



JRC SCIENCE FOR POLICY REPORT

# Scientific, Technical and Economic Committee for Fisheries (STECF)

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## 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-22-15)

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2022

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JRC133303

EUR 28359 EN

PDF ISBN 978-92-68-01920-7 ISSN 1831-9424 [doi:10.2760/101043](https://doi.org/10.2760/101043) KJ-NA-28-359-EN-N

STECF

ISSN 2467-0715

Luxembourg: Publications Office of the European Union, 2023

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How to cite this 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-22-15)*. Publications Office of the European Union, Luxembourg, 2023, doi:10.2760/101043, JRC133303.

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## **Abstract**

Commission Decision of 25 February 2016 setting up a Scientific, Technical and Economic Committee for Fisheries, C(2016) 1084, OJ C 74, 26.2.2016, p. 4–10. The Commission may consult the group on any matter relating to marine and fisheries biology, fishing gear technology, fisheries economics, fisheries governance, ecosystem effects of fisheries, aquaculture or similar disciplines. This report is the latest in a series of annual reports requested by the European Commission to analyse the balance between fleet capacity and fishing opportunities using a standard approach across all EU fleet segments, based on DCF information and in line with the Commission Guidelines (COM (2014) 545)<sup>1</sup>.

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

**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-22-15)**

**Request to the STECF**

STECF is requested to The STECF is requested to assess the extent to which the STECF Expert Working Group 22-15 delivered on its Terms of Reference. The STECF is in particular requested to assess the following findings presented by the STECF Expert Working Group 22-15 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).
- The findings on whether, in accordance with the Commission Guidelines (COM(2014)545), the annual national fleet reports submitted by 31 May 2022 present an appropriate and complete analysis of balance between fleet capacity and fishing opportunity for each Member States' fleet segments.
- The observed discrepancies between the national balance assessments and those carried out by STECF Expert Working group 22-15 and the reasons for those as identified by the STECF Expert Working group.
- 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.
- The assessment of the balance situation in the outermost regions, especially in the light of the comments in Section 6.5 of the July 2022 plenary meeting report of the STECF (PLEN-22-02) with regard to the outcomes of the ad hoc STECF contracts carrying out a preliminary comparison of the 2021 EU outermost regions fleet balance reports (ref. STECF 2240 and 2241).
- Provide a summary overview of the action plans (AP) currently implemented by each Member State. The overview should include the year each AP was launched, if it is a renewal or a new one and identify the changes between the current AP and its previous version.

**STECF comments**

STECF reviewed the report of the EWG 22-15 and notes 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 2009-2020:

***Biological indicators***

- Sustainable harvest indicator (SHI). SHI values are not considered meaningful, if the landing values that are included in the SHI / total landings value ratio is less than 40%. Only meaningful values of SHI are used to indicate whether a fleet segment may be considered to be in or out of balance with fishing opportunities.
- 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)

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 indicate a favourable (in balance) or unfavourable (out of balance) situation based on the values 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 (MS). Comparisons between indicator values as computed by the EWG and those in the National fleet reports submitted by Member States by 31 May 2022 are based on the reference year 2020 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 5.6.1 presents the number of segments in each supra region (North Atlantic Ocean, Mediterranean and Black Seas and Other Fishing Regions) and for each indicator, the number of segments for which an indicator value could be computed for the year 2020. It also includes the numbers of segments that according to the criteria in the Commission guidelines, are indicated to be in balance or out of balance, together with an assessment of the trend of the indicators, as reported by the EWG 22-15.

For the whole EU, out of 585 active fleet segments in 2020, landings in weight and value were available for approximately 87% of them. Of the 585 active fleet segments, a meaningful value for the SHI could be computed for only 30% of them, and a value for the SAR could be computed for 74%. Economic indicator values (CR/BER and RoFTA) were available for 62% of the total active fleet segments, while for RoI this percentage was only 10%. STECF notes that these proportions are similar to those reported for 2019 (PLEN 21-03).

For segments with a meaningful value for SHI, the majority were indicated to be out of balance (55%) and for the SAR, the majority were indicated to be in balance (55%). With regard to each of the economic indicators, a majority of the segments were indicated to be in balance (65%, 64% and 56% for CR/BER, RoFTA and RoI, respectively). Finally, for the segments for which the technical indicator VUR could be computed, half were indicated to be in balance and half out of balance.

In the North Atlantic Ocean (NAO), a meaningful value for the SHI could be estimated for 36% of the 324 fleet segments, with 49% of them out of balance and 51% in balance. The SAR was estimated for 74% of the total segments in the region, 60% of which were indicated to be in balance and 40% out of balance. Economic indicators values (CR/BER and RoFTA) were available for 62% of the total active fleet segments in this area, while for RoI this percentage was 10%. The majority of the fleet segments considering these three economic indicators were indicated to be in balance (66%, 64% and 44% for CR/BER, RoFTA and RoI, respectively). For the VUR technical indicator (available for 81% of the fleet segments of this area), half of the segments were indicated to be in balance and other half, out of balance. Finally, 24% of fleet segments had inactive vessels, and 91% of such segments were indicated to be in balance (proportion of inactive vessels in a segment is less than 10%).

Regarding the trends in indicator values, no trend or no clear trend could be observed in the SHI for almost half (47%) of the fleet segments in the NAO; 26% of the fleet segments had an improving trend, 14% a deteriorating trend, 1% were considered to have a no clear trend and for 6% of the segments, no trend could be calculated. For the three economic indicators, the majority of the segments had a deteriorating trend (59%, 69% and 68% for CR/BER, RoFTA and RoI, respectively). Finally, no clear overall picture could be depicted by the technical indicators as for the majority of the segments (69%), there was no clear trend.

In the Mediterranean and Black Seas (MBS) a meaningful value for the SHI could be computed for 23% of the 205 fleet segments in this region, 74% of which were indicated to be out of balance

and 16% in balance. The SAR was estimated for 77% of the total segments in this region, 52% of which were indicated to be in balance and 48% out of balance. Economic indicator values (CR/BER and RoFTA) were available for 65% of the total active fleet segments in this area, while values for RoI could be computed for only 8%. According to the economic indicator values, the majority of fleet segments were indicated to be in balance (69%, 66% and 82% for CR/BER, RoFTA and RoI, respectively). According to the VUR technical indicator, 42% of the segments were indicated to be in balance and 58% out of balance. Finally, 21% of fleet segments had inactive vessels, and 93% of such segments were indicated to be in balance (proportion of inactive vessels in a segment is less than 10%).

Regarding the trends of the indicators above, for the SHI, the trend was improving for 51% of the fleet segments in the MBS, 15% had a deteriorating trend, 2% a flat trend and for the rest (28%), the trend could not be calculated. For the three economic indicators, an improving trend was observed for 38%, 49% and 35% of the fleet segments, considering the CR/BER, RoFTA and RoI, respectively, while it was deteriorating for 37%, 40% and 12%, respectively. For the majority of the remaining segments there was no clear trend, or no trend could be calculated. Finally, no clear overall picture could be depicted by the technical indicators, as for the majority of segments there was no clear trend (40%), or the trend could not be calculated (30%).

In the Other Fishing Regions (OFR) (which includes the French Outermost regions (OMR)) a meaningful SHI value could be computed for 25% of the 56 fleet segments from this area, with 43% of them indicated to be out of balance and 57% in balance. The SAR was estimated for 66% of the total number of segments, 38% of which were indicated to be in balance and 62% out of balance. Economic indicators values (CR/BER and RoFTA) were available for 46% of the total active fleet segments in this area, while for RoI this percentage was 11%. The majority of the fleet segments considering these three economic indicators were out of balance (54%, 54% and 50% for CR/BER, RoFTA and RoI, respectively). For the VUR technical indicator (with a coverage of 89% of the fleet segments of this area), 68% of the segments were in balance and 32% out of balance. Finally, 30% of fleet segments had inactive vessels, and all such segments were indicated to be in balance (proportion of inactive vessels in a segment is less than 10%).

Regarding the trends of the indicators above, for SHI no clear trend was observed, or it was not possible to obtain a trend for 93% of the fleet segments in the OFR. The remaining 7% of fleet segments indicated a deteriorating trend. For the three economic indicators, the majority of the segments had a deteriorating trend (42%, 73% and 33% for CR/BER, RoFTA and RoI, respectively). An improving trend was assessed for 15%, 15% and 33% of the fleet segments (for CR/BER, RoFTA and RoI, respectively). No trend in the VUR could be calculated for 62% of the fleet segments and no clear trend could be detected for 20% of them. In the case of IV indicator, there was no clear trend for 59% of the segments and it could not be calculated for 12% of them.

STECF further notes that VUR is largely uninformative for small scale and part time fleet segments, because it only shows what proportion of the segment was inactive.

Table 1. Total numbers of fleet segments and by supra-regions as calculated by the EWG 22-15 for the year 2020, together with the numbers of segments for which a value for each indicator could be computed, the numbers indicated to be in or out of balance and their trends

Area		N° active segments	Indicators							
			Biological		Economic			Technical		
		Total	SHI	SAR	CR/BER	RoFTA	RoI	VUR	IV	
EU	Coverage	Total	585	177	435	360	360	57	507	139
	Balance	In balance		79	239	235	229	32	246	126
		Out of Balance		98	196	125	131	25	261	13
NAO	Coverage	Total	324	116	241	200	200	34	261	78
	Balance	In balance		59	144	131	128	15	129	68
		Out of Balance		57	97	69	72	19	132	10
	Trend	Trend deteriorating		14		118	137	23	14	16

	Trend improving		46		39	48	5	20	17				
	No clear trend		48		30	2	1	181	34				
	Flat trend		1		0	0	0	19	0				
	Could not be calculated		7		13	13	5	27	11				
<b>MBS</b>	<b>Coverage</b>	Total	205		47	157		134	134	17	196	44	
	<b>Balance</b>	In balance			12	81		92	89	14	83	41	
		Out of Balance			35	76		42	45	3	113	3	
	<b>Trend</b>	Trend deteriorating			7			49	54	2	18	9	
		Trend improving			24			51	62	6	32	14	
		No clear trend			2			17	1	9	78	18	
		Flat trend			1			0	0	0	10	0	
		Could not be calculated			13			17	17	0	58	3	
	<b>OFR</b>	<b>Coverage</b>	Total	56		14	37		26	26	6	50	17
		<b>Balance</b>	In balance			8	14		12	12	3	34	17
Out of Balance					6	23		14	14	3	16	0	
<b>Trend</b>		Trend deteriorating			1			11	19	2	2	1	
		Trend improving			0			4	4	2	5	4	
		No clear trend			8			8	0	2	10	10	
		Flat trend			0			0	0	0	2	0	
		Could not be calculated			5			3	3	0	31	2	

### **Assessment of if the annual national fleet reports present an appropriate and complete analysis of balance between fleet capacity and fishing opportunity for each Member States' fleet segments**

The EWG 22-15 considered that all but two (France and Denmark) fleet reports provide a sound and comprehensive analysis of balance between fleet capacity and fishing opportunities in the Member State. However, only 6 out of 22 fleet reports submitted by Member States were prepared fully in line with the Commission guidelines (Table 5.6.2). The 16 other MS followed the guidelines to varying degrees (reported in Table 5.6.2 as a "No" is in accordance with the CG column). The reasons why, as extracted from the EWG 22-15 report, are listed in Table 5.6.2 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 guidelines.
- Omission of segments (not even capacity data is reported by Member State).
- Calculation of the indicator with data from the year prior to the year the fleet report is submitted (e.g., stock status from the previous year for 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. Summary of the assessment made by the EWG 22-15 of whether annual national fleet reports i/ present an appropriate and complete analysis of balance between fleet capacity and fishing opportunities and ii/ follow the Commission Guidelines (CG)

MS	Fleet report provides a sound and comprehensive analysis according to EWG 22-15	Fleet report is in accordance with the CG according to EWG 22-15	Comments provided by the EWG 22-15
Belgium	Yes	Yes	
Bulgaria	Yes	No	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
Croatia	Yes	Yes	-
Cyprus	Yes	No	SAR indicator values missing.
Denmark	Not stated by the EWG	No	Assessment of the balance between fleet capacity and fishing opportunities is evaluated based on fisheries and vessel length categories. It should be evaluated based on fleet segments to be consistent with the Commission Guidelines
Estonia	Yes	No	SAR was not calculated by the MS; the MS present the values extracted from the STECF JRC web page. Moreover, the biological indicators (SHI and SAR) and economic indicators are not provided for the high seas fleet segment (confidentiality issues).
Finland	Yes	No	Only SHI values were presented but none of the economic or technical indicators requested were presented in the fleet report and no comparison with the indicator values computed by the EWG 22-15 could be made.
France	Not stated by the EWG	No	The MS uses a different fleet segmentation from that of the EWG. There is also some indicators and information missing.
Germany	Yes	Yes	-
Greece	Yes	No	Did not explicitly assess the fleet segments in terms of 'in balance' or 'out of balance' in accordance with the CG.
Ireland	Yes	No	The Irish fleet report uses a different fleet segmentation than the EWG.
Italy	Yes	No	The Italian fleet report uses a different fleet segmentation than the EWG.
Latvia	Yes	No	Missing the SAR indicator.
Lithuania	Yes	No	Missing one DWF fleet segments for which biological indicators seems to be out of balance.
Malta	Yes	No	Does not include biological indicators at the segment level due to data limitations

Netherlands	Yes	No	No information for year 2021 is given and only some information for 2020 is provided.
Poland	Yes	Yes	-
Portugal	Yes	Yes	-
Romania	Yes	No	SHI only available for one segment, while the EWG provided results for six segments.
Slovenia	Yes	No	Methodology to calculate to SAR differs from the one in the CG.
Spain	Yes	Yes	-
Sweden	Yes	No	Different fleet segmentation than the required in the CG.

STECF notes that in the absence of explicit objective criteria to assess whether the fleet report submitted by a Member State provides a sound and comprehensive analysis of balance between fleet capacity and fishing opportunities of all its fleet segments, based on DCF information, in line with the Commission guidelines, the EWG assessment of sound and comprehensive, is inevitably subjective.

Furthermore, the EWG 22-15, as in previous reports, makes a distinction between whether the report presents a sound and comprehensive assessment of balance and whether it is presented in line with the Commission guidelines, hence the distinction is also given in Table 5.6.2.

#### **Discrepancies between the national balance assessments and those carried out by the EWG 22-15.**

As requested, for each fleet segment and indicator, the EWG 22-15 compared indicator values as calculated by the EWG and those provided in the Member States' fleet reports (see each National chapter in the EWG 22-15 report and Annex II). A summary of the differences found by Member States and indicators used was prepared by STECF and is presented in Table 5.6.3. The categorisation of the differences in the indicator values between Member States' fleet reports and those calculated by the EWG is based on the following criteria decided by STECF:

- Equal: If the indicator values calculated by the EWG and those provided by the Member State are the same.
- Similar (Sim). If the indicator values calculated by the EWG and those provided by the MS differ, but they indicate the same balance/imbalance assessment.
- Discrepancies (Discr). If the indicator value calculated by the EWG and those provided by the MS differ and they indicate a different balance/imbalance assessment.
- Not Provided (NP): If the indicator value is not provided in the Member State's fleet report.
- Not Comparable (NC): If the fleet segmentation used by the Member State differs to that used by the EWG.

Table 3. Summary of differences in indicator values between those calculated by EWG 22-15 and the Member States' fleet reports for 2020

MS	Biological		Economic		Technical		Comments from the EWG 22-15	
	SHI	SAR	CR/BER	RoI	RoFTA	VUR		IV
Belgium	Sim	Sim	Discr	NP	Discr	Discr	Sim	Discrepancies in CR/BER and RoFTA in one segment. VUR also different in one segment.
Bulgaria	Discr	Sim	Discr	NC	NC	NP	NC	The EWG excluded information on the status of stocks in the Black Sea. The SHI indicators in the MS report are likely based on other target reference points.
Croatia	Discr	NC	Sim	NP	Sim	Sim	Equal	Different list of stocks used to estimate F/FMSY average to be used in SHI calculation.
Cyprus	Discr	NP	Discr	NP	NC	Discr	Equal	The EWG was unable to identify the reasons for discrepancies in SHI and CR/BER.
Denmark	Sim	Sim	Sim	Similar	NP	NC	NC	IV is calculated for 2021 and not for 2020 (EWG). Different methodology for VUR.
Estonia	Sim	NP	Sim	NP	Similar	NC	NC	Different years and different methodology
Finland	Discr	NP	NP	NP	NP	NP	NP	The fleet report has calculated SHI on a stock basis rather than a fleet basis, therefore we are not able to make any comparisons. No values for the rest of the indicators.
France	NC	NC	NC	NC	NC	NC	NC	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.
Germany	Discr	Discr	Equal	NP	Discr	Discr	Equal	SHI for one segment and SAR in three segments. For RoFTA and VUR the discrepancies is one segment
Greece	NC	NP	NP	NP	Discr	Equal	Equal	SHI for one segment and SAR in three segments. For Rofta and VUR the discrepancy is only in one segment.
Ireland	NC	NC	Discr	NP	Discr	NP	NP	Since Ireland used EWG 20-11 data for their assessment of SHI and SAR, no comparison was possible. For economic indicators the MS and EWG used different data.
Italy	NC	NP	Equal	NP	Discr	NC	Equal	SHI is provided by GSA and is different from the one used in the EWG. For RoFTA the probable reason for the discrepancies found is that the values in the Italy fleet report were not shown as percentage.
Latvia	Sim	NP	Sim	NC	NP	NP	NC	One segment missing, and a different reference year.
Lithuania	Sim	Sim	Equal	Equal	Equal	Sim	Equal	SAR is not calculated by the MS. Different number of segments assessed.
Malta	NP	NP	Discr	Discr	NP	Equal	Sim	SHI and SAR were not provided for 2020. Discrepancy for two segments for CR/BER, and one for ROI.
Netherlands	Discr	Discr	Equal	NC	NP	Equal	Equal	Discrepancies for SHI were found for 3 fleets, and for SAR for 1 fleet. EWG provided RoFTA, fleet report ROI although values are similar.
Poland	Discr	Discr	Sim	NC	NP	Sim	Sim	Discrepancies for SHI were found for 1 segment, and for SAR for many segments. EWG provided RoFTA, fleet report ROI although values are equal
Portugal	NP	NP	Discr	NP	Sim	Discr	Equal	SHI and SAR only provided for the Madeiran fleets and discrepancies were found for the SAR. CR/BER show small discrepancies leading to contradictory assessments when close to the threshold value. VUR discrepancies identified for most segments for unknown reasons.
Romania	Sim	NP	Sim	Sim	NP	Discr	Equal	SAR not provided because Romanian catches below 10% of stock at risk. VUR showed major discrepancies for 2 segments.
Slovenia	NP	Sim	Sim	NP	Equal	Discr	Equal	SHI was not provided because none of the fleet had more than 40% of the value of landings from assessed stocks. Due to a lack of biomass reference points, the definition used for SAR was slightly different than in the guidelines but led to similar assessments.  For the CR/BER indicator, MS reported short term profitability for two clusters leading to similar assessments. Discrepancies were identified in VUR for 7 segments (with one or two vessels).
Spain	Discr	Discr	Equal	NP	Equal	Discr	Discr	Discrepancies identified for SHI and SAR leading to contradictory assessments.  One segment is missing for RoFTA. Discrepancies were identified for the VUR of three segments and two of the IV.
Sweden	NP	NP	Equal	NP	Equal	NC	NC	SHI and SAR provided for 2019 not 2020. VUR not comparable due to differences in fleet segmentation

STECF notes that for many fleet segments, discrepancies between the SHI values computed by the EWG 22-15 for a given year (in this report the year 2020) and those provided by Member States in their Fleet reports for the same year are likely to occur. Such occurrences arise because the values for F/FMSY used in computing the SHI will in most cases, be derived from the results of stock assessments undertaken at different times. For example, a Member State preparing its fleet report for 2021, which it will submit by 31 May 2022, is likely to base its F/FMSY values for 2020 on stock assessments carried out in 2021. However, the EWG 22-15 derives its F/FMSY values for 2020 from stock assessments carried out in 2022, which is likely to deliver an updated and often different value for F/FMSY for 2020 than in the previous year's assessment.

**The assessment of the balance situation in the outermost regions (OMR).**

As requested, the EWG has produced an overall assessment of the outermost regions (OMR) fleet segments both at aggregated Member State level, and at fleet segment level. STECF notes that the biological and technical indicators are provided at total fleet segment level, although for the case of the economic indicators, they are provided at clustered segment level. This implies that the total segments for the case of biological and technical indicators is 67, while for the case of the economic indicators the total number of clustered segments is 35. The STECF summary of the EWG 22-15 assessment is presented in Table 5.6.4 (for biological and technical indicators) and Table 5.6.5 (for economic indicators).

Table 4. Total number of segments in the OMR as calculated by the EWG 22-15, indicated to be in balance and out of balance in 2020, by biological and technical balance indicators.

MS	Fleet Segments (Total)	Assessment	SAR	SHI	VUR
France	35	Coverage	32	7	33
		Out of balance	12	2	16
Portugal	19	Coverage	15	0	19
		Out of balance	2	0	9
Spain	13	Coverage	13	2	13
		Out of balance	3	1	3
Total	67	Coverage	60	9	65
		Out of balance	17	3	28

Table 5. Clustered number of segments in the OMR as calculated by the EWG 22-15, indicated to be in balance and out of balance, by economical balance indicators.

MS	Fleet Segments (Clustered)	Assessment	CR/BER	RoFTA
France	18	Coverage	16	16
		Out of balance	8	8
Portugal	15	Coverage	15	15
		Out of balance	4	4

Spain	6	Coverage	6	6
		Out of balance	1	1
Total	39	Coverage	37	37
		Out of balance	13	13

STECF notes that while SAR indicator values were available for 90% of the OMR fleet segments, a meaningful value for SHI could only be computed for 13% of them. Meaningful values for SHI were computed for 20% and 15% of the total French and Spanish OMR fleet segments, respectively. No meaningful values for SHI were calculated for any Portuguese fleet segments.

STECF also notes that because meaningful values for SHI could be computed for only a small proportion of the OMR fleet segments, the proportion of segments indicated to be out of balance expressed as a percentage of the total number of fleet segments appears artificially low. The main reason for this low coverage is that the majority of OMR fleet segments are small-scale fisheries catching a large number of species in small quantities, the majority of them being data-limited and not assessed.

STECF PLEN 22-02 had commented that considering some additional national assessments of key stocks may be explored within national laboratories (especially for French OMR). However, if such assessments have not been validated by the relevant RFMO, they are not available to EWG 22-15. Collecting, validating and including these, may increase the number and proportion of fleet segments for which a SHI value can be computed. However, STECF notes that to substantially increase the proportion will be challenging and that the SHI coverage will remain incomplete.

The main species responsible for the imbalance considering the SHI for French OMR fleet segments were yellowfin tuna, blue marlin; albacore; bigeye tuna and striped marlin. For Spain, the main species responsible of the imbalance were bigeye tuna and Atlantic horse mackerel.

The economic and technical indicators were calculated for the majority of the (clustered) fleet segments (90% and 100%, respectively) of which, according to the Commission guidelines, 35% were found to be out of balance.

### **Overview of the action plans (AP) currently implemented by each Member State.**

In 2022, new APs were presented by Denmark, Portugal and Sweden. In addition, an update of existing APs was provided by Bulgaria, Cyprus, Croatia, France, Germany, Italy, Lithuania, Poland, Romania and Spain. A resubmission of a 2016 AP was made by Malta. The remaining Member States did not submit any new or updated APs.

STECF notes that the EWG has produced a table summarizing the main elements of the APs, for the years 2021 and 2022 which is reproduced below (Table 5.6.6). In particular, the new or revised APs were assessed by the EWG based on the (1) timeframe presented, (2) the precise measures to be implemented and (3) their objectives and targets, for reducing the perceived imbalance in the fleet segments concerned, as requested by the Commission guidelines (appropriately targeted). In 2022, all but Malta's and Italian's AP were considered by the EWG as sufficiently detailed regarding these three requirements. However, in general 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 6. Summary of action plans submitted in 2021 and 2022 as reported by the EWG

MEMBER STATE	Year*	Action plan presented?	Status	Appropriately targeted? **	Timeframe described	Tools described	EWG comments
Belgium	2021	No	NA	NA	NA	NA	EWG 21-16 comments; The MS considered all segments to be in balance. No action plan presented.
Belgium	2022	No	NA	NA	NA	NA	The MS considered all segments to be in balance. No action plan presented.
Bulgaria	2021	yes	new	yes	yes	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.
Bulgaria	2022	yes	update	yes	yes	yes	The updated action plan (2020) is partly targeted because there is no information about the share of capacity that will be reduced. Two new measures were added to the AP and the information for each fleet segment was updated. However, it is still not clear how the proposed measures will improve the balance of the fleet.
Cyprus	2021	yes	Update	yes	yes	yes	Partial of only some segments. The EWG could not assess if the actions proposed will influence the balance.
Cyprus	2022	yes	Update	yes	yes	yes	An action plan that accompanied with the 2020 fleet report was reviewed by MS. A similar action plan was applied for the DTS VL2440 fleet segment. The measure proposed is the permanent cessation of fishing activities for two trawlers from a segment total of five trawlers on a voluntary basis or with an established restriction on the trawl net's mesh sizes. The time frame is for two years without specific dates.
Croatia	2021	Yes	Update	Yes	Yes	Yes	Objectives not clear, and no quantitative evaluation and timeframe. The EWG could not assess if the actions proposed will influence the balance.
Croatia	2022	Yes	Updated and Strengthened	Yes	Yes	Yes	The action plan clearly sets out the timeframe and the objectives/targets. The direct outcome of the measures in the AP is not quantifiable.
Denmark	2021	no	-	-	-	-	The MS considers its management system to be well functioning in order to secure a balance.
Denmark	2022	yes	new	yes	yes	yes	Action Plan clear, targeted and limited in time (2022-2023): it provides a detailed plan for Baltic Sea and adjustments to the fleet structure with regard to mitigate the negative effects of Brexit (without precision on this second point). Both terminated by the end of 2023
Estonia	2022	no	/	/	/	/	No action plan proposed by MS. The MS considers its management system to be adequate in order to ensure that the fishing fleet to be in balance with fishing opportunities, with no identified structural overcapacity.
Finland	2022	no	/	/	/	/	No action plan proposed by MS. The MS considers its fishing fleet to be in balance with fishing opportunities, with no identified structural overcapacity.
France	2021	yes	update	yes	yes	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.
France	2022	yes	update	yes	yes	yes	The AP (2020) was updated with five new segments, and the timeframe was extended to 2023. The length class for one segment was changed. The implementation and progress by measure and segment of the previous AP is provided in Annex 3 of the fleet report submitted in 2022.
Germany	2021	yes	Update	yes	yes	yes	Describes the targets measures and timeframes to be used.
Germany	2022	yes	Update	yes	yes	yes	The updated 2021 action plan proposes specific measures for eight fleet segments which operate in the Baltic Sea region. AP presents a wide range of measures of both a general type applicable for all fleets, as well as specific type to those fleet segments identified as being out of balance. Some of measures are as an ongoing basis from 2015. The measure for permanent cessation of fishing activities is applicable to the 2021-2022 period. In 2022, a provided action plan required the fleet reduce by TM VL2440 segment due to the implementation of a permanent cessation measure.
Greece	2022	no	/	/	/	/	MS considers that certain fleet segments are not in balance with their fishing opportunities. An Action plan is in preparation but was not submitted with the annual fleet report. There is no clear time plan provided by MS.
Ireland	2021	No	-	-	-	-	The MS considers that structural imbalance does not exist, so no action plan is proposed.
Ireland	2022	No	-	-	-	-	Ireland, based on the Irish Fleet Report 2021, considers that structural imbalance does not exist in any of its fleet segments and no action plan is proposed. The Irish view is that the imbalance identified in some fleets in the 2016 report is due to a difference in the rate of interest used in the calculation of the indicators.

MEMBER STATE	Year*	Action plan presented?	Status	Appropriately targeted? **	Timeframe described	Tools described	EWG comments
Italy	2021	Yes	Update	Partly	me timeframe spe	Yes	EWG 21-16 comments; No comments from the EWG.
Italy	2022	Yes	Update	No fleet segments mentioned	me timeframe spe	Partly	Updated from at least 2017. Objectives are not specifically targeted at the fleet segments that are not in balance. The action plan describes several measures to be taken to reduce fishing mortality. Of these, only temporary closure periods are explicitly described. The other measures are mostly unfinalised and have not been implemented yet.
Latvia	2021	No	-	-	-	-	Action plan submitted with 2019 fleet report. Timeframe: within the programming period 2014-2020 (with n+ 3 rule). In a case of unavoidable legal and technical constraints or limitations the available measures under next programming period 2021-2027 will be used. The EWG could not assess if the actions proposed will influence the balance.
Latvia	2022	No	-	-	-	-	Ongoing AP provided with 2019 fleet report. MS implemented measure for reducing the capacity in fleet segment DFN 2440 operating in the Baltic Sea through permanent withdrawal from fishing activity of a number of vessels, which were involved in cod fishery in 2014-2018.
Lithuania	2021	Yes	Update	Yes	Yes	Yes	Timeframe: 2021-2023. Update of AP provided with 2019 fleet report. 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.
Lithuania	2022	No	-	-	-	-	Ongoing AP provided with 2020 fleet report. Timeframe: 2021-2023. Two types of measures targeting fleet segments NAO DFN 1012 and NAO DTS 2440 operating in the Baltic Sea - a system of transferable fishing concessions and a scrapping scheme with public compensation for permanent cessation of fishing for reducing overcapacity. No action plan for the distant water fleet segment (OFR TM 40XX).
Malta	2021	yes	resubmitted	no	no	no	Resubmitted the 2016 action plan. More a statement of intent to improve monitoring. The EWG could not assess if the actions proposed will influence the balance.
Malta	2022	yes	resubmitted	no	no	no	Resubmitted the 2016 action plan. No changes and new information about the implementation of the AP submitted in the previous years.
Netherlands	2021	No	-	-	-	-	The MS considers its management system to be well functioning in order to secure a balance
Netherlands	2022	No	-	-	-	-	No rationale for not presenting AP is elaborated in the fleet report.
Poland	2021	yes	Update	yes	yes	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.
Poland	2022	yes	Update	yes	yes	yes	An action plan accompanied with 2020 fleet report was reviewed by MS. An action plan is proposed for eight of the fishing fleet segments which operated in the Baltic Sea region. The action plan includes three main measures which were specified for each segments identified by MS that were out of balance. A time frame is for three to five years without specific dates.
Portugal	2021	no	-	-	-	-	The MS considers its management system to be well functioning in order to secure a balance.
Portugal	2022	yes	new	yes	yes	yes	Action Plan clear, targeted and limited in time (2022-2023): it targets the fleet HOK > 12m
Romania	2021	yes	update	yes	yes	yes	Seems an update of previous ones. The EWG could not assess if the actions proposed will influence the balance.
Romania	2022	yes	update	yes	yes	yes	Action Plan from 2020 and extended to 2027. The AP targets all 6 fleet segments but the objectives are unclear. The lack of relevant information means that the EWG is unable to assess of the potential effects of the proposed measures
Slovenia	2021	No	-	-	-	-	The MS considered that all fleet segments were in balance.
Slovenia	2022	No	-	-	-	-	The MS considers that all fleet segments are in balance. The EWG does not concur with the assessment. It appears that socio-economic objectives (employment) may have priority over stock conservation
Spain	2021	Yes	Update	Yes	Yes	Yes	EWG 21-16 comments; Objectives well defined but the timeframe not specified. The EWG could not assess if the actions proposed will influence the balance.
Spain	2022	Yes	Update	Yes	Yes	Yes	Updated from 2021. The objectives are clearly defined and the measures to achieve them are described. The objectives are appropriately targeted to the fleet segments which are not in balance. The AP implies that the targets are to be met by the time the AP expires, but it is not made explicit. Some parts of the AP set for 2021-2023 were met in 2022 and can be considered successful.
Sweden	2021	yes	new	yes	yes	yes	The EWG could not assess if the actions proposed will influence the balance.
Sweden	2022	no	/	/	/	/	AP 2021 is valid until 2023. MS has implemented a measure for reducing overcapacity in fleet targeting cod in the Baltic Sea. MS reported on the progress of AP 2021 implementation in the annual fleet report in 2022.

## **STECF conclusions**

STECF concludes that all terms of reference were successfully addressed by the EWG 22-15.

In most cases, and according to the EWG, most Member States' fleet reports provided a sound and comprehensive analysis of balance between capacity and fishing opportunities. However, STECF concludes that the assessment of whether a Member States' fleet report is sound and comprehensive is rather subjective, and further guidance of how to perform this evaluation should be given by the DGMARE to the EWG, specifying which are the elements of the fleet report that should be included to categorise it as sound and comprehensive.

STECF concludes that many of the Member States' 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 and it varies by Member State.

STECF concludes that according to the criteria in the Commission guidelines (COM (2014) 545) (CG), more than half (55%) of the fleet segments in the North Atlantic Ocean (NAO) for which a meaningful value for the SHI can be calculated, are indicated to be out of balance with fishing opportunities. However, there is an improving trend for many fleet segments. Conversely, the majority of economic indicators are showing fleet segments to be in balance, although, overall, the trends indicate a worsening situation related to the increasing evolution of the main cost items of fleets throughout Member States.

STECF concludes that according to the same criteria, 74% of the fleet segments in the Mediterranean and Black Sea (MBS), for which a meaningful value for the SHI can be calculated (23%), are indicated to be out of balance with fishing opportunities. Again, there is an improving trend for many fleet segments. Conversely, the economic indicators, are showing fleet segments to be in balance with fishing opportunities. Overall, the trends indicate an improving situation.

STECF concludes that according to the same criteria, 57% of the fleet segments in the Other Fishing regions (OFR), for which a meaningful value for the SHI can be calculated, 25% are indicated to be in balance with fishing opportunities. However, for these regions the coverage of the SAR indicator is higher than for SHI (66% of the fleet segments), while according to these indicators the majority of these seem to be out of balance. No reliable assessment of the trends could be made for the majority (93%) of the OFR fleet segments for biological indicators due to a lack of data. For the case of economic indicators, a deteriorating trend or no clear trend was obtained for the majority of the fleet segments.

In the case of the technical indicators, no clear trend can be depicted for the NAO, MBS, OFR and OMR. STECF reiterates the conclusion of PLEN 21-03 that the use of VUR indicator is misleading for small scale segments and/or seasonal fisheries, given that their maximum sea-days is very variable.

STECF concludes that the global coverage of the SHI indicator is limited in all the regions (36%, 23%, 25%, and 13% of the active fleet segments for NAO, MED, OFR and OMR, respectively), which hinders any reliable assessment of the biological balance indicators at overall regional level. STECF concludes that this level of coverage has been rather stable in the recent years, and that full coverage of the SHI indicator is unlikely to happen in all the regions. STECF suggests that the SHI coverage is likely to be lowest for small-scale fisheries in temperate/tropical waters, considering that their landings' portfolio is usually composed of many species, and that for many of these stocks which a stock assessment is unlikely to be available soon due to the lack of data or capacity to carry out such assessments.

STECF concludes that it may be possible for some additional work on stock assessment may be carried out within national labs. Information should be sought from the relevant RFMOs to investigate the likelihood that additional stock assessments of coastal species will be performed in the near future. If that will not happen, STECF reiterates its suggestion from PLEN 22-02 that a dedicated STECF Outermost Regions EWG be conducted in 2023, that could review and make available to the Balance/Capacity EWG any additional existing information on the status of the coastal stocks that could contribute to improving the SHI coverage for some fleets segments. However, STECF notes that the coverage problem will likely persist for many segments.

STECF concludes that the number of OMR fleet segments for which economic indicators has been computed increased in 2022 compared to 2021. For the French OMRs, nine new fleet segments have been included compared to 2021.

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## **REPORT TO THE STECF**

### **EXPERT WORKING GROUP ON**

### **Assessment of balance indicators for key fleet segments and review of national reports on Member States efforts to achieve balance between fleet capacity and fishing opportunities (EWG-22-15)**

**Virtual meeting, 17-21 October 2022**

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



## 1 INTRODUCTION

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)<sup>2</sup>. Where possible, evaluation should use data reference years 2011 to 2021.

An Expert group of the STECF (Chair, Dr John Casey), EWG 22-15, will be convened from 17 to 21 October 2022 to undertake the following tasks and report to the STECF.

### 1.1 Terms of Reference for EWG-22-15

**The STECF EWG is requested to:**

1. Based on the data submitted by Member States under the 2022 DCF Economic data call and the most recent assessments and advice from relevant scientific bodies on stock status and their exploitation rates, **compute values for the technical, economic and biological indicators specified in the European Commission Guidelines.**

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

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

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

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

2. **Provide country chapters containing the following information for each Member State, in order to allow the STECF to issue an informed advice both as regard the balance situation of the fleet segments and concerning the quality of the**

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<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 1380/2013 of the European Parliament and the Council on the Common Fisheries Policy

**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 2022 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 2022 are appropriately targeted, timebound and are likely to contribute to redressing the imbalance in the fleet segments concerned.**
  - e) **Provide a summary overview of the action plans (AP) currently implemented by each Member State.** The overview should include the year each AP was launched, if it is a renewal or a new one and identify the changes between the current AP and its previous version.
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).

## 2 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>3</sup>. Furthermore, numerous suggestions for modification and improvement have also been provided in previous reports.

All such criticisms 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. The term "imbalanced" is also used and is synonymous with "out of balance".

### 2.1 Data availability and the sustainable harvest indicator (SHI) and stocks at risk (SAR)

The Expert group notes that in reporting indicator values for the SHI and SAR 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 2022, presents the SHI and SAR indicator values computed by Expert Working Group 20-11 and or 21-16, which may or may not be based on data up to and including 2022.

For many stocks, especially those in area 27, the most recent estimates for F available in January to May 2022, will be from assessments carried out in 2021 and in most cases the most recent estimate of F will be up to and including the years 2020. Hence, the SHI values in the fleet report submitted in 2022 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 2022 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.

Furthermore, when the indicator values presented in the fleet report are derived from the report of the STECF EWG 21-16, no comparison between the values in the fleet report and those computed by the STECF EWG 22-15 was carried out.

### 2.2 An economic perspective on capacity adjustment measures in action plans.

Some care should be taken with capacity adjustment measures discussed in the Fleet Reports and Action Plans. Measures which are intended to protect stocks may miss the opportunity to achieve both stock conservation and socio-economic improvements which would be available from more carefully crafted and directed economic management measures. For example, experience suggests that there is a danger of the funds provided for decommissioning being re-invested in capacity unless sound economic instruments prevent the intention being frustrated; Seasonal closures may tend to ever greater length. The opportunity to make gains in employment and income in the peripheral areas of the EU is not one that can readily be overlooked but often depends on careful fish stock conservation and even stock recoveries. These measures cannot be broadly or generally described however, because the nature and location of fisheries needing revised management varies greatly and any economic institutions must be tailored to the particular

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<sup>3</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.

fishery. Nevertheless, EWG 22-15 is not the appropriate forum for a detailed discussion of such possibilities.

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

#### 3.1 Background

All indicators provided and used in the STECF EWG 22-15 were calculated according to the 2014 Commission guidelines (COM (2014) 545 final). The 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.

#### 3.2 Provision of Indicator Values

##### *3.2.1 Indicator Calculation Process*

Economic and technical indicators for the period 2008-2020 were prepared by the STECF EWG 22-06 (2022 Annual Economic Report on the EU Fishing Fleet (2022 AER)). The SAR list and corresponding data base were prepared under contract by Armelle Jung. SHI and SAR values by fleet segment were computed by Jerome Guitton.

All indicator values were reviewed at a preparatory expert group held virtually from 21-23 September 2022 (Preparatory WG 22-15 chaired by Armelle Jung). The values used for this report were those finalised and agreed following the preparatory expert group on the 15<sup>th</sup> Of October 2022. Indicators, data sources and other relevant information regarding 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 + fishing technology + vessel length) was compiled by the JRC and provided to EWG 22-15. Indicator values were computed for each year over the period 2008-2020.

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

**Table 3.2.1.1** - Indicators provided to experts at EWG 22-15.

Indicator	Calculated by	Comments	
<b>Biological indicators</b>	<p><b>SHI</b> Sustainable Harvest Indicator</p>	<p>Jerome Guitton</p>	<ol style="list-style-type: none"> <li>1. Calculated by landings value for 2008-2021* for every EU fleet segment for which data were available (2021 data are provisional and may be subject to change): <ul style="list-style-type: none"> <li>• Data sources for stock assessment parameters included the ICES and ICCAT for fleet segments operating in Area 27.</li> <li>• For fleet segments operating in Area 37 the data sources for stock assessment parameters included: <ol style="list-style-type: none"> <li>a. A database of STECF stock assessment results compiled by the JRC. Updated information on stock assessments carried out at FAO/GFCM working groups was collected during preparatory meeting.</li> <li>b. Tuna fisheries stock assessment</li> </ol> </li> <li>• For fleet segments operating in Outermost regions the data sources for stock <ol style="list-style-type: none"> <li>a. CECAF Working group</li> <li>b. South Pacific Regional Fishery Management Organization</li> <li>c. Tuna commissions</li> </ol> </li> </ul> </li> <li>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%.</li> <li>3. EDI, NOS, NSR have been provided.</li> <li>4. ToR 4: the output was described in the term of reference. For each Member State, those fleet segments that according to the 2020 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).</li> </ol>
	<p><b>SAR</b> Stocks at Risk Indicator</p>	<p>Armelle Jung Jerome Guitton</p>	<ol style="list-style-type: none"> <li>1. Calculated for 2009-2021* for all fleet segments for which data were available.</li> <li>2. Selection of the stocks at risk was prepared by Armelle Jung then complemented, checked and endorsed by the preparatory EWG 22-15 : <ul style="list-style-type: none"> <li>• For fleet segments operating in Area 27, the most recent ICES Advice on fishing opportunities was</li> </ul> </li> </ol>

			<p>accessed through the ICES website (up to the cut-off date 23/09/2022).</p> <ul style="list-style-type: none"> <li>• For fleet segments operating in Area 37, the most recent GFCM/SAC and STECF stock assessment reports were taken into account.</li> <li>• For fleet segments operating in other areas (OFR), STECF stock assessment reports and RFMO's reports were considered.</li> <li>• Additional information was taken from Council Regulations fixing annual fishing opportunities; as well as from GFCM, ICCAT, CECAF, IOTOC, SEAFO, NAFO or SPRFMO scientific assessments reports, advices or recommendations;</li> <li>• Extraction from CR (Critically Endangered), EN (Endangered) and VU (Vulnerable) marine organisms used as human food (<i>Fishes, Mollusks and Echinoderms</i>) from the IUCN list was updated for 2022. The species were cross-checked with the AER landing data base to selected the species that have been landed by any MS during the 2008-2021 time series (536 species). These species were ranked by decreasing landing values (in weight) and added to the SAR selection data base. Due to time and human resources constrains the preparatory WG stopped the selection at the threshold of 100 t (all years combined). Some species with lower landing value already included in the list as CR or EN before 2021 are included as well.</li> <li>• CITES fish listing was updated for species classified to Annex I and II (Washington Convention).</li> </ul> <p>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.</p> <p>4. The complete list of species identified as at risk for the year 2021 is given in Annex IV.</p>
<b>Economic indicators</b>	<p><b>ROI or RoFTA</b></p> <p>The Return on Investment (ROI) or Return on Fixed Tangible Assets (RoFTA)</p>	JRC	<ol style="list-style-type: none"> <li>1. Calculated using the same principle as STECF EWG 22-06;</li> <li>2. The target reference value to which the indicator value is compared is the 5-year average (2016-2020) risk-free interest rate.</li> <li>3. Calculated for years 2009-2020, 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=2020)</li> </ol>
	<p><b>CR/BER</b></p> <p>Current revenue as proportion</p>	JRC	<ol style="list-style-type: none"> <li>1. Calculated for years 2009-2020, the most recent year for which DCF economic data are available.</li> <li>2. The long-term viability analysis of CR/BER approach was taken.</li> </ol>



	of break-even revenue		3. Values are in real terms, i.e., nominal values adjusted for inflation (base=2020)
<b>Technical/inactivity indicators</b>	<b>VUR</b> Fleet segment utilisation indicator Average Days at Sea / Maximum Days at Sea	JRC	<ol style="list-style-type: none"> <li>1. Calculated for years 2009-2020.</li> <li>2. Calculated when MS provided either maximum observed days at sea (DAS) for each fleet segment or maximum theoretical DAS.</li> <li>3. 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>
	Inactive vessels per length category	JRC	<ol style="list-style-type: none"> <li>1. Number and proportion of inactive vessels, in number, GT and kW for years 2009-2020.</li> </ol>
<p>Data sources: 2022 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.</p> <p>*based on provisional data</p>			

### 3.2.2 Data Source and Coverage

The data used to compile the various indicators were collected under the Data Collection Framework (DCF), 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 2022 call for fleet economic scientific data concerning 2008-2020/21 issued by DG MARE in 2022. The two biological indicators (SHI and SAR indicator) were calculated based on transversal (landings) data submitted under the same data call. Additional information needed to calculate the biological indicators was obtained from other sources (see Table 3.2.1.1).

The 2022 fleet economic data call requested transversal and economic data covering years from 2008 to 2021. Capacity data (GT, kW, no. of vessels) was requested up to and including 2022, while employment and economic parameters were requested up to and including 2021. Most effort and all landings data were requested up to and including 2021, albeit on a voluntary basis, to allow for economic performance nowcasts to be estimated for 2021 and projections for 2022. 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. 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 are hard to obtain or for confidentiality reasons.

Regarding confidentiality, 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 are summarised in the 2022 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 2020.

MS	NAO						NAO Total	MBS						MBS Total	OFR						OFR Total	EU Total	
	VL0010	VL1012	VL1218	VL1824	VL2440	VL40XX		VL0006	VL0612	VL1218	VL1824	VL2440	VL40XX		VL0010	VL1012	VL1218	VL1824	VL2440	VL40XX			
BEL	-	1	3	27	32	-	63	-	-	-	-	-	-	-	-	-	-	-	-	-	-	63	
BGR	-	-	-	-	-	-	-	428	720	57	17	11	-	1,233	-	-	-	-	-	-	-	-	1,233
CYP	-	-	-	-	-	-	-	372	372	36	1	5	-	786	-	-	-	-	-	-	-	-	786
DEU	618	55	124	84	25	11	917	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	917
DNK	792	86	201	68	35	28	1,210	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,210
ESP	4,074	389	592	241	294	14	5,604	106	1,040	363	385	152	2	2,048	-	-	1	2	110	87	200	7,852	
EST	1,248	42	1	6	20	5	1,322	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,322
FIN	1,240	52	17	7	16	4	1,336	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,336
FRA	1,348	652	382	198	104	13	2,697	264	798	19	30	46	7	1,164	1,270	90	15	13	1	19	1,408	5,269	
GRC	-	-	-	-	-	-	-	3,640	7,084	315	194	167	-	11,400	-	-	-	-	-	-	-	-	11,400
HRV	-	-	-	-	-	-	-	3,740	2,132	238	68	73	-	6,251	-	-	-	-	-	-	-	-	6,251
IRL	1,001	148	71	76	75	20	1,391	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,391
ITA	-	-	-	-	-	-	-	2,021	5,119	2,111	691	273	12	10,227	-	-	-	-	-	-	6	6	10,233
LTU	55	3	-	2	12	1	73	-	-	-	-	-	-	-	-	-	-	-	-	-	6	6	79
LVA	190	-	9	-	32	-	231	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	231
MLT	-	-	-	-	-	-	-	285	286	14	22	5	-	612	-	-	-	-	-	-	-	-	612
NLD	185	21	18	172	65	70	531	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	531
POL	519	130	51	56	45	2	803	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	803
PRT	2,800	233	272	121	122	10	3,558	-	-	-	-	1	-	1	-	-	-	-	12	5	17	3,576	
ROU	-	-	-	-	-	-	-	11	93	21	1	4	-	130	-	-	-	-	-	-	-	-	130
SVN	-	-	-	-	-	-	-	23	38	9	-	-	-	70	-	-	-	-	-	-	-	-	70
SWE	529	150	73	35	20	9	816	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	816
<b>EU Total</b>	<b>14,599</b>	<b>1,962</b>	<b>1,814</b>	<b>1,093</b>	<b>897</b>	<b>187</b>	<b>20,552</b>	<b>10,890</b>	<b>17,682</b>	<b>3,183</b>	<b>1,409</b>	<b>737</b>	<b>21</b>	<b>33,922</b>	<b>1,270</b>	<b>90</b>	<b>16</b>	<b>15</b>	<b>123</b>	<b>123</b>	<b>1,637</b>	<b>56,111</b>	

**Table 3.2.2.2** Number of inactive vessels by length group and supra-region for each Member State in 2020

MS	NAO						NAO Total	MBS						MBS Total	OFR						OFR Total	EU total	
	VL0010	VL1012	VL1218	VL1824	VL2440	VL40XX		VL0006	VL0612	VL1218	VL1824	VL2440	VL40XX		VL0010	VL1012	VL1218	VL1824	VL2440	VL40XX			
BEL	-	-	1	2	1	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	
BGR	-	-	-	-	-	-	-	255	333	8	1	-	-	597	-	-	-	-	-	-	-	-	597
CYP	-	-	-	-	-	-	-	37	38	2	-	1	-	78	-	-	-	-	-	-	-	-	78
DEU	343	22	10	4	1	-	380	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	380
DNK	391	8	7	-	2	-	408	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	408
ESP	658	26	36	9	8	-	737	60	205	42	11	7	-	325	-	-	-	3	17	3	23	1,085	
EST	545	26	3	-	-	-	574	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	574
FIN	1,901	100	12	1	2	-	2,016	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,016
FRA	145	27	8	6	3	2	191	59	110	4	2	1	-	176	542	32	4	8	-	1	587	954	
GRC	-	-	-	-	-	-	-	1,219	1,207	75	46	5	-	2,552	-	-	-	-	-	-	-	-	2,552
HRV	-	-	-	-	-	-	-	666	712	105	35	39	-	1,557	-	-	-	-	-	-	-	-	1,557
IRL	431	91	18	4	3	-	547	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	547
ITA	-	-	-	-	-	-	-	375	1,040	253	27	19	1	1,715	-	-	-	-	1	2	3	3	1,718
LTU	41	6	1	2	12	-	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	62
LVA	82	-	-	-	-	-	82	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	82
MLT	-	-	-	-	-	-	-	165	101	6	12	4	-	288	-	-	-	-	-	-	-	-	288
NLD	120	13	19	18	14	5	189	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	189
POL	13	1	2	4	2	-	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22
PRT	3,899	74	118	35	23	1	4,150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4,150
ROU	-	-	-	-	-	-	-	7	38	-	-	-	-	45	-	-	-	-	-	-	-	-	45
SVN	-	-	-	-	-	-	-	34	25	6	1	-	-	66	-	-	-	-	-	-	-	-	66
SWE	182	24	10	6	3	-	225	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	225
<b>EU Total</b>	<b>8,751</b>	<b>418</b>	<b>245</b>	<b>91</b>	<b>74</b>	<b>8</b>	<b>9,587</b>	<b>2,877</b>	<b>3,809</b>	<b>501</b>	<b>135</b>	<b>76</b>	<b>1</b>	<b>7,399</b>	<b>542</b>	<b>32</b>	<b>4</b>	<b>11</b>	<b>18</b>	<b>6</b>	<b>613</b>	<b>17,599</b>	

### 3.2.3 Fleet Segment Coverage

As reported above, the estimation of the balance indicators requires multiple data coming from different sources. As data are not available for all fleet segments, the balance indicators are calculated for a proportion of the EU fleet. This proportion 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  $\geq 40\%$  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 proportion 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 importance of the fleet segments concerned in terms of their contribution to the catches at MS level.

Table 3.2.3.1 shows the coverage (%) of each balance indicator in terms of landed value submitted by MS for the reference year 2020. 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. Alternatively, in such a case the data required to calculate that indicator are available for all fleet segments.

Values for the SHI indicator are reported in Table 3.2.3.1 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.
- (iii) 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 Table 3.2.3.1 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 and 2022 data calls, 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 2020 for which landings in value can be identified as missing 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 2020. SHI = coverage of fleet segments for which SHI could be calculated and considered as meaningful (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%	98%	100%	100%	0%	100%
BGR	100%	98%	1%	92%	92%	0%	92%
CYP	100%	88%	29%	88%	88%	0%	0%
DEU	100%	100%	77%	64%	64%	0%	64%
DNK	100%	99%	71%	100%	100%	100%	0%
ESP	100%	98%	57%	97%	97%	45%	97%
EST	100%	100%	70%	85%	85%	85%	0%
FIN	100%	100%	69%	100%	100%	13%	100%
FRA	100%	94%	60%	76%	76%	0%	94%
GRC	100%	97%	0%	100%	100%	0%	100%
HRV	100%	100%	82%	99%	99%	0%	99%
IRL	100%	88%	69%	86%	86%	0%	0%
ITA	100%	100%	51%	98%	98%	29%	98%
LTU	100%	100%	99%	78%	78%	78%	78%
LVA	100%	100%	91%	100%	100%	0%	100%
MLT	100%	100%	28%	100%	100%	88%	100%
NLD	100%	100%	68%	100%	100%	0%	100%
POL	100%	100%	75%	100%	100%	0%	100%
PRT	100%	97%	29%	100%	100%	0%	100%
ROU	100%	98%	14%	70%	70%	70%	70%
SVN	100%	100%	0%	100%	100%	0%	100%
SWE	100%	100%	94%	39%	39%	0%	39%

\* when value of fishing rights available.

**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 2020, the number of active fleet segments, and the active fleet segments in 2020 with missing values.

MS	Supra region	No. of fleet segments	No. of active segments	No. of inactive segments	Data availability (by no. of fleet segments)			Data provision format		Fleet segments with 1 or more essential economic variable
					Landings in value	Landings in weight	Economic data	Landings data	Economic data	
BEL	NAO	12	9	3	4	4	4	Aggregate fleet segments		
BGR	MBS	28	24	4	24	24	14	Fleet segment	Aggregate fleet segments	
CYP	MBS	11	7	4	7	7	6	Fleet segment	Aggregate fleet segments	(1) MBS PS 1824 NGI
DEU	NAO	27	22	5	14	14	13	Aggregate fleet segments		(1) NAO TM 40XX NGI*
DNK	NAO	23	19	4	19	19	19	Fleet segment		
ESP	MBS	33	28	5	28	28	20			
	NAO	59	49	10	52	52	32	Fleet segment	Aggregate fleet segments	
	OFR	12	9	3	9	9	6			
EST	NAO	9	6	3	5	5	3	Fleet segment	Aggregate fleet segments	
FIN	NAO	13	8	5	5	5	5	Aggregate fleet segments		
FRA	MBS	32	27	5	27	27	17			
	NAO	59	53	6	52	52	31	Fleet segment	Aggregate fleet segments	
	OFR	56	40	16	34	34	16			(1) OFR PGO0010 MQ, OFR PS 40XX IWE
GRC	MBS	28	23	5	16	16	15	Aggregate fleet segments		
HRV	MBS	37	32	5	31	31	23	Fleet segment	Aggregate fleet segments	
IRL	NAO	35	30	5	30	30	12	Fleet segment	Aggregate fleet segments	NAO TM 1218*, NAO DFN0010, NAO FPO0010, NAO TM 1012*, NAO DTS0010, NAO DRB0010, NAO HOK1012*, NAO HOK0010
ITA	MBS	33	27	6	27	27	21	Fleet segment	Aggregate fleet segments	
	OFR	4	2	2	2	2	1			
LTU	NAO	11	6	5	6	6	3	Fleet segment	Aggregate fleet segments	
	OFR	2	2		2	2	1	Fleet segment	Aggregate fleet segments	
LVA	NAO	4	3	1	3	3	3	Fleet segment		
MLT	MBS	22	17	5	9	9	10	Aggregate fleet segments		
NLD	NAO	32	26	6	11	11	11	Aggregate fleet segments		
POL	NAO	21	16	5	11	8	8	Aggregate fleet segments		
	MBS	1	1		1	1	1	Fleet segment		
PRT	NAO	70	55	15	50	50	50	Aggregate fleet segments		
	OFR	3	3		2	2	2	Fleet segment		
ROU	MBS	8	6	2	6	6	4	Fleet segment	Aggregate fleet segments	
SVN	MBS	17	13	4	3	3	3	Aggregate fleet segments		
SWE	NAO	27	22	5	22	22	6	Fleet segment	Aggregate fleet segments	
<b>EU fleet</b>		<b>729</b>	<b>585</b>	<b>144</b>	<b>512</b>	<b>509</b>	<b>360</b>			

### 3.2.4 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: [https://sirs.agrocampus-ouest.fr/stecf\\_balance\\_2022/](https://sirs.agrocampus-ouest.fr/stecf_balance_2022/)

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/FMSY 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.

### 3.2.5 Overview of data and information to compute biological indicators (SHI and SAR)

The EWG 22-15 was able to produce a variety of data and information which is likely to prove useful to researchers and Member States to undertake additional analyses and research on the balance between fishing capacity and fishing opportunities. Such data and information are presented in a single excel workbook with filename "Annex IA Annex IB Annex IC and Annex III.xlsx". The workbook contains 6 separate worksheets including a metadata worksheet describing the data presented in each of the other worksheets. An overview of the different annexes is given below.

**Annex IA** : Stock reference list for biological indicators including splitting values.

Sheet Annex IA provides the distribution of the species per area enabling to species-specific landings to be allocated to stocks.

- When two or more stocks both occur in the same area, a splitting value is used to allocate the proportion of catches from the area to each stock.
- When a species overlaps different areas and is not separated into different stocks, the geographical area of distribution of the species as described in the scientific literature, defines the species as a single stock.

**Annex IB** : SAR Decision Table

Sheet Annex IB provides the input data used to determine whether a particular stock can be considered a stock at risk (SAR). The data given as follows:

- the stock code,
- the species 3 alpha code
- the decision status as a stock at risk for each year of the time series 2009-2021 (ALL = stock listed at risk / 0= stock not listed at risk)

The data presented allow a value for SAR to be computed/reproduced for each stock.

**Annex IC** : SAR Calculation detailed

Sheet Annex IC provides the value of the SAR indicator by country, geo indicator, fleet segment, and year (-1= no SAR, 0= no SAR calculated, >1 = the number of SAR reaching the definition).

It presents the related stock name, the related criteria (a/b/c/d) and the threshold rule for selection (10% of the FS landings, 10% of the stock landings, or both).

The data can be filtered for the above criteria to identify the SAR for subsets of the data.



**Annex III Area 27** : Stocks on which fleet segments are reliant for Area 27.

This sheets provides detailed results of SAR calculation for EU fleet segment operating in North East Atlantic.

**Annex III Area 37** : Stocks on which fleet segments are reliant for Area 37.

This sheets provides detailed results of SAR calculation for EU fleet segment operating in Mediterranean and Black Sea.

For stocks on which fleet segments are reliant relating to Other Fishing Regions (Area OFR), the information can be obtained from Annex IC by filtering the supra region and geo indicator columns.

### 3.3 Indicator Findings – Regional Overviews

Out of 585 active fleet segments in 2020 (56,111 vessels), landings in weight were available for 509 fleet segments or aggregate fleet segments, while value of landings were available for 506 segments. SHI indicator values were available for 448 segments, of which 177 were considered meaningful to assess balance or imbalance (SHI $\geq$ 40%). Economic indicator values (CR/BER and RoFTA) were available for 360 fleet segments or aggregate fleet segments. RoI values (with value of fishing quota) were available for 57 fleet segments or aggregate fleet segments from 8 Member States.

The SAR indicator was available for 435 fleet segments in 2020. According to the criteria in the 2014 Commission guidelines, EWG 22-15 notes that the SAR results indicate that there were 239 segments that may have been in balance with their fishing opportunities (SAR=0) and 196 segments that may have not been in balance with their fishing opportunities, as follows:

- 2 segments (,1%) with 8 stocks-at-risk,
- 3 segment (<1%) with 7 stocks-at-risk,
- 1 segments (<1%) with 6 stocks-at-risk,
- 5 segments (1.2%) with 5 stocks-at-risk,
- 9 segments (2%) with 4 stocks-at-risk,
- 13 segments (3%) with 3 stocks-at-risk,
- 48 segments (11%) with 2 stocks-at-risk,
- 115 segments (36%) 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.

SR	Number of SAR								
	0	1	2	3	4	5	6	7	8
NAO	144	47	27	6	6	5	1	3	2
MBS	81	56	13	5	2	0	0	0	0
OFR	14	12	8	2	1	0	0	0	0
EU fleet	239	115	48	13	9	5	1	3	2

### 3.3.1 NAO – North Atlantic (area 27)

Out of 324 active fleet segments in 2020, landings in weight were provided for 281 fleet segments or aggregate fleet segments, while value of landings were provided for 278 segments, i.e., not provided for 3 segments.

#### Sustainable Harvest Indicator (SHI)

SHI indicator values were available for 324 segments, of which 116 could 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 116 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 2020 provided by MS, and were as follows:

- 51% (59 segments) may be in balance with their fishing opportunities;
- 49% (57 segments) may not be in balance with their fishing opportunities.

For 14 (12%) segments, an increasing (deteriorating) trend was assessed for SHI while a decreasing (improving) trend was observed for 46 (40%) segments. A further 48 (41%) segments had no clear trend, 1 segment had a null/flat trend and no trend could be calculated for the remaining 7 ( ) segments.

#### Stocks at Risk Indicator (SAR)

SAR indicator was available for 241 fleet segments, of which 97 segments may not have been in balance with their fishing opportunities in 2020. According to the criteria in the 2014 Commission guidelines, EWG 22-15 notes that the SAR results indicate that:

- 2 segment with 8 stocks-at-risk,
- 3 segments with 7 stocks-at-risk,
- 1 segments with 6 stocks-at-risk,
- 5 segments with 5 stocks-at-risk,
- 6 segments with 4 stocks-at-risk,
- 6 segments with 3 stocks-at-risk,
- 27 segments with 2 stocks-at-risk,
- 47 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 2020 in the North Atlantic region (NAO) is 34 and the number of segments for which trends are calculated is 29.

According to the criteria in the 2014 Commission guidelines, the EWG notes that the RoI indicator values for the 34 fleet segments indicate that:

- 44% (15 segments) may be in balance with their fishing opportunities.
- 56% (19 segments) may not be in balance with their fishing opportunities;

For 5 (15%) segments, an increasing trend was assessed for RoI while a decreasing trend was observed for 23 (68%) segments. A further 1 segment had no clear trend and no trend could be calculated for the remaining 5 ( ) segments.

RoFTA is available for 200 fleet segments. According to the criteria in the 2014 Commission guidelines, the EWG notes that the RoFTA indicator values for the 200 fleet segments indicate that:

- 64% (128 segments) may be in balance with their fishing opportunities.
- 34% (67 segments) may not be in balance with their fishing opportunities;
- 2% (5 segments) are classified as insufficiently profitable.

For 48 (24%) segments, an increasing trend was assessed for RoFTA while a decreasing trend was observed for 137 (69%) segments and 2 segments did not show clear trend. No trend could be calculated for the remaining 13 (7%) 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 200.

According to the criteria in the 2014 Commission guidelines the Expert group notes that the *CR/BER* indicator values for the 200 fleet segments for which balance/out of balance was calculated indicate that:

- 66% (131 segments) may be in balance with their fishing opportunities.
- 34% (69 segments) may not be in balance with their fishing opportunities;

An increasing trend for *CR/BER* was assessed for 39 (20%) fleet segments while a decreasing trend was observed for 118 (59%) segments. A further 30 (16%) fleet segments had no clear trend and no trend could be calculated for the remaining 13 (7%) segments.

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

The Vessel Use Indicator (VUR) was available for 261 fleet segments<sup>4</sup> in NAO in 2020. According to the criteria in the 2014 Commission Guidelines, the expert group notes the VUR indicator values indicate that:

- 49% (129 segments) may be in balance with their fishing opportunities;
- 51% (132 segments) may not be in balance with their fishing opportunities.

A decreasing trend for the Vessel Use Indicator was assessed for 14 (6%) fleet segments while an increasing trend was observed for 20 (7%) segments. No clear trend was found for 181 (70%) segments, a null/flat trend was found for 19 (7%) segments and no trend could be calculated for the remaining 27 (10%) segments.

### The Inactive Fleet Indicators

The EU inactive fleets in the North Atlantic (NAO) comprised 78 segments in 2020, 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 (20%) showed an increasing (deteriorating) trend. A further 34 (43%) segments showed no clear trend and no trend could be calculated for the remaining 11 (15%) segments.

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

Out of 205 active fleet segments in 2020, landings in weight and value were provided for 179 fleet segments or aggregate fleet segments.

### Sustainable Harvest Indicator (SHI)

SHI indicator values were available for 153 segments, of which 106 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 47 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 36% of the total value of the landings in 2020 provided by MS, and were as follows:

- 26% (12 segment) may be in balance with their fishing opportunities;
- 74% (35 segments) may not be in balance with their fishing opportunities.

For 7 (15%) segments, an increasing (deteriorating) trend was assessed for SHI while a decreasing (improving) trend was observed for 24 (51%) segments. A further 2 (4%) segments had no clear trend, 1 segment (2%) showed a flat trend and no trend could be calculated for the remaining 13 (28%) segments.

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<sup>4</sup> The VUR value calculated for an aggregate segment (cluster) is applied to all the fleet segments in the cluster.

### Stocks at Risk Indicator (SAR)

SAR indicator was available for 157 fleet segments, of which 76 segments may not have been in balance with their fishing opportunities in 2020. According to the criteria in the 2014 Commission guidelines, EWG 22-15 notes that the SAR results indicate that there were:

- 2 segments with 4 stocks-at-risk,
- 5 segments with 3 stocks-at-risk,
- 13 segments with 2 stocks-at-risk,
- 56 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 (with value of fishing quota) is available for 2020 in the Mediterranean and Black Sea (MBS) is 17.

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

- 82% (14 segments) may be in balance with their fishing opportunities.
- 18% (3 segments) may not be in balance with their fishing opportunities.

For 6 (35%) segments, an increasing trend was assessed for RoI while a decreasing trend was observed for 2 (12%) segments. Remaining 9 (53%) segments showed no trend.

RoFTA is available for 134 fleet segments. According to the criteria in the 2014 Commission guidelines, the EWG notes that the RoFTA indicator values for the 134 fleet segments indicate that:

- 66% (89 segments) may be in balance with their fishing opportunities.
- 31% (41 segments) may not be in balance with their fishing opportunities;
- 3% (4 segments) are classified as not sufficiently profitable.

For 62 (46%) segments, an increasing trend was assessed for RoFTA while a decreasing trend was observed for 54 (40%) segments. One segment did not show no trend and for the remaining 17 (13%) segments trend could not be calculated.

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

The number of fleet segments for which the *CR/BER* indicator is available is 134.

According to the criteria in the 2014 Commission guidelines EWG notes that the *CR/BER* indicator values for the 134 fleet segments for which balance/out of balance was calculated indicate that:

- 69% (92 segments) may be in balance with their fishing opportunities.
- 31% (42 segments) may not be in balance with their fishing opportunities;

An increasing trend for *CR/BER* was assessed for 51 (38%) fleet segments while a decreasing trend was observed for 49 (37%) segments. A further 17 (13%) segments had no clear trend and no trend could be calculated for the remaining 17 (13%) segments.

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

The Vessel Use Indicator (VUR) was available for 196 fleet segments in MBS in 2020. According to the criteria in the 2014 Commission guidelines EWG notes that the VUR indicator values indicate that:

- 42% (83 segments) may be in balance with their fishing opportunities;
- 58% (113 segments) may not be in balance with their fishing opportunities.

An improving trend for the Vessel Use Indicator was assessed for 32 (16%) fleet segments while a deteriorating trend was observed for 18 (9%) segments. No clear trend was found for 78 (40%) segments, 10 (5%) segments showed a flat trend and no trend could be calculated for the remaining 58 (30%) segments.

### The Inactive Fleet Indicators

The EU inactive fleets in the MBS comprised 44 segments in 2020, of which 93% (41 segments) were in balance and 7% (3 segments) were out of balance, according to the guidelines.

Overall, 14 (32%) fleet segments showed an improving trend in the number of inactive vessels and 9 (20%) segments showed a 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 56 active fleet segments in 2020, landings in weight and value were provided for 49 fleet segments or aggregate fleet segments.

#### Sustainable Harvest Indicator (SHI)

SHI indicator values were available for 36 segments, of which 14 could 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 60% of the total value of the landings in 2020 provided by MS, and were as follows:

- 57% (8 segments) may be in balance with their fishing opportunities;
- 43% (6 segments) may not be in balance with their fishing opportunities.

Overall, 1 (7%) segments showed a deteriorating trend, and 8 (57%) segments showed no clear trend. No trend could be calculated for the remaining 5 (36%) segments.

#### Stocks at Risk Indicator (SAR)

SAR indicator was available for 37 fleet segments, of which 23 segments may not have been in balance with their fishing opportunities in 2020. According to the criteria in the 2014 Commission guidelines, EWG 22-15 notes that the SAR results indicate that there were:

- 1 segment with 4 stocks-at-risk,
- 2 segment with 3 stocks-at-risk,
- 8 segment with 2 stocks-at-risk,
- 12 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* (with value of fishing quota) is available for 2020 in OFR is 6.

According to the criteria in the 2014 Commission guidelines, the EWG notes that the *RoI* indicator values for the 6 segments indicate that:

- 50% (3 segments) may be in balance with their fishing opportunities.
- 50% (3 segments) may not be in balance with their fishing opportunities,

For 2 (33%) segments, an increasing trend was assessed for *RoI* while a decreasing trend was observed for 2 (33%) segments. Remaining 2 segments did not show trend.

*RoFTA* is available for 26 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 26 segments indicate that:

- 46% (12 segments) may be in balance with their fishing opportunities.
- 54% (14 segments) may not be in balance with their fishing opportunities.

For 4 (15%) segments, an increasing trend was assessed for RoFTA while a decreasing trend was observed for 19 (73%) segments. No trend could be calculated for the remaining 3 (12%) 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 26.

According to the criteria in the 2014 Commission guidelines EWG notes that the *CR/BER* indicator values for the 36 segments for which balance/out of balance was calculated indicate that:

- 46% (12 segments) may be in balance with their fishing opportunities.
- 54% (14 segments) may not be in balance with their fishing opportunities;

An increasing trend for *CR/BER* was assessed for 4 (15%) segments while a decreasing trend was observed for 11 (42%) segments. A further 8 (31%) segments had no clear trend and no trend could be calculated for the remaining 3 (12%) segments.

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

The Vessel Use Indicator (VUR) was available for 50 fleet segments in OFR in 2020. According to the criteria in the 2014 Commission guidelines EWG notes that the VUR indicator values indicate that:

- 68% (34 segments) may be in balance with their fishing opportunities;
- 32% (16 segments) may not be in balance with their fishing opportunities.

An increasing trend was observed for 5 (10%) segments and a decreasing trend was observed for 2 segments. No clear trend was found for 10 (20%) segments, a null/flat trend was found for 2 segments and no trend could be calculated for the remaining 31 (62%) segments.

#### The Inactive Fleet Indicators

17 fleet segments in the OFR had inactive vessels in 2020, all of which were in balance according to the guidelines.

Overall, 1 segment showed a deteriorating trend, 4 segments showed an 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 2020 and trends over the period 2016-2020 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.

SR	Status	SHI		SAR	CR/BER		RoI			RoFTA			VUR		Inactive vessels #	
	Trend	in balance	out of balance	#SAR	in balance	out of balance	in balance	out of balance	Insuff. profitable	in balance	out of balance	Insuff. profitable	in balance	out of balance	in balance	out of balance
NAO	Improving	30	16		32	7	3	2		41	7	0	2	12	14	3
	Deteriorating	1	13		68	50	8	15		77	56	4	19	1	12	4
	No clear trend	26	22		23	7	0	1		2	0	0	75	106	33	1
	Flat/null	0	1		0	0	0	0		0	0	0	19	0		
	No trend calculated	2	5		8	5	4	1		8	4	1	14	13	9	2
<b>NAO TOTAL</b>		<b>59</b>	<b>57</b>	<b>241</b>	<b>131</b>	<b>69</b>	<b>15</b>	<b>19</b>		<b>128</b>	<b>67</b>	<b>5</b>	<b>129</b>	<b>132</b>	<b>68</b>	<b>10</b>
MBS	Improving	8	16		40	11	5	1		44	16	2	9	23	12	2
	Deteriorating	0	7		33	16	2	0		37	15	2	12	6	8	1
	No clear trend	0	2		11	6	0	0		0	1	0	29	49	18	
	Flat/null	1	0		0	0	7	2		0	0	0	10	0		
	No trend calculated	3	10		8	9	0	0		8	9	0	23	35	3	
<b>MBS TOTAL</b>		<b>12</b>	<b>35</b>	<b>157</b>	<b>92</b>	<b>42</b>	<b>14</b>	<b>3</b>		<b>89</b>	<b>41</b>	<b>4</b>	<b>83</b>	<b>113</b>	<b>41</b>	<b>3</b>
OFR	Improving	0	0		4	0	1	1		4	0	0	3	2	4	
	Deteriorating	1	0		4	7	1	1		7	12	0	2	0	1	
	No clear trend	4	4		3	5	0	0		0	0	0	9	1	10	
	Flat/null	0	0		0	0	1	1		0	0	0	2	0		
	No trend calculated	3	2		1	2	0	0		1	2	0	18	13	2	
<b>OFR TOTAL</b>		<b>8</b>	<b>6</b>	<b>37</b>	<b>12</b>	<b>14</b>	<b>3</b>	<b>3</b>		<b>12</b>	<b>14</b>	<b>0</b>	<b>34</b>	<b>16</b>	<b>17</b>	
<b>Balance result - EU fleet</b>		<b>79</b>	<b>98</b>	<b>435</b>	<b>235</b>	<b>125</b>	<b>32</b>	<b>25</b>		<b>229</b>	<b>122</b>	<b>9</b>	<b>246</b>	<b>261</b>	<b>126</b>	<b>13</b>
<b>Indicator coverage EU fleet</b>		<b>177</b>		<b>435</b>	<b>360</b>			<b>57</b>		<b>360</b>			<b>507</b>		<b>139</b>	

### North Atlantic Ocean (NAO)

Out of 116 fleet segments in the NAO for which the SHI could be estimated and meaningfully to assessed, 57 segments were *out of balance* and 59 *in balance* with fishing opportunities in 2020. For segments for which a trend in SHI could be detected the situation was improving for 46 segments, and worsening for 14. Null or no clear trend could be observed for 48 segments.

According to each of the economic indicators, the majority of fleet segments in the NAO were *in balance* with their fishing opportunities in 2020 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 47 fleet segments in the MBS for which the SHI could be estimated and meaningfully to assessed, 35 segments were *out of balance* and 12 *in balance* with their fishing opportunities in 2020. For segments for which a trend in SHI could be detected the situation was improving for 24 segments, and worsening for 7. Null or no clear trend could be observed for 4 segments.

According to each of the economic indicators, the majority of fleet segments in the MBS were *in balance* with their fishing opportunities in 2020 and overall, the trends are improving or deteriorating in a similar number of fleet segments.

The technical indicators suggest that the majority of fleet segments were *out of balance* with their fishing opportunities in 2020, 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 14 fleet segments for which the SHI could be estimated and meaningfully to assessed, 6 segments were *out of balance* and 8 segments *in balance* with fishing opportunities in 2020. For segments for which a trend in SHI could be detected the situation appeared to be improving for 0 segments, and worsening for 1. Null or no clear trend was observed for 13 segments.

For the limited number of segments for which economic indicators could be computed, approximately half were found to be *in balance* with their fishing opportunities in 2020. The sparse data indicate that the economic situation appeared to be worsening.

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

## 3.4 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 22-15 based on data submitted by Member States under the 2022 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 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.

**Task 2e. Action plan Overview: we should add whatever it is we decide to present.**

The Action plan overview is presented as a table summarizing for each all Member States the current status of action plans submitted with the fleet reports submitted in 2022 in relation to Action plans already included or identified as on-going in the fleet reports submitted in 2021.

### 3.4.1 Belgium (BEL)

#### **Overview of indicator findings**

##### Area 27

There were 12 fleet segments in the Belgian fleet in 2020, 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 2020, SHI indicator values were available for 4 fleet segments.

According to the criteria in the 2014 Balance Indicator Guidelines, the SHI indicator value 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 98.13% of the total value of the landings in 2020 provided by MS, and were as follows:

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

Trends were available for the 3 fleet segments:

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

### Stocks at Risk Indicator (SAR)

The SAR indicator was available for all the 4 active fleet segments in 2020. EWG 22-15 notes that the 2020 SAR indicator values indicate:

- 3 fleet segments may be *in balance* with their fishing opportunities,
- 1 fleet segment 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	2	2		

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

RoI was not calculated.

RoFTA was calculated for 4 segments:

- 1 segment was *in balance* with their fishing opportunities,
- 3 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:

- 3 segments were *in balance* with their fishing opportunities.
- 1 segment was *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 8 segments:

- 2 segments displayed an **increasing** trend,
- 6 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 total, inactive vessels accounted for 6% of the total number of vessels, 3% of the total GT and 3.6% 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 2020, 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 2020 and trends over 2016-2020 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 all values indicate that the segment is in balance. Segment BEL NAO DTS2440 NGI appears to be in balance according to the biological indicators, whereas the economic indicators suggest that this segment is out of balance. In contrast to that, do the economic indicators suggest that the BEL NAO TBB2440 NGI segment may be in balance (although the trends for the economic values show a deterioration), while the biological indicators indicate that the segment is out of balance (despite an improving SHI).

These observations are not completely in line with the assessment of balance in the Member States' fleet report submitted in 2022, 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.



The comparison between RoFTA reported in the MS annual fleet report and those estimated in the framework of EWG 22-15 revealed different values of indicator but similar outputs for all values, and similar to CR/BER indicator: BEL NAO PMP1824 NGI\*, BEL NAO TBB1824 NGI\* and BEL NAO TBB2440 NGI were "in balance" in 2020 while BEL NAO DTS2440 NGI\* were "in balance" according to MS fleet report and out of balance according to EWG estimations.

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 22-15 revealed similar outputs for all segments except for the segment BEL NAO PMP1824 NGI\* where the segment is in balance according the EWG 22-15 estimate 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 22-15 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 22-15 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 the fleet report for 2020. Therefore, no action plan is proposed by the Member State.

### **Measures in action plans**

No new or revised action plan was proposed.

#### *3.4.2 Bulgaria (BGR)*

### **Overview of indicator findings**

#### Area 37

There were 28 fleet segments in the Bulgarian fleet in 2020, 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 2020, SHI indicator values were available for 17 fleet segments.

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

The 1 fleet segment for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 0.52% of the total value of the landings in 2020 provided by MS, and was as follows:

- 2 fleet segments 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 2020. For 6 fleet segments, one or more stocks-at-risk were detected:

- 18 fleet segments may be *in balance* with their fishing opportunities;
- 6 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	14	2	1	

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

RoI was not calculated.

RoFTA was calculated for the 14 segments:

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

Trends could be calculated for 12 segments:

- 5 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 14 segments:

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

Trends could be calculated for 14 segments:

- 5 segments displayed an **increasing** trend,
- 7 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>2020</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 16 segments:

- 4 segments displayed an **increasing** trend,
- 1 segment displayed a **decreasing** trend,
- 11 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 2020, 5 vessel length classes had inactive vessels (VL0006, VL0612, VL1218, VL1824 and VL2440).

The total inactive fleet accounted for 32.6% of the total number of vessels, 18.4% of the total GT and 23.9% 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 there is no trend observed.

The fleet segment with the highest level of inactivity was the VL0612 group with 18.2% in terms of number of vessels, 11.6% in GT and 16.3% in kW.

### Synthesis of indicators and trends

The status of 28 fleet segments and trends for the Bulgarian fleet in Black Sea Region is shown below. Based on indicator values for 2020 and trends over 2016-2020 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, FPO VL0612 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 two fleet segments (DFN1218 NGI\* and PGP0612 NGI\*). The SHI indicated to be out of balance for both segments. Yet, the SAR indicator suggested the DFN1218 NGI\* segment to be in balance, as well as for seven other fleet segments. The SAR values indicated imbalance for six fleet segments.

The above observations are not always in line with the 2020 balance indicator values provided for 15 fleet segments in the Member State's Fleet Report 2022. The estimates in the fleet report are based on three most recent years 2019-2021 and identifies 10 segments that may also be out of 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 22-15 revealed discrepancies for the values in four segments. However, the Member State and EWG 22-15 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 PS VL2440, FPO VL0006, DFN VL0006 and DFN VL0612 for which the EWG 22-15 values indicate "in balance" and those in the MS fleet report indicate "out of balance". The reasons for the discrepancies in the values is not clear.

The value of the CR/BER indicator for 10 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 VL0006, TM VL1824 and TM VL2440. In view of the long-term profitability of the segments, the calculation also includes the potential loss of benefits - 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 2013- 2018.

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 22-15 is not possible due to only RoFTA was estimated by EWG.

The value of the ROI indicator for 15 segments in the fleet report were presented. The highest indicator value is observed for segments PMP VL0006, PMP VL0612 and TM VL2440 which characterise a profitable fishery in a long-term. The negative value of ROI was reported for six segments: DFN VL0006, PS VL006, HOK VL006, DFN VL0612, HOK VL0612 and TM VL1824.

### 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 22-15 indicator values was possible. The information in the fleet report stated that the highest level of unused capacity is observed for small-scale vessels less than 12 metres. 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. The biological and technical (2020 and 2021) and economic (2019, 2020, 2021) indicators were provided for the most recent years.

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, an updated action plan has been provided which includes such segments.



### **Measures in action plans**

The amended 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).

The updated action plan is based on the MS's overall assessment and comparison of technical, economic and biological indicators for 2019-2021. 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:

- Administrative measures in regards to terminating the commercial fishing, validity of the licence and fishing register.
- Investment measures aimed at modernization of infrastructure in ports as a reconstruction of the boat shelters.
- Improvement of marketing of the production and markets.
- Protection and restoration of aquatic biodiversity and aquatic ecosystems.

The fleet segments addressed in the Action plan are as follows:

- VL0006 DFN, PS, PMP, FPO, HOK, PGP
- VL0612 DFN, FPO, HOK, PGP, PMP
- VL1218 DFN, PMP, TM
- VL1824 TM

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

Measures mentioned by MS	Actions mentioned by MS
Permanent cessation of fishing activities.	This activity will contribute to the adaptation of the fishing fleet to fish stocks.
Provisionally suspension of fishing activities.	The action will contribute to the achievement of a fair living standard for the fishing community through the introduction of compensation for operators during fishing bans and compensation for economic shocks from the political situation and following the COVID-19 pandemic

The proposed action plan is largely a statement of intent to improve fishery sector activities until the end of 2023. The two new objectives and measures were added to the amended action plan. All the 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.

### 3.4.3 Croatia (HRV)

#### **Overview of indicator findings**

##### Area 37

There were 37 fleet segments in the Croatian fleet in 2020, of which 32 were active. Of the 32 active segments, landings data were provided for all the 31 segments while economic data were provided aggregated by 23 fleet segments.

##### Sustainable Harvest Indicator (SHI)

Out of 32 fleet segments active in 2020, SHI indicator values were available for 31.

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

The EWG notes that for the 16 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 81.99% of the total value of the landings in 2020 provided by MS, and were as follows:

- 14 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 11 fleet segments:

- 7 segments displayed a **decreasing (improving)** trend,
- 4 segments displayed an **increasing** (deteriorating) trend.

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

SAR indicator was available for the same 31 fleet segments in 2020.

According to the criteria in the 2014 Balance Indicator Guidelines, EWG 22-15 notes that the 2020 SAR indicator values indicate:

- 16 fleet segments may be *in balance* with their fishing opportunities;
- 3 fleet segment with SAR: 2 SAR stock *may not be in balance* with their fishing opportunities.
- 12 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	31	0	0	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%
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N of fleet segments	15	8	1	7
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### Return on Investment (RoI) and/or Return on Fixed Tangible Assets (RoFTA)

In 2020 RoI was not calculated for any fleet segment.

RoFTA was calculated for 23 segments:

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

Trends could be calculated for 17 segments:

- 13 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 23 segments:

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

Trends could be calculated for 17 segments:

- 13 segments displayed an **increasing** trend,
- 4 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 20 segments:

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

### The Inactive Fleet Indicators

In 2020, 5 vessel length classes had inactive vessels (VL0006, VL0612, VL1218 VL1824 and VL2440).

The Croatian inactive fleet accounted for 19.94% of the total number of vessels, 28.53% of the GT and 28.21% of the kW.

At the national level, inactive vessels accounted for more than 20% of the fleet in GT and kW, and thus, *out of balance*, but overall displayed **decreasing** (improving) trends. However, in terms of number of vessels, this percentage has fallen below 20% so that in terms of numbers, it has reached balance.

### Synthesis of indicators and trends

Based on indicator values for 2020 and trends over 2016-2020 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, excluding FPO, all segments for which a 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 2022 and there is an action plan implemented for imbalanced segments.

■ in balance 
 ■ out of balance 
 ■ borderline 
 ■ insufficiently profitable 
 ■ improving 
 ■ deteriorating 
 ■ Null/flat trend 
 ■ no clear tr

					Status 2020 according to thresholds and criteria in the 2014 Guidelines											Trends 2016-2020													
					Biological			Economic				Vessel use				Inactive		Biological			Economic				Inactive				
SR	FT	VL	FS name	N vessels	SAR	SHI	EDI	CR/BER	RoFTA	Roi	NP margin	NVA/FTE	VUR	VUR <sub>2016</sub>	#	GT	MW	SHI	EDI	CR/BER	RoFTA	Roi	NP margin	NVA/FTE	VUR	VUR <sub>2016</sub>	#	GT	MW
MBS	DFN	VL0006	HRV MBS DFN0006 NGI	337																									
MBS	DFN	VL0612	HRV MBS DFN0612 NGI	681																									
MBS	DFN	VL1218	HRV MBS DFN1218 NGI	19																									
MBS	DRB	VL0612	HRV MBS DRB0612 NGI*	7																									
MBS	MGP	VL0612	HRV MBS DRB0612 NGI*	1																									
MBS	DRB	VL1218	HRV MBS DRB1218 NGI*	14																									
MBS	DRB	VL2440	HRV MBS DRB1218 NGI*	1																									
MBS	DTS	VL0006	HRV MBS DTS0612 NGI*	5																									
MBS	DTS	VL0612	HRV MBS DTS0612 NGI*	142																									
MBS	DTS	VL1218	HRV MBS DTS1218 NGI	159																									
MBS	DTS	VL1824	HRV MBS DTS1824 NGI	29																									
MBS	DTS	VL2440	HRV MBS DTS2440 NGI	9																									
MBS	FPO	VL0006	HRV MBS FPO0006 NGI	46																									
MBS	FPO	VL0612	HRV MBS FPO0612 NGI	113																									
MBS	HOK	VL0006	HRV MBS HOK0006 NGI	99																									
MBS	HOK	VL0612	HRV MBS HOK0612 NGI*	254																									
MBS	HOK	VL1218	HRV MBS HOK0612 NGI*	7																									
MBS	MGO	VL0006	HRV MBS MGO0006 NGI	272																									
MBS	MGO	VL0612	HRV MBS MGO0612 NGI*	55																									
MBS	MGO	VL1218	HRV MBS MGO0612 NGI*	2																									
MBS	PGP	VL0006	HRV MBS PGP0006 NGI	2945																									
MBS	PGP	VL0612	HRV MBS PGP0612 NGI*	821																									
MBS	PGP	VL1218	HRV MBS PGP0612 NGI*	1																									
MBS	PGO	VL0006	HRV MBS PMP0006 NGI*	4																									
MBS	PMP	VL0006	HRV MBS PMP0006 NGI*	32																									
MBS	PGO	VL0612	HRV MBS PMP0612 NGI*	1																									
MBS	PMP	VL0612	HRV MBS PMP0612 NGI*	26																									
MBS	PMP	VL1218	HRV MBS PMP0612 NGI*	2																									
MBS	PS	VL0612	HRV MBS PS0612 NGI	31																									
MBS	PS	VL1218	HRV MBS PS1218 NGI	34																									
MBS	PS	VL1824	HRV MBS PS1824 NGI	39																									
MBS	PS	VL2440	HRV MBS PS2440 NGI	63																									
MBS	INACTIVE	VL0006	HRV MBS INA0006 NGI	666																									
MBS	INACTIVE	VL0612	HRV MBS INA0612 NGI	712																									
MBS	INACTIVE	VL1218	HRV MBS INA1218 NGI	105																									
MBS	INACTIVE	VL1824	HRV MBS INA1824 NGI	35																									
MBS	INACTIVE	VL2440	HRV MBS INA2440 NGI	39																									
HRV Total				7808																									

### Comparison of indicator values

Indicator values computed by the EWG 22-15 and those in the fleet report submitted by 31 May 2022 are compared in Annex II.

### Area 37

#### Sustainable Harvest Indicator (SHI)

In the MS annual fleet report the SHI has been provided for the reference year 2020.

The comparison between biological indicators reported in the MS annual fleet report and those estimated in the framework of EWG 22-15 revealed similar outputs in terms of fleet segment status for SHI for most segments.

The only exceptions were the fleets DFN VL1218 for which the status in the EWG 22-15 estimation "out of balance", and for which the MS annual report indicated "in balance" and FPO VL0612, for which the status in the EWG 22-15 estimation "in balance", and for which the MS annual report indicated "out balance". Moreover, in the MS annual fleet report the following 3 fleet segments were not considered: DRB 2440 and MPG 0612 and PMP 1218. 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 2012-2020, but no comparison with EWG 22-15 outputs in term of trends could be made as no trend assessment was presented by the MS. However, in MS annual report a general increasing pattern is observed in PS fleet segments as also seen in EWG 22-15 indicator values.

### Stocks at Risk Indicator (SAR)

In the MS annual fleet report SAR has been provided explicitly for the reference year 2020 as estimated by the EWG 22-15. 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. Balance status of MGO fleet segments below 12 m LOA, which include vessels targeting red coral, accordingly to the MS, cannot be considered as out of balance, since only a small share of MGO vessels (only 3%) have been issued specific authorizations for red coral.

MS reported SAR indicator for 23 aggregated segments, while EWG 22-15 calculation was based on fleet segments and comparison is not always possible. MS considered the segments PGP 0006 and PS 1218 in balance while EWG 22-15 evaluated them out of balance for hake (hke.37) and sardina (pil.gsa17-18).

### 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 22-15 revealed similar outputs.

The MS fleet report, for the 23 clustered fleet segments for 2020 CR/BER (short-term return) indicates that for:

- 16 segments values are over threshold,
- 7 segments values are below threshold.

In the MS annual fleet report an increasing trend for CR/BER was assessed for 18 fleet segments while a decreasing trend was observed for 4 segments. No significant trend is observed for 1 segment. Differently the EWG 22-15 analysed the trend only for 17 fleet segments, but showing positive patterns for most of them (4 fleet segments decreasing).

### 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 22-15 revealed similar outputs for all values.

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

- 7 fleet segments values are out of balance;
- 15 fleet segments are in balance; while
- 1 fleet segment is 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 22-15 analysed the trend only for 17 fleet segments, but showing positive patterns for most of them (4 fleet segments decreasing).

### 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 22-15 revealed similar outputs for most values.

Regarding MS fleet report, the 23 aggregated 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:

- none displayed an increasing trend,
- 2 displayed a declining trend,
- 16 displayed no significant trend,
- 5 displayed flat/null trend.

MS annual fleet report treated 23 aggregated 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 few vessels and, for confidentiality reasons, are clustered (e.g.: DRB VL2440, MGP VL0618, 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 22-15.

#### **Assessment of fleet report**

The fleet report submitted by Croatia provides an accurate picture of the fleets and comprehensive analysis of the balance between fleet capacity and fishing opportunity of all fleet segments, characterized by a long time series of balance indicators, and is in line with the Commission guidelines COM(2014)545.

The national assessment of overall balance status per fleet segment provided in MS annual fleet report was made taking into consideration first, 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.

MS is aware that indication of imbalance exists in some segments of the fleet with low dependency on overfished stocks, specifically in terms of economic and technical indicators. However, these fleets are considered highly local and operating in very restricted areas with limited impact on resources, so for further consideration of their balance MS will continue to follow closely these fleet segments so as to prevent a possible negative impact on stocks. Furthermore, a part of MGO and HOK segment ('red coral fleet') which also include a small fleet authorised for red coral fishery should be excluded and considered as imbalanced due to a conservation status of red coral. This fishery is subject to specific regulation and only a small number of vessels is authorised, but due to segmentation procedures they cannot be analysed and presented as such.

There is a discrepancy between the MS and EWG 22-15 in the fleet segments flagged by at least one SAR.

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

#### **Measures in action plans**

The Action plan is a continuation of the Action plans from previous years (from 2018) updated and supplemented with additional information considering STECF EWG 21-16 comments.

The MS report states that 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 to temporary and permanent cessation of fishing activities foreseen for PS and DTS segments, Croatia intends to continue with implementation of measures listed in the GFCM regional plans for small pelagics and demersal fisheries aimed at improving the status of targeted stocks and economic performance of segments concerned.

This Action plan has been updated with some stronger actions directed in the reduction of fleet capacity, fishing effort and catch for PS segments. This will be done through a set of measures directed to improvement of stock status and management of fishing capacity and effort. Measures for PS segments will predominantly target protection of juvenile fish and redirection of the fleet from the areas identified as nurseries or important for protection of early age classes of sardine and anchovy.

For the DTS segments which are assessed as imbalanced, Croatia plans to implement additional measures and plans to continue with implementation of temporary cessation of fishing activities during key periods for recruitment of target species.

As for DRB segment capacity control measures shall be undertaken in order to limit and possibly decrease the active capacity. The measures to be implemented include the authorisation process, permanent cessation and buy-off of authorised gears. Furthermore, the spatio-temporal measures shall also be revised in 2022.

Buy-off of fishing gears is a new measure proposed by Croatia and pending approval from the EC. This measure is applied to several fleet segments and is directed to permanent removal of active vessels holding fishing authorisations (which are related to certain fishing gear) by deleting the authorisation including corresponding fishing rights from the fishing licence (deleting of fishing gear from the licence).

The action plan clearly sets out the timeframe and the objectives/targets. There is a quantitative evaluation to determine whether permanent cessation is likely to be achieved. The direct outcome of the MS measures is not quantifiable since they are directed at overall improvement of the fisheries and the status of target stocks.

#### 3.4.4 Cyprus (CYP)

### **Overview of indicator findings**

#### Area 37

There were 11 fleet segments in the Cypriot fleet in 2020, 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.

#### Sustainable Harvest Indicator (SHI)

Out of the 7 fleet segments active in 2020, landings in value have been provided aggregated in 7 fleet segments and SHI indicator values were available for 6.

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 segment for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 29.10% of the total value of the landings in 2020 provided by MS, and was as follows:

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

Trends was available for this fleet segment and displayed a **decreasing** (improving) trend.

#### Stocks at Risk Indicator (SAR)

SAR indicator was available for all the 7 active fleet segments in 2020.

According to the criteria in the 2014 Balance Indicator Guidelines, EWG 22-15 notes that the 2020 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	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	4	1	1	

#### 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:

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

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

CR/BER was calculated for 6 segments:

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

Trends were calculated for the 6 segments:

- 2 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 not provided by the MS. VUR<sub>220</sub> is analysed here.



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

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

Trends could be calculated for 7 segments:

- 3 segments displayed a **decreasing** trend,
- 4 segments displayed **no clear** trend.

### The Inactive Fleet Indicators

In 2020, 4 length classes included inactive vessels (VL0006, VL0612, VL1218 and VL2440).

The Cypriot inactive fleet accounted for 9.0% of the total number of vessels, 9.4% of the GT and 9.4% 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 in general increasing (deteriorating) trends.

### Synthesis of indicators and trends

Based on indicator values for 2020 and trends over 2016-2020 and according to the criteria in the Commission guidelines, the majority of fleet segments appear to be out of balance with fishing opportunities. As in the fleet report for 2020, only one the PG 0006 segment for CR/BER and RoFTA values indicate in balance. The available trends in CR/BER shows either an deteriorating situation or no trend, as for RoFTA shows improving, deteriorating or not clear context for different fleet segments.

The SHI indicators shows that PGP VL1218 may not be in balance with its fishing opportunities. The SAR indicator shows that PS VL1824 may not be in balance with its fishing opportunities.

SR	FT	VL	FS name	N vessels	Status 2020 according to thresholds and criteria in the 2014 Guidelines										Trends 2016-2020											
					Biological			Economic				Vessel use			Inactive				Economic				Inactive			
					SAR	SHI	EDI	CR/BER	RoFTA	RoI	NP margin	NVA/FTE	VUR	VUR <sub>220</sub>	#	GT	kW	SHI	EDI	CR/BER	RoFTA	RoI	NP/CR	NVA/FTE	VUR	VUR <sub>220</sub>
MBS	DTS	VL2440	CYP MBS DTS2440 NGI	5	Green	Green	Green	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red
MBS	PG	VL0006	CYP MBS PG0006 NGI	28	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
MBS	PG	VL0612	CYP MBS PG0612 NGI	299	Green	Green	Green	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red
MBS	PGO	VL0006	CYP MBS PGO0006 NGI	344	Green	Green	Green	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red
MBS	PGO	VL0612	CYP MBS PGO0612 NGI	73	Green	Green	Green	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red
MBS	PGP	VL1218	CYP MBS PGP1218 NGI	36	Green	Green	Green	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red
MBS	PS	VL1824	CYP MBS PS1824 NGI	1	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red
MBS	INACTIVE	VL0006	CYP MBS INA0006 NGI	37	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
MBS	INACTIVE	VL0612	CYP MBS INA0612 NGI	38	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
MBS	INACTIVE	VL1218	CYP MBS INA1218 NGI	2	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
MBS	INACTIVE	VL2440	CYP MBS INA2440 NGI	1	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
CYP Total				864																						

### Comparison of indicator values

A comparison Indicator values computed by the EWG 22-15 and those in the fleet report submitted in May 2022 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 2020.

The comparison between biological indicators reported in the MS annual fleet report and those estimated in the framework of EWG 22-15 revealed some discrepancies in terms of fleet segment status for SHI in 2 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. For PGP VL1218 the MS annual report indicated "in balance" (SHI=0.99), while the EWG 21-16 indicated this fleet segment as "out of balance" (SHI=1.2).

Indicator trends were provided only for the period 2018-2020 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 2020, but it was stated that all fleet segments were in balance for SAR. EWG 22-15 highlighted 6 fleet segments in balance with their fishing opportunities and 1 fleet segment with 1 stock at risk (bluefin tuna (SAR=1)).

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

In the EWG 22-15 report presented six segments whereas after clustering 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 22-15 could be made for 4 segments only. Two segments PGO VL0006 the PGO VL VL0612 were clustered with others segments in the fleet report.

Both the PGO VL0006 and PGO VL VL0612 segments appear out of balance according to the EWG 22-15 estimates but as there were no separate 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. Also, where EWG 22-15 has computed an estimate for MBS PG 0612 segment as "out of balance" while based on the MS annual report numbers showed as "in balance".

No trends analysis could be undertaken as data 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 22-15 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 22-15 could be made for 4 segments only. Two segments PGO VL0006 the PGO VL VL0612 were clustered with other segments in the fleet report.

Both the PGO VL0006 and PGO VL VL0612 segments appear out of balance in the calculation by EWG 22-15 but as there were no separate 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 data 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 22-15.

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 22-15 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.

No trends analysis could be undertaken

### 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 22-15 dataset.

Indicator trends between reported in the MS annual fleet report and those estimated in the framework of EWG 22-15 revealed similar outputs for all segments.

### **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 VL0612 segments which according to the economic indicators computed by EWG 22-15 may be out of balance. The MS reports that all economic, technical and SHI indicators of the PGP 1218 fleet segment indicate out of balance. However, MS has not reported any action plan.

### **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 22-15 is unable to determine whether the measures proposed will have any influence on the balance between capacity and fishing opportunities. Furthermore, the timeframe for implementation is not specified.

### *3.4.5 Denmark (DNK)*

### **Overview of indicator findings**

#### Area 27

There were 23 fleet segments in the Danish fleet in 2020, 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 2020, SHI indicator values were available for 18.

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 12 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 70.93% of the total value of the landings in 2020 provided by MS, and were as follows:

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

Trends were calculated for 12 fleet segments:

- 2 segments displayed an **increasing** (deteriorating) trend,
- 6 segments displayed a **decreasing (improving)** trend,
- 4 segments displayed **no clear** trend.

#### Stocks at Risk Indicator (SAR)

SAR indicator was available for 19 fleet segments in 2020.

- 5 segments may be in balance with their fishing opportunities;
- 1 segment with 6 stocks-at-risk,
- 1 segment with 5 stocks-at-risk,
- 2 segments with 4 stocks-at-risk,
- 2 segments with 3 stocks-at-risk,
- 4 segments with 2 stocks-at-risk,
- 4 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	18			

#### 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	10	8		

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

RoI was calculated for 19 segments:

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

13 segments were *out of balance* with their fishing opportunities. Trends were calculated for 19 segments:

- 2 segments displayed an **increasing** trend,
- 16 segments displayed a **decreasing** trend,
- 1 segment displayed **no clear** trend.

RoFTA was calculated for 19 segments:

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

Trends were calculated for 18 segments:

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

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

CR/BER 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 18 segments:

- 2 segments displayed an **increasing** trend,
- 14 segments displayed a **decreasing** trend,
- 2 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:

- 1 segment displayed an **increasing** trend,
- 2 segments displayed a **decreasing** trend,
- 16 segment displayed **no clear** trend.

#### The Inactive Fleet Indicators

In 2020, 4 length classes included inactive vessels (VL0010, VL1012, VL1218 and VL1824).

The Danish inactive fleet accounted for 25.2% of the total number of vessels, 2.7% of the GT and 7.1% 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 2019-2020 were available).

#### Synthesis of indicators and trends

Based on indicator values for 2020 and trends over 2016-2020 and according to the criteria in the Commission guidelines, an overview of the indicators presents that the majority of fleet segments appear to be out of balance with fishing opportunities.

These observations are not exactly in line with the assessment of balance in the Member States' fleet report submitted in 2022 as it is said in the MS report that the variety for the category is large and no overall assessment can be made. However, the report says that for most vessels between 10 and 12 meters it is considered to be an imbalance between capacity and fishing possibilities and for those imbalance segments a new action plan is presented.

						Status 2020 according to thresholds and criteria in the 2014 Guidelines											Trends 2016-2020														
						Biological			Economic					Vessel use			Inactive		Economic						Inactive						
SR	FT	VL	FS name	N vessels		SAR	SHI	EDI	CR/BER	RoFTA	RoI	NP margin	NVA/FTE	VUR	VUR <sub>20</sub>	#	GT	kW	SHI	EDI	CR/BER	RoFTA	RoI	NP/CR	NVA/FTE	VUR	VUR <sub>20</sub>	#	GT	kW	
NAO	DRB	VL1012	DNK NAO DRB1012 NGI	3																											
NAO	DRB	VL1218	DNK NAO DRB1218 NGI	33																											
NAO	DTS	VL0010	DNK NAO DTS0010 NGI	5																											
NAO	DTS	VL1012	DNK NAO DTS1012 NGI	12																											
NAO	DTS	VL1218	DNK NAO DTS1218 NGI	106																											
NAO	DTS	VL1824	DNK NAO DTS1824 NGI	41																											
NAO	DTS	VL2440	DNK NAO DTS2440 NGI	35																											
NAO	DTS	VL40XX	DNK NAO DTS40XX NGI	16																											
NAO	PGP	VL0010	DNK NAO PGP0010 NGI	689																											
NAO	PGP	VL1012	DNK NAO PGP1012 NGI	45																											
NAO	PGP	VL1218	DNK NAO PGP1218 NGI	22																											
NAO	PMP	VL0010	DNK NAO PMP0010 NGI	98																											
NAO	PMP	VL1012	DNK NAO PMP1012 NGI	26																											
NAO	PMP	VL1218	DNK NAO PMP1218 NGI	27																											
NAO	PMP	VL1824	DNK NAO PMP1824 NGI	12																											
NAO	TBB	VL1218	DNK NAO TBB1218 NGI	9																											
NAO	TBB	VL1824	DNK NAO TBB1824 NGI	15																											
NAO	TM	VL1218	DNK NAO TM 1218 NGI	4																											
NAO	TM	VL40XX	DNK NAO TM 40XX NGI	12																											
NAO	INACTIVE	VL0010	DNK NAO INA0010 NGI	391																											
NAO	INACTIVE	VL1012	DNK NAO INA1012 NGI	8																											
NAO	INACTIVE	VL1218	DNK NAO INA1218 NGI	7																											
NAO	INACTIVE	VL2440	DNK NAO INA2440 NGI	2																											
DNK Total				1618																											

### Comparison of indicator values

Indicator values computed by the EWG 22-15 and those in the fleet report submitted by 31 May 2022 are compared in Annex II.

#### Sustainable Harvest Indicator (SHI)

Denmark presented SHI values calculated until year 2020. The comparison between SHI reported in the MS annual fleet report and those estimated in the framework of EWG 22-15 revealed similar outputs for all values.

#### Stocks at Risk Indicator (SAR)

Denmark presented SAR values calculated until year 2020. The comparison between SAR reported in the MS annual fleet report and those estimated in the framework of EWG 22-15 revealed similar outputs for all values.

For the outcome, in the MS report when the indicator is 0, the status is in blank, while in the EWG 22-15 framework it is considered *in balance* following the Guidelines assumptions.

#### 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 22-15 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 2016-2020 where similar results arise between the MS annual fleet report and EWG 22-15 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 22-15 revealed similar outputs for all values.

The trends between the MS annual fleet report and EWG 22-15 for the period 2016-2020 were similar.

#### 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.

EWG 22-15 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. In the MS fleet report, the vessel utilization indicator was the ratio between days at sea and maximum days at sea for each fleet. Thus, the VUR indicator was not comparable.

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 22-15.

#### Inactive Fleet Indicator

Inactive vessels have been reported as number, GT and kW for year 2021 in the MS annual fleet report, but the EWG 22-15 dataset provides data for year 2020 so they are not comparable.

#### **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.

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. However, a new action plan was proposed as some imbalance fleet segments were identified.

The Expert group concludes that the content of the fleet report 2021 is in line with the Commission's Guidelines.

Regarding the Member State's assessment of the balance between fleet capacity and fishing opportunities, it is evaluated based on fisheries and vessel length categories, and it should be evaluated based on fleet segments to be consistent with the Commission Guidelines.

#### **Measures in action plans**

In 2022, Denmark has presented an action plan showing that there is a need for carrying out a scrapping scheme for the Baltic Sea in order to reduce the capacity for the smaller vessel length-class segments.

Denmark aims at a reduction capacity goal to 786 GT and 4493 kW, representing 30 percent of the tonnage and 31 percent of the kW of the fleet in the Baltic Sea –corresponding to 2,0 percent of the tonnage and 1.4 percent of the kW of the total Danish fleet. This reduction goal represents 19 vessels according to the analysis.

The permanent cessation measure will take place during 2022 and the capacity will be reduced at the latest at the end of 2023.

Apart from the permanent cessation scheme for the Baltic, Denmark is also planning additional adjustments to the fleet structure which will also be carried out in 2022 and terminated by the end of 2023.

### 3.4.6 Estonia (EST)

#### **Overview of indicator findings**

##### Area 27

There were 9 fleet segments in the Estonian fleet in 2020, 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 2020, 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 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 four fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 69.73% of the total value of the landings in 2020 provided by MS, and were as follows

- 3 fleet segments may be *out of balance* with their fishing opportunities;
- 1 fleet segment may be *in balance* with their fishing opportunities.

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

SAR indicator was available for all 5 active fleet segments in 2020.

According to the criteria in the 2014 Balance Indicator Guidelines, EWG 22-15 notes that the 2020 SAR indicator values indicate:

- 4 fleet segments may be *in balance* with their fishing opportunities;
- 1 fleet segment may be *out of balance* with one 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	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	2			3

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

RoI and RoFTA were 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:

- 1 segment displayed an improving trend,
- 2 segments displayed a deteriorating 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 improving trend,
- 1 segment displayed a deteriorating 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 2020, 3 vessel length groups had inactive vessels (VL0010, VL1012 and VL1218).

The total inactive fleet accounted for 30.3% of the total number of vessels, 4.8% of the total GT and 15.9% 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, with one segment *out of balance*,
- All 3 segments were *in balance* in terms of GT and kW.



The comparison between CR/BER reported in the MS annual fleet report and those estimated in the framework of EWG 22-15 revealed a 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 a chart format and were available for three segments: PG1012, PG0010 and TM1840. The EWG fleet segment used is TM2440. The comparison between CR/BER trends presented in the MS annual fleet report and those estimated in the framework of EWG 22-15 are similar.

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

Prior to the 2021 annual fleet report the MS 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. From 2020, the MS will rely on the rates of the European Central Bank.

The calculations of the fleet segments with respect to being in or out of balance were very similar between the MS annual report and the EWG calculations.

#### 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 22-15.

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 2017-2021 and only for segments in length classes TMVL1218-VL40XX.

EWG 22-15 reported VUR220 because the data presented by the MS under the DCF guidelines 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 2020 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 and VL40XX 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 22-15 notes that a comparison for Inactive Fleet Indicator is not appropriate. The MS annual fleet report provides the number of vessels for 2021, while the WG indicator is based on vessel numbers in 2020.

#### **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 values of the economic and technical indicators are based on data for the period of 2016-2020. The biological indicators for 2020 were not calculated by the MS, the MS present the values extracted from the STECF JRC web page. 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 considers that the fishing capacity in the Estonian fishing fleet is balanced with fishing opportunities and the report does not identify structural overcapacity.

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.

#### *3.4.7 Finland (FIN)*

### ***Overview of indicator findings***

#### Area 27

There were 13 fleet segments in the Finnish fleet in 2020, 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 2020, 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 69.24% of the total value of the landings in 2020 provided by MS, and were as follows:

- 2 fleet segments may be *out of balance* with their fishing opportunities.
- 1 fleet segment may be *in balance* with their fishing opportunities.

Trends were calculated for 3 segments:

- 2 fleet segments displayed an *increasing* (deteriorating) trend with one segment showing *no clear trend*.

#### Stocks at Risk Indicator (SAR)

SAR indicator was available for all 5 active fleet segments in 2020.

- 4 segments may be *in balance* with their fishing opportunities.
- 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	1	1

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

RoI was calculated for 2 segments:

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

Trends could be calculated for 1 segments:

- 1 segment displayed an *increasing* trend

RoFTA was calculated for 5 segments:

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

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

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

Trends were calculated for 8 segments:

- All 8 segments displayed *no clear* trend.

#### The Inactive Fleet Indicators

In 2020, 5 vessel length classes had inactive vessels (VL0010, VL1012, VL1218, VL1824 and VL1824).



The MS, in its fleet report, reiterates that the biological indicator (SHI), calculated by EWG 21-16, using 2019 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 2020 or any other previous years. The EWG 22-15 SAR value for the FS PG0010 segment indicates two stocks at risk (Salmon - sal.27.32, sal.27.22-31).

#### 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 2020 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 2020 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 2020 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. SHI data has been provided for a number of pelagic stocks, however it is not possible to compare these with the calculations of the EWG. 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 is not in line with the Commission's Guidelines. Only SHI values were presented but none of the economic or technical indicators requested were presented in the fleet report and no comparison with the indicator values computed by the EWG 22-15 could be made. Furthermore, the information

presented in the Finnish fleet report for 2021 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.

#### **3.4.8 France (FRA)**

### **Overview of indicator findings**

There were 147 fleet segments in the French national fleet in 2020, 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 59 fleet segments in 2020, 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 53 fleet segments active in 2020, SHI indicator values were available for 49.

SHI indicator values for 31 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 18 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 65.8% of the total value of the landings in 2020 provided by MS, and were as follows:

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

Trends could be calculated for 17 fleet segments:

- 2 segment displayed an **increasing** (deteriorating) trend,
- 4 segments displayed a **decreasing** (improving) trend,
- 11 segments displayed **no clear** trend.

#### Stocks at Risk Indicator (SAR)

SAR indicator was available for 52 active fleet segments in 2020. For 17 fleet segments, one or more stocks-at-risk were detected:

- 35 fleet segments may be in balance with their fishing opportunities;
- 1 segment with 8 stocks-at-risk,
- 2 segment with 5 stocks-at-risk,
- 1 segment with 3 stocks-at-risk,
- 3 segments with 2 stocks-at-risk,
- 10 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	48			

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	36	10	1	2

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

RoI was not calculated.

RoFTA was calculated for 32 segments:

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

Trends could be calculated for 32 segments:

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

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

CR/BER was calculated for 32 segments:

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

Trends could be calculated for 32 segments:

- 2 segments displayed an **increasing** trend,
- 17 segments displayed a **decreasing** trend,
- 13 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 51 segments:

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

Trends could be calculated for 49 segments:

- 5 segments displayed an **increasing** trend,
- 3 segments displayed a **decreasing** trend,

- 37 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 2020, 6 vessel length classes had inactive vessels (VL0010, VL1012, VL1218, VL1824, VL2440 and VL40XX).

The French Area 27 inactive fleet accounted for 3.0% of the total number of vessels, 2.8% of the total GT and 2.4% 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 6 segments were *in balance* (<20%) and 5 segments displayed **no clear trend** for vessel numbers (#). The inactive segment VL1824 displayed an **increasing** (deteriorating) trend for GT.

#### 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".



The 2 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 0.7% of the total value of the landings in 2020 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 27 fleet segments in 2020. For 14 fleet segments in 2020, one or more stock at risk were detected:

- 13 fleet segments may be in balance with their fishing opportunities;
- 2 segments with 2 stocks-at-risk,
- 12 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	18			

#### 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	21			

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

RoI was not calculated.

RoFTA was calculated for 16 segments:

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

Trends were calculated for the 16 segments:

- 10 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:

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

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

Trends for the 17 segments were as follows:

- 7 segments displayed an **increasing** trend
- 5 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>)

VUR could be calculated for 27 segments:

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

Trends could be calculated for 9 segments:

- 2 segments displayed an **increasing** trend,
- 3 segment displayed a **decreasing** trend,
- 2 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 (MBS)

In 2020, 5 vessel length classes in the MBS fleet had inactive vessels.

The total inactive fleet accounted for 2.8% of the total number of vessels, 0.4% of the total GT and 1.2% 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 5 segments were *in balance* (<20%) and displayed **no clear** trend for vessel numbers (#), apart from the VL0612 segment, which displayed a **decreasing** (improving) trend for vessel numbers.

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

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".

					Status 2020 according to thresholds and criteria in the 2014 Guidelines											Trends 2016-2020														
					Biological				Economic				Vessel use			Inactive			Biological				Economic				Inactive			
SR	FT	VL	FS name	N vessels	SAR	SHI	EDI	CR/BER	RoFTA	RoI	NP margin	NVA/FTE	VUR	VUR <sub>120</sub>	#	GT	KW	SHI	EDI	CR/BER	RoFTA	RoI	NP margin	NVA/FTE	VUR	VUR <sub>120</sub>	#	GT	KW	
MBS	DFN	VL0006	FRA MBS DFN0006 NGI	131																										
MBS	DFN	VL0612	FRA MBS DFN0612 NGI	524																										
MBS	DFN	VL1218	FRA MBS DFN1218 NGI*	4																										
MBS	PGP	VL1218	FRA MBS DFN1218 NGI*	1																										
MBS	HOK	VL1218	FRA MBS DFN1218 NGI*	8																										
MBS	DTS	VL1218	FRA MBS DTS1824 NGI*	4																										
MBS	DTS	VL1824	FRA MBS DTS1824 NGI*	27																										
MBS	DTS	VL2440	FRA MBS DTS2440 NGI*	30																										
MBS	TM	VL2440	FRA MBS DTS2440 NGI*	1																										
MBS	FPO	VL0006	FRA MBS FPO0006 NGI	69																										
MBS	FPO	VL0612	FRA MBS FPO0612 NGI	62																										
MBS	HOK	VL0006	FRA MBS HOK0006 NGI	11																										
MBS	HOK	VL0612	FRA MBS HOK0612 NGI	77																										
MBS	DRB	VL0612	FRA MBS MGO0612 NGI*	4																										
MBS	MGO	VL0612	FRA MBS MGO0612 NGI*	8																										
MBS	PGO	VL0006	FRA MBS PGO0006 NGI	21																										
MBS	PGO	VL0612	FRA MBS PGO0612 NGI	36																										
MBS	PGP	VL0006	FRA MBS PGP0006 NGI	31																										
MBS	PGP	VL0612	FRA MBS PGP0612 NGI	67																										
MBS	PMP	VL0006	FRA MBS PMP0612 NGI*	1																										
MBS	PMP	VL0612	FRA MBS PMP0612 NGI*	14																										
MBS	PMP	VL1218	FRA MBS PS 0612 NGI*	1																										
MBS	PS	VL0612	FRA MBS PS 0612 NGI*	6																										
MBS	PS	VL1218	FRA MBS PS 0612 NGI*	1																										
MBS	PS	VL1824	FRA MBS PS 0612 NGI*	3																										
MBS	PS	VL2440	FRA MBS PS 2440 NGI*	15																										
MBS	PS	VL40XX	FRA MBS PS 2440 NGI*	7																										
MBS	INACTIVE	VL0006	FRA MBS INA0006 NGI	59																										
MBS	INACTIVE	VL0612	FRA MBS INA0612 NGI	110																										
MBS	INACTIVE	VL1218	FRA MBS INA1218 NGI	4																										
MBS	INACTIVE	VL1824	FRA MBS INA1824 NGI	2																										
MBS	INACTIVE	VL2440	FRA MBS INA2440 NGI	1																										

## OFR

There were 56 fleet segments in the French OFR fleet in 2020, of which 40 were active. Of the 40 active segments, landings data were available for 34 segments and economic data for 10 fleet segments.

### Sustainable Harvest Indicator (SHI)

Out of 40 fleet segments active in 2020, SHI indicator values were available for 25.

According to the criteria in the 2014 Commission 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 9 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 77.3% of the total value of the landings in 2019 provided by MS, and were as follows:

- 6 segments may be *in balance* with their fishing opportunities;
- 3 segments may be *out of balance* with their fishing opportunities.

Trends could be calculated for 5 fleet segments:

- 5 segments displayed **no clear** trend.

### Stocks at Risk Indicator (SAR)

SAR indicator was available for 34 fleet segments in 2020. The 2020 SAR indicator values indicate:

- 21 fleet segments may be in balance with their fishing opportunities;
- 1 segment with 3 stocks-at-risk,

- 4 segments with 2 stocks-at-risk,
- 8 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			

#### 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	19	4	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 15 segments:

- 8 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:

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

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

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

VUR was calculated for 31 segments:

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

Trends could be calculated for 6 segments:

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

### The Inactive Fleet Indicators

In 2020, 16 vessel length classes by outermost region fleets, totalling 25 segments, had inactive vessels.

The total inactive fleet accounted for 9.5% of the total number of vessels, 2.8% of the total GT and 7.7% 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".





According to the estimated value by EWG 22-15, 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 decreasing trends. The estimates provided by fishing areas for economic indicators RoFTA and CR/BER show a profitable fishery for 25 out of 32 segments in the North Atlantic (Area 27) and 12 out of 17 segments in Mediterranean Sea (Area 37). Similarly for the latter two indices, 6 out of 10 and 8 out of 15 segments respectively were in balance in the OFR. An opposite pattern is observed for the technical indicator (VUR), where imbalance is detected for the biggest share of calculated segments in all areas: 30 out of 51 segments were imbalanced in Area 27; 23 out of 27 segments in Area 37 and 15 out of 31 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 OFR do not have any stocks-at-risk (35 out of 52 segments, and 21 out of 34 segments, respectively). In Area 37, 13 out of 27 fleet segments have at least one stock-at-risk. However, it should be noted that the fleet segments in Area 27 and OFR have relatively more segments with more than one stock-at-risk (13.4% and 14.7%, respectively), compared to Area 37 (7.4%).

### **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 2020 and appear to have been computed only partly in line with the Commission guidelines COM(2014)545. Regarding the biological indicators, the Fleet report notes a change compared to previous years. The SHI indicator is based on historical values for  $F_{MSY}$  and not on the  $F_{MSY}$  values of the most recent assessment which is proposed in the guidelines. In addition, the SHI is based on landed volume and not on landed value as prescribed in the Commission guidelines, and France calculates SHI both based on the  $F/F_{MSY}$  ratio and the partial  $F$  of a fleet segment. 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 is based on biological indicators (SHI, SAR, NOS) and the EDI only. 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 2022, i.e., 2019 to 2021;
- at least two of the 'number of overexploited stocks' (NOS) or 'economic dependency indicator' (EDI) biological indicators are negative for each of the last 3 years of the report.

The MS considers that the economic and technical indicators prescribed in the Commission Guidelines 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 197 fleet segments, 10 were assessed to be out of balance, 80 were in balance, 91 segments could not be assessed (64 due to a paucity of relevant data and information or which comprised less than three vessels and 27 which require further

monitoring) and 16 were inactive segments. The MS noted that 91 segments could not be assessed for several potential reasons, such as additional information that needs to be collected or further monitoring before an assessment can be made or confidentiality reasons. 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.

The EWG 22-15 notes that the MS' 2022 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 22-15 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 landing value of fleet segments by stock. Together with the lack of information on the indicator values, the EWG 22-15 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 by 18% in the number of vessels from 7380 to 6061 considered for the period 2011-2020, but how this reduction has affected the fleet composition and how this may have changed the overall balance of the fleet is not described. The decrease in GT or kW is not provided in the Fleet Report for the same time period.

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.

**Measures in action plans**

The Action plan provided in the Annex 4 of the Fleet report 2022 is an update and continuation from the 2016, 2018, 2019 and 2020 action plans. It includes four fleet segments from the previous year Action Plan and six new fleet segments considered to be out of balance in 2020. 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 changed from VL0024m as listed in the 2021 action plan to VL0006m.

Fleet Report 2021 updates for Action plan	Fleet Report 2022 updates for Action plan
Fleet segment: Vessels of between 0 and 24 metres fishing for eel in the Mediterranean as a subsidiary activity.	Fleet segment: Vessels of between 0 and 6 metres in length fishing for eel in the Mediterranean as a subsidiary activity.

- ii) The fishing capacity reduction targets were extended from 2022 to 2023 for all listed segments;

- iii) The following new fleet segments were identified by the MS in the Action Plan:

Additional fleet segments included in the Action plan in 2022 Report	Number of vessels in the segment in 2020
Purse seine vessels of 12 to 18 metres in length fishing for European pilchard (PIL.27.8abd) in the Bay of Biscay (AT GG_Ib PS_VL1218) and in the Celtic Sea - West Scotland (AT MC_OE_Is PS VL1218)	26
Vessels AT GG_Ib OTM VL0010 fishing for European pilchard in the Bay of Biscay	1
Vessels AT GG_Ib OTM VL1012 fishing for European pilchard in the Bay of Biscay	8
Vessels AT GG_Ib MGP VL1012 fishing for European pilchard in the Bay of Biscay	8
Vessels AT MdN_Mchest DFN VL1012 fishing for common sole in the Eastern Channel	28

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.
- Measures focused on capacity reduction related to Brexit.

The EWG 22-15 notes that the 2022 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 changed from VL0024 to VL0006

metres. Five new fleet segments were added to the Action Plan and the time frame for the measures implementation was extended from 2022 to 2023. The fleet report 2022 provides the information about the reasons for those changes, as well as it is mentioned that two new Action Plans are going to be introduced in 2022 - one for the Atlantic seaboard and one for the Mediterranean seaboard although no details are provided in the report.

The Action plan implementation in 2021 is described in detail in Annex 3 of the Fleet report. The measures were aimed at (i) ending issuing fishing licences to several segments, (ii) modifying gear selectivity, and (iii) banning the requested capacity increase in the fleet.

The EWG 22-15 notes that the French updated Action Plan includes the ten fleet segments considered to be out of balance in 2020 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 ten segments that the MS considers to be out of balance. The implementation for fishing capacity reduction targets for ten segments included in the updated action plan were prolonged for 2023.

### 3.4.9 Germany (DEU)

#### **Overview of indicator findings**

##### Area 27

There were 27 fleet segments in 2020, 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 the 22 fleet segments active in 2020, landings in value have been provided aggregated in 14 fleet segments and SHI indicator values were available for 14.

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 22-15 notes that the 9 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 77.28% of the total value of the landings in 2020 provided by the MS, and were as follows:

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

Trends were available for the 9 fleet segments:

- 4 fleet segments displayed a **decreasing** (improving) trend,
- 5 fleet segments displayed **no clear** trend.

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

SAR indicator was available for all the 14 active fleet segments in 2020.

According to the criteria in the 2014 Balance Indicator Guidelines, EWG 22-15 notes that the 2020 SAR indicator values indicate:

- 6 fleet segments may be in balance with their fishing opportunities;
- 1 fleet segment with 7 stocks-at-risk.
- 6 fleet segments with 2 stocks-at-risk.

- 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	14			

#### 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	5	6	3	

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

RoI was not calculated.

RoFTA was calculated for 13 segments:

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

Trends were calculated for 13 segments:

- 0 segments displayed an **increasing** trend,
- 13 segments displayed a **decreasing** trend.

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

CR/BER was calculated for 13 segments:

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

Trends were calculated for 13 segments:

- 0 segments displayed an **increasing** trend,
- 10 segments displayed a **decreasing** trend,
- 3 segments displayed a **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 19 segments\*:

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

Trends for the 17 segments were as follows:

- 3 segments displayed an **decreasing** trend,



### ***Comparison of indicator values***

A comparison Indicator values computed by the EWG 22-15 and those in the fleet report submitted by 31 May 2022 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 2020. The comparison between SHI reports in the MS annual fleet report and those estimated in the framework of EWG 22-15 revealed similar outputs for most values with the exception of one discrepancy for DEU NAO DTS 40XX NGI segment that results "in balance" (SHI=0.91) in the MS fleet report whereas the EWG 22-15 indicates out of balance (SHI=1.5).

The comparison between SHI trends reported in the MS annual fleet report and those estimated in the framework of EWG 22-15 revealed the same outputs for 8 fleet segments. For DEU NAO DTS10-12 the MS fleet report showed an increasing trend, while for the same fleet segment the EWG 22-15 observed no trend.

#### Stocks at Risk Indicator (SAR)

In the MS annual fleet report the SAR has been provided for the reference year 2020.

The comparison between SAR reported in the MS annual fleet report and those estimated in the framework of EWG 22-15 revealed similar outputs for 12 fleet segments. Exceptions are DEU NAO TM1824 and DEU NAO TM2440, for which EWG 22-15 did not compute an estimate for SAR, while in the MS annual report was indicated "out of balance". For DEU NAO TBB40XX, EWG 22-15 did not compute an estimate for SAR, while in the MS annual report was indicated "in balance". For DEU NAO DTS2440 and DEU NAO TM40XX, EWG 22-15 estimated the SAR as "in balance", while in the MS annual report they were indicated "out of 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 22-15 revealed similar outputs for all values.

Trends are similar for this indicator, with exceptions of NAO DFN VL2440, where EWG 22-15 has computed an estimate as "no trend" while based on the MS annual report numbers was calculated as "decreasing".

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

As for the Return on Fixed Tangible Assets (RoFTA) indicator, the comparisons between values reported in the MS annual fleet report and those estimated in the framework of EWG 22-15 revealed similar outputs in most cases. However, the NAO DFN VL2440 segment in the MS fleet report is reported as a positive value whereas the EWG 22-15 estimate is negative. Hence the MS assessment is "in balance", whereas the EWG 22-15 estimate indicates "out of balance".

Trends are similar for this indicator with exceptions of NAO DFN VL2440, where EWG 22-15 estimates indicate a decreasing trend (deterioration) while the MS annual fleet indicates an increasing trend (improvement).



### 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 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 22-15. The status in the EWG 22-15 estimation was "in balance" for NAO DFN1218 NGI, NAO DTS1824 NGI, NAO DTS1012 NGI and NAO DTS1218 NGI segments for which the MS annual report indicated "out of balance".

Trends are similar for this indicator with exceptions of NAO DFN VL2440, where EWG 22-15 has computed an estimate as "decreasing" while based on the MS annual report numbers was calculated as "no trend".

### 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 22-15 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. This is also corroborated by the fact that fishing opportunities allocated to German fisheries under EU law are generally not exceeded.

The above observations are generally largely in line with the indicator values computed by the EWG 22-15.

With regard to Baltic Sea fisheries, future fleet management will be affected by unprecedented reductions in fishing opportunities for herring and cod. ICES estimates that these stocks will continue to develop slowly, with a falling trend compared to previous years. Fishing capacity in the segments concerned will therefore have to be adjusted in the coming years.

### ***Measures in action plans***

The 2021 report on the balance between the fishing capacity and fishing opportunities of the German fleet shows 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 MS fleet report asserts that causes of the decline in stocks are mainly overfishing due to total allowable catches being set too high, as well as changing environmental conditions owing to climate change.

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

<b>Fleet segment</b>	<b>Explanation</b>	<b>Stocks fished*</b>
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

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:

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

EWG 22-15 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 22-15 notes that all the relevant central-government and federal-state authorities will take part in the evaluation of the action plan at the end of the current EMFF funding period. The relevant industry associations are also involved. The parties involved are currently drawing up a report with input from the federal states and the Thünen Institute based on the targets and measures described.

#### 3.4.10 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 16 fleet segments and economic data were provided aggregated in 16 fleet segments.

###### Sustainable Harvest Indicator (SHI)

Out of 16 fleet segments active in 2020, SHI indicator values were available for 13.

According to the criteria in the 2014 Commission 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.

#### Stocks at Risk Indicator (SAR)

SAR indicator values was available for all sixteen fleet segments.

- 11 segments may be *in balance* with their fishing opportunities.
- 1 segment may be *out of balance*, with one stock at risk.
- 4 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.

Proportion of NOS	0-25%	25-50%	50-75%	75-100%
N of fleet segments	10			

#### 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			

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

RoI was not calculated.

RoFTA was calculated for 15 segments:

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

Trends could be calculated for 15 segments:

- 8 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 15 segments:

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

Trends could be calculated for 15 segments:

- 8 segments displayed an *increasing* trend.
- 7 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, VUR220 is not analysed here.

VUR was calculated for the 22 segments\*:

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

Trends could be calculated for 6 segments:

- 6 segments displayed an **increasing** trend,
- 7 segments displayed a **decreasing** trend
- 7 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 2020, 5 vessel length classes had inactive vessels (VL0006, VL0612, VL1218, VL1824 and VL2440). The Greek inactive fleet accounted for 18.3% of the total number of vessels, 12.7% of the total GT and 15.6% of the total 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* but displayed **increasing** (deteriorating) trends.

A similar percentage of inactive vessels was present in two fleet segments, VL0006 and VL0612, with 8.7% each in number of vessels.

By vessel length group:

- 3 segments displayed an **increasing** trend in all three categories.
- 1 segment displayed a **decreasing** trend in two categories but **no clear trend** in vessel number.
- 1 segment displayed **no clear trend across all three categories**.

## Synthesis of indicators and trends

Based on indicator estimations for 2020 and trends over 2016-2020, 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. Economic and technical indicators for PS1218 and PS1824 show an improving trend, while those for PS2440 all show a deteriorating trend.

The two larger demersal segments DTS18-24 and DTS 2440 may be in balance based on all economic and technical indicators, and show positive trends for economic indicators but no trend for technical indicators. On the other hand, the smaller demersal segments DTS0612 and DTS 1218 may be out of balance for all economic and technical indicators. The DTS1218 segment is showing deteriorating trends for CR/BER and RoFTA, while the DTS0612 segment is showing positive trends. Both are indicating deteriorating trends for technical indicators.

Hook segments seem to be out of balance based on the economic and technical indicators, while they also have deteriorating trends across economic indicators, but no clear trend in technical indicators. The pots and/or traps segments appear to be in balance on the economic indicators, although they show a deteriorating trend, but appear to be out of balance with technical indicators, again showing no clear trend.

The three drift/fixed netters segments appear to be out of balance for both economic and technical indicators. Where last year only one segment appeared out of balance for economic indicators, this



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 22-15.

### **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 22-15 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 22-15 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 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.

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 for 2021 did not explicitly assess the fleet segments in terms of 'in balance' or 'out of balance' in accordance with the Commission guidelines. An action plan is in preparation but was not submitted with the annual report.

Based on the arguments above, it is evident that the Greek fleet report for 2021 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**

The MS noted that it was preparing an action plan, however it was not submitted with the 2021 Annual report.

#### *3.4.11 Ireland (IRL)*

### **Overview of indicator findings**

#### Area 27

There were 26 fleet segments in 2020, of which 21 were active. Of the active segments, landings data were available for all and economic data were available to calculate the indicators for 8 aggregated segments.

### Sustainable Harvest Indicator (SHI)

SHI indicator values were available for 18 fleet segments active in 2020.

According to the criteria in the 2014 Balance Indicator Guidelines, the SHI indicator values for fleet segments cannot be used meaningfully to assess the balance or imbalance unless the indicator values are based on stocks that comprise more than 40% of the total value of landings by those fleet segments. 14 segments satisfied this criterium:

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

Trends could be calculated for 13 fleet segments:

- 9 segments displayed a **decreasing** (improving) trend,
- 1 segment displayed a **null/flat** trend,
- 0 segments displayed an **increasing** (deteriorating) trend,
- 3 segments displayed **no clear** trend.

### Stocks at Risk Indicator (SAR)

The SAR indicator was available for all 24 active fleet segments in 2020.

According to the criteria in the 2014 Balance Indicator Guidelines:

- 14 fleet segments appear to be in balance with their fishing opportunities,
- 3 fleet segments with SAR: 4 SAR stocks may not be in balance with their fishing opportunities,
- 6 fleet segments with SAR: 1 SAR stock may not be in balance with its 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	

### Economic Dependency Indicator (EDI)

All 24 segments exhibited an economic dependency (EDI) value below 20% with an average of 4.7%.

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

RoI was not calculated.

RoFTA was calculated for 12 segments:

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

Trends could be calculated for 10 segments:

- 4 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 12 segments:

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

Trends could be calculated for only 10 segments:

- 4 segments displayed an **increasing** trend,
- 5 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<sub>220</sub> were provided by the MS and thus, VUR (i.e., maximum days-at-sea) is not analysed here.

VUR<sub>220</sub> was calculated for 18 segments\*:

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

Trends could be calculated for all 18 segments but all exhibited **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 2020, 5 vessel length classes had inactive vessels (VL0010, VL1012, VL1218, VL1824 and VL2440). The Irish inactive fleet accounted for 28.2% of the total number of vessels, 5.7% of GT and 13.1% of the total kW. At the national level, inactive vessels accounted for more than 28% 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 22.2% in terms of number of vessels and 6.2% 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 for 2020 continues the mixed picture of 2019. SHI values were computed for 18 segments, 12 of which appear now to be in balance. In terms of trends in the SHI, the situation appears to either be improving 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 2020 continues generally to be unfavourable but is improving.



					Status 2020 according to thresholds and criteria in the 2014 Guidelines											Trends 2016-2020														
					Biological			Economic				Vessel use		Inactive		Biological			Economic				Inactive							
SR	FT	VL	FS name	N vessels	SAR	SHI	EDI	CR/BER	RoFTA	RoI	NP margin	NVA/FTE	VUR	VUR <sub>20</sub>	#	GT	KW	SHI	EDI	CR/BER	RoFTA	RoI	NP margin	NVA/FTE	VUR	VUR <sub>20</sub>	#	GT	KW	
NAO	DFN	VL0010	IRL NAO DFN0010	192																										
NAO	DFN	VL1012	IRL NAO DFN1012	10																										
NAO	DFN	VL1218	IRL NAO DFN1824 *	7																										
NAO	DFN	VL1824	IRL NAO DFN1824 *	7																										
NAO	DFN	VL2440	IRL NAO DFN1824 *	1																										
NAO	DRB	VL0010	IRL NAO DRB0010	130																										
NAO	DRB	VL1012	IRL NAO DRB1012 *	31																										
NAO	DRB	VL1218	IRL NAO DRB1012 *	6																										
NAO	DRB	VL1824	IRL NAO DRB2440 *	2																										
NAO	DRB	VL2440	IRL NAO DRB2440 *	5																										
NAO	DTS	VL0010	IRL NAO DTS0010	45																										
NAO	DTS	VL1012	IRL NAO DTS1012	12																										
NAO	DTS	VL1218	IRL NAO DTS1218	31																										
NAO	DTS	VL1824	IRL NAO DTS1824	58																										
NAO	DTS	VL2440	IRL NAO DTS2440	44																										
NAO	FPO	VL0010	IRL NAO FPO0010	577																										
NAO	FPO	VL1012	IRL NAO FPO1012	80																										
NAO	FPO	VL1218	IRL NAO FPO1218 *	21																										
NAO	FPO	VL1824	IRL NAO FPO1218 *	1																										
NAO	FPO	VL2440	IRL NAO FPO1218 *	2																										
NAO	HOK	VL0010	IRL NAO HOK0010	57																										
NAO	HOK	VL1012	IRL NAO HOK1012 *	10																										
NAO	HOK	VL1218	IRL NAO HOK1012 *	1																										
NAO	TBB	VL1824	IRL NAO TBB2440 *	5																										
NAO	TBB	VL2440	IRL NAO TBB2440 *	9																										
NAO	TM	VL1012	IRL NAO TM 1012 *	5																										
NAO	TM	VL1218	IRL NAO TM 1218 *	5																										
NAO	TM	VL1824	IRL NAO TM 1218 *	3																										
NAO	TM	VL2440	IRL NAO TM 2440	14																										
NAO	TM	VL40XX	IRL NAO TM 40XX	20																										
NAO	INACTIVE	VL0010	IRL NAO INA0010	431																										
NAO	INACTIVE	VL1012	IRL NAO INA1012	91																										
NAO	INACTIVE	VL1218	IRL NAO INA1218	18																										
NAO	INACTIVE	VL1824	IRL NAO INA1824	4																										
NAO	INACTIVE	VL2440	IRL NAO INA2440	3																										
IRL Total				1938																										

### 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 22-15 identified seven segments "out of balance": DFN 1824, DTS1012, DTS 1218, FPO 1218, TBB 2440, TM 2440, and TM 40XX.

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 22-06 (AER) and EWG 22-15, 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 EWG 22-15 could be done for 12 segments and showed different results for 7 segments.

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

In the MS annual fleet report, RoFTA was calculated for 18 segments, 1 of which was described as "out of balance": DTS1824. EWG 22-15 identified 7 segments "out of balance": DFN 1824, DTS1012, DTS 1218, FPO 1218, TBB 2440, TM 2440, and TM 40XX.

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 22-06 (AER) and EWG 22-15, 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 22-15 could be done for 12 segments and showed different results for 5 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 2021 submitted for EWG 22-15 provides sound and comprehensive estimates for the balance indicators which are derived from the EWG 20-11 report.

The Fleet Report for 2021 stated that in the Fleet Report for the previous year the Member State had said that it considered basing the indicator values on the segmentation used by the Expert Group (DCF segmentation) does not allow proper assessment of the highly diverse nature of the

fleet or range of natural variations within fleet segments. This situation remains the same this year.

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.

Hence, the Fleet Report for 2021 is not strictly in line with the guidelines.”

### ***Measures in action plans***

No new or revised action plans were proposed.

#### *3.4.12 Italy (ITA)*

### ***Overview of indicator findings***

There were 37 fleet segments in 2020, of which 29 were active. Of the 29 active segments, landings were provided for 29 fleet segments and economic data were provided aggregated for 22 fleet segments.

#### Sustainable Harvest Indicator (SHI)

##### Area 37

Out of 27 fleet segments active in 2020, SHI indicator values were available for 25.

According to the criteria in the 2014 Balance Indicator Guidelines, the SHI indicator values for 10 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 50.23% of the total value of the landings in 2020 provided by MS, and were as follows:

- 13 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 10 fleet segments:

- 6 fleet segments displayed a **decreasing** trend,
- 1 fleet segment displayed **no clear** trend,
- 3 fleet segments displayed **increasing** trend.

#### Stocks at Risk Indicator (SAR)

The SAR indicator was available for all the 27 active fleet segments in 2020.

According to the criteria in the 2014 Balance Indicator Guidelines, EWG 22-15 notes that the 2020 SAR indicator values indicate:

- 14 fleet segments may be in balance with their fishing opportunities,
- 2 fleet segments with 4 stocks-at-risk,

- 3 fleet segments with 3 stocks-at-risk,
- 1 fleet segment with 2 stocks-at-risk,
- 7 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	25			

#### 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	6	4	3

#### OFR

##### Sustainable Harvest Indicator (SHI)

Out of the 2 active fleet segments in 2020, SHI indicator values were available for 1 segment.

According to the criteria in the 2014 Balance Indicator Guidelines, the SHI indicator value for 1 fleet segment can be used meaningfully to assess the balance or imbalance.

The EWG notes that this fleet segment for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 74.51% of the total value of the landings in 2020 provided by MS, and may not be in balance with its fishing opportunities.

A trend could be calculated for 1 fleet segment:

- 1 fleet segment displayed no clear trend.

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

The SAR indicator was available for all the 2 active fleet segments in 2020.

According to the criteria in the 2014 Balance Indicator Guidelines, EWG 22-15 notes that the 2020 SAR indicator values indicate:

- 0 fleet segments may be in balance with their fishing opportunities,
- 2 fleet segments with 1 stock-at-risk.

#### 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			

#### 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		

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

There were 37 fleet segments in the Italian fleet in 2020 of which 29 were active. After clustering 22 segments were available for analysis.

RoI was calculated for 6 segments:

- All 6 segments were *in balance* with their fishing opportunities.

RoFTA was calculated for 22 segments:

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

Trends could be calculated for 20 segments:

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

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

CR/BER was calculated for 22 segments:

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

Trends could be calculated for 20 segments:

- 4 segments displayed an **increasing** trend,
- 10 segments displayed a **decreasing** trend,
- 6 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\*:

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

Trends could be calculated for 21 segments:

- 12 segments displayed a **decreasing** trend,
- 9 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 2020, 6 vessel length segments in MBS (VL0006, VL0612, VL1218, VL1824, VL2440 and VL40XX) and 2 vessel length segments (VL2440, VL40XX) in OFR had inactive vessels.

The inactive Italian fleet accounted for 14,4% of the total number of vessels, 8.6% of the total GT and 11% 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 overall **increasing** (deteriorating) trend.

The segment with the highest levels of inactivity was the VL0612 group at 8.7% 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 2020 and trends over 2016-2020 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 DTS 1824 NGI, MBS TBB 1218 NGI, MBS TBB 1824 NGI, and OFR DTS 40XX IWE, appeared in balance for economic variables. The majority of the fleet segments appear to not be in balance for the biological indicators (88% by number of active segments were assessed as being out of balance for the SHI). The majority of fleet segments, excepting MBS DTS 0612 NGI, MBS DTS1824 NGI, MBS TBB 1218 NGI, MBS TBB 1824 NGI, and OFR DTS 40XX IWE, appeared to be in balance for economic variables. More than half of segments show a deteriorating trend or no clear trend for economic indicators. 32% by number of active segments appear to be in balance according to VUR variables. While most segments show a worsening trend in VUR, 43% show no clear trend.



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

The VUR and VUR220 values provided by the Italian fleet report are based on a fleet segmentation by GSA, which is different to that used by EWG 22-15. Therefore, a comparison between indicator values computed by the Expert group with those prepared by the MS cannot be made.

### Inactive Fleet Indicator

The comparison between Inactive vessels indicator reported in the MS annual fleet report and those estimated in the framework of EWG 22-15 revealed similar outputs for all values.

### **Assessment of fleet report**

While the segmentation used for the Italian fleet report uses the standard fleet segmentation adopted under the DCF, some indicator values (SHI, VUR) 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 22-15 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 partly 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 a comparison between the SHI and VUR indicator values estimated by the EWG 22-15.

It should be noted that the SAR indicator has not been provided in the Italian fleet report.

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 goal of the plan is to reduce the fishing effort in several fishing segments by increasing the number of temporary closures for 2022. The EWG notes that the plan includes a continuation of measures already established prior to and including 2021.

These measures include:

- Effort reduction in fishing days in 2021 and 2022 in several GSAs.
- In GSAs 9, 10 and 11 Italy introduced a quota system for two shrimp species. The Italian authorities are drawing up a specific national management plan for *Ensis minor*.
- Launching a project aimed at collecting data to draw up a specific management plan for the fishing of small pelagic species in the Campania region (GSA 10).
- In GSA 16, changes in management plans currently in force are being drawn up.
- Improvement of stock assessments for e.g. deep-sea shrimps in GSAs 12 and 16 and anchovy and sardine in GSA 16 are being worked on.
- A pilot project has been launched to verify the presence of *Isidella elongata* in the Strait of Otranto, as a first step in the potential establishment of a fishing restricted area (FRA).
- Work on a new scrapping plan within the scope of the EMFF.
- Italy will intensify ("step up checks and monitoring") control and monitoring in the FRAs and the Fossa di Pomo to ensure compliance with the total ban on fishing in these areas.



Several measures presented in this year's action plan are identical to measures from last year's action plan. The new measures presented in this year's fleet report are mainly too general and lack verifiable targets. Part of the action plan consists of measures that the MS intends to implement, but no implementation period is reported.

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 of relevant targeted species or the extent to which any potential imbalance between capacity and fishing opportunities for Italian fleet segments will be affected.

### 3.4.13 Latvia (LVA)

#### **Overview of indicator findings**

##### Area 27

There were 4 fleet segments in the Latvian fleet in 2020, 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 2020, SHI indicator values were available for all of them.

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 2 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 91.45% of the total value of the landings in 2020 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 calculated for the 2 fleet segments with no trend found in both of them.

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

SAR indicator was available for all the 3 active fleet segments in 2020.

According to the criteria in the 2014 Balance Indicator Guidelines, the 2020 SAR indicator values indicate that 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.

	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.

	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:

- 3 segments were *in 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.

Trends were calculated for 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 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 2020, 1 vessel length segment had inactive vessels (VL0010).

The total inactive Latvian vessels account for 26.2% of the total number of vessels, 2.7% 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 2020 and trends over 2016-2020 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.

The above observations are largely in line with the assessment of balance in the Member States' fleet report submitted in 2022. No new action plan has been proposed for unbalanced segments, although the action plan submitted with the fleet report for 2019 is being implemented.

						<span style="color: green;">■</span> in balance <span style="color: red;">■</span> out of balance <span style="color: orange;">■</span> borderline <span style="color: lightgreen;">■</span> insufficiently profitable <span style="color: green;">■</span> improving <span style="color: red;">■</span> deteriorating <span style="color: yellow;">■</span> Null/flat trend <span style="color: blue;">■</span> no clear trend																									
						Status 2020 according to thresholds and criteria in the 2014 Guidelines													Trends 2016-2020												
SR	FT	VL	FS name	N vessels	Status 2020 according to thresholds and criteria in the 2014 Guidelines													Trends 2016-2020													
					Biological			Economic				Vessel use			Inactive			Economic						Inactive							
					SAR	SHI	EDI	CR/BER	RoFTA	RoI	NP margin	NVA/FTE	VUR	VUR <sub>20</sub>	#	GT	kw	SHI	EDI	CR/BER	RoFTA	RoI	NP/CR	NVA/FTE	VUR	VUR <sub>20</sub>	#	GT	kw		
NAO	PGP	VL0010	LVA NAO PGP0010 NGI	190																											
NAO	TM	VL1218	LVA NAO TM 1218 NGI	9																											
NAO	TM	VL2440	LVA NAO TM 2440 NGI	32																											
NAO	INACTIVE	VL0010	LVA NAO INAO010 NGI	82																											
LVA Total				313																											

## Comparison of indicator values

A comparison Indicator values computed by the EWG 22-15 and those in the fleet report submitted by 30 May 2022 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 2020 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 segment shows an increasing trend.

### Stocks at Risk Indicator (SAR)

In the MS annual fleet report the SAR was not 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 22-15. For all fleet segments the indicator values from the MS annual fleet report are lower than the one calculated by the EWG. However, all 3 fleet segments (PGP VL0010, TM VL1218 and TM VL2440) reveal positive values for this indicator in agreement with the EWG 22-15 assessment.

No conclusion on trend assessment was presented by the MS.

Trends for CR/BER based on EWG 22-15 calculations for the 3 segments were as follows:

- 2 segments displayed an increasing trend (TM VL1218 and TM VL2440),
- 1 segment displayed a decreasing trend (PGP VL0010).

### 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 22-15. No comparison was possible on the value of the indicators.

Although the balance conclusion for both indicators revealed similar outputs:

- 3 segments were in balance with their fishing opportunities.

No conclusion on trend assessment was presented by the MS.

Trends for RoFTA based on EWG 22-15 calculations for the 3 segments were as follows:

- 2 segments displayed an increasing trend (TM VL1218 and TM VL2440),
- 1 segment displayed a decreasing trend (PGP VL0010).

#### Inactive Fleet Indicator

Inactive vessels information is missing from the EWG 22-15 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 three years by 4.8%, 6.1%, and 9%, 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.

The fleet balance was assessed using all biological, economic and technical indicators (SHI, ROI, CR/BER and VUR and IFI) for the time period 2016-2020 with exception of SAR.

Although the fleet report submitted by Latvia does not present a calculation for the SAR indicator without any explanation, it is generally in line with the Commission guidelines COM (2014)545.

#### **Measures in action plans**

No new or revised 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. It is particularly relevant to those vessels in this segment that mainly or only targets Baltic cod and which ceased their activities in spring 2019. National and European Commission emergency measures were set to protect the eastern Baltic cod stock. Moreover, VL2440 TM fleet segment further stayed inactive in 2020 in accordance to the Council Regulation which set the ban in targeted fishery 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.

#### *3.4.14 Lithuania (LTU)*

##### **Overview of indicator findings**

There were 13 fleet segments in the Lithuanian national fleet in 2020, of which 8 were active (6 in NAO and 2 in OFR). Of the 8 active segments, landings data were available for all the segments while economic data were provided aggregated by 4 fleet segments.

## Sustainable Harvest Indicator (SHI)

### Area 27

Out of 6 fleet segments active in 2020, landings in value have been provided aggregated in 6 fleet segments and 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 three fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 90% of the total value of the landings in 2020 provided by MS, and were as follows:

- 3 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 2020 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 6 fleet segments in NAO and 2 in OFR:

### Area 27

- 5 fleet segments appear to be *in balance*.
- 1 fleet segment appear to be *out of balance* with 2 stocks-at-risk.

### OFR

- 1 fleet segment appear to be *in balance*.
- 1 fleet segments appear to be *out of balance* with 4 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	5			

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

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)-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			3

#### Economic Dependency Indicator (EDI)-OFR

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	1	1		

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

RoI was calculated for 4 segments:

- 1 segment was *in balance* with its fishing opportunities,
- 3 segment were *out of 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:

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

Trends for the 4 segments were as follows:

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

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

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 8 segments\*:

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

Trends were calculated for 8 segments:

- 2 segments displayed an **increasing (improving)** trend;
- 5 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.

#### The Inactive Fleet Indicators

In 2020, 5 vessel length segments had inactive vessels (VL0010, VL1012, VL1218, VL1824 and VL2440).

The Lithuanian inactive fleet accounted for 44% of the total number of vessels, 4.5% of the total GT and 9.8% of the total kW.

At the national level, inactive vessels accounted for more than 20% of the fleet in terms of number category, and thus, was *out of balance* and displayed **increasing** (deteriorating) trend. Inactive vessels were *in balance* and displayed **decreasing** trends in the other 2 categories (GT and kW).

The segments with the highest level of inactivity were the VL0010 segment at 29% in terms of number of vessels and VL2440 with 3.5% of GT and 5.7% of kW.

By vessel length group:

- 1 segment was *out of balance* in terms of vessel numbers,
- 4 segments were *in balance* in terms of vessel numbers,
- 5 segments were *in balance* in terms of GT and kW.

#### Synthesis of indicators and trends

Based on biological indicator values for 2020 and trends over 2016-2020, and according to the criteria in the Commission guidelines, five fleet segments appear not to be in balance with fishing opportunities. Four of the fleet segments are considered out of balance for SHI, and two are out of balance according to SAR. The MS fleet report agrees with EWG 22-15 in this analysis. The economic indicators suggest that distant fleet segment OFR TM 40XX is in balance with fishing opportunities, while NAO DFN VL1012, NAO PG VL0010 and NAO TM VL2440 are out of balance.

The above observations are largely in line with the assessment of balance in the Member States' fleet report submitted in 2022. However, it does not propose any action plan for the distant fleet segment OFR TM 40XX which seems to be out of balance according SAR and SHI although the economic indicators indicate "in balance".

						<span style="color: green;">■</span> in balance <span style="color: red;">■</span> out of balance <span style="color: orange;">■</span> borderline <span style="color: lightgreen;">■</span> insufficiently profitable <span style="color: green;">■</span> improving <span style="color: red;">■</span> deteriorating <span style="color: yellow;">■</span> Null/flat trend <span style="color: blue;">■</span> no clear tr																						
						Status 2020 according to thresholds and criteria in the 2014 Guidelines											Trends 2016-2020											
SR	FT	VL	FS name	N vessels	Status 2020 according to thresholds and criteria in the 2014 Guidelines											Trends 2016-2020												
					Biological			Economic					Vessel use			Inactive				Biological			Economic					Inactive
			SAR	SHI	EDI	CR/BER	RoFTA	RoI	NP margin	NVA/FTE	VUR	VUR <sub>20</sub>	#	GT	KW	SHI	EDI	CR/BER	RoFTA	RoI	NP margin	NVA/FTE	VUR	VUR <sub>20</sub>	#	GT	KW	
NAO	DFN	VL1012	LTU NAO DFN1012 NGI*	3	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
NAO	DFN	VL2440	LTU NAO DFN1012 NGI*	1	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
NAO	PG	VL0010	LTU NAO PG 0010 NGI*	55	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
NAO	TM	VL1824	LTU NAO TM 2440 NGI*	2	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
NAO	TM	VL2440	LTU NAO TM 2440 NGI*	11	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
NAO	TM	VL40XX	LTU NAO TM 2440 NGI*	1	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
OFR	DTS	VL40XX	LTU OFR TM 40XX NEU*	2	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
OFR	TM	VL40XX	LTU OFR TM 40XX NEU*	4	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
NAO	INACTIVE	VL0010	LTU NAO INA0010 NGI	41	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
NAO	INACTIVE	VL1012	LTU NAO INA1012 NGI	6	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
NAO	INACTIVE	VL1218	LTU NAO INA1218 NGI	1	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
NAO	INACTIVE	VL1824	LTU NAO INA1824 NGI	2	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
NAO	INACTIVE	VL2440	LTU NAO INA2440 NGI	12	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
LTU Total				141																								

### Comparison of indicator values

A comparison Indicator values\_computed by the EWG 22-15 and those in the fleet report submitted by 30 May 2022 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 2020.

Despite the fact that the Lithuanian Baltic Sea fleet in 2020 consisted of 6 fleet segments SHI was estimated for only 3 of these segments, all of which were out of balance. The three segments for which SHI was estimated are NAO TM 1824, NAO TM 2440 and NAO TM 40XX.

A comparison between indicator values in the MS Fleet reports for 2022 and the values for equivalent fleet segments as estimated by EWG 22-15 indicate that the status of the 3 segments for which a comparison can be made remains the same. There are similar outputs for all values. All fleet segments may be out of balance.

The SHI values for 2 of the segments estimated for the period 2016-2020 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 estimates that one OFR segment may be in balance while the second was may be out of balance.

#### Stocks at Risk Indicator (SAR)

In the MS annual fleet report the SAR has been provided for the reference year 2020 for 6 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 22-15 revealed the same outputs for all fleet segments, all of them being in balance.

For the OFR fleet segments the MS and EWG 22-15 are in agreement on their status, with one fleet segment indicated to be 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 2016-2020 for 4 fleet segments.

A comparison between indicator values in the MS Fleet report and the values for equivalent fleet segments as estimated by EWG 22-15 for the year 2020 show the same estimations for all the fleet segments. Data for fleet segment NAO DTS VL2440 has not been presented separately by the MS, as it had been in previous years, instead is clustered with NAO TM VL24-40, due to confidentiality reasons.



Three segments, NAO DFN VL1012, NAO PG VL0010 and NAO TM VL2440 were all found to be out of balance or insufficiently profitable, while OFR TM VL40XX was found to be in balance with an increasing trend.

Based on EWG 22-15 analysis the fleet segments NAO DFN VL1012, NAO PG VL0010 and NAO TM VL2440 show a decreasing trend for the period 2016-2020, whereas the distant fleet OFR TM VL40XX shows an increasing 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 2016-2020 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.

The comparison between RoFTA and ROI for 4 fleet segments reported in the MS annual fleet report and those estimated in the framework of EWG 22-15 revealed the same outputs for all values and trends. Data for fleet segment NAO DTS VL2440 has not been presented separately by the MS, as it had been in previous years, instead is clustered with NAO TM VL2440, due to confidentiality reasons.

Potential overcapacity in MS report is indicated for the fleet segments NAO DFN VL1012, NAO PG VL0010 and NAO TM VL2440, the segments are out of balance for both RoFTA and ROI with decreasing trend. Distant fleet OFR TM VL40XX is indicated as in balance with an increasing trend.

#### 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>.

A discrepancy has been observed in the values of VUR between the MS annual fleet report and the ones estimated in the framework of the EWG 22-15. For some segments this could be because the MS used a clustered fleet segmentation. Nevertheless, the outputs in terms of fleet segments status are the same and show that all fleet segments appear to be in balance, apart from NAO PG VL0010.

Comparison of the trends was not possible as EWG 22-15 due to the different periods used (EWG 22-15 presented trends for 2016-2020 while MS for 2017-2011). Regardless of that, EWG 22-15 indicates there is no clear trend in the data for the most of fleet segment (except for TM VL1824 and TM VL40XX with an increasing trend).

#### Inactive Fleet Indicator

Inactive vessels have been reported as number, GT and kW in the MS annual fleet report. EWG 22-15 estimates that all indicators are in balance, apart from the number of vessels in NAO INA0010 which is out of balance.

This indicator is increasing in all categories for two fleet segments and showing no clear trend in all categories for 1 fleet segment. The indicator is showing no clear trend in GT for 2 fleet segments, is increasing in kW for 1 fleet segment and is showing no clear trend in kW for 1 fleet segment.

### **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 2022 and the values for equivalent fleet segments, as estimated by EWG 22-15, 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 to be functioning well in attempting to secure a balance between fishing opportunities and capacity and no new or revised action plan has therefore been proposed apart from those provided by MS in 2021 and which is ongoing for 2021-2023.

Based on the combined analysis of the results of the vessel use, biological and economic indicators, the MS concludes in the Fleet Report that the Lithuanian fleet is in balance or almost in balance with its fishing opportunities in the case of all fleet segments assessed. The rationale for making such a conclusion is explained in the MS fleet report.

For one fleet segment which had previous problems of overcapacity and economic inefficiency (OFR TM 40XX) the biological indicators appear out of balance, however the economic and technical indicators now appear to be in balance.

No action plan is proposed for the distant water fleet segment.

### **Measures in action plans**

No new or revised action plans were proposed. However, the action plan provided by MS in 2021 (Lithuanian fleet report for 2020) seems to be the same as that provided with the 2019 fleet report in terms of targets and measures but with amended timeframe from 2020 to 2021-2023 (see below).

The action plan relates to the fleet segments NAO DFN 1012 and NAO DTS 2440 operating in Baltic Sea which are reliant on the Baltic Sea cod stock and which is currently in poor condition. The following measures are currently being implemented under the 2021 Action Plan in order to reduce the pressure on the stock:

- System of transferable fishing concessions (TFC) as an effective tool to address overcapacity. According to MS it is too early to evaluate the effectiveness of this measure as it was introduced in 2016.
- Scrapping scheme with public compensation for permanent cessation of fishing for reducing overcapacity, if relevant amendment of Regulation (EU) № 508/2014 allows it.

#### **3.4.15 Malta (MLT)**

### **Overview of indicator findings**

#### Area 37

There were 22 fleet segments in 2020, of which 17 were active. Of the 17 active segments, landings and economic data were provided aggregated in 9 fleet segments.

#### Sustainable Harvest Indicator (SHI)

Out of 17 active fleet segments in 2019, SHI indicator values were available for 9.

According to the criteria in the 2014 Commission 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 2 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 27.89% of the total value of the landings in 2020 provided by MS, and were as follows:

- 2 fleet segments may be *in balance* with their fishing opportunities.

Trends were available for the 1 fleet segment:

- 1 fleet segment displayed a **decreasing** (improving) trend.

#### Stocks at Risk Indicator (SAR)

SAR indicator was available for 9 fleet segments in 2020

- 3 fleet segments may be in balance with their fishing opportunities.
- 2 segments with 2 stocks-at-risk,
- 4 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	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	9			

#### 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 6 segments:

- 6 segments displayed an **increasing** trend.

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

CR/BER was calculated for 11 segments:

- 5 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:

- 8 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 provided by the MS and thus, VUR<sub>220</sub> is not analysed here.

VUR was calculated for 17 segments\*:

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

Trends could be calculated for 15 segments:

- 4 segments displayed a **decreasing** trend,
- 9 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 2020, 5 vessel length segments had inactive vessels (VL0006, VL0612, VL1218, VL1824 and VL2440).

The Maltese inactive fleet accounted for 31.9% of the total number of vessels, 33.9% of the total GT and 30.0% 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 there was no trend detected.

The segments with the highest level of inactivity were the VL0006 segment with 18.3% in terms of number of vessels, the VL0612 segment with 13.5% of the kW and VL1824 with 7.7% of GT.

By vessel length group:

- All segments were *in balance* in all 3 categories (#, GT and kW),
- 3 segments displayed **increasing** trend in all 3 categories (#, GT and kW).

### Synthesis of indicators and trends

Based on indicator values for 2020 and trends over 2016-2020 and according to the criteria in the Commission guidelines, over half of the fleet segments appear to be out of balance with their fishing opportunities. Despite the economic indicators are balanced for the fleet segments HOK1218 NGI and PGP0612 NGI\*, the biological indicators show an imbalance due to the presence of one stock-at-risk in each of the segments. No SHI-value is meaningful for MGO1824 NGI\*, but the remaining indicators (except for VUR<sub>220</sub>) indicate that this segment may be in balance with its fishing opportunities. In terms of economic and technical indicators, HOK1218 NGI and MGO1824 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, but shows an increasing trend for each of the indicators. The DTS2440 NGI\*, HOK1824 NGI\* and MGO0612 NGI segments show an imbalance for CR/BER and RoFTA, but appear to be in balance for ROI (except the DTS2440 NGI\* segment for which ROI is not calculated). The MGO0612 NGI segment shows a negative trend for CR/BER and RoFTA, while the DTS2440 NGI\* shows an increasing trend for those indicators.

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.

						<span style="color: green;">■</span> in balance <span style="color: red;">■</span> out of balance <span style="color: orange;">■</span> borderline <span style="color: lightgreen;">■</span> insufficiently profitable <span style="color: green;">■</span> improving <span style="color: red;">■</span> deteriorating <span style="color: yellow;">■</span> Null/flat trend <span style="color: blue;">■</span> no clear trend																									
						Status 2020 according to thresholds and criteria in the 2014 Guidelines											Trends 2016-2020														
						Biological			Economic					Vessel use			Inactive														
SR	FT	VL	FS name	N vessels		SAR	SHI	EDI	CR/BER	RoFTA	RoI	NP margin	NVA/FTE	VUR	VUR <sub>20</sub>	#	GT	kW	SHI	EDI	CR/BER	RoFTA	RoI	NP/CR	NVA/FTE	VUR	VUR <sub>20</sub>	#	GT	kW	
MBS	DTS	VL1824	MLT MBS DTS2440 NGI*	5																											
MBS	DTS	VL2440	MLT MBS DTS2440 NGI*	4																											
MBS	HOK	VL1218	MLT MBS HOK1218 NGI	10																											
MBS	HOK	VL1824	MLT MBS HOK1824 NGI*	15																											
MBS	MGO	VL0612	MLT MBS MGO0612 NGI	10																											
MBS	MGO	VL1218	MLT MBS MGO1218 NGI*	4																											
MBS	MGO	VL1824	MLT MBS MGO1824 NGI*	1																											
MBS	PMP	VL1824	MLT MBS MGO1824 NGI*	1																											
MBS	DFN	VL0006	MLT MBS PGP0006 NGI*	4																											
MBS	PGP	VL0006	MLT MBS PGP0006 NGI*	253																											
MBS	HOK	VL0006	MLT MBS PGP0006 NGI*	4																											
MBS	DFN	VL0612	MLT MBS PGP0612 NGI*	1																											
MBS	PGP	VL0612	MLT MBS PGP0612 NGI*	108																											
MBS	HOK	VL0612	MLT MBS PGP0612 NGI*	39																											
MBS	PMP	VL0006	MLT MBS PMP0006 NGI	24																											
MBS	PMP	VL0612	MLT MBS PMP0612 NGI	128																											
MBS	PS	VL2440	MLT MBS PS 2440 NGI*	1																											
MBS	INACTIVE	VL0006	MLT MBS INA0006 NGI	165																											
MBS	INACTIVE	VL0612	MLT MBS INA0612 NGI	101																											
MBS	INACTIVE	VL1218	MLT MBS INA1218 NGI	6																											
MBS	INACTIVE	VL1824	MLT MBS INA1824 NGI	12																											
MBS	INACTIVE	VL2440	MLT MBS INA2440 NGI	4																											
MLT Total				900																											

### Comparison of indicator values

A comparison Indicator values computed by the EWG 22-15 and those in the fleet report submitted by 31 May 2022 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 2020. It is not clear why SHI indicators are not presented, although  $F/F_{MSY}$  values are reported for 2020. In the summary table of the MSs' fleet report provided for Balance and Capacity, Malta provided provided results at the MS level. In this table, the SHI indicator is green, being satisfactory. There is no information how these results are derived.

#### Stocks at Risk Indicator (SAR)

The MS annual fleet report did not provide information for SAR in the reference year 2020. A general statement is made that overall, the SAR indicator is not available for Malta for 2013-2020, 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. It is also stated that the landings threshold is likely to be overestimated as it does not consider the landings from non EU fleets.

#### 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 22-15 revealed similar outputs for most values.

The exception was segments HOK VL1824 and MGO VL0612 for which the status in the EWG 22-15 estimation was "out of balance" and for which the MS annual report indicated "in balance".

#### 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 22-15 revealed similar outputs for most values.

The only exception was the fleet segment MGO VL0612, for which the status in the EWG 22-15 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 22-15 revealed the same outputs for all values.

#### 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 22-15 revealed the same outputs for all values in 2020.

### ***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.

Nevertheless, it should be noted that the report does not include biological indicators at the segment level which is, according to the report, mainly related to data limitations.

Since no discrepancies were raised by the STECF in the previous (EWG 21-16) report, no specific issues were addressed by the MS in its 2022 fleet report. The EWG 21-16 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.

The EWG 22-15 notes that 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 2020 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 2008-2020. 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 action plan is provided in Annex I of the fleet report 2022. However, it has not been modified since last year.

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 22-15 is unable to comment on the likely effects of the proposed measures.

### 3.4.16 Netherlands (NLD)

#### Overview of indicator findings

##### Area 27

There were 32 fleet segments in 2020, of which 26 were active. Of the 26 active segments, landings and economic data were provided aggregated for 11 fleet segments.

##### Sustainable Harvest Indicator (SHI)

Out of 11 active fleet segments in 2020, SHI indicator values were available for all of them.

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 68.44% of the total value of the landings in 2020 provided by MS, and were as follows:

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

Trends were available for 6 fleet segments:

- 4 segments displayed a **decreasing** trend,
- 2 segments displayed **no clear** trend.

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

SAR indicator was available for all 11 fleet segments in 2020. According to the criteria in the 2014 Balance Indicator Guidelines, 2019 SAR indicator values indicate:

- 8 segments may be *in balance* with their fishing opportunities
- 1 segment appears *out of balance* with 2 stocks-at-risk,
- 2 segments appear *out of balance* 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			

##### 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	7	2	2	

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

RoI was not calculated.

RoFTA was calculated for 11 segments:

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

Trends were calculated for 11 segments:

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

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

CR/BER was calculated for 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:

- 3 segments displayed an **increasing** trend,
- 7 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, VUR220 is not analysed here.

VUR was calculated for 26 segments\*:

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

Trends were calculated for 20 segments.

- 1 segment displayed an **increasing** trend.
- 3 segments displayed a **decreasing** trend.
- 16 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 2020, 6 vessel length classes had inactive vessels (VL0010, VL1012, VL1218, VL1824, VL2440 and VL40XX).

The Dutch inactive fleet accounted for 26.3% of the total number of vessels, 5% of the total GT and 8.1% 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 displayed a **decreasing** (improving) trend.

The segment with the highest level of inactivity is the VL0010 segment with 16.7% of the number of vessels.

EWG 22-15 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 VL1012 and VL1824. **Decreasing** (improving) trends were recorded for VL0010, VL1218, and VL40XX. **No trend** was recorded for VL2440.



## Synthesis of indicators and trends

Based on indicator values for 2020 and trends over 2016-2020 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, RoFTA and CR/BER indicators suggest that segment TBB VL2440 is not in balance with a worsening situation (decreasing trend) for RoFTA and CR/BER. As SAR, SHI, ROFTA, VUR and VUR<sub>220</sub> indicators suggest, fleet segment PG VL1012 is not also in balance with a decreasing trend for CR/BER and ROFTA.

The segment TBB VL40XX also indicates some potential imbalance according to the SHI and SAR values with improving situation (decreasing trend) for SHI.

Fleet segment DTS VL1824 appear to be in balance for both SAR and SHI, although RoFTA and CR/BER indicators suggest that this segment is not in balance with a worsening situation (decreasing trend).

Exceptions exist for fleet segments DFN VL1824, PG VL0010 and TBB VL1218, where fleets appear to be in balance for SAR, CR/BE, and RoFTA and with an increasing trend for RoFTA and CR/BER (apart from PG VL0010 where trend of RoFTA is decreasing), although VUR indicator suggest that the segments are not in balance.

The above observations are largely in line with the assessment of balance in the Member States' fleet report submitted in 2022.

						Status 2020 according to thresholds and criteria in the 2014 Guidelines										Trends 2016-2020															
						Biological			Economic				Vessel use			Inactive			Economic						Inactive						
SR	FT	VL	FS name	N vessels		SAR	SHI	EDI	CR/BER	RoFTA	RoI	NP margin	NVA/FTE	VUR	VUR <sub>220</sub>	#	GT	KW	SHI	EDI	CR/BER	RoFTA	RoI	NP/C R	NVA/FTE	VUR	VUR <sub>220</sub>	#	GT	KW	
NAO	DFN	VL1218	NLD NAO DFN1824 NGI*	1																											
NAO	DFN	VL1824	NLD NAO DFN1824 NGI*	1																											
NAO	FPO	VL1218	NLD NAO DFN1824 NGI*	3																											
NAO	FPO	VL1824	NLD NAO DFN1824 NGI*	2																											
NAO	FPO	VL2440	NLD NAO DFN1824 NGI*	1																											
NAO	MGO	VL1824	NLD NAO DFN1824 NGI*	5																											
NAO	PGP	VL1218	NLD NAO DFN1824 NGI*	1																											
NAO	HOK	VL1218	NLD NAO DFN1824 NGI*	1																											
NAO	DTS	VL1824	NLD NAO DTS1824 NGI*	10																											
NAO	DTS	VL2440	NLD NAO DTS2440 NGI*	33																											
NAO	DTS	VL40XX	NLD NAO DTS2440 NGI*	1																											
NAO	PG	VL0010	NLD NAO PG 0010 NGI*	169																											
NAO	PMP	VL0010	NLD NAO PG 0010 NGI*	2																											
NAO	PG	VL1012	NLD NAO PG 1012 NGI*	20																											
NAO	DTS	VL0010	NLD NAO TBB0010 NGI*	8																											
NAO	DTS	VL1012	NLD NAO TBB0010 NGI*	1																											
NAO	TBB	VL0010	NLD NAO TBB0010 NGI*	6																											
NAO	DRB	VL2440	NLD NAO TBB1218 NGI*	3																											
NAO	DRB	VL40XX	NLD NAO TBB1218 NGI*	4																											
NAO	DTS	VL1218	NLD NAO TBB1218 NGI*	1																											
NAO	TBB	VL1218	NLD NAO TBB1218 NGI*	10																											
NAO	TM	VL1218	NLD NAO TBB1218 NGI*	1																											
NAO	TBB	VL1824	NLD NAO TBB1824 NGI*	154																											
NAO	TBB	VL2440	NLD NAO TBB2440 NGI*	28																											
NAO	TBB	VL40XX	NLD NAO TBB40XX NGI*	59																											
NAO	TM	VL40XX	NLD NAO TM 40XX NGI*	6																											
NAO	INACTIVE	VL0010	NLD NAO INA0010 NGI*	120																											
NAO	INACTIVE	VL1012	NLD NAO INA1012 NGI*	13																											
NAO	INACTIVE	VL1218	NLD NAO INA1218 NGI*	19																											
NAO	INACTIVE	VL1824	NLD NAO INA1824 NGI*	18																											
NAO	INACTIVE	VL2440	NLD NAO INA2440 NGI*	14																											
NAO	INACTIVE	VL40XX	NLD NAO INA40XX NGI*	5																											
NLD Total				720																											

## Comparison of indicator values

A comparison Indicator values computed by the EWG 22-15 and those in the fleet report submitted in 2022 are given in Annex II (the report was submitted on 22 September 2022 and not by 31 May as required). 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 6 fleet segments for the reference year 2020.

The comparison between biological indicators reported in the MS annual fleet report and those estimated in the framework of EWG 22-15 revealed contradictory conclusions regarding the balance or imbalance of the fleet segments in terms of SHI for some fleet segments. The fleet segments PG VL1012, TBB VL2440 and TBB VL40XX were found to be out of balance in the EWG 22-15 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 22-15 and indicate an improving situation (decreasing trend for 4 segments and no clear trend for 2 segments).

### Stocks at Risk Indicator (SAR)

In the MS annual fleet report the SAR has been provided for the reference year 2020.

The comparison between biological indicators reported in the MS annual fleet report and those estimated in the framework of EWG 22-15 revealed similar outputs in terms of fleet segment status for SAR for all segments apart from TM VL40XX, where EWG 22-15 estimates this segment to be in balance while it was the opposite in the fleet report.

Fleet segment TBB VL2440 was identified with 2 SAR by the EWG 22-15 while MS assessment shows 1 SAR. The stock potentially at risk in this fleet segment is the common skate complex (consisting of common blue skate and flapper skate) in the North Sea, Skagerrak and Kattegat. Total landings may comprise more than 10% of the total landings of the stock, but these landings are unknown to date. The number of SAR for the clustered fleet segment (TBB VL2440 and TBB VL40XX) was in absence of clear information on the common skate complex, concluding for the MS assessment to take into account only 1 stock, which was North Sea sole.

### **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 22-15 revealed the same outputs for all values. Four fleet segments (DTS VL1824, DTS VL 2440, TBB VL 0010 and TBB VL2440) seems to be out of balance for CR/BER.

Values for the period 2014-2020 are provided accompanied by trend indication for 5 segments with an increasing trend for TBB VL1218 and TM VL40XX and decreasing trend for TBB VL2440, TBB VL40XX and DTS VL2440. A non-significant trend at 5% is indicated for the other 6 segments and no comparison on the trend was possible for them.

Trends based on EWG 22-15 calculations for the 11 segments were as follows:

- 3 segments displayed an increasing trend (including TBB VL1218 and TM VL40XX),
- 7 segments displayed a decreasing trend (TBB VL2440, TBB VL40XX and DTS VL2440),
- 1 segment displayed no clear trend.

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

In the Dutch annual fleet report ROI was calculated where RoFTA was estimated by EWG 22-15. Hence no direct comparison was carried out.

The status in terms of balance for both indicators revealed similar outputs:

- 5 segments are in balance with its fishing opportunities,
- 6 segments are out of balance with their fishing opportunities.

In the absence of RoFTA calculations in the MS report, a comparison between trends is not possible. However, in the Dutch annual fleet report ROI values for the period 2014-2020 are provided accompanied by trend indication for 3 segments with an increasing trend for DTS VL2440 and a decreasing trend for DFN VL 1824 and TBB VL2440. A non-significant trend at 5% is indicated for the other 8 segments and no comparison on the trend was possible for them.

Trends for RoFTA based on EWG 22-15 calculations for the 11 segments were as follows:

- 3 segments displayed an increasing trend (including DTS VL2440),
- 8 segments displayed a decreasing trend (including DFN VL 1824 and TBB VL2440).

### **Net profit margin**

The comparison between NPM reported in the MS annual fleet report and those estimated in the framework of EWG 22-15 revealed the same outputs for all values.

Values for the period 2014-2020 are provided accompanied by trend indication for 4 segments with an increasing trend for TBB VL1218 and a decreasing trend TBB VL2440, TBB VL40XX and DTS VL2440). A non-significant trend at 5% is indicated for the other 7 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 22-15 revealed the same outputs for all values.

Values for the period 2014-2020 are provided. 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 table reporting the maximum observed days at sea (based on average days at sea of 10 most active vessels) per fleet segment was included in the MS annual fleet report (Table on page 27 of the MS fleet report).

VUR was calculated for 11 segments:

- 6 segments were in balance with their fishing opportunities (including DFN VL1824),
- 5 segments were *out of balance* with their fishing opportunities.

Trend assessment for VUR was provided by the MS and showed no clear or no trend with the exception of DFN VL1824 with a decreasing trend.

Trends based on EWG 22-15 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 (DFN VL1824).

### **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 22-15 dataset. While the inactivity of the Dutch fleet lays below 10% in terms of gross tonnage and engine power, the large number of small inactive vessels brings the total inactive vessel percentage above the 20% threshold.

### **Assessment of fleet report**

In general, the fleet report submitted by the Netherlands provides a sound and comprehensive analysis of the balance between fleet capacity and fishing opportunities for all fleet segments for which indicator values were available but it is not completely in line with the Commission guidelines COM (2014)545.

Although some of the EWG 21-16 findings are reflected in the fleet report submitted by Netherlands, the report does not contain current information (for 2021) required under point 9 of the Commission guidelines COM (2014)545 which specifies additional information that should be included. Only some of the information for 2020 was provided.

A comparison between indicator values provided in the MS Fleet report and the values for equivalent fleet segments, as estimated by EWG 22-15, show that many of the indicators for the segments for which a comparison can be made are similar. The majority of indicators are showing similar values (except for SHI) and trends.

Although some of the fleet segments show some indications of imbalance according to analysis of the results for SHI, SAR, ROI, CR/BR and VUR indicators and reasons for not considering them as such are explained to some extent in the fleet report, no overall conclusion regarding the balance or lack thereof based on the results of all indicators was presented by the MS. Furthermore, no action plan is proposed for any of the fleet segments and no rationale behind such a judgement is elaborated in the fleet report which is not strictly in line with the Commission guidelines COM (2014)545.

### **Measures in action plans**

No new or revised action plans were proposed.

#### *3.4.17 Poland (POL)*

### **Overview of indicator findings**

#### Area 27

There were 21 fleet segments in 2020, of which 16 were active. Of the 16 active segments, weight of landings was provided aggregated by 11 segments, value of landings and economic data were provided aggregated by 8 fleet segments.

#### Sustainable Harvest Indicator (SHI)

Out of fleet segments active in 2020, landings in value have been provided aggregated in 8 fleet segments and SHI indicator values were available for 8.

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 22-15 notes that for the 3 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 74.87% of the total value of the landings in 2020 provided by MS, and were as follows

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

Trend was available for only 1 fleet segments and it was **increasing**.

#### Stocks at Risk Indicator (SAR)

SAR indicator was available for all the 11 active fleet segments in 2020.

According to the criteria in the 2014 Balance Indicator Guidelines, EWG 22-15 notes that the 2020 SAR indicator values indicate:

- 8 fleet segments may be in balance with their fishing opportunities;
- 3 fleet 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.

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

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

RoFTA 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 could be calculated for 6 segments:

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

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

CR/BER 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 could be calculated for 6 segments:

- 0 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 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 11 segments:

- 9 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 2020, 5 vessel length segments had inactive vessels (VL0010, VL1012, VL1218, VL1824 and VL2440).

The inactive fleet accounted for 2.66% of the total number of vessels, 1.61% of the total GT and 2.7% of the total kW. At the national level, inactive vessels accounted for less than 20% of the fleet in vessel number and thus, was *in balance* and displayed *decreasing* (improving) trends.

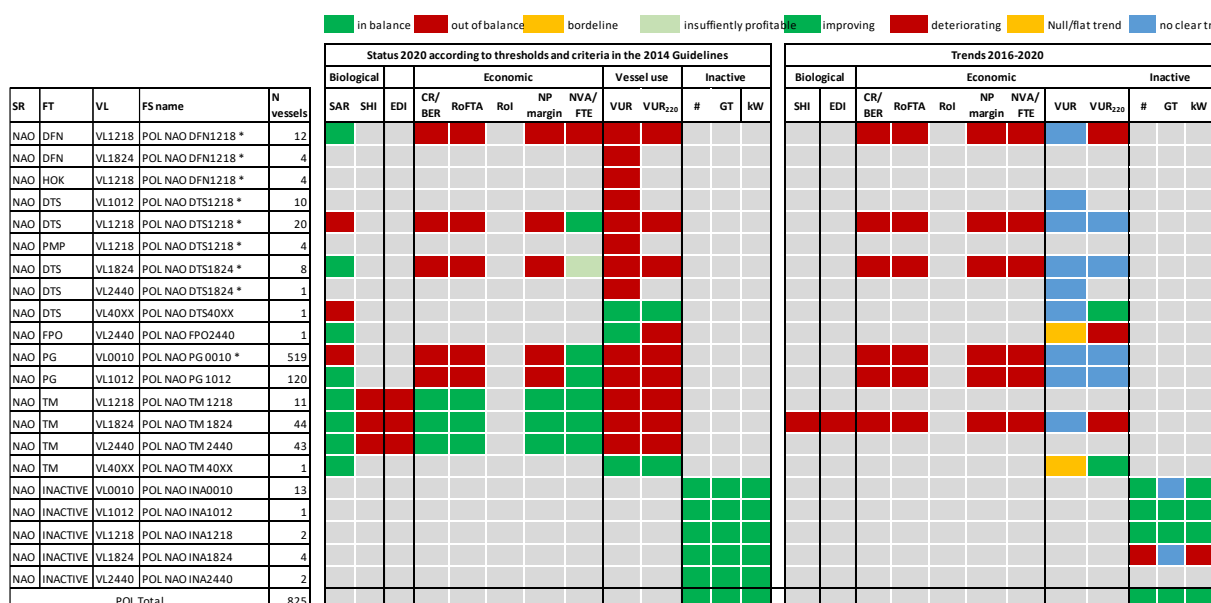
The segments with the highest level of inactivity were the VL0010 segment with 1.58% in terms of number of vessels, the VL1824 segment with 1.2% of the kW and VL2440 with 0.9% of GT.

By vessel length group:

- All segments were *in balance* in all 3 categories (#, GT and kW),
- 3 segments displayed *decreasing* trends in all 3 categories (#, GT and kW).

### Synthesis of indicators and trends

Based on indicator values for 2020 and trends over 2016-2020 and according to the criteria in the Commission guidelines, the majority of fleet segments appear to be out of balance with their fishing opportunities. More than half of segments could be also considered as out of balance according to the RoFTA, CR/BER, and VUR values. Segments TM VL 1218, TM VL1824 and TM VL2440 indicate some potential imbalance according to the SHI value for 2020. The trend is indicating a deteriorating situation for the SHI of the fleet segment TM VL1824.



### Comparison of indicator values

A comparison Indicator values computed by the EWG 22-15 and those in the fleet report submitted by 31 May 2022 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 the period 2019–2021.

SHI values reported in the MS annual fleet report and those estimated in the framework of EWG 22-15 are similar (i.e., all the 3 fleet segments out of balance). EWG 22-15 revealed a discrepancy in terms of fleet segment status for SHI in 1 fleet segment (DTS VL1824), for which the MS annual report indicated "in balance" and the EWG 22-15 estimation does not provide status due to <40% landing value of assessed stocks. The EWG is unable to identify the reasons for such discrepancies.

#### Stocks at Risk Indicator (SAR)

In the Fleet Report submitted by Poland SAR is presented for 2019–2021.

The comparison between SAR values reported in the MS annual fleet report and those estimated in the framework of EWG 22-15 was made for 2020 in view of data comparability and reveals some discrepancies. In particular, DTS VL 1218 and DTS VL400XX were out of balance for EWG 22-15, but they were not assessed for SAR in the MS fleet report. TM VL400XX was in balance for EWG 22-15, but it was not assessed for SAR in the MS fleet report. In addition, DTS VL1824, PG VL1012, TM VL1824 and TM VL2440 were in balance for EWG 22-15, while the fleet report reported these fleet segments as out of balance for SAR.

#### 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 22-15 revealed similar outputs even there were some differences in the indicator value.

In the Polish annual fleet report CR/BER values for 8 segments of the period 2018-2020 are provided without trend indication.

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

In the MS annual fleet report ROI was calculated where RoFTA was estimated by EWG 22-15. Hence no direct comparison was carried out.

The status in terms of balance for both indicators revealed similar outputs:

- 3 segments are in balance with its fishing opportunities,
- 5 segments are out of balance with their fishing opportunities.

In the absence of RoFTA calculations in the MS report, a comparison between trends is not possible. However, in the Polish annual fleet report ROI values for 8 segments of the period 2018-2020 are provided without trend indication.

#### 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 22-15.

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 22-15 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 22-15. EWG 22-15 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 22-15 and MS report.

### **Assessment of fleet report**

The assessment of balance between fleet capacity and fishing opportunities in the report appears sound and comprehensive and in line with Commission guidelines COM(2014)545.

The Fleet Report submitted by Poland shows that there is imbalance between the fishing capacity of the Polish fleet operating in the Baltic and available fish stocks. In particular, the main causes of the imbalances were found to relate to three main factors: a) an excessive number of vessels in the fleet; b) catch imbalance and c) an imbalance in the exploitation of central Baltic herring.

The Fleet Report provides information about several management measures carried out by Poland to reduce the number of imbalanced fleets segments.

### **Measures in action plans**

In the fleet report, Poland has concluded that structural overcapacity exists in eight of the fishing fleet segments and accordingly, a revised action plan based on the action plan submitted with the 2021 fleet report is provided. The revised action plan specifies actions to be taken separately for specific fleet segments rather than relating to all segments assessed by the MS to be out of balance.

EWG 22-15 notes that the action plan clearly specifies the targets and tools. However, no specific time-frame for its implementation was indicated, only that the plan is to be implemented over a 3-5 year time period.

The action plan specifies three main measures:

- I. reducing the number of vessels in permanently inefficient and imbalanced segments to a level which ensures an increase in efficiency in segments operating at a deficit and stabilises the financial condition of those segments;
- II. developing a system for distributing Polish catch quotas in a way which is geared towards achieving biological balance;
- III. improving data collection methods and tools, analyses and modelling of the Baltic fleet's economic and biological performance. Over a period of 3-5 years, Poland is planning to develop holistic balance assessment methods and a data collection system enabling better structuring and modelling of fleet scenarios.

The EWG 22-15 is unable to assess the extent to which the measures in the action plan are likely to redress the imbalance in the fleet segments concerned.

#### *3.4.18 Portugal (PRT)*

### **Overview of indicator findings**

There were 74 fleet segments in 2020, of which 59 were active. Of the 59 active segments, landings and economic data were provided aggregated by 48 fleet segments.

### **Area 27**

#### Sustainable Harvest Indicator (SHI)

Out of 55 active fleet segments in 2020 in Area27, SHI indicator values were available for 46.

According to the criteria in the 2014 Commission guidelines, the SHI indicator values for 37 fleet segments cannot be used meaningfully to assess the balance or imbalance because the indicator values are based on stocks that comprise less than 40% of the total value of landings by those fleet segments.

The 9 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 30.20% of the total value of the landings in 2020 provided by MS, and were as follows:



- 9 fleet segments may be in balance with their fishing opportunities,
- 0 fleet segment may be out of balance with their fishing opportunities.

Trends could be calculated for 9 segments:

- 0 fleet segment displayed an **increasing** (deteriorating) trend,
- 8 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 2020.

- 37 fleet segments may be in balance with their fishing opportunities;
- 1 fleet segment with 8 stocks-at-risk,
- 1 fleet segment with 7 stocks-at-risk,
- 1 fleet segment with 4 stocks-at-risk,
- 2 fleet segments with 3 stocks-at-risk,
- 2 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	45			

#### 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	45	1		

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

RoI was not calculated.

RoFTA was calculated for 50 segments:

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

Trends could be calculated for 50 segments:

- 13 segments displayed an **increasing** trend.
- 37 segments displayed a **decreasing** trend.

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

CR/BER was calculated for 50 segments:

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

Trends could be calculated for 50 segments:

- 10 segments displayed an **increasing** trend,
- 33 segments displayed a **decreasing** trend,
- 7 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 55 segments\*:

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

Trends could be calculated for 55 segments:

- 10 segments displayed an **increasing** trend,
- 3 segments displayed a **decreasing** trend,
- 42 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 2020, 15 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. The mainland and Azores (P3) fleets contained inactive vessels in the VL40XX segment.

The Portuguese inactive fleet accounted for 53.7% of the total number of vessels, 17.5% 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 all 3 categories (#, GT and kW), and thus, out of balance. Apart from the increasing (deteriorating) trend of VL0010, the other length segments displayed no general clear trends.

## **OFR**

#### Sustainable Harvest Indicator (SHI)

Out of 3 fleet segments active in 2020, 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 2 active fleet segments in 2020.

- 2 fleet segments may be out of balance with their fishing opportunities.
- 2 fleet segments with 2 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			

#### 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 3 active fleet segments and RoFTA was calculated for 2 segments:

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

Trends could be calculated for 2 segments.

Both segments displayed a **decreasing** trend.

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

CR/BER was calculated for 2 segments:

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

Trends could be calculated for 2 segments.

Both segments displayed a **decreasing** trend.

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

VUR was calculated for 3 segments:

- 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 **no clear** trend.

#### The Inactive Fleet Indicators

There is no inactive fleet segment in Portuguese fleet in OFR.

#### Synthesis of indicators and trends

For NAO area, based on the STECF indicator estimates for the economic indicators, most fleet segments in the Portuguese fishery are in balance. A general conclusion about the balance or imbalance of the biological indicators with regard to the Portuguese fleet to 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 NAO area.



## **Comparison of indicator values**

Indicator values computed by the EWG 22-15 and those in the fleet report submitted by 31 May 2022 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 and 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 22-15.

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 2018-2021. The CR/BER ratio was estimated for 51 segments subdivided into the mainland fleet (34 segments), the Azores fleet (9 segments), the Madeiran fleet (5 segments) and other regions fleet (3 segments).

There were 53 segments estimated for the EWG 22-15 (2 segments more than in the MS Fleet Report: MBS FPO2440 NGI and NAO HOK1824 P2). A comparison between indicator values in MS Fleet Report and data estimated for EWG 22-15 showed small discrepancies in values which has affected the results for only 2 segments (NAO PGP1218 NGI et NAO PGP1824 NGI, for which the values of the indicator were close to the threshold).

The estimates for the EWG 22-15 showed negative trends for 36 segments. The trends were not interpreted in the MS fleet Report, but the values were calculated for the last 3 years and were greater than 1 for most segments.

### 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 2018-2021. The RoFTA ratio was estimated for 51 segments subdivided into the mainland fleet (34 segments), the Azores fleet (9 segments), the Madeiran fleet (5 segments) and other regions fleet (3 segments).

There were 53 segments estimated for the EWG 22-15 (2 segments more than in the MS Fleet Report: MBS FPO2440 NGI and NAO HOK1824 P2). A comparison between indicator values in MS Fleet Report and data estimated for EWG 22-15 showed significant discrepancies in values in most segments but it did not affect the final results in any fleet segment. In most cases, the values estimated by EWG 22-15 were much higher than those estimated by MS.

The estimates for the EWG 22-15 in most of the fleet segments showed a decreasing trend. The trends were not interpreted in the MS fleet Report, but the values were calculated for the last 3 years and were positive for most segments.

### 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 2018-2021 subdivided into the mainland fleet, the Azores and the Madeiran fleets. The VUR ratio

was estimated for 51 segments subdivided into the mainland fleet (34 segments), the Azores fleet (9 segments), the Madeiran fleet (5 segments) and other regions fleet (3 segments). The VUR assumption was based on max-days-observed.

There were 59 segments estimated for the EWG 21-16 (8 segments more than in the MS Fleet Report). Discrepancies are detected for nearly all segments that could be compared between the EWG 22-15 and MS Fleet Report. The reason for the discrepancies is unknown.

The estimates for the EWG 22-15 did not provide a clear trend for most fleets. In the MS fleet Report, the values were calculated for the last 3 years but the trends were not interpreted.

#### Inactive Fleet Indicator

Inactive vessels have been reported in the Portuguese fleet report as number, GT and kW for years 2017 to 2021. The numbers presented in the fleet report were the same to those computed by the EWG. All the fleet segments were 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.

The values were provided for the last 5 years but the trends were not interpreted. As the numbers were the same as those used by the EWG, apart from the increasing trend of vessel length VL0010 in mainland and Azores, the other length segments displayed no general clear trends.

### **Assessment of fleet report**

EWG notes that the fleet report submitted by Portugal provides sound and comprehensive analysis of balance between fleet capacity and fishing opportunity of all fleet segments and it is generally in line with the Commission Guidelines (COM (2014)545).

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 more or less in balance with its fishing opportunities in the case of all fleet segments. However, as some vulnerabilities are deemed to exist in the segments operating with hooks and lines (HOK), it was proposed that the fleet be adjusted and it is supported by the new action plan presented by the MS.

### **Measures in action plans**

A new action plan is presented due to imbalance observed on vessel use indicators and economic indicators for the fishing fleet operating with hooks, particularly in the case of larger length-class vessels.

In the action plan, a need for adjusting the fleet's capacity is considered, the aim of implementing measures for the permanent cessation of activity are presented and a timetable defining the start of the implementation in the second half of 2022 and complete the decommissioning by the end 2023 are defined.

The fleet capacity will be adjusted by 10 vessels, which will result in a capacity reduction of around 1 000 GT in terms of gross tonnage and 2 700 kW in terms of propulsion power.

The EWG 22-15 is unable to assess the extent to which the measures in the action plan are likely to redress the imbalance in the fleet segments concerned.

### 3.4.19 Romania (ROU)

#### **Overview of indicator findings**

##### Area 37

There were 8 fleet segments in 2020, 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 2020, landings in value have been provided for 6 fleet segment and SHI indicator values were available for 5.

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 1 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 14.29% of the total value of the landings in 2020 provided by MS, and this fleet segment may not be in balance with its fishing opportunities.

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

SAR indicator was available for all the 6 active fleet segments in 2020.

According to the criteria in the 2014 Balance Indicator Guidelines, EWG notes that the 2020 SAR indicator values indicate:

- 6 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	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/Fmsy is calculated and landings are available.

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

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

RoI was calculated for 4 segments:

- 3 segments were *in balance* with their fishing opportunities,
- 1 segment was insufficiently profitable 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, 1 segment displayed a **decreasing** trend,
- 2 segments displayed an **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 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:

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

### The Inactive Fleet Indicators

In 2020, 2 vessel length segments had inactive vessels (VL0006 and VL0612).

The Romanian inactive fleet accounted for 25.7% of the total number of vessels, 4.9% of the total GT and 3.3% of the total 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* and displayed **increasing** (deteriorating) trends. In terms of number, the fleet was found to be *out of balance* and displayed **decreasing** (improving) trend.

The segment with the highest level of inactivity was the VL0612 segment with 21.7% of the number of vessels, 4.3% of the GT and 1.8% of the kW and displayed **increasing** (deteriorating) trends for all 3 categories.

### Synthesis of indicators and trends

Based on biological and economic indicator values for 2020 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 2016-2020 shows a worsening situation. Exceptions exist for fleet segment PG VL0612, where SHI and EDI reveal indications of imbalance.



					Status 2020 according to thresholds and criteria in the 2014 Guidelines											Trends 2016-2020														
					Economic						Vessel use		Inactive			Economic						Inactive								
SR	FT	VL	FS name	N vessels	SAR	SHI	EDI	CR/BER	RoFTA	RoI	NP margin	NVA/FTE	VUR	VUR <sub>20</sub>	#	GT	kw	SHI	EDI	CR/BER	RoFTA	RoI	NP margin	NVA/FTE	VUR	VUR <sub>20</sub>	#	GT	kw	
MBS	PG	VL0006	ROU MBS PG 0006 NGI*	11																										
MBS	PG	VL0612	ROU MBS PG 0612 NGI*	68																										
MBS	PMP	VL0612	ROU MBS PG 0612 NGI*	25																										
MBS	PMP	VL1218	ROU MBS PMP1218 NGI*	21																										
MBS	PMP	VL1824	ROU MBS PMP1218 NGI*	1																										
MBS	PMP	VL2440	ROU MBS PMP2440 NGI*	4																										
MBS	INACTIVE	VL0006	ROU MBS INA0006 NGI	7																										
MBS	INACTIVE	VL0612	ROU MBS INA0612 NGI	38																										
ROU Total				175																										

### Comparison of indicator values

A comparison Indicator values\_computed by the EWG 22-15 and those in the fleet report submitted by 31 May 2022 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 22-15 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 22-15 estimated SAR values for all fleet segments, where all 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 fleet report, the CR/BER ratio has been provided for 6 segments while EWG 22-15 has returned 6 segments grouped in 4 clusters. The comparison between indicator values in MS Fleet Report and data estimated for EWG 22-15 showed small discrepancies in values, which has not affected the overall results.

The trends between the MS annual fleet report and EWG 22-15 for the period 2016-2020 were different. There are discrepancies in values calculated over the period and in the calculation of the trend: in the fleet report, the trend was the comparison between the average value of the period 2016-2019 and the value for 2020. In the MS report, the trend increased only for PG0612 and decreased for all other segments while the EWG assessed an increasing trend for PG0006, a decreasing trend for PMP1218 and no trend for the other two segments.

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

In the MS fleet report, the ROI has been provided for 6 segments while EWG 22-15 has returned 6 segments grouped in 4 clusters. The comparison between indicator values in MS Fleet Report and data estimated for EWG 22-15 showed small discrepancies in values which has not affected the overall results.

The trends between the MS annual fleet report and EWG 22-15 for the period 2016-2020 were different. There are discrepancies in values calculated over the period and in the calculation of the trend: in the fleet report, the trend was the comparison between the average value of the period 2016-2019 and the value for 2020. In the MS report, the trend increased only for PG0612 and decreased for all other segments while the EWG assessed an increasing trend for PG0006, and a decreasing trend for all other segments.

### 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 2016-2020. 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 22-15 for two segments (PMP VL1824 and PMP VL2440). Such discrepancies affected the assessment of the balance/imbalance of those fleet segments. The EWG 22-15 indicator values suggest that the fleets are in balance whereas fleet report indicates that they are out of balance.

The trends between the MS annual fleet report and EWG 22-15 for the period 2016-2020 were different. There are discrepancies in values calculated over the period and in the calculation of the trend: in the fleet report, the trend was the comparison between the average value of the period 2016-2019 and the value for 2020.

Segments for VUR trend	Increasing	No trend	Decreasing
EWG 22-15	1	4	1
MS Fleet Report	3		3

### ***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 out of balance. Although EWG 22-15 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 those stocks considered at risk.

The report presents an action plan which is similar to that presented with the fleet report for 2020 submitted in 2021. The current action plan includes all fleet segments assessed by the Member State to be out of balance with fishing opportunities.

### ***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 2021.

The current Action plan proposes economic and technical measures for six fleet segments and indicates a number of measures that have been selected for each fleet segment. These measures are broad-ranging and their objectives and targets are unclear.

The time frame for the implementation of the action plan extends to 2027. Some measures are already being implemented by Romania in accordance with the action plan from 2021.

The EWG 22-15 is unable to assess the extent to which the measures in the action plan are likely to redress the imbalance in the fleet segments concerned.

### 3.4.20 Slovenia (SVN)

#### **Overview of indicator findings**

##### Area 37

There were 17 fleet segments in 2020, of which 13 were active. Of the 13 active segments, landings and economic data were provided aggregated for 3 clusters (aggregated fleet segments).

##### Sustainable Harvest Indicator (SHI)

Out of 3 aggregated segments in 2020, SHI indicator values were available for all 3.

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

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

SAR indicator was available for all the 3 active fleet segments in 2020.

According to the criteria in the 2014 Balance Indicator Guidelines, EWG 22-15 notes that the 2020 SAR indicator values indicate:

- All the 3 active aggregated 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	2	1		

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

RoI was not calculated as value of quota and other fishing rights is not available.

RoFTA was calculated for 3 segments:

- All 3 segments were *in balance* with their fishing opportunities.

Trends were calculated for 3 segments:

- All 3 segments displayed an **increasing** trend.

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

CR/BER was calculated for 3 segments:

- All 3 segment were *in balance* with their fishing opportunities,

Trends were calculated for 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>)

VUR was calculated for the 13 active fleet segments:

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

Trends were calculated for 7 segments:

- 4 segments displayed an **increasing** trend,
- 3 segments displayed **no clear** trend.

#### The Inactive Fleet Indicators

In 2020, 4 vessel length segments had inactive vessels (VL0006, VL0612, VL1218 and VL1824). The Slovenian inactive fleet accounted for 48.5% of the total number of vessels, 48.5% of the total GT and 42.4% of the total kW. At the national level, inactive vessels accounted for more than 20% (#, GT and KW) and thus *out of balance*. However, displayed a **decreasing** trend for number and KW, but **increasing** trend for GT.

The segments with the highest level of inactivity were the VL0006 segment with 25% of the number of vessels and VL0612 segment with 23.5% of the kW.

#### Synthesis of indicators and trends

Based on indicator values for 2020 and trends over 2016-2020 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. Regarding biological indicators, SHI indicator values cannot be used meaningfully to assess the balance or imbalance and no stocks at risk were found.

The indicator values are largely in line with the assessment of balance in the Member States' fleet report submitted in 2022, 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.

						Status 2020 according to thresholds and criteria in the 2014 Guidelines											Trends 2016-2020														
						Biological			Economic					Vessel use			Inactive		Economic						Inactive						
SR	FT	VL	FS name	N vessel s		SAR	SHI	EDI	CR/BER	RoFTA	RoI	NP margin	NVA/FTE	VUR <sub>0</sub>	VUR <sub>22</sub>	#	GT	kW	SHI	EDI	CR/BER	RoFTA	RoI	NP/CR	NVA/FTE	VUR <sub>0</sub>	VUR <sub>22</sub>	#	GT	kW	
MBS	DFN	VL0006	SVN MBS DFN0006 NGI*	19		in balance									out of balance																
MBS	FPO	VL0006	SVN MBS DFN0006 NGI*	2											out of balance																
MBS	PGP	VL0006	SVN MBS DFN0006 NGI*	1											out of balance																
MBS	PMP	VL0006	SVN MBS DFN0006 NGI*	1											out of balance																
MBS	DFN	VL0612	SVN MBS DFN0612 NGI*	25		in balance									out of balance																
MBS	DFN	VL1218	SVN MBS DFN0612 NGI*	2											out of balance																
MBS	FPO	VL0612	SVN MBS DFN0612 NGI*	1											out of balance																
MBS	PGP	VL0612	SVN MBS DFN0612 NGI*	1											out of balance																
MBS	PMP	VL0612	SVN MBS DFN0612 NGI*	1											out of balance																
MBS	PMP	VL1218	SVN MBS DFN0612 NGI*	1											out of balance																
MBS	HOK	VL0612	SVN MBS DFN0612 NGI*	7											out of balance																
MBS	DTS	VL0612	SVN MBS DTS1218 NGI*	3											out of balance																
MBS	DTS	VL1218	SVN MBS DTS1218 NGI*	6		in balance									out of balance																
MBS	INACTIVE	VL0006	SVN MBS INA0006 NGI	34																											
MBS	INACTIVE	VL0612	SVN MBS INA0612 NGI	25																											
MBS	INACTIVE	VL1218	SVN MBS INA1218 NGI	6																											
MBS	INACTIVE	VL1824	SVN MBS INA1824 NGI	1																											
SVN Total				136																											

### Comparison of indicator values

A comparison Indicator values computed by the EWG 22-15 and those in the fleet report submitted by 31 May 2022 are given in Annex II. Points of note for each indicator are listed below. MS has calculated technical, biological and economic indicators for DFN and DTS segments. The MS fleet report states that considering the MS reservations regarding the use of the indicators, these are not calculated for the FPO, HOK, PGP and PMP segments, since they would show a totally distorted picture on the balance of these segments due to the extremely low landed quantities.

### 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%. Also the EWG 22-15 could not compute a meaningful estimate SHI for any fleet segment.

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. As the EWG 22-15 could not compute a meaningful estimate SHI for any fleet segment (<40%) trend comparisons with the fleet report was not possible.

### Stocks at Risk Indicator (SAR)

The EWG 22-15 calculated SAR for 3 aggregated 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 22-15 and MS fleet report were the same (in balance).

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

The long term viability analysis of CR/BER was computed by EWG 22-15 for 3 aggregated fleet segments. MS reported short-term profitability for two clusters (aggregated fleet segments: DFN 0612 and DTS 1218) and one fleet segment (DFN 0006). 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”.

As a result of the different estimation methodology used (long term/short term), the comparison with CR/BER reported in the MS annual fleet report revealed distinct outputs. However, the result was the same in terms of balance.

The indicator trends were not explicitly commented on the MS fleet report, but time series from 2016 was available to 5 fleet segments. EWG 22-15 trends were similar to MS fleet report trends for comparable aggregated segments (DFN 0612 and DTS 1218).

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

For 3 aggregated fleet segments the RoFTA was calculated by EWG 22-15. The comparison with RoFTA reported in the MS annual fleet report revealed similar outputs between clustered segments. MS reported RoFTA for two clusters (aggregated fleet segments: DFN 0612 and DTS 1218) and one fleet segments (DFN 0006). 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 aggregated fleet segments.

Indicator trends were not explicitly commented in the MS fleet report, but time series from 2016 was available for 2 fleet segments and 2 aggregated fleet segments. EWG 22-15 trends were similar to MS fleet report trends.

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

The VUR was calculated by EWG 22-15 for 13 fleet segments. The VUR was also reported for de same fleet segments in the MS fleet report.

Discrepancy in the indicator outputs was found in 7 of the fleet segments (segments with 1 or 2 vessels).

Indicator trends were not explicitly commented in the MS fleet report, but time series from 2015 was available for 5 fleet segments. Both EWG 22-15 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 22-15 revealed the same outputs for all segments.

Indicator trends were not explicitly commented in the MS fleet report, but time series from 2008 was available for the 4 inactive segments and for the entire Slovenia national inactive fleet. EWG 22-15 trends and MS fleet report trends showed a similar pattern for all inactive segments.

### ***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 significant 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.

The fleet report provides 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.

As already stated in previous EWG reports, MS does not follow the Guidelines when computing a value for the SAR.

### ***Measures in action plans***

No new or revised action plans were proposed.

#### *3.4.21 Spain (ESP)*

### ***Overview of indicator findings***

There were 104 fleet segments in 2020, of which 86 were active. Of the 86 active segments, landings data were provided for 86 fleet segments and economic data aggregated by 57 fleet segments. Results are presented by main supra-region below.

#### Area 27

There were 59 fleet segments in 2020, of which 52 were active. Of the 52 active segments, landings data were provided for 52 fleet segments and economic data were available for 32 aggregated fleet segments.

#### Sustainable Harvest Indicator (SHI)

Out of 49 active fleet segments in 2020, SHI indicator values were available for 49.

According to the criteria in the 2014 Commission guidelines, the SHI indicator values for 37 fleet segments cannot be used meaningfully to assess the balance or imbalance because the indicator values are based on stocks that comprise less than 40% of the total value of landings by those fleet segments.

The 12 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 51.64% of the total value of the landings in 2020 provided by MS, and were as follows:

- 2 fleet segments may not be in balance with their fishing opportunities,
- 10 fleet segments may be in balance with their fishing opportunities.

Trends were available for the 11 fleet segments:

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

#### Stocks at Risk Indicator (SAR)

SAR indicator was available for 52 fleet segments in 2020. According to the criteria in the 2014 Balance Indicator Guidelines, EWG 22-15 notes that the 2020 SAR indicator values indicate:

- 32 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,
- 1 fleet segment with 5 stocks-at-risk may not be in balance with their fishing opportunities,
- 2 fleet segments with 4 stocks-at-risk may not be in balance with their fishing opportunities,

- 6 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	47			

#### 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	47	2		

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

RoI was calculated for 7 segments:

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

Trends could be calculated for 3 segments:

- All 3 segments displayed a **decreasing** trend.

RoFTA was calculated for 32 segments:

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

Trends could be calculated for 24 segments:

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

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

CR/BER was calculated for 32 segments:

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

Trends could be calculated for 24 segments:



- 5 segments displayed an **increasing** trend,
- 17 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\*:

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

Trends could be calculated for 39 segments:

- 1 segments displayed an **increasing** trend,
- 2 segment displayed a **decreasing** trend,
- 24 segments displayed **no clear** trend,
- 12 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".



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

The 8 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 56.20% of the total value of the landings in 2020 provided by MS, and were as follows:

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

Trends were available for the 8 fleet segments:

- 8 fleet segments displayed a **decreasing** (improving) trend.

### Stocks at Risk Indicator (SAR)

SAR indicator was available for 28 active fleet segments in 2020. According to the criteria in the 2014 Balance Indicator Guidelines, EWG 22-15 notes that the 2020 SAR indicator values indicate:

- 12 fleet segments may be in balance with their fishing opportunities,
- 2 fleet segments with 3 stocks-at-risk may not be in balance with their fishing opportunities,
- 4 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 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	23			

### 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	19	1	2	1

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

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:

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

Trends could be calculated for 15 segments:

- 6 segments displayed an **increasing** trend,
- 9 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 the 28 segments\*:

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

Trends were calculated for 25 segments:

- 6 segments displayed a **decreasing** trend,
- 16 segments displayed **no clear** trend,
- 3 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.

#### 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".



- 2 fleet segments with 2 stocks-at-risk may not be in balance with their fishing opportunities,
- 2 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 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	6			

#### Economic Dependency Indicator (EDI)

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

	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 5 segments:

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

Trends could be calculated for 3 segments:

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

RoFTA was calculated for 6 segments:

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

Trends could be calculated for 5 segments:

- All 5 segments displayed a **decreasing** trend.

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

CR/BER was calculated for 6 segments:

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

Trends could be calculated for 5 segments:

- 4 segments displayed a **decreasing** trend,
- 1 segment displayed **no clear** trend.



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 52% of the fleet segments maybe in balance with their fishing opportunities (meaning that no SAR were identified). The trend in SHI shows an improving situation (decreasing trend in SHI) for most of the (meaningful) segments.

The economic data indicate that 78% of fleet segments are in balance with their fishing opportunities, although a number of these are indicating a deteriorating trend.

VUR data indicate that 27% of fleet segments are out of balance with their fishing opportunities. Only one segment of 86 (ESP NAO PS 1218 IC \*) indicate an improving trend and 10 segments show a declining trend. For all other segments there is no clear trend in the 2016 – 2020 data.

The above observations are largely in line with the assessment of balance in the Member States' fleet report submitted in 2022, 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 of indicator values computed by the EWG 22-15 and those in the fleet report submitted by 31 May 2022 are given in Annex II. Points of note for each indicator are listed below.

#### Sustainable Harvest Indicator (SHI)

SHI indicator value for 55 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 23 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 DFN1824 NGI\*, ESP NAO DTS2440 NGI, ESP NAO DTS40XX NGI, ESP NAO HOK1012 IC \*, ESP NAO PS 1824 NGI\*) the conclusions regarding the balance or imbalance of those fleet segments are contradictory. For some segments (e.g. ESP NAO DFN1824 NGI\*, ESP NAO HOK1012 IC \*) the assessment by EWG22-15 is "in balance", while the MS fleet report interpretation is "out of balance" and for other segments (e.g. ESP NAO DTS40XX 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 2020. The MS reported SAR (at least 1) in 35 fleet segments, which is a lower number compared to the results of EWG22-15, which identified 41 fleet segments containing at least 1 SAR. The results of EWG22-15 identified in several cases (e.g. ESP NAO PMP0010 IC \*, ESP NAO DFN1218 NGI) more SAR in a fleet segment compared to the MS fleet report, but there were also cases (e.g. ESP NAO DTS1824 NGI, ESP MBS PS 1824 NGI) when the MS fleet report identified more SAR in a fleet segment compared to the results of EWG22-15.

#### 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 22-15.

45 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 22-15 revealed similar outputs. However no comparison could be made for ESP OFR PS 40XX NGI fleet segment calculated by the EWG 21-16 but which was not listed in the fleet report.

44 fleet segments were in balance while 13 were out of balance.



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

Comparison of the VUR data reported in the MS annual fleet report and those estimated in the framework of EWG 22-15 revealed similar outputs for most indicator values.

In 3 fleet segments of 86 reported, however, the MS report differed from the EWG report as to whether segments were in or out of balance. The MS calculated two segments (ESP MBS PS 2440 NGI\* and ESP NAO PS 1824 NGI\*) to be out of balance while the EWG estimated them to be in balance. The MS calculated ESP NAO FPO1218 NGI segment to be in balance, however the EWG found it to be out of balance.

Regarding VUR220 comparison no discrepancies were found between the MS annual fleet report and those estimated in the framework of EWG 22-15.

### Inactive Fleet Indicator

The comparison between Inactive vessels indicator reported in the MS annual fleet report and those estimated in the framework of EWG 22-15 revealed similar outputs for most values.

In two fleet segments (ESP MBS INA0006 NGI and ESP NAO INA0010 IC) 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 two 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 89 fleet segments in the Spanish fleet in 2020, 12 of which were stated to be out of balance, and the remaining 77 segments were in balance. There was still a discrepancy between the MS and EWG 22-15 in the number of fleet segments that are flagged by at least one SAR.

Issues raised by the EWG 21-16 in relation to last year's fleet report (large discrepancies in the identification of SAR between the MS and EWG21-16) were addressed in the 2022 fleet report by Spain. Also, the somewhat vague periods of allocation in last year's action plan ("2 years") were replaced by clearly defined time periods (e.g. "2022-2024") in the action plan accompanying the report submitted in 2022.

### **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 and targeted 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) and increase the value of economic indicators (CR/BER  $\geq$  1 and ROFTA positive and above long-term interest rates (TRP)).

The time frame for the implementation of this plan will be from 2021 to 2023 and for some segments in the Mediterranean from 2022 to 2024.

The planned measures will be based on the activity of selected fleet segments and will include effort reduction, resource recovery and management measures.

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  $< 1$ , increasing CR/BER  $\geq 1$  and ROFTA positive and above TRP) and can therefore be measured and evaluated. The timeframe for the measures taken is also determined.

Nevertheless, the EWG 22-15 is unable to assess the extent to which the measures in the action plan are likely to deliver the stated objectives or the extent to which they are likely to contribute to redressing the imbalance in the fleet segments concerned.

### 3.4.22 Sweden (SWE)

#### **Overview of indicator findings**

##### Area 27

There were 27 fleet segments in 2020, of which 22 were active. Of the 22 active segments, landings data were provided for all segments and economic data for 6 aggregate segments.

##### Sustainable Harvest Indicator (SHI)

Out of fleet segments active in 2020, 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 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 17 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 94.25% of the total value of the landings in 2020 provided by MS, and were as follows

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

Trends could be calculated for 16 fleet segments:

- 3 fleet segments displayed an **increasing** (deteriorating) trend,
- 2 fleet segments displayed a **decreasing** (improving) trend,
- 11 fleet segments displayed **no clear** trend.

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

SAR indicator was available for all the 22 active fleet segments in 2020.

According to the criteria in the 2014 Balance Indicator Guidelines, EWG 17-08 notes that the 2020 SAR indicator values indicate:

- 14 fleet segments may be in balance with their fishing opportunities
- 1 fleet segment with 3 stocks-at-risk
- 2 fleet segment with 2 stocks-at-risk
- 5 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	19			

#### 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	4	2	2

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

RoI was not calculated.

RoFTA was calculated for 6 segments:

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

Trends were calculated for 6 segments:

- 2 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 6 segments:

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

Trends were calculated for 6 segments:

- 2 segments displayed an **increasing** trend,
- 3 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 18 segments\*:

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

Trends were calculated for 17 segments:

- All segments displayed **no clear** trend.

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



### ***Comparison of indicator values***

The biological indicator values in the Swedish fleet report for 2021 relate to the period 2009-2019 and are those given in the report of the EWG 21-16 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 21-16 and the EWG 22-15. Hence a direct comparison between biological indicator values used by the Member State and those computed by EWG 22-15 could not be made.

A comparison between the indicator values computed by the EWG 22-15 and those in the fleet report submitted by 31 May 2022 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 according to STECF EWG 21-16 report for 2019.

Therefore, a comparison with values from EWG 22-15 for 2020 was not possible.

#### Stocks at Risk Indicator (SAR)

In the MS annual fleet report the SAR has been provided according to STECF EWG 21-16 report for 2019.

Therefore, a comparison with values from EWG 22-15 for 2020 is not possible.

#### 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 22-15 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 22-15 and named DFN and DTS by vessel length group. So the data were comparable for all six clusters: SWE NAO DFN0010 NGI\* (corresponding to Passive gear < 10 m in the MS fleet report), SWE NAO DFN1012 NGI\* and SWE NAO DFN1218 NGI\* (Passive gear ≥ 10 m in the MS fleet report), SWE NAO DTS1012 NGI\* (Active gear < 12 m in the MS fleet report), SWE NAO DTS1218 NGI\* (Active gear 12 – < 18 m in the MS fleet report), SWE NAO DTS1824 NGI\* (Active gear 18 – < 24 m in the MS fleet report) and SWE NAO DTS2440 NGI\* (Active gear ≥ 24 m in the MS fleet report).

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 22-15 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 (for 7 segments identified by MS for 2020).

A discrepancy has been observed in the calculation of VUR between the MS annual fleet report and that of the estimation of the EWG 22-15 for the year 2020. The status in the EWG 22-15 estimation was "in balance" for SWE NAO DTS1824 NGI but the MS annual report indicated "out of balance". On the other hand, VUR value for aggregate segment 'Passive gear ≥ 12 m' (corresponding to SWE

NAO DTS1012 NGI\*) is over threshold and “in balance”, but according to the estimation of the EWG 22-15 is under 70% threshold and may be “out of balance”.

The difference could be due to different input data and fact that MS presented aggregated data for 7 segments in 2020, while EWG 22-15 calculated VUR for 22 segments according to DCF data provided by MS.

Indicator trends was provided for the period 2019-2021 in the fleet report while the EWG 22-15 comments on the period 2016-2020. No comparison was possible.

#### Inactive Fleet Indicator

In the MS fleet report the inactive fleet indicator values were presented for two length classes only (<12m and >12m). The EWG was able to compare the values for 2020 by aggregating values according to such length groups and the results were similar.

The EWG 22-15 calculated indicator trends for only one segment for which the trends observed in the MS annual fleet report was the same (improving).

#### **Assessment of fleet report**

The fleet report submitted by Sweden provides an 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. For the above reasons, the Swedish fleet report is not strictly in line with the Commission guidelines COM(2014) 545.

MS considers that the critical indicator levels for small scale passive gear segments should not necessarily be interpreted as overcapacity taking into consideration these vessels are working part-time in fisheries and have a small share in landings.

The Swedish fleet report for 2021 concludes that there is imbalance in some segments. MS action plan submitted in 2021 is still ongoing and includes measures for reducing identified overcapacity among vessels previously targeting cod in the Baltic Sea.

The plan proposed measures to curb this fleet capacity, in the form of support for permanent cessation of fishing activities for 17 vessels. Based on their fishing activity and the extent to which they were economically dependent on cod fishing, 19 vessels were considered eligible for the proposed measure, according to annual report submitted by MS in 2022.

#### **Measures in action plans**

No new or revised action plans were proposed by MS in 2022.

MS reported on the progress in relation to action plan submitted in 2021 concerning vessels targeting cod in the Baltic Sea. According to the action plan, effects of removal of mentioned vessels (approximately 2% of the tonnage and kW capacity of the Swedish fleet) should take effect at latest by 2023.

### 3.5 Overview of Action Plans

In response to Task 2e of the Terms of reference, Table 3.5.1. summarises for each Member State, the current status of Action Plans submitted with the fleet reports submitted in 2022 in relation to Action Plans already included or identified as on-going in the fleet reports submitted in 2021.

Table 3.5.1 Summary of action plans

MEMBER STATE	Year*	Action plan presented?	Status	Appropriately targeted? **	Timeframe described	Tools described	EWG comments
Belgium	2021	No	NA	NA	NA	NA	EWG 21-16 comments; The MS considered all segments to be in balance. No action plan presented.
Belgium	2022	No	NA	NA	NA	NA	The MS considered all segments to be in balance. No action plan presented.
Bulgaria	2021	yes	new	yes	yes	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.
Bulgaria	2022	yes	update	yes	yes	yes	The updated action plan (2020) is partly targeted because there is no information about the share of capacity that will be reduced. Two new measures were added to the AP and the information for each fleet segment was updated. However, it is still not clear how the proposed measures will improve the balance of the fleet.
Cyprus	2021	yes	Update	yes	yes	yes	Partial of only some segments. The EWG could not assess if the actions proposed will influence the balance.
Cyprus	2022	yes	Update	yes	yes	yes	An action plan that accompanied with the 2020 fleet report was reviewed by MS. A similar action plan was applied for the DTS VL2440 fleet segment. The measure proposed is the permanent cessation of fishing activities for two trawlers from a segment total of five trawlers on a voluntary basis or with an established restriction on the trawl net's mesh sizes. The time frame is for two years without specific dates.
Croatia	2021	Yes	Update	Yes	Yes	Yes	Objectives not clear, and no quantitative evaluation and timeframe. The EWG could not assess if the actions proposed will influence the balance.
Croatia	2022	Yes	Updated and Strengthened	Yes	Yes	Yes	The action plan clearly sets out the timeframe and the objectives/targets. The direct outcome of the measures in the AP is not quantifiable.
Denmark	2021	no	-	-	-	-	The MS considers its management system to be well functioning in order to secure a balance.
Denmark	2022	yes	new	yes	yes	yes	Action Plan clear, targeted and limited in time (2022-2023): it provides a detailed plan for Baltic Sea and adjustments to the fleet structure with regard to mitigate the negative effects of Brexit (without precision on this second point). Both terminated by the end of 2023
Estonia	2022	no	/	/	/	/	No action plan proposed by MS. The MS considers its management system to be adequate in order to ensure that the fishing fleet to be in balance with fishing opportunities, with no identified structural overcapacity.
Finland	2022	no	/	/	/	/	No action plan proposed by MS. The MS considers its fishing fleet to be in balance with fishing opportunities, with no identified structural overcapacity.
France	2021	yes	update	yes	yes	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.
France	2022	yes	update	yes	yes	yes	The AP (2020) was updated with five new segments, and the timeframe was extended to 2023. The length class for one segment was changed. The implementation and progress by measure and segment of the previous AP is provided in Annex 3 of the fleet report submitted in 2022.
Germany	2021	yes	Update	yes	yes	yes	Describes the targets measures and timeframes to be used.
Germany	2022	yes	Update	yes	yes	yes	The updated 2021 action plan proposes specific measures for eight fleet segments which operate in the Baltic Sea region. AP presents a wide range of measures of both a general type applicable for all fleets, as well as specific type to those fleet segments identified as being out of balance. Some of measures are as an ongoing basis from 2015. The measure for permanent cessation of fishing activities is applicable to the 2021-2022 period. In 2022, a provided action plan required the fleet reduce by TM VL2440 segment due to the implementation of a permanent cessation measure.
Greece	2022	no	/	/	/	/	MS considers that certain fleet segments are not in balance with their fishing opportunities. An Action plan is in preparation but was not submitted with the annual fleet report. There is no clear time plan provided by MS.
Ireland	2021	No	-	-	-	-	The MS considers that structural imbalance does not exist, so no action plan is proposed.
Ireland	2022	No	-	-	-	-	Ireland, based on the Irish Fleet Report 2021, considers that structural imbalance does not exist in any of its fleet segments and no action plan is proposed. The Irish view is that the imbalance identified in some fleets in the 2016 report is due to a difference in the rate of interest used in the calculation of the indicators.

MEMBER STATE	Year*	Action plan presented?	Status	Appropriately targeted? **	Timeframe described	Tools described	EWG comments
Italy	2021	Yes	Update	Partly	Timeframe spe	Yes	EWG 21-16 comments; No comments from the EWG.
Italy	2022	Yes	Update	No fleet segments mentioned	Timeframe spe	Partly	Updated from at least 2017. Objectives are not specifically targeted at the fleet segments that are not in balance. The action plan describes several measures to be taken to reduce fishing mortality. Of these, only temporary closure periods are explicitly described. The other measures are mostly unfinalised and have not been implemented yet.
Latvia	2021	No	-	-	-	-	Action plan submitted with 2019 fleet report. Timeframe: within the programming period 2014-2020 (with n+ 3 rule). In a case of unavoidable legal and technical constrains or limitations the available measures under next programming period 2021-2027 will be used. The EWG could not assess if the actions proposed will influence the balance.
Latvia	2022	No	-	-	-	-	Ongoing AP provided with 2019 fleet report. MS implemented measure for reducing the capacity in fleet segment DFN 2440 operating in the Baltic Sea through permanent withdrawal from fishing activity of a number of vessels, which were involved in cod fishery in 2014-2018.
Lithuania	2021	Yes	Update	Yes	Yes	Yes	Timeframe: 2021-2023. Update of AP provided with 2019 fleet report. 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.
Lithuania	2022	No	-	-	-	-	Ongoing AP provided with 2020 fleet report. Timeframe: 2021-2023. Two types of measures targeting fleet segments NAO DFN 1012 and NAO DTS 2440 operating in the Baltic Sea - a system of transferable fishing concessions and a scrapping scheme with public compensation for permanent cessation of fishing for reducing overcapacity. No action plan for the distant water fleet segment (OFR TM 40XX).
Malta	2021	yes	resubmitted	no	no	no	Resubmitted the 2016 action plan. More a statement of intent to improve monitoring. The EWG could not assess if the actions proposed will influence the balance.
Malta	2022	yes	resubmitted	no	no	no	Resubmitted the 2016 action plan. No changes and new information about the implementation of the AP submitted in the previous years.
Netherlands	2021	No	-	-	-	-	The MS considers its management system to be well functioning in order to secure a balance
Netherlands	2022	No	-	-	-	-	No rationale for not presenting AP is elaborated in the fleet report.
Poland	2021	yes	Update	yes	yes	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.
Poland	2022	yes	Update	yes	yes	yes	An action plan accompanied with 2020 fleet report was reviewed by MS. An action plan is proposed for eight of the fishing fleet segments which operated in the Baltic Sea region. The action plan includes three main measures which were specified for each segments identified by MS that were out of balance. A time frame is for three to five years without specific dates.
Portugal	2021	no	-	-	-	-	The MS considers its management system to be well functioning in order to secure a balance.
Portugal	2022	yes	new	yes	yes	yes	Action Plan clear, targeted and limited in time (2022-2023): it targets the fleet HOK > 12m
Romania	2021	yes	update	yes	yes	yes	Seems an update of previous ones. The EWG could not assess if the actions proposed will influence the balance.
Romania	2022	yes	update	yes	yes	yes	Action Plan from 2020 and extended to 2027. The AP targets all 6 fleet segments but the objectives are unclear. The lack of relevant information means that the EWG is unable to assess of the potential effects of the proposed measures
Slovenia	2021	No	-	-	-	-	The MS considered that all fleet segments were in balance.
Slovenia	2022	No	-	-	-	-	The MS considers that all fleet segments are in balance. The EWG does not concur with the assessment. It appears that socio-economic objectives (employment) may have priority over stock conservation
Spain	2021	Yes	Update	Yes	Yes	Yes	EWG 21-16 comments; Objectives well defined but the timeframe not specified. The EWG could not assess if the actions proposed will influence the balance.
Spain	2022	Yes	Update	Yes	Yes	Yes	Updated from 2021. The objectives are clearly defined and the measures to achieve them are described. The objectives are appropriately targeted to the fleet segments which are not in balance. The AP implies that the targets are to be met by the time the AP expires, but it is not made explicit. Some parts of the AP set for 2021-2023 were met in 2022 and can be considered successful.
Sweden	2021	yes	new	yes	yes	yes	The EWG could not assess if the actions proposed will influence the balance.
Sweden	2022	no	/	/	/	/	AP 2021 is valid until 2023. MS has implemented a measure for reducing overcapacity in fleet targeting cod in the Baltic Sea. MS reported on the progress of AP 2021 implementation in the annual fleet report in 2022.

\* year relates to the year of the MS's fleet report that included the AP

\*\*Appropriately targeted? - Are the measures in the AP specifically aimed at redressing the imbalance in the the fleet segments concerned?



## **4 TASK 3- FLEET SEGMENTS IN THE OUTERMOST REGIONS**

### **4.1 Introduction**

EWG 22-15 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."*

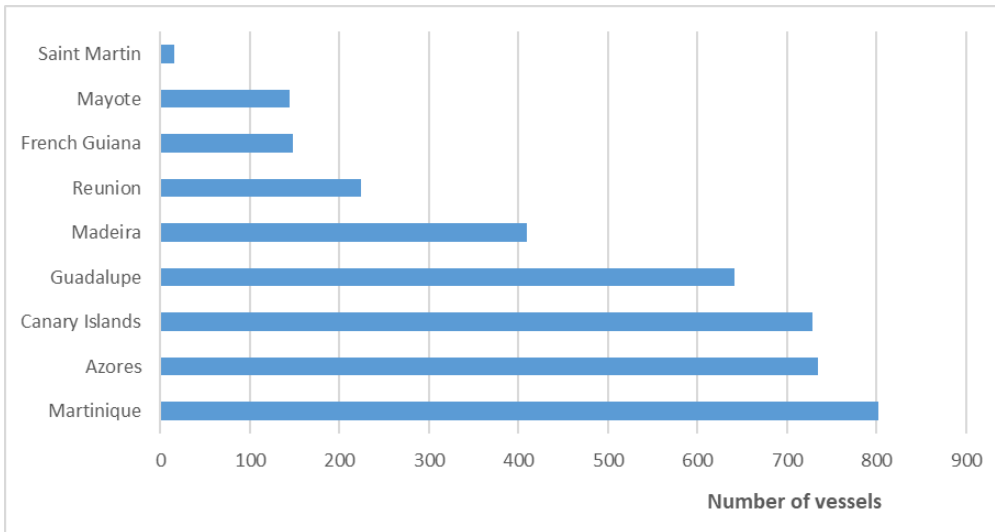
Since 2019 (STECF 19-13) MS fleets from the OMRs could be distinguished from their mainland fleets by the introduction of geographical indicator (Geo-indicator) in the DCF fleet economic data call. For Spain and France consistent historical data for OMR regions only can be obtained from 2017 (four years of time series). Furthermore, as explained in the sections below, there are 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 2020 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 22-15 chose to compute also the VUR<sub>220</sub> indicator in cases where maximum number of days at sea were not provided by Member States and VUR could not be computed.

### **4.2 OMR fleets at a glance**

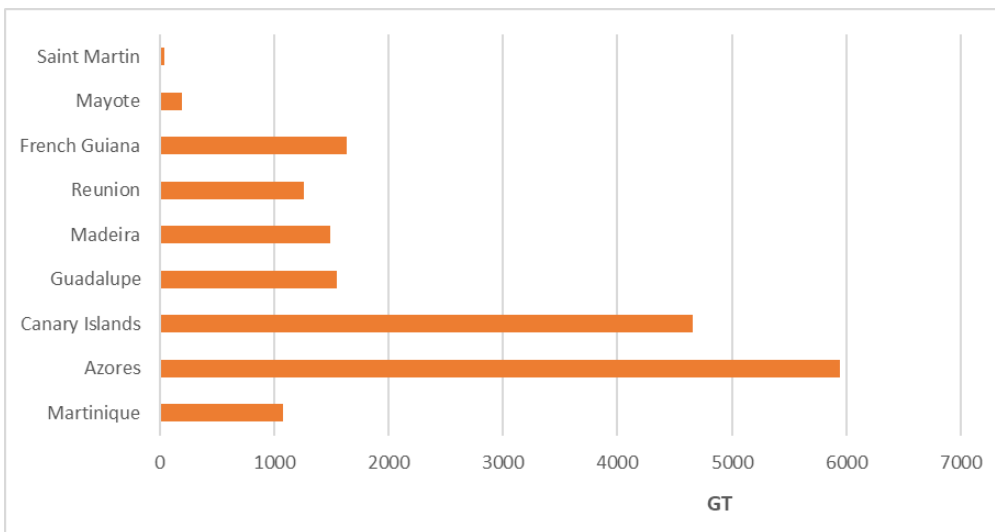
The EU OMR fleet totaled 3 849 vessels in 2020. The French OMR fleet was the most numerous, accounting for 51% of all reported vessels. The Portuguese and Spanish fleets represented 30% and 19% respectively.



### Number of vessels for the OMRs

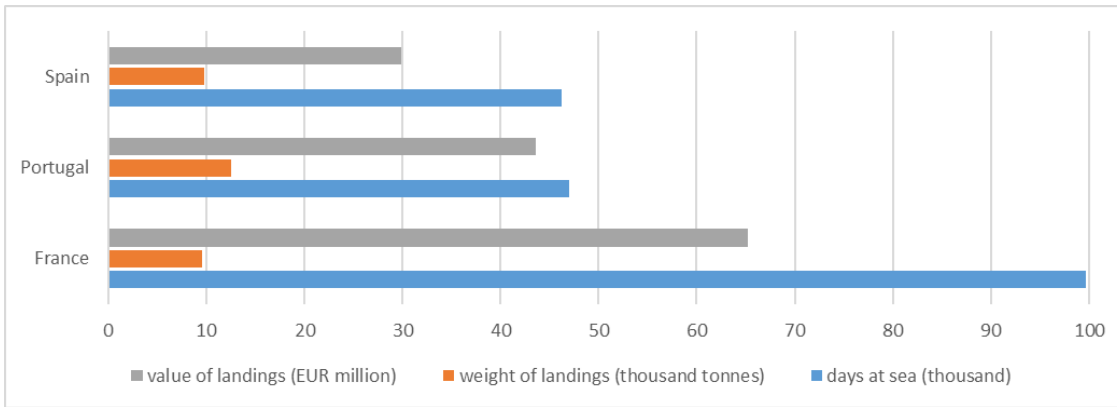
Martinique, with 802 vessels, was the largest OMR fleet (by number), followed by Azores (735), Canary Islands (728), Guadelupe (641), Madeira (409) La Reunion (224), French Guiana (148), Mayotte (144) and Saint Martin (18).

About 93% of the vessels in OMR belong to the small-scale coastal fleet (SSCF).



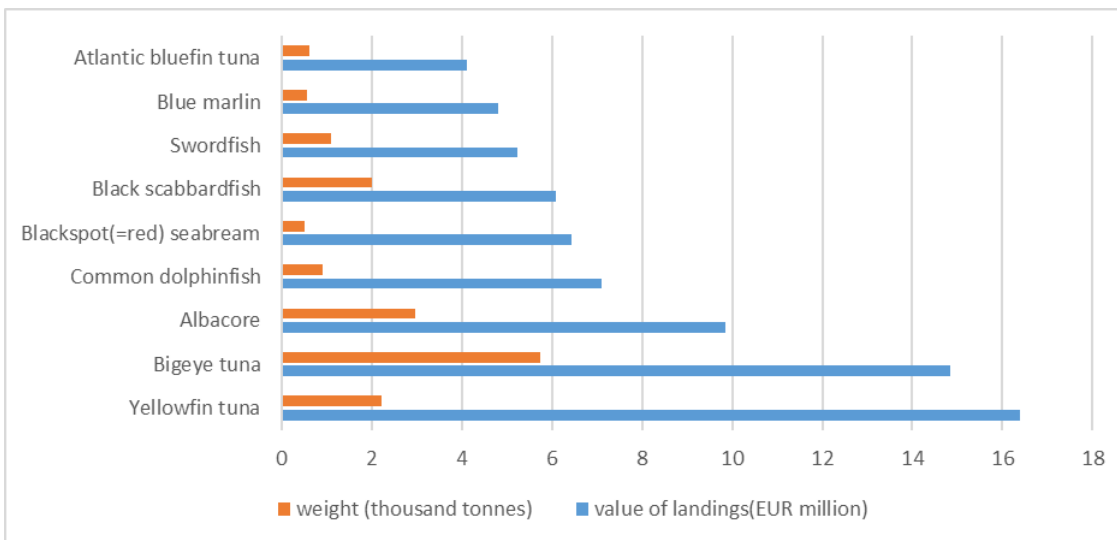
### Gross tonnage (GT) of the OMRs

If one compares the number of vessels with GT it can be concluded that Martinique is mainly composed by small scale fleet (20% in number of vessels and 6% in GT). In the opposite direction Azores, Canary Islands and French Guiana reveals to have fleet segments with bigger vessels with 33% and 26% and 9% of the total tonnage respectively.



### OMR Effort

The OMR fleet spent 193 thousand days at sea in 2020, to land approximately 32 thousand tonnes of seafood, valued in EUR 138 million.



### Most representative species

Tuna and other large pelagic species represent the major part of the landings with Yellowfin tuna, Bigeye tuna and Albacore the largest components by value of landings, followed by Common dolphinfish, Blackspot(=red) seabream and Black scabbardfish.




The Azores, Canary Islands and Guadeloupe fleets were the most important in terms of landing value (with landed value of 23.9%, 21.6% and 15.9% respectively), followed by Martinique (13.1%), Reunion (11.4%), Madeira (7.6%), Mayotte (3.6%) and French Guyana (3.1%)

The 2022 Annual Economic Report (STECF 22-06) will provide more details on the OMR fleets and their economic performance.

### 4.3 French Outermost Regions

The data provided for the five French OMRs (Saint Martin did not present any fleet segment), uses the geographical indicator to distinguish the OMR fleets and the balance indicators associated with those fleets (Table 4.3.1).

Table 4.3.1 - List of Fleet Segments in French Outermost Regions and status with respect to available balance indicators in 2020.

Out of balance (  ), in balance (  ) with no information (  )

Overseas territory	Fleet segment	Fishing Technique	Vessel Length	Number of vessels	Status 2020 according to thresholds and criteria in the 2014 Guidelines						
					SAR	SHI	CR/BER	RoFTA	VUR	VUR <sub>220</sub>	
French Guiana	FRA OFR DFN0010 GF *	DFN	VL0010	38							
		FPO	VL0010	1							
	FRA OFR DFN1012 GF *	DFN	VL1012	57							
	FRA OFR DTS1824 GF	DTS	VL1824	9							
Guadeloupe	FRA OFR DFN0010 GP	DFN	VL0010	86							
		FPO	VL0010	93							
	FRA OFR HOK0010 GP	HOK	VL0010	101							
		PGO	VL0010	2							
	FRA OFR PGP0010 GP *	PGP	VL0010	174							
		FRA OFR PGP1012 GP *	DFN	VL1012	3						
			FPO	VL1012	3						
			PGP	VL1012	2						
FRA OFR HOK1012 GP *	HOK	VL1012	7								
	FRA OFR PS 0010 GP	PS	VL0010	17							
Martinique	FRA OFR DFN0010 MQ	DFN	VL0010	49							
		FPO	VL0010	123							
	FRA OFR HOK0010 MQ	HOK	VL0010	121							
		FRA OFR PGP0010 MQ *	DFN	VL1012	1						
	FPO		VL1218	1							
	FPO		VL1824	1							
	PGP		VL0010	168							
	FRA OFR HOK1012 MQ *	PS	VL0010	1							
HOK		VL1012	11								
FRA OFR PGO0010 MQ *	PGO	VL0010	26								
Réunion	FRA OFR HOK0010 RE *	DFN	VL0010	1							
		PGO	VL0010	3							
		PGP	VL0010	5							
		HOK	VL0010	152							
	FRA OFR HOK1012 RE	HOK	VL1012	5							
		HOK	VL1218	14							
FRA OFR HOK1824 RE	HOK	VL1824	3								
Mayotte	FRA OFR HOK0010 YT *	DFN	VL0010	6							
		PGP	VL0010	1							
		HOK	VL0010	92							
		HOK	VL1012	1							

Note that for VUR 220, the indicator values are uninformative because most segments are small-scale and it is highly unlikely they would achieve a maximum of 220 days at sea.

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.

Comparing to the last year report, improvement was observed in the Assessment of the Number of Stocks at Risk (SAR). Unlike last year report, where this indicator was not presented in the report for French OMR fleet, in this year the indicator is assessed for almost all fleet segments. SHI indicator is presented for one more fleet segment (PGP VL0010 RE).

Like the SAR indicator, VUR is presented for almost all fleet segments (FRA OFR HOK0010 YT and FRA OFR DFN VL0010 with one vessel each didn't provide information). Since this year France provided the maximum days at sea variable for Martinique, Guadeloupe and Mayote it was possible to calculate the VUR indicator for the French OMR fleets.

Unlike SAR, SHI and VUR, the economic and VUR220 were assessed and presented only for the clustered fleet segments. For the 18 clustered segments presented, France assessed economic indicators for 16 segments. In the last year report 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. Stock assessments were performed by STECF for Stocks at Risk (SAR).

### Segment - FRA OFR DFN0010 GF \*

#### Imbalance indicators – SAR, CR/BER and RoFTA

Species/area	31	41.1.1	Total	%
Acoupa weakfish	50 086 €	272 598 €	322 684 €	31.5%
Green weakfish	7 750 €	235 595 €	243 345 €	23.8%
Crucifix sea catfish	11 910 €	139 200 €	151 110 €	14.8%
Tripletail	5 947 €	94 360 €	100 307 €	9.8%

Most representative species in value of landings

#### SAR

Fleet segment	2016	2017	2018	2019	2020
DFN0010	EET/AWP	EET/AWP	EET/AWP /TAR	EET /AWP /TAR	EET /TAR

\*EET = Atlantic goliath grouper, AWP = Gillbacker sea catfish, TAR = Tarpon

In 2020 SAR indicates imbalance for this fleet segment due to catches of Gillbacker sea catfish and Tarpon. The two species represents 0.57% of the total landing value of the fleet segment.

	2016	2017	2018	2019	2020
Rofta (%)	60.64	81.37	64.79	40.63	-12.20
CR/BER	2.20	2.54	2.24	1.72	0.80

Historical indicators for the last five years

### Segment - FRA OFR DFN1012 GF \*

#### Imbalance indicators – SAR

Species/area	31	41.1.1	Total	%
Acoupa weakfish	1 200 006 €	306 907 €	1 506 913 €	54.5%
Green weakfish	419 275 €	318 484 €	737 759 €	26.7%

Most representative species in value of landings

In 2020 SAR indicates imbalance for this fleet segment due to catches of Atlantic goliath grouper, Gillbacker sea catfish and Tarpon. The three species represents 0.76% of the total landing value of the fleet segment.

#### SAR

Fleet segment	2016	2017	2018	2019	2020
DFN1012	EET/AWP	EET/AWP	EET/AWP /TAR	EET/AWP /TAR	EET/AWP /TAR

\*EET = Atlantic goliath grouper, AWP = Gillbacker sea catfish, TAR = Tarpon

Historical indicators for the last five years

## FRA OFR DTS1824 GF

### Imbalance indicators – VUR

Species/area	31	41.1.1	Total	%
Penaeus shrimps nei	386 991 €	65 135 €	452 126 €	95.3%

Most representative species in value of landings

	2016	2017	2018	2019	2020
VUR		0.42	0.46	0.38	0.52

## GUADELOUPE

4 imbalance clusters were studied: FRA OFR DFN0010 GP and FRA OFR FPO0010 GP FRA OFR PGP0010 GP \* and FRA OFR PGP1012 GP\*.

### Segment - FRA OFR DFN0010 GP

#### Imbalance indicator – CR/BER and RoFTA

Species/area	31	%
Parrotfishes nei	975 555 €	38.67%
Caribbean spiny lobster	384 665 €	15.25%
Halfbeaks nei	174 483 €	6.92%
Grunts, sweetlips nei	129 976 €	5.15%
Spotted spiny lobster	128 839 €	5.11%
Common dolphinfish	115 333 €	4.57%

Most representative species in value of landings

	2016	2017	2018	2019	2020
Rofta (%)	-4.93	2.36	9.32	1.36	-11.24
CR/BER	0.87	1.06	1.27	1.07	0.73

Historical indicators for the last five years

### Segment - FRA OFR FPO0010 GP

#### Imbalance indicators – Rofta, CR/BER

Species/area	31	%
Caribbean spiny lobster	881 950 €	31.44%
Parrotfishes nei	296 067 €	10.56%
Groupers nei	270 036 €	9.63%
Snappers nei	167 938 €	5.99%
Squirrelfishes nei	153 431 €	5.47%
Surmulletts(=Red mullets) nei	147 842 €	5.27%
Grunts, sweetlips nei	135 894 €	4.84%
Yellowfin tuna	109 161 €	3.89%

Most representative species in value of landings

	2016	2017	2018	2019	2020
Rofta (%)	-5.72	-16.95	-9.20	-16.37	-9.85
CR/BER	0.86	0.66	0.85	0.68	0.79

Historical indicators for the last five years

## Segment - FRA OFR PGP1012 GP\*

### Imbalance indicators – Rofta, CR/BER

Species/area	31	%
Common dolphinfish	88 294 €	21.05%
Yellowfin tuna	62 728 €	14.96%
Snappers nei	56 829 €	13.55%
Wahoo	35 545 €	8.48%
Queen snapper	31 223 €	7.45%
Parrotfishes nei	27 292 €	6.51%
Caribbean spiny lobster	25 753 €	6.14%

Most representative species in value of landings

	2016	2017	2018	2019	2020
Rofta (%)	-0.33	-7.83	-5.77	-12.59	-16.35
CR/BER	0.97	0.62	0.70	0.35	0.15

Historical indicators for the last five years

Since 2016, this fleet is considered as imbalanced regarding economic indicators.

## MARTINIQUE

The fleet in this region comprises 10 fleet segments (5 clustered). Imbalance were found for all fleet segments.

## Segment - FRA OFR DFN0010 MQ

### Imbalance indicators – Rofta, CR/BER, VUR

Species/area	31	%
Halfbeaks nei	117 427 €	33.12%
Caribbean spiny lobster	52 061 €	14.68%
Grunts, sweetlips nei	31 686 €	8.94%
Snappers nei	22 675 €	6.40%
Stromboid conchs nei	19 659 €	5.54%
Carangids nei	16 116 €	4.55%
Parrotfishes nei	15 914 €	4.49%

Most representative species in value of landings

	2016	2017	2018	2019	2020
Rofta (%)	-4.93	2.36	9.32	1.36	-11.24
CR/BER	0.87	1.06	1.27	1.07	0.73
VUR					0.31

Historical indicators for the last five years

## Segment - FRA OFR FPO0010 MQ

### Imbalance indicators – Rofta, CR/BER, VUR

Species/area	31	%
Caribbean spiny lobster	707 011 €	34.00%
Snappers nei	160 319 €	7.71%
Yellowtail snapper	149 925 €	7.21%
Squirrelfishes nei	133 200 €	6.41%
Parrotfishes nei	111 317 €	5.35%
Carangids nei	95 505 €	4.59%
Yellowfin tuna	86 095 €	4.14%
Marine fishes nei	84 436 €	4.06%
Grunts, sweetlips nei	72 086 €	3.47%

Most representative species in value of landings

	2016	2017	2018	2019	2020
Rofta (%)	-5.72	-16.95	-9.20	-16.37	-9.85
CR/BER	0.86	0.66	0.85	0.68	0.79
VUR					0.40

Historical indicators for the last five years

## Segment - FRA OFR HOK0010 MQ

### Imbalance indicators – SAR, VUR

Species/area	31	%
Yellowfin tuna	2 814 774 €	52.5%
Blue marlin	1 051 159 €	19.6%
Common dolphinfish	647 619 €	12.1%

Most representative species in value of landings

### SAR

Fleet segment	2016	2017	2018	2019	2020
HOK 0010	BUM.31	BUM.31	BUM.31	BUM.31	BUM.31

BUM.31 = Blue marlin FAO area 31

In 2020 SAR indicates imbalance for this fleet segment due to catches of Blue marlin which represents 19.6% of the total landing value of the fleet segment.

	2016	2017	2018	2019	2020
VUR					0.27

Historical indicators for the last five years

## Segment - FRA OFR PGP0010 MQ \*

### Imbalance indicators – SAR, VUR

Species/area	31	%
Yellowfin tuna	3 630 901 €	35.60%
Blue marlin	1 408 456 €	13.81%
Snappers nei	922 665 €	9.05%
Common dolphinfish	854 051 €	8.37%
Caribbean spiny lobster	750 788 €	7.36%
Filefishes, leatherjackets nei	270 965 €	2.66%



Most representative species in value of landings

### SAR

Fleet segment	2016	2017	2018	2019	2020
PGP 0010	BUM.31	BUM.31	BUM.31	BUM.31	BUM.31
PS 0010	-1	-1	-1	0	BUM.31
HOK 0010	BUM.31	BUM.31	BUM.31	BUM.31	BUM.31

BUM.31 = Blue marlin FAO area 31

In 2020 SAR indicates imbalance for this fleet segment due to catches of Blue marlin which represents 13.8% of the total landing value of the fleet segment.

### VUR

FS	2016	2017	2018	2019	2020
DFN 1012					0.14
FPO 1218		0.50	0.65	1.00	1.00
FPO 1824		1.00	1.00	0.50	1.00
<b>PGP 0010</b>					<b>0.68</b>
PS 0010					<b>0.52</b>
HOK 1012		0.43			<b>0.20</b>

Historical indicators for the last five years

### Segment - FRA OFR PGO0010 MQ \*

#### Imbalance indicators – SAR, VUR

Species/area	31	%
Rays and skates nei	55 851 €	34.14%
Bigeye scad	52 468 €	32.07%
Mackerel scad	15 353 €	9.39%

Most representative species in value of landings

	2016	2017	2018	2019	2020
VUR					0.15

Historical indicators for the last five years

### REUNION

3 imbalanced clusters were studied: FRA OFR HOK0010 RE \*and FRA OFR FPO0010 GP and FRA OFR HOK1218 RE and FRA OFR HOK1824 RE \*.

### Segment - FRA OFR HOK0010 RE \*

#### Imbalance indicators – SAR, SHI, VUR

Species/area	51.7	%
Yellowfin tuna	2 444 003 €	29.53%
Blue marlin	1 552 288 €	18.75%
Swordfish	1 180 226 €	14.26%
Common dolphinfish	532 087 €	6.43%
Albacore	517 265 €	6.25%

Most representative species in value of landings

**SAR**

FS	2016	2017	2018	2019	2020
PGP 0010			BUM/YFT	YFT	BUM/YFT
HOK 0010	BUM	BUM	BUM/YFT	BUM/YFT	BUM/YFT
HOK 1012	BUM		YFT	YFT	YFT

\*YFT = Yellowfin tuna; BUM = Blue marlin

In 2020 SAR indicates imbalance for this fleet segment due to catches of Blue Marlin and Yellowfin tuna. The two species represents 48.2% of the total landing value of the fleet segment.

**SHI**

FS	2016	2017	2018	2019	2020
PGP 0010	1.22	1.25	1.29	1.29	1.35
HOK 0010	1.11	1.16	1.18	1.13	1.20
HOK 1012	0.96	0.93	0.93	1.04	0.94

SHI indicates imbalance for two segments (PGP 0010 and HOK 0010) due to high dependence on Yellowfin tuna  $F/F_{msy} = 1.20$ ; Blue Marlin  $F/F_{msy} = 1.48$ ; Albacore  $F/F_{msy} = 1.33$ ; Bigeye tuna  $F/F_{msy} = 1.21$  and Striped marlin  $F/F_{msy} = 2.03$ .

**VUR**

FS	2017	2018	2019	2020
PGO 0010				0.30
PGP 0010				0.28
HOK 0010	0.80	0.57	0.74	0.38
HOK 1012	0.62	0.57	0.55	0.28

Most representative species in value of landings

**Segment - FRA OFR HOK1218 RE****Imbalance indicators – SAR, Rofta, CR/BER**

Species/area	51.6	51.7	Total	%
Swordfish	1 577 554 €	778 172 €	2 814 774 €	40.7%
Yellowfin tuna	820 645 €	431 991 €	1 051 159 €	21.6%
Albacore	692 149 €	261 577 €	647 619 €	16.5%

Most representative species in value of landings

**SAR**

FS	2016	2017	2018	2019	2020
HOK 1218	WSH/BUM	BUM	BUM/YFT	BUM/YFT	BUM/YFT

\*YFT = Yellowfin tuna; BUM = Blue marlin; WSH = Great white shark

In 2020 SAR indicates imbalance for this fleet segment due to catches of Blue Marlin and Yellowfin tuna. The two species represents 14.6% of the total landing value of the fleet segment.

	2016	2017	2018	2019	2020
CR/BER	0.43	-1.05	-0.43	-1.09	-0.28
ROFTA	-18.63	-104.51	-47.33	-73.96	-49.47

Historical indicators for the last five years

**Segment - FRA OFR HOK1824 RE****Imbalance indicators – SAR, Rofta, CR/BER**

Species/area	51.5	51.6	51.7	51.8	Total	%
Swordfish	1 812 €	669 345 €	200 931 €	146 177 €	1 018 265 €	60.59%
Yellowfin tuna		185 448 €	90 478 €	22 578 €	298 504 €	17.76%

Most representative species in value of landings

#### SAR

FS	2016	2017	2018	2019	2020
HOK 1824			YFT	YFT	YFT

\*YFT = Yellowfin tuna

In 2020 SAR indicates imbalance for this fleet segment due to catches of Yellowfin tuna which represents 17.8% of the total landing value of the fleet segment.

	2016	2017	2018	2019	2020
CR/BER	0.06	-0.83	-0.27	-0.80	-0.97
ROFTA	-18.08	-50.73	-23.46	-35.76	-47.70

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

#### Segment - FRA OFR HOK0010 YT \*

#### Imbalance indicators – SAR

Species/area	51.6	%
Marine fishes nei	1 300 142 €	26.33%
Emperors(=Scavengers) nei	667 171 €	13.51%
Snappers nei	481 407 €	9.75%
Yellowfin tuna	315 081 €	6.38%
Carangids nei	309 840 €	6.28%
Groupers nei	250 186 €	5.07%
Skipjack tuna	195 944 €	3.97%
Narrow-barred Spanish mackerel	190 433 €	3.86%

Most representative species in value of landings

#### SAR

FS	2016	2017	2018	2019	2020
HOK 0010	COM	COM	COM	YFT/COM	COM

\*YFT = Yellowfin tuna, COM = Narrow-barred Spanish mackerel

Historical indicators for the last five years

In 2020 SAR indicates imbalance for this fleet segment due to catches of Narrow-barred Spanish mackerel and Yellowfin tuna. The two species represents 10.2% of the total landing value of the fleet segment.

#### 4.4 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 2020. Out of balance (■), in balance (■) with no information (■)

Overseas territory	Fleet segment	Fishing Technique	Vessel Length	Number of vessels	Status 2020 according to thresholds and criteria in the 2014 Guidelines					
					SAR	SHI	CR/BER	RoFTA	VUR	VUR <sub>220</sub>
Azores	PRT NAO DFN0010 P3	DFN	VL0010	34	■	■	■	■	■	■
	PRT NAO HOK0010 P3	HOK	VL0010	313	■	■	■	■	■	■
	PRT NAO HOK1012 P3	HOK	VL1012	64	■	■	■	■	■	■
	PRT NAO HOK1218 P3	HOK	VL1218	32	■	■	■	■	■	■
	PRT NAO HOK2440 P3 *	HOK	VL1824	4	■	■	■	■	■	■
		HOK	VL2440	20	■	■	■	■	■	■
	PRT NAO PGP0010 P3 *	PGP	VL0010	17	■	■	■	■	■	■
		PGP	VL1012	1	■	■	■	■	■	■
		PGP	VL1218	2	■	■	■	■	■	■
	PRT NAO PS 0010 P3	PS	VL0010	21	■	■	■	■	■	■
PRT NAO PS 1012 P3 *	PS	VL1012	8	■	■	■	■	■	■	
PRT NAO PS 1218 P3	PS	VL1218	4	■	■	■	■	■	■	
Madeira	PRT NAO HOK0010 P2 *	HOK	VL0010	48	■	■	■	■	■	■
		HOK	VL1012	6	■	■	■	■	■	■
	PRT NAO HOK1218 P2	HOK	VL1218	15	■	■	■	■	■	■
	PRT NAO HOK1824 P2	HOK	VL1824	3	■	■	■	■	■	■
	PRT NAO HOK2440 P2	HOK	VL2440	4	■	■	■	■	■	■
	PRT NAO MGP0010 P2	MGP	VL0010	7	■	■	■	■	■	■
PRT NAO MGP1824 P2 *	MGP	VL1824	3	■	■	■	■	■	■	

The Portuguese OMR fleet is composed by 19 fleet segments (15 clustered). EWG performed SAR indicators 15 fleet segments (79%). No information was available for SHI indicator. For the economic and technical indicators, the MS provide information for all fleet segments.

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

6 imbalanced clusters were identified: PRT NAO DFN0010 P3, PRT NAO HOK0010 P3, PRT NAO HOK1012 P3, PRT NAO HOK1218 P3, PRT NAO HOK2440 P3 and PRT NAO PGP0010 P3.

#### Segment - PRT NAO DFN0010 P3

#### Imbalance indicators – VUR

Species/area	27.10.2	%
Parrotfish	401 226 €	58.6%
Yellowmouth barracuda	35 951 €	5.2%
Blackspot(=red) seabream	33 633 €	4.9%
Thicklip grey mullet	24 259 €	3.5%
Grey triggerfish	21 383 €	3.1%

Most representative species in value of landings

	2016	2017	2018	2019	2020
VUR	0.50	0.48	0.60	0.64	0.59

Historical indicators for the last five years

### Segment - PRT NAO HOK0010 P3

#### Imbalance indicators – SAR, VUR

Species/area	27.10.a	%
Blackspot(=red) seabream	2 862 130 €	32.50%
Veined squid	1 769 256 €	20.09%
Alfonsino	592 419 €	6.73%
Wreckfish	457 601 €	5.20%
Red porgy	367 550 €	4.17%
Forkbeard	275 676 €	3.13%
Red scorpionfish	229 963 €	2.61%
Blackbelly rosefish	189 422 €	2.15%

Most representative species in value of landings

#### SAR

FS	2016	2017	2018	2019	2020
HOK 0010	GPD	spz/GPD	GPD	GPD	GPD

GPD = Dusky grouper, SPZ = Smooth hammerhead

In 2020 SAR indicates imbalance for this fleet segment due to catches of Dusky grouper that represents 1.74% of the total landing value of the fleet segment.

	2016	2017	2018	2019	2020
VUR	0.32	0.28	0.31	0.30	0.32

Historical indicators for the last five years

### Segment - PRT NAO HOK1012 P3

#### Imbalance indicators - Rofta, CR/BER, VUR

Species/area	27.10.a	34.1.2	Total	%
Blackspot(=red) seabream	2 127 101 €		2 127 101 €	29.63%
Veined squid	1 661 480 €		1 661 480 €	23.14%
Alfonsino	577 348 €		577 348 €	8.04%
Wreckfish	329 660 €		329 660 €	4.59%
Bigeye tuna	287 073 €	29 016 €	316 089 €	4.40%
Blackbelly rosefish	298 424 €		298 424 €	4.16%
Forkbeard	240 073 €		240 073 €	3.34%

Most representative species in value of landings

	2016	2017	2018	2019	2020
Rofta (%)	23.89	25.87	34.06	36.84	-16.35
CR/BER	2.12	2.59	2.41	2.23	0.76
VUR	0.56	0.55	0.59	0.66	0.66

Historical indicators for the last five years

### Segment - PRT NAO HOK1218 P3

#### Imbalance indicators - VUR

Species/area	34.1.1	%
Blackspot(=red) seabream	3 087 633 €	30.2%
Veined squid	2 085 731 €	20.4%
Alfonsino	619 885 €	6.1%
Wreckfish	488 818 €	4.8%
Red porgy	400 972 €	3.9%
Forkbeard	326 679 €	3.2%
Red scorpionfish	244 999 €	2.4%
Grey triggerfish	241 751 €	2.4%
Blackbelly rosefish	213 272 €	2.1%

Most representative species in value of landings

	2016	2017	2018	2019	2020
VUR	<b>0.50</b>		<b>0.67</b>	<b>0.62</b>	<b>0.69</b>

Historical indicators for the last five years

### Segment - PRT NAO HOK2440 P3

#### Imbalance indicators - Rofta, CR/BER

Species/area	27.10.a	34.1.2	Total	%
Bigeye tuna	1 736 138 €	1 498 035 €	3 234 173 €	36.76%
Albacore	1 037 032 €	1 930 533 €	2 967 565 €	33.73%
Skipjack tuna	592 799 €	65 500 €	658 299 €	7.48%

Most representative species in value of landings

	2016	2017	2018	2019	2020
Rofta (%)	<b>-8.44</b>	<b>11.81</b>	<b>13.46</b>	<b>2.76</b>	<b>-9.61</b>
CR/BER	<b>0.41</b>	<b>1.56</b>	<b>1.78</b>	<b>1.13</b>	<b>0.50</b>

Historical indicators for the last five years

### Segment - PRT NAO PGP0010 P3

#### Imbalance indicators - VUR

Species/area	34.1.2	%
Parrotfish	83 870 €	14.7%
Blue jack mackerel	57 388 €	10.0%
Blackspot(=red) seabream	43 799 €	7.7%
Swordfish	38 549 €	6.7%
Common spiny lobster	35 611 €	6.2%
Greater amberjack	22 813 €	4.0%
Veined squid	20 835 €	3.6%
Bigeye tuna	19 444 €	3.4%
Grey triggerfish	17 483 €	3.1%
Pacific chub mackerel	16 518 €	2.9%
Red porgy	16 291 €	2.9%
Red scorpionfish	16 111 €	2.8%
Yellowmouth barracuda	14 721 €	2.6%
Albacore	13 018 €	2.3%
Skipjack tuna	12 696 €	2.2%

Most representative species in value of landings

	2016	2017	2018	2019	2020
VUR			0.94	0.54	0.69

Historical indicators for the last five years

## MADEIRA

The fleet in this region comprises 6 segments, 3 of which were assessed to be out of balance according to at least one balance indicator: PRT NAO HOK0010 P2, PRT NAO HOK2440 P2 and PRT NAO MGP1824 P2 \*.

### Segment - PRT NAO HOK0010 P2 \*

#### Imbalance indicators – SAR, VUR

Species/area	34	%
Black scabbardfish	634 475 €	31.7%
Bigeye tuna	512 494 €	25.6%
Atlantic bluefin tuna	330 670 €	16.5%
Pink dentex	108 348 €	5.4%

Most representative species in value of landings

## SAR

FS	2016	2017	2018	2019	2020
HOK 0010	ND			SMD.34-47/LOO	SMD.34-47
HOK 1012	ND	ND	ND	ND	ND

SMD = Smooth-hound, LOO = Smalltooth sand tiger, ND = No data

In 2020 SAR indicates imbalance for this fleet segment due to catches of Smooth-hound that represents 0.01% of the total landing value of the fleet segment.

	2016	2017	2018	2019	2020
VUR *	0.32	0.24	0.38	0.39	0.35

Historical indicators for the last five years

### Segment - PRT NAO HOK2440 P2

#### Imbalance indicators – Rofta, CR/BER

Species/area	27.10.a	34.1.2	Total	%
Albacore	1 865 €	632 661 €	634 526 €	58.9%
Bigeye tuna	38 278 €	390 163 €	428 441 €	39.8%

Most representative species in value of landings

	2016	2017	2018	2019	2020
Rofta (%)	4.54	50.72	15.29	5.72	-15.78
CR/BER	1.11	5.22	1.98	1.21	0.03

Historical indicators for the last five years

## Segment - PRT NAO MGP1824 P2 \*

### Imbalance indicators – CR/BER, RoFTA

Species/area	34.1.2	%
Blue jack mackerel	190 098 €	58.2%
Pacific chub mackerel	125 446 €	38.4%

Most representative species in value of landings

	2016	2017	2018	2019	2020
Rofta (%)	-7.82	0.89	20.31	-11.99	-10.23
CR/BER	0.36	0.98	2.42	0.46	0.60

Historical indicators for the last five years

## 4.5 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 (■)

Overseas territory	Fleet segment	Fishing Technique	Vessel Length	Number of vessels	Status 2020 according to thresholds and criteria in the 2014 Guidelines					
					SAR	SHI	CR/BER	RoFTA	VUR	VUR <sub>220</sub>
Canary Islands	ESP NAO FPO1012 IC *	FPO	VL0010	1	■	■	■	■	■	■
		FPO	VL1012	7	■	■	■	■	■	■
		FPO	VL1218	5	■	■	■	■	■	■
	ESP NAO HOK1012 IC *	HOK	VL0010	9	■	■	■	■	■	■
		HOK	VL1012	37	■	■	■	■	■	■
	ESP NAO HOK1218 IC	HOK	VL1218	38	■	■	■	■	■	■
	ESP NAO HOK2440 IC *	HOK	VL1824	10	■	■	■	■	■	■
		HOK	VL2440	15	■	■	■	■	■	■
	ESP NAO PMP0010 IC *	PMP	VL0010	422	■	■	■	■	■	■
		PMP	VL1012	7	■	■	■	■	■	■
		PMP	VL1218	1	■	■	■	■	■	■
	ESP NAO PS 1218 IC *	PS	VL1012	1	■	■	■	■	■	■
		PS	VL1218	7	■	■	■	■	■	■

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 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 – VUR

Species/area	34.1.1	34.1.2	Total	%
Bigeye tuna		1 064 201 €	1 064 201 €	31.4%
Atlantic bluefin tuna	5 965 €	664 112 €	670 076 €	19.8%
Skipjack tuna	39 €	632 759 €	632 797 €	18.7%
Albacore		449 766 €	449 766 €	13.3%



Most representative species in value of landings

HOK 01012	2018	2019	2020
VUR	0.54	0.53	0.57

Historical indicators for the last three years

## ESP NAO HOK1218 IC

### Imbalance indicators – SAR, VUR

Species/area	34.1.1	34.1.2	Total	%
Bigeye tuna	86 356 €	1 563 210 €	1 649 565 €	36.9%
Albacore		900 733 €	900 733 €	20.1%
Atlantic bluefin tuna		699 186 €	699 186 €	15.6%
Skipjack tuna	41 141 €	41 141 €	41 141 €	7.5%

Most representative species in value of landings

### SAR

FS	2016	2017	2018	2019	2020
HOK 1218					SMD

\*SMD = Smooth-hound

In 2020 SAR indicates imbalance for this fleet segment due to catches of Smooth-hound that represents 0.01% of the total landing value of the fleet segment.

HOK 1218	2018	2019	2020
VUR	0.65	0.60	0.60

Historical indicators for the last three years

## ESP NAO HOK2440 IC \*

### Imbalance indicators – SAR, SHI, Rofta, CR/BER

Species/area	34.1.1	34.1.2	Total	%
Bigeye tuna	764 231 €	2 934 389 €	3 698 620 €	45.8%
Albacore	103 €	2 014 903 €	2 015 006 €	25.0%
Atlantic bluefin tuna	4 950 €	1 225 596 €	1 230 545 €	15.2%

Most representative species in value of landings

### SHI

FS	2016	2017	2018	2019	2020
HOK 2440		1.17	1.05	1.00	1.00

\*SHI indicates imbalance for this fleet segment due to high dependence on Bigeye tuna  $F/F_{msy} = 1,00$  and Atlantic horse mackerel  $F/F_{msy} = 1,27$

HOK 2440	2018	2019	2020
CR/BER	-0.78	0.11	0.44
RoFTA	-53.25	-44.63	-27.72

Historical indicators for the last three years

## ESP NAO PMP0010 IC \*

### Imbalance indicators – SAR, VUR

Species/area	34.1.1	34.1.2	Total	%
Parrotfish		1 260 825 €	1 260 825 €	11.6%
Pink dentex		938 448 €	938 448 €	8.6%
Red porgy	160 €	937 262 €	937 422 €	8.6%
Atlantic bluefin tuna	35 936 €	847 102 €	883 038 €	8.1%
Bigeye tuna		606 965 €	606 965 €	5.6%
Skipjack tuna		554 919 €	554 919 €	5.1%
White trevally		365 702 €	365 702 €	3.4%
Dusky grouper		293 710 €	293 710 €	2.7%
Albacore		285 039 €	285 039 €	2.6%
Grey triggerfish		265 940 €	265 940 €	2.4%
Splendid alfonsino		230 394 €	230 394 €	2.1%
European hake		222 477 €	222 477 €	2.0%
Yellowfin tuna		219 742 €	219 742 €	2.0%
Surmullet		210 389 €	210 389 €	1.9%
Narwal shrimp		207 834 €	207 834 €	1.9%
Striped soldier shrimp		178 090 €	178 090 €	1.6%
Redbanded seabream		176 228 €	176 228 €	1.6%
Greater amberjack		175 691 €	175 691 €	1.6%
Comber		142 612 €	142 612 €	1.3%
White seabream		130 768 €	130 768 €	1.2%

Most representative species in value of landings

#### SAR

FS	2016	2017	2018	2019	2020
PMP 0010		SAE/MKF/SMD /GPD	WHM/CCT/SAE/M KF/SMD/GPD	CCT/SAE/MKF/S MD/GPD	SAE/MKF/SMD/ GPD
PMP 1218					SAE

\*WHM = Atlantic white marlin, CCT = Sand tiger shark, SAE = Madeiran sardinella,

MKF = Island grouper, SMD = Smooth-hound, GPD = Dusky grouper, SAE = Madeiran sardinella

In 2020 SAR indicates imbalance for this fleet segment due to catches of Atlantic white marlin, Sand tiger shark, Maderian sardinella and Dusky grouper. The four species represents 3.34% of the total landing value of the fleet segment.

PMP 0010	2018	2019	2020
VUR	<b>0.31</b>	<b>0.32</b>	<b>0.32</b>

Historical indicators for the last three years

#### 4.6 Summary

Table 4.6.1 summarizes the information on balance indicators and their assessment available for each OMR by Member state for the year 2020. 67 fleet segments were considered for biologic indicators (SAR and SHI) and VUR and 39 clustered fleet segments for the economic indicators and VUR<sub>20</sub>, (Saint Martin did not present any fleet segment).

Table 4.6.1 Information on balance indicators available by Member State and OMR for the year 2020 (Only clustered segments considered in here).

Fleet segments (total)		SAR	SHI	VUR	Fleet segments (clustered)		Rofta	CR/BER	VUR <sub>220</sub>	
France	35	Assessed FS	32	7	33	18	Assessed FS	16	16	18
		Imbalance	12	2	16		Imbalance	8	8	16
	<b>% imbalance</b>		<b>38</b>	<b>29</b>	<b>48</b>	<b>% imbalance</b>		<b>50</b>	<b>50</b>	<b>89</b>
Portugal	19	Assessed FS	15	0	19	15	Assessed FS	15	15	15
		Imbalance	2	0	9		Imbalance	4	4	10
	<b>% imbalance</b>		<b>13</b>		<b>47</b>	<b>% imbalance</b>		<b>27</b>	<b>27</b>	<b>67</b>
Spain	13	Assessed FS	13	2	13	6	Assessed FS	6	6	6
		Imbalance	3	1	3		Imbalance	1	1	5
	<b>% imbalance</b>		<b>23</b>	<b>50</b>	<b>23</b>	<b>% imbalance</b>		<b>17</b>	<b>17</b>	<b>83</b>
Total	67	Assessed FS	60	9	65	39	Assessed FS	37	37	39
		Imbalance	17	3	28		Imbalance	13	13	31
	<b>% imbalance</b>		<b>28</b>	<b>33</b>	<b>43</b>	<b>% imbalance</b>		<b>35</b>	<b>35</b>	<b>79</b>

There is a significant shortage of data required to compute the biological indicator SHI. SAR indicator values were available for 60 segments out of 67 (90%); however, the SHI could be computed for only 9 (13%) of the 67 fleet segments identified in the OMRs.

For the French OMRs, the SAR indicator was computed for 32 segments out of 35 and 12 of them were out of balance; and the SHI could be computed for 7 segments out of 35 (20%), 2 of them were out of balance.

For Portuguese OMRs, the SAR indicator was computed for 15 out of 19 segments (79%) and 2 of them were out of balance, but the SHI was not available for any segment.

For Spanish OMRs, SAR was calculated for 12 segments out of 13, and 3 of them were out of balance, however, the SHI could be computed for only 2 segments, one of them was out of balance.

The main species responsible for the imbalance for fleet segments of France were Yellowfin tuna, Blue Marlin; Albacore; Bigeye tuna and Striped marlin. For Spain, the main species responsible of the imbalance were Bigeye tuna and Atlantic Horse Mackerel.

In comparison to the French fleet report submitted in 2021, in its fleet report submitted in 2022, France provided economic indicators for an additional 9 fleet segments. French Guiana didn't provide information for FRA OFR DTS VL1820 and Martinique FRA OFR PGP VL0010. The 2022 Annual Economic Report (STECF 22-06) will provide more details on the OMR economic performance of the fleets. Spain and Portugal provided information for the technical and economic indicators for all fleet segments.

*Structural imbalance over the most recent 3 years.*

According to 2014 Commission guidelines the economic and biological indicators should be calculated for a period of at least three years to assess balance. Table 4.6.2. summarises which fleet segments are indicated to be structurally imbalanced based on indicator values over the most recent three years (2018-2020). Table 4.6.2 summarises the proportions of fleet segments in each OMR that are indicated to be imbalanced in 2020 and structurally imbalanced based on indicator values for the most recent three years (2018-2020).

Table 4.6.1. Structurally imbalanced segments in the OMR based on indicator values over the most recent three years.

Overseas territory	Fleet segment	Fishing Technique	VL	SAR	SHI	CR/BER	RoFTA	VUR
French Guiana	FRA OFR DFN0010 GF *	DFN	VL0010					
	FRA OFR DFN1012 GF *	DFN	VL1012					
	FRA OFR DTS1824 GF	DTS	VL1824					
Guadeloupe	FRA OFR FPO0010 GP	FPO	VL0010					
	FRA OFR PGP1012 GP *	PGP	VL1012					
Martinique	FRA OFR FPO0010 MQ	FPO	VL0010					
	FRA OFR HOK0010 MQ	HOK	VL0010					
	FRA OFR PGP0010 MQ *	PGP	VL0010					
		HOK	VL1012					
Réunion	FRA OFR HOK0010 RE *	PGP	VL0010					
		HOK	VL0010					
		HOK	VL1012					
	FRA OFR HOK1218 RE	HOK	VL1218					
	FRA OFR HOK1824 RE	HOK	VL1824					
Mayotte	FRA OFR HOK0010 YT *	HOK	VL0010					
Azores	PRT NAO DFN0010 P3	DFN	VL0010					
	PRT NAO HOK0010 P3	HOK	VL0010					
	PRT NAO HOK1012 P3	HOK	VL1012					
	PRT NAO HOK1218 P3	HOK	VL1218					
Madeira	PRT NAO HOK0010 P2 *	HOK	VL0010					
		HOK	VL1012					
Canary Islands	ESP NAO HOK1012 IC	HOK	VL1012					
	ESP NAO HOK1218 IC	HOK	VL1218					
	ESP NAO HOK2440 IC *	HOK	VL1824					
		HOK	VL2440					
ESP NAO PMP0010 IC *	PMP	VL0010						

Red shading = structural imbalance; Grey shading = inconclusive; no shading = no information

Table 4.6.2. Proportion of fleet segments showing imbalance.

		SAR	SHI	Rofta	CR/BER	VUR	VUR <sub>220</sub>
France	Imbalance 2020	34%	6%	44%	44%	46%	89%
	Structural imbalance	31%	6%	28%	28%		89%
Portugal	Imbalance 2020	11%	0%	27%	27%	47%	67%
	Structural imbalance	5%	0%	0%	0%	32%	53%
Spain	Imbalance 2020	23%	8%	17%	17%	23%	100%
	Structural imbalance	8%	8%	17%	17%	23%	
<b>Total</b>	<b>Imbalance 2020</b>	<b>25%</b>	<b>4%</b>	<b>33%</b>	<b>33%</b>	<b>42%</b>	<b>82%</b>
	<b>Structural imbalance</b>	<b>19%</b>	<b>4%</b>	<b>15%</b>	<b>15%</b>	<b>28%</b>	<b>73%</b>

Grey shading = inconclusive

#### 4.6.1 Biological Data Requirements

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  $F_{msy}$ , 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 (see example in Figure 4.6.1). 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.

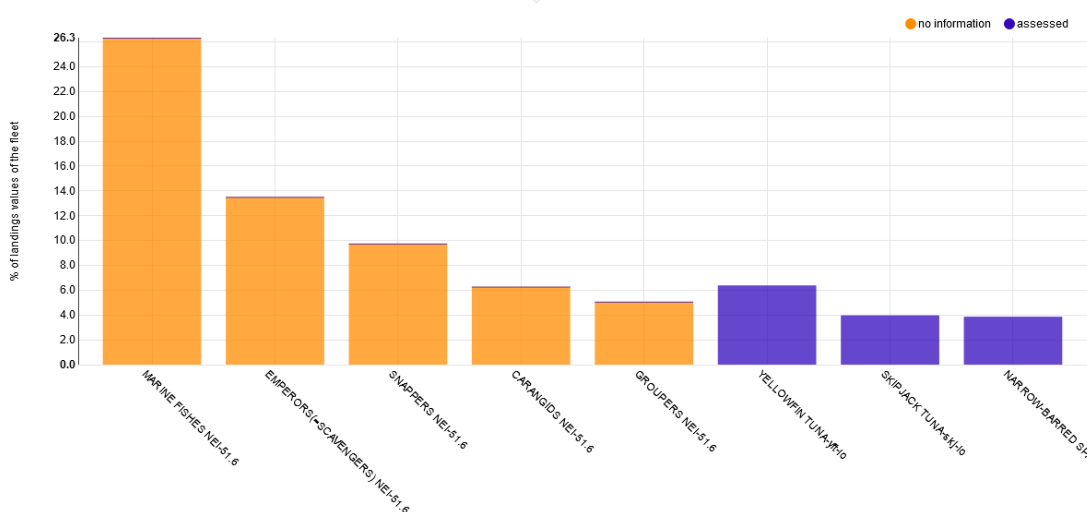


Figure 4.6.1. Lack of information for Mayotte island, many species cannot be linked to stock as they are reported as Nei.

If we want to improve and extend information on balance indicators in the OMRs there is a need to:

1. improve Fisheries Information system with properly sampled catches at the specie-specific and geographical scale
2. to strengthen RFMos to evaluate stocks

#### 4.7 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 Stocks on which fleet segments that are indicated to be out of balance are reliant

fleet_code	major_stocks
FRA-OFR-DFN-VL0010-GF-	ACOUPA WEAKFISH-41.1.1/no information GREEN WEAKFISH-41.1.1/no information CRUCIFIX SEA CATFISH-41.1.1/no information TRIPLETAIL-41.1.1/no information SMALLTOOTH WEAKFISH-41.1.1/no information
FRA-OFR-DFN-VL1012-GF-	ACOUPA WEAKFISH-31/no information GREEN WEAKFISH-31/no information GREEN WEAKFISH-41.1.1/no information ACOUPA WEAKFISH-41.1.1/no information
FRA-OFR-HOK-VL0010-MQ-	yft-atl/no information bum-atl/no information COMMON DOLPHINFISH-31/no information
FRA-OFR-HOK-VL0010-RE-	yft-io/assessed bum-io/assessed swo-io/assessed COMMON DOLPHINFISH-51.7/no information alb-io/assessed WAHOO-51.7/no information
FRA-OFR-HOK-VL0010-YT-	MARINE FISHES NEI-51.6/no information EMPERORS(=SCAVENGERS) NEI-51.6/no information SNAPPERS NEI-51.6/no information yft-io/assessed CARANGIDS NEI-51.6/no information GROUPEERS NEI-51.6/no information skj-io/assessed com-io/assessed
FRA-OFR-HOK-VL1012-MQ-	yft-atl/no information bum-atl/no information
FRA-OFR-HOK-VL1012-RE-	swo-io/assessed yft-io/assessed alb-io/assessed
FRA-OFR-HOK-VL1218-RE-	swo-io/assessed yft-io/assessed alb-io/assessed
FRA-OFR-HOK-VL1824-RE-	swo-io/assessed yft-io/assessed
FRA-OFR-PGP-VL0010-MQ-	yft-atl/no information bum-atl/no information COMMON DOLPHINFISH-31/no information CARIBBEAN SPINY LOBSTER-31/no information SNAPPERS NEI-31/no information FILEFISHES, LEATHERJACKETS NEI-31/no information CARANGIDS NEI-31/no information

FRA-OFR-PGP-VL0010-RE-	bum-io/assessed yft-io/assessed BIGEYE SCAD-51.7/no information COMMON DOLPHINFISH-51.7/no information
FRA-OFR-PS-VL0010-MQ-	yft-atl/no information bum-atl/no information RAYS AND SKATES NEI-31/no information COMMON DOLPHINFISH-31/no information VARIOUS SHARKS NEI-31/no information MACKEREL SCAD-31/no information
PRT-NAO-HOK-VL0010-P2-	BLACK SCABBARDFISH-34.1.2/no information bet-atl/assessed bft-ea/no information PINK DENTEX-34.1.2/no information
PRT-NAO-HOK-VL0010-P3-	sbr.27.10/no information VEINED SQUID-27.10.a/no information ALFONSINO-27.10.a/no information WRECKFISH-27.10.a/no information RED PORGY-27.10.a/no information FORKBEARD-27.10.a/no information RED SCORPIONFISH-27.10.a/no information BLACKBELLY ROSEFISH-27.10.a/no information
ESP-NAO-HOK-VL1218-IC-NO	bet-atl/assessed alb-na/no information bft-ea/no information SKIPJACK TUNA-34.1.2/no information
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 bet-atl/assessed SKIPJACK TUNA-34.1.2/no information WHITE TREVALLY-34.1.2/no information DUSKY GROUPER-34.1.2/no information alb-na/no information GREY TRIGGERFISH-34.1.2/no information SPLENDID ALFONSINO-34.1.2/no information EUROPEAN HAKE-34.1.2/no information yft-atl/no information SURMULLET-34.1.2/no information NARWAL SHRIMP-34.1.2/no information STRIPED SOLDIER SHRIMP-34.1.2/no information REDBANDED SEABREAM-34.1.2/no information GREATER AMBERJACK-34.1.2/no information COMBER-34.1.2/no information
ESP-NAO-PMP-VL1218-IC-NO	SKIPJACK TUNA-34.1.2/no information vma-34/no information bft-ea/no information PINK DENTEX-34.1.2/no information RED PORGY-34.1.2/no information EUROPEAN CONGER-34.1.2/no information

Key \* Assessed = stock assessment available: no information = no assessment available

## 5 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 Commission guidelines and based on indicator values (2020 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 an Excel workbook which provides separate lists for the North Atlantic (Area 27) the Mediterranean and Black Seas (Area 37) and the OFR region.

## 6 CONTACT DETAILS OF EWG-22-15 PARTICIPANTS

<sup>1</sup> - 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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## **7 LIST OF ANNEXES**

Annex I – Methods of calculating indicators and trends – appended to report.

Annex IV – Species identified as SAR in 2022 according to the Commission Guideleines COM(2014) 545 Final) – appended to report.

List of electronic annexes:

Annex IA – Biological indicator stock reference list

Annex IB – Reference list for stocks at risk

Annex IC – Detailed information for stocks at risk

Annex III – Stocks on which fleet segments are reliant (areas 27 and 37 Separately)

The above electronic Annexes are located in two excel workbooks and are published on the meeting's web site on:

<https://stecf.jrc.ec.europa.eu/wg2215>

EWG\_22-15 – Annex IA Annex IB Annex IC and Annex III.xlsx

EWG\_22-15 – Annex II – Indicator Comparison Tables.xlsx

## **8 LIST OF BACKGROUND DOCUMENTS**

Background documents are published on the meeting's web site on:

<https://stecf.jrc.ec.europa.eu/wg2215>

List of background documents:

EWG-22-15 – Doc 1 - Declarations of invited and JRC experts (see also section 6 of this report – List of participants)

<https://stecf.jrc.ec.europa.eu/wg2215>

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 2022

[https://oceans-and-fisheries.ec.europa.eu/fisheries/rules/fishing-fleet-capacities/fleet-capacity-reports-2021\\_en](https://oceans-and-fisheries.ec.europa.eu/fisheries/rules/fishing-fleet-capacities/fleet-capacity-reports-2021_en)

## 9 ANNEX I - METHODS OF CALCULATING INDICATORS AND TRENDS

### A1.1 Sustainable Harvest Indicator (SHI)

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

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

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

In which,  $F_i$  is the fishing mortality available for stock  $i$  from scientific assessments (e.g. ICES, STECF, GFCM, ICCAT, IOTC advice) and  $V_i$  is the value of landings from stock  $i$ . Data on  $F_i$  (mean  $F$ ) and  $F_{MSY}$  for fish stocks found in Area 27 were obtained from the ICES online database, a database of stock assessments output summaries (<http://standardgraphs.ices.dk/stockList.aspx>). For Area MBS output from assessments carried out by STECF working group was compiled by JRC (<https://stecf.jrc.ec.europa.eu/web/stecf/dd/medbs/sambs>). In addition, information on  $F/F_{msy}$  was scrutinized from GFCM Stock Assessment Forms (<http://www.fao.org/gfcm/data/safs/en/>) kindly provided by GFCM secretariat. Information on tuna / tuna-like species was obtained from the ICCAT (<http://www.iccat.es/en/>) and IOTC website (<http://www.iotc.org/>). In addition, we considered stocks fished by European fleets in NAFO area ([www.nafo.int](http://www.nafo.int)) as well as in SPRFMO (e.g. jack mackerel, [www.sprfmo.int](http://www.sprfmo.int)). 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  $F_{MSY}$  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 simply 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 GSA 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:

- **Stock Assessment Selection** - The 2014 Balance Indicator Guidelines state the calculation of the SHI indicator should take into account 'the most recent value of fishing mortality

available from scientific assessments'. The EWG 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 2020 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  $F_{MSY}$  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 22-15 Prep. Meeting participants noted that the list of  $F/F_{MSY}$  ratios in the JRC database includes only the outcomes of the assessment carried out in the framework of STECF meetings. In order to further increase the accuracy of the SHI calculation for the Mediterranean, information on  $F$  and  $F_{MSY}$  timeseries was therefore extracted from reports of the GFCM Working Group on Stock Assessment of Demersal Species (WGSAD), the Working Group on Stock Assessment of Pelagic Species (WGSAP), as well as stock assessment forms available online (<http://www.fao.org/gfcm/data/safs/en/>). EWG 22-15 Prep. Meeting notes that this was a time consuming process since in many cases data has to manually be extracted from graphs provided in stock assessment forms, and considers that a single database with a complete list of updated assessments (as is available for the ICES region) should be required for the Mediterranean and Black Sea and for high migratory species especially looking for Tuna species assessments. For Tuna,  $F/F_{MSY}$  has been collected through ICCAT and IOTC but sometimes reports only provide short time series.
- In cases where stock assessments were available from more than one source, the more updated stock assessment was taken into account for SHI calculations. Where STECF and GFCM assessment were available and values of  $F$  and/or  $F_{MSY}$  differed, both assessments were retained and the SHI calculations were based on an average of the two assessment results.

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 to 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 to the definition of the SAR indicator in the 2014 Balance Indicator Guidelines, a stock at risk (SAR) means a stock which is either:

- a) assessed as being below the  $B_{lim}$ ; or
- b) subject to an advice to close the fishery, to prohibit directed fisheries, to reduce the fishery to the lowest possible level, or similar advice from an international advisory body, even where such advice is given on a data-limited basis; or

- c) subject to a fishing opportunities regulation which stipulates that the fish should be returned to the sea unharmed or that landings are prohibited; or
- d) a stock which is on the IUCN 'red list' or is listed by CITES.

AND for which either:

- 1- the stocks make up to 10% or more of the catches by the fleet segment; **or**
- 2- the fleet segment takes 10% or more of the total catches from that stock.

The meaning of these last two conditions are represented in Figure 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.

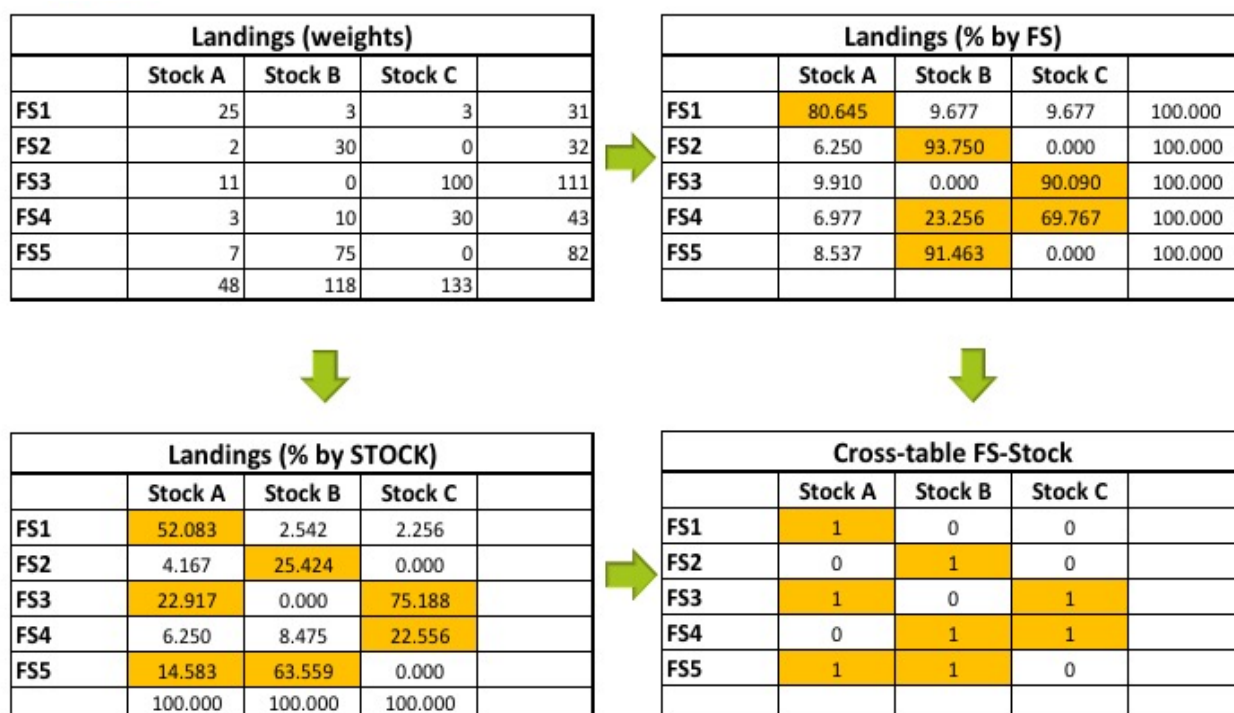


Figure A1.1. Example of pre-processing of landings data for the computation of the SAR indicator

During the preparatory meeting EWG 22-15, 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 all)

The total number of Stocks as Risk increased from 2012 to 2022, 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).

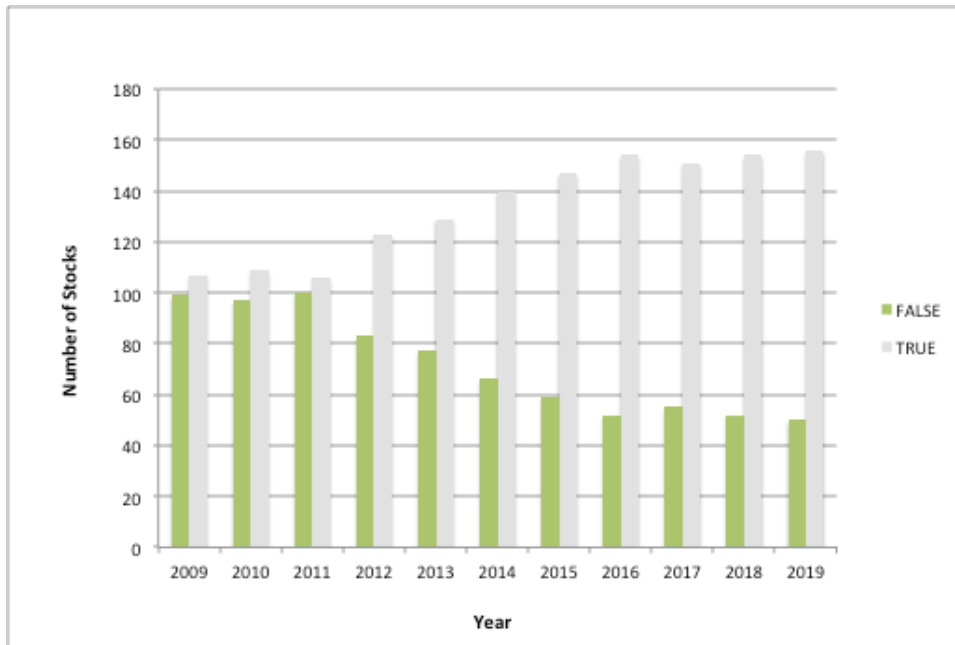


Figure A1.2 - Distribution of the number of SAR per year (TRUE = Stock is considered at risk; FALSE = Stock is not considered at risk).

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).

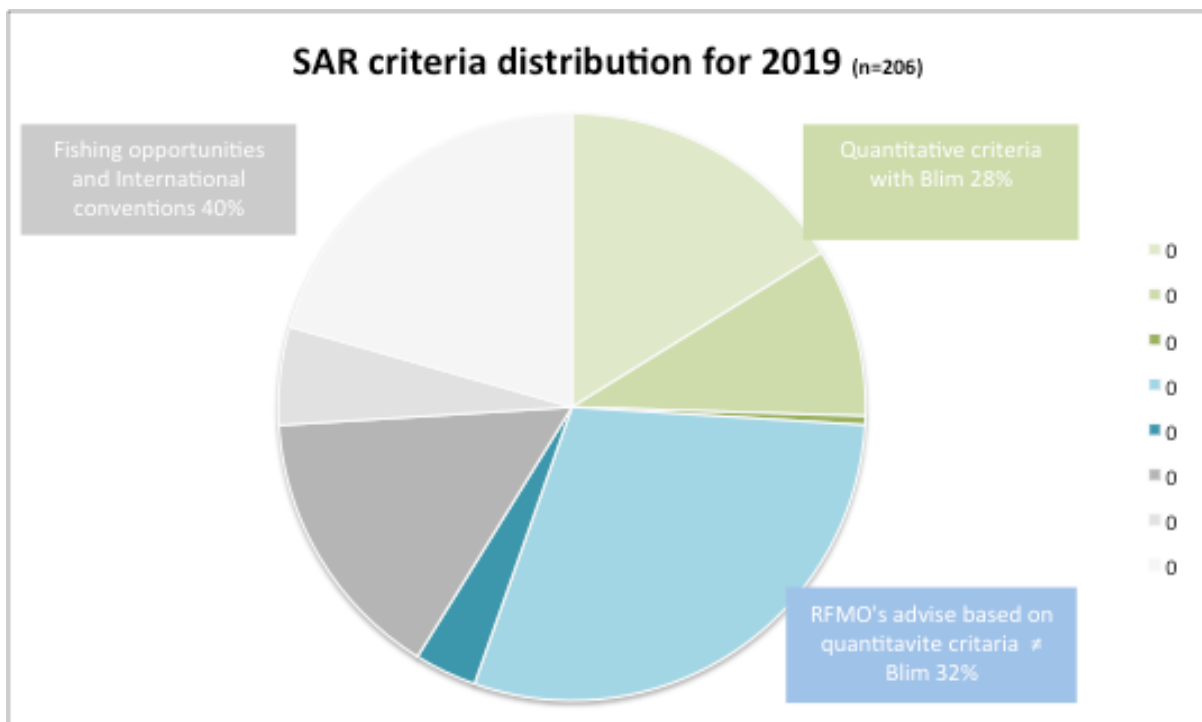


Figure A1.3 - Distribution of SAR per selecting criteria (a to d) in 2019.

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:

- Committee for Central for Eastern Atlantic (CECAF) - Stock status information for pelagic species under the jurisdiction of the CECAF was reviewed to determine which stocks could be incorporated in the SAR indicator. The 2018 CECAF-FAO reports were available for evaluation of the SAR this year, which allows an update of the SAR. Madeiran sardinella, Round sardinella, Bonga shad, Atlantic horse mackerel and Cunene horse mackerel from north CECAF were included in the selection as well as Madeiran sardinella, Round sardinella both for north and south CECAF.
- When  $B_{lim}$  was not available a proxy of  $0.4 SSB_{msy}$  were agreed to be used for some RFMO's stocks as for instance the inclusion of Striped Marlin (*Tetrapturus audax*) in IOTC.
- Where new species were added to the SAR list, the relevant geographical ranges were investigated and corresponding FAO fishing areas added to the Stock Description column in the 2017 SAR stock selection sheet.
- The main issues faced by the group during the EWG 18-14 Prep. Meeting were that in some cases the stock assessments had not yet been released, due to the co-vid crisis ; the deadline taken into account 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 purpose of evaluation of the fishing activity on the environment the inclusion of fishes under "endangered" (EN) category as well as some other species (eg. Marine mammals, birds, carals, etc.) category would make sense to be considered.
- SAR definition criteria "c" includes some EC Regulations for fishing opportunity. However the temporal measures listed in such Regulations cannot be included in the SAR selection (eg. Porcupine 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.



According to 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 to the definition of the SAR indicator in the 2014 Balance Indicator Guidelines, a stock at risk (SAR) means a stock which is either:

- a) assessed as being below the  $B_{lim}$ ; or
- b) subject to an advice to close the fishery, to prohibit directed fisheries, to reduce the fishery to the lowest possible level, or similar advice from an international advisory body, even where such advice is given on a data-limited basis; or
- c) subject to a fishing opportunities regulation which stipulates that the fish should be returned to the sea unharmed or that landings are prohibited; or
- d) a stock which is on the IUCN 'red list' or is listed by CITES.

AND for which either:

- 1- the stocks make up to 10% or more of the catches by the fleet segment; **or**
- 2- the fleet segment takes 10% or more of the total catches from that stock.

The meaning of these last two conditions are represented in Figure A1.1. Here, three stocks are exploited by five fleet segments, and landings data (in weights) are available for each stock/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 3-5 will have a SAR=2.

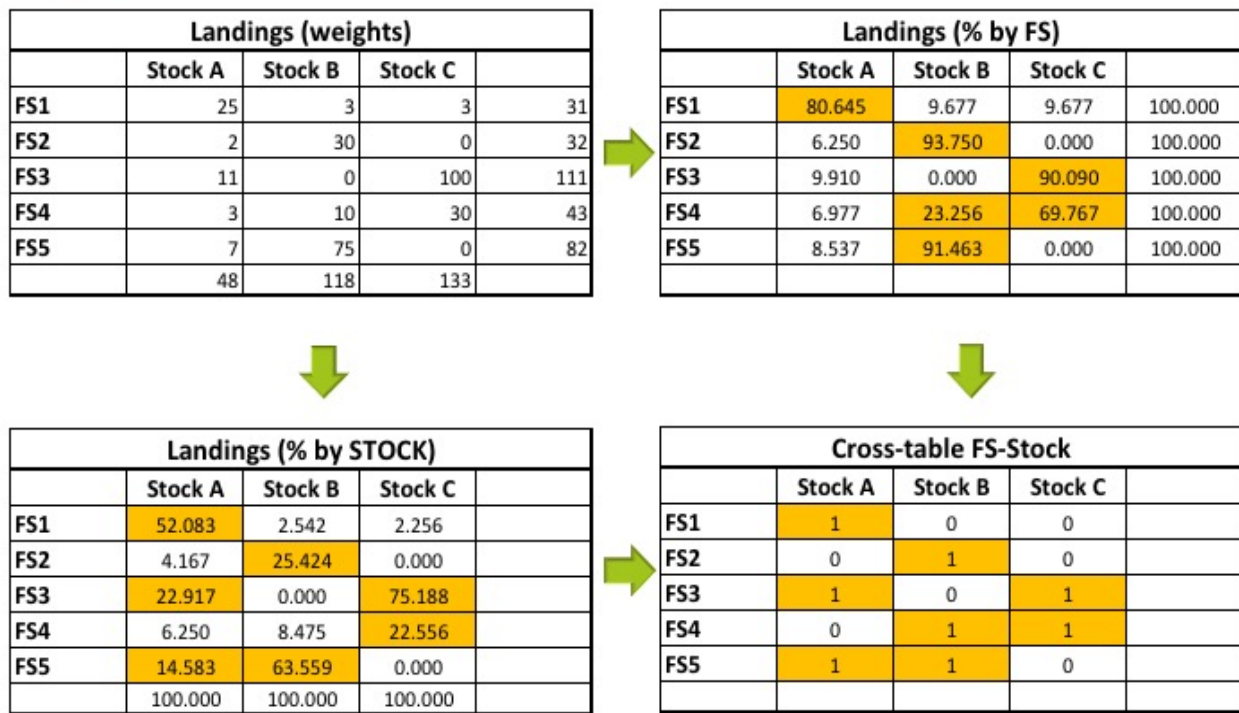


Figure A1.1. Example of pre-processing of landings data for the computation of the SAR indicator  
 During the preparatory meeting EWG 22-15, more than 400 stocks were examined. For 2022 Balance Group, 267 items were considered at risk for at least one year of the time period 2009-2021. They are representing over 300 stocks considering that some regulation relates to groups (e.g. Mobula listing in CITES count for one item but consist in 8 species)

The total number of Stocks as Risk increased from 2012 to 2022, 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). It should be noted that for 2022 the vulnerable species were considered for SAR selection as IUCN approach for Threatened species. 2020-2021, a large number of IUCN species were reviewed at regional or global ; ass these assessment were mainly made available in 2022 it allows the Preparatory EWG 22-15 to include new species.

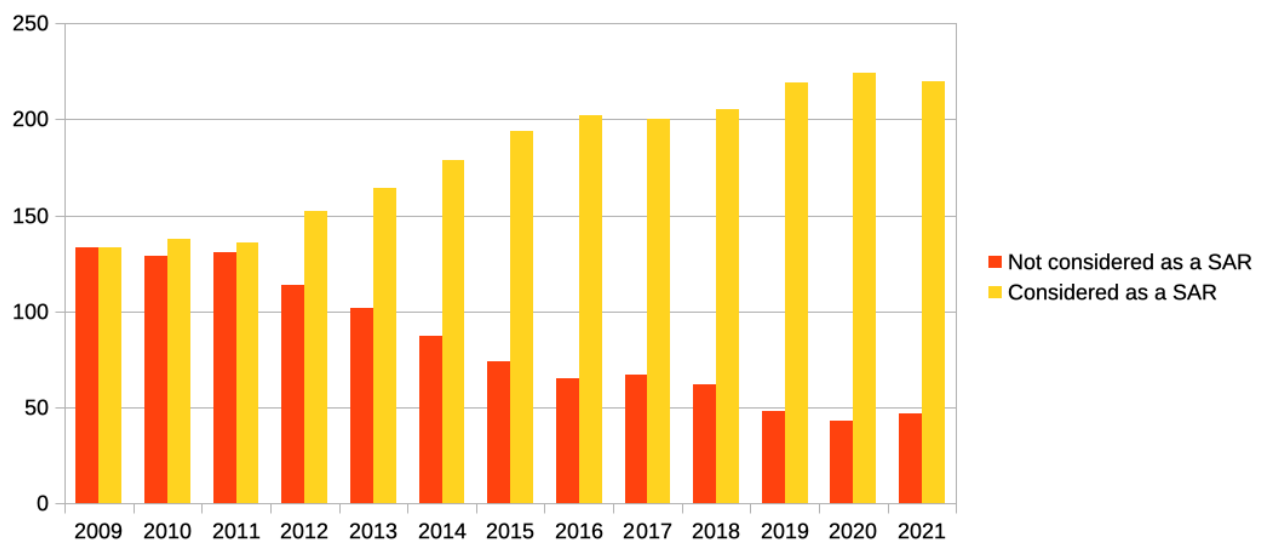


Figure A1.2 - Distribution of the number of SAR per year (TRUE = Stock is considered at risk; FALSE = Stock is not considered at risk).

For 2022, 19% of the stocks were selected based on quantitative data (SSB/B lim), about one third was selected due to RFMO's advices based on quantitative data different from Blim, 16% of the stocks or species were selected based on regulations (EC or RFMOs) and the remaining third were linked to some listing in International conventions (IUCN or CITES).

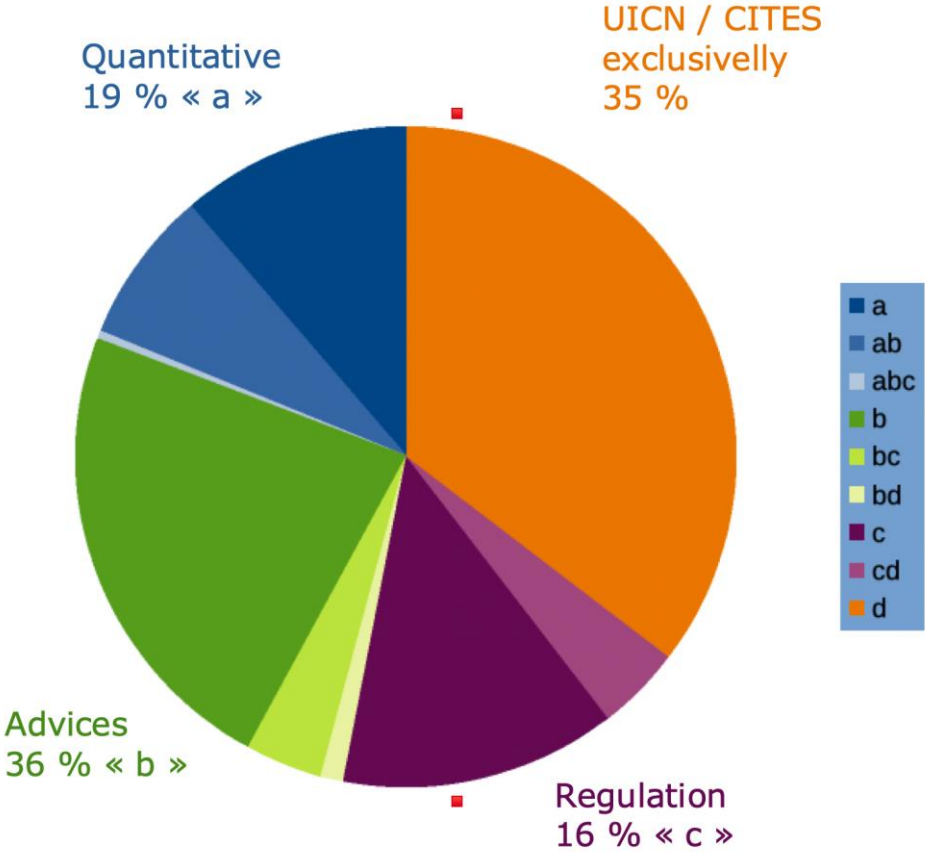


Figure A1.3 - Distribution of SAR per selecting criteria (a to d) in 2022.

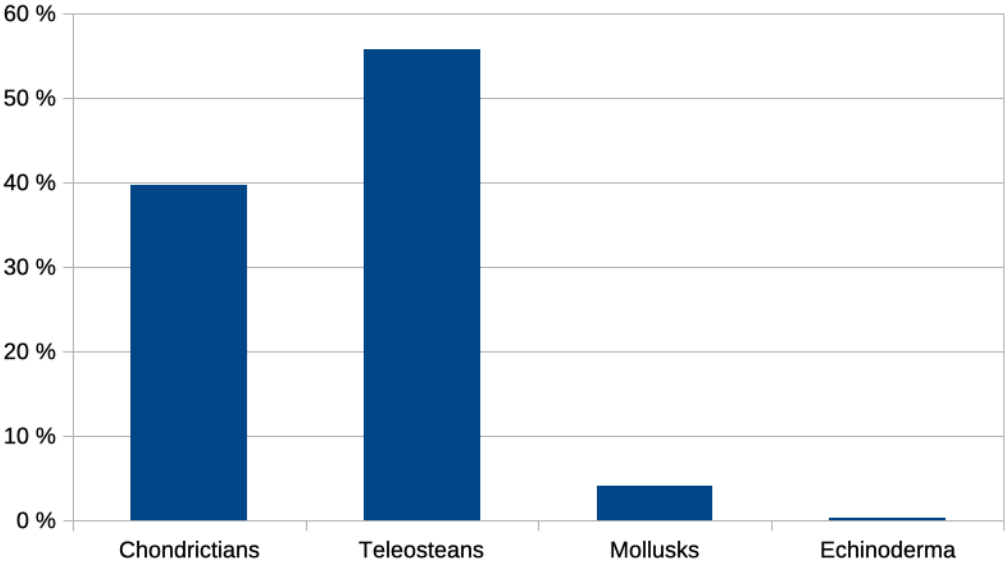


Figure A1.4 - Distribution of SAR per group in 2022.

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 group.

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 – 2022 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:

- Committee for Central for Eastern Atlantic (CECAF) - Stock status information for pelagic species under the jurisdiction of the CECAF was reviewed to determine which stocks could be incorporated in the SAR indicator. No new report was made available since the 2018 CECAF-FAO reports were available for evaluation of the SAR this year, released in 2020 so that no update was possible. which allows an update of the SAR. Madeiran sardinella, Round sardinella, Bonga shad, Atlantic horse mackerel and Cunene horse mackerel from north CECAF were included in the selection as well as Madeiran sardinella, Round sardinella both for north and south CECAF.
- The Barent Sea stocks of NEA cod, NEA haddock, *Sebastes mentella* or Greenland Halibut, used to be assessed by ICES were not processed in 2022 as management and data collection for these stocks are shared between Norway and Russia. "Due to the temporary suspension of Russian scientists from ICES, this assessment was conducted by a Joint Russian-Norwegian working group on Arctic Fisheries (JRN-AFWG) consisting of scientists from VNIRO (Russia) and IMR (Norway) (Howell et al., 2022)". For the EWG 22-15 the 2021 assessment data was used for these stocks. It was evaluated that this proxy was not of major issue for the indicator calculation.
- As ICES has changed their approach for Cod coastal Norwegian waters now split into cod.27.1-2.coastN and cod.27.1-2.coastS for northern and southern catches. A new splitting ratio was discussed within experts and decided for SAR as well as for SHI.
- When  $B_{lim}$  was not available a proxy of  $0.4 SSB_{msy}$  were agreed to be used for some RFMO's stocks as for instance the inclusion of Striped Marlin (*Tetrapturus audax*) in IOTC.
- Where new species were added to the SAR list, the relevant geographical ranges were investigated and corresponding FAO fishing areas added to the Stock Description column in the 2021 SAR stock selection sheet.
- The main issues faced by the group during the EWG 22-15 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 account was the 15/09/2022. 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
- The experts agreed to select only the "critically endangered" (CR), "Endangered" (EN) and "Vulnerable" (VU) species of marine species (e.g fish, mollusk and echinoderm) used for human food consumption. listed on the IUCN Red list as stocks at risk for the SAR calculation, . This represent an improvement in the approach for a better evaluation of the fleet segment involved in landing stocks or species in threatened status. However, some improvement is still possible, as the EWG apply a threshold at 100t total landing (all year combined) for 2022 Preparatory EWG 22-15 ; the remaining species /stocks could be taken into account for next years calculation exercise. In addition some other groups such as Marine mammals, birds,

reptiles, corals, etc. category would also make sense to be considered in the future, in relation with ETP and sensitive species methodology developed for the STECF EWG 22-05.

- 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. Porcupine 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 5 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, Oskar, 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.
- This year the online platform for Indicator offers the possibility to check directly the FS involved in landing the stocks listed at risk ; this can be considered as a major improvement for experts to explain MS situation in regards to SAR values assessemntrs as potentially imbalance as well as trying to evaluate the discrepancies between MS and JRC calculation for SAR.

Species identified as SAR for 2021 according to the Commission Guidelines (COM(2014) 545 Final) and for which the cumulative annual catches exceed 100 t are listed in Annex IV.

### *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 22-15as:

$$\text{Net profit} / (\text{value of physical capital} + \text{value of quota and other fishing rights})$$

where,

$$\text{Net profit} = (\text{Income from landings} + \text{other income} + \text{income from leasing out quota}) - (\text{crew wage} + \text{unpaid labour} + \text{energy costs} + \text{repair costs} + \text{other variable costs} + \text{other non-variable costs} + \text{lease/rental payments for quota or value of quota} + \text{annual depreciation})$$

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

RoFTA is calculated as

$$\text{Net profit} / (\text{value of physical capital});$$

where,

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

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. Conversely, RoI is calculated only calculated when value of quota and other fishing rights is available.

EWG 22-15 applied the criteria from the 2014 Commission guidelines to comment on whether fleet segments were 'in balance' or 'out of balance'. When the indicator value was less than the interest rate, but greater than zero the comment, 'not sufficiently profitable' was used.

The RoFTA indicator has been calculated and is presented under section 3.6 for all Member States 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
	Slope* <-0.05	Decreasing

At least the last 2 consecutive years with data	-0.05=<Slope*=<0.05	No clear trend**
	Slope = 0	Flat / null

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

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

#### 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 segment to keep fishing on a day-by-day basis: does income cover the pay for the crew and the fuel and running costs for the vessel? If not, there may be an imbalance. If the ratio between current revenue and break-even revenue is less than one, this is an indication of short-term economic inefficiency that could indicate the existence of an imbalance.

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

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

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

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

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

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

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

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

#### 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<sub>220</sub> 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 (Table 3.3.6.1).

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



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

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

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

**10 ANNEX IV - SPECIES IDENTIFIED AS SAR FOR 2021 ACCORDING TO COM(2014) 545 FINAL) AND FOR WHICH THE CUMULATIVE ANNUAL CATCH SINCE 2008 HAS EXCEEDED 100 T.**

Code	Specie Common Name	FAO_Code	Stock_Description	SAR_Choice
1	Sole	SOL	Sole ( <i>Solea solea</i> ) in Division 7.a (Irish Sea)	2021_FALSE
2	Sole	SOL	Sole ( <i>Solea solea</i> ) in Subarea 4 (North Sea)	2021_TRUE
3	Whiting	WHG	Whiting ( <i>Merlangius merlangus</i> ) in Division 6.a (West of Scotland)	2021_TRUE
4	Whiting	WHG	Whiting ( <i>Merlangius merlangus</i> ) in Division VIIa (Irish Sea)	2021_TRUE
5	Saithe	POK	Saithe ( <i>Pollachius virens</i> ) in Division 5.b (Faroes grounds)	2021_FALSE
6	Plaice	PLE	Plaice ( <i>Pleuronectes platessa</i> ) in Subarea 8 and Division 9.a (Bay of Biscay and Atlantic Iberian waters)	2021_FALSE
7	Plaice	PLE	Plaice ( <i>Pleuronectes platessa</i> ) in divisions 7.b-c (West of Ireland)	2021_FALSE
8	Spurdog	DGS	Spurdog ( <i>Squalus acanthias</i> ) in the Northeast Atlantic	2021_TRUE
9	horse mackerel	HOM, JAX	Horse mackerel ( <i>Trachurus trachurus</i> ) in Subarea 8 and divisions 2.a, 4.a, 5.b, 6.a, 7.a-c, and 7.e-k (the Northeast Atlantic)	2021_FALSE
10	Cod	COD	ICES Subarea 14 and NAFO Division 1.F (East Greenland, South Greenland)	2021_FALSE
11	cod	COD	Cod ( <i>Gadus morhua</i> ) in Subarea 4, Division 7.d, and Subdivision 20 (North Sea, eastern English Channel, Skagerrak)	2021_TRUE
12	cod	COD	Cod ( <i>Gadus morhua</i> ) in divisions 7.e-k (western English Channel and southern Celtic Seas)	2021_TRUE
13	cod	COD	Cod ( <i>Gadus morhua</i> ) in Subdivisions 22-24 (Western Baltic Sea)	2021_TRUE
14	cod	COD	Cod ( <i>Gadus morhua</i> ) in Division 6.a (West of Scotland)	2021_TRUE
15	cod	COD	Cod ( <i>Gadus morhua</i> ) in Subdivision 5.b.1 (Faroe Plateau)	2021_FALSE
16	cod	COD	Cod ( <i>Gadus morhua</i> ) in Subdivision 7a	2021_TRUE
17	Atlantic salmon	SAL	Atlantic salmon ( <i>Salmo salar</i> ) in subdivisions 22-31 (Baltic Sea, excluding the Gulf of Finland)	2021_TRUE
18	Atlantic salmon	SAL	Atlantic salmon ( <i>Salmo salar</i> ) in subdivision 32	2021_TRUE
19	Porbeagle	POR	Porbeagle ( <i>Lamna nasus</i> ) in all waters	2021_TRUE
20	Plaice	PLE	Plaice ( <i>Pleuronectes platessa</i> ) in Division 7.d (eastern English Channel)	2021_FALSE
21	haddock	HAD	Haddock ( <i>Melanogrammus aeglefinus</i> ) in Subarea 4, Division 6.a, and Subdivision 20 (North Sea, West of Scotland, Skagerrak)	2021_FALSE
22	anchovy	ANE	Anchovy ( <i>Engraulis encrasicolus</i> ) in Subarea 8 (Bay of Biscay)	2021_FALSE
23	bluefin tuna	BFT	Bluefin tuna ( <i>Thunnus thynnus</i> ) in Mediterranean	2021_TRUE
24	bluefin tuna	BFT	Bluefin tuna ( <i>Thunnus thynnus</i> ) Atlantic Ocean east of longitude 45° W	2021_FALSE
25	Turbot	TUR	Turbot ( <i>Scophthalmus maximus</i> ) in the Black Sea	2021_FALSE
26	Nephrops	NEP	Norway lobster ( <i>Nephrops norvegicus</i> ) in Division 4.b, Functional Unit 6 (central North Sea, Farn Deeps)	2021_FALSE
27	Nephrops	NEP	Norway lobster ( <i>Nephrops norvegicus</i> ) in Division 9.a, functional units 26-27 (Atlantic Iberian waters East, western Galicia, and northern Portugal)	2021_TRUE
28	Nephrops	NEP	Norway lobster ( <i>Nephrops norvegicus</i> ) in Division 8.c, Functional Unit 25 (southern Bay of Biscay and northern Galicia)	2021_TRUE
29	Sandeel	SAN	Sandeel ( <i>Ammodytes</i> spp.) in divisions 4.b-c and Subdivision 20, Sandeel Area 2r (central and southern North Sea)	2021_TRUE
30	Sandeel	SAN	Sandeel ( <i>Ammodytes</i> spp.) in subdivisions 20-22, Sandeel Area 6 (Skagerrak, Kattegat and Belt Sea)	2021_FALSE
31	Capelin	CAP	Subareas 5 and 14 and Division 2.a west of 5°W (Iceland and Faroes grounds, East Greenland, Jan Mayen area)	2021_TRUE
32	Herring	HER	Herring ( <i>Clupea harengus</i> ) in subdivisions 20-24, spring spawners (Skagerrak, Kattegat, and wester	2021_TRUE
33	Blue Ling	BLI	Blue ling ( <i>Molva dypterygia</i> ) in subareas 1, 2, 8, 9, and 12, and in divisions 3.a and 4.a (other areas)	2021_TRUE
34	Large tooth sawfish	RPR, RPM	Large tooth sawfish ( <i>Pristis pristis</i> )	2021_TRUE
35	Dwarf sawfish	RPC	Dwarf sawfish ( <i>Pristis clavata</i> )	2021_TRUE
36	Blue Ling	BLI	Blue ling ( <i>Molva dypterygia</i> ) in Subarea 14 and Division 5.a (East Greenland and Iceland grounds)	2021_FALSE
37	Herring	HER	Herring ( <i>Clupea harengus</i> ) in divisions 6.a and 7.b-c (West of Scotland, West of Ireland)	2021_TRUE
38	Plaice	PLE	Plaice ( <i>Pleuronectes platessa</i> ) in divisions 7.h-k (Celtic Sea South, southwest of Ireland)	2021_TRUE
39	Pollack	POL	Pollack ( <i>Pollachius pollachius</i> ) in Subarea 4 (North Sea) and Division 3.a (North Sea, Skagerrak and Kattegat)	2021_TRUE
40	Portuguese dogfish	CYO	Portuguese dogfish ( <i>Centroscymnus coelolepis</i> ) North East Atlantic 27	2021_TRUE
41	Leaf-scale gulper shark	GUQ	Leafscale gulper shark ( <i>Centrophorus squamosus</i> ) in subareas 1-10, 12, and 14 (the Northeast Atlantic and adjacent waters)	2021_TRUE
42	Angel shark	AGN	Angel Shark ( <i>Squatina squatina</i> ) in North East Atlantic 27 and 34	2021_TRUE
43	Orange roughy	ORY	Orange roughy ( <i>Hoplostethus atlanticus</i> ) in the Northeast Atlantic	2021_TRUE
44	Orange roughy	ORY	Orange roughy ( <i>Hoplostethus atlanticus</i> ) in South Est Atlantic	2021_TRUE
45	Haddock	HAD	Haddock ( <i>Melanogrammus aeglefinus</i> ) in Division 5.b (Faroes grounds)	2021_FALSE
46	Golden redfish	REG, RED	Golden redfish ( <i>Sebastes norvegicus</i> ) in subareas 1 and 2 (Northeast Arctic)	2021_TRUE
47	Beaked redfish	REB, RED	Beaked redfish ( <i>Sebastes mentella</i> ) in Subarea 14 and Division 5.a, Icelandic slope stock (East of Greenland, Iceland grounds)	2021_TRUE
48	Haddock	HAD	Haddock ( <i>Melanogrammus aeglefinus</i> ) in Division 6.b (Rockall)	2021_FALSE
49	Blackspot Seabream	SBR	Blackspot seabream ( <i>Pagellus bogaraveo</i> ) in subareas 6, 7, and 8 (Celtic Seas and the English Channel, Bay of Biscay)	2021_TRUE
50	Blue Ling	BLI	Blue ling ( <i>Molva dypterygia</i> ) in subareas 6-7 and Division 5.b (Celtic Seas, English Channel, and Faroes grounds)	2021_FALSE
51	European eel	ELE	European eel ( <i>Anguilla anguilla</i> ) in North East Atlantic 27	2021_TRUE
52	European eel	ELE	European eel ( <i>Anguilla anguilla</i> ) in Mediterranean 37	2021_TRUE
53	Northern Shrimp	PRA	Northern shrimp ( <i>Pandalus borealis</i> ) on the Flemish Cap (NAFO 3M)	2021_FALSE
54	Northern Shrimp	PRA	Northern shrimp ( <i>Pandalus borealis</i> ) on the Grand Bank (NAFO 3LNO)	2021_TRUE
55	Techirghiol stickleback	GUO	Techirghiol stickleback ( <i>Gasterosteus crenobiontus</i> ) in GSA 29	2021_TRUE
56	Star Sturgeon	ACE	Star sturgeon ( <i>Acipenser stellatus</i> ) in Mediterranean and Black Sea 37	2021_TRUE
57	Barbel Sturgeon	AAN	Barbel sturgeon ( <i>Acipenser nudiiventris</i> ) in Mediterranean and Black Sea 37	2021_TRUE
58	Atlantic Sturgeon	AAO	Atlantic Sturgeon ( <i>Acipenser oxyrinchus</i> ) in Northeast Pacific 67, 77	2021_TRUE
59	White Sturgeon	APN	White Sturgeon ( <i>Acipenser transmontanus</i> ) in Northwest Atlantic 27	2021_TRUE
60	Danube Sturgeon	APG	Danube Sturgeon ( <i>Acipenser gueldenstaedtii</i> ) in Black Sea and Caspian Sea	2021_TRUE
61	Green Sturgeon	AAM	Green Sturgeon ( <i>Acipenser medirostris</i> ) in Northwest Pacific 67, 77	2021_TRUE
62	Adriatic Sturgeon	AAA	Adriatic sturgeon ( <i>Acipenser nudiiventris</i> ) in Adriatic Sea 37	2021_TRUE
63	Basking shark	BSK	Basking shark ( <i>Cetorhinus maximus</i> ) in all waters	2021_TRUE
65	Sawfishes	SAW	Sawfishes nei ( <i>Pristis</i> spp/ <i>Anoxypristis</i> ) 27.9, 31, 34, 37, 41, 51, 57	2021_TRUE
66	Starry Ray	RJR	Starry ray ( <i>Amblyraja radiata</i> ) in Subarea 4 and division 2.a, 3.a, 7.d	2021_TRUE
67	Great White shark	WSH	Great White Shark ( <i>Carcharodon carcharias</i> ) in all waters	2021_TRUE
68	Comon skate Complex	RJB	Common skate ( <i>Dipturus batis</i> -complex (blue skate ( <i>Dipturus batis</i> ) and flapper skate ( <i>Dipturus cf. intermedia</i> )) in subareas 6-7 (excluding Division 7.d) (Celtic Seas and western English Channel)	2021_TRUE
69	Whale shark	RHN	31, 34, 41, 51, 58	2021_TRUE
70	Smooth Lantern Shark	ETP	Smooth Lantern Shark ( <i>Etmopterus pusillus</i> ) in ICES areas 2.a, 3, 4, 7, 8, 9 & 10	2021_TRUE
71	Tope Shark	GAG	Tope ( <i>Galeorhinus galeus</i> ) in subareas 1-10, 12 and 14 (the Northeast Atlantic and adjacent waters)	2021_TRUE
72	Giant Manta	RMB	Giant Manta ray ( <i>Mobula birostris</i> ) in all waters	2021_TRUE
73	Mobulus	MAN, RME, RMH, RMJ, RMK, RMM, RMU, RMR, RMT, RMO, RMV	Mobulinae in all waters	2021_TRUE
74	Thornback Ray	RJC	Thornback ray ( <i>Raja clavata</i> ) in Subarea 4 and in divisions 3.a and 7.d (North Sea, Skagerrak, Kattegat, and eastern English Channel)	2021_TRUE
75	Undulate ray	RJU	Undulate Ray in Vild-e, English Channel	2021_FALSE
76	Norwegian Skate	JAD	Vla, Vib, Vila-c, Vilefghk	2021_TRUE
77	White Skate	RJA	White skate ( <i>Rostroraja alba</i> ) in the Northeast Atlantic	2021_TRUE
78	Guitarfishes	GTF, RHH, RBE, RBC, GUD, GUF, RBO, RBU, RBS, RBL, RBP, RBK, RBZ, RBR, RBT, GUZ, RZE	Guitarfishes in 27.1-12	2021_TRUE
79	Great lanternshark	ETR	Great lanternshark ( <i>Etmopterus princeps</i> ) in North East Atlantic	2021_TRUE
80	Bigeye Thresher Shark	BTH	Bigeye Thresher shark ( <i>Alopias superciliosus</i> ) in all waters	2021_TRUE
81	Oceanic White Tip	OCS	Oceanic White Tip Shark ( <i>Carcharhinus longimanus</i> ) in all waters	2021_TRUE
82	Silky Shark	FAL	Silky Shark ( <i>Carcharhinus falciformis</i> ) in ICCAT area	2021_TRUE
83	Hamerheads Sharks nei	SPN	Hamerhead Shark ( <i>Sphyrna lewini</i> ) all out of Mediterranean	2021_TRUE
84	Sardine	PIL	Sardine ( <i>Sardina pilchardus</i> ) in 27.8c, 27.9a	2021_FALSE
85	Anchovy	ANE	Anchovy ( <i>Engraulis encrasicolus</i> ) in GSA 7	2021_TRUE
86	sandeel	SAN	Sandeel ( <i>Ammodytes</i> spp.) in Division 4.a, Sandeel Area 7r (northern North Sea, Shetland)	2021_TRUE
87	Sardine	PIL	Sardine ( <i>Pilchardus pilchardus</i> ) in GSA 6	2021_FALSE
88	sandeel	SAN	Sandeel ( <i>Ammodytes</i> spp.) in divisions 4.a-b and Subdivision 20, Sandeel Area 3r (northern and central North Sea, Skagerrak)	2021_FALSE
89	sandeel	SAN	Sandeel ( <i>Ammodytes</i> spp.) in Division 4.a, Sandeel Area 5r (Northern North Sea, Viking and Bergen banks)	2021_TRUE
90	sandeel	SAN	Sandeel ( <i>Ammodytes</i> spp.) in divisions 4.b-c, Sandeel Area 1r (central and southern North Sea, Dogger Bank)	2021_TRUE

Code	Specie Common Name	FAO_Code	Stock_Description	
91	Spiny Dogfish	DGS	Spurdog ( <i>Squalus acanthias</i> ) in Black Sea GSA 29	2021_TRUE
92	Smalltooth sand tiger	LOO	Smalltooth sand tiger ( <i>Odontaspis ferox</i> ) all area	2021_TRUE
93	Sawback angelshark	SUA	Sawback angelshark ( <i>Squatina aculeata</i> ) all area	2021_TRUE
94	Smoothback angelshark	SUT	Smoothback angelshark ( <i>Squatina oculata</i> ) in Atlantic and Medeterranea	2021_TRUE
95	Maltese Ray	JAM	Maltese ray ( <i>Leucoraja melitensis</i> ) in Mediteranea	2021_TRUE
96	Spiny butterfly ray	RGL	Spiny butterfly ray ( <i>Gymnura altavela</i> ) in East Atlantic and Mediterranean	2021_TRUE
97	Bull Ray	MPO	Bull ray ( <i>Aetomylaeus bovinus</i> ) in Mediterranean	2021_TRUE
98	Sand Tiger Shark	CCT	Sand tiger shark ( <i>Cacharinus taurus</i> ) all waters	2021_TRUE
99	Greenland Shark	GSK	Greenland Shark ( <i>Somniosus microcephalus</i> ) all waters	2021_TRUE
100	Southern Blufin Tuna	SBF	Southern Blufin Tuna ( <i>Thunnus maccoyii</i> ) in all waters	2021_TRUE
101	Blackchin guitarfish	RBC	Blackchin guitarfish ( <i>Rhinobatos cemiculus</i> ) in 37	2021_TRUE
102	Sandy ray	RJI	Sandy ray ( <i>Leucoraja circularis</i> ) in Mediteranea 37	2021_TRUE
103	Common guitarfish	RBX	Common guitarfish in Mediteranea 37	2021_TRUE
104	Alopiidae	BTH, ALV, PTH, THR	Alopiidae in Indian Ocean	2021_TRUE
105	Tusk	USK	Tusk ( <i>Brosme brosme</i> ) in Subarea 12, excluding Division 12.b (Southern Mid-Atlantic Ridge)	2021_TRUE
106	Gulper Shark	CWO, GUP	Gulper Shark ( <i>Centrophorus granulosus</i> ) all waters	2021_TRUE
107	Longnose velvet dogfish	CYP	Longnose velvet dogfish ( <i>Centroscymnus crepidater</i> ) in North east Atlantic Ocean	2021_TRUE
108	Cape Verde spiny lobster	NRH	Cape Verde spiny lobster ( <i>Palinurus charlestoni</i> ) in Maderian Waters	2021_TRUE
109	Sandeel	SAN	Sandeel ( <i>Ammodytes</i> spp.) in divisions 4.a-b, Sandeel Area 4 (northern and central North Sea)	2021_FALSE
110	Cunene horse mackerel	HMZ	Cunene horse mackerel ( <i>Trachurus trcae</i> ) in South CECAF	2021_FALSE
111	Sole	SOL	Sole ( <i>Solea solea</i> ) in subdivisions 20-24	2021_FALSE
112	Knifetooth dogfish	SYR	Knifetooth dogfish ( <i>Scymnodon ringens</i> ) all area	2021_TRUE
113	Undulate ray	RJU	Undulate Ray in VIII a-b Nothern & Central Bay of Biscay	2021_FALSE
114	Cod	COD	Cod ( <i>Gadus morhua</i> ) in NAFO divisions 1.A-E, offshore (West Greenland)	2021_TRUE
115	Sea bass	BSS	Sea bass ( <i>Dicentrarchus labrax</i> ) in divisions 4.b-c, 7.a, and 7.d-h (central and southern North Sea, Irish Sea, English Channel, Bristol Channel, and Celtic Sea)	2021_FALSE
116	Swordfish	SWO	Swordfish in Mediteranea	2021_TRUE
117	Greenland Halibut	GHL	Greenland halibut ( <i>Reinhardtius hippoglossoides</i> ) in subareas 5, 6, 12, and 14 (Iceland and Faroes grounds, West of Scotland, North of Azores, East of Greenland)	2021_FALSE
118	Roughhead Grenadier	RHG	Roughhead grenadier ( <i>Macrourus berglax</i> ) in the Northeast Atlantic	2021_TRUE
119	Capelin	CAP	Northeast Arctic excluding Division 2.a west of 5°W	2021_TRUE
120	Roughsnout grenadier	TSU	Roughsnout grenadier ( <i>Trachyrincus scabrus</i> ) in the northeast Atlantic	2021_TRUE
121	Sole	SOL	Sole ( <i>Solea solea</i> ) in Division 7.d (eastern English Channel)	2021_FALSE
122	Cod	COD	Cod ( <i>Gadus morhua</i> ) in Division 6.b (Rockall)	2021_TRUE
123	Cod	COD	Cod ( <i>Gadus morhua</i> ) in Subdivision 21 (Kattegat)	2021_TRUE
124	Cod	COD	Cod ( <i>Gadus morhua</i> ) in subareas 1 and 2 (Norwegian coastal waters cod)	2021_FALSE
125	Beaked redfish	REB, RED	Beaked redfish ( <i>Sebastes mentella</i> ) in ICES subareas 5, 12, and 14 (Iceland and Faroes grounds, north of Azores, east of Greenland) and NAFO subareas 1+2 (deep pelagic stock > 500 m)	2021_TRUE
126	American Plaice	PLA	American plaice ( <i>Hippoglossoides platessoides</i> ) on the Grand Bank (NAFO 3LNO)	2021_TRUE
127	Witch Flounder	WIT	Witch flounder ( <i>Glyptocephalus cynoglossus</i> ) in Divisions 2J + 3KL	2021_TRUE
128	Undulate ray	RJU	Undulate ray ( <i>Raja undulata</i> ) in divisions 7.b and 7.j (west and southwest of Ireland)	2021_TRUE
129	Undulate ray	RJU	Undulate ray ( <i>Raja undulata</i> ) in Division 9.a (Atlantic Iberian waters)	2021_TRUE
130	Undulate ray	RJU	Undulate ray ( <i>Raja undulata</i> ) in Division 8.c (Cantabrian Sea)	2021_TRUE
131	Cuckoo ray	RJN	Cuckoo ray ( <i>Leucoraja naevus</i> ) in Subarea 4 and Division 3.a (North Sea, Skagerrak, and Kattegat)	2021_FALSE
132	White Grouper	GPW	White grouper ( <i>Epinephelus aeneus</i> ) in Mauritania, Senegal and Gambia	2021_FALSE
133	Striped marlin	MLS	Striped marlin ( <i>Tetrapturus audax</i> ) in the Indian Ocean	2021_TRUE
134	Orange roughy	ORY	Orange Roughy ( <i>Hoplostethus atlanticus</i> ) in South Est Pacific Ocean	2021_TRUE
135	Roundnose grenadier	RNG	Roundnose grenadier ( <i>Coryphaenoides rupestris</i> ) in North Atlantic	2021_TRUE
137	Angel shark	AGN	Angel Shark ( <i>Squatina squatina</i> ) in Mediteranea	2021_TRUE
138	Shark	SPL	Scalloped Hammerhead Shark ( <i>Sphyrna lewini</i> ) in Mediterranean	2021_TRUE
139	Great Hammerhead Shark	SPK	Great Hammerhead ( <i>Sphyrna mokarran</i> ) Shark in Mediterranean	2021_TRUE
140	Smooth Hammerhead Shark	SPK	Smooth Hammerhead ( <i>Sphyrna zygaena</i> ) Shark in Mediterranean	2021_TRUE
141	Shark	SPL	Scalloped Hammerhead Shark ( <i>Sphyrna lewini</i> ) all out of Mediteranea	2021_TRUE
142	Shark	SPK	Great Hammerhead ( <i>Sphyrna mokaran</i> ) Shark all out of Mediterranean	2021_TRUE
143	Smooth Hammerhead Shark	SPK	Smooth Hammerhead ( <i>Sphyrna zygaena</i> ) Shark world out of Mediterranean	2021_TRUE
144	Hammerheads Sharks	SPN	Hammerhead Shark ( <i>Sphyrna lewini</i> ) all out of Mediterranean	2021_TRUE
145	Atlantic salmon	SAL	Atlantic Salmon ( <i>Salmo salar</i> ) in Atlantic ocean, southern complex	2021_TRUE
146	Friiled shark	HXC	Friiled shark ( <i>Chlamydoselachus anguineus</i> ) all waters	2021_TRUE
147	Sailfin roughshark	OXN	Sailfin roughshark ( <i>Oxynotus paradoxus</i> )all waters	2021_TRUE
148	Deep-water catsharks	API	Deep-water catsharks ( <i>Apristurus</i> spp.)all waters	2021_TRUE
149	Bluntnose sixgill shark	SBL	Bluntnose sixgill shark ( <i>Hexanchus griseus</i> ) all waters	2021_TRUE
150	Mousse catshark	GAM	Mousse catshark ( <i>Galeus murinus</i> ) all waters	2021_TRUE
151	Velvet belly	ETX	Velvet belly ( <i>Etmopterus spinax</i> )	2021_TRUE
152	Black dogfish	CFB	Black dogfish ( <i>Ctenorhinus lybicus</i> ) in divisions 3.a and 4.a East (Skagerrak and Kattegat and northern North Sea in the Norwegian Deep)	2021_TRUE
153	Northern Shrimp	PRA	Deep	2021_FALSE
154	Cod	COD	Cod ( <i>Gadus morhua</i> ) in subdivisions 24-32, eastern Baltic stock (eastern Baltic Sea)	2021_TRUE
155	Galapagos Damsel	AZE	Galapagos Damsel ( <i>Azarina eupalama</i> ) in Pacific	2021_TRUE
156	Whitespotted Wedgefish	RCD	Whitespotted Wedgefish ( <i>Rhynchobatus djiddensis</i> ) in Northern Indian Ocean	2021_TRUE
157	Seventyfour seabream	SEV	Seventyfour seabream ( <i>Polysteganus undulosus</i> ) in Southern Indian Ocean	2021_TRUE
158	Halavi Guitarfish	RBH	Halavi Guitarfish ( <i>Glaucostegus halavi</i> ) in Northern Indian Ocean	2021_TRUE
159	Nassau Grouper	GNP	Nassau grouper ( <i>Epinephelus striatus</i> ) in Caribbean Sea	2021_TRUE
160	Corfu toothcarp	VXL	Corfu toothcarp ( <i>Valencia letourneuxi</i> ) in Mediteranee Ionian Sea	2021_TRUE
161	Valencia toothcarp	VHS	Valencia toothcarp ( <i>Valencia hispanica</i> ) in Western Mediteranea 37.1.2, 37.1.1	2021_TRUE
162	Giant Seabass	TEJ	Giant Seabass ( <i>Stereolepis gigas</i> ) in Pacific Ocean	2021_TRUE
163	Japanese huchen	HUP	Japanese huchen ( <i>Hucho perryi</i> ) in North-Western Pacific Ocean	2021_TRUE
164	European hake	HKE	European hake ( <i>Merluccius merluccius</i> ) Moroccan stock	2021_FALSE
165	Deep-water rose shrimp	DPS	Deep-water rose shrimp ( <i>Parapenaeus longirostris</i> ) in CECAF 34.1.11 34.1.12 34.1.13	2021_FALSE
166	Rubberlip grunt	GBR	Rubberlip grunt ( <i>Plectrohynchus mediterraneus</i> ) in CECAF 34.1.11 34.1.12	2021_TRUE
167	Witch	WIT	Witch ( <i>Glyptocephalus cynoglossus</i> ) in Subarea 4 and divisions 3.a and 7.d (North Sea, Skagerrak and Kattegat, eastern English Channel)	2021_FALSE
168	Yellowfin Tuna	YFT	Yellowfin tuna ( <i>Thunnus albacares</i> ) in Indian Ocean	2021_TRUE
169	Atlantic White Marlin	WHM	White Marlin ( <i>Tetrapturus albidus</i> ) in Atlantic Ocean.	2021_TRUE
170	Shortfin Mako	SMA	Shortfin Mako ( <i>Isurus oxyrinchus</i> ) in North Atlantic Ocean	2021_TRUE
171	Herring	HER	Herring ( <i>Clupea harengus</i> ) in divisions 7.a South of 52°30'N, 7.g-h, and 7.j-k (Irish Sea, Celtic Sea, and southwest of Ireland)	2021_TRUE
172	Whiting	WHG	Whiting ( <i>Merlangius merlangus</i> ) in divisions 7.b-c and 7.e-k (southern Celtic Seas and western English Channel)	2021_TRUE
173	Witch Flounder	WIT	Witch flounder in Divisions 3N + 3O	2021_TRUE
174	Capelin	CAP	Capelin in Divisions 3N + 3O	2021_TRUE
175	Cod	COD	Cod ( <i>Gadus morhua</i> ) in Divisions 3N + 3O	2021_TRUE
176	Sole	SOL	Sole ( <i>Solea solea</i> ) in Division 7.h-k (Celtic Sea South, southwest of Ireland)	2021_FALSE
177	Toothfish	TOA, TOT, TOP	Toothfish ( <i>Dissostichus</i> spp.) in Antarctic 48.5	2021_FALSE
178	Nephrops	NEP	Norway lobster ( <i>Nephrops norvegicus</i> ) in Division 8.c, Functional Unit 31 (southern Bay of Biscay and Cantabrian Sea)	2021_TRUE
179	Round sardinella	SAA	Round sardinella ( <i>Sardinella aurita</i> ) in North CECAF	2021_TRUE
180	Madeiran sardinella	SAE	Madeiran sardinella ( <i>Sardinella madarensis</i> ) in North CECAF	2021_TRUE
181	Sardinellas nei	SIX	Sardinella ( <i>Sardinella spp</i> ) in North CECAF	2021_TRUE
182	Bonga shad	BOA	Bonga shad ( <i>Ethmalosa fimbriata</i> ) in North CECAF	2021_FALSE
183	Round sardinella	SAA	Round sardinella ( <i>Sardinella aurita</i> ) in South CECAF	2021_TRUE
184	Madeiran sardinella	SAE	Madeiran sardinella ( <i>Sardinella madarensis</i> ) in South CECAF	2021_TRUE
185	Sardinellas nei	SIX	Sardinella ( <i>Sardinella spp</i> ) in South CECAF	2021_TRUE
186	Atlantic horse mackerel	HOM	Atlantic horse mackerel ( <i>Trachurus trachurus</i> ) in North CECAF	2021_FALSE

Code	Specie Common Name	FAO_Code	Stock_Description	SAR_Choice
187	Cunene horse mackerel	HMZ	Cunene horse mackerel ( <i>Trachurus trecae</i> ) in North CEECAF	2021_FALSE
188	Shortfin Mako	SMA	Shortfin Mako ( <i>Isurus oxyrinchus</i> ) in Mediteranea	2021_TRUE
189	Daggernose Shark	CIO	Daggernose Shark ( <i>Isogomphodon oxyrhynchus</i> )	2021_TRUE
190	Yangtze sturgeon	AAD	Yangtze sturgeon ( <i>Acipenser dabryanus</i> )	2021_TRUE
192	Herring	HER	Herring ( <i>Clupea harengus</i> ) in Subarea 4 and divisions 3.a and 7.d, autumn spawners (North Sea, Skagerrak and Kattegat, eastern English Channel)	2021_FALSE
192	Alfosino	ALF	Alfonisino ( <i>Beryx spendens</i> ) in Subarea NAFO 6 G	2021_TRUE
193	Sardine	PIL	Sardine ( <i>Sardina pilchardus</i> ) in GFCM Area 17-18	2021_TRUE
194	Hidden angel shark	SZJ	Hidden Angelshark ( <i>Squatina oculata</i> ) in South East Atlantic	2021_TRUE
195	Argentine angel shark	SUG	Argentine Angelshark ( <i>Squatina argentina</i> ) in South East Atlantic	2021_TRUE
196	Common skate complex	RJB	Common skate complex (Blue skate ( <i>Dipturus batis</i> ) and flapper skate ( <i>Dipturus intermedius</i> )) in Subarea 8 and Division 9.a (Bay of Biscay and Atlantic Iberian waters)	2021_TRUE
197	Common skate complex	RJB	Common skate complex (Blue skate ( <i>Dipturus batis</i> ) and flapper skate ( <i>Dipturus intermedius</i> )) in Subarea 4 and Division 3.a (North Sea, Skagerrak, and Kattegat)	2021_TRUE
198	Americain plaice	PLA	American plaice ( <i>Hippoglossoides platessoides</i> ) in Division 3M	2021_TRUE
199	Kitefin shark	SCK	Kitefin shark ( <i>Dalatis licha</i> ) in subareas 1-10, 12, and 14 (the Northeast Atlantic and adjacent waters)	2021_TRUE
200	Southern pink shrimp	SOP	Coastal Shrimp ( <i>Penaeus notialis</i> ) off Guinea	2021_TRUE
201	Amur sturgeon	AAH	Amur sturgeon ( <i>Acipenser schrenckii</i> )	2021_TRUE
202	Striped smoothhound	CTF	Striped smoothhound ( <i>Mustelus fasciatus</i> ) in South West Atlantic	2021_TRUE
203	Dagerhaad	DAR	Dagerhaad ( <i>Chrysolephus cristiceps</i> ) in South East Atlantic	2021_TRUE
204	Canterbury mudfish	GNB	Canterbury mudfish ( <i>Neochanna burrowsius</i> ) in South East Pacific	2021_TRUE
205	Techirghiol stickleback	GUO	Techirghiol stickleback ( <i>Gasterosteus crenobiontus</i> ) in the Black Sea	2021_TRUE
206	Houting	HOU	Houting ( <i>Coregonus oxyrinchus</i> ) in Eastern Channel and the North Sea	2021_TRUE
207	Bottlenose wedfish	RCA	Bottlenose wedfish ( <i>Rhynchobatus australiae</i> ) in Indian Ocean	2021_TRUE
208	Thresher shark	TRH, ALV, BTH	Thresher sharks ( <i>Alopias</i> spp.) in subareas 10 and 12, divisions 7.c-k and 8.d-e, and in subdivisions 5.b.1, 9.b.1, and 14.b.1 (Northeast Atlantic)	2021_TRUE
209	Smalltooth sawfish	RPP	Smalltooth sawfish ( <i>Pristis pectinata</i> )	2021_TRUE
210	Narrow sawfish	RPA	Narrow sawfish ( <i>Anoxypristis cuspidata</i> )	2021_TRUE
211	Green sawfish	RPZ	Green sawfish ( <i>Pristis zijsron</i> )	2021_TRUE
212	Goth catshark	APA	Goth catshark ( <i>Apristurus manis</i> ) in SEAFO waters	2021_TRUE
213	Blurred smooth lantern shark	ETB	Blurred smooth lantern shark ( <i>Etmopterus bigelowi</i> ) in SEAFO waters	2021_TRUE
214	Shorttail lanternshark	ETH	Shorttail lanternshark ( <i>Etmopterus brachyurus</i> ) in SEAFO waters	2021_TRUE
215	Great lanternshark	ETR	Great lanternshark ( <i>Etmopterus princeps</i> ) in SEAFO waters	2021_TRUE
216	Smooth Lantern Shark	ETP	Smooth lanternshark ( <i>Etmopterus pusillus</i> ) in SEAFO waters	2021_TRUE
217	Atlantic wolffish	CAA	Atlantic wolffish ( <i>Anarhichas lupus</i> ) in NAFO waters subarea 2	2021_TRUE
218	Blue shark	BSH	Blue Shark ( <i>Prionace glauca</i> ) in Mediterranean	2021_TRUE
219	Bull Ray	MPO	Bull ray ( <i>Aetomylaeus bovinus</i> ) in Atlantic	2021_TRUE
220	anchovy	ANE	Anchovy ( <i>Engraulis encrasicolus</i> ) in Division 9.a (Atlantic Iberian waters)	2021_FALSE
221	Cod	COD	Cod ( <i>Gadus morhua</i> ) in subareas 1 and 2 north of 67°N (Norwegian Sea and Barents Sea), northern Norwegian coastal cod	2021_FALSE
222	Great Silver Smelt	ARU	Greater silver smelt ( <i>Argentina silus</i> ) in divisions 5.b and 6.a (Faroes grounds and west of Scotland)	2021_FALSE
223	Blue Marlin	BUM	Blue Marlin ( <i>Makaira nigricans</i> ) in the Indian Ocean	2021_TRUE
224	Blue Marlin	BUM	Blue Marlin ( <i>Makaira nigricans</i> ) in the Gulf of Mexico	2021_TRUE
225	Turbot	TUR	Turbot ( <i>Scophthalmus maximus</i> ) in Europe (except Med)	2021_TRUE
226	Common Stingray	JDP	Common Stingray ( <i>Dasyatis pastinaca</i> ) in Atlantic and Mediterranean	2021_TRUE
227	Blue Marlin	JDP	Blue Marlin ( <i>Makaira nigricans</i> ) in the Pacific Ocean	2021_TRUE
228	Shi Drum	COB	Shi Drum ( <i>Umbriina cirrosa</i> ) in East Atlantic and Mediterranean	2021_TRUE
229	Starry Ray	RJR	Stary ray ( <i>Amblyraja radiata</i> ) in North Atlantic Ocean	2021_TRUE
230	Rabbitfish	CMO	Rabbitfish ( <i>Chimaera monstrosa</i> ) in East Atlantic and Mediterranean	2021_TRUE
231	Brown Meagre	CBM	Brown Meagre ( <i>Sciaenops ocellatus</i> ) in Mediterranean	2021_TRUE
232	Atlantic Goliath Grouper	CMO	Common Eagle Ray ( <i>Myliobatis aquila</i> ) in Atlantic and South West Indian Ocean	2021_FALSE
232	Common Eagle Ray	MYL	Common Eagle Ray ( <i>Myliobatis aquila</i> ) in Atlantic and South West Indian Ocean	2021_TRUE
234	Green Ormer	HTL	Green Ormer ( <i>Haliotis tuberculata</i> ) in Atlantic and Mediterranean	2021_TRUE
235	Common Weakfish	STG	Comon Weakfish ( <i>Cynoscion regalis</i> ) in Western Atlantic	2021_TRUE
236	Bigeye Tuna	BET	Bigeye tuna ( <i>Thunnus obesus</i> ) Global	2021_TRUE
237	White Marlin	WHM	White Marlin ( <i>Kajikia albida</i> ) in Gulf of Mexico	2021_TRUE
238	Green Wase	WRV	Green Wase ( <i>Kajikia albida</i> ) in Mediterranean and 27.9	2021_TRUE
239	horse makereel	HOM, JAX	Horse mackerel ( <i>Trachurus trachurus</i> ) in Eastern Atlantic	2021_TRUE
240	European hake	HKE	European hake ( <i>Merluccius merluccius</i> ) in the Mediterranean	2021_TRUE
241	Birdbeak dogfish	DCA	Birdbeak dogfish ( <i>Daenia calcea</i> ) in North East Atlantic Ocean	2021_TRUE
242	Senegalese hake	HKM	Senegales hake in the East Atlantic	2021_TRUE
243	Shortfin Mako	SMA	Shortfin Mako ( <i>Isurus oxyrinchus</i> ) in other waters	2021_TRUE
244	Madeiran sardinella	SAE	Madeiran sardinella ( <i>Sardinella madarensis</i> ) in South East Atlantic	2021_TRUE
245	Common dentex	DEC	Common dentex ( <i>Dentex dentex</i> ) in the Mediterranean	2021_TRUE
246	Common dentex	DEC	Common dentex ( <i>Dentex dentex</i> ) in the North East Atlantic	2021_TRUE
247	Common smoothhound	SMD	Common smoothhound ( <i>Mustelus mustelus</i> ) in the North East Atlantic	2021_TRUE
248	Common smoothhound	SMD	Common smoothhound ( <i>Mustelus mustelus</i> ) in the Mediterranean	2021_TRUE
249	Common smoothhound	SMD	Common smoothhound ( <i>Mustelus mustelus</i> ) in the South East Atlantic	2021_TRUE
250	Nursehound	SYT	Nursehound ( <i>Scyliorhinus stellaris</i> ) in the NEA	2021_TRUE
251	Nursehound	SYT	Nursehound ( <i>Scyliorhinus stellaris</i> ) in the Mediterranean	2021_TRUE
252	Bluefish	BLU	Bluefish ( <i>Pomatomus saltatrix</i> ) all areas exclusive Med, Gulf of Mexico	2021_TRUE
253	Blackspeckled Smoothhound	MPT	Blackspeckled smoothhound ( <i>Mustelus punctulatus</i> ) in the Mediterranean and CEECAF	2021_TRUE
254	Dusky grouper	GPD	Dusky grouper ( <i>Epinephelus marginatus</i> ) all areas	2021_TRUE
255	Marbled torpedo ray	TTR	Marbled torpedo ray ( <i>Torpedo marmorata</i> ) all areas	2021_TRUE
256	Tarpon	TAR	Tarpon ( <i>Megalops atlanticus</i> ) all areas	2021_TRUE
257	Starry smoothhound	SDS	Starry smoothhound ( <i>Mustelus asterias</i> ) in the Mediterranean	2021_TRUE
258	Island grouper	MKF	Island grouper ( <i>Mycteroperca fusca</i> ) in FAO area 34	2021_TRUE
259	Gillbacker Sea Catfish	AWP	Gillbacker Sea Catfish ( <i>Sciades parkeri</i> ) in FAO areas 31 and 41	2021_TRUE
260	West African Goatfish	GOA	West African Goatfish ( <i>Pseudupeneus prayensis</i> ) in FAO areas 34 and 59	2021_TRUE
261	Plain bonito	BOP	Plain bonito ( <i>Orcyompsis unicolor</i> ) in European waters	2021_TRUE
262	Narrow-barred Spanish mackerel	COM	Narrow-barred Spanish mackerel ( <i>Scomberomorus commerson</i> ) in the Persian Gulf	2021_TRUE
263	Endeavour dogfish	CEM	Endeavour dogfish ( <i>Centrophorus moluccensis</i> ) in all waters	2021_TRUE
264	Silver Pomfret	SIP	Silver Pomfret ( <i>Pampus argenteus</i> ) in the Persian Gulf	2021_TRUE
265	Birdbeak dogfish	DCA	Birdbeak dogfish ( <i>Daenia calcea</i> ) in 27.1, 27.2a, 27.4, 27.14	2021_TRUE
266	Angular roughshark	OXY	Angular roughshark ( <i>Oxynotus centrina</i> ) Global	2021_TRUE
267	Northern wolffish	CAB	Northern wolffish ( <i>Anarhichas denticulatus</i> ) in North East Atlantic	2021_TRUE
268	Narrownose smoothhound	SDP	Narrownose smoothhound ( <i>Mustelus schmitti</i> ) South west Atlantic	2021_TRUE
269	Giant sea cucumber	JCF	Giant Sea Cucumber ( <i>Isostichopus fuscus</i> ) Central East Pacific	2021_TRUE

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