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## NWWAC ADVICE

### Addressing Choke Risk in NWW after exemptions

27 November 2020

#### 1. Background

The issue of choke species has been identified by the North Western Waters Advisory Council (NWWAC) and the North Western Waters Member States Group (NWW MSG) as a continuing obstacle to the Landing Obligation (LO). Extensive work has been completed to identify the key choke species and the potential mitigation measures outside the remit of Article 15 of the Common Fisheries Policy (CFP) to reduce the choke risks for NWW fisheries. The views of the NWWAC were presented in the advice of 17 April 2018 and of 29 October 2019<sup>1</sup>.

In May 2020, the NWW MSG submitted their first draft of the Joint Recommendations (JR) for 2021 to the European Commission. These recommendations contain *de minimis* and high survivability exemptions, and technical measures designed to increase the selectivity in key fisheries. A revised version of these JRs was submitted to the Commission in July 2020 following lengthy negotiations with the Member States.

The NWWAC acknowledges the Commission has adopted on 21 August a proposal for a Delegated Regulation specifying details of the landing obligation for certain demersal fisheries in the North-Western waters for the period 2021-2023. The European Parliament scrutinised the proposal and no objections were given. Thus, the Delegated Act is now being finalised for adoption and publication.

As in previous years, it is unclear whether the resulting Discard Plan will lead to full mitigation of the identified choke risks and whether further measures will be needed to avoid fisheries closing prematurely in early 2021. The only mechanism besides the Discard Plan to implement such measures in the short-term is through the Fishing Opportunities Regulation, but even then, uncertainty remains whether all choke risks can be properly addressed. The situation is further complicated by the five stocks where ICES has again advised zero catches.

At its virtual meeting in September 2020, the members of the NWWAC agreed to consider the issue further. NWWAC members discussed updates to the Choke Identification Tool (previously Choke Mitigation Tool), taking into account the provisions of the Discard Plan proposal in the 2021-2023 period as adopted by the Commission. Based on the results of these discussions, the Focus Group

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<sup>1</sup> NWWAC advice on addressing High Choke Risk stocks under the Landing Obligation ([link](#), lien, enlace)



Landing Obligation developed the present advice.

The NWWAC is aware that this advice might have to be revised considering eventual future changes to stock shares after Brexit.

The NWWAC also acknowledges that Member States are requested to submit a Joint Recommendation by 1 May 2021 maintaining oversight of the implementation of the provisions of the Discard Plan and reviewing and amending any element that evidence and/or improved data show is not fit for purpose. The AC will support the work of the MSG by engaging in the preparation of advice on the Joint Recommendation. Given the importance and implications of the decisions taken in this regard, the NWWAC urges the Commission and the NWW MSG to proactively share any further information on this process to allow the NWWAC to provide meaningful input in a timely manner.

## **2. General remarks**

AC members recognise that the existing measures in the current Discard Plan, as well as those included in the proposed Discard Plan for 2021, are needed and have been helpful in avoiding choke situations in the NWW.

However, the NWWAC would like to highlight and remind about the major challenges in implementing the LO, which are still very relevant. Specific issues include:

- The setting of single species TACs in mixed fisheries (e.g. cod, haddock, whiting 7b-k) and coverage of non-target species (e.g. Plaice 7h,j,k);
- The objectives of the CFP and the content of the NWW Multiannual Plan (MAP);
- Zero catch advice;
- Stocks for which no quota is allocated to a Member State.
- Highly depleted stocks with low rebuilding potential (e.g. West of Scotland cod);
- Lack of data, particularly on unwanted catches;
- Unintended consequences of management measures, e.g. displacement of effort;
- Impact on fishermen working conditions and / or remuneration.

North Western Waters demersal fisheries are highly dynamic, variable and have a mixed nature. The fisheries are subject to ecosystem change that can result in distributional shifts in fish species. Changes in stock biology and natural phenomena such as recruitment pulses prevalent in gadoid species, may create choke situations not originally forecasted. This has implications for the degree to which chokes can be predicted and for the tools available to mitigate them.

In mixed fisheries, it is inevitable that different stocks will have divergent levels of abundance. The NWWAC recognises that TACs are the most direct way of limiting fishing mortality in commercial fisheries, but that their application in mixed fisheries can be problematic, especially where TACs for bycatch species restrict fishing opportunities for target species. Moreover, in certain cases setting the



TAC towards the maximum advice level for one of the target stocks in the mixed fishery might result in either exceeding the maximum advised TAC level for another stock (or stocks), or in choking the fishery.

It is important to consider the implications of using  $F_{MSY}$  ranges provided for by the Western Waters MAP in a mixed fisheries context. The additional flexibility provided by these ranges for a stock may be constrained by others, more limiting stocks (for example in the Celtic Sea mixed fishery where the advice for haddock has increased compared to last year, while cod remains at a zero catch advice).

Mixed fisheries advice could play an important role in this context. However, it is already apparent that the zero-catch advice for several stocks continues to pose significant challenges this year.

The NWWAC also highlights the significant advances made throughout the WKIrish process towards an ecosystem-based approach to fisheries management and encourages the Commission to take into consideration the NWWAC advice in this respect <sup>2</sup>.

Apart from considerations around TAC and quota-setting, it remains clear that the implementation of the CFP in a mixed fisheries context requires creative and innovative solutions involving spatial management, technical measures, and in some cases balancing short- and long-term socio-economic trade-offs.

In the lead-up to the full implementation of the LO significant progress was made in advancing our understanding of chokes and several measures were identified, including technical gear modifications, electronic monitoring and potential avoidance measures informed by advanced knowledge on the spatial distributions of choke species and unwanted catches. Moreover, STECF has identified a range of measures which could improve selectivity regarding stocks identified as 'high risk chokes' by the NWWAC choke identification tool.<sup>3</sup> It has more recently also referred back to a number of existing studies regarding relevant selectivity and avoidance measures as part of its evaluation of the Bycatch Reduction Plan (BCReP) developed by the regional NWW MSG.<sup>4</sup>

Whilst STECF has evaluated the measures proposed for next year's discard plan, it has to be noted that no evaluation has taken place of the new baselines from the technical measures regulation, issued

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<sup>2</sup> See the NWWAC Advice on the Consultation on Fishing Opportunities for 2021 under the Common Fisheries Policy, paragraph 2.2

<sup>3</sup> Scientific, Technical and Economic Committee for Fisheries (STECF) – Technical Measures – Improving selectivity to reduce the risk of choke species (STECF-18-02). Publications Office of the European Union, Luxembourg, 2018, ISBN 978-92-79-79382-0, doi:10.2760/41580, JRC111821; <https://stecf.jrc.ec.europa.eu/documents/43805/2023188/STECF+18-02+-+TM+improving+selectivity.pdf/d4993b8e-94db-44dd-8122-33d270d0214b>

<sup>4</sup> STECF (2019) - 61st Plenary Meeting Report (PLEN-19-02). Scientific, Technical and Economic Committee for Fisheries (STECF) – 61st Plenary Meeting Report (PLEN-19-02). Publications Office of the European Union, Luxembourg, 2019 p.102 onwards. <https://stecf.jrc.ec.europa.eu/reports/plenary/PLEN-19-02>



from inter-institutional discussions. However, the implementation of these regulations will result in an increase in mesh size in certain areas for example the Celtic Sea. Also, some selective devices have become mandatory, e.g. square mesh panels.

Priority should be given to measures which do not only minimise the amount of unwanted catches (and thus the choke risk), but also help the relevant stocks recover to mitigate chokes in the long-term. Otherwise, the underlying issue (the dire state of certain stocks) remains unaddressed and the potential choke issue is simply perpetuated rather than solved. The most sustainable way of preventing future chokes is to allow stocks to recover to healthy levels so that they no longer pose a choke risk. At the same time, the effects of climate and other eventual natural changes should not be disregarded.

Priority should be given to avoidance measures that aim at unwanted fish not entering the gear in the first place. This could include spatial closures, real-time closures, mandatory move-on rules and gear modifications, which allow unwanted fish to escape as early as possible throughout the capture process to maximise survival.

Any measures put forward should be accompanied by robust means of monitoring, in order to allow for a reliable assessment or review of a) their implementation and challenges encountered, b) their effectiveness at achieving their purpose and c) their impact and consequences on the economic viability of the vessels applying them. This is crucial to demonstrate the extent to which progress has been made or highlight where progress is still lacking (e.g. in the context of the new Technical Conservation Measures Framework), and to provide a sound basis for informed adjustments to address potential shortcomings in the future. However, the NWWAC is aware of the difficulties the current pandemic is posing, with several safety and health measures being implemented in ports and offices and hampering the timelines for monitoring tasks.

Considering the zero-catch advice for several stocks in the Western Waters for 2019, the Council adopted bycatch TACs and the Member States concerned committed to developing BCRPs<sup>5</sup> and to implementing full catch documentation for these stocks from 2019.<sup>6</sup> This approach was introduced to avoid immediate choke situations arising from zero catch advice.

However, the STECF's evaluation of the BCRP developed by the NWW MSG in July 2019 found that the BCRP "Does not fulfil the commitments made by the Member States as it does not contain any elements to ensure reduced by-catches of the relevant stocks over and above the measures already

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<sup>5</sup> Statement of the North Western Waters regional group made at December Council 2018. Available on <http://data.consilium.europa.eu/doc/document/ST-5692-2019-INIT/en/pdf>

<sup>6</sup> 'all vessels benefitting from these specific TACs should implement full catch documentation as from 2019' (Recital 8 of the TAC and Quota Regulation for 2019, Council Regulation (EU) 2019/124)



included in the discard plan”<sup>7</sup>. Work on the BCReP appears not to have progressed further since then, apart from the adoption of Celtic Sea remedial measures introduced through last year’s TAC Regulation. The NWWAC seeks clarification from the Commission if the BCReP approach will be resumed or replaced by an alternative process.

On one hand, the OIG members of the NWWAC do not support the approach of setting bycatch TACs for zero-catch advice stocks in the absence of reliable monitoring and control, given the MSY 2020 deadline. The OIG members refer at the full AC membership recommendation above prioritising measures that are geared towards stock recovery, i.e. avoiding unwanted catches in the first place and maximising survivability. Should bycatch TACs nevertheless be adopted for 2021 despite the above concerns, OIG members find that they need to be based on catch scenarios which prioritise the rapid rebuilding of the bycatch stocks, rather than primarily the protection of target fisheries, and be accompanied by robust full catch documentation. On the other hand, the NWWAC Industry members emphasize the need to keep all options open to avoid premature closure of fisheries.

The NWWAC recommends to first assess the results of the current technical measures in place and their effectiveness in improving selectivity prior to considering additional measures.

The NWWAC also refers to the consideration and monitoring of the roadmaps in which scientific evidence is requested to accurately support the content of the Discard Plan.

Mitigating the choke risks for certain stocks may have knock-on effects on other stocks. The impact of effort displacement from fisheries also needs to be considered as this may have implications for other stocks where the choke risk is currently low. To deal with unexpected choke situations some contingency planning would be needed.

The work of the NWWAC has focused mainly on high risk choke stocks. However, there remain many other stocks which represent a high choke risk to individual Member States due to a lack of quota. This issue was addressed to a certain extent by Article 8 of the Fishing Opportunities Regulation for 2020<sup>8</sup>, with the establishment of a pooling system for quota exchanges for the zero catch advice stocks. While the NWWAC encourages Member States to engage in solutions to address the zero catch advice stock (zero TAC) and actively agree on quota swaps that will help to mitigate choke risks in general, it also advises the Commission to assess the functioning of the article 8 measures and the resulting pooling system. At the same time, the NWWAC believes it is very important to ensure there is no targeting of the stocks for which a by-catch quota system is established.

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<sup>7</sup> Scientific, Technical and Economic Committee for Fisheries (STECF) – 61st Plenary Meeting Report (PLEN-19-02), p. 102 onwards: <https://stecf.jrc.ec.europa.eu/documents/43805/2537709/STECF+PLEN+19-02.pdf/ed2ce229-81d6-495b-bf40-0b8ff5dbafa5>

<sup>8</sup> Council Regulation (EU) 2020/123, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32020R0123>



The NWWAC also asks Member States to continue considering another tool available in Article 15 of the CFP, the inter-species flexibilities. These may provide a route through which some choke risks may be mitigated, accepting the complexity of implementing<sup>9</sup> this measure. In support of this recommendation, the NWWAC has identified stocks for which inter-species flexibility is possible according to the Commission’s proposal for Fishing Opportunities 2021 in its Choke Identification tables.

### **3. Approach taken**

To aid the discussions on the choke issues, the NWWAC has developed a table, the NWW Choke Identification Tool, designed to re-assess the severity of potential choke risks as in previous years.

The table is largely based on the North Western Waters Choke Mitigation tool<sup>10</sup> which included a detailed analysis of the different choke risks for key stocks based on STECF catch data from 2015 and 2016.

To assess the choke risk for each stock from 1 January 2021 onwards, the Choke Identification tool takes into account the ICES Advice for 2021 and the exemptions included in the Discard Plan proposed by the Commission.

Each stock was then reclassified as a “high”, “moderate” or “low” risk taken across Member States:

- “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.

Additional mitigation measures are proposed to reduce the choke risk where relevant. These solutions are based on the potential mitigation measures described in the NWWAC advice of 17 April 2018 and of 29 October 2019<sup>11</sup> and taking realistic catch options presented by ICES for individual stocks.

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<sup>9</sup> Scientific, Technical and Economic Committee for Fisheries (STECF) – 45th Plenary Meeting Report (PLEN-14-01). 2014, 86 pp., section 4.1.

<sup>10</sup> Report on the NWW choke species analysis [Link Lien Enlace](#)

<sup>11</sup> NWWAC advice on addressing High Choke Risk stocks under the Landing Obligation ([link](#), lien, enlace)





As with the previous choke analysis, it is important to note that whenever a stock is classified as “moderate” or “low” risk, this stock may be “high risk” to an individual Member State. 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<sup>12</sup> (i.e. in cases where a Member State has no quota for a species but has reported catches). In addition, it must be noted that the NWWAC believes that not all high-risk stocks can be addressed via TAC and quota management and that other measures (included those referred to earlier) will need to be assessed in order to avoid unnecessary obligatory cessation of fisheries.

#### 4. Celtic Sea

The Group examined the data for each stock separately and in carrying out the evaluation identified the following conclusions:

- There are 5 “high” risk stocks remaining, 4 “moderate” and 4 “low” risk choke stocks.
- Haddock 7b-k remains a “high” risk stock, even with exemptions and selectivity measures as deficit between catches and TAC is still significant.
- The choke risk for whiting 7b-k is high, based on ICES advice for a reduction in catches. Improvements in selectivity introduced for 2020 may help but will not completely solve the choke risk.
- Based on ICES advice for a TAC reduction, the choke risk for sole 7f,g remains high for several MS even with exemptions in place.
- The choke risk for Cod 7e-k remains high following the ICES advice. Improvements in selectivity introduced for 2020 may help but will not completely solve the choke risk.
- Based on ICES advice for zero catches, the choke risk for plaice 7h,j,k remains high in the absence of exemptions for all fisheries with bycatch of plaice.
- For boarfish 6-8, choke risk remains moderate: MS can rely on swaps when they have zero quota for this stock. While the continuation of the de minimis exemption for bottom trawls in ICES divisions 7b-c and 7f-k would also help reducing the risk of choke in certain cases, it doesn’t help to avoid damage caused by this species to rest of catch on board demersal fishing vessels due to unavoidable big shoals and the shape of the fish. For consistency, the exemption should include the ICES division 7e.
- For sole 7h,j,k choke risk is classified at moderate level with ICES advice to reduce TAC. Bycatch remains small in all fisheries.
- Choke risk remains moderate for hake 6 and 7 with a small reduction in catches advised by ICES.
- For plaice in 7f,g, with a further reduction in catches advised by ICES, the choke risk may increase to moderate. The high survivability exemption will reduce the risk in the beam trawl

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<sup>12</sup> See page 6 of this document mentioning the pooling system as described in Article 8 of the Regulation on Fishing Opportunities for 2020



and trammel net fisheries but not in others. The conditions for a *de minimis* on sole linked to selective gear and selectivity measures proposed for gadoid and *Nephrops* fisheries may also help to reduce unwanted catches.

- Skates and rays in 6 and 7 remain a low choke risk species, as the continuation of high survivability exemption would remove immediate choke risk in 2021.
- *Nephrops*, pollack and megrim continue to present a low or no apparent risk as choke species.

The main findings by stock are summarized below with an AC view on which **additional** measures – besides the Discard Plan – might assist in obtaining choke mitigation.

### High risk

Species	Possibility for inter-species flexibility Reg EU 1380/2013 Art 15.8	Possible additional measures contributing to mitigating choke
Haddock 7b-k	Yes	Continue research to further improve selectivity
Whiting 7b-k	No	Improving selectivity for whiting in fisheries where unwanted catches are highest should remain a priority. Accurate monitoring and recording of whiting discarded under the <i>de minimis</i> exemptions should be ensured.
Sole 7f,g	Yes	Prioritise high survivability work in fisheries in 7f,g; The ICES Benchmark of Feb 2020 led to a revision of the reference points in the analysis. The subsequent advice to reduce the TAC would increase the choke risk, rather than addressing it.
Cod 7e-k	No	Improving selectivity for cod in fisheries where unwanted catches are highest should remain a priority. Explore additional spatial/temporal measures. Prioritise measures that are geared towards stock recovery, i.e. avoid capture in the first place and maximise survival of any escaping cod. Use mixed fisheries advice (once available) to inform TAC-setting.





<b>Plaice 7h,j,k</b>	No	<p>Address data limitations which impact the quality of the ICES advice. Request ICES to analyse if Plaice 7h,j,k and Plaice 7f,g can be considered one stock.</p> <p>Consider possible improvements in selectivity in fisheries where bycatches are highest.</p> <p>Prioritise measures that are geared towards stock recovery, i.e. avoid capture in the first place and maximise survival of any escaping plaice. Further survivability studies should be prioritized, and special effort should be made to collect vitality estimates, obtained by observers on-board, and the collation of existing data sources (previous vitality, observer and REM data) for plaice in 7h.</p> <p>Improve the documentation of catches to address the data issues for this stock.</p>
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**Moderate risk**

Species	Possibility for inter-species flexibility Reg EU 1380/2013 Art 15.8	Possible additional measures contributing to mitigating choke
<b>Plaice 7f,g</b>	Yes	<p>Extension of existing high survivability exemptions to high risk fisheries based on new scientific studies.</p> <p>Further survivability work should be prioritised to confirm survival rates in line with the NWW MS roadmap for plaice.</p> <p>Address data limitations which impact the quality of the ICES advice.</p>
<b>Hake 6 &amp; 7</b>	Yes	<p>Prioritise improving selectivity in gadoid and <i>Nephrops</i> fisheries where unwanted catches are highest.</p> <p>Consider extending existing measures to areas not covered currently (e.g. Area 6).</p>
<b>Sole 7h,j,k</b>	No	<p>Address data limitations which impact the quality of the ICES advice to support consideration of inter area flexibility or merging of TACs with 7h,j,k stock (As the benchmark report pointed out, concerns were raised on the identity of the neighboring sole 7h,j,k stock, and, in particular for the sub stock in 7h, its relationship to the sole 7f,g and 7e stocks. Yet no data are available to clarify this.)</p> <p>Prioritise survivability experiments in trawl fisheries in 7h,j,k.</p> <p>Monitor and record catches of sole discarded under the <i>de minimis</i> exemptions in place.</p>



<b>Boarfish 6-8</b>	No	Introduce exemption for ICES division 7e. Explore options to improve measures for avoidance to reduce unwanted catches of boarfish in relevant fisheries. Enhanced data collection to improve knowledge on the levels of unwanted catches in demersal fisheries. Ideally, the application of the boarfish TAC should be limited to pelagic fisheries interested in retaining it.
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#### Low or no apparent risk

Species	Possibility for inter-species flexibility Reg EU 1380/2013 Art 15.8	Possible additional measures contributing to mitigating choke
<b>Skates and Rays 6 &amp; 7</b>	No	In line with NWW Roadmap for skates and rays, the programme of data collection, further high survivability experiments and improvements in selectivity should continue. Note that no at sea work could be carried out due to COVID-19 restrictions. Trials that were planned for 2020 may need extensions to complete the trials.
<b>Megrim 7</b>	Yes	Prioritise improvements in selectivity in fisheries where unwanted catches of megrim are highest. Monitor and record the catches of megrim discarded under the <i>de minimis</i> exemption.
<b>Nephrops 7</b>	No	No additional measures proposed
<b>Pollack 7</b>	No	No additional measures proposed

#### 5. West of Scotland

The following are the main conclusions for the stocks in the West of Scotland:

- There are 3 “high” choke risk stocks remaining, 7 “moderate” and 4 “low” risk.
- Cod 6a, cod in 6b and Whiting 6a remain “high” risk stocks.
- With the proposed reduction in catches based on the ICES advice, choke risk remains moderate for saithe 6a. Improvements in gear selectivity in mixed demersal fisheries may have limited benefits for this stock.
- For haddock in 6a, the choke risk is likely to reduce from high to moderate based on ICES advice for increase in catches.



- With the proposed reduction in catch advised by ICES, the choke risk for haddock 6b may increase to moderate. This only impacts Ireland as no other MS has reported catches of haddock in 6b.
- Anglerfish, ling, silver smelt 5b, 6a and tusk 6b continue to be classified as being “moderate” risk choke species. In the case of silver smelt and tusk, Members States rely on swaps to reduce the risk of choking.
- With the continuation of the high survivability exemptions, choke risk for *Nephrops* is likely to remain low.
- Looking at the ICES catch advice, blue ling, tusk 6a and megrim are classified as low risk choke stocks.

The main findings by stock are summarized below with an AC view on which **additional** measures – besides the Discard Plan – might assist in obtaining choke mitigation.

### High risk

Species	Possibility for inter-species flexibility Reg EU 1380/2013 Art 15.8	Possible additional measures contributing to mitigating choke
<b>Cod 6a</b>	No	<p>Accelerate introduction of technical measures in directed demersal fisheries including spatial closures and consider the economic fabric of the business in a mixed demersal fishery.</p> <p>Bycatch TAC linked to requirements for full catch documentation</p> <p>Explore stock identity issue with North Sea.</p> <p>Prioritise measures that are geared towards stock recovery, i.e. avoid capture in the first place and maximise survival of any escaping cod.</p> <p>Further explore fishing mortality in comparison to natural mortality in 6a, which has only been partially explored by ICES.</p>
<b>Whiting 6a</b>	No	<p>Accelerate introduction of technical measures in directed demersal fisheries including spatial/temporal closures.</p> <p>Bycatch TAC linked to requirements for full catch documentation</p> <p>Prioritise measures that are geared towards stock recovery, i.e. avoid capture in the first place.</p> <p>The introduction of the 300mm square mesh panel should reduce bycatches of whiting in the small mesh fisheries which account for the majority of whiting catches in the area.</p> <p>Ensure that increase in recruitment into the fishery is fully protected.</p>
<b>Cod 6b</b>	No	Enhance data collection to improve knowledge of the stock.



### Moderate risk

Species	Possibility for inter-species flexibility Reg EU 1380/2013 Art 15.8	Possible additional measures contributing to mitigating choke
Saithe 6a	Yes	No additional measures proposed.
Anglerfish 6	No	No additional measures proposed.
Haddock 6a	Yes	Accelerate introduction of technical measures and monitor effectiveness of the measures introduced. Accurate monitoring and reporting of haddock discarded under the <i>de minimis</i> exemption.
Haddock 6b	Yes	No additional measures proposed.
Ling 6 - 9, 12, 14, 3a, 4a	No	Introduce the same <i>de minimis</i> that is in place in the North Sea to cover catches of ling below MCRS in the longline fisheries.
Silver smelt 5b, 6a	No	Explore options to improve selectivity to reduce unwanted catches of silver smelt in relevant fisheries.
Tusk 6b	Yes	No additional measures proposed.

### Low or no apparent Risk

Species	Possibility for inter-species flexibility Reg EU 1380/2013 Art 15.8	Possible additional measures contributing to mitigating choke
Blue Ling 5b, 6 & 7	Yes	No additional measures proposed.
Megrim 6	Yes	No additional measures proposed.
<i>Nephrops</i> 6	Advice due autumn	Additional survivability studies to cover fisheries outside 12 nautical miles.
Tusk 6a	Yes	No additional measures proposed.



## 6. Irish Sea

The following are the main conclusions for the Irish Sea stocks:

- There are 1 “high” risk stock, 1 “moderate” risk stock and 4 “low” risk stocks.
- Whiting remains a “high” risk stock. De minimis and improvements in selectivity will not reduce choke risk if TAC is set according to ICES advice (i.e. 0 TAC).
- With improvements in selectivity and despite ICES reduced catch advice, choke risk for cod remains moderate.
- For haddock, the proposed increase in TAC and improvements in selectivity will maintain choke risk at low.
- The choke risk for Sole remains at “low” following the ICES advice, providing that fishing mortality does not increase significantly.
- For plaice, the proposed high survival exemption in beam trawl fisheries means choke risk remains low even with ICES advising for a large reduction in catches. This stock remains a bycatch with no directed fisheries in the Irish Sea.
- For *Nephrops*, the combination of high survivability exemptions and improvements in selectivity will maintain risk level at low.

The main findings by stock are summarized below with an AC view on which **additional** measures – besides the Discard Plan – might assist in obtaining choke mitigation.

### High risk

Species	Possibility for inter-species flexibility Reg EU 1380/2013 Art 15.8	Possible additional measures contributing to mitigating choke
Whiting 7a	No	Discard information remains very imprecise: request that greater effort is made to improve the understanding of discard estimates. Improving selectivity for whiting in fisheries where unwanted catches are highest should remain a priority.



### Moderate risk

Species	Possibility for inter-species flexibility Reg EU 1380/2013 Art 15.8	Possible additional measures contributing to mitigating choke
Cod 7a	No	Discard information remains very imprecise: request that greater effort is made to improve the understanding of discard estimates. Consider additional selectivity measures that could be taken in <i>Nephrops</i> fisheries to reduce cod bycatch. Consider additional spatial/temporal measures.

### Low or no apparent risk

Species	Possibility for inter-species flexibility Reg EU 1380/2013 Art 15.8	Possible additional measures contributing to mitigating choke
Haddock 7a	Yes	No additional measures proposed.
Sole 7a	Yes	No additional measures proposed.
Plaice 7a	Yes	No additional measures proposed.
<i>Nephrops</i> 7	No	No additional measures proposed

## 7. Channel

The following are the main conclusions for the Channel stocks:

- There are 1 “moderate” and 4 “low” choke risk stocks.
- Sole in 7d is classified as being a “moderate” risk choke species with the exemptions in place. However, further reductions in TAC may increase the choke risk depending on fishing patterns.
- For sole in 7e, the choke risk is reduced to “low” based on ICES advice for an increase in TAC.
- The choke risk for plaice in 7d,e is likely to remain low in 2021, thanks to the continuation of the high survivability exemption.
- The choke risk for Skates and Rays remains “low” on the basis that the proposed high survivability exemption is maintained in 2021.



- For cod 7d, even though the ICES advice is for a large reduction in the TAC, the choke risk remains “low” as the reported catches are currently at very low levels.
- Sprat in 7d,e is considered a “low” risk species.
- Haddock 7b-k, Cod 7b-k and Whiting 7b-k have been discussed in the Celtic Sea area. However, given the TACs for these stocks cover either partially or fully the eastern and western Channel it is important to re-iterate the choke risk – “high” – for all these stocks.

The main findings by stock are summarized below with an AC view on which **additional** measures – besides the Discard Plan – might assist in obtaining choke mitigation.

#### Moderate risk

Species	Possibility for inter-species flexibility Reg EU 1380/2013 Art 15.8	Proposed additional measures for 2020
Sole 7d	Yes	Concerns exist regarding the high discard rates: work on improving selectivity should be prioritised to avoid catch of juvenile fish.

#### Low or no apparent Risk

Species	Possibility for inter-species flexibility Reg EU 1380/2013 Art 15.8	Proposed additional measures for 2020
Sole 7e	Yes	Reconsider similar high survivability exemption as for sole in 7d, once MS provide information on the fishery catch composition and the related survival rate of the species in the relevant fisheries.
Plaice 7d, e	Yes	Continue with high survivability work in trawl and seine fisheries. Improve selectivity work.
Skates & Rays 7d	No	In line with NWW Roadmap for skates and rays, the programme of data collection, further high survivability experiments and improvements in selectivity should continue.
Cod 7d	No	No additional measures proposed based on low abundance. To be reconsidered if an increase of abundance would be noticed.
Sprat 7d,e	No	No additional measures proposed.





## 8. Other choke issues

### **Pelagic bycatch in demersal fisheries**

Bycatches of pelagic species such as herring, mackerel, horse mackerel, boarfish and greater argentine in NWW demersal fisheries could lead to choke issues in 2021. However, there is some uncertainty about the extent of such catches and neither ICES nor STECF provide accurate catch information for these pelagic stocks. The extent of recorded catches is likely to be underestimated.

Given the lack of accurate catch data, the NWWAC is not able to assess whether these bycatches present a significant choke risk. Some stocks already benefit from exemptions that can solve a part of the potential choke situation. Therefore, these exemptions remain very important for demersal fisheries. Other measures could be needed for some particular stocks, but given the differences in quota allocations and level of activity in the different demersal fisheries, it appears to the NWWAC that ICES should be asked to evaluate it and Member States to evaluate whether these bycatches require further measures.

### **Deep-sea stocks**

Based on the initial choke analysis in 2017, six deep-sea stocks were identified as relevant to the NWW:

- Deep-sea sharks – Union and international waters of 5,6,7, 8 & 9
- Black Scabbardfish – Union and international waters of 5, 6, 7 and 8
- Alfonsinos – Union and international waters of 3, 4, 5, 6, 7, 8, 9, 10, 12 and 14
- Roundnose grenadier – Union and international waters of 5b, 6 and 7
- Red seabream – Union and international waters of 6, 7 and 8
- Greater forkbeard – Union and international waters of 5, 6 and 7

No detailed analysis was carried out using the Choke Mitigation Tool at that time as either the catch data is incomplete or unreliable, the level of fisheries was reportedly very low, or most of the Member States do not catch their quota and traditionally swap it out. On this basis the choke risk was concluded likely to be low. As these stocks have been subject to the LO since 1 January 2019, NWWAC members will take the ICES advice for 2021 into consideration and provide advice on the choke risk for those species they deem necessary.

## 9. Conclusions

- The *de minimis* and high survivability exemptions in combination with the improvements in selectivity proposed in the NWW Discard plan will reduce, and in some cases remove the choke risks for certain stocks.
- Nine stocks are classified as high risk, taking account of any exemptions proposed under the



Discard Plan and also the ICES advice for 2021. These stocks are – haddock 7b-k; whiting 7b-k; sole 7f,g; cod 7e-k; plaice 7h,j,k; cod and whiting in 6a; cod in 6b; and whiting in 7a.

- In the case of cod 7e-k, plaice 7h,j,k; cod and whiting in 6a; and whiting in 7a, ICES advises for zero catch. Following this advice, resulting in a zero TAC will mean fisheries in which there are catches of these stocks will be closed from the start of 2021. For the other high-risk choke stocks, fisheries are likely to be closed during the first half of 2021 if no additional choke avoidance measures are agreed.
- The choke risk for sole 7h,j,k and haddock 6a has been reduced to moderate, as the proposed de minimis exemptions will help reducing choke risk for these stocks.
- The choke risk for cod 7a has been reduced to moderate on the basis of improved selectivity (technical measures in the Irish Sea introduced from 1 January 2019) and despite ICES reduced catch advice. The choke risk for other species considered remains moderate or low risk. For a number of these stocks Member States can rely on swaps to prevent choking fisheries.
- There are a number of stocks for which a particular Member State or group of Member States have no quota. The NWWAC recommends that the quota exchange mechanism for TACs for unavoidable by-catches explained in Regulation (EU) 2020/123 Article 8 continues for 2021.
- Members also advise the Commission to assess bycatches in general and particularly for zero TAC advice stocks, as well as the pooling system and ensure it doesn't produce unwanted consequences (such as targeting for such bycatch stocks or disincentivising selectivity).
- The NWWAC recommends to first assess the results of the current technical measures in place and their effectiveness in improving selectivity prior to considering additional measures.
- Given the lack of accurate catch data, the NWWAC is not able to assess whether pelagic bycatches in demersal fisheries present a significant choke risk considering existing exemptions. Given the differences in quota allocations and level of activity in the different demersal fisheries, the NWWAC advises Member States should evaluate whether these bycatches require further measures.

## **10. Annex - Choke analysis spreadsheet**