

Request from	European Commission, DG MARE, Unit C5
Request announced	06 March 2023
Request received	
Answer deadline client	As early as possible
Request code (client)	23_10: EU-UK-NO_LTMS NS herring
Request code (ICES)	
Request	Joint EU-UK-Norway request to ICES to advise on a long-term management plan for North Sea herring autumn spawners in North Sea, Skagerrak and Kattegat and Eastern English Channel
<p>The European Union, Norway, and the United Kingdom jointly request ICES to advise on the long-term management strategies on North Sea autumn spawners herring (<i>Clupea harengus</i>) in Subarea 4 and divisions 3.a and 7.d, (North Sea, Skagerrak and Kattegat, eastern English Channel). A request is provided below.</p> <p>ICES is requested to identify appropriate precautionary combinations in the format of Tables given in its response to the EU, Norway and the United Kingdom request to ICES to evaluate a multi-annual management strategy for herring (<i>Clupea harengus</i>) in Subarea 4 and divisions 3.a and 7.d, autumn spawners (North Sea, Skagerrak and Kattegat, eastern English Channel) (her.27.3a47d), using:</p> <ul style="list-style-type: none"> • A harvest control rule with a fishing mortality equal to the target F when SSB is at or above $B_{trigger}$. In the case that the SSB is forecast to be less than $B_{trigger}$ at spawning time in the year for which the TAC is to be set, the TAC shall be fixed consistently with a fishing mortality that is given by: $F = F_{target} * SSB / B_{trigger}$ • A range of $B_{trigger}$ from 800 000 to 1 700 00 tonnes with a range of target Fs up to F_{Lim} • For the combinations above explore the following exploitation pattern scenarios: <ol style="list-style-type: none"> 1. Recent exploitation pattern (averaged over 2012-2021). 2. A historic exploitation pattern (averaged over 1998-2007). 3. Ranges of assumptions for values of F_{0-1} that vary between 0-0.1 independent from recent exploitation patterns for older fish (F_{2+}). 4. The recent exploitation pattern with $F_{0-1}=0$ from above contrasted with exploitation patterns moved to one year older and one year younger fish (three scenarios). <p>Long term goals:</p> <ul style="list-style-type: none"> • Maximise yield • Minimising the risk of falling below B_{lim} • Achieve stability of catches <p>All alternatives should be evaluated with and without a constraint on the inter-annual variation of TAC. When the rules would lead to a TAC, which deviates by more than 20% below or 25% above the TAC of the preceding year, the Parties shall fix a TAC that is respectively no more than 20% less or 25% more than the TAC of the preceding year. The TAC constraint shall not apply if the SSB at spawning time in the year for which the TAC is to be set is less or equal to $B_{trigger}$.</p> <p>The constraint mechanism shall be tested separately from and in combination with 10% banking and borrowing mechanism. Banking and borrowing should be suspended when SSB is below $B_{trigger}$.</p>	

Evaluation and performance criteria

Each alternative shall be assessed in relation to how it performs in the short term (5 years), medium term (next 10 years) and long term (next 25 years) in relation to:

- Average SSB
- Average yield
- Indicator for year to year variability in SSB and yield
- Risk of SSB falling below B_{lim}

ICES RESPONSE

In order to respond to this request fully an 18 month timeline is required. The process will start with a scoping meeting that should include the experts from HAWG and the advice requesters in order to best plan the work, and to make sure that experts understand well the details of the request included here. At this point a fuller response can be provided that will detail the forthcoming workplan. Below is an outline of the timeline as currently envisaged.

Description	Date	Meeting format and composition	Additional information
Scoping meeting	17-18 Jan-24	In-person + managers	ICES
	Mar-24		HAWG
Explorations meeting (WKM-SEHerring)	Sep-24	In-person + reviewers	TBD
Final explorations meeting (WKM-SEHerring)	Nov-24	On-line + managers	Decide on up to 3 HCR
	Mar-25		HAWG
	Apr-25		Report to ICES

At the scoping meeting, the specifications of the LTMS evaluations will be agreed on following the WGMSE2 template, including the operating models to use, performance statistics to be presented, and criteria to use in order to draw conclusions on the performance of the various MSEs. The approach and tools should be agreed upon for the evaluation at this point.

An in-person meeting with two reviewers present will take place approximately 6 months after the HAWG 2024. Inter-sessional work be presented at this meeting, and the exploration of different exploitation pattern scenarios will be undertaken, as agreed upon at the meeting in January. There will then be a final meeting in November of 2024 in order to review the final explorations that were not presented during the in-person meeting. A final meeting will take place the following year in order to tune the final model.

Following this process, HAWG will take place as normal in March of 2025 where the LTMS can be trialed. A final report will be ready for ICES by the of April 2025, alongside an advice sheet in response to this request.

Planning ICES	See above
WG(s) involved	HAWG, WKMSEHerring
Preparation timing	See above
Review group	RGMSEHER ongoing 2024 and 2025
Advice drafting group	ADGMSEHER March/April 2025
ACOM Webex	WCMSEHER April 2025
Release date	30 th April 2025

Grey cells to be filled in by ICES