EUROPEAN COMMISSION
DIRECTORATE-GENERAL FOR MARITIME AFFAIRS AND FISHERIES

BALTIC SEA, NORTH SEA AND LANDLOCKED MEMBER STATES

Brussels,

State of play with the Management plan for Baltic stocks of cod, herring and sprat.

You will be aware that DG MARE are currently working on a proposal for a long-term management plan for the stocks of cod, herring and sprat in the Baltic Sea. This is being drafted ready for ready for adoption in December of this year. This note is intended to outline the key elements of the plan and to seek feedback on some of these.

Scope and objectives

Following discussion with Member States and BSRAC, the initial objectives for the plan will be based around single species MSY fishing mortality targets. This should be regarded as a starting point from which to adapt the plan in the light of improved scientific understanding and changing conditions. The stocks to be addressed, and the target fishing mortalities, are given in the table below. The stocks indicated by italics are those where there is a question mark over their inclusion in the plan.

Stock	**Target fishing mortality**
Western Baltic cod	0.33
Eastern Baltic cod	0.30
Central Baltic herring	0.16
Gulf of Riga herring	0.30
Bothnian Sea herring	0.16
Bothnian Bay herring	*Not defined*
Western Baltic herring	*0.25*
Baltic Sprat	0.35

Note that Bothnian Bay herring is a data-limited stock and as such it may not be possible to include it directly within the management plan, although this is currently under review. There are particular issues associated with Western Baltic herring associated with the stock's migration into the North Sea and Skagerrak which are discussed further below.

The plan does not at this stage consider plaice in the Baltic. While this species is subject to a TAC, the scientific understanding of the stock(s) is at a relatively early stage of development.

Discards.

The reform of the Common Fisheries Policy anticipates a discard ban and that management plans should include measures concerning the elimination of unwanted catches. Hence, the Baltic plan will need to address these issues. The approach adopted in the Skagerrak proposal is one model for how to address the issue, but we would welcome further discussion on this matter.

Technical Measures

Technical measures for the Baltic are mainly contained in a specific regulation (2187/2005), although there are other measures, specifically nominal spawning closures, contained in the Baltic cod plan regulation (1098/2007). While a number of options for the treatment of technical measures are currently being discussed in the context of CFP reform, the timescale of the current proposal means that the simplest and quickest approach will be to retain regulation 2187/2005, with minor amendments as necessary. This leaves the question of what to do about the spawning closures.

With regard to the spawning closures, STECF have advised:

> *"The impact on the present spawning closures on the stocks and the fisheries is unclear but the measures are unlikely to have had a limiting effect on the overall fishing mortality and EWG concludes that spawning closures are not required to meet the biological objectives as long as the TACs effective in limiting the fishing mortalities as intended. If spawning closures are included the timing of the closures should better match spawning season."*

The spawning closures consist of two closed seasons (1-30 April in the Western Baltic, and 1 July to 31 August in the southern part of the Eastern Baltic), and three smaller areas in the Eastern Baltic which are closed over 1 May to 31 October. The advice notes that the Western Baltic closure would provide better protection for more mature spawners if it were split so that SD 22 would be closed over March and the first half of April, and SD24 would be closed from 1 June to the middle of August. The advice also notes that spawning aggregations only occur in water depths of 20mm or deeper.

This leaves three options:

1. Retain the spawning closures as they are
2. Retain the spawning closures but with the dates revised to more closely match the current spawning periods
3. Remove the spawning closures.

Option 1 might be appropriate given that fishermen have learnt to live with the existing closures so changing them might be disruptive for them. However, this would not be completely in line with the scientific advice. Conversely, Option 2 would be consistent with scientific advice, but might be disruptive to fishermen, in particular, the small-scale coastal fishery which does not have access to other fishing opportunities during this season. This could be mitigated by only closing areas of 20m or deeper, but this would bring additional control difficulties. The scientific advice concludes that the closures are not required to meet the biological objectives provided that TACs are effective. This would mean that Option 3 might be considered. However, the closures may have some conservation benefit, and, perhaps more importantly, they may be perceived to have some conservation benefit, so removing them might be seen as having a negative impact on conservation.

TAC constraints.

The present cod plan includes a constraint which means that TACs can change by no more than 15% from year to year. Member states and stakeholders have indicated that they are in favour of the stability that this constraint offers, but the scientific advice is that this constraint is likely to cause problems for the cod stock in the short term. The problem arises because the stock is forecast to decrease naturally, but the TAC constraint will mean that the TAC will not decrease as fast as the stock, so fishing mortality will increase well above the MSY target value. Similar problems may arise if TAC constraints are applied to the sprat and herring stocks.

In view of the potential conflict between the requirement for stability of TACs, and the problems this could cause for the stocks, we are exploring an alternative approach to applying TAC constraints. The approach, known as the '50:50 rule' is used in management plans in other areas, particularly Iceland. Instead of basing a TAC completely on the harvest rule, it involves going half-way between the current TAC and the TAC indicated by the harvest rule. The current approach for Baltic cod is to follow the harvest rule to set the TAC, unless this leads to a change of more than plus or minus 15% in TAC, in which case, the change is limited to plus or minus 15%. Under the alternative approach we are considering, if the harvest rule indicated a change of more than 15% in TAC, the TAC would instead be based on the 50:50 rule. We do not yet have full scientific advice on this approach but scientific work is in progress and the initial indications from these analyses are that this approach might be a useful compromise.

Fishing Effort.

In relation to the annual effort limits currently in place as part of the cod management plan, the scientific advice notes that:

> *"The evaluation of the present multiannual management plan, and the simulations presented in section 7, indicate that rules for effort limitations are not currently required to meet the biological objectives, as long as the limitations in catches are effective in limiting the fishing mortality as intended."*

On the basis of this advice there is no requirement to use effort restrictions as a primary management measure. However, there may be a case for retaining the ability to restrict effort if other measures are proving unsuccessful. It may also be considered desirable to prevent any increase in capacity/effort above recent levels.

Stock-specific issues

Western Baltic cod.

The current cod management plan has a target F for the Western Baltic cod stock of 0.6, whereas under a new plan, a target of 0.33 is anticipated. While recent fishing mortality on the western cod stocks is indicated to be slightly below the current target level, the difference between the current F and the new target could nonetheless be relatively large. Furthermore, the change would be a result of changing objectives in management plans rather than anything happening in the fishery. In recognition of this, one approach would be to move towards the new target value over a series of annual steps rather than in a single year. However, this would need to be balanced against the commitment to achieve MSY by 2015.

Western Baltic herring

The Western Baltic Herring stock spawns in the Western Baltic in spring then migrates into the Skagerrak and, to a lesser extent, the North Sea, to feed. This causes problems for management of the fisheries, as the scientific advice only provides information on what the total catch from the stocks should be in a given year, not on how it should be allocated across the different areas. At present there is no scientific basis for allocating the catch between the Western Baltic and the Skagerrak. One approach would be to use a 50:50 split between the two areas. However Western Baltic fish are caught in the Skagerrak as part of a mixed-stock fishery with North Sea herring, and the TAC for this Skagerrak fishery is agreed with Norway who would be opposed to such a fixed position, as it would effectively dictate the Skagerrak TAC. In addition, the mixed stock issue also means that there can also be problems with total removals from the stock exceeding the TAC.

As it stands, the available scientific advice would allow a harvest rule for the Western Baltic herring stock to be included in the Baltic plan. This would provide a basis for setting an annual TAC for the stock but would not resolve the issues of how to set a TAC for the mixed-stock fishery in the Skagerrak. Any more complex procedure, i.e. which determined both the TACs in both the Western Baltic and the Skagerrak, would need to be agreed with Norway. In the case where the plan contained only a harvest rule, this would mean that the stock would nominally be under a plan, but that annual negotiations would still be required to determine the Skagerrak TAC. Even, then the mixed-stock issue means that TACs could still be exceeded so that the plan wouldn't necessarily be effective in achieving its objectives.

Part of the justification for including all of the Baltic stocks of cod, herring in sprat into a single management plan was to allow biological interactions between these stocks to be taken into account. At present, models of these interactions are only available for the stocks in the Eastern Baltic, although in the medium term it should be possible for these to be extended in order to quantify the impact that such effects have on the Western Baltic stocks.

Two options for how the Western Baltic Herring stock is treated can be considered:

1. Include the Western Herring stock in the Baltic plan
2. Exclude the Western Herring stock from the plan but include it in a separate single stock plan at a later date.

The pros and cons of the two are options can be summarised as follows:

Include Western Herring in Baltic plan

Advantages:

- Would allow biological interactions, e.g. possible predation by Western Baltic cod to be accounted for once the science base is available.
- Could be done within the current timescale of proposal development.

Disadvantages:

- Would still require annual negotiations with MS & Norway on the Skagerrak TAC.
- The mixed-stock catches in the Skagerrak & North Sea mean that TACs might still be exceeded hence the plan might not be effective in achieving its objectives.
- A harvest-rule-only plan might not meet stakeholder requirements.

Include Western Baltic Herring in separate, single stock plan

Advantages:

- Would allow more time for the area allocation and mixed stock issues to be addressed and incorporated in the plan – work on these issues is currently underway in the EU-funded GAP2 project
- Would not necessarily lead to a delay in implementation as a stand-alone plan could be implemented as an EU-Norway agreement rather than as a Council regulation, hence would not meet the delays associated with the co-decision process.

Disadvantages:

- Would reduce the possibility of addressing biological interactions
- Further delay in implementation of a plan might not find favour with stakeholders

We would welcome input on the preferred option here.

Multi-species and the ecosystem approach

In addition to the general objectives of implementing the precautionary and MSY approaches, the reform also anticipates the requirement to implement the ecosystem-based approach to fisheries management, and to integrate the requirements of EU environmental legislation. The latter refers primarily to the Marine Strategy Framework Directive (MSFD) requirement to achieve Good Environmental Status (GES) in this case. Among the elements of the MSFD, the three descriptors of GES most relevant to the management of the fisheries considered are the following:

Descriptor 1; Maintaining biological diversity.
Descriptor 3; Maintaining exploited populations within safe biological limits and with a healthy age-distribution
Descriptor 4; Maintaining all elements of marine food webs at normal abundance.

There is some overlap between these descriptors and existing fisheries objectives. For instance, Descriptor 3 should be met to a large extent through the implementation of the precautionary approach (to maintain stocks within safe biological limits) and the MSY approach (which will normally apply a low fishing mortality and thus also lead to a healthy age distribution). Descriptor 4, however, applies more to multiple stocks, so would require that the stocks of cod, herring and sprat considered here are all maintained above their minimum biomass levels, so that there can be no consideration of, for instance, fishing down cod in order to make more sprat available for commercial fisheries. This would result from MSY targets which account for multi-species interactions. It is not immediately clear what management requirements Descriptor 1 would impose (if any) over and above the requirements of Descriptors 3 and 4.

One possible approach to implementing the ecosystem approach to fisheries management is a bottom-up approach which would use the current single-stock approach as a starting point and then to develop the approach to take greater account of e.g. species interactions and ecosystem effects as better information on these aspects becomes available. This approach has close parallels with the Baltic plan, which was originally intended to take full account of species interactions but which will now use single species F-MSY targets as a starting point. This approach was chosen over a more multi-species approach which would have required more time for scientific advice on appropriate MSY targets and their associated risks.

Under the bottom-up approach to the implementation of an ecosystem approach outlined above, the scientific work would continue in order to develop elements of the plan in the light of improved scientific understanding of the interactions between and within the stocks concerned. Further scientific analysis will also be required to ensure that the fishing mortality targets used are consistent with the requirements of MSFD Descriptor 4. Any decisions about target fishing mortalities, and other aspects of the plans will involve trade-offs, e.g. between yields of different stocks, or between present and future yields from the same stock, so there should be close involvement of stakeholders in the scientific process.

In relation to the Baltic plan, the conclusion about MSFD and the ecosystem approach is that further science is required and that the process needs to be a collaborative one, involving scientists, stakeholders and managers. However, this need not delay the preparation of the proposal for a regulation. Rather, the proposal will make it clear that, reflecting the requirements of the ecosystem approach, and also the strong environmental influences on Baltic stocks, the plan will be adaptive in nature. This will mean that there will need to be scope for changing the parameters of the plan where scientific advice indicates that this is appropriate in order to achieve the plan's objectives. Of course, this

is likely to run into the problem of co-decision, but this should not be taken as a reason for not taking such an approach. This approach would also require that the supporting scientific advisory process runs in parallel to the implementation of the plan, but the details of this can be finalised in due course.

Control measures:

- the special permit for fishing for cod,
- the requrement to have logbook for vessels of eight m overall length or more holding a fishing authorisation for fishing for cod,
- fishing vessels retaining on board 300 kg cod or ? herring ? sprat shall notify the competent authorities of their flag Member State at least one hour before leaving the management area,
- the threshold applicable to the live weight of species subject to a multiannual plan, above which a fishing vessel shall be required to land its catches in a designated port or a place close to the shoreas set out in Article 43 of Regulation 1224/2009 shall be:

(a) 750 kilograms of cod,

(b) 5 tons of any combination of herring and sprat (pelagic stocks),

- methodology for estimation of the catch composition for pelagic catches.