

## 16.4.8 Reopening of the advice

### Reopening of the advice provided in spring

ICES has a protocol for reopening fisheries advice for stocks when new information from fisheries-independent surveys becomes available after the advice has been issued. The protocol includes criteria for identifying candidate stocks for reopening the advice, based on analysis of whether the new survey information will significantly change the assessment of recruiting year classes.

### Fish stocks with information from bottom trawl surveys

The protocol was agreed by the ICES Advisory Committee (ACOM) following recommendations of the Workshop on North Sea Reopening Protocol (WKNSROP, ICES, 2021). This protocol replaces the previous protocol developed by the Ad hoc Group on Criteria for Reopening Fisheries Advice (AGCREFA; ICES, 2008) and used since 2008.

### Reopening Protocol

1. Reopening will only be considered for stocks where SSB at the end of the interim year is below  $MSY B_{trigger}$ .
2. Ages to consider for reopening check:
  - a) When selecting the ages to consider for the re-opening check, consideration should be given to how many times and to what extent a corresponding year-class has been observed in data sources used in the assessment (both fishery-dependent and -independent sources).
  - b) This will only be the first age used in the assessment. In all cases, only the selected age is checked for the re-opening protocol for recruitment.
  - c) For North Sea cod, the recruitment assumption in the TAC year also needs to be checked to confirm it is appropriate.
3. Reopening check for recruitment:
  - a) RCT3 to be used with the following settings:

Regression type	C
Tapered time weighting required	N*
Shrink estimates toward mean	N
Exclude surveys with SE's greater than that of mean	N
Enter minimum log S.E. for any survey	0.0
Min. no. of years for regression (3 is the default)	3
Apply prior weights to the surveys	N

\* Taper weighting may be required for saithe to deal with variable and high F on age 4 prior to 2000.

- b) Only indices with new information (not previously included in the assessment or spring forecast) about the year-class in question (step 1) to be included.
- c) Full time series of assessment estimates for selected age (step 1) to be included, apart from the final estimate if uncertainty considerations warrant its exclusion.
- d) Reopening triggered if  $|D| > 1$ , where  $D = (R-A)/S$  (Annex 3).

4. Forecast procedure once reopening is triggered based on recruitment (step 2):
  - a) Update the intermediate year F assumption, if the required intermediate year data are available, based on an intermediate-year landings constraint using the relationship between landings for quarters 1–2 or 1–3 (depending on available data) and the total landings for the year (Section 5.3 of ICES WKNSROP 2020 report).
  - b) For assessments that include intermediate year data:
    - Rerun the assessment with full data sets (including the new data).
    - Populate and rerun the forecast procedure with the resulting assessment estimates, and updated intermediate year F assumption (step 3a) if available.
  - c) For assessments that do not include intermediate year data:
    - Rerun RCT3 with the settings of step 2, but using all indices that include information about the most recent year-class corresponding to the age selected in step 1.
    - Rerun the forecast procedure, replacing the spring value for the given year-class with the resulting RCT3 estimate, and updating the intermediate year F assumption (step 3a) if available.
5. Procedure following reopening:
  - a) ACOM to be notified of stocks for which reopening is triggered, with accompanying revised forecasts, for approval.
  - b) Once approved, expert group to conduct audits and prepare revised advice sheets for the Advice Drafting Group, who will finalise advice for ACOM approval and release.

## References

- ICES. 2008. Report of the Ad hoc Group on Criteria for Reopening Fisheries Advice (AGCREFA), 20–22 August 2008, Copenhagen, Denmark. ICES CM 2008/ACOM:60. 30 pp.
- ICES. 2020. Workshop on the North Sea reopening protocol (WKNSROP). ICES Scientific Reports. 2:108. 74 pp. <http://doi.org/10.17895/ices.pub.7576>.

*Recommended citation:* ICES. 2021. Title. In Report of the ICES Advisory Committee, 2021. ICES Advice 2021, Book 16, section 16.4.8. <https://doi.org/10.17895/ices.advice.8595>.