

**ANNEX V Report to support the request for by-catches of anglerfish (*Lophiidae*), sole (*Solea spp.*), turbot (*Psetta maxima*), red seabream (*Pagellus bogaraveo*), great forkbeard (*Phycis blennoides*), a combined de minimis up to a maximum of 7% in 2019 and 2020, and up to a 6% in 2021 of the total annual catches of these species made by trawlers (gear codes : OTT, OTB, PTB, OT, PT, TBN, TBS, TX, SSC, SPR, TB, SDN, SX, SV) in the Gulf of Cadiz part of ICES subarea IXa.**

In the framework of the landing obligation in accordance with article 15 of regulation (EU) N° 1380/2013, a de minimis exemption is requested for the following TAC and quota species caught as by-catch: anglerfish (*Lophiidae*), sole (*Solea spp.*), turbot (*Psetta maxima*), red seabream (*Pagellus bogaraveo*), great forkbeard (*Phycis blennoides*) with demersal vessels using bottom trawls (OTB, OTT, PTB, OT, PT, TBN, TBS, TX, SSC, SPR, TB, TBB, SDN, SX, SV) in ICES subarea 9a in the Gulf of Cadiz, up to 7% in 2019 and 2020 and 6% after 2020 of the total annual catches of those species caught by this fleet.

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

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**Motive**

Vessels having a highly mixed activity catch simultaneously a diversity of species during the same fishing operation, in the Gulf of Cadiz case more than 400 different species are founded in the net. They are depending financially on several species, most them not included in the TAC and quota regulation) but they can be choked for this species if the quota is exhausted without being able to avoid this catches.

Thus, it is very difficult to improve selectivity without causing significant commercial losses as the incomes from this fleets pend mainly on non TAC species which makes it very difficult to introduce changes in the gears when the amount of TAC and quota species is very low and the catch composition includes a great variety of species most of them marketable.

This complication is even truer regarding the differences of those species morphology. Moreover, even with all scientists' efforts on developing mixed species models, it is for now unreal to find the appropriate balance between fishing opportunity taking into account technical and biological interactions. That is why, besides the description of choke species issues linked to this activity (mixed fisheries), it is highly necessary to establish suitable solutions for this specific fleet.

This inherit circumstances of highly mixed demersal fisheries justifies this exemption request due to this difficulty to improve the selectivity.

In addition to those situations of choke species, landing application enforcement may generate disproportionate cost due to management of the undersized fish on port as the quantities are very low, spread in many small ports with no possibilities to find operators that wants to use this catches, but also hold overloading and increase the sorting time by the crew. Those arguments justify this de minimis request also for disproportionate costs.

This specificity of mixed demersal fisheries justifies this exemption request due to this difficulty to improve the selectivity. This de minimis request aims at giving some flexibility needed for fishermen, exercising bottom trawler metier, to implement the landing obligation in the short term.

### **Definition of the species**

The following species are included in this de minimis:

Anglerfish (Lophiidae)

Sole (Solea spp.)

Turbot (Psetta maxima)

Red (black spotted) seabream (Pagellus bogaraveo)

Great forkbeard (Phycis blennoides)

## Definition of the management unit

### Characteristics of the bottom trawl fishery and its activity

The Spanish bottom trawl operating in IXa South Iberian waters (Gulf of Cádiz) targets a great variety of molluscs like octopus (*Octopus vulgaris*) and cuttle fish (*Sepia officinalis*); and crustaceans like white shrimp (*Parapenaeus longirostris*) and nephrops (*Nephrops norvegicus*); but also some fishes as hake (*Merluccius merluccius*) and (*Dicologoglosa cuneata*).

**54,48% of the catches made by this métier** corresponds to target species where cephalopods and crustaceans and hake have the highest catch rates. **48%** of catches are **by-catch** some of the regulated by TAC and quotas.

The trawl fleet is mainly composed of around 150 vessels. Their average characteristics are about 17.9 m length, 31 HP and 212 GRT. The traditional trawl gear used is the “*backa*” trawl gear with some modifications (Anom., 2001).

The bottom trawl fleet operating in the Division IXa South (Gulf of Cádiz) was classified by Silva et al. (2007) in a unique métier. For proper management of this fishery, should be taken into account that there are coastal trips targeting caramote prawn, wedge sole and cephalopods, but also there are deeper trips targeting blue whiting, hake and deep rose shrimp.

The vessels in this métier are allowed to use a minimum mesh size of 55 mm (from 2009). The minimum trawl depth is established for a minimum distance to the coast of 6 nautic miles.

Trawl fleet must stop fishing during a temporary closure of 45 days between late September and early November. The maximum activity period is 18 hours per day and they must stop fishing for a 48-hour continuous period per week.

The minimum landing size (MLS) of hake is 27 cm and the MLS of Nephrops is 20 mm carapace length (CL). Nephrops fishing may only be made in fishing periods expressly authorized by national regulation, after hearing the affected fisheries.

### Composition of catches, landings and discards

It was not possible to use the STECF data to establish a profile discard and to estimate which quantity of every species could be discarded under the use of a *de minimis* as there was no data fulfilled from our national observation programs.

Based on the estimates, catch estimations and discards estimations from samplings are included for all the by-catch species listed before that were founded historically in the catch composition of this fleet.

## Specifying de minimis volume

### Discard volume

Based on the *IEO observer's* data of 2016, it was 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 as they can vary significantly from a year to another due to the random behaviour of fishery activity very dependant to the weather and external factors. Nevertheless, estimates presented hereafter can give a general idea of maximum volume discard estimates that appears to be very low but can choke significantly in the fleet if no flexibility is applied.

In the following table information from Gulf of Cadiz catches and discards obtained in the observers programme are presented.

The Species subject to DM	Total catch	Estimated discard share composition on overall catches	Estimated discard share composition (DS)	Maximum volume of discard with a 7% DM ( in tonnes)	Applicable rules for DM use	Maximun discard share	Estimate of Maximum volume under a 7 % de minimis
Sole	12,90	1,00%	14,28%	0,90	25% of the estimated discard share composition	17,85%	1,13
Red Seabream	0,66	0,05%	0,73%	0,05		0,92%	0,06
Great Forkbeard	17,67	1,37%	19,56%	1,24		24,45%	1,55
Anglerfish	59,11	4,58%	65,43%	4,14		81,78%	5,17
<b>Total</b>	<b>90,34</b>	<b>7,00%</b>	<b>100,00%</b>	<b>6,32</b>		<b>125,00%</b>	<b>7,91</b>

There was not information for turbot catches and discards in the time serial used from 2015 to 2017 but in previous studies this is one of the species that appears occasionally as by-catch so the possibility to discard it will remain open in case the quota is exhausted and calculatios will be revised in 3 years time to update this figures.

### Safeguards

This de minimis would respond partly in how to implement landing obligation in specific fisheries where it is difficult in a 2019 scenario to implement it. Also 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 7% of the catches concerned.

As said before, volume and composition of catches can be unpredictable and vary from a year to another. It is also important to emphasize that, because of the mixed character of the fisheries it is highly unlikely that only one species would be discarded.

This is all the point of a combined de minimis: giving some 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 safeguards.

According to the discard profile of the fishery (see annexe I), 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.

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