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2022 report on the balance between fishing capacity and fishing opportunities in the Swedish fishing fleet

Introduction

EU Member States are required to report annually on the balance between the fishing capacity and fishing opportunities of their fleets. The type of information and the indicators that should be included in the report are set out in Article 22 of Regulation (EU) No 1380/2013, and the technical, biological and economic indicators are described in more detail in supplementary guidelines (COM (2014) 545). An overall assessment should be made, taking all the indicators into account, to determine whether a fleet segment is in imbalance. The data presented in this report is broken down in accordance with the Data Collection Framework Regulation (Regulation (EC) No 1004/2017).

Summary and conclusions

This report assesses the balance between fishing capacity and fishing opportunities in the Swedish fishing fleet based on technical, biological and economic indicators as required by the Commission guidelines.

For most segments made up of vessels fishing with passive gears, values below critical thresholds can be observed over time with respect to the economic indicators (return on fixed tangible assets and current revenue / break-even revenue). For 2021, and partly for 2020, the economic indicators were also at critical levels for some active gear segments in length classes 10-12 metres and 18-24 metres, most likely due to effects linked to the pandemic.

Vessel use indicator values were below the critical threshold of 0.7 for nearly all segments in 2022, as has been the case for most segments in recent years. Again, pandemic-related effects are likely to have contributed to this, along with the emergency measures adopted in July 2019 and the ban on targeted cod fishing in place since 2020 in the Baltic Sea. The proportion of inactive vessels was 21% on average in 2022 (entire fleet). Looking only at vessels of more than 12 metres in length, 17% of vessels were inactive in 2022, which is higher than in 2021 but still well below the

20% threshold. For vessels under 12 metres in length the proportion is 28%, which is above the critical level. However, the share of inactive vessels in this group has remained relatively stable in recent years.

The action plan submitted by Sweden in 2021, which expired last year, became necessary because vessels primarily targeting cod in the Baltic Sea contributed to overcapacity in the Swedish fleet. It was one of the results of an emergency measure introduced in 2019 to ban targeted cod fishing in the Baltic Sea due to the poor status of the stock. The ban meant that vessels that had mainly been fishing cod in the Baltic Sea lost their fishing opportunities with immediate effect. The Swedish action plan for 2021 proposed support for permanent cessation of fishing activities as a measure to curb fleet overcapacity. 19 vessels, with a total capacity of some 3 200 kW and 580 GT, were considered eligible for the proposed measure based on fishing activity and the extent to which they were economically dependent on cod fishing. Vessels that applied for and received support to permanently cease their fishing activity have been removed from the fleet. These had a total capacity of some 1 100 kW and 250 GT. The reduction in total fleet capacity from 2021 to 2022 corresponds roughly to that of the vessels included in the action plan (see Table 2). Over the years the Swedish fleet has been on a downward trend in terms of capacity and the number of vessels. One reason for this is that Swedish fishing licences are valid for a limited time (up to 5 years) and are renewed only if certain requirements are met (fishing on a commercial basis). At the same time, the status of many stocks has made it difficult to grant new licences.

Implementing an individual transferable quota (ITQ) system is an effective way of reducing fleet capacity. Sweden introduced such a system for pelagic fisheries in 2009, and the number of vessels and fishing capacity in that segment fell significantly as a result. In Sweden's demersal fisheries, a system of annual individual allocation is in place which does not, however, provide incentives for a lasting adaptation of the fishing fleet. The Agency for Marine and Water Management, having recommended to the Swedish Government that a full-fledged ITQ system should also be implemented in demersal fisheries, has now been instructed to design such a scheme. A well-designed scheme could help achieve potential overcapacity [*sic*] in certain segments (e.g. the Swedish shrimp fishing fleet), while at the same time preventing undesirable structural effects.

Critical indicator levels have been reported for several years for the segments made up of the smallest vessels fishing with passive gear. As in past fleet reports, we take the view that the critical indicator levels for small-scale, passive gear segments should not necessarily be interpreted as overcapacity. There are a number of reasons for this:

- Part-time fishing is widespread in small-scale, passive gear segments. This means that fishing capacity is not fully exploited but does not entail a risk of overfishing.
- As these segments account for a very small proportion of total catches, only 1-3%, their exploitation of the available fish resources is limited.
- Several STECF reports (e.g. STECF 18-14) point out that it is difficult to assess the economic and technical indicators for small-scale fleet segments. Economic indicators are based on the assumption that fishing is the main activity of the fleet segment being assessed, which for small-scale fleets is often not the case. According to STECF 18-14 (p. 226), 'EWG 16-09 considers that economic and technical indicators for narrow-scale fleet segments should be consulted with caution, and that local expert knowledge is required generally to anticipate indicative results/trends'.
- Reducing small-scale segments would run counter to policy objectives with respect to small-scale fisheries at both EU and national level. The STECF also notes that 'assessing whether a fleet segment is in or out of balance with fishing opportunities is not simply a technical or scientific issue. Such an assessment also requires consideration of the social and economic aspects and objectives of the fishery management policy' (STECF, 15-02, p. 12).

Biological indicators are available up to and including 2020. Some Swedish fleet segments have a value above 1 for the sustainable harvest indicator (SHI). High SHI indicator values are found in

both passive and active gear segments. One factor to consider when interpreting the SHI is the segment's share of total catches. The STECF has also noted the following weakness in the interpretation of the SHI (STECF 15-02): 'a SHI value greater than 1 only indicates a fleet's reliance on stocks that are overexploited, not how much they contribute to the overall fishing mortality, which may be of more interest to managers' (STECF 15-02, p 13). The second biological indicator, stocks at risk (SAR), shows that eight segments had a value above 1 in 2020, including both active and passive gear segments.

As noted by the STECF in their comments on Member States' fleet reports¹, a more detailed breakdown is used for the biological indicators than for the economic and technical indicators in Sweden's report. This is due to the fact that, based on the confidentiality rules for economic data described in more detail in the next section, there are too few vessels in several segments. An alternative approach that could be used to avoid a segment mismatch in the future would be to calculate the biological indicators at the same level as the economic/technical indicators.

Lastly, it should be noted that the level of segmentation used (which is in line with the Data Collection Framework) affects the conclusions that can be drawn, and that the indicators and calculation methods used are subject to further interpretation and discussion, which may also limit the scope for comparison with other Member States.

Breakdown and presentation of the data

This section aims to explain why the Swedish economic indicator data cannot be presented at the same detailed breakdown level as the biological indicators. In its comments on the fleet reports of previous years, the Commission pointed out that the less detailed segmentation used by Sweden for the economic and technical indicators made it difficult to compare the different types of indicator². For the biological indicators, which are calculated jointly for all Member States and are available on the STECF's website³, a more detailed level of segmentation is used which results in a very small number of vessels for several Swedish fleet segments. This is described in more detail below.

According to the Data Collection Regulation, the data is to be broken down by vessel length and specific gear types (HOK, DFN, FPO, etc.). Different segmentation levels may be used for the reporting of economic data. The length segments are the same for all segmentation levels, with the gear segments accounting for the difference. It is recommended that the breakdown of data should be as detailed as possible. If a criterion for presenting the data is not met for one of the gear segments, it is recommended to move up a level and to present all the data at a higher level of aggregation. This ensures that aggregation levels are not mixed. RCGECON (formerly PGECON) have issued recommendations on segmentation levels and how to implement them.

The economic indicator data collected in Sweden has the characteristics described above and is therefore presented in aggregated form. A more detailed breakdown would have resulted in 27 segments, with some segments made up of only a few vessels. This is illustrated in Table 1 below. Under Swedish legislation on the confidentiality of economic data, too few vessels in a segment means that the data cannot be presented.

Alternatively, the indicators/data could be presented only for certain gear groups where the number of vessels is sufficiently high, excluding those segments that have too few vessels, but this would mean that the report would not cover several gear groups with an insufficient number of vessels.

¹ See, for example, STECF 20-11 (p. 186), STECF 21-16 (p. 170) and STECF 22-15 (p. 158).

² See, for example, STECF 20-11 (p. 186), STECF 21-16 (p. 170) and STECF 22-15 (p. 158).

³ The most recent available biological indicators can be found at [Capacity and fishing opportunities - European Commission \(europa.eu\)](https://ec.europa.eu/eurofish/indicators/), (STECF 2022-15 – Balance Capacity Indicator Table).

It would also involve a more complex presentation and interpretation, and would still not allow a direct comparison with the biological indicators.

While the technical indicators could be presented at a more detailed level, as they are not covered by the same rules on data confidentiality, this would mean that they would not be directly comparable with the economic indicators. As we see it, presenting the technical indicators separately for all 27 segments would not be statistically meaningful either, given the very small number of vessels in several segments. This has led us to present the economic indicators ('return on fixed tangible assets' and 'current revenue / break-even revenue') and the technical 'vessel use' indicator' for nine clusters, as shown in the columns of Table 1 below.

The indicators are thus presented for nine segments, broken down by length group and active/passive gear, in the 2022 Swedish fleet report. It should be noted that the length class breakdown was recently amended by Regulation (EU) 2021/1167⁴, footnote 1 to Table 8 of which states that: *For vessels less than 12 m in the Mediterranean Sea and the Black Sea, the length categories are $0 \leq 6$, $6 \leq 12$ m. For vessels less than 12 m in the Baltic Sea, the length categories are $0 \leq 8$, $8 \leq 12$ m. For all other regions, the length categories are defined as $0 \leq 10$, $10 \leq 12$ m.* Accordingly, the following breakdown is used in the Swedish fleet report:

- Passive gears:
 - vessels less than 8 metres (Baltic Sea)
 - vessels 8-12 metres (Baltic Sea)
 - vessels less than 10 metres (North Sea)
 - vessels 10-12 metres (North Sea)
- Active gears:
 - vessels 8-12 metres (Baltic Sea)
 - vessels 10-12 metres (North Sea)
 - vessels 12-18 metres in length
 - vessels 18-24 metres in length
 - vessels more than 24 metres.

⁴ Commission Delegated Decision (EU) 2021/1167 of 27 April 2021 establishing the multiannual Union programme for the collection and management of biological, environmental, technical and socioeconomic data in the fisheries and aquaculture sectors from 2022 (available at: [Publications Office \(europa.eu\)](https://publications.ec.europa.eu/)).

Table 1. Fleet segments for which data is collected (27 segments) and clusters used in the reporting (9 segments/clusters), 2021

	Segments (clusters) for which data was reported to the Commission, and number of vessels per detailed fleet segment								
	DTS (active gear)					DFN (passive gear)			
Existing gear and length classes in the Swedish fishing fleet	VL0812	VL1012	VL1218	VL1824	VL2440	VL0008	VL0010	VL0812	VL1012
DFN									
VL0008						125			
VL0010							23		
VL0812								97	
VL1012									9
VL1218									8
DTS									
VL0008	1								
VL0812	28								
VL1012		36							
VL1218			63						
VL1824				30					
VL2440					13				
FPO									
VL0008						138			
VL0010							185		
VL0812								12	
VL1012									37
VL1218									1
HOK									
VL0010							12		
VL1012									2
PGO									
VL0010							5		
PGP									
VL0008						6			
VL0010							7		
VL0812								1	
PS									
VL0812	1								
VL1218			1						
TM									
VL0812	7								
VL1824				5					
VL2440					17				
Total	37	36	64	35	30	269	232	110	57

Description of the Swedish fleet

Table 2 gives an overview of how the Swedish fishing fleet developed from 2014 to 2022. The number of vessels fell by 25% over this period. In 2022 there were 1 060 vessels, of which 841 were actively engaged in fishing. Inactive vessels are vessels that had no fishing activity at any time during the year.

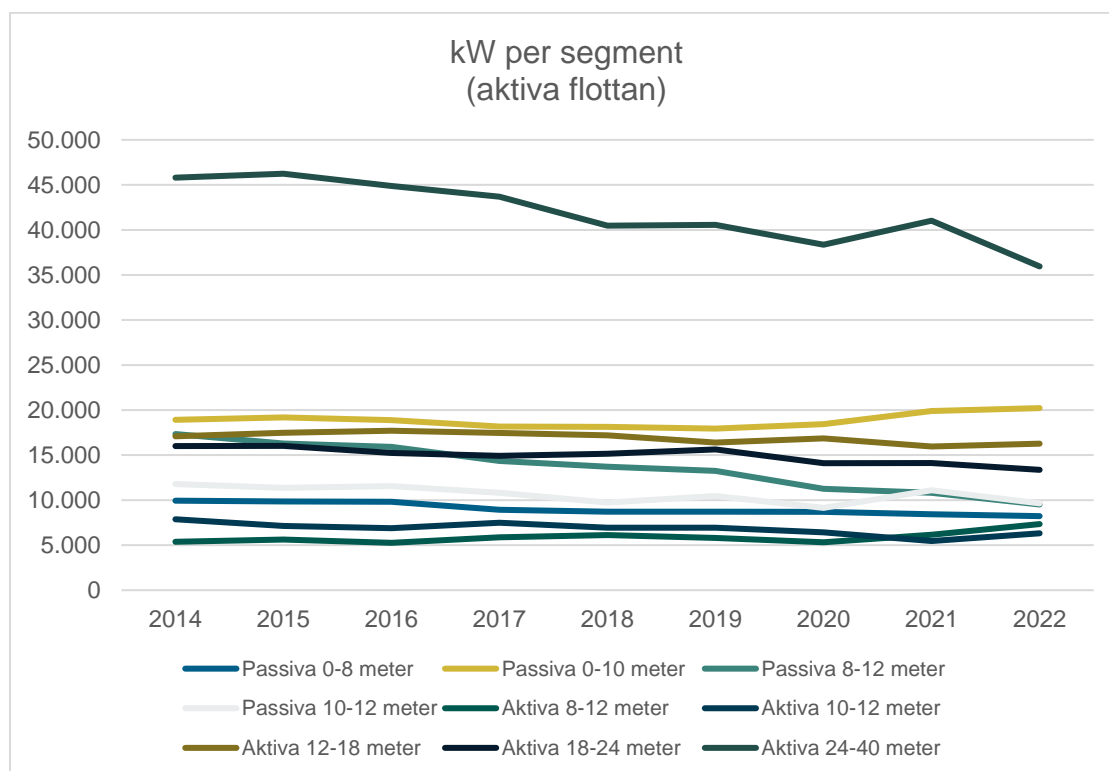
Total tonnage decreased by some 3 400 GT (around 10.7%) between 2014 and 2022, and engine power decreased by some 28 300 kW (around 16.3%). However, both engine power and gross tonnage increased slightly from 2020 to 2021 because some vessels did not have their fishing permits renewed in 2020 (for example, because of vessel conversion) and were therefore not included in the 2020 statistics. Unlike in previous years, this year's report also covers vessels operating on the basis of individual fishing rights, resulting in slightly different figures compared to earlier reports.

Table 2. Swedish fishing fleet 2014-2022

	2014	2015	2016	2017	2018	2019	2020	2021	2022
Number of vessels	1 434	1 399	1 354	1 300	1 264	1 219	1 117	1 087	1 060
of which inactive vessels	331	319	300	318	307	294	243	217	219
Proportion of inactive vessels	23%	23%	22%	24%	24%	24%	22%	20%	21%
Average vessel age (years), active vessels	33.60	34.2	35.1	35.4	36.0	36.6	36.8	37.2	37.7
Average length, active vessels	10.04	10.0	10.0	10.0	10.0	10.1	10.0	10.1	10.0
Tonnage (1 000 GT), all vessels	31.60	31.0	32.0	28.3	28.2	27.9	27.4	29.1	28.2
Engine power (1 000 kW), all vessels	173.94	170.4	173.2	161.6	156.1	155.6	146.2	149.1	145.6

Figures 1-3 below and Table B1 of the Annex show overall trends in the number of vessels, gross tonnage and engine power by segment of the fleet. As can be seen from Figure 1, the 'passive gear 0- 8 m' segment is the largest in terms of the number of vessels, whereas the 'active gear \geq 24 m' segment is the largest in terms of gross tonnage and engine power.

Figure 3. Engine power in kW per segment (active fleet), 2014-2022.



Figures 4 and 5 below and Table B2 of the Annex show overall trends in landed weight and landed value by segment in the period from 2014 to 2022. In 2022 the total weight landed by the Swedish fleet was 137 889 tonnes, with a landed value of EUR 109 873. The total weight and value of landings vary over the years due, among other things, to variations in the size of quotas, in particular quotas for pelagic catches which make up the majority of landings. Moreover, vessels fishing with active gears account for the majority of both the landed value and the landed weight. In the period from 2014 to 2022, vessels fishing with active gears annually accounted for 97-99% of total catches by weight and 85-90% of the total value of catches. Vessels fishing with passive gears thus account for 1-3% of total catches by weight and 10-15% of the total value of catches.

Figure 4. Landed weight by segment (active fleet), 2014-2022.

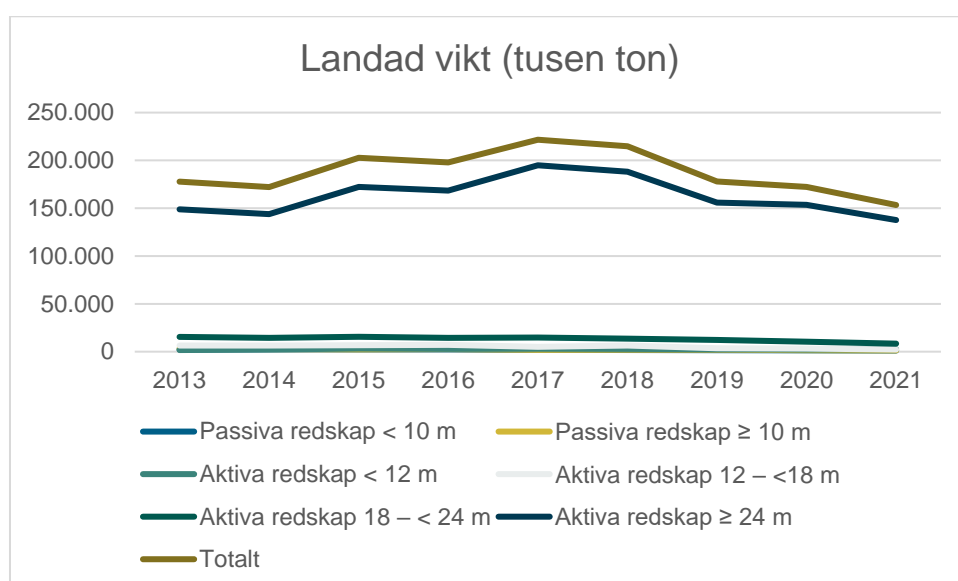
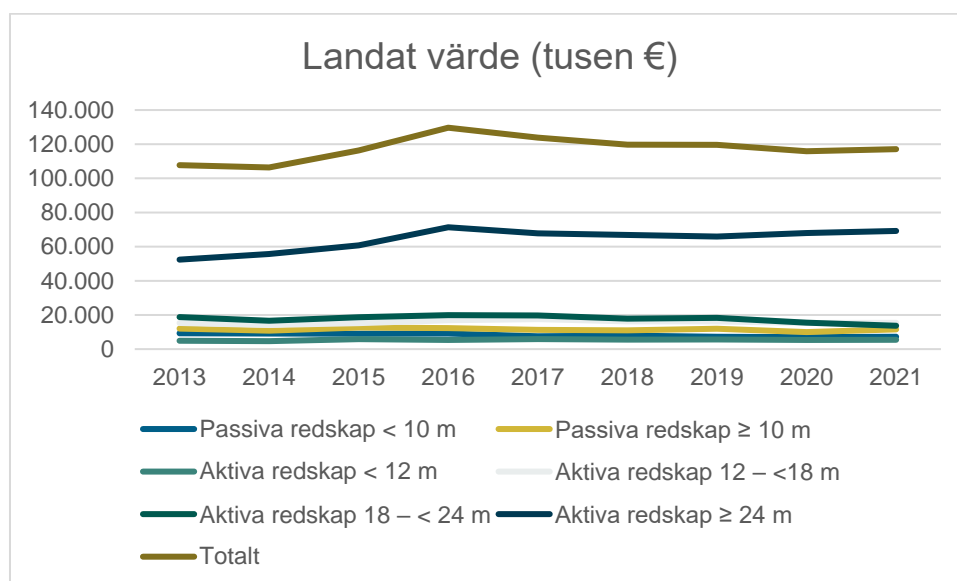


Figure 5. Landed value by segment (active fleet), 2014-2022.



Impact on fishing capacity

The use of certain gears is subject to a fishing permit in addition to a fishing licence. This is one of the ways in which fleet capacity is regulated. Applicants wishing to set up in fisheries subject to a special gear permit in addition to the fishing licence are assessed in terms of their ability to comply with the landing obligation in view of the available fishing opportunities and the expected catch composition.

Fishing permit for Baltic cod

A fishing permit is required for Baltic Sea vessels longer than 8 metres equipped with cod-fishing gear (trawl or passive gear). In 2018 separate permits were introduced for fishing with such gear in the western and in the eastern Baltic (before 2018 there was a single permit for the entire Baltic Sea). Due to the continued poor condition of the Baltic cod stock, the ban on targeted fishing was extended into 2022 (except limited fishing with passive gears). Permits for fishing with cod-fishing gear were issued for the eastern Baltic in 2022, as this type of permit also covers gears to fish species other than cod. No permits were granted for the use of cod-fishing gear in the western Baltic in 2022.

Permits for cod-fishing gear in Skagerrak, Kattegat and the North Sea

A fishing permit is required for cod-fishing gear (including some types of passive gear for vessels longer than 10 metres) in Skagerrak, Kattegat and the North Sea. Applications for new permits are examined on a yearly basis under the system for allocating fishing opportunities annually in place since 2017. Due to the ban on targeted cod fishing in the Baltic, vessels that previously had a permit to trawl for Baltic cod only have had the opportunity to apply for a permit to fish crawfish in Skagerrak and Kattegat with trawls equipped with species-selective grids. Three such permits were issued in 2022. With respect to the North Sea, no new fishing permits were granted for cod-fishing gear in 2022 taking into account mixed fisheries, by-catches and scientific catch and catch composition estimates.

Fishing permit for northern prawn

Due to the condition of the northern prawn stock, no new fishing permits were issued for this fishery in 2022. The number of licence holders in this fishery has remained constant at 62 for several years.

Compliance with the fishing capacity entry and exit rules

Fleet entry and exit rules are designed to prevent an increase in fleet capacity and are applied in accordance with EU law. Under these rules, no new capacity can be introduced unless at least the same capacity is scrapped. Any capacity entering the Swedish fishing fleet in a given year is offset by the scrapping of at least the equivalent capacity. Fishing permits are issued on condition that fishing capacity is withdrawn, and commercial sea fishing may only be carried out by vessels holding a fishing permit.

The capacity ceilings for Sweden, as laid down in Annex II to Regulation (EU) No 1380/2013, are 43 386 GT and 210 829 kW. As shown in Table 1, the Swedish fleet had a capacity of some 145 600 kW and 28 200 GT in 2022. Sweden is thus well below the capacity ceilings.

Weaknesses and strengths in fleet management

Allocation of annual individual demersal fishing opportunities and the Agency's proposal to introduce fishing rights

In demersal fisheries the Agency has been allocating individual fishing opportunities annually since 2017. These can be temporarily transferred between licence holders in the course of the year. Individual allocations are based on historical catch reports in the years from 2011 to 2014, with some exceptions and adjustments. The scheme was designed, in particular, to take into consideration small-scale coastal fishing with passive gears under unallocated coastal quotas. Assessments of the scheme have shown that while it allows better planning during the year, it also creates uncertainty about the fishing opportunities and revenues available in this fishery in the coming years. A further challenge is posed by a number of 'lock-in effects' observed in the current scheme. In 2020 the Agency proposed certain improvements of the scheme for allocating individual annual fishing opportunities in the context of a review commissioned by the government. The Agency concluded that a system of transferable fishing rights, with a validity of more than a year, should be introduced in Swedish demersal fisheries. With the right design, and the right balance of regulation and control, we believe that such a system could contribute to a simpler, more transparent allocation system, help make fishing more profitable and make it easier for fishers to adapt their individual fishing opportunities. It is crucial for such a system to be well designed to avoid undesirable effects. During 2022 the factors to be taken into account in a system of transferable demersal fishing rights were analysed by the Agency under a government mandate. One of the main conclusions of its report was that to exploit the benefits of fishing rights while taking account of fishery policy objectives, a system of transferable demersal fishing rights should be combined with regulations and specific mechanisms. These should aim to prevent excessive concentration of fishing opportunities among a few operators and to help achieve policy aims such as promoting small-scale coastal fishing and avoiding excessive geographical concentration. The Agency proposed that as a next step, the government should make the legislative amendments necessary to allow transferable demersal fishing rights to be introduced. In a new government mandate (2023), the Agency was instructed to propose legislative amendments in view of introducing transferable fishing rights in demersal fisheries.

Pelagic fisheries

In 2019 the Agency renewed the system of transferable fishing rights in pelagic fisheries for another 10 years. The new 10-year period runs from 2020. Since 2009 pelagic quotas have been divided into fishing rights, annual pelagic fishing opportunities, regional fishing opportunities and coastal quotas. Changes introduced as from 2020 mainly concerned the size of coastal quotas, i.e. the introduction of transferable fishing rights for herring and sprat in ICES subareas 30-31 (Bothnian Sea and Bothnian Bay), and regional allocation in the same sub-areas.

Changes to administrative procedures

Administrative adjustments required to introduce a system of annual allocations

As mentioned above, on 1 January 2017 a new system for allocating fishing opportunities was introduced for Sweden's demersal fisheries. As the new system is based on individual annual fishing opportunities that are transferable between fishers during the year, major adjustments to administrative procedures were required. These included, for example, adjustments of the quota calculation system and introduction of an e-service (*Fiskerätt*) for processing applications to transfer fishing opportunities. In 2019 and 2020 the Agency developed automated calculation of individual allocations.

Ceiling on fishing opportunities

The system of annual, individually allocated fishing opportunities in place since 2017 in demersal fisheries includes certain restrictions on the possibility of transferring fishing opportunities between fishers. For example, there is an upper limit on the quantities of a given species or quota that may be allocated to a single holder of a licence or permit. The aim of these rules is to avoid the concentration of fishing opportunities among a few operators. For example, no licence holder may have fishing opportunities for Norway lobster in Skagerrak/Kattegat exceeding 6% of the total individually allocated quantity of that species.

Balance indicators

Biological indicators

Under the current fleet report guidelines (COM (2014) 545), two biological indicators should be taken into account: the sustainable harvest indicator (SHI) and the stocks-at-risk indicator (SAR). The Commission coordinates the calculation of these indicator values based on DCF data and ICES and STECF assessments. The calculated values are made available to Member States for inclusion in their national fleet reports⁵. SHI and SAR indicator values are currently available up to and including 2020 and are presented in Table B3 of the Annex.

As explained in the section on the breakdown and presentation of data, the biological indicators are calculated on the basis of a more detailed breakdown (by specific gear type) than the economic and technical indicators, meaning that they are not directly comparable. A less detailed breakdown is used for the economic and technical indicators because there are too few vessels in several segments, and also to comply with the confidentiality rules for economic data.

⁵ The most recent available biological indicators can be found at [Capacity and fishing opportunities - European Commission \(europa.eu\)](https://europea.eu), (STECF 2022-15 – Balance Capacity Indicator Table).

Sustainable harvest indicator (SHI)

The SHI reflects ‘the extent to which a fleet segment is dependent on overfished stocks’. Here, ‘overfished’ means that a stock is fished above F_{msy} (the fishing mortality rate corresponding to the maximum sustainable yield). The indicator is a weighted average of the F to F_{msy} ratio, where F is fishing mortality and F_{msy} the level of fishing corresponding to the maximum sustainable yield. This ratio is calculated for the various stocks making up a segment’s catches, for which a single indicator, weighted by the value of landings, is then established. A value below 1 is seen as an indication of sustainable exploitation, whereas a value above 1 is an indication of overfishing. The indicator does not cover all stocks fished, but only those managed on the basis of target levels expressed as fishing mortality (for other species other targets are used).

Of the 17 segments for which the indicator could be assessed for 2020, seven were not in balance and 10 were in balance with the available fishing opportunities. The seven segments with an SHI value above 1 include both active and passive gears. It should be noted in this regard that segments using passive gear accounted for 1-3% of total catches by weight in the period from 2014 to 2022. Furthermore, the STECF discusses several uncertainties and shortcomings linked to the SHI in its reports⁶.

Stocks-at-risk indicator (SAR)

A further biological indicator is the indicator for stocks at risk (SAR). This indicator measures how many of the stocks exploited by a fleet segment are biologically vulnerable. According to the guidelines there is potential capacity imbalance if ‘stocks at high risk’ make up more than 10% of a fleet segment’s catches or if the segment takes more than 10% of the total catches of a stock at risk. The calculation method set out in the guidelines will produce an indicator value above 1 if more than 10% of a fleet segment’s catches are of a stock at high risk, or if it takes more than 10% of the total catches of that stock. Table B3 provides a comparison of the indicator values for the various segments of the Swedish fleet. It shows that eight (both active and passive gear) segments have an indicator value of 1 or above, while 14 segments achieve a balance with the available fishing opportunities. The STECF has also highlighted various issues with respect to the SAR indicator in its reports regarding the SHI, see e.g. STECF 15-02 (pp. 45-46) and STECF 18-14 (pp. 223-225).

Economic indicators

Return on fixed tangible assets (ROFTA)

The return on fixed tangible assets (ROFTA) indicator is presented in Table 3. The indicator shows the return on investments, and its value should be greater than zero. It should also be compared with – and be higher than – the long-term risk-free interest rate. It is worth noting that labour costs do not include wages for the owner of a one-person business, which leads to undervaluation. At the same time, total revenues include not only the total landed value, but also other revenues such as from the trading in fishing rights, which contributes to overvaluation.

As in previous years, passive gear segments generally have values below 1 (with the exception of 10-12 m vessels fishing with passive gear in the North Sea). In 2021 – and partly also in 2020 – this was the case even for some active gear segments, i.e. vessels in length classes 10-12 m (North Sea) and 18-24 m. This could be due to pandemic-related effects.

⁶ See e.g. STECF 15-02 (pp. 40-41) and STECF 18-14 (pp. 221-223).

Table 3. Return on fixed tangible assets (ROFTA), 2014-2021

Value per calendar year (%)	2014	2015	2016	2017	2018	2019	2020	2021
Passive, 0-8 metres* (Baltic Sea)	-158%	-153%	-165%	-148%	-119%	-140%	-156%	-145%
Passive, 0-10 metres** (North Sea)	-18%	-4%	-4%	-26%	-16%	-13%	-11%	-21%
Passive, 8-12 metres* (Baltic Sea)	-35%	-42%	-45%	-45%	-46%	-55%	-53%	-47%
Passive, 10-12 metres** (North Sea)	-3%	0%	3%	-2%	2%	23%	11%	16%
Active, 8-12 metres	16%	19%	23%	19%	18%	76%	86%	55%
Active, 10-12 metres	3%	17%	36%	10%	18%	14%	-2%	-7%
Active, 12-18 metres	34%	51%	68%	55%	77%	19%	79%	48%
Active, 18-24 metres	4%	19%	34%	14%	26%	26%	16%	-2%
Active, 24-40 metres	8%	21%	60%	42%	25%	24%	20%	26%

* In accordance with footnote 1 to Table 8 of Regulation (EU) 2021/1167⁷, only vessels fishing in the Baltic Sea are included in this segment.

** In accordance with footnote 1 to Table 8 of Regulation (EU) 2021/1167⁸, only vessels fishing in the North Sea in are included in this segment with regard to Sweden.

Complementary to Table 3, Table 4 shows the total revenue of the various segments in the period from 2014 to 2021.

Table 4. Total revenue, 2014-2021 (thousand €)

	2014	2015	2016	2017	2018	2019	2020	2021
Passive, 0-8 metres*	3 173	3 707	3 736	3 268	3 687	2 702	2 314	2 386
Passive, 0-10 metres**	5 931	6 577	6 534	5 032	5 331	5 292	5 263	5 107
Passive, 8-12 metres*	3 944	2 928	3 247	2 199	2 035	1 907	1 491	1 571
Passive, 10-12 metres**	4 604	5 875	5 705	4 710	4 433	6 062	4 087	5 148
Active, 8-12 metres	2 396	3 727	2 774	3 215	2 419	3 215	3 090	3 388
Active, 10-12 metres	4 070	4 554	5 110	5 021	4 434	3 780	3 190	3 083
Active, 12-18 metres	14 526	16 958	18 658	17 754	17 667	14 926	15 388	14 975
Active, 18-24 metres	18 069	22 534	22 928	21 461	19 703	20 126	16 718	13 798
Active, 24-40 metres	58 881	69 181	77 699	75 332	71 411	69 079	70 070	72 823

* In accordance with footnote 1 to Table 8 of Regulation (EU) 2021/1167⁹, only vessels fishing in the Baltic Sea are included in this segment.

** In accordance with footnote 1 to Table 8 of Regulation (EU) 2021/1167¹⁰, only vessels fishing in the North Sea in are included in this segment with regard to Sweden.

⁷ Commission Delegated Decision (EU) 2021/1167 of 27 April 2021 establishing the multiannual Union programme for the collection and management of biological, environmental, technical and socioeconomic data in the fisheries and aquaculture sectors from 2022 (available at: [Publications Office \(europa.eu\)](https://eur-lex.europa.eu/eli/reg_del/2021/1167/oj)).

⁸ Commission Delegated Decision (EU) 2021/1167 of 27 April 2021 establishing the multiannual Union programme for the collection and management of biological, environmental, technical and socioeconomic data in the fisheries and aquaculture sectors from 2022 (available at: [Publications Office \(europa.eu\)](https://eur-lex.europa.eu/eli/reg_del/2021/1167/oj)).

⁹ Commission Delegated Decision (EU) 2021/1167 of 27 April 2021 establishing the multiannual Union programme for the collection and management of biological, environmental, technical and socioeconomic data in the fisheries and aquaculture sectors from 2022 (available at: [Publications Office \(europa.eu\)](https://eur-lex.europa.eu/eli/reg_del/2021/1167/oj)).

¹⁰ Commission Delegated Decision (EU) 2021/1167 of 27 April 2021 establishing the multiannual Union programme for the collection and management of biological, environmental, technical and socioeconomic data in the fisheries and aquaculture sectors from 2022 (available at: [Publications Office \(europa.eu\)](https://eur-lex.europa.eu/eli/reg_del/2021/1167/oj)).

Current revenue / break-even revenue

The second economic indicator, current revenue divided by break-even revenue, may indicate overcapacity if the value is below 1, as this is an indication that current revenue fails to cover expenses (i.e. fishing is not economically viable). Values below the critical threshold can be observed over time for most passive gear segments. For 2021 this indicator shows a critical level also for active gear segments in length class 10-12 m (for the active gear segment in length class 18-24 m it equals the threshold value). This could be due to pandemic-related effects.

Table 5. Current revenue / break-even revenue, 2014-2021.

Value per calendar year (%)	2014	2015	2016	2017	2018	2019	2020	2021
Passive, 0-8 metres*	-2.6	-2.3	-2.4	-2.4	-1.6	-2.2	-2.0	-1.6
Passive, 0-10 metres**	0.5	0.9	0.9	0.3	0.6	0.7	0.7	0.5
Passive, 8-12 metres*	-0.1	-0.3	-0.3	-0.4	-0.4	-0.6	-0.5	-0.3
Passive, 10-12 metres**	0.9	1.0	1.1	1.0	1.1	1.8	1.3	1.5
Active, 8-12 metres	1.4	1.5	1.7	1.6	1.6	3.0	2.6	2.2
Active, 10-12 metres	1.0	1.5	2.1	1.3	1.6	1.4	1.0	0.9
Active, 12-18 metres	1.8	2.3	2.5	2.4	3.1	1.5	2.3	2.0
Active, 18-24 metres	1.1	1.6	1.9	1.4	1.7	1.8	1.4	1.0
Active, 24-40 metres	1.2	1.9	3.0	2.7	2.0	2.1	1.8	2.4

* In accordance with footnote 1 to Table 8 of Regulation (EU) 2021/1167¹¹, only vessels fishing in the Baltic Sea are included in this segment.

** In accordance with footnote 1 to Table 8 of Regulation (EU) 2021/1167¹², only vessels fishing in the North Sea in are included in this segment with regard to Sweden.

The economic indicators presented in Tables 3 and 5 appear to indicate some overcapacity in most of the passive gear segments. It should be borne in mind, however, that these segments account for a very small proportion of total Swedish catches (1-3%), and that their exploitation of the available fish resources is therefore limited. Moreover, fishers in these segments are often part-time fishers with other sources of income apart from fishing. It should also be noted that there are considerable variations within segments.

¹¹ Commission Delegated Decision (EU) 2021/1167 of 27 April 2021 establishing the multiannual Union programme for the collection and management of biological, environmental, technical and socioeconomic data in the fisheries and aquaculture sectors from 2022 (available at: [Publications Office \(europa.eu\)](https://eur-lex.europa.eu/eli/reg_del/2021/1167/oj)).

¹² Commission Delegated Decision (EU) 2021/1167 of 27 April 2021 establishing the multiannual Union programme for the collection and management of biological, environmental, technical and socioeconomic data in the fisheries and aquaculture sectors from 2022 (available at: [Publications Office \(europa.eu\)](https://eur-lex.europa.eu/eli/reg_del/2021/1167/oj)).

Vessel use indicators

Proportion of inactive vessels

The proportion of inactive vessels can be considered as unused fleet capacity, i.e. as an indicator of vessel use. The guidelines state that 20% should be seen as a critical threshold. In 2022 the proportion of inactive vessels in the Swedish fishing fleet was 21% for the fleet as a whole (see Table 2). In order for the assessment of this indicator to be meaningful, however, it needs to be considered which length groups the inactive vessels belong to. Table 6 therefore shows the proportion of inactive vessels in the length classes below and above 12 m. The majority of inactive vessels are less than 12 m in length. Looking only at vessels longer than 12 metres, the proportion of inactive vessels in 2021 was 17%, i.e. below the critical level of 20%.

Table 6. Proportion of inactive vessels broken down by vessels of less/more than 12 m, 2014-2022.

Segment	Proportion of inactive vessels per year								
	2014	2015	2016	2017	2018	2019	2020	2021	2022
<12 m	34%	33%	32%	37%	37%	36%	30%	27%	28%
≥12m	8%	8%	9%	9%	8%	10%	14%	12%	17%

Average days divided by the maximum number of days at sea

A further indicator of vessel use is the ratio of average to maximum days at sea. The maximum number of days at sea can be calculated as a theoretical number, or it can be based on the observed, actual maximum number of days logged at sea. The observed maximum number, based on a percentile of 90%, is shown in Table 7. According to the guidelines, a value below 0.7 over time is an indication of structural overcapacity. In 2022 the vessel use indicator values were at critical levels for almost all segments, and in recent years most segments have had values below the 0.7 threshold (see Table 7).

Factors such as pandemic-related effects and increased fuel costs may have had an impact on this indicator, contributing to the low values of many segments in recent years. The emergency measures adopted by the Commission at the end of July 2019 to ban commercial cod fishing in most of the Baltic Sea until the end of that year, as well as the ban on targeted cod fishing as from 1 January 2020, are also likely to have contributed to the low average values in recent years.

This indicator should be assessed with caution as several factors strongly influence the number of possible fishing days, such as the available quotas, fishing seasons, geographical conditions, the weather and the management system. As regards the management system, fishers with individual quotas are limited by the quota allocated to them. There is also a wide spread within each segment.

Table 7. Average number of days divided by the maximum number of days at sea (2020-2022).

Year	Segment	Current effort		Maximum observed number of days*	Capacity used (proportion*)
		Number of vessels	Average number of days at sea		
2022	Active, 10-12 metres	41	19	28	69%
	Active, 8-12 metres	34	13	40	31%
	Active, 12-18 metres	65	57	108	53%
	Active, 18-24 metres	33	89	135	66%
	Active, 24-40 metres	26	93	172	54%
	Passive, 0-8 metres	259	53	121	44%
	Passive, 0-10 metres	229	47	111	42%
	Passive, 8-12 metres	98	31	74	42%
	Passive, 10-12 metres	50	33	57	58%
2021	Active, 10-12 metres	37	72	55	131%
	Active, 8-12 metres	36	20	145	14%
	Active, 12-18 metres	64	88	165	54%
	Active, 18-24 metres	35	119	190	63%
	Active, 24-40 metres	30	128	210	61%
	Passive, 0-8 metres	269	58	117	50%
	Passive, 0-10 metres	231	53	122	43%
	Passive, 8-12 metres	110	55	122	45%
	Passive, 10-12 metres	57	77	157	49%
	Active, 10-12 metres	40	65	73	89%
2020	Active, 8-12 metres	31	28	127	22%
	Active, 12-18 metres	68	81	151	54%
	Active, 18-24 metres	35	123	191	65%
	Active, 24-40 metres	29	143	253	57%
	Passive, 0-8 metres	282	61	120	50%
	Passive, 0-10 metres	224	54	116	47%
	Passive, 8-12 metres	115	54	134	41%
	Passive, 10-12 metres	50	84	179	47%
	Active, 10-12 metres	41	19	28	69%
	Active, 8-12 metres	34	13	40	31%

* Estimated based on 90% percentile.

** In accordance with footnote 1 to Table 8 of Regulation (EU) 2021/1167¹³, only vessels fishing in the Baltic Sea are included in this segment.

*** In accordance with footnote 1 to Table 8 of Regulation (EU) 2021/1167¹⁴, only vessels fishing in the North Sea are included in this segment with regard to Sweden.

¹³ Commission Delegated Decision (EU) 2021/1167 of 27 April 2021 establishing the multiannual Union programme for the collection and management of biological, environmental, technical and socioeconomic data in the fisheries and aquaculture sectors from 2022 (available at: [Publications Office \(europa.eu\)](https://publications.europa.eu)).

¹⁴ Commission Delegated Decision (EU) 2021/1167 of 27 April 2021 establishing the multiannual Union programme for the collection and management of biological, environmental, technical and socioeconomic data in the fisheries and aquaculture sectors from 2022 (available at: [Publications Office \(europa.eu\)](https://publications.europa.eu)).

Annexes: Tables

Table B1. Fishing fleet trends, 2014-2022

		2014	2015	2016	2017	2018	2019	2020	2021	2022
Number of vessels per segment, active fleet	Passive, 0-8 metres	348	345	341	309	305	295	282	269	259
	Passive, 0-10 metres	260	255	249	235	227	220	224	232	229
	Passive, 8-12 metres	196	186	176	157	152	139	115	110	98
	Passive, 10-12 metres	64	63	63	59	54	57	50	57	51
	Active, 8-12 metres	33	33	33	34	35	34	31	37	39
	Active, 10-12 metres	49	46	43	46	44	43	40	36	41
	Active, 12-18 metres	69	71	73	71	69	68	68	64	65
	Active, 18-24 metres	41	41	39	38	39	39	35	35	33
	Active, 24-40 metres	43	40	37	33	32	30	29	30	26
Number of vessels per segment, inactive fleet	Inactive, 0-8 metres	132	129	133	145	137	138	120	109	110
	Inactive, 0-10 metres	117	113	96	93	95	72	48	42	37
	Inactive, 8-12 metres	61	55	49	65	61	66	52	45	47
	Inactive, 10-12 metres	7	9	8	2	2	3	4	5	3
	Inactive, 12-18 metres	14	13	14	13	12	15	19	16	22
Gross tonnage per segment, active fleet	Passive, 0-8 metres	447	429	427	377	363	351	320	292	287
	Passive, 0-10 metres	940	944	920	877	858	846	854	879	885
	Passive, 8-12 metres	1 629	1 552	1 461	1 280	1 198	1 102	906	877	764
	Passive, 10-12 metres	934	888	874	777	714	720	569	676	584
	Active, 8-12 metres	348	364	360	443	437	416	364	462	504
	Active, 10-12 metres	617	589	563	587	554	550	520	482	538
	Active, 12-18 metres	2 469	2 515	2 565	2 568	2 589	2 547	2 538	2 432	2 398
	Active, 18-24 metres	4 880	4 860	4 591	4 469	4 597	4 628	4 144	4 133	3 910
	Active, 24-40 metres	15 940	16 068	15 390	14 787	14 661	14 969	14 900	16 787	15 282
Gross tonnage per segment, inactive fleet	Inactive, 0-8 metres	141	153	144	175	165	170	161	154	141
	Inactive, 0-10 metres	272	257	240	235	230	199	123	112	93
	Inactive, 8-12 metres	443	388	351	477	481	541	441	324	363

	Inactive, 10-12 metres	64	76	79	16	21	29	53	63	29
	Inactive, 12-18 metres	2 478	1 890	4 038	1 235	1 284	846	1 480	1 472	2 444
kW per segment, active fleet	Passive, 0-8 metres	9 941	9 846	9 810	8 931	8 719	8 723	8 701	8 431	8 226
	Passive, 0-10 metres	18 910	19 179	18 876	18 171	18 130	17 944	18 437	19 895	20 218
	Passive, 8-12 metres	17 340	16 286	15 915	14 352	13 712	13 252	11 258	10 816	9 514
	Passive, 10-12 metres	11 789	11 367	11 552	10 812	9 736	10 452	9 139	11 094	9 648
	Active, 8-12 metres	5 382	5 619	5 260	5 870	6 131	5 796	5 324	6 151	7 344
	Active, 10-12 metres	7 877	7 130	6 891	7 496	6 945	6 945	6 417	5 462	6 315
	Active, 12-18 metres	17 083	17 471	17 705	17 451	17 200	16 398	16 858	15 956	16 276
	Active, 18-24 metres	16 007	16 025	15 236	14 922	15 143	15 637	14 093	14 123	13 364
	Active, 24-40 metres	45 798	46 239	44 883	43 684	40 475	40 562	38 350	41 019	35 945
kW per segment, inactive fleet	Inactive, 0-8 metres	3 453	3 351	3 332	3 794	3 872	3 818	3 185	3 127	3 110
	Inactive, 0-10 metres	6 773	6 332	5 681	5 609	5 615	4 795	2 754	2 492	2 279
	Inactive, 8-12 metres	5 181	5 068	4 641	5 971	5 670	6 121	4 896	3 880	4 074
	Inactive, 10-12 metres	1 184	1 553	1 397	307	596	794	779	938	504
	Inactive, 12-18 metres	7 221	4 983	12 020	4 278	4 183	4 323	5 969	5 725	8 826

Table B2. Landed weight and value by segment, 2014-2022

	Year	Passive, 0-8 m	Passive, 0-10 m	Passive, 8-12 m	Passive, 10-12 m	Active, 8-12 m	Active, 10-12 m	Active, 12-18 m	Active, 18-24 m	Active, 24-40 m	Total
Landed weight (t)	2014	950	802	2 111	1 558	1 763	456	6 446	14 365	143 798	172 249
	2015	980	827	1 689	1 616	2 853	430	6 636	15 567	172 167	202 766
	2016	927	823	2 022	1 378	2 412	488	7 125	14 471	167 796	197 442
	2017	763	669	1 497	953	2 627	444	5 119	14 753	194 917	221 742
	2018	812	633	1 466	917	2 393	455	6 411	13 684	188 179	214 950
	2019	702	612	1 269	1 039	2 258	368	3 606	12 342	155 237	177 433
	2020	640	572	1 175	598	1 899	348	3 228	10 396	152 041	170 898
	2021	531	544	872	575	2 318	288	2 227	8 360	137 334	153 050
	2022	463	546	534	464	3 049	233	1 721	8 917	121 961	137 889
Landed value (€1 000)	2014	2 860	5 371	3 296	4 340	2 257	3 653	13 452	16 620	55 720	107 569
	2015	3 140	5 499	2 433	5 369	3 371	3 834	14 240	18 648	60 773	117 307
	2016	3 246	5 600	2 824	5 081	2 557	4 281	16 100	19 903	71 354	130 945
	2017	2 888	4 489	1 951	4 182	2 843	4 304	16 044	19 702	67 767	124 170
	2018	3 144	4 849	1 913	4 128	2 333	3 879	15 298	17 817	66 820	120 181
	2019	2 348	4 832	1 764	4 974	2 832	3 458	14 139	18 288	65 905	118 539
	2020	2 124	4 878	1 365	3 603	2 735	3 111	14 301	15 534	68 011	115 662
	2021	2 343	4 856	1 519	4 949	3 186	3 014	14 440	13 882	69 416	117 607
	2022	2 275	4 772	1 093	3 976	4 989	2 650	15 194	14 952	59 973	109 873

Table B3. Biological indicators can be found at [Capacity and fishing opportunities - European Commission \(europa.eu\)](https://ec.europa.eu/fishery/capacity-and-fishing-opportunities), STECF 2022-15 – Balance Capacity Indicator Table)

G ea r	Len gth	Total number of vessels												SAR										Statu s in 2020 *	SHI										Tren d (5%) 2016 /20	Statu s in 2020 *				
		20 09	20 10	20 11	20 12	20 13	20 14	20 15	20 16	20 17	20 18	20 19	20 20	20 09	20 10	20 11	20 12	20 13	20 14	20 15	20 16	20 17	20 18		20 19	20 20	20 09	20 10	20 11	20 12	20 13	20 14	20 15	20 16			20 17	20 18	20 19	20 20
DF N	VL0 010	26 7	23 9	23 9	23 9	23 8	25 2	25 3	25 8	22 4	21 6	20 3	19 2	1	1	1	1	2	0	0	1	2	2	1	1	in imbal ance	2. 28	2. 47	2. 25	2. 04	2. 08	2. 07	2. 25	2. 28	2. 11	2. 03	1. 89	1. 61		
FP O	VL0 010	37 2	36 7	34 7	32 6	32 1	32 8	31 2	29 7	30 4	29 0	28 5	28 0	2	1	2	2	2	2	2	2	2	2	2	2	in imbal ance	0. 59	0. 6	0. 6	1. 07	0. 77	0. 46	0. 32	0. 44	0. 39	0. 48	0. 58	0. 53		
P G O	VL0 010	2	1		1		2	1	2	2	4	5	6	1	1		-1		-1	-1	-1	-1	-1	-1	no SAR foun d	0. 58	0. 38		0. 59					0. 32			-			
P G P	VL0 010	25	33	32	35	32	34	41	32	21	19	18	18	0	0	1	0	0	1	0	0	0	0	0	in balan ce	0. 96	1. 03	1. 05	0. 96	0. 95	0. 95	0. 83	0. 79	0. 81	0. 78	0. 76	0. 76	no trend	in balan ce	
H O K	VL0 010	26	16	20	23	21	17	17	19	13	26	18	15	0	0	0	1	1	0	0	0	1	1	0	0	in balan ce	1. 25	2. 49	0. 98	1. 12	1. 05	0. 98	0. 89	0. 84	0. 84	0. 86	0. 84	0. 98	no trend	in balan ce
DF N	VL1 012	10 9	98	91	94	10 0	93	89	84	72	64	62	60	2	2	2	2	3	1	1	2	3	3	2	2	in imbal ance	2. 54	2. 71	2. 59	2. 57	2. 72	2. 63	2. 8	2. 62	2. 38	2. 51	2. 61	2. 02	decre asing	in imbal ance
DF N	VL1 218	15	15	13	13	13	12	12	11	7	8	10	4	2	2	2	2	3	-1	0	1	2	2	2	1	in imbal ance	2. 06	2. 08	2. 04	2. 18	2. 15	2. 88	3. 24	3. 22	3. 58	3. 52	2. 69	3. 38		
FP O	VL1 012	28	29	28	34	32	28	34	32	35	32	34	36	1	0	1	1	1	1	1	0	1	1	0	0	in balan ce	0. 57	0. 55	0. 56	1. 07	0. 75	0. 44	0. 32	0. 44	0. 36	0. 5	0. 58	0. 51	no trend	in balan ce
FP O	VL1 218	3	3	4	3	1	2	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	no SAR	0. 57	0. 53	0. 53	1. 08	0. 73	0. 39	0. 26	0. 39	0. 32	0. 47	0. 62	0. 51	incre asing	in balan ce	

