

Annex 2: Recommendations

Recommendations from WGIDE 2020

Recommendations from WGIDE 2020 are listed in the table below. Background information for the recommendations is in the relevant chapters for the respective species.

Recommendation	Recipient:
1. It is recommended that an age reading exchange and a following workshop are held for Norwegian spring spawning herring. The work should also deal with issues related to the mixing of NSSH with adjacent herring stocks in the fringes of the distribution area. The workshop participants should be both age readers and participants with statistical, stock identification and stock assessment expertise. This relates to section 4.14 in the report.	WGBIOP; WGIPS
2. It is recommended to organise a workshop on evaluation of NEA mackerel stock components and regional management measures. The aim is to review information on stock identification, formulate scenarios for mackerel components and evaluate the basis and provide recommendations on how the results could be used in the context of the ICES advice.	ACOM; SIMWG

Comments to recommendation 2

Below is a suggestion for Terms of Reference for a workshop on evaluation of NEA mackerel stock components and regional management unit.

WKEVALMAC– Workshop on the Evaluation of NEA Mackerel stock components and regional management measures.

2020/2/FRSG43 A Workshop on the Evaluation of NEA Mackerel stock components and regional management measures (WKEVALMAC) chaired by xxx, yyy will meet from xxx by correspondence (Webex) to:

- a) Review information on stock identification of NEA Mackerel and comparative review of Atlantic mackerel population structure, including critical evaluation of inferences from each source of information, to build up a picture of mackerel components in the Northeast Atlantic, based on the following:
 - i) Distribution and movements of different life-stages of mackerel, including changes over time, inferred from:
 - 1) Mackerel Tagging
 - 2) Scientific Surveys
 - 3) Commercial landings
 - 4) Dispersal models (e.g. of mackerel eggs and larva/juveniles)
 - ii) Genetic analyses
 - iii) Other approaches not listed above
- b) Based on the evidence from ToR a, formulate scenarios for mackerel components in the Northeast Atlantic, and assess the evidence-based plausibility of each of these scenarios (including current definitions).
- c) Consider the practical implications, for data, particularly historical time-series of catch data, of each of the scenarios in ToR b and how any difficulties might be dealt with. For example, considering spatial components with mixing in a single model has different implications for

data compared to split stock units. Considerations should include how to deal with changes over time.

- d) Make recommendations for which mackerel stock scenario(s) to take forward in a future mackerel benchmark, including in what format data should be requested and prepared.
- e) Review and evaluate the basis and potential impacts of management measures targeted at specific areas or components of NEA mackerel (e.g. minimum landing size, closed areas, closed seasons, quota measures) and provide recommendations on how the results could be in the context of the ICES advice

The Workshop will report by xx for the attention of ACOM and FRSG.

Recommendations to WGWIDE 2020

There were two recommendations to WGWIDE 2020. They are listed in the table below together with the main response.

Recommendation	Recipient:	Response from WGWIDE 2020
ID141 from WGISDAA WGISDAA requests that WGWIDE produce a rerun of the latest NE Atlantic mackerel assessment with a shortened time series for the MEGS SSB index of the recent 5 surveys (2007-2019) to compare F, SSB and recruitment and management reference point estimates with the current full assessment.	WGWIDE	WGISDAA has been supplied with data and code to assess the impact of a shortened series of 'egg tuning series', on the NE Atlantic mackerel assessment.
ID207 from WGIPS Aim: To improve information sharing between WGIPS and assessment working groups with Survey Summary Tables Survey Summary Sheets have been developed by WGIPS in response to a previous request from assessment working groups. WGIPS requests that these groups (HAWG and WGWIDE) answer the assessment related questions at the bottom of the existing Survey Summary Sheet and return to WGIPS for review and feedback. The group would benefit greatly from feedback on any issues with annual survey data from WGIPS coordinated surveys and whether the WGIPS Survey Summary Sheets are fit for purpose.	WGWIDE; HAWG	The assessment related fields of the Survey Summary Tables will be filled in.

Status and follow-up on recommendations from WGWIDE 2019

Last year's meeting made five recommendations for other working groups. In the table below they are listed together with the status of the work.

Recommendation	Recipient:	Status
ID126. WGWIDE recommends that an age reading workshop on blue whiting must be conducted in the next years. Therefore it is important that the planned age-reading workshop for blue whiting will take place.	WGBIOP	Work is on-going with otolith exchange planned in winter 2020/2021 and workshop in summer 2021.
ID127. It is recommended that WGBIOP provides WGWIDE with the variance-covariance matrix for	WGBIOP	A discussion on some clarifying questions from WGBIOP revealed that WGWIDE needs age-error

Recommendation	Recipient:	Status
results of the age-reading by species (NSS herring, blue whiting NEA mackerel), for use in exploration of effects of ageing-errors on the assessments.		matrices for the three species - preferably with possibility for having separate age-error matrix for each catch-data deliverer.
ID128. It is recommended that a method is developed to calculate and provide uncertainty estimates around the SSB-estimate from the mackerel egg survey.	WGMEGS	Due to COVID a 1st part of the WGMEGS meeting was held in April 2020 in order to finalize results of the MEGS surveys. 2nd part of the meeting will be held 4-6 November to discuss other topics and answer recommendations.
ID129. It is recommended to undertake feasibility study with regard to surveys conducted in summer south of 60N to potentially extend swept area coverage outside the southern boundary of the current IESSNS-survey.	WGIPS	<p>It is not possible to use the existing acoustic surveys in the area, due to time limitations and possibly also engine-power limitations to operate the Multipeel trawl.</p> <p>Secondly, WGIPS recommended organising a workshop for analysing existing data, in order to establish the scientific value of swept-area estimates of mackerel in the top 30-40 m in the shelf-area south of 60°N, because mackerel is also found in the deeper layers in this region.</p> <p>This recommendation from WGIPS was found useful and preparations will take place in autumn 2020 to organise a workshop.</p>
<p>ID130. It is recommended to increase the spatial coverage of NS-IBTS Q1 or very late Q4 to include the south-western Norwegian shelf and shelf edge in proximity to the Norwegian trench.</p> <p>The IBTS has observed high catch rates in some years at the north-eastern edge of the survey area (towards the Norwegian trench) in winter. It is therefore possible that some recruits are also overwintering on the other side of the trench along the south western shelf edge of Norway.</p>	IBTSWG	<p>No conclusive answer could be given.</p> <p>Swedish and Norwegian vessels have taken extra stations on the shelf edge of the Norwegian trench in winter 2018/2019.</p> <p>Probably, this will only be possible in years with additional time at sea.</p>