

**ECOREGION** North Sea  
**SUBJECT** Request from the Netherlands on the evaluation of the long term management plan for sole and plaice in the North Sea (part 2)

**Request**

ICES is requested to:

*review the report "Ex post and ex ante evaluation of the long term management plan for sole and plaice in the North Sea (part 2): ex ante" and to assess whether the EU multi annual plan for management of sole and plaice in the North Sea" is precautionary or not. This report succeeds and replaces the earlier report of 2008 (Machiels et al. 2008). On the basis of this report, ICES assessed the flatfish plan in part as preliminary precautionary.*

**ICES Advice**

ICES has reviewed the evaluation report of the EU multi annual plan for management of sole and plaice in the North Sea and concludes that the multi annual plan is consistent with the precautionary approach.

**Basis for advice**Background

The EU established a multi-annual plan for fisheries exploiting stocks of plaice and sole in the North Sea (Council Regulation (EC) No 676/2007). Machiels *et al.* (2008) presented an evaluation of the management plan. The aim of the evaluation was to ensure that the management measures set out in the management plan are consistent with the precautionary approach to the management of the plaice and sole stocks. This evaluation was based on a range of scenarios concerning stock dynamics, technical interactions between sole and plaice fishing, and interpretations of the regulation itself. ICES conducted an independent review of this evaluation report, and concluded (ICES, 2008 (Section 6.4.7)) that the evaluation was deficient on some points. Because of these problems, ICES concluded that the management plan was only precautionary in parts as various aspects, particularly concerning the plaice stock, were undetermined.

In August 2010, ICES received the above request from the Netherlands to review a revised evaluation report (Miller and Poos, 2010). This second evaluation took account of the review comments from the 2008 evaluation, and also considered the latest available data and assessment models for the stocks. The 2008 evaluation only considered the precautionary aspects of the plan; the 2010 evaluation also considered whether the plan was consistent with the precautionary approach, but additionally considered whether the long term management of the stocks was consistent with the maximum sustainable yield principle.

The 2010 report confirmed the finding from the 2008 evaluation that the management plan is precautionary with regard to the North Sea sole stock, and concludes that the spawning stock biomass of plaice has a greater than 95% probability of remaining above Bpa in the medium term (which was questioned in 2008). Hence, the management plan is now considered precautionary for both stocks. The 2010 evaluation report is inconclusive concerning whether the management plan is consistent with principle of maximum sustainable yield. Current reference point estimates are provisional, and MSY reference points will be re-evaluated before 2012 advice. Uncertainty exists as to whether the MSY targets can be reached simultaneously for both stocks.

Three independent reviewers provided comments on the 2010 evaluation. All reviewers agreed with the overall conclusion of the report that the current management plan is consistent with the precautionary approach. However, all reviewers expressed concerns about how mixed-fisheries interactions were treated in the management plan. While a single species harvest control rule may be precautionary, the overall plan may not be when fishing is allowed to continue on one stock after the TAC has been attained for the other stock. Catches of the latter stock will then be discarded resulting in a fishing mortality above the harvest control rule target.

Consequently, the authors of the 2010 evaluation report were contacted to expand their analyses to also cover the mixed fishery situation. An updated report was received from the authors that incorporated new analyses and clarifications based on the reviewers' comments. The three independent reviewers were then invited to comment on the updated report. The reviewers agreed that the additional analyses indicated that mixed fishery effects are unlikely to compromise the precautionary nature of the management plan and the conclusion that the plan is in line with the precautionary

approach remains valid. The above-mentioned reservations on the consistency with the MSY approach was not analysed further in the updated report since the MSY reference points are to be re-evaluated.

### Sources

ICES. 2008. Report of the ICES Advisory Committee, 2008. ICES Advice, 2008.

Miller, C.M; J. J Poos 2010. Combined *Ex post* and *ex ante* evaluation of the long term management plan for sole and plaice in the North Sea, including responses to ICES review. ICES CM 2010/ACOM:62.

Machiels, M.A.M., Kraak, S.B.M., and Poos, J.J. 2008. Biological evaluation of the first stage of the management plan for fisheries exploiting the stocks of plaice and sole in the North Sea according to Council Regulation (EC) 676/2007. Report number CO31/08: 39 pp.