP	nep.fu.7	27.4.A	1.2
NEP	nep.fu.8	27.4.B	3.5
NEP	nep.fu.9	27.4.A	6.2
PIL	pil-gsa01	SA 1	2
PIL	pil-gsa01-03	SA 1	2
PIL	pil-gsa01-03	SA 3	2
PIL	pil-gsa03	SA 3	2
1.15	pii-gaα∪3	JA J	2

PIL	pil-gsa22	SA 22	2
PIL	pil-gsa22_23	SA 22	2
PRA	pra.27.3a4a	27.4.A	1
PRA	pra.27.4a	27.4.A	2256.3
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	<u>.</u>	27.12.B.	1.1
REB	reb.2127.dp	27.12.C	1.1
	reb.2127.dp		
REB	reb.2127.dp	27.14.A	1.4
REB	reb.2127.dp	27.14.B	1.6
REB	reb.2127.dp	27.14.B.1	1.6
REB	reb.2127.dp	27.14.B.2	1.6
REB	reb.2127.dp	27.5.A.1	1.4
REB	reb.2127.dp	27.5.A.2	1.4
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	17.7
REB	reb.2127.sp	21.2	17.7
REB	reb.2127.sp	27.12.A	17.7
REB	reb.2127.sp	27.12.A.1	17.7
REB	reb.2127.sp	27.12.A.2	17.7
REB	reb.2127.sp	27.12.A.3	17.7
REB	reb.2127.sp	27.12.A.4	17.7
REB	reb.2127.sp	27.12.B	17.7
REB	reb.2127.sp	27.12.C	17.7
REB	reb.2127.sp	27.14.A	23.8
REB	reb.2127.sp	27.14.B	26.4
REB	reb.2127.sp	27.14.B.1	26.4
REB	reb.2127.sp	27.14.B.2	26.4
REB	reb.2127.sp	27.5.A.1	23.8
REB	reb.2127.sp	27.5.A.2	23.8
REB	reb.2127.sp	27.5.B.1.A	17.7
REB	reb.2127.sp	27.5.B.1.B	17.7
REB	reb.2127.sp	27.5.B.2	17.7
REB	reb.27.14b	27.14.B	10.2
REB	reb.27.14b	27.14.B.1	10.2
REB	reb.27.14b	27.14.B.2	10.2

REB	reb.27.5a14	27.14.A	3.9
REB	reb.27.5a14	27.14.B	4.3
REB	reb.27.5a14	27.14.B.1	4.3
REB	reb.27.5a14	27.14.B.2	4.3
REB	reb.27.5a14	27.5.A.1	3.9
REB	reb.27.5a14	27.5.A.2	3.9
RED	reb.2127.dp	21.1	1.1
RED	reb.2127.dp	21.2	1.1
RED	reb.2127.dp	27.12.A	2.8
RED	reb.2127.dp	27.12.A.1	2.8
RED	reb.2127.dp	27.12.A.2	2.8
RED	reb.2127.dp	27.12.A.3	2.8
RED	reb.2127.dp	27.12.A.4	2.8
RED	reb.2127.dp	27.12.B	2.8
RED	reb.2127.dp	27.12.C	2.8
RED	reb.2127.dp	27.14.A	2.8
RED	reb.2127.dp	27.14.B	2.8
RED	reb.2127.dp	27.14.B.1	2.8
RED	reb.2127.dp	27.14.B.2	2.8
RED	reb.2127.dp	27.5.A.1	2.8
RED	reb.2127.dp	27.5.A.2	2.8
RED	reb.2127.dp	27.5.B.1.A	2.8
RED	reb.2127.dp	27.5.B.1.B	2.8
RED	reb.2127.dp	27.5.B.2	2.8
RED	reb.2127.sp	21.1	17.7
RED	reb.2127.sp	21.2	17.7
RED	reb.2127.sp	27.12.A	46.3
RED	reb.2127.sp	27.12.A.1	46.3
RED	reb.2127.sp	27.12.A.2	46.3
RED	reb.2127.sp	27.12.A.3	46.3
RED	reb.2127.sp	27.12.A.4	46.3
RED	reb.2127.sp	27.12.B	46.3
RED	reb.2127.sp	27.12.C	46.3
RED	reb.2127.sp	27.14.A	46.3
RED	reb.2127.sp	27.14.B	46.3
RED	reb.2127.sp	27.14.B.1	46.3
RED	reb.2127.sp	27.14.B.2	46.3
RED	reb.2127.sp	27.5.A.1	46.3
RED	reb.2127.sp	27.5.A.2	46.3
RED	reb.2127.sp	27.5.B.1.A	46.3
RED	reb.2127.sp	27.5.B.1.B	46.3
RED	reb.2127.sp	27.5.B.2	46.3
RED	reb.27.1-2	27.1.A	1.4
			2

RED         reb.27.1-2         27.2 A         1.4           RED         reb.27.1-2         27.2 A         1.4           RED         reb.27.1-2         27.2 A1         1.4           RED         reb.27.1-2         27.2 B         1.4           RED         reb.27.1-2         27.2 B.1         1.4           RED         reb.27.1-2         27.2 B.2         1.4           RED         reb.27.1-2         27.2 B.2         1.4           RED         reb.27.1-2         27.1 B.         3.7           RED         reg.27.1-2         27.1 B.         3.7           RED         reg.27.1-2         27.2 A.1         3.7           RED         reg.27.1-2         27.2 A.1         3.7           RED         reg.27.1-2         27.2 A.2         3.7           RED         reg.27.1-2         27.2 A.2         3.7           RED         reg.27.1-2         27.2 B.1         3.7           RED         reg.27.5-12         27.2 B.1         3.7           RED         reg.27.5-61214         27.1 2 A.2         3.7           RED         reg.27.5-61214         27.1 2 A.2         1.6           RED         reg.27.5-61214         27.1 2 A.2<				
RED         reb.27.1-2         27.2.A.2         1.4           RED         reb.27.1-2         27.2.A.2         1.4           RED         reb.27.1-2         27.2.B.         1.4           RED         reb.27.1-2         27.2.B.1         1.4           RED         reb.27.1-2         27.1.A         3.7           RED         reg.27.1-2         27.1.A         3.7           RED         reg.27.1-2         27.1.B         3.7           RED         reg.27.1-2         27.2.A         3.7           RED         reg.27.1-2         27.2.A         3.7           RED         reg.27.1-2         27.2.A         3.7           RED         reg.27.1-2         27.2.A         3.7           RED         reg.27.1-2         27.2.B         3.7           RED         reg.27.1-2         27.2.B         3.7           RED         reg.27.5-12         27.2.B         1.6 <td>RED</td> <td>reb.27.1-2</td> <td>27.1.B</td> <td>1.4</td>	RED	reb.27.1-2	27.1.B	1.4
RED         reb.27.1-2         27.2.B         1.4           RED         reb.27.1-2         27.2.B         1.4           RED         reb.27.1-2         27.2.B.1         1.4           RED         reb.27.1-2         27.2.B.2         1.4           RED         reb.27.1-2         27.1.A         3.7           RED         reg.27.1-2         27.1.B         3.7           RED         reg.27.1-2         27.2.A         3.7           RED         reg.27.1-2         27.2.A         3.7           RED         reg.27.1-2         27.2.A         3.7           RED         reg.27.1-2         27.2.B         3.7           RED         reg.27.1-2         27.2.B         3.7           RED         reg.27.1-2         27.2.B.2         3.7           RED         reg.27.1-2         27.2.B.2         3.7           RED         reg.27.56.1214         27.12.A         1.6           RED         reg.27.56.1214         27.12.A         1.6           RED         reg.27.56.1214         27.12.A         1.6           RED         reg.27.56.1214         27.12.A         1.6           RED         reg.27.56.1214         27.12.A	RED	reb.27.1-2	27.2.A	1.4
RED         reb.27.1-2         27.2.B         1.4           RED         reb.27.1-2         27.2.B.1         1.4           RED         reb.27.1-2         27.2.B.2         1.4           RED         reb.27.1-2         27.1.A         3.7           RED         reg.27.1-2         27.1.B         3.7           RED         reg.27.1-2         27.2.A         3.7           RED         reg.27.1-2         27.2.A         3.7           RED         reg.27.1-2         27.2.A         3.7           RED         reg.27.1-2         27.2.B         3.7           RED         reg.27.561214         27.12.A         1.6           RED         reg.27.561214         27.12.A         1.6           RED         reg.27.561214         27.12.A         1.6           RED         reg.27.561214         27.12.B         1.6           RED         reg.27.561214         27.14.B         1.6 </td <td>RED</td> <td>reb.27.1-2</td> <td>27.2.A.1</td> <td>1.4</td>	RED	reb.27.1-2	27.2.A.1	1.4
RED         reb.27.1-2         27.2.8.1         1.4           RED         reb.27.1-2         27.2.8.2         1.4           RED         reg.27.1-2         27.1.A         3.7           RED         reg.27.1-2         27.1.B         3.7           RED         reg.27.1-2         27.2.A         3.7           RED         reg.27.1-2         27.2.A.1         3.7           RED         reg.27.1-2         27.2.A.2         3.7           RED         reg.27.1-2         27.2.B.1         3.7           RED         reg.27.1-2         27.2.B.1         3.7           RED         reg.27.1-2         27.2.B.1         3.7           RED         reg.27.1-2         27.2.B.2         3.7           RED         reg.27.1-2         27.2.B.1         3.7           RED         reg.27.1-2         27.2.B.2         3.7           RED         reg.27.56.1214         27.12.A         1.6           RED         reg.27.56.1214         27.12.A         1.6           RED         reg.27.56.1214         27.12.A         1.6           RED         reg.27.56.1214         27.12.A         1.6           RED         reg.27.56.1214         27.14.B </td <td>RED</td> <td>reb.27.1-2</td> <td>27.2.A.2</td> <td>1.4</td>	RED	reb.27.1-2	27.2.A.2	1.4
RED         reb.27.1-2         27.2.8.2         1.4           RED         reg.27.1-2         27.1.A         3.7           RED         reg.27.1-2         27.1.B         3.7           RED         reg.27.1-2         27.2.A         3.7           RED         reg.27.1-2         27.2.A.1         3.7           RED         reg.27.1-2         27.2.B.2         3.7           RED         reg.27.1-2         27.2.B.1         3.7           RED         reg.27.1-2         27.2.B.2         3.7           RED         reg.27.1-2         27.2.B.2         3.7           RED         reg.27.561214         27.12.A         1.6           RED         reg.27.561214         27.14.B         1.6           RED         reg.27.561214         27.14.	RED	reb.27.1-2	27.2.B	1.4
RED         reg.27.1-2         27.1A         3.7           RED         reg.27.1-2         27.1.B         3.7           RED         reg.27.1-2         27.2A         3.7           RED         reg.27.1-2         27.2A.1         3.7           RED         reg.27.1-2         27.2A.2         3.7           RED         reg.27.1-2         27.2.B.1         3.7           RED         reg.27.1-2         27.2.B.2         3.7           RED         reg.27.561214         27.12.A         1.6           RED         reg.27.561214         27.12.A         1.6           RED         reg.27.561214         27.12.A         1.6           RED         reg.27.561214         27.12.A         1.6           RED         reg.27.561214         27.12.A3         1.6           RED         reg.27.561214         27.12.A         1.6           RED         reg.27.561214         2	RED	reb.27.1-2	27.2.B.1	1.4
RED         reg 27.1-2         27.1.8         3.7           RED         reg 27.1-2         27.2.A         3.7           RED         reg 27.1-2         27.2.A.1         3.7           RED         reg 27.1-2         27.2.A.2         3.7           RED         reg 27.1-2         27.2.B.1         3.7           RED         reg 27.1-2         27.2.B.2         3.7           RED         reg 27.1-2         27.2.B.2         3.7           RED         reg 27.561214         27.12.A         1.6           RED         reg 27.561214         27.12.A         1.6           RED         reg 27.561214         27.12.A2         1.6           RED         reg 27.561214         27.12.A2         1.6           RED         reg 27.561214         27.12.A3         1.6           RED         reg 27.561214         27.12.A         1.6           RED         reg 27.561214         27.12.A         1.6           RED         reg 27.561214         27.12.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	RED	reb.27.1-2	27.2.B.2	1.4
RED         reg.27.1-2         27.2.A         3.7           RED         reg.27.1-2         27.2.A.1         3.7           RED         reg.27.1-2         27.2.A.2         3.7           RED         reg.27.1-2         27.2.B.         3.7           RED         reg.27.1-2         27.2.B.2         3.7           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.2         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         27.14.B.1         1.6           RED         reg.	RED	reg.27.1-2	27.1.A	3.7
RED         reg.27.1-2         27.2.A.1         3.7           RED         reg.27.1-2         27.2.A.2         3.7           RED         reg.27.1-2         27.2.B.1         3.7           RED         reg.27.1-2         27.2.B.1         3.7           RED         reg.27.1-2         27.2.B.2         3.7           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         27.14.B         1.6           RED         reg.27.561214         27.14.B.1         1.6           RED         reg	RED	reg.27.1-2	27.1.B	3.7
RED         reg. 27.1-2         27.2A.2         3.7           RED         reg. 27.1-2         27.2.B         3.7           RED         reg. 27.1-2         27.2.B.1         3.7           RED         reg. 27.1-2         27.2.B.2         3.7           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         27.14.A         1.6           RED         reg. 27.561214         27.14.B.1         1.6           RED         reg. 27.561214         27.5.A.2         1.6           RED <td>RED</td> <td>reg.27.1-2</td> <td>27.2.A</td> <td>3.7</td>	RED	reg.27.1-2	27.2.A	3.7
RED         reg.27.1-2         27.2.B         3.7           RED         reg.27.1-2         27.2.B.1         3.7           RED         reg.27.1-2         27.2.B.2         3.7           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         27.14.B.3         1.6           RED         reg.27.561214         27.14.B.2         1.6           RED         reg.27.561214         27.5.B.1.B         1.6           RED	RED	reg.27.1-2	27.2.A.1	3.7
RED reg.27.1-2 27.2.8.1 3.7  RED reg.27.1-2 27.2.8.2 3.7  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.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.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.B 1.6  RED reg.27.561214 27.12.B 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 1.6  RED reg.27.561214 27.14.B.1 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 27.14.B.2 1.6  RED reg.27.561214 27.5.A.1 1.6  RED reg.27.561214 27.5.A.1 1.6  RED reg.27.561214 27.5.A.1 1.6  RED reg.27.561214 27.5.B.1 1.6  RED reg.27.561214 27.4 1.6  R	RED	reg.27.1-2	27.2.A.2	3.7
RED         reg.27.1-2         27.2.8.2         3.7           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.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         1.6           RED         reg.27.561214         27.5.A.2         1.6           RED         reg.27.561214         27.5.B.1.B         1.6           RED         reg.27.561214         27.5.B.1.B         1.6           RED	RED	reg.27.1-2	27.2.B	3.7
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         27.14.B.2         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.A         1.6           RED         reg.27.561214         27.5.B.1.B         1.6           RED         reg.27.561214         27.5.B.2         1.6           SAN	RED	reg.27.1-2	27.2.B.1	3.7
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       1.6         RED       reg.27.561214       27.5.A.2       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.1.B       1.6         RED       reg.27.561214       27.5.B.1.B       1.6         SAN       san.sa.1r       27.4.B       1.8         SAN       san.sa.2r       27.4.B       7.2         SAN       san.sa.3r	RED	reg.27.1-2	27.2.B.2	3.7
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         1.6           RED         reg.27.561214         27.5.A.2         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.1.B         1.6           RED         reg.27.561214         27.5.B.2         1.6           SAN         san.sa.1r         27.4.B         1.8           SAN         san.sa.2r         27.4.B         7.2           SAN         s	RED	reg.27.561214	27.12.A	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       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       1.6         RED       reg,27.561214       27.5.A.2       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.1.B       1.6         RED       reg,27.561214       27.5.B.2       1.6         RED       reg,27.561214       27.5.B.2       1.6         RED       reg,27.561214       27.5.B.2       1.6         RED       reg,27.561214       27.5.B.2       1.6         RED       san.sa.1r       27.4.B       1.8         SAN       san.sa.2r	RED	reg.27.561214	27.12.A.1	1.6
RED         reg.27.561214         27.12.A4         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         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         1.6           RED         reg.27.561214         27.5.A.2         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           SAN         san.sa.1r         27.4.B         1.8           SAN         san.sa.1r         27.4.B         1.8           SAN         san.sa.2r         27.4.B         7.2           SAN         san.sa.2r         27.4.B         7.2           SAN         san.sa.3r         27.4.B         1           SAN         san.sa.3r         <	RED	reg.27.561214	27.12.A.2	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       1.6         RED       reg.27.561214       27.5.A.2       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         SAN       san.sa.1r       27.4.B       1.8         SAN       san.sa.1r       27.4.B       1.8         SAN       san.sa.2r       27.4.C       1.3         SAN       san.sa.2r       27.4.C       5         SAN       san.sa.3r       27.4.A       1.1         SAN       san.sa.3r       27.4.A       1.1         SAN       san.sa.3r       27.4.B       3.7         SAN       san.sa.3r       27.4.B       3.7	RED	reg.27.561214	27.12.A.3	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       1.6         RED       reg.27.561214       27.5.A.2       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         SAN       san.sa.1r       27.4.B       1.8         SAN       san.sa.1r       27.4.B       1.8         SAN       san.sa.2r       27.4.C       1.3         SAN       san.sa.2r       27.4.C       5         SAN       san.sa.3r       27.4.C       5         SAN       san.sa.3r       27.4.A       1.1         SAN       san.sa.3r       27.4.A       1.1         SAN       san.sa.3r       27.4.B       3.7         SAN       san.sa.4       27.4.B       3.7	RED	reg.27.561214	27.12.A.4	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       1.6         RED       reg.27.561214       27.5.A.2       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         SAN       san.sa.1r       27.4.B       1.8         SAN       san.sa.1r       27.4.B       1.8         SAN       san.sa.2r       27.4.B       7.2         SAN       san.sa.2r       27.4.C       1.3         SAN       san.sa.3r       27.4.C       5         SAN       san.sa.3r       27.4.A       1.1         SAN       san.sa.3r       27.4.A       1.1         SAN       san.sa.3r       27.4.B       3.7         SAN       san.sa.4       27.4.B       3.7         SAN       san.sa.4       27.4.B       31.3    <	RED	reg.27.561214	27.12.B	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       1.6         RED       reg.27.561214       27.5.A.2       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         SAN       san.sa.1r       27.4.B       1.8         SAN       san.sa.2r       27.4.B       1.8         SAN       san.sa.2r       27.4.C       1.3         SAN       san.sa.2r       27.4.C       5         SAN       san.sa.3r       27.4.C       5         SAN       san.sa.3r       27.4.A       1.1         SAN       san.sa.3r       27.4.B       3.7         SAN       san.sa.3r       27.4.B       3.7         SAN       san.sa.4       27.4.A       9.5         SAN       san.sa.4       27.4.B       31.3	RED	reg.27.561214	27.12.C	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       1.6         RED       reg.27.561214       27.5.A.2       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         SAN       san.sa.1r       27.4.B       1.8         SAN       san.sa.1r       27.4.B       1.8         SAN       san.sa.2r       27.4.C       1.3         SAN       san.sa.2r       27.4.C       5         SAN       san.sa.3r       27.4.C       5         SAN       san.sa.3r       27.4.A       1.1         SAN       san.sa.3r       27.4.A       1.1         SAN       san.sa.3r       27.4.B       3.7         SAN       san.sa.3r       27.4.B       3.7         SAN       san.sa.3r       27.4.B       3.7         SAN       san.sa.4       27.4.B       3.7         SAN       san.sa.4       27.4.B       3.1 <td>RED</td> <td>reg.27.561214</td> <td>27.14.A</td> <td>1.6</td>	RED	reg.27.561214	27.14.A	1.6
RED       reg.27.561214       27.14.B.2       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.A       1.6         RED       reg.27.561214       27.5.B.1.B       1.6         RED       reg.27.561214       27.5.B.2       1.6         SAN       san.sa.1r       27.4.B       1.8         SAN       san.sa.1r       27.4.C       1.3         SAN       san.sa.2r       27.4.B       7.2         SAN       san.sa.2r       27.4.C       5         SAN       san.sa.3r       27.4.C       5         SAN       san.sa.3r       27.4.A       1.1         SAN       san.sa.3r       27.4.A       1.1         SAN       san.sa.3r       27.4.B       3.7         SAN       san.sa.4       27.4.A       9.5         SAN       san.sa.4       27.4.B       31.3	RED	reg.27.561214	27.14.B	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.A       1.6         RED       reg.27.561214       27.5.B.1.B       1.6         RED       reg.27.561214       27.5.B.2       1.6         SAN       san.sa.1r       27.4.B       1.8         SAN       san.sa.1r       27.4.C       1.3         SAN       san.sa.2r       27.4.B       7.2         SAN       san.sa.2r       27.4.C       5         SAN       san.sa.3r       27.4.A       1         SAN       san.sa.3r       27.4.A       1.1         SAN       san.sa.3r       27.4.B       3.7         SAN       san.sa.4       27.4.B       3.7         SAN       san.sa.4       27.4.B       31.3	RED	reg.27.561214	27.14.B.1	1.6
RED       reg.27.561214       27.5.A.2       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         SAN       san.sa.1r       27.4.B       1.8         SAN       san.sa.1r       27.4.C       1.3         SAN       san.sa.2r       27.4.B       7.2         SAN       san.sa.2r       27.4.C       5         SAN       san.sa.3r       27.3.A       1         SAN       san.sa.3r       27.4.A       1.1         SAN       san.sa.3r       27.4.B       3.7         SAN       san.sa.4       27.4.B       9.5         SAN       san.sa.4       27.4.B       31.3	RED	reg.27.561214	27.14.B.2	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         SAN       san.sa.1r       27.4.B       1.8         SAN       san.sa.1r       27.4.C       1.3         SAN       san.sa.2r       27.4.B       7.2         SAN       san.sa.2r       27.4.C       5         SAN       san.sa.3r       27.3.A       1         SAN       san.sa.3r       27.4.A       1.1         SAN       san.sa.3r       27.4.B       3.7         SAN       san.sa.4       27.4.B       9.5         SAN       san.sa.4       27.4.B       31.3	RED	reg.27.561214	27.5.A.1	1.6
RED       reg.27.561214       27.5.B.1.B       1.6         RED       reg.27.561214       27.5.B.2       1.6         SAN       san.sa.1r       27.4.B       1.8         SAN       san.sa.1r       27.4.C       1.3         SAN       san.sa.2r       27.4.B       7.2         SAN       san.sa.2r       27.4.C       5         SAN       san.sa.3r       27.3.A       1         SAN       san.sa.3r       27.4.A       1.1         SAN       san.sa.3r       27.4.B       3.7         SAN       san.sa.4       27.4.A       9.5         SAN       san.sa.4       27.4.B       31.3	RED	reg.27.561214	27.5.A.2	1.6
RED       reg.27.561214       27.5.B.2       1.6         SAN       san.sa.1r       27.4.B       1.8         SAN       san.sa.1r       27.4.C       1.3         SAN       san.sa.2r       27.4.B       7.2         SAN       san.sa.2r       27.4.C       5         SAN       san.sa.3r       27.3.A       1         SAN       san.sa.3r       27.4.A       1.1         SAN       san.sa.3r       27.4.B       3.7         SAN       san.sa.4       27.4.A       9.5         SAN       san.sa.4       27.4.B       31.3	RED	reg.27.561214	27.5.B.1.A	1.6
SAN       san.sa.1r       27.4.B       1.8         SAN       san.sa.1r       27.4.C       1.3         SAN       san.sa.2r       27.4.B       7.2         SAN       san.sa.2r       27.4.C       5         SAN       san.sa.3r       27.3.A       1         SAN       san.sa.3r       27.4.A       1.1         SAN       san.sa.3r       27.4.B       3.7         SAN       san.sa.4       27.4.A       9.5         SAN       san.sa.4       27.4.B       31.3	RED	reg.27.561214	27.5.B.1.B	1.6
SAN       san.sa.1r       27.4.C       1.3         SAN       san.sa.2r       27.4.B       7.2         SAN       san.sa.2r       27.4.C       5         SAN       san.sa.3r       27.3.A       1         SAN       san.sa.3r       27.4.A       1.1         SAN       san.sa.3r       27.4.B       3.7         SAN       san.sa.4       27.4.A       9.5         SAN       san.sa.4       27.4.B       31.3	RED	reg.27.561214	27.5.B.2	1.6
SAN       san.sa.2r       27.4.B       7.2         SAN       san.sa.2r       27.4.C       5         SAN       san.sa.3r       27.3.A       1         SAN       san.sa.3r       27.4.A       1.1         SAN       san.sa.3r       27.4.B       3.7         SAN       san.sa.4       27.4.A       9.5         SAN       san.sa.4       27.4.B       31.3	SAN	san.sa.1r	27.4.B	1.8
SAN         san.sa.2r         27.4.C         5           SAN         san.sa.3r         27.3.A         1           SAN         san.sa.3r         27.4.A         1.1           SAN         san.sa.3r         27.4.B         3.7           SAN         san.sa.4         27.4.A         9.5           SAN         san.sa.4         27.4.B         31.3	SAN	san.sa.1r	27.4.C	1.3
SAN         san.sa.3r         27.3.A         1           SAN         san.sa.3r         27.4.A         1.1           SAN         san.sa.3r         27.4.B         3.7           SAN         san.sa.4         27.4.A         9.5           SAN         san.sa.4         27.4.B         31.3	SAN	san.sa.2r	27.4.B	7.2
SAN     san.sa.3r     27.4.A     1.1       SAN     san.sa.3r     27.4.B     3.7       SAN     san.sa.4     27.4.A     9.5       SAN     san.sa.4     27.4.B     31.3	SAN	san.sa.2r	27.4.C	5
SAN         san.sa.3r         27.4.B         3.7           SAN         san.sa.4         27.4.A         9.5           SAN         san.sa.4         27.4.B         31.3	SAN	san.sa.3r	27.3.A	1
SAN         san.sa.4         27.4.A         9.5           SAN         san.sa.4         27.4.B         31.3	SAN	san.sa.3r	27.4.A	1.1
SAN         san.sa.4         27.4.A         9.5           SAN         san.sa.4         27.4.B         31.3	SAN	san.sa.3r	27.4.B	3.7
SAN san.sa.4 27.4.B 31.3	SAN	san.sa.4		9.5
	SAN	san.sa.4	27.4.B	31.3
	SAN	san.sa.6	27.3.A	585.3

# **ANNEX IB - SAR stock selection**

See supporting Excel workbook

# **ANNEX II - Comparison of indicator values**

See supporting Excel workbook

# ANNEX III - Stocks on which fleet segments are reliant

This Annex lists for each Member State, 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. Annex III is also available separately as an Excel workbook.

For Area 27

fleet_code	major_stocks
BEL-NAO-DTS-VL2440-NGI	ple.27.420/assessed Common squids nei-27.7.d/no information Common squids nei-27.4.c/no information sol.27.7fg/assessed nep.fu.6/assessed nep.fu.8/assessed tur.27.4/assessed nep.fu.5/no information nep.fu.33/no information mur.27.3a47d/no information sol.27.7d/assessed
BEL-NAO-PMP-VL1824-NGI	Whelk-27.4.c/no information Great Atlantic scallop-27.7.d/no information sol.27.4/assessed
BEL-NAO-TBB-VL1824-NGI	Common shrimp-27.4.c/no information sol.27.7d/assessed ple.27.7d/assessed sol.27.4/assessed Turbot-27.7.d/no information bll.27.3a47de/no information
BEL-NAO-TBB-VL2440-NGI	sol.27.7fg/assessed ple.27.420/assessed sol.27.7d/assessed sol.27.7a/assessed sol.27.8ab/assessed mon.27.78abd/assessed cod.27.47d20/assessed ple.27.7d/assessed sol.27.4/assessed lem.27.3a47d/no information Common cuttlefish-27.7.d/no information sol.27.7h-k/assessed tur.27.4/assessed anf.27.3a46/no information Common cuttlefish-27.7.e/no information
DEU-NAO-DFN-VL1218-NGI	sol.27.4/assessed cod.27.47d20/assessed sol.27.20-24/assessed
DEU-NAO-DFN-VL2440-NGI	anf.27.3a46/no information Deep-sea red crab-27.6.b/no information mon.27.78abd/assessed sol.27.4/assessed
DEU-NAO-DTS-VL1012-NGI	cod.27.22-24/assessed ple.27.21-23/assessed ple.27.24-32/no information
DEU-NAO-DTS-VL1218-NGI	ple.27.21-23/assessed cod.27.22-24/assessed her.27.20-24/assessed dab.27.22-32/no information
DEU-NAO-DTS-VL1824-NGI	ple.27.420/assessed cod.27.22-24/assessed nep.fu.6/assessed nep.fu.8/assessed ple.27.21-23/assessed tur.27.4/assessed Common shrimp-27.4.b/no information nep.fu.5/no information nep.fu.33/no information
DEU-NAO-DTS-VL2440-NGI	pok.27.3a46/assessed cod.27.47d20/assessed hke.27.3a46-8abd/assessed ple.27.420/assessed sol.27.4/assessed tur.27.4/assessed
DEU-NAO-PG-VL0010-NGI	cod.27.22-24/assessed Pike-perch-27.3.d.24/no information her.27.20-24/assessed European eel-27.3.d.24/no information ple.27.21-23/assessed Freshwater breams nei-27.3.d.24/no information European perch-27.3.d.24/no information
DEU-NAO-PG-VL1012-NGI	cod.27.22-24/assessed her.27.20-24/assessed ple.27.21-23/assessed
DEU-NAO-TBB-VL1218-NGI	Common shrimp-27.4.b/no information
DEU-NAO-TBB-VL1824-NGI	Common shrimp-27.4.b/no information
DEU-NAO-TBB-VL2440-NGI	sol.27.4/assessed ple.27.420/assessed tur.27.4/assessed
DNK-NAO-DTS-VL2440-NGI	cod.27.47d20/assessed pra.27.3a4a/assessed anf.27.3a46/no information pok.27.3a46/assessed ple.27.420/assessed hke.27.3a46-8abd/assessed nep.fu.3-4/assessed spr.27.4/no information cod.27.21/no information lem.27.3a47d/no information
DNK-NAO-PGP-VL0010-NGI	European plaice-27.3.a/no information Lumpfish(=Lumpsucker)-27.3.a/no information cod.27.22-24/assessed sol.27.20-24/assessed cod.27.21/no information cod.27.47d20/assessed European eel-27.3.c.22/no information European lobster-27.4.b/no information European eel-27.3.d.24/no

	information European flat oyster-27.4.b/no information ple.27.21-23/assessed European whitefish-27.4.b/no information European eel-27.3.b.23/no information ple.27.420/assessed Edible crab-27.4.b/no information Edible crab-27.3.a/no information Common prawn-27.3.a/no information fle.27.3a4/no information
DNK-NAO-PGP-VL1012-NGI	cod.27.22-24/assessed European plaice-27.3.a/no information ple.27.21-23/assessed cod.27.47d20/assessed cod.27.21/no information ple.27.420/assessed sol.27.20-24/assessed hke.27.3a46-8abd/assessed Turbot-27.3.c.22/no information
DNK-NAO-PGP-VL1218-NGI	ple.27.420/assessed cod.27.47d20/assessed hke.27.3a46-8abd/assessed European plaice-27.3.a/no information tur.27.4/assessed sol.27.4/assessed anf.27.3a46/no information sol.27.20-24/assessed ple.27.21-23/assessed cod.27.21/no information
DNK-NAO-PMP-VL0010-NGI	European plaice-27.3.a/no information ple.27.21-23/assessed nep.fu.3-4/assessed cod.27.21/no information cod.27.22-24/assessed Lumpfish(=Lumpsucker)-27.3.a/no information sol.27.20-24/assessed ple.27.420/assessed
DNK-NAO-PMP-VL1012-NGI	ple.27.21-23/assessed European plaice-27.3.a/no information nep.fu.3-4/assessed cod.27.22-24/assessed cod.27.21/no information sol.27.20-24/assessed ple.27.24-32/no information ple.27.420/assessed Atlantic cod-27.3.d.25/no information
DNK-NAO-PMP-VL1218-NGI	nep.fu.3-4/assessed cod.27.22-24/assessed European plaice-27.3.a/no information ple.27.21-23/assessed sol.27.20-24/assessed
DNK-NAO-PMP-VL1824-NGI	ple.27.420/assessed cod.27.47d20/assessed hke.27.3a46-8abd/assessed pra.27.3a4a/assessed anf.27.3a46/no information spr.27.4/no information tur.27.4/assessed cod.27.21/no information pok.27.3a46/assessed
DNK-NAO-TM-VL1218-NGI	spr.27.22-32/assessed spr.27.4/no information spr.27.3a/no information
ESP-NAO-DFN-VL1012-NGI-NO-	mac.27.nea/assessed hke.27.8c9a/assessed sol.27.8c9a/no information bss.27.8c9a/no information Seaweeds nei-27.8.c/no information Common octopus-27.8.c/no information Spinous spider crab-27.9.a/no information Common octopus-27.9.a/no information Spinous spider crab-27.8.c/no information Surmullet-27.8.c/no information Pouting(=Bib)-27.9.a/no information pol.27.89a/no information alb-na/no information Surmullets(=Red mullets) nei-27.8.c/no information Common cuttlefish-27.9.a/no information John dory-27.8.c/no information ank.27.8c9a/assessed Maja spider crabs nei-27.9.a/no information Turbot-27.9.a/no information Wedge sole-27.9.a/no information hom.27.9a/assessed Common cuttlefish-27.8.c/no information Caramote prawn-27.9.a/no information Red scorpionfish-27.8.c/no information Raja rays nei-27.8.c/no information Barnacle-27.8.c/no information White seabream-27.8.c/no information
ESP-NAO-DFN-VL1218-NGI-NO-	alb-na/no information hke.27.8c9a/assessed mac.27.nea/assessed ank.27.8c9a/assessed sol.27.8c9a/no information bss.27.8c9a/no information Common octopus-27.9.a/no information Spinous spider crab-27.8.c/no information pol.27.89a/no information John dory-27.8.c/no information mon.27.8c9a/assessed Spinous spider crab-27.9.a/no information Common cuttlefish-27.9.a/no information Turbot-27.8.c/no information Surmullet-27.8.c/no information Turbot-27.9.a/no information Maja spider crabs nei-27.9.a/no information Seaweeds nei-27.8.c/no information
ESP-NAO-DFN-VL1824-NGI-NO-	hke.27.8c9a/assessed alb-na/no information mac.27.nea/assessed
ESP-NAO-DFN-VL2440-NGI-NO-	alb-na/no information hke.27.8c9a/assessed mac.27.nea/assessed mon.27.8c9a/assessed
ESP-NAO-DRB-VL0010-NGI-NO-	Common edible cockle-27.9.a/no information Japanese carpet shell-27.9.a/no information Pullet carpet shell-27.9.a/no information Banded carpet shell-27.9.a/no information
ESP-NAO-DRB-VL1012-NGI-NO-	Striped venus-27.9.a/no information Variegated scallop-27.8.c/no information
ESP-NAO-DTS-VL1218-NGI-NO-	Deep-water rose shrimp-27.9.a/no information Common cuttlefish-27.9.a/no information Caramote prawn-27.9.a/no information Common octopus-27.9.a/no information European common squid-27.9.a/no information Spottail mantis squillid-27.9.a/no information European squid-27.9.a/no information Atlantic chub mackerel-27.9.a/no information Common squids nei-27.9.a/no information hke.27.8c9a/assessed Meagre-27.9.a/no information Wedge sole-27.9.a/no information
ESP-NAO-DTS-VL1824-NGI-NO-	Deep-water rose shrimp-27.9.a/no information Common cuttlefish-27.9.a/no information Common octopus-27.9.a/no information hke.27.8c9a/assessed European squid-27.9.a/no information Atlantic chub mackerel-27.9.a/no information nep.fu.2829/assessed Caramote prawn-27.9.a/no information European common squid-27.9.a/no information whb.27.1-91214/assessed Spottail mantis squillid-27.9.a/no information Common squids nei-27.9.a/no information
ESP-NAO-DTS-VL2440-NGI-NO-	whb.27.1-91214/assessed hke.27.3a46-8abd/assessed mon.27.78abd/assessed meg.27.7b-k8abd/assessed hke.27.8c9a/assessed mac.27.nea/assessed ank.27.78abd/assessed ldb.27.8c9a/assessed Northern shortfin squid-27.7.j/no information mon.27.8c9a/assessed hom.27.2a4a5b6a7a-ce-k8/assessed anf.27.3a46/no information

ESP-NAO-FPO-VL1012-NGI-NO-	Common octopus-27.9.a/no information Common octopus-27.8.c/no information mac.27.nea/assessed
ESP-NAO-FPO-VL1218-IC-NO-	European conger-34.1.2/no information Forkbeard-34.1.2/no information Pink dentex-34.1.2/no information Red porgy-34.1.2/no information MWK-34.1.2/no information Fangtooth moray-34.1.2/no information Brown moray-34.1.2/no information Large-eye dentex-34.1.2/no information Parrotfish-34.1.2/no information Common octopus-34.1.2/no information bft-ea/no information
ESP-NAO-FPO-VL1218-NGI-NO-	Common octopus-27.9.a/no information Common octopus-27.8.c/no information alb-na/no information
ESP-NAO-HOK-VL0010-IC-NO-	Skipjack tuna-34.1.2/no information bft-ea/no information bet-atl/assessed alb-na/no information
ESP-NAO-HOK-VL0010-NGI- NO-	mac.27.nea/assessed hke.27.8c9a/assessed European conger-27.8.c/no information Common squids nei-27.8.c/no information
ESP-NAO-HOK-VL1012-IC-NO-	bet-atl/assessed Skipjack tuna-34.1.2/no information bft-ea/no information alb-na/no information
ESP-NAO-HOK-VL1012-MA-NO-	bft-ea/no information Blackspot(=red) seabream-34.1.1/no information
ESP-NAO-HOK-VL1012-NGI- NO-	mac.27.nea/assessed alb-na/no information hke.27.8c9a/assessed bss.27.8c9a/no information European conger-27.8.c/no information pol.27.89a/no information sbr.27.6-8/no information Red porgy-27.9.a/no information
ESP-NAO-HOK-VL1218-IC-NO-	bet-atl/assessed alb-na/no information Skipjack tuna-34.1.2/no information bft-ea/no information
ESP-NAO-HOK-VL1218-MA-NO-	bft-ea/no information Blackspot(=red) seabream-34.1.1/no information Red porgy-34.1.1/no information Atlantic bluefin tuna-sa 3/no information
ESP-NAO-HOK-VL1218-NGI- LLD-	swo-na/no information alb-na/no information
ESP-NAO-HOK-VL1218-NGI- NO-	alb-na/no information mac.27.nea/assessed hke.27.8c9a/assessed pol.27.89a/no information European conger-27.8.c/no information bss.27.8c9a/no information European conger-27.9.a/no information
ESP-NAO-HOK-VL1824-IC-NO-	bet-atl/assessed alb-na/no information bft-ea/no information
ESP-NAO-HOK-VL1824-MA-NO-	Canary dentex-34.1.1/no information gbr_mor/assessed Pink dentex-34.1.1/no information Black seabream-34.1.1/no information
ESP-NAO-HOK-VL1824-NGI- LLD-	swo-na/no information Blue shark-27.8.b/no information alb-na/no information
ESP-NAO-HOK-VL1824-NGI- NO-	alb-na/no information mac.27.nea/assessed hke.27.8c9a/assessed
ESP-NAO-HOK-VL2440-IC-NO-	bet-atl/assessed alb-na/no information
ESP-NAO-HOK-VL2440-NGI- LLD-	swo-na/no information Blue shark-34.2.0/no information Blue shark-27.10.a/no information Swordfish-34.2.0/no information Blue shark-21.6.h/no information Blue shark-21.3.m/no information Blue shark-27.8.a/no information Blue shark-31/no information Blue shark-27.7.j/no information
ESP-NAO-PGP-VL1824-NGI-NO-	hke.27.3a46-8abd/assessed alf.27.nea/no information
ESP-NAO-PGP-VL2440-NGI-NO-	hke.27.3a46-8abd/assessed
ESP-NAO-PMP-VL0010-IC-NO-	Parrotfish-34.1.2/no information Pink dentex-34.1.2/no information Red porgy-34.1.2/no information bft-ea/no information Skipjack tuna-34.1.2/no information Splendid alfonsino-34.1.2/no information bet-atl/assessed White trevally-34.1.2/no information alb-na/no information Dusky grouper-34.1.2/no information Grey triggerfish-34.1.2/no information European hake-34.1.2/no information Wahoo-34.1.2/no information Surmullet-34.1.2/no information Narwal shrimp-34.1.2/no information Striped soldier shrimp-34.1.2/no information yft-atl/assessed Redbanded seabream-34.1.2/no information Comber-34.1.2/no information Common octopus-34.1.2/no information
ESP-NAO-PMP-VL0010-NGI-NO-	Common octopus-27.9.a/no information Arched razor shell-27.9.a/no information Stony sea urchin-27.9.a/no information Barnacle-27.8.c/no information Common cuttlefish-27.9.a/no information Barnacle-27.8.c/no information Common octopus-27.8.c/no information mac.27.nea/assessed Common prawn-27.9.a/no information Pullet carpet shell-27.9.a/no information Caramote prawn-27.9.a/no information Velvet swimcrab-27.9.a/no information Meagre-27.9.a/no information Spinous spider crab-27.9.a/no information Stony sea urchin-27.8.c/no information alb-na/no information hke.27.8c9a/assessed White seabream-27.9.a/no information Common edible cockle-27.9.a/no information

ESP-NAO-PMP-VL1012-IC-NO-	Common pandora-34.1.2/no information bft-ea/no information Skipjack tuna-34.1.2/no information bet-atl/assessed alb-na/no information
ESP-NAO-PMP-VL1218-IC-NO-	bet-atl/assessed Skipjack tuna-34.1.2/no information bft-ea/no information
ESP-NAO-PMP-VL1824-IC-NO-	Skipjack tuna-34.1.2/no information bet-atl/assessed
ESP-NAO-PS-VL1012-IC-NO-	Round sardinella-34.1.2/no information European pilchard(=Sardine)-34.1.2/no information Purple dye murex-34.1.2/no information Parrotfish-34.1.2/no information hom_34/assessed
ESP-NAO-PS-VL1218-IC-NO-	Blue jack mackerel-34.1.2/no information vma-34/assessed
EST-NAO-PG-VL0010-NGI	European perch-27.3.d.28/no information European perch-27.3.d.29/no information European smelt-27.3.d.28/no information Pike-perch-27.3.d.28/no information her.27.25-2932/assessed
EST-NAO-TM-VL1218-NGI	her.27.25-2932/assessed spr.27.22-32/assessed
EST-NAO-TM-VL1824-NGI	spr.27.22-32/assessed her.27.25-2932/assessed
EST-NAO-TM-VL2440-NGI	spr.27.22-32/assessed her.27.25-2932/assessed
FIN-NAO-PG-VL0010-NGI	Whitefishes nei-27.3.d.31/no information sal.27.22-31/no information European perch-27.3.d.30/no information Whitefishes nei-27.3.d.30/no information Pike-perch-27.3.d.29/no information Pike-perch-27.3.d.30/no information her.27.3031/assessed Vendace-27.3.d.31/no information Atlantic salmon-27.3.d.32/no information European perch-27.3.d.29/no information Pike-perch-27.3.d.32/no information European smelt-27.3.d.30/no information
FIN-NAO-PG-VL1012-NGI	European smelt-27.3.d.30/no information European perch-27.3.d.30/no information her.27.3031/assessed her.27.25-2932/assessed
FIN-NAO-TM-VL1218-NGI	her.27.25-2932/assessed her.27.3031/assessed
FIN-NAO-TM-VL1824-NGI	her.27.25-2932/assessed her.27.3031/assessed Vendace-27.3.d.31/no information
FIN-NAO-TM-VL2440-NGI	her.27.3031/assessed her.27.25-2932/assessed
FRA-NAO-DFN-VL1012-NGI	sol.27.8ab/assessed sol.27.7d/assessed Spinous spider crab-27.7.e/no information mon.27.78abd/assessed bss.27.8ab/assessed pol.27.89a/no information Great Atlantic scallop-27.7.e/no information Gilthead seabream-27.8.a/no information ank.27.78abd/assessed sol.27.4/assessed hke.27.3a46-8abd/assessed Whelk-27.7.d/no information bll.27.3a47de/no information Edible crab-27.7.e/no information Turbot-27.8.a/no information Spinous spider crab-27.8.a/no information Meagre-27.8.b/no information bss.27.4bc7ad-h/assessed European lobster-27.7.d/no information Turbot-27.7.e/no information Common cuttlefish-27.8.b/no information Surmullet-27.8.a/no information rjm.27.8/no information
FRA-NAO-DFN-VL1218-NGI	sol.27.8ab/assessed mon.27.78abd/assessed Spinous spider crab-27.7.e/no information hke.27.3a46-8abd/assessed ank.27.78abd/assessed bss.27.8ab/assessed Turbot-27.7.e/no information Edible crab-27.7.h/no information bll.27.3a47de/no information sol.27.7d/assessed
FRA-NAO-DFN-VL1824-NGI	hke.27.3a46-8abd/assessed sol.27.8ab/assessed mon.27.78abd/assessed
FRA-NAO-DFN-VL2440-NGI	hke.27.3a46-8abd/assessed
FRA-NAO-DRB-VL1012-NGI	Great Atlantic scallop-27.7.d/no information Great Atlantic scallop-27.7.e/no information Warty venus-27.7.e/no information
FRA-NAO-DRB-VL1218-NGI	Great Atlantic scallop-27.7.d/no information Great Atlantic scallop-27.7.e/no information Common European bittersweet-27.7.d/no information
FRA-NAO-DRB-VL1824-NGI	Great Atlantic scallop-27.7.d/no information
FRA-NAO-DRB-VL2440-NGI	Great Atlantic scallop-27.7.d/no information
FRA-NAO-DTS-VL0010-NGI	Common shrimp-27.8.a/no information Common cuttlefish-27.8.a/no information sol.27.8ab/assessed Great Atlantic scallop-27.7.d/no information European eel-27.8.a/no information Great Atlantic scallop-27.8.a/no information Great Atlantic scallop-27.7.e/no information Common shrimp-27.7.d/no information ple.27.7d/assessed sol.27.7d/assessed Inshore squids nei-27.8.a/no information bss.27.8ab/assessed Surmullet-27.8.a/no information
FRA-NAO-DTS-VL40XX-NGI	cod.27.1-2/assessed pok.27.3a46/assessed hke.27.3a46-8abd/assessed bsf.27.nea/no information anf.27.3a46/no information
FRA-NAO-FPO-VL1012-NGI	Whelk-27.7.e/no information Whelk-27.7.d/no information European lobster-27.7.e/no information Great Atlantic scallop-27.7.e/no information Spinous spider crab-27.7.e/no information
FRA-NAO-FPO-VL1218-NGI	Edible crab-27.8.a/no information Whelk-27.7.d/no information Spinous spider crab-27.8.a/no

	information Edible crab-27.7.h/no information sol.27.8ab/assessed European lobster-27.8.a/no information Whelk-27.7.e/no information
FRA-NAO-HOK-VL1824-NGI	hke.27.3a46-8abd/assessed European conger-27.8.a/no information European conger-27.7.e/no information
FRA-NAO-HOK-VL2440-NGI	hke.27.3a46-8abd/assessed
FRA-NAO-MGP-VL0010-NGI	European eel-27.8.a/no information Great Atlantic scallop-27.7.d/no information sol.27.7d/assessed Great Atlantic scallop-27.7.e/no information Tangle-27.7.e/no information North European kelp-27.7.e/no information Great Atlantic scallop-27.8.a/no information sol.27.8ab/assessed Common shrimp-27.8.a/no information Marine fishes nei-27.7.d/no information
FRA-NAO-MGP-VL1012-NGI	Great Atlantic scallop-27.7.d/no information sol.27.7d/assessed mac.27.nea/assessed ple.27.7d/assessed pil.27.8abd/assessed
FRA-NAO-MGP-VL1218-NGI	Great Atlantic scallop-27.7.d/no information sol.27.7d/assessed mac.27.nea/assessed
FRA-NAO-PGO-VL1012-NGI	alb-na/no information
FRA-NAO-PGP-VL1012-NGI	Common prawn-27.8.b/no information sol.27.8ab/assessed bss.27.8ab/assessed European lobster-27.7.d/no information Meagre-27.8.b/no information Whelk-27.7.e/no information Spinous spider crab-27.7.e/no information Edible crab-27.7.d/no information sol.27.7d/assessed Whelk-27.7.d/no information Whelk-27.4.c/no information alb-na/no information
FRA-NAO-PGP-VL1218-NGI	sol.27.8ab/assessed bss.27.8ab/assessed Turbot-27.8.a/no information mon.27.78abd/assessed pol.27.89a/no information Meagre-27.8.b/no information Scorpionfishes, rockfishes nei-27.8.a/no information ank.27.78abd/assessed
FRA-NAO-PMP-VL1218-NGI	Great Atlantic scallop-27.7.d/no information Great Atlantic scallop-27.7.e/no information Queen scallop-27.7.e/no information Warty venus-27.7.e/no information Oval surf clam-27.7.e/no information
FRA-NAO-PS-VL1012-NGI	pil.27.8abd/assessed Mediterranean horse mackerel-27.8.b/no information hom.27.2a4a5b6a7a-ce-k8/assessed bft-ea/no information Chub mackerel-27.8.b/no information bss.27.8ab/assessed
FRA-NAO-PS-VL1824-NGI	bft-ea/no information European pilchard(=Sardine)-27.7.e/no information pil.27.8abd/assessed albna/no information Common dolphinfish-27.7.e/no information hom.27.2a4a5b6a7a-ce-k8/assessed
FRA-NAO-TBB-VL1012-NGI	Great Atlantic scallop-27.7.d/no information sol.27.7d/assessed Turbot-27.7.d/no information
FRA-NAO-TBB-VL1218-NGI	Great Atlantic scallop-27.7.d/no information sol.27.7d/assessed
GBR-NAO-DFN-VL0010-NGI	sol.27.7d/assessed bss.27.4bc7ad-h/assessed sol.27.7e/assessed pol.27.67/no information ple.27.7d/assessed Whelk-27.7.e/no information Turbot-27.7.e/no information mon.27.78abd/assessed Edible crab-27.7.e/no information rjc.27.3a47d/no information Cuttlefish, bobtail squids nei-27.7.d/no information sol.27.4/assessed Whelk-27.7.d/no information Whelk-27.7.g/no information European lobster-27.7.e/no information mac.27.nea/assessed Turbot-27.7.d/no information
GBR-NAO-DFN-VL1012-NGI	European pilchard(=Sardine)-27.7.f/no information European pilchard(=Sardine)-27.7.e/no information Palinurid spiny lobsters nei-27.7.f/no information hke.27.3a46-8abd/assessed Palinurid spiny lobsters nei-27.7.g/no information Turbot-27.7.g/no information
GBR-NAO-DFN-VL1218-NGI	hke.27.3a46-8abd/assessed pol.27.67/no information Turbot-27.7.e/no information
GBR-NAO-DFN-VL1824-NGI	hke.27.3a46-8abd/assessed pol.27.67/no information
GBR-NAO-DRB-VL0010-NGI	Great Atlantic scallop-27.4.a/no information Common edible cockle-27.4.c/no information Manila clam-27.7.d/no information Great Atlantic scallop-27.7.a/no information Great Atlantic scallop-27.7.e/no information Solen razor clams nei-27.6.a/no information Great Atlantic scallop-27.4.b/no information Queen scallop-27.7.a/no information Great Atlantic scallop-27.6.a/no information Clams, etc. nei-27.4.b/no information
GBR-NAO-DRB-VL1218-NGI	Common edible cockle-27.4.c/no information Great Atlantic scallop-27.7.a/no information Great Atlantic scallop-27.6.a/no information Great Atlantic scallop-27.7.e/no information Great Atlantic scallop-27.7.d/no information
GBR-NAO-DTS-VL0010-NGI	nep.fu.6/assessed nep.fu.8/assessed nep.fu.13/assessed nep.fu.7/assessed nep.fu.15/assessed Common squids nei-27.4.a/no information Cuttlefish, bobtail squids nei-27.7.e/no information nep.fu.5/no information nep.fu.12/assessed nep.fu.33/no information nep.fu.11/assessed sol.27.4/assessed sol.27.7d/assessed Lemon sole-27.7.e/no information ple.27.7d/assessed sol.27.7e/assessed nep.fu.34/no information ple.27.7e/assessed Common squids nei-27.7.e/no information mon.27.78abd/assessed
GBR-NAO-DTS-VL1012-NGI	nep.fu.6/assessed Cuttlefish, bobtail squids nei-27.7.e/no information nep.fu.8/assessed Lemon sole-
GPU-IAUO-D I 2-A LTOTS-IAGI	nep.ru.o/ assessed editionshi, bobitan squids ner-z1.7.e/no innormation nep.ru.o/assessed temon sole-

	27.7.e/no information nep.fu.13/assessed nep.fu.5/no information nep.fu.12/assessed nep.fu.33/no
	information nep.fu.15/assessed mon.27.78abd/assessed Edible crab-27.7.a/no information nep.fu.11/assessed Common squids nei-27.7.e/no information sol.27.7e/assessed whg.27.7b-ce-k/assessed John dory-27.7.e/no information ple.27.7e/assessed
GBR-NAO-DTS-VL1824-NGI	nep.fu.7/assessed anf.27.3a46/no information cod.27.47d20/assessed nep.fu.15/assessed had.27.46a20/assessed whg.27.47d/assessed nep.fu.9/assessed lez.27.4a6a/assessed nep.fu.6/assessed nep.fu.8/assessed nep.fu.13/assessed Common squids nei-27.4.a/no information nep.fu.5/no information
GBR-NAO-DTS-VL2440-NGI	cod.27.47d20/assessed had.27.46a20/assessed anf.27.3a46/no information hke.27.3a46-8abd/assessed whg.27.47d/assessed pok.27.3a46/assessed had.27.6b/assessed mon.27.78abd/assessed lin.27.3a4a6-91214/no information nep.fu.7/assessed
GBR-NAO-DTS-VL40XX-NGI	ple.27.420/assessed pok.27.3a46/assessed had.27.6b/assessed anf.27.3a46/no information Common squids nei-27.7.d/no information cod.27.47d20/assessed
GBR-NAO-HOK-VL2440-NGI	hke.27.3a46-8abd/assessed lin.27.3a4a6-91214/no information
GBR-NAO-PMP-VL0010-NGI	Great Atlantic scallop-27.7.d/no information
GBR-NAO-PS-VL1218-NGI	European pilchard(=Sardine)-27.7.e/no information European pilchard(=Sardine)-27.7.f/no information
GBR-NAO-TBB-VL0010-NGI	sol.27.7e/assessed sol.27.7d/assessed ple.27.7e/assessed Cuttlefish, bobtail squids nei-27.7.e/no information Great Atlantic scallop-27.7.e/no information Turbot-27.7.e/no information bll.27.3a47de/no information Lemon sole-27.7.e/no information
GBR-NAO-TBB-VL1012-NGI	rjh.27.7afg/no information sol.27.7fg/assessed Common shrimp-27.4.c/no information rjc.27.7afg/no information
GBR-NAO-TBB-VL1218-NGI	Common shrimp-27.4.c/no information Cuttlefish, bobtail squids nei-27.7.e/no information sol.27.7e/assessed sol.27.7d/assessed Great Atlantic scallop-27.7.d/no information ple.27.7e/assessed ple.27.7d/assessed Whelk-27.4.c/no information sol.27.7fg/assessed
GBR-NAO-TBB-VL40XX-NGI	ple.27.420/assessed sol.27.4/assessed
GBR-NAO-TM-VL1824-NGI	Various squids nei-27.4.a/no information Common squids nei-27.4.a/no information anf.27.3a46/no information
IRL-NAO-DFN-VL1012-NGI	hke.27.3a46-8abd/assessed Turbot-27.7.g/no information pol.27.67/no information
IRL-NAO-DFN-VL1218-NGI	hke.27.3a46-8abd/assessed pol.27.67/no information Turbot-27.7.g/no information
IRL-NAO-DFN-VL1824-NGI	hke.27.3a46-8abd/assessed pol.27.67/no information
IRL-NAO-DFN-VL2440-NGI	hke.27.3a46-8abd/assessed
IRL-NAO-DTS-VL1218-NGI	meg.27.7b-k8abd/assessed mon.27.78abd/assessed nep.fu.22/assessed nep.fu.2021/assessed nep.fu.15/assessed hke.27.3a46-8abd/assessed nep.fu.16/assessed whg.27.7b-ce-k/assessed nep.fu.19/assessed ank.27.78abd/assessed had.27.7b-k/assessed sol.27.7h-k/assessed had.27.7a/assessed European sprat-27.7.a/no information Common sole-27.6.a/no information cod.27.7e-k/assessed
IRL-NAO-DTS-VL1824-NGI	nep.fu.2021/assessed nep.fu.16/assessed nep.fu.22/assessed nep.fu.15/assessed mon.27.78abd/assessed hke.27.3a46-8abd/assessed meg.27.7b-k8abd/assessed whg.27.7b-ce-k/assessed nep.fu.19/assessed anf.27.3a46/no information ank.27.78abd/assessed
IRL-NAO-DTS-VL2440-NGI	nep.fu.2021/assessed nep.fu.16/assessed Common squids nei-27.6.b/no information hke.27.3a46-8abd/assessed nep.fu.22/assessed anf.27.3a46/no information mon.27.78abd/assessed nep.fu.15/assessed meg.27.7b-k8abd/assessed mac.27.nea/assessed had.27.6b/assessed whg.27.7b-ce-k/assessed had.27.7a/assessed Common cuttlefish-27.7.e/no information
IRL-NAO-FPO-VL1012-NGI	Whelk-27.7.a/no information Edible crab-27.6.a/no information Edible crab-27.7.a/no information Edible crab-27.7.j/no information Edible crab-27.7.b/no information Edible crab-27.7.g/no information
IRL-NAO-FPO-VL1218-NGI	Edible crab-27.6.a/no information Whelk-27.7.a/no information Edible crab-27.7.j/no information
IRL-NAO-TBB-VL2440-NGI	meg.27.7b-k8abd/assessed mon.27.78abd/assessed ank.27.78abd/assessed Turbot-27.7.g/no information Lemon sole-27.7.g/no information had.27.7b-k/assessed rjh.27.7afg/no information Witch flounder-27.7.g/no information cod.27.7e-k/assessed
IRL-NAO-TM-VL1218-NGI	European sprat-27.6.a/no information European sprat-27.7.a/no information
IRL-NAO-TM-VL1824-NGI	European sprat-27.6.a/no information alb-na/no information mac.27.nea/assessed

IRL-NAO-TM-VL2440-NGI	mac.27.nea/assessed alb-na/no information hom.27.2a4a5b6a7a-ce-k8/assessed
LTU-NAO-DFN-VL1012-NGI	European smelt-27.3.d.26/no information Atlantic cod-27.3.d.26/no information
LTU-NAO-DTS-VL1824-NGI	spr.27.22-32/assessed Atlantic cod-27.3.d.26/no information
LTU-NAO-PG-VL0010-NGI	European smelt-27.3.d.26/no information her.27.25-2932/assessed Gobies nei-27.3.d.26/no information
LTU-NAO-TM-VL1824-NGI	spr.27.22-32/assessed her.27.25-2932/assessed
LTU-NAO-TM-VL2440-NGI	spr.27.22-32/assessed her.27.25-2932/assessed
LTU-NAO-TM-VL40XX-NGI	spr.27.22-32/assessed her.27.25-2932/assessed
LVA-NAO-TM-VL2440-NGI	spr.27.22-32/assessed her.27.28/assessed
NLD-NAO-DFN-VL1824-NGI	Edible crab-27.4.c/no information Common shrimp-27.4.c/no information
NLD-NAO-DTS-VL1824-NGI	ple.27.420/assessed Common shrimp-27.4.c/no information tur.27.4/assessed nep.fu.6/assessed nep.fu.8/assessed nep.fu.5/no information sol.27.4/assessed nep.fu.33/no information
NLD-NAO-DTS-VL2440-NGI	European squid-27.7.d/no information mur.27.3a47d/no information ple.27.420/assessed mac.27.nea/assessed tur.27.4/assessed Sevenstar flying squid-27.7.d/no information cod.27.47d20/assessed nep.fu.6/assessed nep.fu.8/assessed whg.27.47d/assessed Tub gurnard-27.7.d/no information nep.fu.5/no information European squid-27.4.c/no information
NLD-NAO-PG-VL1012-NGI	sol.27.4/assessed bss.27.4bc7ad-h/assessed
NLD-NAO-TBB-VL0010-NGI	Common shrimp-27.4.c/no information Chinese mitten crab-27.4.c/no information Thinlip grey mullet-27.4.c/no information
NLD-NAO-TBB-VL1824-NGI	dgs.27.nea/no information Common shrimp-27.4.c/no information
NLD-NAO-TBB-VL2440-NGI	sol.27.4/assessed ple.27.420/assessed tur.27.4/assessed Common shrimp-27.4.c/no information
NLD-NAO-TBB-VL40XX-NGI	Pouting(=Bib)-27.4.a/no information sol.27.4/assessed ple.27.420/assessed
NLD-NAO-TM-VL40XX-NGI	whb.27.1-91214/assessed her.27.3a47d/assessed mac.27.nea/assessed hom.27.2a4a5b6a7a-ce-k8/assessed her.27.1-24a514a/assessed
POL-NAO-DFN-VL1218-NGI	Atlantic cod-27.3.d.25/no information fle.27.2425/no information cod.27.22-24/assessed ple.27.24-32/no information
POL-NAO-DTS-VL1218-NGI	fle.27.2425/no information Atlantic cod-27.3.d.25/no information cod.27.22-24/assessed spr.27.22-32/assessed
POL-NAO-DTS-VL1824-NGI	fle.27.2425/no information spr.27.22-32/assessed Atlantic cod-27.3.d.26/no information her.27.25-2932/assessed Atlantic cod-27.3.d.25/no information
POL-NAO-PG-VL0010-NGI	European perch-27.3.d.24/no information Pike-perch-27.3.d.26/no information European eel-27.3.d.26/no information her.27.25-2932/assessed European eel-27.3.d.24/no information trs.27.22-32/no information fle.27.2425/no information Freshwater bream-27.3.d.24/no information Pike-perch-27.3.d.24/no information
POL-NAO-PG-VL1012-NGI	fle.27.2425/no information Atlantic cod-27.3.d.25/no information trs.27.22-32/no information ple.27.24-32/no information cod.27.22-24/assessed
POL-NAO-TM-VL1824-NGI	spr.27.22-32/assessed her.27.25-2932/assessed
POL-NAO-TM-VL2440-NGI	spr.27.22-32/assessed her.27.25-2932/assessed
PRT-NAO-DFN-VL0010-NGI	bss.27.8c9a/no information Gilthead seabream-27.9.a/no information Sea lamprey-27.9.a/no information Surmullet-27.9.a/no information White seabream-27.9.a/no information European eel-27.9.a/no information Allis shad-27.9.a/no information Axillary seabream-27.9.a/no information Common cuttlefish-27.9.a/no information Red porgy-27.9.a/no information Common pandora-27.9.a/no information Thickback soles nei-27.9.a/no information hke.27.8c9a/assessed sol.27.8c9a/no information
PRT-NAO-DFN-VL0010-P3	Parrotfish-27.10.a/no information Yellowmouth barracuda-27.10.a/no information Grey triggerfish-27.10.a/no information Thicklip grey mullet-27.10.a/no information White trevally-27.10.a/no information
PRT-NAO-DFN-VL1012-NGI	John dory-27.9.a/no information sol.27.8c9a/no information Common octopus-27.9.a/no information Surmullet-27.9.a/no information bss.27.8c9a/no information Axillary seabream-27.9.a/no information hke.27.8c9a/assessed Pouting(=Bib)-27.9.a/no information Common cuttlefish-27.9.a/no information Thickback soles nei-27.9.a/no information Turbot-27.9.a/no

	information Common pandora-27.9.a/no information Brill-27.9.a/no information
PRT-NAO-DFN-VL1218-NGI	Common octopus-27.9.a/no information John dory-27.9.a/no information sol.27.8c9a/no information ank.27.8c9a/assessed hke.27.8c9a/assessed Pouting(=Bib)-27.9.a/no information bss.27.8c9a/no information Common cuttlefish-27.9.a/no information Turbot-27.9.a/no information rjc.27.9a/no information rjh.27.9a/no information Wreckfish-27.9.a/no information Surmullet 27.9.a/no information Brill-27.9.a/no information
PRT-NAO-DFN-VL1824-NGI	hke.27.8c9a/assessed John dory-27.9.a/no information Common octopus-27.9.a/no information ank.27.8c9a/assessed sol.27.8c9a/no information hom.27.9a/assessed rjc.27.9a/no information Turbot-27.9.a/no information
PRT-NAO-DTS-VL40XX-IWE	cod-3m/no information Atlantic redfishes nei-21.3.m/no information Atlantic redfishes nei-21.3.o/no information Greenland halibut-21.3.l/no information cod.27.1-2/assessed
PRT-NAO-FPO-VL0010-NGI	Common octopus-27.9.a/no information
PRT-NAO-FPO-VL1012-NGI	Common octopus-27.9.a/no information
PRT-NAO-HOK-VL0010-NGI	bss.27.8c9a/no information Gilthead seabream-27.9.a/no information Common octopus-27.9.a/no information Chub mackerel-27.9.a/no information Meagre-27.9.a/no information White seabream 27.9.a/no information European conger-27.9.a/no information Red porgy-27.9.a/no information Common cuttlefish-27.9.a/no information
PRT-NAO-HOK-VL0010-P2	Black scabbardfish-34.1.2/no information bet-atl/assessed Pink dentex-34.1.2/no information bft ea/no information
PRT-NAO-HOK-VL0010-P3	Veined squid-27.10.a/no information sbr.27.10/no information Wreckfish-27.10.a/no information Red porgy-27.10.a/no information Alfonsino-27.10.a/no information
PRT-NAO-HOK-VL1012-NGI	bss.27.8c9a/no information European conger-27.9.a/no information Red porgy-27.9.a/no information Wreckfish-27.9.a/no information Blackbelly rosefish-27.9.a/no information rjc.27.9a/no information Forkbeard-27.9.a/no information
PRT-NAO-HOK-VL1012-P3	Veined squid-27.10.a/no information sbr.27.10/no information Blackbelly rosefish-27.10.a/n information bet-atl/assessed Alfonsino-27.10.a/no information
PRT-NAO-HOK-VL1218-P2	Black scabbardfish-34.1.2/no information
PRT-NAO-HOK-VL1218-P3	Veined squid-27.10.a/no information bet-atl/assessed sbr.27.10/no information Skipjack tuna 27.10.a/no information Blackbelly rosefish-27.10.a/no information alb-na/no information
PRT-NAO-HOK-VL1824-NGI	swo-na/no information bsf.27.nea/no information Blue shark-27.10.a/no information Wreckfish 27.9.a/no information Blue shark-27.9.a/no information
PRT-NAO-HOK-VL1824-P2	Black scabbardfish-34.1.2/no information bet-atl/assessed alb-na/no information
PRT-NAO-HOK-VL2440-NGI	swo-na/no information Blue shark-27.10.a/no information bft-ea/no information Blue shark-34.2/no information Blue shark-27.9.b/no information
PRT-NAO-HOK-VL2440-P2	alb-na/no information bet-atl/assessed
PRT-NAO-HOK-VL2440-P3	alb-na/no information bet-atl/assessed Skipjack tuna-27.10.a/no information
PRT-NAO-MGP-VL0010-P2	Limpets nei-34.1.2/no information
PRT-NAO-MGP-VL1824-P2	Chub mackerel-34.1.2/no information Blue jack mackerel-34.1.2/no information
PRT-NAO-PGP-VL0010-NGI	Common octopus-27.9.a/no information Common cuttlefish-27.9.a/no information bss.27.8c9a/n information Common edible cockle-27.9.a/no information Meagre-27.9.a/no information Gilthea seabream-27.9.a/no information Surmullet-27.9.a/no information sol.27.8c9a/no information Whit seabream-27.9.a/no information European conger-27.9.a/no information Pullet carpet shel 27.9.a/no information Pouting(=Bib)-27.9.a/no information rjc.27.9a/no information Red porgy 27.9.a/no information
PRT-NAO-PGP-VL0010-P3	Veined squid-27.10.a/no information Parrotfish-27.10.a/no information Blue jack mackerel 27.10.a/no information Grey triggerfish-27.10.a/no information Surmullet-27.10.a/no information sbr.27.10/no information Dusky grouper-27.10.a/no information Axillary seabream-27.10.a/no information Yellowmouth barracuda-27.10.a/no information Common spiny lobster-27.10.a/no information Forkbeard-27.10.a/no information Red scorpionfish-27.10.a/no information Red porgy 27.10.a/no information
PRT-NAO-PGP-VL1218-NGI	Common octopus-27.9.a/no information sol.27.8c9a/no information Pouting(=Bib)-27.9.a/n information hke.27.8c9a/assessed Turbot-27.9.a/no information bss.27.8c9a/no information
PRT-NAO-PGP-VL1824-NGI	Common octopus-27.9.a/no information sol.27.8c9a/no information John dory-27.9.a/n

	information Pouting(=Bib)-27.9.a/no information Turbot-27.9.a/no information hke.27.8c9a/assessed bss.27.8c9a/no information Brill-27.9.a/no information Common cuttlefish-27.9.a/no information
PRT-NAO-PS-VL1012-P3	Blue jack mackerel-27.10.a/no information Chub mackerel-27.10.a/no information
PRT-NAO-PS-VL1218-P3	Blue jack mackerel-27.10.a/no information Chub mackerel-27.10.a/no information
SWE-NAO-DFN-VL0010-NGI	cod.27.22-24/assessed her.27.3031/assessed European perch-27.3.d.30/no information Whitefishes nei-27.3.d.31/no information Edible crab-27.3.a/no information sal.27.22-31/no information Whitefishes nei-27.3.d.30/no information sol.27.20-24/assessed European perch-27.3.d.25/no information European eel-27.3.d.27/no information Atlantic cod-27.3.d.25/no information European eel-27.3.d.25/no information Northern pike-27.3.d.25/no information Vendace-27.3.d.31/no information European lobster-27.3.a/no information Lumpfish(=Lumpsucker)-27.3.a/no information European perch-27.3.d.29/no information
SWE-NAO-DFN-VL1012-NGI	cod.27.22-24/assessed Vendace-27.3.d.31/no information her.27.20-24/assessed
SWE-NAO-DFN-VL1218-NGI	Vendace-27.3.d.31/no information
SWE-NAO-DTS-VL2440-NGI	pra.27.3a4a/assessed pok.27.3a46/assessed cod.27.47d20/assessed
SWE-NAO-HOK-VL1012-NGI	cod.27.22-24/assessed Atlantic cod-27.3.d.25/no information mac.27.nea/assessed Edible crab-27.3.a/no information
SWE-NAO-PS-VL1012-NGI	her.27.25-2932/assessed
SWE-NAO-PS-VL1218-NGI	her.27.25-2932/assessed
SWE-NAO-TM-VL1012-NGI	her.27.28/assessed her.27.25-2932/assessed
SWE-NAO-TM-VL1824-NGI	her.27.25-2932/assessed her.27.28/assessed
SWE-NAO-TM-VL2440-NGI	her.27.25-2932/assessed her.27.3031/assessed spr.27.22-32/assessed her.27.28/assessed
SWE-NAO-TM-VL40XX-NGI	her.27.25-2932/assessed spr.27.22-32/assessed her.27.28/assessed her.27.3a47d/assessed her.27.1-24a514a/assessed

# For Area 37

fleet_code	major_stocks
BGR-MBS-DFN-VL0006-NGI	Gobies nei-sa 29/no information Pontic shad-sa 29/no information Bluefish-sa 29/no information rpw-gsa29/no information
BGR-MBS-DFN-VL0612-NGI	tur-gsa29/assessed Pontic shad-sa 29/no information Bluefish-sa 29/no information Gobies nei-sa 29/no information hmm-gsa29/no information Sand gaper-sa 29/no information
BGR-MBS-DFN-VL1218-NGI	rpw-gsa29/no information tur-gsa29/assessed
BGR-MBS-DFN-VL2440-NGI	tur-gsa29/assessed rpw-gsa29/no information
BGR-MBS-HOK-VL0612-NGI	tur-gsa29/assessed dgs-gsa29/no information hmm-gsa29/no information
BGR-MBS-PMP-VL0006-NGI	Sand gaper-sa 29/no information rpw-gsa29/no information
BGR-MBS-PMP-VL0612-NGI	Sand gaper-sa 29/no information rpw-gsa29/no information
BGR-MBS-PMP-VL1218-NGI	rpw-gsa29/no information mut-gsa29/no information
BGR-MBS-PMP-VL1824-NGI	rpw-gsa29/no information mut-gsa29/no information tur-gsa29/assessed
BGR-MBS-PS-VL1824-NGI	hmm-gsa29/no information ane-gsa29/no information
BGR-MBS-TBB-VL0612-NGI	rpw-gsa29/no information
BGR-MBS-TBB-VL1218-NGI	rpw-gsa29/no information
BGR-MBS-TBB-VL1824-NGI	rpw-gsa29/no information tur-gsa29/assessed
BGR-MBS-TM-VL0612-NGI	mut-gsa29/no information tur-gsa29/assessed
BGR-MBS-TM-VL1218-NGI	spr-gsa29/no information mut-gsa29/no information rpw-gsa29/no information
BGR-MBS-TM-VL1824-NGI	spr-gsa29/no information

BGR-MBS-TM-VL2440-NGI	spr-gsa29/no information
CYP-MBS-DTS-VL2440-NGI	Surmullet-sa 14/no information mut-gsa25/assessed pac-gsa25/no information spc-gsa25/no information alb-med/no information Surmullet-sa 15/no information European squid-sa 25/no information Bogue-sa 25/no information hke-gsa12_13_14_15_16/assessed
CYP-MBS-PGO-VL0006-NGI	Marbled spinefoot-sa 25/no information Parrotfish-sa 25/no information Surmullet-sa 25/no information White seabream-sa 25/no information Common cuttlefish-sa 25/no information Dusky spinefoot-sa 25/no information Bogue-sa 25/no information Red porgy-sa 25/no information
CYP-MBS-PGO-VL0612-NGI	Marbled spinefoot-sa 25/no information Parrotfish-sa 25/no information Surmullet-sa 25/no information White seabream-sa 25/no information Common cuttlefish-sa 25/no information Dusky spinefoot-sa 25/no information Bogue-sa 25/no information Red porgy-sa 25/no information
CYP-MBS-PGP-VL1218-NGI	alb-med/no information bft-ea/no information
CYP-MBS-PG-VL0006-NGI	Marbled spinefoot-sa 25/no information Bogue-sa 25/no information Parrotfish-sa 25/no information White seabream-sa 25/no information Dusky spinefoot-sa 25/no information spc-gsa25/no information Common cuttlefish-sa 25/no information Greater amberjack-sa 25/no information Surmullet-sa 25/no information Common octopus-sa 25/no information Dusky grouper-sa 25/no information Comber-sa 25/no information
CYP-MBS-PG-VL0612-NGI	Bogue-sa 25/no information Surmullet-sa 25/no information Parrotfish-sa 25/no information Marbled spinefoot-sa 25/no information Dusky spinefoot-sa 25/no information White seabream-sa 25/no information Comber-sa 25/no information spc-gsa25/no information Lagocephalus spp-sa 25/no information Blotched picarel-sa 25/no information Common cuttlefish-sa 25/no information Greater amberjack-sa 25/no information Red porgy-sa 25/no information Dusky grouper-sa 25/no information pac-gsa25/no information
ESP-MBS-DFN-VL0612-NGI-NO-	Common octopus-sa 6/no information Common cuttlefish-sa 6/no information Common sole-sa 6/no information Common spiny lobster-sa 5/no information Gilthead seabream-sa 6/no information Caramote prawn-sa 6/no information Greater amberjack-sa 6/no information Common spiny lobster-sa 6/no information Common dentex-sa 6/no information Red scorpionfish-sa 6/no information bft-ea/no information hke-gsa01_05_06_07/assessed Common pandora-sa 6/no information Atlantic bonito-sa 6/no information hke-gsa06/assessed Sand steenbras-sa 6/no information Surmullet-sa 6/no information Surmullet-sa 6/no information Surmullet-sa 1/no information White seabream-sa 6/no information Surmullet-sa 1/no information mongsa01_05_06_07/no information Brown meagre-sa 6/no information mut-gsa06/assessed Common cuttlefish-sa 1/no information
ESP-MBS-DFN-VL1218-NGI-NO-	Gilthead seabream-sa 6/no information Common octopus-sa 6/no information Common cuttlefish-sa 6/no information Common sole-sa 6/no information bft-ea/no information Caramote prawn-sa 6/no information Sand steenbras-sa 6/no information hke-gsa01_05_06_07/assessed Common cuttlefish-sa 1/no information hke-gsa06/assessed Greater amberjack-sa 6/no information Common spiny lobster-sa 6/no information mut-gsa06/assessed Common dentex-sa 6/no information Surmullet-sa 1/no information Blue crab-sa 6/no information Surmullet-sa 6/no information Common pandora-sa 6/no information Red scorpionfish-sa 6/no information Brill-sa 6/no information Common spiny lobster-sa 2/no information
ESP-MBS-DRB-VL0612-NGI-NO-	Smooth callista-sa 1/no information Truncate donax-sa 1/no information Striped venus-sa 1/no information Caramote prawn-sa 6/no information
ESP-MBS-DRB-VL1218-NGI-NO-	Caramote prawn-sa 6/no information Common octopus-sa 6/no information Purple dye murex-sa 6/no information Common cuttlefish-sa 6/no information
ESP-MBS-DTS-VL0612-NGI-NO-	Common octopus-sa 1/no information mon-gsa01_05_06_07/no information Pelagic fishes nei-sa 6/no information Horned octopus-sa 6/no information mut-gsa01/assessed Blackbellied angler-sa 6/no information dps-gsa06/assessed mut-gsa06/assessed Common octopus-sa 6/no information Common cuttlefish-sa 1/no information Gurnards nei-sa 6/no information Surmullet-sa 6/no information Spotted flounder-sa 6/no information hke-gsa01_05_06_07/assessed Red bandfish-sa 6/no information Horned octopus-sa 1/no information dps-gsa01/assessed European squid-sa 6/no information Poor cod-sa 6/no information Mediterranean sand eel-sa 6/no information Elegant cuttlefish-sa 6/no information hke-gsa06/assessed Common cuttlefish-sa 6/no information Broadtail shortfin squid-sa 6/no information
ESP-MBS-DTS-VL1218-NGI-NO-	mut-gsa06/assessed Spottail mantis squillid-sa 6/no information dps-gsa01/assessed Common octopus-sa 1/no information Common octopus-sa 6/no information mon-gsa01_05_06_07/no information dps-gsa06/assessed nep-gsa06/assessed Common cuttlefish-sa 6/no information aragsa01/assessed hke-gsa01_05_06_07/assessed Spotted flounder-sa 6/no information Caramote prawn-sa 6/no information hke-gsa06/assessed Horned octopus-sa 6/no information Gilthead seabream-sa 6/no information mut-gsa01/assessed Surmullets(=Red mullets) nei-sa 6/no information Common pandora-sa 6/no information Broadtail shortfin squid-sa 6/no information

Blackbellied angler-sa 6/no information Purple dve murex-sa 6/no information Common cuttlefish-sa 1/no information Poor cod-sa 6/no information ara-gsa06\_07/assessed ara-gsa06/assessed Norway lobster-sa 1/no information Surmullet-sa 6/no information European squid-sa 6/no information Surmullet-sa 1/no information Blue-leg swimcrab-sa 6/no information Atlantic horse mackerel-sa 6/no information Alloteuthis squids nei-sa 6/no information ara-gsa05/assessed ara-gsa06\_07/assessed ara-gsa06/assessed gsa06/assessed hke-gsa01\_05\_06\_07/assessed mon-gsa01\_05\_06\_07/no information Common octopus-sa 6/no information mut-gsa06/assessed dps-gsa01/assessed hke-gsa06/assessed aragsa01/assessed Common cuttlefish-sa 6/no information Spottail mantis squillid-sa 6/no information ara-gsa02/assessed Surmullets(=Red mullets) nei-sa 6/no information Spotted flounder-sa 6/no information Horned octopus-sa 6/no information nep-gsa05/assessed Common octopus-sa 1/no information Common pandora-sa 6/no information Gilthead seabream-sa 6/no information Blue whiting(=Poutassou)-sa 6/no information Caramote prawn-sa 6/no information European squid-sa 5/no information Broadtail shortfin squid-sa 6/no information Common squids nei-sa 6/no information Norway lobster-sa 1/no information Common octopus-sa 5/no information Greater forkbeard-sa 6/no information dps-gsa05/assessed John dory-sa 6/no information Poor cod-sa 6/no ESP-MBS-DTS-VL1824-NGI-NOinformation European squid-sa 6/no information Atlantic horse mackerel-sa 6/no information ara-gsa06\_07/assessed ara-gsa06/assessed ara-gsa05/assessed hke-gsa01\_05\_06\_07/assessed nepgsa06/assessed hke-gsa06/assessed dps-gsa06/assessed mut-gsa06/assessed gsa01\_05\_06\_07/no information ara-gsa01/assessed Common octopus-sa 6/no information Blue whiting(=Poutassou)-sa 6/no information nep-gsa05/assessed Horned octopus-sa 6/no information Common pandora-sa 6/no information Common cuttlefish-sa 6/no information Blue and red shrimp-O/no information Greater forkbeard-sa 6/no information Surmullets(=Red mullets) nei-sa 6/no ESP-MBS-DTS-VL2440-NGI-NOinformation ara-gsa02/assessed Norway lobster-sa 7/no information ESP-MBS-FPO-VL0612-NGI-NO-Common octopus-sa 1/no information Common octopus-sa 6/no information Common octopus-sa 6/no information Striped soldier shrimp-sa 1/no information Striped soldier ESP-MBS-FPO-VL1218-NGI-NOshrimp-sa 6/no information Pink spiny lobster-sa 1/no information bft-ea/no information Gilthead seabream-sa 6/no information Atlantic pomfret-sa 6/no information Common octopus-sa 5/no information hke-gsa01\_05\_06\_07/assessed hke-gsa06/assessed sbrgsa01\_03/assessed Common dolphinfish-sa 5/no information Blackspot(=red) seabream-sa 6/no information Little tunny(=Atl.black skipj)-sa 6/no information sbr.27.9/no information Common spiny lobster-sa 6/no information Red porgy-sa 6/no information Atlantic bluefin tuna-sa 3/no information Common spiny lobster-sa 5/no information European seabass-sa 6/no information Common ESP-MBS-HOK-VL0612-NGI-NOoctopus-sa 6/no information Blue crab-sa 6/no information ESP-MBS-HOK-VL1218-NGI-NO-Atlantic bluefin tuna-sa 3/no information bft-ea/no information hke-gsa01 05 06 07/assessed hke-gsa06/assessed hke-gsa07/no information Blackbelly rosefish-sa ESP-MBS-HOK-VL1824-NGI-NO-6/no information Blackbelly rosefish-sa 7/no information European hake-0/no information Gilthead seabream-sa 6/no information Blue crab-sa 6/no information Caramote prawn-sa 6/no information Common octopus-sa 1/no information European seabass-sa 6/no information Common octopus-sa 6/no information Common sole-sa 6/no information Senegalese sole-sa 6/no information ESP-MBS-PMP-VL0006-NGI-Greater amberjack-sa 1/no information Sand steenbras-sa 6/no information Common cuttlefish-sa NO-6/no information Common cuttlefish-sa 1/no information Atlantic bonito-sa 1/no information Common octopus-sa 1/no information Mediterranean sand eel-sa 6/no information Common octopus-sa 6/no information Common spiny lobster-sa 5/no information Gilthead seabream-sa 6/no information Common cuttlefish-sa 6/no information Common dentex-sa 6/no information Red scorpionfish-sa 5/no information Greater amberjack-sa 6/no information Surmullet-sa 6/no information bft-ea/no information Greater amberjack-sa 1/no information Blue crab-sa 6/no information Common sole-sa 6/no information European seabass-sa 6/no information Common dolphinfish-sa 5/no information Common cuttlefish-sa 1/no information Atlantic bonito-sa 6/no information Caramote prawn-sa 6/no information Common spiny lobster-sa 6/no information mutgsa06/assessed Red scorpionfish-sa 6/no information Surmullet-sa 1/no information Common FSP-MBS-PMP-VI 0612-NGIdentex-sa 5/no information Sand steenbras-sa 6/no information Common cuttlefish-sa 5/no NOinformation Transparent goby-sa 1/no information Common octopus-sa 6/no information Atlantic bluefin tuna-sa 3/no information bft-ea/no information Gilthead seabream-sa 6/no information Greater amberjack-sa 6/no information Striped shrimp-sa 1/no information Common dentex-sa 6/no information hke-ESP-MBS-PMP-VL1218-NGIgsa01\_05\_06\_07/assessed hke-gsa06/assessed Common sole-sa 6/no information Common NOpandora-sa 6/no information Atlantic bonito-sa 6/no information sbr-gsa01\_03/assessed pil-gsa06/assessed pil-gsa01/no information pil-gsa01-03/no information Atlantic bonito-sa 1/no information Greater amberjack-sa 1/no information Mediterranean horse mackerel-sa 1/no information European anchovy-sa 1/no information European pilchard(=Sardine)-sa 5/no ESP-MBS-PS-VL0612-NGI-NO-

	information Atlantic horse mackerel-sa 1/no information Atlantic bonito-sa 6/no information
ESP-MBS-PS-VL1218-NGI-NO-	ane-gsa06/no information pil-gsa06/assessed European anchovy-sa 1/no information Round sardinella-sa 1/no information pil-gsa01-03/no information pil-gsa01/no information Atlantic chub mackerel-sa 1/no information
ESP-MBS-PS-VL1824-NGI-NO-	ane-gsa06/no information pil-gsa06/assessed European anchovy-sa 1/no information
ESP-MBS-PS-VL2440-NGI-NO-	bft-ea/no information ane-gsa06/no information
FRA-MBS-DFN-VL0006-NGI	sbg-gsa07/no information bss-gsa07/no information Thicklip grey mullet-sa 7/no information Mugil spp-sa 7/no information Stony sea urchin-sa 7/no information Boxlip mullet-sa 7/no information European eel-sa 7/no information
FRA-MBS-DFN-VL0612-NGI	sbg-gsa07/no information bss-gsa07/no information sol-gsa07/no information Common spiny lobster-sa 7/no information Common octopus-sa 7/no information Common spiny lobster-sa 8/no information Mugil spp-sa 7/no information Common cuttlefish-sa 7/no information hke-gsa07/no information hke-gsa01_05_06_07/assessed Scorpionfishes, rockfishes nei-sa 7/no information Surmullet-sa 7/no information swo-med/assessed bft-ea/no information Common pandora-sa 7/no information Turbot-sa 7/no information mon-gsa01_05_06_07/no information Purple dye murex-sa 7/no information Atlantic bonito-sa 7/no information Changeable nassa-sa 7/no information
FRA-MBS-DFN-VL1218-NGI	bft-ea/no information Common spiny lobster-sa 8/no information hke-gsa07/no information hke-gsa01_05_06_07/assessed Leerfish-sa 8/no information
FRA-MBS-DTS-VL1218-NGI	Norway lobster-sa 8/no information Deep-water rose shrimp-sa 8/no information hke-gsa08_09_10_11/assessed Common dab-sa 8/no information
FRA-MBS-DTS-VL1824-NGI	Common octopus-sa 7/no information Octopuses, etc. nei-sa 7/no information hke-gsa01_05_06_07/assessed hke-gsa07/no information Atlantic mackerel-sa 7/no information sol-gsa07/no information Common cuttlefish-sa 7/no information mon-gsa01_05_06_07/no information Purple dye murex-sa 7/no information Inshore squids nei-sa 7/no information Brill-sa 7/no information European common squid-sa 7/no information sbg-gsa07/no information bss-gsa07/no information Shortfin squids nei-sa 7/no information
FRA-MBS-DTS-VL2440-NGI	mon-gsa01_05_06_07/no information Octopuses, etc. nei-sa 7/no information hke-gsa01_05_06_07/assessed hke-gsa07/no information Common octopus-sa 7/no information Atlantic mackerel-sa 7/no information sol-gsa07/no information Surmullet-sa 7/no information Shortfin squids nei-sa 7/no information Poor cod-sa 7/no information ane-gsa07/assessed Inshore squids nei-sa 7/no information Brill-sa 7/no information Common cuttlefish-sa 7/no information Gurnards, searobins nei-sa 7/no information Red gurnard-sa 7/no information
FRA-MBS-FPO-VL0006-NGI	European eel-sa 7/no information bss-gsa07/no information sbg-gsa07/no information Silversides(=Sand smelts) nei-sa 7/no information
FRA-MBS-FPO-VL0612-NGI	Common octopus-sa 7/no information Changeable nassa-sa 7/no information sbg-gsa07/no information European eel-sa 7/no information bft-ea/no information bss-gsa07/no information
FRA-MBS-HOK-VL0006-NGI	bss-gsa07/no information sbg-gsa07/no information White seabream-sa 7/no information
FRA-MBS-HOK-VL0612-NGI	bft-ea/no information swo-med/assessed Blackspot(=red) seabream-sa 7/no information sbg-gsa07/no information bss-gsa07/no information
FRA-MBS-PGP-VL0612-NGI	Common octopus-sa 7/no information bft-ea/no information Stony sea urchin-sa 8/no information sbg-gsa07/no information swo-med/assessed sol-gsa07/no information Stony sea urchin-sa 7/no information bss-gsa07/no information Common spiny lobster-sa 8/no information Common cuttlefish-sa 7/no information Changeable nassa-sa 7/no information European smelt-sa 7/no information
GRC-MBS-DFN-VL0612-NGI	Surmullet-sa 22/no information hke-gsa20/assessed hke-gsa22/no information mut-gsa22/assessed Common cuttlefish-sa 22/no information Bogue-sa 22/no information Red scorpionfish-sa 22/no information Atlantic bonito-sa 20/no information Common pandora-sa 22/no information mut-gsa20/assessed Common cuttlefish-sa 20/no information Red porgy-sa 22/no information Mullets nei-sa 22/no information Surmullet-sa 20/no information Common octopus-sa 22/no information Common sole-sa 22/no information Caramote prawn-sa 20/no information Red scorpionfish-sa 20/no information Gilthead seabream-sa 22/no information Common spiny lobster-sa 22/no information White seabream-sa 20/no information Annular seabream-sa 22/no information White seabream-sa 22/no information Atlantic bonito-sa 22/no information Caramote prawn-sa 22/no information
GRC-MBS-DFN-VL1218-NGI	Norway lobster-sa 20/no information Surmullet-sa 22/no information Bogue-sa 22/no information Gilthead seabream-sa 22/no information Red porgy-sa 22/no information Red scorpionfish-sa 22/no information Red porgy-sa 20/no information Common cuttlefish-sa 22/no information Common two-

	banded seabream-sa 22/no information hke-gsa20/assessed Common pandora-sa 22/no information Red scorpionfish-sa 23/no information hke-gsa22/no information Round sardinella-sa 22/no information mut-gsa22/assessed Surmullet-sa 23/no information Common sole-sa 22/no information
GRC-MBS-HOK-VL0006-NGI	European seabass-sa 22/no information Gilthead seabream-sa 22/no information White seabream-sa 22/no information Red porgy-sa 22/no information Common pandora-sa 22/no information White seabream-sa 20/no information Common two-banded seabream-sa 22/no information Common octopus-sa 22/no information Gilthead seabream-sa 20/no information
GRC-MBS-HOK-VL0612-NGI	Red porgy-sa 22/no information hke-gsa22/no information Common pandora-sa 22/no information White seabream-sa 22/no information Gilthead seabream-sa 22/no information Red porgy-sa 20/no information Red porgy-sa 23/no information hke-gsa20/assessed swo-med/assessed European seabass-sa 22/no information
HRV-MBS-DFN-VL0006-NGI	Gilthead seabream-sa 17/no information Red scorpionfish-sa 17/no information Mullets nei-sa 17/no information sol-gsa17/assessed Common octopus-sa 17/no information European seabass-sa 17/no information ctc-gsa17_18/assessed ctc-gsa17/assessed Common dentex-sa 17/no information Salema-sa 17/no information hke-gsa17_18_stecf/assessed hke-gsa17_18/assessed Atlantic bonito-sa 17/no information Common spiny lobster-sa 17/no information John dory-sa 17/no information Saddled seabream-sa 17/no information Warty venus-sa 17/no information Common two-banded seabream-sa 17/no information
HRV-MBS-DFN-VL0612-NGI	sol-gsa17/assessed Gilthead seabream-sa 17/no information Red scorpionfish-sa 17/no information Common spiny lobster-sa 17/no information John dory-sa 17/no information Common octopus-sa 17/no information Common dentex-sa 17/no information hke-gsa17_18/assessed hke-gsa17_18_stecf/assessed Turbot-sa 17/no information ctc-gsa17/assessed ctc-gsa17_18/assessed Dogfish sharks nei-sa 17/no information European lobster-sa 17/no information Mullets nei-sa 17/no information Spinous spider crab-sa 17/no information
HRV-MBS-DFN-VL1218-NGI	sol-gsa17/assessed Turbot-sa 17/no information Dogfish sharks nei-sa 17/no information Spinous spider crab-sa 17/no information
HRV-MBS-DRB-VL0612-NGI	sol-gsa17/assessed sja-gsa17/assessed Scallops nei-sa 17/no information Variegated scallop-sa 17/no information
HRV-MBS-DRB-VL1218-NGI	sol-gsa17/assessed sja-gsa17/assessed Marine fishes nei-sa 17/no information ctc-gsa17/assessed ctc-gsa17_18/assessed
HRV-MBS-DRB-VL2440-NGI	sol-gsa17/assessed ctc-gsa17_18/assessed ctc-gsa17/assessed
HRV-MBS-DTS-VL0006-NGI	Greater amberjack-sa 17/no information Atlantic bonito-sa 17/no information Picarel-sa 17/no information Mullets nei-sa 17/no information Mediterranean sand smelt-sa 17/no information
HRV-MBS-DTS-VL0612-NGI	mut-gsa17_18/assessed nep-gsa17_18/assessed hke-gsa17_18/assessed hke-gsa17_18_stecf/assessed Horned and musky octopuses-sa 17/no information dps-gsa17_18_19/assessed John dory-sa 17/no information European squid-sa 17/no information Picarel-sa 17/no information Common octopus-sa 17/no information Monkfishes nei-sa 17/no information Raja rays nei-sa 17/no information Various squids nei-sa 17/no information sol-gsa17/assessed
HRV-MBS-DTS-VL1218-NGI	mut-gsa17_18/assessed hke-gsa17_18_stecf/assessed hke-gsa17_18/assessed nep-gsa17_18/assessed dps-gsa17_18_19/assessed Horned and musky octopuses-sa 17/no information John dory-sa 17/no information European squid-sa 17/no information Common octopus-sa 17/no information Gurnards, searobins nei-sa 17/no information
HRV-MBS-DTS-VL1824-NGI	nep-gsa17_18/assessed dps-gsa17_18_19/assessed hke-gsa17_18_stecf/assessed hke-gsa17_18/assessed Monkfishes nei-sa 17/no information
HRV-MBS-DTS-VL2440-NGI	nep-gsa17_18/assessed dps-gsa17_18_19/assessed hke-gsa17_18/assessed hke-gsa17_18_stecf/assessed
HRV-MBS-FPO-VL0006-NGI	nep-gsa17_18/assessed Common octopus-sa 17/no information Common spiny lobster-sa 17/no information Gilthead seabream-sa 17/no information
HRV-MBS-FPO-VL0612-NGI	nep-gsa17_18/assessed Common octopus-sa 17/no information
HRV-MBS-HOK-VL0006-NGI	Common octopus-sa 17/no information swo-med/assessed European squid-sa 17/no information Gilthead seabream-sa 17/no information hke-gsa17_18/assessed hke-gsa17_18_stecf/assessed Common dentex-sa 17/no information Red scorpionfish-sa 17/no information Gurnards, searobins nei-sa 17/no information Common two-banded seabream-sa 17/no information John dory-sa 17/no information European conger-sa 17/no information
HRV-MBS-HOK-VL0612-NGI	bft-ea/no information Gurnards, searobins nei-sa 17/no information swo-med/assessed hke-gsa17_18_stecf/assessed hke-gsa17_18/assessed Red porgy-sa 17/no information

bft-ea/no information swo-med/assessed
Mark
Warty venus-sa 17/no information Common octopus-sa 17/no information Sea urchins, etc. nei-sa 17/no information Gilthead seabream-sa 17/no information Noah's ark-sa 17/no information
Sponges-sa 17/no information Sea urchins, etc. nei-sa 17/no information Warty venus-sa 17/no information
Sponges-sa 17/no information
sja-gsa17/assessed Musky octopus-sa 17/no information sol-gsa17/assessed Horned and musky octopuses-sa 17/no information mut-gsa17_18/assessed Common octopus-sa 17/no information John dory-sa 17/no information Gurnards, searobins nei-sa 17/no information
Eunice sea-worms-sa 17/no information Marine worms-sa 17/no information
European eel-sa 17/no information European squid-sa 17/no information ctc-gsa17/assessed ctc-gsa17_18/assessed
European squid-sa 17/no information Gilthead seabream-sa 17/no information Common octopus-sa 17/no information Mullets nei-sa 17/no information hke-gsa17_18/assessed hke-gsa17_18_stecf/assessed Surmullet-sa 17/no information Red scorpionfish-sa 17/no information Saddled seabream-sa 17/no information Common two-banded seabream-sa 17/no information Salema-sa 17/no information Common pandora-sa 17/no information European conger-sa 17/no information Black scorpionfish-sa 17/no information European seabass-sa 17/no information Red porgy-sa 17/no information Bogue-sa 17/no information
Common spiny lobster-sa 17/no information Red scorpionfish-sa 17/no information Common octopus-sa 17/no information European squid-sa 17/no information hke-gsa17_18/assessed hke-gsa17_18_stecf/assessed Gurnards, searobins nei-sa 17/no information Common dentex-sa 17/no information Gilthead seabream-sa 17/no information Red porgy-sa 17/no information Surmullet-sa 17/no information John dory-sa 17/no information
Common octopus-sa 17/no information Gilthead seabream-sa 17/no information European squid-sa 17/no information European lobster-sa 17/no information Mullets nei-sa 17/no information European seabass-sa 17/no information Common dentex-sa 17/no information Salema-sa 17/no information White seabream-sa 17/no information Common two-banded seabream-sa 17/no information Red scorpionfish-sa 17/no information
Common octopus-sa 17/no information Gilthead seabream-sa 17/no information Common dentex-sa 17/no information John dory-sa 17/no information Picarel-sa 17/no information European squid-sa 17/no information Salema-sa 17/no information
Gilthead seabream-sa 17/no information Common dentex-sa 17/no information Mullets nei-sa 17/no information Common two-banded seabream-sa 17/no information Saddled seabream-sa 17/no information Salema-sa 17/no information Picarel-sa 17/no information
pil-gsa17_18/assessed ane-gsa17_18/assessed Atlantic bonito-sa 17/no information Mullets nei-sa 17/no information Greater amberjack-sa 17/no information
pil-gsa17_18/assessed ane-gsa17_18/assessed
pil-gsa17_18/assessed ane-gsa17_18/assessed
pil-gsa17_18/assessed ane-gsa17_18/assessed
Striped venus-sa 17/no information
Striped venus-sa 17/no information
ctc-gsa17_18/assessed tgs-gsa17/no information sol-gsa17/assessed mut-gsa09/assessed mts-gsa17_18/assessed Caramote prawn-sa 9/no information mts-gsa17/assessed Common octopus-sa 9/no information dps-gsa09_10_11/assessed ctc-gsa17/assessed Common cuttlefish-sa 9/no information mur-gsa09/no information ars-gsa09_10_11/assessed Common octopus-sa 11/no information Common octopus-sa 10/no information ara-gsa09/no information Spottail mantis squillid-sa 9/no information Common octopus-sa 16/no information Common octopus-sa 18/no information hke-gsa12_13_14_15_16/assessed hke-gsa08_09_10_11/assessed hke-gsa09_10_11/assessed hke-gsa09_10_11/assessed dps-gsa17_18_19/assessed mut-gsa17_18/assessed Big-scale sand smelt-sa 17/no information Surmullet-sa 11/no information mut-gsa10/assessed Marine fishes nei-sa 9/no information Horned octopus-sa 9/no information Common sole-sa 9/no information dps-gsa12_13_14_15_16/no information Warty venus-sa 18/no information Marine crustaceans nei-sa 17/no information John dory-sa 9/no information Common cuttlefish-sa 16/no information Smooth-hound-sa 17/no information European squid-sa 16/no information eoi-gsa18/assessed Bogue-sa 16/no information hke-gsa17_18/assessed

hke-gsa17\_18\_stecf/assessed Common cuttlefish-sa 10/no information Veined squid-sa 16/no information Broadtail shortfin squid-sa 9/no information Common spiny lobster-sa 11/no information Stargazer-sa 9/no information

dps-gsa17\_18\_19/assessed Blue and red shrimp-sa 19/no information mts-gsa17\_18/assessed tgsgsa17/no information dps-gsa09\_10\_11/assessed nep-gsa17\_18/assessed ctc-gsa17\_18/assessed mut-gsa17\_18/assessed eoi-gsa18/assessed mts-gsa17/assessed hke-gsa17\_18\_stecf/assessed hkegsa17\_18/assessed ars-gsa09\_10\_11/assessed ars-gsa18\_19/assessed European squid-sa 17/no information Caramote prawn-sa 18/no information dps-gsa12\_13\_14\_15\_16/no information hkegsa19/assessed ctc-gsa17/assessed mut-gsa09/assessed Broadtail shortfin squid-sa 18/no information Common octopus-sa 16/no information Horned octopus-sa 9/no information Musky octopus-sa 17/no information Common cuttlefish-sa 16/no information nep-gsa09/assessed Common octopus-sa 11/no information ara-gsa09\_10\_11/assessed sol-gsa17/assessed European squid-sa 18/no information Common octopus-sa 9/no information Surmullet-sa 16/no information Musky octopus-sa 18/no information ara-gsa09/no information hke-gsa12\_13\_14\_15\_16/assessed Common octopus-sa 18/no information hke-gsa08\_09\_10\_11/assessed hke-gsa09\_10\_11/assessed Gilthead seabream-sa 18/no information Whiting-sa 17/no information mur-gsa09/no information European squid-sa 16/no information Common octopus-sa 10/no information Surmullet-sa 11/no information Broadtail shortfin squid-sa 17/no information Common cuttlefish-sa 9/no information mut-gsa10/assessed Midsize squid-sa 17/no information mut-gsa19/assessed Caramote prawn-sa 9/no information Common cuttlefish-sa 10/no information Common octopus-sa 19/no information Broadtail shortfin squid-sa 9/no information Common cuttlefish-sa 19/no information Broadtail shortfin squid-sa 19/no information Blackbellied angler-sa 18/no information European squid-sa 9/no information Blackbellied angler-sa 17/no information

#### ITA-MBS-DTS-VL1218-NGI--

dps-gsa17\_18\_19/assessed nep-gsa17\_18/assessed dps-gsa12\_13\_14\_15\_16/no information dpsgsa09\_10\_11/assessed mut-gsa17\_18/assessed ars-gsa09\_10\_11/assessed hke-gsa17\_18/assessed hke-gsa17\_18\_stecf/assessed Musky octopus-sa 17/no information tgs-gsa17/no information nepgsa09/assessed ctc-gsa17\_18/assessed Horned octopus-sa 9/no information Broadtail shortfin squidsa 17/no information Marine molluscs nei-sa 17/no information Giant red shrimp-sa 16/no information Blue and red shrimp-sa 19/no information mts-gsa17\_18/assessed aragsa09\_10\_11/assessed ctc-gsa17/assessed hke-gsa12\_13\_14\_15\_16/assessed sol-gsa17/assessed ane-gsa09\_10\_11/no information mut-gsa09/assessed Caramote prawn-sa 9/no information mtsgsa17/assessed Blackbellied angler-sa 17/no information hke-gsa08\_09\_10\_11/assessed hkegsa09 10 11/assessed Common octopus-sa 9/no information Norway lobster-sa 16/no information ars-gsa18\_19/assessed European squid-sa 9/no information ara-gsa09/no information Common cuttlefish-sa 9/no information Whiting-sa 17/no information mur-gsa09/no information eoigsa18/assessed Surmullet-sa 16/no information Common octopus-sa 16/no information European squid-sa 17/no information Common cuttlefish-sa 16/no information Horned octopus-sa 17/no information Tub gurnard-sa 17/no information Broadtail shortfin squid-sa 18/no information Common octopus-sa 11/no information Broadtail shortfin squid-sa 9/no information hke-gsa09/no information Silver scabbardfish-sa 16/no information Spottail mantis squillid-sa 9/no information European squid-sa 11/no information European squid-sa 16/no information Blue and red shrimp-sa 16/no information Broadtail shortfin squid-sa 16/no information nep-gsa11/no information Common octopus-sa 17/no information Caramote prawn-sa 10/no information

## ITA-MBS-DTS-VL1824-NGI--

Giant red shrimp-sa 16/no information dps-gsa12\_13\_14\_15\_16/no information Blue and red shrimp-sa 16/no information ars-gsa09\_10\_11/assessed ara-gsa09\_10\_11/assessed Norway lobstersa 16/no information nep-gsa17\_18/assessed dps-gsa17\_18\_19/assessed Surmullet-sa 16/no information ane-gsa17\_18/assessed dps-gsa09\_10\_11/assessed hke-gsa17\_18\_stecf/assessed hke-gsa17\_18/assessed pil-gsa17\_18/assessed mut-gsa17\_18/assessed tgs-gsa17/no information

## ITA-MBS-DTS-VL2440-NGI--

swo-med/assessed alb-med/no information bft-ea/no information Silver scabbardfish-sa 19/no information hke-gsa17\_18\_stecf/assessed hke-gsa17\_18/assessed

# ITA-MBS-HOK-VL1218-NGI--

ctc-gsa17\_18/assessed Common octopus-sa 11/no information Common octopus-sa 19/no information Mullets nei-sa 17/no information Common cuttlefish-sa 19/no information ctc-gsa17/assessed Common octopus-sa 10/no information mts-gsa17\_18/assessed Common octopus-sa 18/no information Gilthead seabream-sa 9/no information Common octopus-sa 9/no information Common cuttlefish-sa 10/no information mts-gsa17/assessed Common cuttlefish-sa 16/no information Common cuttlefish-sa 9/no information Blackbelly rosefish-sa 11/no information mut-gsa19/assessed hke-gsa19/assessed Bogue-sa 10/no information Gilthead seabream-sa 11/no information Gilthead seabream-sa 11/no information Gilthead seabream-sa 11/no information Gobies nei-sa 11/no information European seabass-sa 19/no information hke-gsa09\_10\_11/assessed hke-gsa08\_09\_10\_11/assessed Mediterranean moray-sa 11/no information Donax clams-sa 9/no information Changeable nassa-sa 17/no information Common spiny lobster-sa 11/no information Gilthead seabream-sa 19/no information Common cuttlefish-sa 11/no information mut-gsa10/assessed Broadtail shortfin squid-sa 10/no information Thinlip grey mullet-sa 9/no information sol-gsa17/assessed Blackbelly rosefish-sa 10/no information Common pandora-sa 10/no information Common spiny lobster-sa 16/no information Stony sea

## ITA-MBS-PGP-VL0006-NGI--

urchin-sa 9/no information Blackbelly rosefish-sa 19/no information Gilthead seabream-sa 17/no information Wrasses, hogfishes, etc. nei-sa 10/no information Sand steenbras-sa 9/no information Donax clams-sa 10/no information Common spiny lobster-sa 10/no information Greater amberjack-sa 10/no information Atlantic saury-sa 19/no information Annular seabream-sa 10/no information Common spiny lobster-sa 19/no information Pearly razorfish-sa 19/no information mut-gsa17\_18/assessed Bogue-sa 16/no information Wrasses, hogfishes, etc. nei-sa 16/no information hke-gsa12\_13\_14\_15\_16/assessed Red porgy-sa 11/no information European seabass-sa 9/no information Common sole-sa 9/no information European squid-sa 10/no information Broadtail shortfin squid-sa 19/no information Marine fishes nei-sa 19/no information

ctc-gsa17\_18/assessed Common octopus-sa 11/no information swo-med/assessed ctcgsa17/assessed Common octopus-sa 9/no information Changeable nassa-sa 17/no information sol- ${\tt gsa17/assessed~hke-gsa08\_09\_10\_11/assessed~hke-gsa09\_10\_11/assessed~Gilthead~seabream-sa}$ 17/no information Common cuttlefish-sa 16/no information Common cuttlefish-sa 9/no information Gilthead seabream-sa 9/no information hke-gsa19/assessed Common spiny lobster-sa 11/no information mts-gsa17\_18/assessed Common octopus-sa 10/no information Common cuttlefish-sa 19/no information Common octopus-sa 18/no information Blackbelly rosefish-sa 11/no information Common octopus-sa 19/no information Common cuttlefish-sa 11/no information Donax clams-sa 9/no information mts-gsa17/assessed Big-scale sand smelt-sa 17/no information European seabasssa 17/no information Common spiny lobster-sa 16/no information Common cuttlefish-sa 10/no information mut-gsa19/assessed Transparent goby-sa 9/no information Gilthead seabream-sa 16/no information Donax clams-sa 10/no information Surmullet-sa 10/no information hkegsa12\_13\_14\_15\_16/assessed Marine crabs nei-sa 17/no information Common pandora-sa 10/no information Common dolphinfish-sa 10/no information Broadtail shortfin squid-sa 10/no information Mullets nei-sa 17/no information Greater amberjack-sa 10/no information Blackbelly rosefish-sa 19/no information Greater amberjack-sa 19/no information Surmullet-sa 16/no information Atlantic bonito-sa 19/no information Silver scabbardfish-sa 10/no information Sand steenbras-sa 17/no information Sand steenbras-sa 10/no information Common octopus-sa 16/no information Common spiny lobster-sa 19/no information Sand steenbras-sa 9/no information ane-gsa09\_10\_11/no information Frigate and bullet tunas-sa 10/no information Greater amberjack-sa 9/no information European anchovy-sa 19/no information Picarels nei-sa 10/no information European seabass-sa 9/no information mur-gsa09/no information alb-med/no information Bogue-sa 16/no information Gobies nei-sa 17/no information Wrasses, hogfishes, etc. nei-sa 16/no information hke-gsa09/no information Atlantic bonito-sa 10/no information Common spiny lobster-sa 9/no information Boguesa 10/no information Common sole-sa 9/no information Gobies nei-sa 11/no information homgsa09 10 11/no information Tub gurnard-sa 19/no information Little tunnv(=Atl.black skipi)-sa 19/no information Blackbelly rosefish-sa 16/no information Common sole-sa 18/no information Thinlip grey mullet-sa 9/no information Common sole-sa 10/no information Blackbelly rosefish-sa 10/no information Red porgy-sa 11/no information

## ITA-MBS-PGP-VL0612-NGI--

swo-med/assessed bft-ea/no information Mediterranean mussel-sa 17/no information Rudderfish-sa 9/no information sol-gsa17/assessed Common spiny lobster-sa 11/no information Silver scabbardfish-sa 9/no information hke-gsa09\_10\_11/assessed hke-gsa08\_09\_10\_11/assessed Common octopus-sa 11/no information Striped soldier shrimp-sa 11/no information hke-gsa09/no information Striped soldier shrimp-sa 10/no information Black seabream-sa 11/no information Silver scabbardfish-sa 10/no information Smooth-hound-sa 17/no information Common spiny lobster-sa 16/no information hke-gsa19/assessed hke-gsa12\_13\_14\_15\_16/assessed alb-med/no information Transparent goby-sa 9/no information Marine fishes nei-sa 17/no information Common octopus-sa 9/no information mts-gsa17\_18/assessed Rudderfish-sa 11/no information mts-gsa17/assessed

## ITA-MBS-PGP-VL1218-NGI--

ane-gsa09\_10\_11/no information Common dolphinfish-sa 10/no information Greater amberjack-sa 10/no information Picarels nei-sa 10/no information Atlantic chub mackerel-sa 10/no information Frigate and bullet tunas-sa 10/no information European pilchard(=Sardine)-sa 10/no information Picarel-sa 10/no information Atlantic bonito-sa 10/no information European barracuda-sa 10/no information Little tunny(=Atl.black skipj)-sa 10/no information Bogue-sa 10/no information Sand steenbras-sa 10/no information mut-gsa10/assessed

## ITA-MBS-PS-VL0612-NGI--

ane-gsa09\_10\_11/no information Greater amberjack-sa 11/no information ane-gsa16/no information ane-gsa09/assessed European pilchard(=Sardine)-sa 10/no information Greater amberjack-sa 16/no information Atlantic mackerel-sa 16/no information European anchovy-sa 19/no information pil-gsa09/assessed Round sardinella-sa 10/no information Common dolphinfish-sa 9/no information Atlantic bonito-sa 9/no information Greater amberjack-sa 9/no information Common dolphinfish-sa 10/no information Atlantic chub mackerel-sa 10/no information Greater amberjack-sa 10/no information hke-gsa12\_13\_14\_15\_16/assessed

## ITA-MBS-PS-VL1218-NGI--

ane-gsa17\_18/assessed bft-ea/no information ane-gsa09\_10\_11/no information ane-gsa09/assessed Little tunny(=Atl.black skipj)-sa 10/no information

# ITA-MBS-PS-VL2440-NGI--

ITA-MBS-PS-VL40XX-NGI-- bft-ea/no information

ITA-MBS-TBB-VL0612-NGI	sol-gsa17/assessed mts-gsa17/assessed mts-gsa17_18/assessed
ITA-MBS-TBB-VL1218-NGI	sol-gsa17/assessed tgs-gsa17/no information ctc-gsa17/assessed ctc-gsa17_18/assessed mts-gsa17_18/assessed mts-gsa17_18/assessed sja-gsa17/assessed boy-gsa17/assessed Marine molluscs neisa 17/no information Turbot-sa 17/no information
ITA-MBS-TBB-VL1824-NGI	sol-gsa17/assessed boy-gsa17/assessed ctc-gsa17_18/assessed ctc-gsa17/assessed sja- gsa17/assessed tgs-gsa17/no information Turbot-sa 17/no information
ITA-MBS-TBB-VL2440-NGI	sol-gsa17/assessed boy-gsa17/assessed ctc-gsa17/assessed ctc-gsa17_18/assessed tgs-gsa17/no information Turbot-sa 17/no information
ITA-MBS-TM-VL1218-NGI	ane-gsa17_18/assessed pil-gsa17_18/assessed
ITA-MBS-TM-VL1824-NGI	pil-gsa17_18/assessed ane-gsa17_18/assessed ane-gsa16/no information
ITA-MBS-TM-VL2440-NGI	ane-gsa17_18/assessed pil-gsa17_18/assessed
MLT-MBS-DTS-VL2440-NGI	Giant red shrimp-sa 15/no information Surmullet-sa 15/no information Giant red shrimp-sa 20/no information hke-gsa12_13_14_15_16/assessed ars-gsa18_19/assessed Blue and red shrimp-sa 15/no information Common cuttlefish-sa 15/no information Surmullet-sa 14/no information John dory-sa 15/no information mut-gsa15/assessed mut-gsa15_16/no information
MLT-MBS-PGP-VL0006-NGI	Common octopus-sa 15/no information European squid-sa 15/no information Bogue-sa 15/no information John dory-sa 15/no information White seabream-sa 15/no information Red scorpionfish-sa 15/no information Common cuttlefish-sa 15/no information swo-med/assessed bft-ea/no information European barracuda-sa 15/no information Common dentex-sa 15/no information Red porgy-sa 15/no information Greater amberjack-sa 15/no information Scorpionfishes, rockfishes neisa 15/no information
ROU-MBS-PG-VL0006-NGI	rpw-gsa29/no information Mediterranean mussel-sa 29/no information Pontic shad-sa 29/no information
ROU-MBS-PG-VL0612-NGI	tur-gsa29/assessed hmm-gsa29/no information ane-gsa29/no information
ROU-MBS-PMP-VL0612-NGI	rpw-gsa29/no information
ROU-MBS-PMP-VL1218-NGI	rpw-gsa29/no information
ROU-MBS-PMP-VL1824-NGI	rpw-gsa29/no information
ROU-MBS-PMP-VL2440-NGI	rpw-gsa29/no information
SVN-MBS-DFN-VL0006-NGI- NA-	sol-gsa17/assessed Gilthead seabream-sa 17/no information European seabass-sa 17/no information Mullets nei-sa 17/no information Common pandora-sa 17/no information
SVN-MBS-DFN-VL0612-NGI- NA-	sol-gsa17/assessed Gilthead seabream-sa 17/no information Common pandora-sa 17/no information Warty venus-sa 17/no information European seabass-sa 17/no information
SVN-MBS-DTS-VL1218-NGI-NA-	European squid-sa 17/no information Musky octopus-sa 17/no information Whiting-sa 17/no information ctc-gsa17/assessed ctc-gsa17_18/assessed Smooth-hound-sa 17/no information mut-gsa17_18/assessed European seabass-sa 17/no information hke-gsa17_18_stecf/assessed hke-gsa17_18/assessed

# **GETTING IN TOUCH WITH THE EU**

# In person

All over the European Union there are hundreds of Europe Direct information centres. You can find the address of the centre nearest you at: <a href="https://europa.eu/european-union/contact\_en">https://europa.eu/european-union/contact\_en</a>

## On the phone or by email

Europe Direct is a service that answers your questions about the European Union. You can contact this service:

- by freephone: 00 800 6 7 8 9 10 11 (certain operators may charge for these calls),
- at the following standard number: +32 22999696, or
- by electronic mail via: <a href="https://europa.eu/european-union/contact\_en">https://europa.eu/european-union/contact\_en</a>

# FINDING INFORMATION ABOUT THE EU

# Online

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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.

# The European Commission's science and knowledge service

Joint Research Centre

# **JRC Mission**

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