Swedish Agency for Marine and Water Management

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Action plan - For the Swedish fishing fleet

Based on indicator values for 2018 and trends over the periods 2014 to 2018 inclusive according to the criteria in the Commission guidelines, several of fleet segments appear to be out of balance with fishing opportunities. The critical values for the small scale segments using passive gears has however not been interpreted a sign of imbalance, as discussed in the fleet report and below. In these segments, fishing may not be the main economic activity and they also use a very small share of the fish resource. It is further important to note the fleet segments used in the fleet capacity report does not correspond to certain fisheries or management segments in the Swedish fishery management. Whereas for example the Swedish Baltic Sea cod fishery clearly suffer from structural overcapacity (as will be shown below) other fisheries do not suffer from structural overcapacity. This also means that although the segments using active gears on average do not show critical values for the economic indicators in the Swedish fleet report, there is a variation within these segments.

The poor status of the Eastern Baltic Sea cod contributes to an overcapacity in the group of vessels traditionally targeting this cod stock. On July 23, 2019, the European Commission decided to ban commercial fishing for cod in ICES subdivisions (SD) 24-26 as an emergency measure to protect the eastern stock of cod in the Baltic Sea. The decision to stop cod fishing applied during the period 24 July to 31 December 2019. Targeted cod fisheries has since 1 January 2020 been prohibited in order to continue the protection of the eastern Baltic Sea cod stock. ICES predicts the stock to continue to be under biological reference points for the coming years even at no fishing. Thus, the recovery of the stock will at best take some time.

Also the quota utilization (on an aggregate level) has decreased over time. Figure 1 shows the development of the eastern Baltic Sea cod quota, the western Baltic Sea cod quota as well as the aggregated quota in western and eastern Baltic Sea over the period 2008-2020. The figure also shows the aggregated catch over time (i.e. in both SD 22-24 and SD 25-32).

The level of the quotas for cod in both western Baltic Sea (SD 22-24) and eastern Baltic Sea (SD 25-32) have decreased over time. The level of western cod quota used to be around 3 000 tonnes but then decreased from around year 2014. In 2018, the western cod quota was 867 tonnes. The Swedish quota for cod in the eastern Baltic Sea increased over the period 2008 - 2012, but then decreased from a level at 17 041 tonnes in 2012 to 7 435 tonnes in 2018 (corresponding to a decrease of 56 percent).

The utilization of particularly the eastern cod quota has changed dramatically over time; it was around 96 percent in 2008 and only 25 percent in 2018. On an aggregate level, considering both Baltic Sea cod quotas, almost 94 percent of the quotas was utilized in 2008 whereas in 2018 the utilization was only 33 percent.

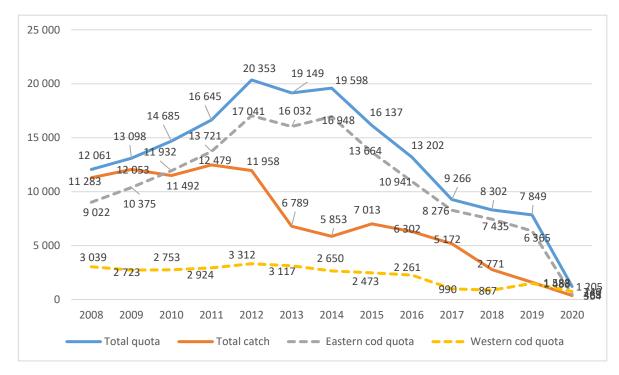


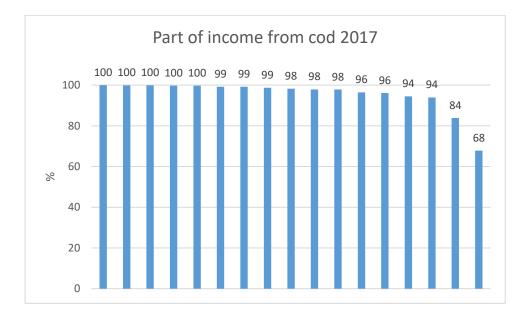
Figure 1. Swedens quoats and catches of cod in tonnes over time (quotas refer to final quotas, after for example yearto-year flexibility)

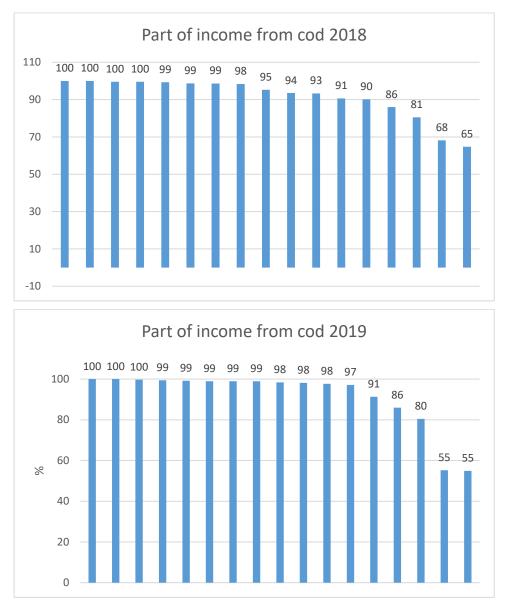
During this period, the number of vessels that mainly focus on cod has decreased from 246 vessels in 2008 to only 97 vessels in 2019, corresponding to a decrease of 60 percent.¹ The same goes for the caught weight that decreased from 11 283 tons in 2008 to 2 771 tons in 2018, corresponding to a decrease of 75 percent. Even though there are some price adjustments the landed value of cod has over time

¹ By main focus indicates that the majority of landed value comes for cod.

decreased by almost 90 percent. The previous year between 2017 and 2018 it decreased from 36 657 SEK to 16 552 SEK, a decrease by 54 percent. Not only has the ban on cod fishing in parts of the Baltic Sea caused a severe economic situation for the fishermen, but decreasing quotas and utilizations of the quotas has over time put fishers in a unsustainable economic situation.

Due to the Baltic Sea cod situation there are 17 vessels that have been identified as mostly affected by the cod fishing ban by investigating both their level of fishing activity and their economic dependences on cod landings. They represent 2.0 percent of the tonnage and 2.1 percent of the kW of the Swedish fleet. Yet, they represent 16.7 percent of the number of vessels fishing mainly for cod, 28.8 percent of the tonnage and 25.6 percent of the kW. These vessels are distributed as follows during the year 2020: 2 vessels DTSVL1824, 1 DTSVL1218, 4 vessels DFNVL0010, 7 vessels DFNVL1012, and 1 vessel DFNVL12XX. It includes an additional 2 vessels that are inactive and their segments are DTSVL1824 and DFNVL0010. Figure 2 show the economic dependency in percentage among the identified vessels from 2017 to 2019.





Figur 2. Part of income from cod for fishermen in the Baltic Sea that are focusing on cod.

Figure 2 show that these vessels have during the last three years been economically dependent on the income from cod and since 2019 their main economic source was disappearing due to the decision to ban commercial fishing for cod in ICES SD 24-26. This ban have had serious impact on their economic survival and many of them are suffering bankruptcy due to their income losses. This economic decrease is also shown in the economic indicators presented in table 1. Due to confidentiality of the individual companies, the following indicators will be presented in average of the affected vessels.

According to the STECF 20-11 report on balance capacity for Sweden, the DFN VL0012 show imbalances in the following indicators: VUR, VUR220, SAR, CR/BER, and RoFTA. It is the same for segment DFN VL1012 except that CR/BER is in balance. For DFN VL12XX there is an imbalance when it comes to SHI, SAR, CR/BER, RoFTA, and VUR220. The indicators for DTS VL1824 show imbalance in VUR220, and in SAR. For the segments DFN VL1012, DFN VL1218, and DTS VL1824, the trend in SHI is also decreasing indicating an unsustainable future. The identified vessels are in the segment that show imbalances among the different indicators with variation among the segments. In the report, it is stated that it was not possible to obtain all data for the indicators and there are therefore some indicators for some segments that are not possible to evaluate.

Economic indicators for the vessels mainly focusing on cod in the Baltic Sea

Net profit margin

As illustrated in Table 1, the net profit margin was on average negative in this segment since 2011, with an exception of 2016 (the average was however relatively small, although it had a positive sign). A net profit margin below zero indicate that the segment is out of balance and not economically sustainable.

Return on Investment / Return On Fixed Tangible Assets (ROFTA)

This indicator shows the return on fixed tangible assets and should be greater than zero. It should also be compared with (and be greater than) long-term risk-free interest. It should be noted that labour costs do not include owners' withdrawals from sole proprietorships, implying an undervaluation. At the same time, it should be recalled that the total revenue includes not only the total landed value, but also other revenues, contributing to overvaluation. This indicator show that all the segments among the fisheries focusing its catch on cod have negative return on fixed tangible assets the last 2 years (2018 and 2019).

Ratio of current revenue to break-even revenue

The other economic indicator, *current revenue against break-even revenue*, points to economic overcapacity if its value is below 1 since this means that current revenue does not cover costs (i.e. fishing is not economically viable). This ratio has during the last two years had a ratio lower than 1 indicating an economic overcapacity.

			Current revenue to	
	Netprofit margin	ROFTA	Break-even revenue	
2008	0,00	0,51	2,22	
2009	0,09	0,76	2,51	
2010	0,08	0,59	2,56	
2011	-3,19	0,46	2,15	
2012	-1,12	0,66	2,54	
2013	-0,46	0,24	1,63	
2014	-0,20	0,44	2,13	
2015	-0,01	0,70	2,55	
2016	0,18	0,68	2,53	
2017	-0,39	0,21	1,39	
2018	-0,39	-0,08	0,80	
2019	-1,18	-0,20	0,57	

Table 1. Average values of net profit margin, return on fixed tangible assets (ROFTA), and Current revenue to Break-even revenue 2008-2019.

1) Labour costs do not include owners' withdrawals from sole proprietorships

The above presented figures indicate that this specific segment suffers from overcapacity. Therefore, the following action is needed in order to reduce the fleet and reobtain levels that are in balance.

Total fishing capacity of all fishing vessels with an allocation of fishing opportunities of cod

Table 2 below show the annual figures as well as yearly average for the years 2015 to 2019 of the total fishing capacity of all fishing vessels with a permit to fish for cod in the Baltic Sea. Table 3 show the corresponding figures for the 17 vessels that, as described above, have been identified as the vessels that are mostly affected by the Baltic Sea cod situation (i.e. the capacity suggested to be withdrawn by permanent cessation as further described below).

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	Average kW	Total kW	Average	Total tonnage	Number
			tonnage		of vessels
2015	158,5	35 504,3	36,5	8 174,8	224
2016	158,5	32 498,5	34,2	7 002,3	205
2017	154,3	30 473,6	32,2	6 343,1	197
2018	152,4	27 738,3	30,3	5 514,7	183
2019	147,8	23 923,4	26,7	4 317,8	163
Average	154,3	30 027,62	32,0	6270,54	194
2015-2019					

Table 2. Average and total fishing capacity of all fishing vessels with permit to fish for cod in the Baltic sea 2015-2019.

Table 3. Average and total fishing capacity for the 17 fishing vessels over the period 2015-2019.

	Average kW	Total kW	Average	Total tonnage	Number of
			tonnage		vessels
2015	177,1	3 010,3	32,7	556,3	17
2016	177,1	3 010,3	32,7	556,3	17
2017	177,1	3 010,3	32,7	556,3	17
2018	177,1	3 010,3	32,7	556,3	17
2019	177,1	3 010,3	32,7	556,3	17
Average	177,1	3 010,3	32,7	556,3	17
2015-2019					

Tools for reducing the fleet

The European Commission decided in July 2019 to ban commercial fishing for cod in ICES SD 24-26 as an emergency measure to protect the eastern stock of cod in the Baltic Sea. Some of the affected businesses received financial support under Article 33 of the European Maritime and Fisheries Fund Regulation (EMFF Regulation) for the temporary laying-up of their fishing vessels. Later the Council decided to adopt similar measures (to ban commercial fishing for cod in ICES SD 24-26) for 2020 and 2021. SwAM has also introduced a possibility for the vessels traditionally targeting cod to shift to Nephrops sp. fishery, but this opportunity has not been utilized by the concerned vessels. Yet, since the ban for commercial fishing cod in ICES SD 24-26 and according to ICES the stocks of cod do not seem to have a quick recovery, many of the Swedish cod fisheries in the Baltic Sea are suffering from income losses and in the near future facing bankruptcy. On top of this, the

quotas of the cod are at historically low level, which makes a reduction of capacity of this fleet inevitable.

In order to reduce the fleet and an income support for cod fishers in the Baltic Sea permanent cessation of the fishing activities are suggested.

The suggested capacity reduction represent 2.0 percent of the tonnage and 2.1 percent of the kW of the Swedish fleet. The willingness among the fishermen to permanently give up their businesses is however uncertain. When a scrapping premium is granted, the equivalent capacity is permanently removed from the Union fishing fleet register and the fishing licences and authorisations will be permanently withdrawn. Thus, if not all the 17 fishing businesses are willing to accept the scrapping premium, the reduction of the fleet in terms of tonnage and kW will be lower than the levels above. This measure will take place during 2021 and it is estimated that the suggested capacity will be reduced by 2023 at latest.

Additional measures to reduce fleet capacity

Sweden are constantly applying effort reduction schemes in terms of for example fishing permits for fishing gear needed to participate in certain fisheries and through exit/entry schemes, as discussed in the fleet report.

An effective tool for reducing fleet capacity was to implement an ITQ-system. In Sweden, such a system was implemented in 2009 in the pelagic fisheries, leading to a substantial decline in the number of vessels and fishing capacity in this segment. In the demersal fisheries, a system of annual individual allocations is applied. The annual system does not create incentives for permanent fleet reduction. However, an implementation of a full ITQ-system also in the demersal fisheries has been suggested by the SwAM, but the Agency does not at the moment have the legal mandate to implement it. Depending on the design of such a system, potential overestablishment in some segments could be achieved while at the same time being able to avoid unwanted concentration of quotas and preserving the small scale segments.²

² In for example the Swedish fishery for northern prawn almost a third of the vessels only fish enough to get a renewed permit the following year, indicating the precense of "quota boats".

Additional notes regarding the suggested measure and expected impact

It should be noted that the measures suggested in this action plan will not imply that all indicators for all segments in the Swedish fleet report will turn to uncritical levels. However, the suggested measure is important to remove up to 17 vessels from the fleet that have had their majority of income from cod in the Baltic Sea. These vessels have lost their most important source of income as a result of the biological situation of the cod in the Baltic Sea and the ban to fish cod, and thus, as illustrated above, display critical levels for their economic indicators. They thereby contributes to an imbalance between fishing capacity and fishing opportunities in the Swedish fleet. However, since they represent only 17 of 1042 vessels it is not realistic to expect that the suggested measure will lead to that all indicators in the fleet report turn to uncritical values.

It is noted in STECF 20-11 (p 11) that "..following the AER fleet segmentation may be of limited usefulness at national level if the fleets are traditionally managed following another segmentation", continuing saying that "..it would then be important to relate the national segments with those required by the Commission guidelines." Therefore, table 4 below relates of the group of vessels for which the measure is suggested to the fleet segments in the fleet capacity report (this has also been described in the text above).

		2020			Vessels relevant for the proposed measure		
		Number of	kW	GT	Number of	kW	GT
		vessels			vessels		
	Passive gear < 10 m	511	30 497	1421	4	289	24
	Passive gear 10 - <12 m	98	15 980	1022	7	1036	88
	Passive gear ≥ 12 m	5	1 575	120	1	170	17
	Active gear < 12 m	70	12 622	876			
	Active gear 12 – < 18 m	68	16 398	2 538	1	298	45
Vessels per segment, active fleet	Active gear 18 – < 24 m	35	15 637	4 144	2	790	233
	Active gear ≥ 24 m	29	40 562	14 900			
Inactive vessels		226	17 384	2230	2	427	149

Table 4. Relating management segment to fleet segments in the fleet capacity report.

The Swedish fleet capacity reports have displayed critical levels of the indicators for the fleet segments with the smallest vessels using passive gears for years. As

discussed in the fleet reports, this should not necessarily be interpreted as an overcapacity. It is for example necessary to keep in mind that the small scale segments using passive gears account for a very small share of the total catches and do thus not use the accessible fish resources to a large extent. It is also likely that operators within these segments often are engaged in part-time fishing. These factors are important to keep in mind when interpreting the economic and technical indicators for the small scale segments. Similar issues have also been raised by STECF in their reports. In for example STECF-18-14, it is recognized that assessment of economic and technical indicators is challenging for the small scale fleet segments. For example, economic indicators presume that fishing activity is the main activity of the fleet segment being assessed, which is often not the case for small scale fishing fleets. In STECF-18-14 (p 226) it is noted that "EWG 16-09 considers that economic and technical indicators for small-scale fleet segments should always be interpreted with caution, and that local expert knowledge is generally required to accurately interpret indicator results/trends". This means that the critical values observed for the small scale segments using passive gears not necessarily should be interpreted a sign of imbalance.

Comments regarding the western Baltic herring

The situation in the Baltic Sea does not only concern cod but also quotas and fishermen fishing for western Baltic herring. The quota for western Baltic herring has decreased sharply in recent years. Usually, part of the Swedish quota for western Baltic Herring is allocated to a small-scale fisheries quota (a so called coastal quota) and the rest of the quota is allocated to vessels with individual fishing rights. Since the Swedish quota was only 280 tonnes in 2021, which is less than usually fished on the small-scale quota, the entire Swedish quota of western Baltic herring was allocated to the small-scale fisheries. Extra quantities of herring have been reserved for the nearby coastal quotas for compensating the lower level of the western Baltic small-scale quota,

Those who have individual fishing rights will thus not be allocated any quantity of the quota at all in 2021 in western Baltic Sea. The vessels with fishing rights were also impacted last year, in 2020, since SwAM allocated most of the Swedish quota for western Baltic herring (440 out of the initial 560 tonnes) to the small scale fisheries quota.

The impact of this for those with individual fishing rights probably varies among vessels depending on their individual composition of fishing rights of different quotas. There are 12 vessels with fishing rights for western Baltic herring. Most of them have also fishing rights of several other quotas, and it is therefore conceivable that most of them are not heavily impacted. There are however two vessels that do not have much other fishing rights. Studying economic indicators for the 12 vessels show that they overall perform economically well, with some individual variations (there are no vessels that have shown critical economic results each year). Economic data is however only available until 2019 and the results might change when economic data for 2020 and later years is available.