



**Response of the North Western Waters Regional Advisory Council
to the
Commissions Non paper on Cod Recovery.**

October 2007

Background

This response has been produced as a result of two NWWRAC sub-working groups held in July and September of this year. It has been developed to compliment the earlier '*NWWRAC Position Paper on the Review of the EU Cod Recovery Plan*'¹, sent to the Commission in August of this year and which was produced as a result of the outcomes of the joint RAC Symposium on Cod Recovery.

The group which developed this paper was given an extraordinary mandate by the NWWRAC Executive Committee to propose sound recommendations for Cod recovery which move away from top down approach to ones which are practical, area based and will encourage the active involvement of fishermen in Cod recovery.

This paper sets out a general idea which is emerging from this RAC to promote the active avoidance of cod catches as well as area based proposals and agreed responses to the Commissions questions in the Non- paper.

General Concept: Cod Avoidance Plans

In order to bring about a rapid recovery of cod stocks in European waters the non-paper states that '*For cod to recover there should be less fishing on cod and fewer cod must be caught. A choice needs to be made in how to reduce cod catches and to reduce fishing effort that catches cod*'. This, it argued, can be done by suppressing effort on cod by reducing effort allocations across all those fleets which catch cod. Alternatively, fleets which catch only small amounts of cod could be decoupled from cod fisheries with separate, less restrictive effort ceilings. Although such fisheries would face less severe restrictions, it is acknowledged that decoupling could involve, especially for those metiers not identified as "cod clean", much more bureaucratic arrangements than have applied hitherto, with sub-area and gear effort ceilings and a much more restrictive regime on transfers of vessels and effort across fleet boundaries.

As an alternative to these two approaches the NWWRAC propose a new idea of *individual vessel cod avoidance plans* which would allow the vessel operator (or group of vessel operators) to prepare *a plan to avoid catching cod*, in areas where urgent measures need to be taken to ensure the recovery of the stock. However vessels operating in fisheries with a verifiable no cod catch record should continue to be exempted from cod avoidance plans.

The basic proposed outline of these plans are detailed in the annex 1 of this paper but in general the NWWRAC would foresee that these plans would specify ways in which the vessel (or vessels) would operate in the coming year to avoid catching cod above that covered by the vessels' legitimate quota. These plans would include a mix of gear solutions and area avoidance as is relevant to the area, fishery, or gear type. Vessels participating in the cod avoidance plan scheme would undertake to provide enhanced data on fishing activities, including estimates of discards collected under scientifically robust procedures. Having discussed this idea with scientists and gear technologists there is general agreement that if cod mortality is to be reduced then a mix of gear solutions and area avoidance will be key. It is also agreed that fishermen are the best people to come up with the necessary mix of measures to meet set targets.

The NWWRAC recognizes that the fundamentals for this plan will be to establish the appropriate targets for cod mortality (total removal being landings and discards) and a means of monitoring these. In addition, if this initiative is to truly have an impact on cod mortality, there is a need to make these plans attractive to whole fleets. As a result the NWWRAC recommend that incentives for this approach should be linked to the lifting of effort restrictions.

Finally it is accepted that the practicality and effectiveness of such a new approach would need to be demonstrated before being fully adopted through a one year pilot scheme with comprehensive & representative observer coverage, pre-agreed with scientists.

A more detailed description of these proposed cod avoidance plans can be found in the annex of this document.

¹ Sent to the Commission on the 22ND of August 2007.

Cod Recovery in the West of Scotland

During discussions on Cod recovery in the West of Scotland, it was felt that the cod avoidance plans could be a very practical way to deal with reducing catches of Cod (including discards) in this area. It was acknowledged that the current Cod TAC in the area is very low (circa 450 tonnes in 2007) and as there is currently no directed fisheries for Cod, further reductions in TAC would prove to be ineffective. The present effort management system in area VI is not working for cod and it is strongly believed that what is needed in the area are appropriate and practical measures which avoid the *catching* of cod, not the *landing* of it.

As a result the NWWRAC recommend that a completely new approach is required using a combination of cod avoidance plans and ***time-limited temporary closures*** for cod (referred to in the current Scottish Pilot as “Real Time Closures”). These are defined as short-term local closures of a suitably defined size, cancelling automatically after a certain length of time (for example, 21 days). Safeguards for the protection of economic viability are built in (for example – limiting the overall number of closures in total at any one time and further prohibiting the blocking of inappropriately large areas by grouping of closures together). Furthermore these closure will have to be identified case by case and defined according to the best available and verified information on the fishing grounds and where available and appropriate, scientific data.

It is mooted that as the cod avoidance plans are voluntary, those signing up should also take part in a time-limited temporary closure schemes as defined above. Evaluation of the results drawn from the current Scottish pilot might help to build confidence in this measure.

Regarding the Commission’s questions on this area- the following are the NWWRAC responses:

Consultation point: 1 Nephrops

- *Can the West Scotland Nephrops fishery continue with approximately current levels of fishing effort? How should this be adapted in due course according to scientific advice to stabilise at an MSY level?*

The West of Scotland Nephrops fishery could continue to operate with current levels of fishing effort as overall the Nephrops fishery has a negligible affect on cod catches. However it is agreed that there may be problems in some of the smaller Nephrops fisheries in Area VI. These, however, may be overcome by improving selectivity at local level via gear modifications, such as escape panels, grids, etc. which offer a real possibility of allowing cod to escape

- *By-catches of cod are low and the effect of this fishery on cod is minimal. However, the high discard rates of haddock and whiting are a concern, particularly as the whiting stock is at a very low level in this area. Can these discards of haddock and whiting be reduced? Could more refined technical measures be introduced, e.g. by obligatory grids or separator trawls?*

Again we agree that gear modifications other than mesh size increase, such as escape panels, grids, etc. should be considered, as we believe these offered a real possibility of allowing cod escape.

- *As a first step, and in accordance with STECF advice, should the mesh size for fishing Nephrops be increased from 70mm to 80mm throughout the area?*

On information supplied by the scientists, it is agreed that a mesh size increase in the Nephrops fishery from 70mm to 80mm would be of no benefit to cod.

Consultation point: 2 Fisheries for Haddock

- *How could a long-term plan be developed for West Scotland haddock, consistent with the North Sea haddock plan, which has shown proven benefits?*

This will require significant improvement in data reporting to improve the stock assessment, reducing discards and establishing the correct fishing mortality rate.

Consultation point: 3 Rockall haddock

- *While international discussions continue concerning the Rockall haddock, what provisional measures should the Community implement?*

The Commission must, through NEAFC, pursue every relevant organization to secure an international agreement without delay with measures comparable to those agreed for the North Sea haddock. Implementing provisional Community measures is a pointless exercise.

Consultation point: 4 Anglerfish (Monkfish)

- *Should the effort management system be changed to bring the effort in this fishery in line with effort management in other fisheries that catch cod?*

The present effort management system in area VI is not working to rebuild cod stocks. A completely new approach is required using a combination of cod avoidance plans and time-limited temporary closures to be applied to identified and defined areas according to the best available scientific and industry data

All available evidence suggests that there has been a significant increase in abundance of monkfish over the last 5 years with a very large and widespread recruitment around 2001. Monkfish have increased in abundance during the 2000s, and the NWWRAC agrees that responsible management is required to maintain current stock levels and encourage further increases. The NWWRAC believes that the current effort regime is suitably restrictive to afford protection to the stock.

A comprehensive observer program is needed to establish areas where anglerfish are not caught with cod.

Consultation point: 5 Saithe Fishery

- *The West of Scotland management line, originally intended to exclude only the saithe fishery from the effort management scheme, is not correctly placed because it excludes a large part of cod catches also. Should the line either*
be relocated so that all ICES statistical rectangles either wholly or partially on the continental shelf (i.e. within the 200m depth contour) are included in the effort management scheme, or;
be removed so that the effort management system extends throughout ICES Division VI, possibly with amendments to the derogations based on catch compositions ?

The answer to consultation point 4 above also applies to part a and b of this consultation point.

- *Is it possible to increase the mesh size when fishing for saithe to 110mm or to 120mm? This would simplify technical regulations by bringing the whitefish fisheries under the same gear regulation.*

There was no consensus on increasing the mesh size in the saithe fishery. It was felt by the industry members within the NWWRAC that an increase to 120mm would do little to improve selectivity of this fishery for cod. However the eNGOs felt that an increase would not only reduce the number of undersized fish been caught and thus discarded, it would also bring the Saithe fishery in line with the management measures in place for other demersal trawl fisheries in the area.

Consultation point: 6 Closed Areas for Cod Protection

- *Can the "windsock" closure be made more effective?*

The Cod Symposium held in Edinburgh has identified the need for assessment of the Windsock closure. The scientists considered that this assessment would prove difficult particularly in the absence of baseline data. On this issue, the Scottish Industry has developed a project to carry out an evaluation of the Windsock closure, expected to be finished before the end of March 2008. However, the industry still considers that this closure is a useful tool in the protection of cod stock in Area VI. This position has been adopted with unequivocal support from NWWRAC members, as being an example of an area appropriately identified and defined according to the best available scientific and industry data

- *Should the "Clyde" and "Greencastle" closures be included in Community legislation? If so, are modifications needed?*

Scientists at Cod Symposium in Edinburgh considered that both closures had a role to play in the recovery of cod stock in Area VI. Modifications may be required ensuring the entire area is covered by

these closures for the appropriate limited time periods. In addition work been undertaken by the Scottish industry, scientists and administration which may highlight and identify additional juvenile cod areas in area VI that should be protected by time-limited temporary closures to be applied to them.

This position has had a majority support by the NWWRAC members but it was noted that some members of the NWWRAC expressed discordant views with regards to the Clyde closure and felt it played no role in the recovery of Cod and was more of a political closure than anything else.

Consultation point: 7 Setting the Cod TAC

- *Should the cod TAC be reserved only for by-catches until the stock has recovered? If so, to what proportion of the retained fish should the cod catch be limited?*

The Group agreed that effectively the cod fishery in Area VI is a by-catch fishery. However the Group considered that further detailed discussions were required before it could recommend that a by-catch provision for Area VI cod be enshrined in Community legislation.

- *Should a separate TAC be set for the cod on the Rockall Bank? Should it be set at zero until scientific advice indicates a potential for a fishery?*
- *Should a separate TAC be set for VIa(N), should it be kept at the current very low level until the annual catches corresponding to an MSY fishing mortality rate can be established? Or should it be adapted according to progressive fishing mortality adjustments –and if so, how?*

Is the target rate of $F=0.4$ adopted for the North Sea appropriate for the West of Scotland also? And how quickly should that rate be approached?

Should the effort adjustments apply to the vessels mostly catching cod, i.e. fishing with 110-119mm and over-120mm gear?

Up to 13% of the cod landed is caught by vessels fishing under a 5% derogation. Should the by-catch limit be reduced to 2%?

A totally new approach is advocated for cod recovery in area VI as outlined in consultation point 4 above using a combination of cod avoidance plans and time-limited temporary closures to be applied to identified and defined areas according to the best available scientific and industry data. This approach makes the five questions above redundant.

Cod Recovery in the Celtic Sea

It is agreed by the NWWRAC that for the Celtic sea cod, the state of the stock does not require urgent measures to recover it. The last assessment provided by the ICES working group indicates that the fishing mortality is now below the precautionary limit and the recent spawning stock biomass trend is upwards.

It is also felt in the NWWRAC that this fishery is extremely data poor, with discard practices leading to underestimation of recruitment. However, regardless of the industry's, scientists' and Commission recognition of this problem, appropriate data to increase the knowledge of the stock is not being collated and hence there is consistently a mismatch between the outcome of the assessments and what is being seen on the ground. In addition the request by the NWWRAC to assess the impact of the Trevoise Closure² has not yet been addressed by the Commission or ICES.

In developing the NWWRAC response to the Commission's non-paper, members found it difficult to address the questions in the paper relevant to this area as they did not relate to the present state of the stock. The NWWRAC believes that this fishery should not be included in the current regime of effort management as there has not been accurate data nor a proper evaluation of the stock (including an accurate estimate of recruitment) in the area to support or justify the adoption of such measures. Bearing this in mind the NWWRAC recommend the following:

- Implement the Trevoise Closure for 2008: This closure is one of the most supported industry initiatives in place which protects the stock when it is most important to do so, during its spawning

² Letter sent to the Commission in June 2007, dated the 1/6/2007.

season in the spring. It is a well identified and defined area implemented according to best scientific and industry available data. Therefore the NWWRAC strongly recommend that the Commission continue to support its implementation. In addition to this the NWWRAC reiterate the call to assess the real impact of this closure.

- Improve data collection: A programme to collect data on this fishery needs to be planned now between scientists and the industry to commence immediately. Member state scientists and industry must work together in co-ordination with the Commission to collate the data needed to provide a complete picture of this fishery. In particular an appropriate assessment must be done on the recruitment to this fishery. It is proposed that this work be financed in a Commission call for tender.
- Encourage time-limited temporary closures and cod avoidance plans: The NWWRAC recommends the implementation of schemes to reduce discarding of juvenile cod through time-limited temporary closures (as discussed above under the West of Scotland section) but adapted to the particularities of the Celtic sea. Cod avoidance plans could also be implemented as part of such a scheme.
- Encourage Gear Selectivity: Experiments on gear selectivity or gear modifications (ie escapement panels or grids) should also be carried out to analyse the real impact of selective devices on the catches composition compared with potential economic losses.
- Commence Long Term Management Plans: Implement a long-term management plan that moves to achieve the recommendations set out in the Johannesburg declaration. The stock status shows no sign that urgent measures are required ($F = 0.58 < F_{pa}$, see last WGSSDS report 2007). The management objectives set by the Johannesburg summit can be achieved without hindering the individual activity of each vessel. But, in order to prevent an increase of fishing effort, ways of restricting access to the area ICES VIIIfg should be considered.

With regards to appropriate management of Celtic Sea Cod, the NWWRAC would strongly support any of the measures above and would encourage the Commission to bear in mind the particulars of this stock. The current state of the stock, with the fishing mortality below the precautionary limit and probable underestimation of recruitment, do not justify the adoption of restricting effort limitation measures and so the NWWRAC strongly oppose a move toward measures which would lead to the integration of Celtic Sea Cod into the regime stated in Annex II of TAC & Quota Regulation.

The NWWRAC is more in favour of appropriate area closures, which provide protection for the stock when it is at its most vulnerable as well as long-term management plans and enhanced schemes of data collection to collate information both from scientists and grassroots knowledge from fishermen to explain exactly what situation this fishery is in.

Cod Recovery in the Irish Sea

The NWWRAC recognises that Cod Recovery measures have been in place in the Irish Sea for seven years now and while some believe that there has been no significant recovery in the stock, supporters of the closed area claim that it may have stalled the decline of the stock. However, most commentators are resigned to the fact that the “temporary” spring closure introduced seven years ago will remain for the foreseeable future. The debate centres on the future area/location and duration of the closure but it is also generally felt that the recovery of stocks may be better achieved through the implementation of TCMs into fisheries with a bycatch of cod. It is also recognised that there is currently no longer a directed fishery for Cod in the Irish Sea. The former semi pelagic fleet has reduced from 40 vessels in 1999 to 4, which are currently targeting haddock. Again data in this area is poor but it is hoped that the recently endorsed discarding data programme will improve this situation in the Irish Sea.

Regarding the Commission’s questions on this area- the following are the NWWRAC responses:

- *Should the Nephrops fishery be “ring-fenced” and managed primarily by regional effort limitation of 4.4 million kW-days, which would be partitioned between the Member States concerned?*

The NWWRAC feel that this approach is not viable as it once again reflects the EC's broad brush approach to cod recovery. At the Belfast Working Group meetings of the NWWRAC, the EC highlighted the significant reduction in fishing effort in the Irish Sea, yet they suggest we need more. This idea applies equal pain to all stakeholders in the fleet, with no recognition given to those with a low catch of cod. Before the point can be answered fully, there are a number of outstanding questions. How has the figure of 4.4 million kW-days been arrived at? How does the EC envisage allocating these between Member States – on the basis of TAC allocations, on the basis of historic effort levels? Would the figure be fixed or would it be further reduced?

- *Could the catch composition rules be changed so that the cod by-catch in the Nephrops fishery should not exceed 5% and the quantity of Nephrops on board should be increased from 35% to 80%?*

The management of the cod catch is one that needs further exploration and the cod avoidance plans being advocated in this paper could certainly be developed. With the application of the EU's Buyer's and Sellers Regulation in the UK and parallel measures in other Member States TACs have become a much more effective tool in the management of the fishery. Of course TACs do not account for those cod and other species that are discarded. Within the Irish Sea the problem of the "unknowns" in relation to discards have been well documented, hence the concept of the Irish Sea Data Enhancement Programme. It would be prudent to wait until the first year of this programme is complete, when we can at least ascertain what the true discarding rates are so that we can then put the measures in place that will effectively manage the problem. Finally increasing dependence on a single-species fishery (Nephrops) is of concern, as the effect this would have on the long-term sustainability of the Nephrop stock in the Irish Sea is largely unknown.

- *Could more reductions in cod by-catches and haddock and whiting discards in Nephrops fisheries be achieved using a general obligation to use separator trawls or grids in all Irish Sea areas?*

Again, the Irish Sea Data Enhancement Programme is instrumental in determining what the by-catches and discard levels of a variety of species are. Currently there is too much uncertainty on the level of by-catches and discards, let alone what further technical conservation measures should be implemented. Trials of grids in the Irish Sea have been selective and inconclusive; however this is an area where the cod avoidance plans could be a useful tool as fishermen would be given an incentive to reduce bycatch in the manner most appropriate for his gear.

Regarding other fisheries such as the 'queenie' scallop fishery in the Isle of Mann – it is recommended that a special derogation be afforded to this fishery as the bycatch of cod is shown to be negligible.

- *Could the minimum mesh size for fishing for Nephrops be increased from 70mm to 80mm?*

In short no. There is much greater interest in this than there was a few years ago, but what would the conservation benefit be? Previous scientific advice, based on sea-trials has suggested that there would be little if any benefit for any species, including cod.

Regarding the selectivity issue in general, a bottom-up approach supported by incentive structures is suggested for implementation of new gears. Gear technologists have advocated that there is little point enforcing gear modification on fishermen if they do not support them.

Cod Recovery in VIId

Although this area is associated with the North Sea Cod Recovery programme, area VIId is within the remit of the NWWRAC. The area is covered in the cod recovery plan, however, at the present the cod by-catches in VIId are less than 5%. While the NWWRAC support the continued protection of Cod and reduction of discards in this area, it is felt that this should be done through the development of TCM's (such as improvement of selective gears), through square meshed window and/or selective grid. Concerning the grid, it is appropriate to take into account the results of the study SAUPLIMOR (protection of juveniles of plaice and cod in the strait of Pas-de-Calais) undertaken by IFREMER in 1999 and 2000. These kind of measures would also go some way to reduce discards. There is also a view within the NWWRAC that closures of the nature of those being trialled by the Scottish fleet are

not regarded as acceptable for this particular area, given the socio-economic impact on other fisheries here.

The NWWRAC will also undertake to submit these remarks directly to the North Sea RAC.

General Conclusions:

The NWWRAC has made a number of recommendations here which they hope will be of use and interest to the Commission.

The idea of cod avoidance plans may be generally new to European fisheries but are in essence target based management plans and are similar to successful implemented management measures in the Canadian West coast Groundfish fishery and in the Alaskan Pollack fishery. The NWWRAC also notes with interest and welcomes the inclusion in the recently circulated Commission Non paper on a new approach to effort management under annex II of the TAC regulation, a section entitled '*exemptions concerning certain fishing areas and catch composition*' where a result oriented approach is being mooted by the Commission.

The idea of time limited time-limited temporary closures, which should be applied to identified and defined areas according to best available scientific and industry data in the West of Scotland and the Celtic Sea, will build on existing experiences gained from the Scottish Pilot Project and the NWWRAC await the outcome of these trials with interest. Finally the idea of regional solutions to regional problems is far from new and the NWWRAC would like to see the Commission's true endorsement of these initiatives by supporting trans-national pilot projects on the initiatives suggested here.

Annex 1

Cod Avoidance Plans

The NWWRAC envisage that Cod Avoidance Plans would operate in the following way:

1. The vessel operator would volunteer to prepare a Cod Avoidance Plan; Vessels operating in fisheries with a verifiable no cod catch record should continue to be exempted from CAP
2. Those vessel operators opting to prepare a plan would discuss the matter with member state authorities who could provide advice on the content of the plans. (Such guidance would be the subject of a prior consultative exercise);
3. The vessel operator (with assistance, if requested) would prepare a specific cod avoidance plan for that vessel for the coming 12 months;
4. The vessel's Cod Avoidance Plan would specify ways in which the vessel would operate in the coming year to avoid catching cod above that covered by the vessels' legitimate quota. This could be through:
 - spatial avoidance
 - temporal/seasonal avoidance
 - selective gear
 - or any other method devised by the vessel operator
5. The vessel operator would undertake, through these means, to keep cod catches within the vessel's quota allocations and in any event, below a certain pre-agreed figure (perhaps expressed as a % by weight) over the course of the year.
6. The Cod Avoidance Plan would be submitted to the member state authorities for approval;
7. If the vessel's Cod Avoidance Plan is approved the vessel would be exempt from effort control measures for the coming year;
8. Conditions: vessels participating in the cod avoidance plan scheme would undertake to provide enhanced data on fishing activities, including estimates of discards;
9. Vessels breaching their conditions would be required to operate for the rest of the year and the subsequent fishing year, within the effort control regime and/or other penalties may apply;
10. Safeguards: in order to provide confidence that the cod avoidance plans would not be abused, a number of safeguards could apply including:
 - observer coverage on both participating and non participating vessels
 - enhanced data reporting, including self-sampling
 - cross-checking of observer data on cod catches with other similar vessels operating in the same area (including those not participating in the plan).
 - appropriate penalties

Notes

- (1) Technical advances in the ability to make fishing gear more selective have not been matched by an institutional structure which incentivises the application of such gear. By specifying and agreeing the outcome (low catches of cod) the ingenuity and knowledge of fishermen will be directed to finding ways to reduce catches of cod. At present no such incentive structure exists.

- (2) Catches – Inclusive of landings and discards. Acceptable bycatch limits to be agreed based on an absolute value (easier to assess scientifically) which may be converted to a percentage.
- (3) Fundamentally for this to work in terms of assessing the impact of the vessels in the fishery there will be the need to assess across the whole of the fleet. There therefore is a need to make these plans attractive to whole fleets. As a result the NWWRAC recommend that incentives for this approach should primarily include lifting of effort restrictions.
- (4) An approach based on Cod Avoidance Plans would be consistent with:
 - the objectives of the cod recovery programme;
 - the Commission's initiative on discards;
 - improved selectivity – the objective of the new revised technical conservation regulation