Serial No. N7706 NAFO SCS Doc. 26/01

SCIENTIFIC COUNCIL - 2026

The Commission's Request for Scientific Advice on Management in 2027 and Beyond of Certain Stocks in Subareas 2, 3 and 4 and Other Matters

(from NAFO/COM Doc. 25-13)

Following a request from the Scientific Council, the Commission agreed that items 1 and 2 should be the priority for the June 2026 Scientific Council meeting subject to resources.

1. The Commission requests that the Scientific Council provide advice for the management of the fish stocks below according to the assessment frequency presented below. In line with the Revised NAFO Precautionary Approach Framework (COM Doc. 25-16) the Commission should be informed by the range of options and associated risks provided by the Scientific Council. The Commission will decide upon the acceptable risk level in the context of the entirety of the Scientific Council advice for each stock guided and as foreseen by the NAFO Precautionary Approach. The Commission acknowledges that full assessment cannot be run when a DE is not nominated for a stock.

Yearly basis	Two-year basis	Three-year basis	Interim Monitoring Only
Cod in Division 3M	Redfish in Division 3M Thorny skate in Divisions 3LNO Witch flounder in Divisions 3NO Redfish in Divisions 3LN Yellowtail flounder in Divisions 3LNO Northern shrimp in Division 3M White hake in Divisions 3NO American plaice in Divisions 3LNO	American plaice in Division 3M Northern shortfin squid in Subareas 3+4 Redfish in Division 3O Cod in Divisions 3NO	Subarea 6 Alfonsino Subareas 2-3 Roughhead Grenadier Capelin in Divisions 3NO

Advice should be provided using the guidance provided in **Annex A**, or using the predetermined Management Procedure in the cases where they exist (currently Greenland halibut 2+3KLMNO). For Division 3M shrimp supplementary advice in terms of fishing-days could also be considered as appropriate. To implement this schedule of assessments, the Scientific Council is requested to conduct a full assessment of these stocks as follows:

- In 2026, advice should be provided for 2027 for: Cod in Division 3M
- In 2026, advice should be provided for 2027 and 2028 for: Redfish in Division 3M, Thorny skate in Divisions 3LNO, Witch flounder in Divisions 3NO, Redfish in Divisions 3LN, Northern shrimp in Division 3M, American plaice in 3LNO.
    - With respect to Northern shrimp in Division 3M, Scientific Council is requested to provide its advice to the Commission prior to the 2026 Annual Meeting based on the survey data up to and including 2026.
- In 2026, advice should be provided for 2027, 2028 and 2029 for: American plaice in Division 3M

The Commission also requests the Scientific Council to continue to monitor the status of all other stocks annually and, should a significant change be observed in stock status (e.g. from surveys) or in bycatch in other fisheries, provide updated advice as appropriate.

2. The Commission requests the Scientific Council to monitor the status of Greenland halibut in Subarea 2 + Divisions 3KLMNO annually to compute the TAC using the agreed Management Procedure and determine whether exceptional circumstances are occurring. If exceptional circumstances are occurring, the exceptional circumstances protocol will provide guidance on what steps should be taken.

3. The Commission requests that Scientific Council, in addition to the 2026 3LN redfish stock assessment, continue to advance work on the 3LN redfish MSE processes during 2025-2026.

4. As practicable and taking into account Scientific Council capacity constraints, develop stock summary sheets for NAFO managed stocks that are evaluated using MSE processes.

5. In relation to the Ecosystem Roadmap as a whole, the Commission requests the Scientific Council, with input from the WG-EAFFM, to continue work on the development of a reference document detailing the ecosystem roadmap, for completion by the 2026 Annual Meeting.

6. In relation to the habitat impact assessment component of the Roadmap (VME and SAI analyses), the Commission requests that Scientific Council to:

    a. Continue to progress work on the centralized data repository using ArcGIS online to host the data and data-products for scientific advice, in conjunction with the NAFO Secretariat.

    b. Work towards the reassessment of VMEs and impact of bottom fisheries on VMEs for 2027; including potential management options in the reassessment of bottom fisheries.

    c. Develop materials on the potential of submitting NAFO coral bottom fishing closed areas as OECMs for discussion at the 2026 WG-EAFFM meeting.

7. The Commission requests the Scientific Council to continue to develop reference points to facilitate the implementation of the Revised NAFO Precautionary Approach Framework, for stocks that currently do not have them.

8. In relation to its workload, the Commission requests the Scientific Council to continue to update the 3-5 year work plan, which reflects requests arising from the 2025 Annual Meeting, other multi-year stock assessments and other scientific inquiries already planned for the near future and, as much as possible, monitor and estimate future workload.

9. The Commission requests the Scientific Council to explore the development of a sampling plan to conduct selectivity trials in the cod fishery in 3M. The objective is to collect data to test the effectiveness and impact of using sorting grids to improve the selectivity of cod and other species.

10. The Commission requests the Scientific Council, as workload allows, in consultation with the NAFO Secretariat, to draft a scoping document for a potential in-person meeting to explore approaches for further integrating information related to climate change throughout Scientific Council operations. This scoping document should identify the scientific expertise needed both within and outside Scientific Council and potential financial and workload implications.

11. Considering a new science and management framework for Northern shrimp in Divisions 2J3KLNO (SSAR) developed and peer-reviewed by Canada, which includes NAFO divisions 3LNO, the Commission tasks the Scientific Council to assess and consider the operational model underlining the MSE developed for the SSAR stock of shrimp by Canada. This assessment will be presented to the Commission at the 2026 Annual Meeting to inform management decisions.

12. The Commission requests the Scientific Council to consider a plan for carrying out benchmark assessments and include this in the 3-5 year work plan.

ANNEX A: Guidance for providing advice on Stocks Assessed

The Commission requests the Scientific Council to consider the following in assessing and projecting future stock levels for those stocks listed above. These evaluations should provide the information necessary for the Commission to consider the balance between risks and yield levels, in determining its management of these stocks:

Stochastic short-term projections (3 years) should be performed with the F levels that are included in the risk table from the Revised PA Framework (Table 1 below), based on the point estimate of biomass. The first year of the projection should assume a catch equal to the agreed TAC for that year. In instances where Scientific Council expects catches to be significantly different from the agreed TAC, an additional projection could be provided based on the best available catch estimation.

In relation to Tier 1 of the Roadmap Scientific Council should provide annually catch information in relation to 2TCI, including recent cumulative catch levels and a scoping of expected cumulative catch levels. Ecosystem summary sheets should be monitored annually and updated on a five-year cycle.

For stocks assessed with a production model, the advice should include updated time series or plots of:

- Catch and TAC of recent years
- Catch to relative biomass
- Relative Biomass
- Relative Fishing mortality
- Stock trajectory against precautionary approach reference points

For stock assessed with an age-structured model, information should be provided on stock size, spawning stock sizes, recruitment prospects, historical fishing mortality. Graphs and/or tables should be provided for all of the following for the longest time-period possible:

- historical yield and fishing mortality;
- spawning stock biomass and recruitment levels;
- Stock trajectory against precautionary approach reference points

For stocks for which only general biological and/or catch data are available, few standard criteria exist on which to base advice. The stock status should be evaluated in the context of management requirements for long-term sustainability and the advice provided should be consistent with the precautionary approach.

The following graphs should be presented for the longest time-period possible:

- catch and TAC of recent years
- length distributions
- time trends of survey abundance estimates
- an age or size range chosen to represent the spawning population
- an age or size-range chosen to represent the exploited population
- recruitment proxy or index for an age or size-range chosen to represent the recruiting population.
- fishing mortality proxy, such as the ratio of reported commercial catches to a measure of the exploited population.
- stock trajectory against precautionary approach reference points

In all cases any additional information the Scientific Council deems appropriate should be provided.

Table 1. The Revised NAFO Precautionary Approach Framework risk table.

y current year (year in which the assessment is made, data until year y-1)

	Yield			$P(F>F_{lim})$			$P(B<B_{lim})$				$P(F>F_{target})$			$P(B<B_{trigger})$				P(By+3 > By)	(By+3-By)/By
F in y+1 and following years	Yield y (50%)	Yield y+1 (50%)	Yield y+2 (50%)	y	y+1	y+2	y	y+1	y+2	y+3	y	y+1	y+2	y	y+1	y+2	y+3		
Critical Zone																			
F=0	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
F=X% current*	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
F current	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Cautious Zone																			
F lower edge leaf	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
F midrib leaf	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
F upper edge leaf	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Healthy Zone																			
F=0.75Fmsy	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Ftarget=0.85Fmsy	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Flim=Fmsy	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%

*X% may vary stock by stock. In the future, this framework may be modified to include F bycatch.
The number of years in the risk projections table will be the same as the years of advice.