Ref. Ares(2019)2387932 - 29/06/2019

ANNEX VIII Report to support the request for by-catches of the following pelagic species: horse mackerel (Trachurus spp.), mackerel (Scomber scombrus), anchovy (Engraulis encrasicolus) and boarfish (Caproidae), a combined de minimis for the species up to a maximum of 3% in 2019 ,2020 and 2021, of the total annual catches of these species made by gillnetters (gear codes: GNS, GND, GNC, GTR, GTN) in fisheries in ICES divisions VIII and IX, X and CECAF areas 34.1.1, 34.1.2, 34.2.0.

In the framework of the landing obligation in accordance with article 15 of regulation (EU) N° 1380/2013, a de minimis exemption obligation is requested for pelagic species (mackerel, horse mackerel, boarfish and anchovy) caught using gillnets (gear codes: GNS, GND, GNC, GTR, GTN) in fisheries in ICES subareas VIII and IX, X and CECAF areas 34.1.1, 34.1.2, 34.2.0, up to 3% in 2019 and 2020 and 6% after 2020 of the total annual catches of those species caught in gillnets fisheries.

The request for an exemption for de minimis is based on article 15.c.i), due to difficulties to further increase selectivity in this fishery, and on article 15.c.ii), due to disproportionate costs a total application of the landing obligation would cause in this fishery.

The selectivity of gillnets is very difficult to improve as it is already a very selective gear. The main problem this metier have to face when the total landing obligation enters in force in 2019 is the lack of quota to cover a relative small quantities of unwanted catches of these pelagic species. This is more a seasonal problem as the discard rate varies a lot from one season to another. But the lack of flexibility could cause that their activity is choked by this by-catches although the vessels have enough quota of target species available.

Summary

Motive

Although this is a very selective gear, as said before, some pelagic species which can be spatially and temporally abundant can be found in the nets, especially mackerel.

Thus, it is very difficult to improve selectivity without causing significant commercial losses.

Taking into account that the amount of unwanted catches is very low this should not be a problem for the stock. The objective to improve selectivity more in this fleet at the moment seems to be unnecessary moreover if the consequences of doing that could lead this fleet to be unviable economically.

This specificity of gillnet fisheries justifies this exemption request due to how complicate is to improve the selectivity.

In addition to those situations of choke species if the quota for some stocks in to enough or is exhausted, landing application enforcement may generate disproportionate cost due to hold overloading and increase the sorting time on board for the crew. Those arguments justify this de minimis request also for disproportionate costs.

This de minimis request aims to give some flexibility needed for fishermen using gillnets to implement the landing obligation in practice.

Definition of the species

Pelagic fish inhabit the water column (not near the bottom) of coasts, open oceans, and lake *(National Ocean Service).*

Below, the states of the stocks affected by this exemption, according to ICES:

- Mackerel (subareas 1–8 and 14, and in Division 9.a): ICES advises that when the MSY approach is applied, catches in 2018 should be no more than 550 948 tonnes. The spawning-stock biomass (SSB) is estimated to have increased in the late 2000s and has remained above MSY $B_{trigger}$ since 2008. The fishing mortality (F) has declined from high levels in the mid-2000s, but remains above F_{MSY}. Discarding is known to take place, but is only quantified for part of the fisheries; the proportion of the landings covered cannot be calculated. Partial discard estimates are included in the assessment and overall discarding is assumed negligible.

- Horse-mackerel (Subarea 8 and divisions 2.a, 4.a, 5.b, 6.a, 7.a–c, and 7.e–k): ICES advises that when the MSY approach is applied, catches in 2018 should be no more than 117 070 tonnes. The stock and the fishery are very dependent on occasional high recruitments. Recruitment from 2002 onwards has been low; however, recruitment in the last three years is above the geometric mean (1983–2016). In recent years, SSB has been declining and is currently the lowest observed in the time-series, below MSY $B_{trigger}$. Fishing mortality increased from 2007, but dropped in 2015–2016 and is currently below F_{MSY}.

- Horse-mackerel (Division 9.a (Atlantic Iberian waters)): ICES advises that when the MSY approach is applied, catches in 2018 should be no more than 55 555 tonnes. Fishing mortality has been below FMSY over the whole time-series. The spawning-stock biomass (SSB) has been above MSY $B_{trigger}$ over the whole time-series and has slightly increased in recent years. Recruitment (R) in 2011–2015 has been above the time-series average.

- Anchovy (Subarea 8 (Bay of Biscay)): ICES advises that when the management strategy is applied, catches in 2018 should be no more than 33 000 tonnes. The spawning–stock biomass (SSB) has been above B_{lim} since 2010. Recruitment and SSB have been well above the historical average in recent years. The incoming recruitment (age 1) in 2018 is the third highest in the historical series. Harvest rates since the reopening of the fishery in 2010 have been below average.

- Boarfish (subareas 6–8 (Celtic Seas, English Channel, and Bay of Biscay)): ICES advises that when the precautionary approach is applied, catches should be no more than 21 830 tonnes in each of the years 2018 and 2019. The relative stock biomass was stable until 2009, and then increased in 2010–2012 before declining rapidly in 2013 and 2014. Since 2014, relative biomasses have been stable but lower than previously.

Definition of the management unit

Gillnet is one of the oldest types of fishing gear and is widely used to harvest diverse marine species (Sainsbury 1996).

Gillnets are classified as a passive gear, consisting of a large wall of netting which can be set at or below the surface on the sea bed, or any depth in between (Munprasit et al. 1986).

Its construction can be single, double or triple (trammel net) netting.

Fish caught in gillnets are usually gilled, but can be wedged, snagged or entangled (Hovgård 1996a, Hovgård 1996b, Hovgård and Lassen 2000). Nets are made of synthetic fibres such as polyamide and can be monofilament or multifilament or a combination of both in the case of more than one panel.

The importance of gillnets in the modern fishing industry is relevantly modest in terms of catch compared with towed gears such as trawls and seines (Hovgård and Lassen 2000). But the gillnets, at least those with a single netting, are, in general, considered as having a high degree of selectivity, in terms of fish species, as well as the size of the fish, which directly depends on the size of the mesh.

However unwanted catches of a number of TAC and quota species can take place. Research is being carried out, aiming to reduce mainly the risk to catch incidentally marine mammals or turtles.

Technologically, gillnets are simple, easy to mend, require little in the way of on board equipment and are relatively cheap to purchase. They may be set in areas with difficult bottom conditions, in coastal rocky areas or in fresh water bodies where towed gears cannot be used (Hovgard and Lassen 2000).

Characteristics of the bottom trawl fishery and its activity

The SWW Discard Atlas reports the following metiers using gillnets that will benefit from this exemption:

Table 1.1. Métiers included in the SWW discard atlas and their target stocks

Métier	Métier code	Target species		
		Hake	*Nephrops*	Sole
Portuguese métiers				
Polyvalent Portuguese fleet	LLS, GNS_>80mm, GTR_>100mm	S	IXa	
Spanish métiers				
Set gillnet targeting demersal species using a mesh size of 60mm in north Spanish Iberian waters ('Beta')	GNS_DEF_60-79_VIIIc_IXa	S		
Set gillnet targeting hake using a mesh size of 90mm in north Spanish Iberian waters ('Volanta')	GNS_DEF_80-99_VIIIc_IXa	S		
French métiers				
Set gillnetters smaller than 15 meters targeting demersal fish and crustaceans in the northern Bay of Biscay	GTR_GNS_DEF_CRU_Inf15m _ VIIIab	N		VIIIab
Set gillnetters larger than 15 meters targeting demersal fish and crustaceans in the northern Bay of Biscay	GTR_GNS_DEF_CRU_Sup15m _ VIIIab	N		VIIIab

Composition of catches, landings and discards

PORTUGAL

Gillnets

Catches

Species	(tonnes)	(%)
ANE	0,000	0,00%
BOC	0,000	0,00%
JAX	516,965	14,17%
MAC	57,275	1,57%
Other species	3.075,281	84,27%
Total	3.649,521	

Vessels

Species	(tonnes)	(%)
ANE	0	0,00%
BOC	0	0,00%
JAX	146	33,56%
MAC	95	21,84%
Total	435	

SPAIN

Data used to make calculations comes from the IEO observers programme and the estimations made with the sampling data collected on board commercial vessels, as no additional data can be found in STECF data base data call regarding this metier.

Last three-year period was taken into account in order to better estimate the landings and discards from the Spanish fleet.

Year	Fishing area	Metier	Species	Estimated Discards (tn)	Estimated Catch (tn)	Discard Rate
2015	VIIIc-IXaN	GNS_DEF_80-99_0_0	Boarfish	2,091	2,091	100
2016	VIIIc-IXaN	GNS_DEF_80-99_0_0	Boarfish	0,076	0,076	100
2017	VIIIc-IXaN	GNS_DEF_80-99_0_0	Boarfish	0,218	0,218	100
2015	VIIIc-IXaN	GNS_DEF_80-99_0_0	Mackerel	138,582	174,236	79,5
2016	VIIIc-IXaN	GNS_DEF_80-99_0_0	Mackerel	0,314	8,124	3,9
2017	VIIIc-IXaN	GNS_DEF_>=100_0_0	Mackerel	0,128	0,128	100
2017	VIIIc-IXaN	GNS_DEF_80-99_0_0	Mackerel	0,379	1,243	30,5
2015	VIIIc-IXaN	GNS_DEF_80-99_0_0	Horse mackerel	21,988	83,151	26,4
2016	VIIIc-IXaN	GNS_DEF_80-99_0_0	Horse mackerel	6,785	39,653	17,1
2017	VIIIc-IXaN	GNS_DEF_80-99_0_0	Horse mackerel	13,441	120,867	11,1

It is important to notice that data used can be taken into account as a good proxy but not as definite data, thus an extreme care on the interpretation and use of the estimates presented below is needed. It is also important to notice that discards and catches may highly vary from a year to another as the variability of pelagic stocks is inherently very high.

Specifying de minimis volume

Discard volume

Based on the IEO *Observer´s programme* data from 2015-2017, it has been established a discard profile in order to estimate maximum volumes of species that would be theoretically discarded under a de minimis as presented in this case.

All precautions shall be taken in interpreting and using those estimates as discards can vary significantly from one year to another due to the coverage of the observer programme and the seasonality that this pelagic species presents together with the high variability of the stocks mentioned before. Nevertheless, estimates presented hereafter can give a good idea of maximum volume discard estimates.

Country	Species subject to DM	Total catch	Estimated discard share composition on overall catches	Estimated discard share composition (DS)	Maximum volume of discard with a 3% DM (in tonnes)	Applicable rules for DM use	Maximun discard share/ species	Estimate of Maximum volume under a 3% de minimis
ESP	**horse mackerel**	81,22	1,70	56,71	2,44	25% of the estimated discard share composition	70,89	3,05
ESP	**mackerel**	61,20	1,28	42,73	1,84		53,42	2,29
ESP	**boarfish**	0,80	0,02	0,56	0,02		0,69	0,70
	total	143,22	3,00	100,00	4,30			

Safeguards

This de minimis would respond partly to how to implement the landing obligation in this specific fishery where it is difficult in a 2019 scenario to implement it. At the same time, this de minimis has its limits and its risks. It is true that the combination of several species can represent a high volume of possible discards. Nevertheless, it will never be more than 3% of the catches made by the fleet concerned. And the maximum total volume of discards is fixed in 4,3 tons.

The point of a combined de minimis is giving the flexibility needed for fisherman to face the variability of by-catch stocks abundance.

Nevertheless, in order to limit the risk of discarding only one species and because discard rate can be significantly different from a species to another it is propose to put in place safeguard.

Here after is a proposition of safeguards that need to be evaluated and discussed:

According to the discard profile of the fishery a margin on 25% shall apply. This margin would allow the flexibility needed to face the variability of catches and discards. On the overall discard volume permitted by this exemption, only the proportion calculated (+25%) could be discarded on the overall discard as it is shown in the table.

Those safeguards should be revised if necessary and according to discard profile that can evolve over the years.

Reference

ICES 2017a.Horse mackerel (Trachurus trachurus) in Subarea 8 and divisions 2.a, 4.a, 5.b, 6.a, 7.a–c, and 7.e–k (the Northeast Atlantic)
http://ices.dk/sites/pub/Publication%20Reports/Advice/2017/2017/hom.27.2a4a5b6a7a-ce-k8.pdf
ICES 2017b. Mackerel (Scomber scombrus) in subareas 1–8 and 14, and in Division 9.a (the Northeast Atlantic and adjacent waters)
http://www.ices.dk/sites/pub/Publication%20Reports/Advice/2017/2017/mac.27.nea.pdf
ICES 2017c. Boarfish (Capros aper) in subareas 6–8 (Celtic Seas, English Channel, and Bay of Biscay)
http://www.ices.dk/sites/pub/Publication%20Reports/Advice/2017/2017/boc.27.6-8.pdf

ICES 2017d. Anchovy (Engraulis encrasicolus) in Subarea 8 (Bay of Biscay)
http://www.ices.dk/sites/pub/Publication%20Reports/Advice/2017/2017/ane.27.8.pdf
NATIONAL OCEAN SERVICE
https://oceanservice.noaa.gov/facts/pelagic.html