# North Western Waters Regional Advisory Council

# Proposal on Improvements in Celtic Sea Selectivity Measures

# 13 October 2011

**1. Background**

Discarding rates in the Celtic Sea are high and typically 40-60% (ICES, 2011; STECF, 2011) of the total haddock and whiting catch is discarded. Following the 15% increases this year in the TAC for haddock and whiting in the Celtic Sea, there was a commitment to improve selectivity of these species. Furthermore, in a recent Commission's reply to the NWWRAC request for on an in-year increase in Celtic Sea cod, it has included a statement from Commissioner Damanaki given at Fisheries Council on July:

> "*Commissioner Damanaki has stated in the Fisheries Council of July 19, the Commission is ready to examine the case of an in-year increase of the cod quota, at the same time insisting that technical measures be implemented that help reduce discards of haddock, whiting, and preferably also young cod. Commission has asked STECF to work on the specification of those technical measures, and I am sure that the work done by the Marine Institute of Ireland and other institutions in this context will be of great help*. "

ICES (2010; 2011) have recommended that in order to improve the yield of haddock and whiting and help achieve MSY, selectivity patterns in the fisheries catching these species should be improved. **The technical basis of the improvements is to introduce the use of square mesh panels (SMP) in trawl and seine fisheries catching these species (i.e. haddock and whiting).**

Recognising that vessels targeting species such as *Nephrops,* require the use of cod-end meshes less than 100mm it is proposed to introduce a square mesh panel of 110mm. Where vessels use larger cod-end mesh sizes (greater than 100mm) the requirement will be to use 100mm SMP. These combinations give broadly similar selectivity patterns for haddock and whiting.

In addition, recognising that small vessels tend to use small trawls, it is proposed that vessels less than 15m and/or less than 112kw, should be allowed to use shorter square mesh panels of 2m in length in comparison with the square mesh panels of 3m in length proposed for larger, more powerful vessels.

The Marine Institute (MI) and The Irish Sea Fisheries Board (BIM) have shown a very significant reduction of approximately over 30% in discards in haddock and whiting by using the square mesh panel as described above.

**It is proposed to apply the square mesh panel requirement to part of the Celtic Sea as shown hatched in Appendix 1 namely VIIf, VIIg and to that part of VIIj north of $50^0$ and east of $11^0$ west.** For the purposes of achieving maximum reductions of haddock and whiting discards in the Celtic Sea, it is very important that the portion of VIIj identified in Appendix 1 is included in any proposal for improvements in technical measures that are to be applied. For Ireland, this area contributes approximately 30% of haddock and whiting landings and it is more than likely to contribute a similar amount for the other main fleet operating in the area. It is also important to note that this area also covers a significant proportion of the Biologically Sensitive Area (BSA). Recent analysis undertaken by ICES identifies this area as being highly important as a nursery ground for many species.

**2. Proposal on Improvements in Celtic Sea Selectivity Measures**

1. The square mesh panel proposed below will apply to a defined area in the Celtic Sea as shown hatched in Appendix 1 namely VIIf ,VIIg and to that part of VIIj north of $50^0$ and east of $11^0$ west.

2. The square mesh panel will apply to demersal trawlers and seiners operating fishing gear with mesh size >70mm but will exclude beam trawlers.

3. Vessels using cod-end mesh sizes less than 100mm for mixed finfish will be subject to the use of a 3m long 110mm square mesh panel positioned between 9m and 12m from the codline. The diagram attached in Appendix 2 shows the positioning of the panel.

4. Vessels targeting mixed finfish using cod-end mesh sizes greater than 100mm must use a 100mm square mesh panel positioned between 9m and 12m from the codline.

5. Vessels targeting whiting (greater than 50% of the catch) using 80-99mm cod-ends must use a 100mm square mesh panel positioned between 9m and 12m from the codline.

6. Vessels targeting Nephrops using a cod-end mesh size of less than 100mm must use a 110mm square mesh panel in the *Celtic Sea Defined Area* as described in 1. above, in a position that is consistent with current regulations in the Irish Sea (VIIa).

7. Vessels less than 15m (or 112kW) must use a 100mm square mesh panel of 2m in length inserted 5 meshes from the selvedge of the top panel with the side or bottom panel of the trawl.

8. The points above will be subject to a review in 6 months and revised if necessary. This review will, in particular, cover the geographical area as defined in (1.) above, the effectiveness of the square mesh panel proposed and the gears it should apply to. Part of the review process will also entail an observer programme at sea with scientists and gear technologists. The review will include consideration of alternative methods of achieving conservation objectives which can be proven to be at least as effective as the square mesh panel proposed.

9. A scientific model will be developed to estimate the trade-offs between improvements in selectivity and economic viability and will be used as a method to assess appropriate steps for achieving conservation targets. The scale of any economic losses of commercially significant species arising from this proposal will be assessed within the process.

MINORITY POSITIONS

The present proposal has been adopted by the majority of members of the NWWRAC Executive Committee. In accordance with article 28 of NWWRAC rules of procedure, the following minority positions have been recorded in the advice as follows:

- The Spanish delegation representing the interest of the catching sector at the Executive Committee (OPPAO and ANASOL-ARVI), despite agreeing with the objective of reduction of discards for haddock and whiting stocks, think that it is necessary to reflect first on the adequacy of these measures and analyse in depth the nature of the discards on an area by area, fleet by fleet, and gear by gear basis. This will help to minimise unnecessary damages to those fleets neither targeting (due to lack of quota) nor catching significant amounts of these species. Furthermore, a clear timeframe of implementation must be indicated as well as a socio-economic impact assessment of the application of these measures and a review of its effectiveness;

- The environmental NGO the Irish Seal Sanctuary believes that relying only on technical conservation measures has not been effective in the protection of juvenile fish. Alternative, far-reaching measures such as closed or protected areas should be considered.

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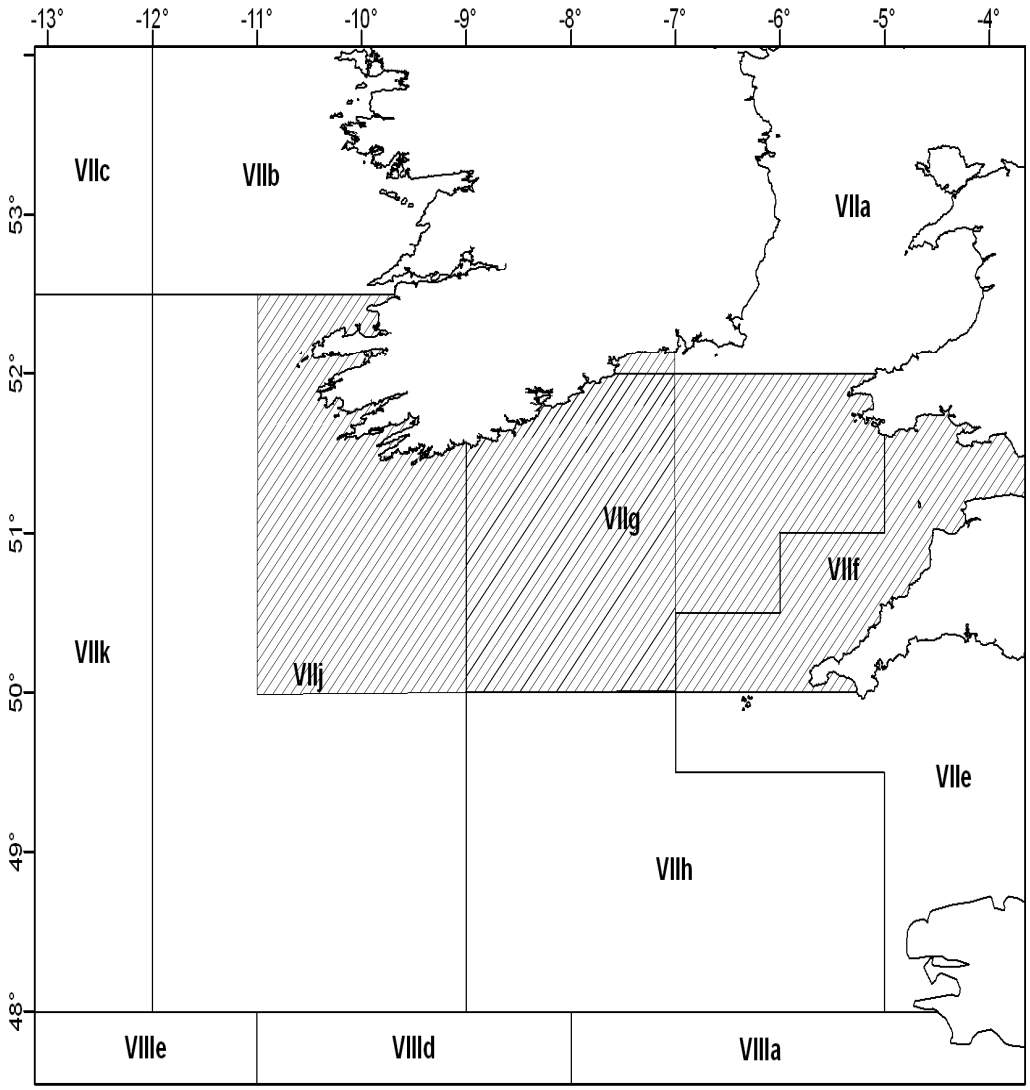
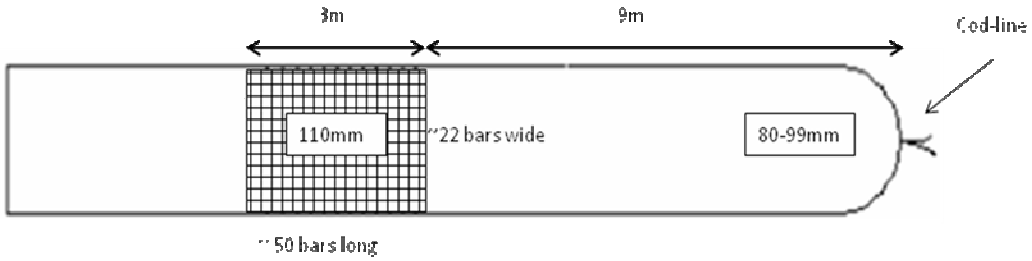
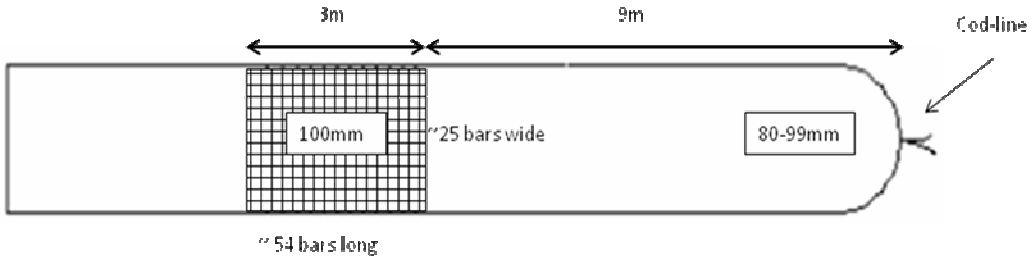
**Appendix 1. Area of Celtic Sea where the improved technical measures are to be applied (shaded area)**



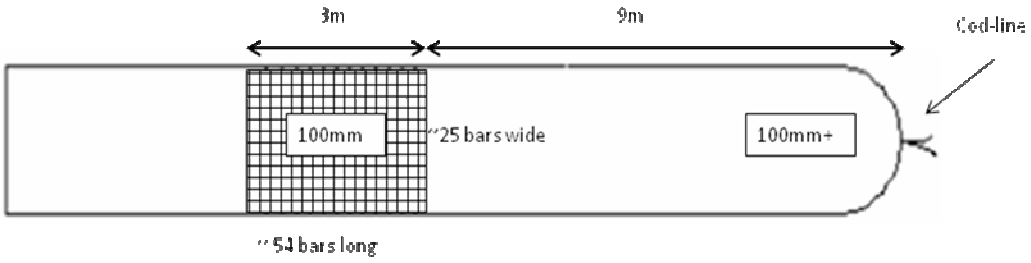
**Appendix 2. Diagrams of codend and square mesh panel configurations associated with gear types and fisheries 3, 4 and 5 identified in the list above.**




Configuration for vessels using less than 100mm cod-end targeting mixed finfish (point 3)

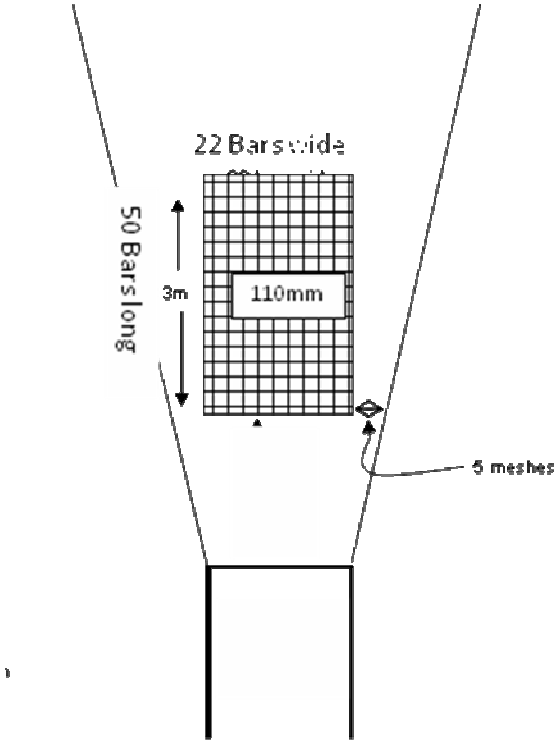



Configuration for vessels using less than 100mm cod-end targeting whiting (minimum 50% of the catch (point 4)




Configuration for vessels using a minimum mesh size of 100mm cod-end targeting mixed whitefish (point 5)

**Appendix 3. Diagrams of codend and square mesh panel configurations associated with gear types and fisheries 6 and 7 identified in the list above.**




Note that for vessels <15m or <112Kw, the panel length should only be a maximum of 2m long equivalent to 33 bars.