

Eastern Baltic Cod Fisheries

DFPO Denmark Eastern Baltic Cod, Germany Eastern Baltic Cod, Swedish Fisherman's Producer Organisation (SFPO) Eastern Baltic cod, LFA Latvia Trawl Eastern Baltic Cod, Poland Eastern Baltic Cod

Eastern Baltic Cod Fisheries – Corrective Action Plan

Preamble

The clients to the MSC certified fisheries of Eastern Baltic Cod have created this joint corrective action plan with the objective of lifting the certificate suspensions currently affecting all of our fisheries:

LFA Latvia Trawl Eastern Baltic Cod
Poland Eastern Baltic Cod
Swedish Fishermen's Producer Organisation (SFPO) Eastern Baltic Cod
Germany Eastern Baltic Cod
DFPO Denmark Eastern Baltic Cod

The parties above strongly believe in the principle of well managed and sustainable fisheries and have demonstrated their performance in this regard by successfully entering their respective fisheries for assessment against MSC principles and criteria.

It is therefore hugely disappointing and disheartening through no fault of their own to be in a position where certificates are suspended, whilst suffering the negative commercial and reputational consequences that this has on the fisheries.

The CAB decision to suspend the certificates lists the following main reasons:

- Uncertainties in particularly ageing and growth of the stock mean that the ICES stock assessment is no longer able to provide advice on stock status relative to reference points
- This means that the harvest strategy and harvest control rules previously applied are no longer appropriate – and new ones cannot be based on the current 'category 3' ICES advice.

In 2013, when the last advice based upon a 'normal', accepted analytical stock assessment was given by ICES¹, the result was a stock that was twice as large as the MSY Btrigger (SSB: 179,872 t and MSY Btrigger 88,200 t), and a fishing mortality that was well below F_{msy} (forecast F: 0.37 and F_{msy}: 0.46). Since then, the relative stock size indicator that ICES uses in the Category 3 ("data-deficient") advice shows a reduction in the survey catch rates of approximately one third, and only a very slight increase in the corresponding F because of the low catches taken in 2013 and 2014. This suggests that the current stock size is probably slightly above MSY Btrigger, and F at or just below F_{msy}.

The issue then is not of the actual sustainability of the fishery, but of scientific certainty.

But the MSC requirements (as well as the ICES advisory system) seem to be built in such a way that if one such single element fails, all other parts of the stock management are more or less automatically dragged down with it. If this can happen in a fishery that has such a strong level of data and scientific scrutiny as the

¹ http://www.ices.dk/sites/pub/Publication%20Reports/Advice/2013/2013/cod-2532_201304112231.pdf

Eastern Baltic Cod, it raises the question of when, rather than if, the same thing will happen to other fisheries.

That the issue is scientific uncertainty also means that we, as organisations of fishermen, rely more or less entirely on what scientific institutions do, rather than our own direct actions, to remedy the problems. Nevertheless, the joint organisations behind this corrective action plan represent the vast majority of cod fishermen in the Baltic and we will put our combined efforts into pushing for a resolution to the problems, wherever we may influence this.

The action plan below consists of two tracks, one “fast-track”, which attempts to resolve the issue within this year, though an expansion of the current ICES category 3 advice to also provide proxy MSY reference points. Since 2016 is the first year that ICES will even be attempting to provide MSY advice for category 3 stocks, this must be considered an experiment and this track thus has a relatively low chance of success. But since it is fastest, the attempt has to be made.

The second, main track aims at solving the major problems behind the scientific uncertainty, particularly the central issue of assessing the age of Eastern Baltic cod. This medium-term work has potential to lead to a solution by mid-2017, and that is thus as far as the current action plan reaches.

Fast track plan – science (decision point in June 2016)

As part of the ongoing workstream in ICES to better deal with stocks that do not have analytical assessments, the WKLIFE V workshop² has explored methods to be able to estimate MSY reference points for a range of ‘data-limited’ stocks, including the so-called category 3 stocks which currently includes Eastern Baltic Cod. These methods have been further tested and refined for a number of stocks in the Western Waters in the WKProxy workshop³ held at the end of last year. For most of the stocks, the methods were able to provide simple above/below answers to SSB relative to an MSY Btrigger proxy, and F relative to an Fmsy proxy. For other stocks, the results were inconclusive.

It is the intention of ICES to attempt to apply these one or more of these methods to the 2016 Eastern Baltic Cod assessment⁴ – and if successful use it as basis for the advice published at the end of May 2016.

At the latest by June 2016 we will therefore know whether the WKProxy method delivers credible results. At this decision point the clients will either:

- 1) Suggest a re-evaluation of the situation by the CABs – if the results are sufficiently positive and robust that it may be possible to re-score the fisheries and pass.**
- 2) If the results are less positive and suggest that changes in management are necessary to reach an average P1 score of 80, the clients will keep working on the fast track plan (in parallel with the main track) through support for adoption of the results of the advice in management (particularly leading up to the October 2016 decision for the 2017 TAC).**

²

http://www.ices.dk/sites/pub/Publication%20Reports/Expert%20Group%20Report/acom/2015/WKLIFEV/wklifeV_2015.pdf

³

http://www.ices.dk/sites/pub/Publication%20Reports/Advice/2016/Special_Requests/EU_Western_Waters_MSY_Proxies.pdf

⁴ See the attached letter from ICES, responding to a request from the clients.

- 3) Conclude that the WKproxy methods are unsuitable for Eastern Baltic Cod and revert to the main plan below.**

Main plan – science (decision point in June 2017)

The range of issues that trouble the stock assessment of Eastern Baltic Cod have been outlined in a recent article by Eero et al⁵. From this article, it is clear that the central issue on which the solution to most of the issues hinge is reducing the very large uncertainty and inconsistencies in the age-determination. The scientific institutes (DTU Aqua, SLU, TI-OSF and NMFRI) have thus started a large scale project, TABACOD⁶, funded by the BalticSea 2020 foundation, to attempt to solve this issue. The main tools of the TABACOD project will be tagging of a large number of cod (a combination of strip-tags, data storage tags and chemical tags) and development of a otolith chemistry based method to validate the historical and future age-reading of Eastern Baltic cod. This should enable the scientists to re-calculate the base data and input parameters with sufficient certainty to make an analytical stock assessment possible again. While the TABACOD project is not planned to end before 2019, there is a reasonable chance that it will lead to sufficient improvements in the data (through a combination of new data and re-visiting the large amounts of data from older projects) that an analytical assessment may be possible for the May 2017 advice.

The clients strongly support the work on reducing the age-reading uncertainties. All clients will communicate directly to each vessel in their fleet to remind them to be alert to the tags, and make sure they return as many as possible with the correct information to the scientists. In addition, a collaborative project between the DFPO and DTU Aqua has applied for funding to run in parallel with TABACOD as a direct support to the later (outreach to ensure tag return, work on genetic markers, natural mortality and other variables to understand the ageing and growth results from the tagging etc.)

At the latest by the end of May 2017 we will therefore know whether ICES has been able to re-instate an analytical assessment of Eastern Baltic cod. At this decision point the clients will either:

- 4) Suggest a re-evaluation of the situation by the CABs – if the analytical assessment has been accepted for the advice and the results are sufficiently positive and robust that it may be possible to re-score the fisheries and pass.**
- 5) If the analytical assessment has been accepted for the advice, but the results suggest that changes in management are necessary to reach an average P1 score of 80, the clients will further work to support the adoption of the results of the assessment in management (particularly leading up to the October 2017 decision for the 2018 TAC and if necessary also in adjusting the new EU Baltic Management plan – see below).**
- 6) If the improvements in data from TABACOD etc. are not yet enough to perform an analytical assessment, the clients will re-evaluate the action plan, taking into account the results until then.**

⁵ <http://icesjms.oxfordjournals.org/content/72/8/2180.full.pdf+html>

⁶ <http://www.balticsea2020.org/english/press-room/368-major-international-research-project-to-solve-the-problem-of-age-determination-in-cod>

Note that the project has changed its name from TABASCO to TABACOD since the announcement.

Both tracks – management

The existing 2007 EU Management Plan for Baltic cod is no longer applicable to Eastern Baltic cod. A new EU Multi-species Management Plan for the Baltic has been under development for a long time, and there is now reason to believe that it will be adopted relatively soon – likely within 2016. Because the application of this plan is expected to be dependent on reference points (Blim, MSY Btrigger and Fmsy), it can only be applied to Eastern Baltic cod if these reference points can be estimated from either an analytical assessment or proxy methods⁷.

The clients strongly support the adoption of the new Management Plan (and have already done so for several years through the Baltic Sea Advisory Council⁸). The clients also support the (proposed) application of a target range of fishing mortalities in line with the MSY as well as the application of special measures to reduce the mortality if the biomass falls below MSY Btrigger⁹.

If the new plan is not adopted before reference points become available, it will most likely be possible to use the generic ICES harvest control rule to manage the fishery instead (as this also operates with an Fmsy target range, and reduces F at $SSB < MSY \text{ Btrigger}$, it is not very different from the harvest control rule expected to be adopted in the plan).

Specific conditions

Condition 1 (1.1.1b)

2016 (June) - Fast track 1 (WKProxy method + good status)

If this is the case, the stock may be shown as in fact fluctuating around its target reference point (without further action needed).

2017 (June): Main track 3 (Analytical assessment + good status)

If this is the case, the stock may be shown as in fact fluctuating around its target reference point (without further action needed).

Fast track 2 and Main track 4: see Condition 3 below on rebuilding.

Condition 2 (1.1.2a+b+c)

2016 (June) - Fast track 1+2 (WKproxy based reference points)

If this is the case, appropriate reference points may again be available and appropriate.

2016 (June) - Main track 4+5 (Analytical assessment based reference points)

If this is the case, appropriate reference points may again be available and appropriate.

See also condition 5 below.

⁷ See the original Commission proposal here: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52014PC0614&rid=1>

⁸ See for example this letter:

http://www.bsac.dk/archive/Dokumenter/Recommendations/2015/BSAC2015_3LetterJWalesa250615FIN.pdf

⁹ As we have already done through the Baltic AC – see:

http://www.bsac.dk/archive/Dokumenter/Recommendations/2014/BSACcommentstothe%20Baltic%20MAP%20COM%202014_614%20.pdf

Condition 3 (1.1.3b)

2016 (November) - Fast track 2 (WKProxy method + further management needed)

The clients will, through the BSAC, support the proposed rebuilding timeframe in the new Baltic Management Plan (2020 at the latest).

2017 (November) - Main track 5 (Analytical assessment + further management needed)

The clients will, through the BSAC, support the proposed rebuilding timeframe in the new Baltic Management Plan (2020 at the latest), as well as the adoption of the Baltic management plan in 2016.

Condition 4 (1.2.1b)

2016 (June) - Fast track 1 (WKProxy method + good status)

If this is the case, there will be evidence that the harvest strategy is achieving its objective (in spite of our temporary lack of knowledge).

2017 (June): Main track 4 (Analytical assessment + good status)

If this is the case, there will be evidence that the harvest strategy is achieving its objective (in spite of our temporary lack of knowledge).

2017 (June and onwards): Other outcomes

Once an analytical or WKproxy based assessment is able to show the position of the stock in relation to the reference points, the application of the EU Management Plan (or ICES generic HCR) should lead to improved stock status – thus providing evidence that the harvest strategy is working.

Condition 5 (1.2.2a+b)

2016 (and onwards if necessary)

The clients will, through the BSAC, support the adoption of the new Baltic Management Plan with a target range of fishing mortalities in line with the MSY as well as special measures to reduce the mortality if the biomass falls below MSY Btrigger¹⁰.

2016 (November): Fast track 1+2 (WKProxy method)

The clients will support application of the ICES WKProxy based in the quota setting (either through the Management Plan or the ICES generic HCR).

2017 (November): Main track 4+5 (Analytical assessment)

The clients will support application of the ICES analytical advice in the quota setting (either through the Management Plan or the ICES generic HCR).

Condition 6 (1.2.3c)

With the introduction of the Landing Obligation it is expected (indeed intended) that targeting/catch composition patterns will change. This will inevitably lead to short term uncertainties in the estimates of the relative proportion of each size class (including above and below the Minimum Conservation Reference

¹⁰ As we have already done through the Baltic AC – see:

http://www.bsac.dk/archive/Dokumenter/Recommendations/2014/BSACcommentstothe%20Baltic%20MAP%20COM%202014_614%20.pdf

Size). The at-sea catch sampling program under the EU Data Collection Framework however continues to provide an independent check to the compositions registered by the fishermen at landing.

2017 – 2021 (or before)

The clients will continue to support the at-sea sampling and will provide the two data sets (composition of landings and estimated compositions from DCF sampling) after the end of each year to the CABs, until the certainty in the estimation has been reinstated and it can be concluded that there is good information on all removals from the stock (no later than five years after suspension).

Condition 7 (1.2.4a+c)

The clients have already urged ICES to do all that they can, to either be able to re-instate the analytical assessment or estimate proxy reference points¹¹ and will continue to support the efforts to improve the assessment.

2016 and onwards

The clients strongly support the work in TABCOD on reducing the age-reading uncertainties. All clients will communicate directly to each vessel in their fleet to remind them to be alert to the tags, and make sure they return as many as possible with the correct information to the scientists.

Conditions 1-5 and 7

2017 (June) Main track 6 (No resolution yet)

The clients will re-evaluate this action plan based upon the preliminary results of TABACOD and other developments since the start of the plan.

¹¹ See the attached letter to ICES.