

Annex VIII

Draft exemption for high survivability of plaice caught with beam trawls BT2 in the Western Waters (7a-k)

The BT2 gear is used in a target fishery on sole and mixed bycatches of for example plaice. The general introduction of the “Flemish panel” in 2016 already resulted in the reduction of the total sole catch by 19,7%, and the reduction of undersized sole (< 24 cm) catch by 40,3%. Increasing the mesh size of the extension in a Belgian beam trawl was shown to be an effective and simple method to reduce the capture of sole. For the moment, it seems difficult to further increase selectivity in this fishery without a further loss of marketable sole.

The choke mitigation tool for the North Western Waters (October 2017) indicated that plaice is a potential choke in different fishing areas. This tool also demonstrated that a high survivability for plaice in the western waters would largely alleviate the risk of plaice to choke the fisheries concerned.

Specific survivability studies for plaice demonstrate that there exists an extremely high variability in the results of vessels, ranging from rather low to high levels (4-93% - see annex I, p. 16. More specific for the western waters the survival levels range from 8 till 73%). This indicates that it is possible to get high survivability figures and that improvements are still possible. The study in annex I stipulates an estimation of the high numbers of juvenile plaice that could survive.

Scientists were invited to study the parameters, which determinate survivability. The study conducted by ILVO in annex I demonstrates significant impacts on survival by trawl duration, sorting duration, wave height, sea temperature, sediment catch and total catch.

From a policy perspective, it seems possible to manage certain of those elements e.g. trawl duration, sorting duration, sediment catch and total catch:

1) The study shows clearly that especially the effect of the sediment catch is important. If catches exists of more than 25% of stones or sand, the survivability of the flatfish caught, decreases by nearly a factor 10. The avoidance of stones and sand in the cod end should be possible by the use of certain technical devices. A note on the potential to increase survival of discards by technical measures in beam trawls (annex II) suggests two technical modifications to beam trawls to avoid stones:

- a) the **flip-up rope** rigged on top of the bobbin rope in the net opening;
- b) the **benthic release panel**, a square mesh panel inserted in the belly of the trawl, just in front of the cod-end. However, the use of the benthic release panel causes again the loss of marketable sole catches;

The introduction of these devices could therefore have a significant impact to increase further survivability for plaice in the BT2 fishery for the >221kW segment fleet.

A transitional period would allow researchers to conduct further scientific work to improve the gear selectivity and to improve survivability of plaice. Note that the use of these devices will also positively impact other flatfish species in the area. Amongst others an electric benthic release panel could have some selectivity potential without losing significant quantities of sole.

2) On smaller BT2 vessels, the <221kW segment fleet, the introduction of these technical devices would hinder fishing operations. Therefore alternative management measures should be explored to increase the survivability of plaice in this segment.

The study in annex I demonstrates that a reduction of the trawl duration and air exposure time also has an impact on the survivability.

A transitional period would allow researchers to conduct further scientific work on the possible impact of trawl duration and focus further on this particular fleet segment.

During this transitional period a limitation of the average trawl duration to less than ninety minutes seems recommendable. A summary of the exemption is provided in Table 1.

Recommendations:

- A temporary exemption for high survivability of plaice in western waters (7a-k) caught with BT2 gear is requested for vessels of the >221kW segment fleet which use the flip-up rope or benthic release panel.

- The smaller BT2 vessels, with an engine power of not more than 221kW or less than 24 m length overall, which are constructed to fish in the twelve mile zone, could use a temporary exemption for high survivability for plaice if the average trawl duration is less than ninety minutes

Table 1: Completed STECF table for high survivability proposal

Country	Exemption applied for (species, area, gear type)	Species as bycatch or target	Number of vessels subject to the landing obligation	Landings (by landing obligation subject vessels)	Estimated Discards	Estimated Catch	Discard Rate	Estimated discard survival rate from provided studies
IE	Plaice, VIIa and b-k	Bycatch	13	269	255	524	49%	8-73%
BE	Plaice VIIa	Bycatch	19	76	NA	NA	NA	(50% trips 12-35%)
	Plaice VIId	Bycatch	41	2.108	1.130(*)	3.238 (*)	35% (*)	
	Plaice VIIe	Bycatch	27	148	NA	NA	NA	
	Plaice VIIf,g	Bycatch	30	170	199	369	54%	
	Plaice VIIh,j,k	Bycatch	15	11	NA	NA	NA	

Note: (*) discard rate 2015 extrapolated on 2017 catches. In the meantime TAC increased substantially in 2016 (nearly doubled) & 2017.

It is also important to note the seasonal pattern in the Belgian plaice landings VIIde. Based upon a 3 yearly average monthly quota uptake, we can assume that 80% of the BE quota uptake is during the months January – March (53%) and November – December (27%). (See table next page)

