

North Western Waters Choke Species Analysis  
NWW Member States & NWW Advisory Council  
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## Executive summary

The issue of choke species has been highlighted as the biggest single problem in implementing the landing obligation. Extensive work has been carried out by the Member Regional Groups and the Advisory Councils on the key choke species and the potential solutions to reduce the risk of fisheries being closed as a result of these species.

On the basis of this work, the North Western Waters Advisory Council (NWWAC) has developed a Choke Mitigation tool (CMT) which provides a means for the identification of choke situations for key stocks. It is designed to help assess what tools – improvements in selectivity; avoidance; quota flexibilities; and exemptions included in Article 15 of the CFP - are appropriate for individual stocks/fisheries to mitigate choke situations. It also provides a qualitative assessment of how and to what extent the available tools can reduce the deficit between catch and fishing opportunities.

Two expert workshops have been convened by the NWWAC and the NWW Regional group to work through the different stocks in the Celtic Sea, West of Scotland, the Irish Sea and Channel using the CMT. The threat of choking fisheries has been assessed for each of these stocks/fisheries and sea basins. The stocks covered were:

Celtic Sea	West of Scotland	Irish Sea	Channel
Anglerfish VII	Anglerfish VI	Cod VIIa	Cod VIId
Cod VIIb-k	Blue Ling VI and VII	Haddock VIIa	Plaice VIId,e
Haddock VIIb-k	Cod VIa	Plaice VIIa	Sole VIId
Hake VI and VII	Cod VIb	Sole VIIa	Sole VIIE
Megrim VII	Haddock VIa	Whiting VIIa	Skates and Rays VIId
<i>Nephrops</i> VII	Haddock VIb		
Plaice VIIf,g	Ling VI and VII		
Plaice VII h,j,k	Megrim VI		
Pollack VII	<i>Nephrops</i> VI		
Skates & Rays VI and VII	Saithe VI		
Sole VIIf,g	Tusk V,VI,VII		
Sole VIIh,j,k	Whiting VI		
Whiting VIIb-k			

The aim was to use this analysis to identify residual choke issues that can only be addressed at Union level with alternative measures over and above the existing tools available. The purpose of the workshop was not to predict the exact nature and extent of chokes as this will be dependent on future stock and TAC developments. The specificities of individual chokes will change over time.

Each of the stocks was classified depending on the extent of the problem as follows:

- **“High risk”** – catches are well in excess of current fishing opportunities and even with all the available mitigation tools applied there is a high risk of choke for multiple Member States.
- **“Moderate risk”** – catches are in excess of fishing opportunities for one or more Member States and the risk of choke is significant for these Member States but mitigation tools potentially can solve the problem.
- **“Low or no apparent risk”** – catches are in line with fishing opportunities and the risk of choke is low or there is no apparent risk with the mitigation tools available.

The stocks were classified as a “high”, “moderate” or “low” risk taken as a whole across Member States. However, a stock classified as “moderate” or “low” risk may actually be deemed to be of “high risk” to an individual Member State. Particular stocks may have specific issues unique to that Member State which may not be immediately solvable with the tools available or the Member State involved is reliant on swaps (i.e. in cases where a Member State has no quota for a particular species but has reported catches).

Based on STECF catch data from 2015 (most recently available) and implied TAC top-ups to take account of catches previously discarded, the main findings by sea basin for the different stocks using the CMT were as follows:

## **Celtic Sea**

### **High Risk – catches exceed the TAC with multiple Member States impacted**

<b>Species</b>	<b>Member States Impacted</b>	<b>Relevant Mitigation Actions</b>	<b>Conclusion</b>
<b>Haddock VIIb-k</b>	BE, ES, FR, IE, NL, UK	Improving selectivity Avoidance ISF	Significant deficit between catches and quotas across MS Mitigation actions unlikely to prevent choking of fisheries
<b>Skates and Rays VI &amp; VII</b>	BE, ES, FR, IE, UK	Avoidance High survivability	Significant deficit between catches and quotas across MS Mitigation actions unlikely to prevent choking of fisheries
<b>Whiting VIIb-k</b>	BE, ES, FR, IE, NL, UK	Improving selectivity Avoidance De minimis	Mitigation actions likely to reduce the risk of choking significantly
<b>Plaice VIIf,g</b>	BE, FR, IE	High survivability Improving selectivity	Mitigation actions likely to reduce the risk of choking significantly
<b>Sole VIIf,g</b>	BE, FR, IE	High survivability Improving selectivity De minimis ISF	Mitigation actions likely to reduce the risk significantly

### **Moderate Risk - catches are less than TAC but for some Member States catches exceed quota**

<b>Species</b>	<b>Member States Impacted</b>	<b>Relevant Mitigation Actions</b>	<b>Conclusion</b>
<b>Hake VI &amp; VII</b>	ES, IE	Quota swaps Improving selectivity ISF De minimis	Mitigation actions likely to reduce the risk of choking significantly High dependence on quota swaps
<b>Anglerfish VII</b>	ES, IE, UK	Quota swaps De minimis	High dependence on quota swaps
<b>Cod VIIb-k (excluding VIId)</b>	IE, UK	Quota swaps Improving selectivity Avoidance	Mitigation actions likely to reduce the risk of choking significantly High dependence on quota swaps
<b>Sole VIIh,j,k</b>	BE, FR	High survivability	Mitigation actions likely to reduce

		Remove TAC Quota swaps	the risk of choking significantly
<b>Plaice VIIh,j,k</b>	FR	High survivability Remove TAC	Mitigation actions likely to reduce the risk of choking significantly
<b>Megrim VII</b>	UK	Quota swaps	Dependence on quota swaps

**Low or no apparent risk - catches are below the TAC and no Member State catches exceed quota**

Species	Member States Impacted	Relevant Mitigation Actions	Conclusion
<b><i>Nephrops VII</i></b>	IE, BE	Quota Swaps	Low risk
<b>Pollack VII</b>	None	NA	No apparent risk

**West of Scotland**

**High Risk – catches exceed the TAC with multiple Member States impacted**

Species	Member States Impacted	Relevant Mitigation Actions	Conclusion
<b>Cod VIa</b>	FR, IE, UK	Improving selectivity Avoidance	Zero TAC Mitigation actions unlikely to fully resolve the issues Change in management approach required
<b>Saithe VIa</b>	ES, FR, NL, UK	ISF De minimis	Significant deficit between catches and quotas across MS Mitigation actions unlikely to prevent choking of fisheries
<b>Whiting VIa</b>	IE, NL, UK	Improving selectivity Avoidance	Mitigation actions likely to reduce the risk significantly

**Moderate Risk - catches are less than TAC but for some Member States catches exceed quota**

Species	Member States Impacted	Relevant Mitigation Actions	Conclusion
<b>Anglerfish VI</b>	IE, UK	Quota swaps De minimis	Dependence on quota swaps
<b>Haddock VIa</b>	ES, IE, NL, UK	Improving selectivity Avoidance Quota swaps Inter area flexibility	Mitigation actions likely to reduce the risk of choking significantly
<b>Haddock VIb</b>	IE, UK	Improving selectivity ISF De minimis	Mitigation actions likely to reduce the risk of choking significantly

**Low or no apparent risk - catches are below the TAC and no Member State catches exceed quota**

Species	Member States Impacted	Relevant Mitigation Actions	Conclusion
<b>Blue Ling V, VI &amp;</b>	None	NA	No apparent risk

<b>VII</b>			
<b>Cod VIb</b>	None	NA	No apparent risk
<b>Ling V, VI, VII</b>	None	NA	No apparent risk
<b>Megrim VI</b>	IE	Quota swaps	Low risk
<b>Nephrops VI</b>	None	NA	No apparent risk
<b>Tusk V, VI, VII</b>	ES	Quota swaps	Low risk

## Irish Sea

### High Risk – catches exceed the TAC with multiple Member States impacted

Species	Member States Impacted	Relevant Mitigation Actions	Conclusion
<b>Cod VIIa</b>	BE, IE, UK	Improving selectivity Avoidance	Mitigation actions likely to reduce the risk of choking significantly
<b>Whiting VIIa</b>	BE, IE, UK	Improving selectivity Removal of TAC	Significant deficit between catches and quotas across MS Mitigation actions unlikely to prevent choking of fisheries

### Moderate Risk - catches are less than TAC but for some Member States catches exceed quota

Species	Member States Impacted	Relevant Mitigation Actions	Conclusion
<b>Haddock VIIa</b>	UK	Improving selectivity ISF	Mitigation actions likely to reduce the risk of choking significantly
<b>Sole VIIa</b>	BE	High survivability De minimis Avoidance	Mitigation actions likely to reduce the risk of choking significantly

### Low or no apparent risk - catches are below the TAC and no Member State catches exceed quota

Species	Member States Impacted	Relevant Mitigation Actions	Conclusion
<b>Plaice VIIa</b>	BE	Quota swaps	Low risk

## Channel

### High Risk – catches exceed the TAC with multiple Member States impacted

Species	Member States Impacted	Relevant Mitigation Actions	Conclusion
<b>Plaice VIId, e</b>	BE, FR, NL, UK	Improving selectivity High survivability Inter area flexibility	TAC uplift in 2016/2017 has largely removed choke risk
<b>Skates &amp; Rays VIId</b>	BE, FR, UK	Avoidance measures High survivability	Significant deficit between catches and quotas across MS Mitigation actions unlikely to prevent choking of fisheries

### Moderate Risk - catches are less than TAC but for some Member States catches exceed quota

Species	Member States Impacted	Relevant Mitigation Actions	Conclusion
Sole VIId	BE	High survivability De minimis Inter area flexibility	Mitigation actions likely to reduce the risk of choking significantly
Sole VIIe	BE	High survivability De minimis Inter area flexibility	Mitigation actions likely to reduce the risk of choking significantly

### Low or no apparent risk - catches are below the TAC and no Member State catches exceed quota

Species	Member States Impacted	Relevant Mitigation Actions	Conclusion
Cod VIId	None	ISF	Low risk

### **Additional Issues**

- Bycatches of demersal stocks in pelagic fisheries and bycatches of pelagic species in demersal species, which are in some cases poorly documented have also been identified as adding to the risk of choke issues in the fisheries in North Western waters. Insufficient data and information on the extent of these bycatches makes assessment difficult. More (or less) fisheries could be choked depending on multiple factors relating to the fisheries and the Member States involved. Specific examples of demersal bycatch in pelagic fisheries include whiting bycatch in the Celtic Sea herring fishery and hake in the mackerel fishery. Specific examples of pelagic bycatch in demersal fisheries include horse mackerel/mackerel and boarfish in mixed demersal fisheries in the Celtic Sea and also West of Scotland as well as whiting in the Channel. A more detailed analysis using the CMT has been completed by the Pelagic Advisory Council (PELAC).
- There are 6 deep-sea stocks relevant to NWW where the risk of choking fisheries is unclear. In recent years fisheries for deep sea species have declined and there are now only a few directed fisheries for these stocks. For most Member States they are caught only as a bycatch. No evaluation using the Choke Mitigation Tool has been completed for these stocks because the STECF data is incomplete or unreliable, the level of fishery is very low or Member States do not catch their quota and traditionally swap it out. Generally for these stocks, discards, where reported, are quite low (typically less than 5%) and the TACs tend to match the actual catches indicating a low choke risk. This is not to say that there are no choke issues and it is up to the individual MS to evaluate this further. The impact of effort displacement from fisheries for deep sea species into fisheries for other species (e.g. anglerfish) need also to be considered as this may have implications for other stocks where the risk is assessed currently as low to moderate.
- The workshops have also identified 24 stocks in NWW for which a particular Member State or a group of Member States have no quota. While ES are the Member State most impacted, BE, DE, FR IE, NL and UK are also affected. The workshops found that for around 9 to 10 of these species the risk of such species choking fisheries is moderate to high. For these stocks there is heavy reliance on swaps to reduce the choke risk.

- Spurdog or picked dogfish are currently managed under a heavily restricted TAC and they are essentially treated as a prohibited species. Under this management regime they are not a choke species although as with the deep-sea species this is not to say that there will not be choke issues with this stock in the future depending on how it evolves.

## Conclusions

- The choke mitigation tool has proven to be an extremely useful way to identify and evaluate the risk of choke species. The results can be used to identify fisheries in which there is a high risk of residual problems that will persist without additional tools or measures over and above what is contained in the CFP and supporting legislation.
- In using the CMT, the limitations of the available discard and landing data, and the different approach by ICES and STECF to raising discard estimates should be recognised. The analysis can only indicate qualitatively there are potential problems for specific stocks and the most relevant mitigation tools to reduce the choke risk for these stocks.
- The choke species issue is complex and the exposure to the risk of choke species varies between stocks, fisheries and Member States. The NWW is characterised by many different stocks and fisheries that all interact. This dynamic system makes predicting choke situation even more difficult, and hence there is a need for further evaluation covering the high risk stocks to identify which fisheries for these stocks are particularly problematic.
- The analysis has identified 12 stocks where there is a high risk of residual choke issues. For 6 of these stocks – whiting VIIb-k; sole and plaice VIIf,g; whiting VI, cod VIIa; plaice VIId,e - the available measures and tools will significantly reduce the choke risk provide they are used appropriately. For the other 6 stocks – haddock VIIb-k, skates and rays VI and VII, cod VIa, saithe VI, whiting VIIa and skates and rays VIId,e - additional measures or a different management approach is likely to be required to prevent multiple fisheries from being choked.
- The analysis has identified 13 stocks where there is a moderate risk of residual choke issues for one or more Member States. The available tools and measures can significantly reduce this risk for these species. For at least 5 of these stocks the Member States impacted are reliant on swaps.
- For 10 stocks the risk of residual choke issues is low. There are further 5 stocks which were not assessed but where the risk is deemed to be low.
- In cases where there is a high risk of choking which cannot be readily solved with the available tools and measures a more detailed analysis of the likely impacts on Member States and fleets is required. Discussion between the Commission and Member States on what additional measures could be taken to reduce the risk would seem appropriate.

