

NWWRAC Opinion on discards in Nephrops fishery in area VII North Western Waters Regional Advisory Council

May 2009

- **Definition of the fishery or fisheries:**

The European Commission, in a non-paper, defines “a *Nephrops* fishery in area VII”. However, the various vessels involved in fishing *Nephrops* in area VII display a range of different features, gears and fishing practices. Dominic Rihan (BIM), during the discards seminar hosted by the Commission in May 2008, gave a presentation on the various features of the fleets operating in area VII, which are as follows:

- Different catch compositions: a proportion ranging from 30 to 80% of catches of *Nephrops*, haddock and whiting in the Irish Sea and hake and megrim in Porcupine.

- Widely differing discard indices: discards are thought to be significant in the Irish Sea and the Smalls and Aran areas, and low in Porcupine.

- Wide variety of discarded species: chiefly haddock, whiting, cod and small *Nephrops* in the Irish Sea, Smalls and Aran, megrim in the Labadie fishery, boar fish and axe fish in Porcupine, and herring and horse mackerel in Smalls and Galway.

This wide diversity in the fleets of area VII is also described in the ICES report Cooperative research report No 270 (ICES 2004 – The *Nephrops* fisheries of the Northeast Atlantic and Mediterranean – A review and assessment of fishing gear design).

The Commission’s proposal considers a single fishery and is based on a single study of observations made in 1997 in only one part of area VII (VII f, g, h),¹ on board French *Nephrops* fishing vessels only.

The Commission’s decision not to impose duties as to means of operation but to fix for every vessel a mandatory individual discard reduction index makes the assumption that this is a highly homogeneous fleet. This is clearly not the case and proposals need to reflect the differences within the fleet and tailored, where necessary, to particular métiers.

It is clear from the evidence above that there are significant discards affecting some areas which demand a more sophisticated approach than that proposed. A broad-brush approach will not deliver the desired outcome. Further consideration needs to be given to how the measures proposed can be tailored to the specific circumstances of the different sub-fleets.

¹ Rochet, M.J, Peronnet, I., Trenkel, V. 2002. An analysis of discards from the French Trawler fleet in Celtic sea – *ICES Journal of Marine Science*, 59: 538-552.

- **Overall objective and specific objectives according to caught species (by catch, etc):**

The Commission reports present discard percentages (50% by weight and 60% by quantity) that do not reflect the reality of the diverse Nephrops fishing activities in area VII. Furthermore, no indication is given as to what species are involved. The NWWRAC would welcome clarification on whether the figures refer to an aggregate of all species, target species only or all commercial species.

Table 1: Commission's proposal of reduction targets for Nephrops fisheries in ICES area VII to reach MABL over 5 years²

| Discards percentages for Nephrops fishing activities in VII (EC report) | Weight | Quantity |
|---|--------|----------|
| Baseline | 50 % | 60 % |
| Year 1 | 25 % | 30 % |
| Year 2 | | |
| Year 3 | 20 % | 25 % |
| Year 4 | 15 % | 20 % |
| Year 5 | 10 % | 15 % |

If the overall objective of discard reduction is to be encouraged, the targets of 10% by weight and 15% by quantity should not be the sole targets applicable to all fisheries. Given the different features of the fisheries, it would doubtless be better to fix absolute levels – instead of percentages – so as to avoid the self-defeating effects of a level set down in relative terms. The absolute levels would be set to ensure sustainability of the stocks concerned.

In addition, given the heterogeneity of the fleets concerned, the indices are poorly aligned with reality. It should be borne in mind that the study by Rochet et al was conducted in 1997, before the entry into force of Regulation (EC) No 850/98 on technical measures, which, at least for the French vessels affected, brought about improved selectivity of fishing gear. Where necessary all vessels replaced their fishing gear to comply with the target species percentages imposed by Regulation (EC) No 850/98. However, the effectiveness of TCMs should be reviewed periodically to ensure reduction in discard rates over the long term.

² EC Non-Paper on the Implementation of the Policy to reduce unwanted by-catch and eliminate discards in European fisheries (June 2008) - 5.1. Bottom trawling targeting Nephrops in Area VII- p 5

The technical modifications have often involved increased mesh size. The modifications implemented after the Rochet et al study have not been accounted for. ICES confirmed this progress in 2007, when it indicated that “It should be interesting to examine the part of decrease of the French discard rate during recent years due to the selectivity improvement from that related to some weak recruiting classes.” (ICES WGSSD Report 2007, p 492) Accordingly, it could be argued that vessels that have already adopted a more selective gear or operate in sectors where fewer non-target species are caught will face a tougher challenge achieving their assigned reduction targets (-50% discards in the first year) It would be disproportionate to require the same results from all fleets, because not all fleets would be starting out with the same discard levels.

There has been a decrease in fishing effort in this area since 2000. Therefore, the targets should be kept in line with this decrease. In addition, the timeframe for the implementation of suitable technical measures could be extended for at least five years so as to ensure most effective technology is used. The allowed level of discards should be calculated on the basis of overall volumes being caught and any biological factors relating to the discarded species. For instance for Nephrops, Charuau (1975) found that the survival rate for discarded Nephrops after net capture was 30% after three days. However, the survival rate typically considered by ICES is 15%. The RAC would welcome clarification on discard survival rates of nephrops and how this could be integrated with the calculation of target levels for discards.

Finally, targets must be set on the basis of the sensitivity of each species. A first stage would consist of limiting discard targets to quota species; species covered by an action or recovery plan, and protected species. Different targets could be applied to fished species and by catch species.

- **Types of measures contemplated and involvement in the process by interested parties:**

The first stage consists of the holding – on the RAC’s initiative – of a meeting of scientists and professionals, in the presence of Commission representatives, in order to review the knowledge available about discards for all fisheries in area VII and better identify potential issues and practical solutions. It may be better to prioritise that part of the fleet that is most affected by discards issue.

The meeting should allow for distribution into several homogeneous groups defined on the basis of the areas exploited, the fishing gear used (mesh) and the proportion of Nephrops in total catches, so as it allows to distinguish "guilds" or metiers. The "guild" or “metier” concept does in fact seem to be the most suitable to address discard reduction targets.

For each guild or metier, gradual specific targets could be set, and ICES could be asked to give an opinion on the acceptable level of discards arrived at jointly by scientists and professionals.

In addition, in association with scientists, professionals would undertake research into the question of what tools could be used to achieve those targets, an element of which would be gear selectivity measures. Special attention must be paid to the protection of spawning and nursery areas to increase recruitment of fish stocks while reducing discards.