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In all correspondence
please refer to:

NAFO/24-105

28 March 2024

TO: Scientific Council Representatives; and
Designated Experts for Stock Assessments

Dear Colleagues,

Subject: Provisional Agenda – *Meeting of the Scientific Council*, 31 May-13 June 2024

In accordance with Rule 4.1 of the *NAFO Rules of Procedure: Scientific Council*, the Provisional Agenda for the **Meeting of the Scientific Council, 31 May -13 June 2024** is hereby circulated to all Contracting Parties.

Please find enclosed the following:

- General Information (Appendix I)
- Provisional Agenda (Appendix II)
  - Requests for advice from the Commission (Annex 1),
  - coastal State request for advice from Denmark (on behalf of Greenland) (Annex 2),
  - coastal State request from Canada (Annex 3).
- Provisional Timetable (Appendix III)
- Experts for Preliminary Assessment of Certain Stocks (Appendix IV)
- Meeting Venue (Appendix V)
- Accommodation and Travel Information (Appendix VI)

All relevant meeting documentation will be accessible on the NAFO Meetings SharePoint (https://meetings.nafo.int/sc/2024/june) as it becomes available. We kindly ask your assistance in providing this information to the members of your meeting delegation.

Yours sincerely,

Brynhildur Benediktsdóttir
Executive Secretary

BB:dbm

APPENDIX I: GENERAL INFORMATION

Scientific Council Meeting, 31 May -13 June 2024

1. Agenda

In accordance with Rule 4.1 of the *NAFO Rules of Procedure: Scientific Council*, the Provisional Agenda for the **31 May -13 June 2024 Meeting of the Scientific Council** is hereby circulated to all Contracting Parties (Appendix II). This includes the requests for advice from the Commission (Annex 1), Denmark (on behalf of Greenland) (Annex 2) and Canada (Annex 3).

2. Time and Place

a) The Scientific Council and its Standing Committees will meet at the Saint Mary's University, 903 Robie St., Halifax, NS, Canada from 31 May -13 June 2024. Registration will begin at 0900 hours on 31 May 2024 in the on-site Secretariat office. In anticipation of continuing travel restrictions on some participants, provisions will also be made to allow participation by Webex.

b) The **Executive Committee** will meet at 0900 hours on 31 May 2024. The opening session of the **Scientific Council** will begin at 1000 hours on 31 May 2024.

c) The Provisional Timetable for the Scientific Council and its Standing Committees is in Appendix III.

3. Documentation

Documentation concerning the June 2024 Meeting is also on the Scientific Council SharePoint site (https://meetings.nafo.int/sc/2024/june - please contact the Secretariat if login information is required).

Designated Experts

a) Further to the Scientific Council nominations at its meetings in 2023, Designated Experts responsible for providing preliminary assessments for certain stocks to STACFIS are listed in Appendix IV.

b) The Scientific Council has recommended that National Representatives to the Scientific Council take an active role in ensuring that all data (see item 4 below), including the STATLANT 21A reports for 2023, are prepared and submitted to the Secretariat in advance of the meeting. Special attention is required of them to ensure Designated Experts receive the necessary data for assessments and other relevant data by **10 May 2024**.

c) Designated Experts are requested to forward their **assessment papers to reach the Secretariat before 24 May 2024**, for pre-meeting distribution. These preliminary assessments will be first issued as working papers and then will be revised as necessary before the end of the meeting for issue as formal documents. Papers sent to the Secretariat will be posted on the SC SharePoint site (see above).

Scientific Papers

a) Scientists submitting papers (Research Documents (SCR Docs), Summary Documents (SCS Docs)), for consideration at the Meeting are **requested to submit their papers in advance for pre-meeting distribution before 24 May 2024**. Title, Author(s) and Abstract (250 words or less) must be submitted in order for documents to be assigned a number. The Scientific Council prescribed format guidelines for preparation of scientific papers (and assessment papers) are given on the SharePoint site. All papers being submitted are requested in electronic form (MS Word compatible format). Documents must be presented to the meeting in person or by a designate.

b) Author(s) are requested to inform the Secretariat (personally or through the representative) at the time of submission, whether or not STACPUB should consider its suitability for publication in the *Journal of Northwest Atlantic Fishery Science* (information for preparing manuscripts for primary publications is given at https://jnafs.scholasticahq.com/for-authors).

4. Data Requirements

a) In accordance with the *Rules of Procedure: Scientific Council* (Rule 4.4), **STATLANT 21A** data from Contracting Parties containing provisional nominal catches in 2023 for all species by Division, are required to reach the Secretariat before the deadline of **01 May 2024**.

b) In accordance with the *Rules of Procedure: Scientific Council* (Rule 4.4), **STATLANT 21B** data from Contracting Parties containing final nominal catches and fishing effort in 2023 for all species by Division and Month, are required to reach the Secretariat before the deadline of **31 August 2024**.

Designated Experts should recognize that the STATLANT 21B returns for 2023 are not normally available for the June meeting.

This letter also serves as a reminder of other data requirements (NAFO/24-031):

- National Research Reports for 2023.
- Inventories of biological surveys in 2023 and planned for 2024 and early 2025.
- List of Biological sampling data for 2023.
- RV Surveys on a stock by stock basis by Designated Experts.

These should be submitted to reach the Secretariat by **10 May 2024**.

Similarly, environmental data to the Department of Fisheries and Oceans Canada, Oceans Science Branch, Marine Environmental Data Section (MEDS), formerly the Integrated Science Data Management (ISDM), to facilitate the work of the Standing Committee of Fisheries and Environment (STACFEN) should be submitted directly to MEDS (NAFO/24-030).

5. Representatives, Alternates, Experts and Advisers

In accordance with Rule 1 of the *Rules of Procedure: Scientific Council*, each Contracting Party shall notify the Executive Secretary of the names of its representatives, alternates, experts and advisers who will attend the meeting, before the commencement of the meeting.

6. Location

Information on the location (CLARI Hub (AT340), Atrium Building, Saint Mary's University, 903 Robie St., Halifax, NS, Canada) is given in Appendix V with additional travel information provided in Appendix VI.

APPENDIX II: PROVISIONAL AGENDA

Scientific Council Meeting, 31 May -13 June 2024

I. Opening (Scientific Council Chair: Diana González-Troncoso)
   1. Appointment of Rapporteur
   2 Presentation and Report of Proxy Votes
   3. Adoption of Agenda
   4. Attendance of Observers
   5. Appointment of Designated Experts
   6. Plan of Work
   7. Housekeeping issues

II. Review of Scientific Council Recommendations in 2023

III. Fisheries Environment (STACFEN Chair: Miguel Caetano)
   1. Opening
   2. Appointment of Rapporteur
   3. Adoption of Agenda
   4. Review of Recommendations in 2023
   5. Invited speakers
   6. Department of Fisheries and Oceans Canada, Oceans Science Branch, Marine Environmental Data Section (MEDS) Report for 2023
   7. Review of the physical, biological and chemical environment in the NAFO Convention Area during 2023
   8. Formulation of recommendations based on environmental conditions during 2023
   9. Other Matters
      a) Work planning for Commission request #10 "Addressing the Impacts of Climate Change on NAFO Fisheries and Ecosystems"
   10. Adjournment

IV. Publications (STACPUB Chair: Rick Rideout)
   1. Opening
   2. Appointment of Rapporteur
   3. Adoption of Agenda
   4. Review of Recommendations in 2023
   5. Review of Publications
      a) Annual Summary
         i) Journal of Northwest Atlantic Fishery Science (JNAFS)
         ii) Scientific Council Studies
         iii) Scientific Council Reports
   6. Other Matters
      a) Deadlines for report drafting
   7. Adjournment

V. Research Coordination (STACREC Chair: Mark Simpson)
   1. Opening
   2. Appointment of Rapporteur
   3. Review of Recommendations in 2023
   4. Fishery Statistics
      a) Progress report on Secretariat activities in 2023/2024
         i) Presentation of catch estimates from the CESAG, daily catch reports and STATLANT 21A and 21B
   5. Research Activities
      a) Biological sampling

i) Report on activities in 2023/2024
ii) Report by National Representatives on commercial sampling conducted
iii) Report on data availability for stock assessments (by Designated Experts)

b) Biological surveys
i) Review of survey activities in 2023 and early 2024 (by National Representatives and Designated Experts)
ii) Surveys planned for 2024 and early 2025

c) Tagging activities
d) Other research activities

6. Review of SCR and SCS Documents
7. Other Matters
a) Update on Canadian survey comparative fishing and conversion factors for new vessels
b) Update on inshore tagging of Greenland Halibut in 0A

8. Adjournment

VI. Fisheries Science (STACFIS Chair: Martha Krohn)

I. Opening
II. General Review of Catches and Fishing Activity
III. Stock Assessments
1. Greenland halibut (*Reinhardtius hippoglossoides*) in SA 0+1 offshore (full assessment)
2. Greenland halibut (*Reinhardtius hippoglossoides*) Div. 1A inshore Divs. 1BC inshore, Div. 1D inshore and Divs. 1EF inshore (full assessment)
3. Demersal redfish and deep-sea redfish (*Sebastes* spp.) in SA 1 (monitor)
4. Wolffish in SA 1 (monitor)
5. Golden redfish (*Sebastes norvegicus* aka *S. marinus*) in Div. 3M (monitor)
6. Cod (*Gadus morhua*) in Div. 3M (full assessment)
7. Redfish (*Sebastes mentella* and *Sebastes fasciatus*) in Div. 3M (full assessment)
8. American plaice (*Hippoglossoides platessoides*) in Div. 3M (monitor)
9. Cod (*Gadus morhua*) in Divs. 3NO (monitor)
10. Redfish (*Sebastes mentella* and *Sebastes fasciatus*) in Divs. 3L and 3N (full assessment)
11. American plaice (*Hippoglossoides platessoides*) in Divs. 3LNO (monitor)
12. Yellowtail flounder (*Limanda ferruginea*) in Divs. 3LNO (monitor)
13. Witch flounder (*Glyptocephalus cynoglossus*) in Divs. 3NO (full assessment)
14. Capelin (*Mallotus villosus*) in Divs. 3NO (monitor)
15. Redfish (*Sebastes mentella* and *Sebastes fasciatus*) in Div. 3O (monitor)
16. Thorny skate (*Amblyraja radiata*) in Divs. 3LNO and Subdiv. 3Ps(full assessment)
17. White hake (*Urophycis tenuis*) in Divs. 3NO and Subdiv. 3Ps(monitor)
18. Roughhead grenadier (*Macrourus berglax*) in SA 2 and 3 (monitor)
19. Greenland halibut (*Reinhardtius hippoglossoides*) in SA 2 + Divs. 3KLMNO (in MSE process: monitor, COM requests #2 and 4a)
20. Northern shortfin squid (*Illex illecebrosus*) in SA 3+4 (monitor)
21. Splendid alfonsino (*Beryx splendens*) in SA 6 (monitor)

IV. Other Matters
a) FIRMS Classification for NAFO Stocks
b) Other Business

V. Adjournment

VII. Management Advice and Responses to Special Requests (See Annex 1)

1. Fisheries Commission (Annex 1)

a) Request for Advice on TACs and Other Management Measures (request #1, Annex 1)

<u>For 2025</u>
- cod in Div. 3M
- redfish in Div. 3LN

<u>For 2025 and 2026</u>
- redfish in Div. 3M
- witch flounder in Div. 3NO
- thorny skate in Div. 3LNO

<u>For 2025, 2026 and 2027</u>
- American plaice in Div. 3LNO

b) Monitoring of Stocks for which Multi-year Advice was provided in 2022 or 2023 (request #1)
- golden redfish in Div. 3M
- American plaice in Div. 3M
- cod in Divs. 3NO
- yellowtail flounder in Divs. 3LNO
- redfish in Divs. 3O
- capelin in Divs. 3NO
- alfonsino stocks in the NAFO Regulatory Area
- roughhead grenadier in Subareas 2 and 3
- white hake in Divs. 3NO and Subdiv. 3Ps
- Northern shortfin squid in SA 3+4

c) Special Requests for Management Advice

i) Greenland halibut in Subarea 2 + Div 3KLMNO monitor, compute the TAC using the most recently agreed HCR and determine whether exceptional circumstances are occurring (request #2, Commission priority).

ii) Continue to advance work on the 2+3KLMNO Greenland halibut MSE processes as per the approved 2024 workplan (request #3a, Commission priority).

iii) Continue to advance work on the 3LN redfish MSE processes as per the approved 2024 workplan (request #3b, Commission priority).

iv) Provide catch information in relation to 2TCI, including recent cumulative catch levels and a scoping of expected cumulative catch levels (request #4a).

v) As practicable and taking into account Scientific Council capacity constraints, develop stock summary sheets for NAFO managed stocks that are evaluated using HCR or MSE processes (request #4b).

vi) Support the Secretariat in developing a centralized data repository using ArcGIS online to host the data and data-products for scientific advice (request #5a).

vii) Continue working with WG-EAFFM towards developing operational objectives for the protection of VMEs and biodiversity in the NRA (request #5b).

viii) Work towards the reassessment of VMEs and impact of bottom fisheries on VMEs for 2026 (request #5c).

ix) Continue progression on the review of the NAFO PA Framework in accordance to the PAF review work plan approved in 2020 and revised in 2023 (request #6).

x) Update the 3-5 year work plan, (request #7, Commission priority).

xi) Include any new Canadian stock assessments for cod 2J3KL (Canada), witch flounder 2J3KL (Canada) as an annex to the SC's annual report (request #8).

xii) Monitor and provide update on relevant research related to the potential impacts of activities other than fishing in the Convention Area, subject to the capacity of the Scientific Council (request #9).

xiii) Summarize the information it currently has available regarding the current and future impacts of climate change on NAFO-managed stocks, non-target species, and associated ecosystems; and identify any consequential data gaps, research needs and opportunities for productive research (request #10).

2. Coastal States
   a) Request by Denmark (Greenland) for Advice on Management in 2025 and 2026 (Annex 2)
      i) Greenland halibut SA 1 (inshore)
      ii) Monitoring of Stocks for which Multi-year Advice was provided in 2022 or 2023;
         - demersal redfish and deep-sea redfish (*Sebastes* spp.) in SA 1
         - wolffish in SA 1

   b) Request by Canada and Greenland for Advice on Management in 2024 and 2025 (Annex 2, Annex 3)
      i) Greenland Halibut, offshore.

VIII. Review of Future Meetings Arrangements
1. Scientific Council shrimp meeting, September 2024
2. Scientific Council, 23-27 September 2024
3. WG-ESA, 12-21 November 2024
4. Scientific Council, June 2025
5. Scientific Council (in conjunction with NIPAG), 2025
6. Scientific Council, Sep. 2025
7. WG-ESA, Nov. 2025
8. NAFO/ICES Joint Groups
   a) NIPAG
   b) WG-DEC
   c) WG-HARP

IX. Arrangements for Special Sessions

1. 11th International flatfish symposium
   Postponed from 2020, this will be held from 25 to 28 November 2024 in in Wageningen, the Netherlands. NAFO agreed to sponsor the symposium in 2020.
2. EAFM Symposium, 2025
   Subject to confirmation, this will be a NAFO/ICES/FAO symposium, and is planned to be held in Rome during March/April 2025.
3. Topics for future Special Sessions

X. Meeting Reports
1. Working Group on Ecosystem Science and Assessment (WG-ESA), 14-23 November 2023
2. Report from ICES-NAFO Working Group on Deepwater Ecosystems (WG-DEC), 25-29 March 2024
3. Meetings attended by the Secretariat

XI. Review of Scientific Council Working Procedures/Protocol
1. General Plan of Work for September 2024 Annual Meeting
2. Priority actions for Scientific Council from the Performance Review Panel WG (adopted by the NAFO Commission in September 2019)

XII. Other Matters

1. Designated Experts
2. Election of Chairs
3. Budget items
4. Other Business
    a) SC meeting format
    The efficiency WG asked all NAFO bodies to consider whether meetings should continue to be in hybrid format.
    b) SC workload discussions
    Report on the small group discussions with SC and Com. Chairs.

    c) Deadlines for submission of documents and data for SC meetings.

XIII. Adoption of Committee Reports

1. STACFEN
2. STACREC
3. STACPUB
4. STACFIS

XIV. Scientific Council Recommendations to Commission

XV. Adoption of Scientific Council Report

XVI. Adjournment

ANNEX 1. COMMISSION'S REQUEST FOR SCIENTIFIC ADVICE ON MANAGEMENT IN 2025 AND BEYOND OF CERTAIN STOCKS IN SUBAREAS 2, 3 AND 4 AND OTHER MATTERS (NAFO SCS Doc. 24/01)

Following a request from the Scientific Council, the Commission agreed that items 1, 2, 3 and 7 should be the priority for the June 2024 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 keeping with the NAFO Precautionary Approach Framework (FC Doc. 04/18), the advice should be provided as a range of management options and a risk analysis for each option without a single TAC recommendation. The Commission will decide upon the acceptable risk level in the context of the entirety of the SC advice for each stock guided and as foreseen by the Precautionary Approach.

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

Advice should be provided using the guidance provided in **Annexes A or B as appropriate**, or using the predetermined Harvest Control Rules in the cases where they exist (currently Greenland halibut 2+3KLMNO). For 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 2024, advice should be provided for 2025 for: Cod in Div. 3M and Redfish in Div. 3LN.
- In 2024, advice should be provided for 2025 and 2026 for: Redfish in Div. 3M, Thorny skate in Div. 3LNO, Witch flounder in Div. 3NO and Northern shrimp in 3M.
    - With respect to Northern shrimp in Div. 3M, Scientific Council is requested to provide its advice to the Commission prior to the 2024 Annual Meeting based on the survey data up to and including 2024.
- In 2024, advice should be provided for 2025, 2026 and 2027 for: American plaice in Div. 3LNO.

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 + Div 3KLMNO annually to compute the TAC using the most recently agreed HCR 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 continue to advance work on the 2+3KLMNO Greenland halibut and 3LN redfish MSE processes during 2023-2024, as per the approved 2024 workplan [COM-SC RBMS-WP 23-06 (Rev. 3)]:
    a. For the Greenland Halibut MSE: test Candidate Management Procedures (CMP) performance against established management objectives and initial discussions on exceptional circumstances protocol.

b. For the 3LN Redfish MSE: (1) review and finalize Operating Models, (2) review any further work on performance statistics; (3) select the CMP(s) for RBMS consideration and potential testing against established management objectives.

4. The Commission requests that the Scientific Council continue to work on tiers 1 and 2 of the Roadmap, specifically to:
   a. Annually provide catch information in relation to 2TCI, including recent cumulative catch levels and a scoping of expected cumulative catch levels;
   b. As practicable and taking into account Scientific Council capacity constraints, develop stock summary sheets for NAFO managed stocks that are evaluated using HCR or MSE processes.

5. In relation to the habitat impact assessment component of the Roadmap (VME and SAI analyses), the Commission requests that Scientific Council:
   a. Support the Secretariat in developing a centralized data repository using ArcGIS online to host the data and data-products for scientific advice;
   b. Continue working with WG-EAFFM towards developing operational objectives for the protection of VMEs and biodiversity in the NRA; and
   c. Work towards the reassessment of VMEs and impact of bottom fisheries on VMEs for 2026.

6. The Commission requests Scientific Council to continue progression on the review of the NAFO PA Framework in accordance to the PAF review work plan approved in 2020 and revised in 2023 (NAFO COM-SC RBMS-WP 23-19 (Revised)), specifically to undertake testing of the Provisional Draft PA Framework (COM-SC RBMS-WP 23-20 (Revised)).

7. The Commission requests Scientific Council to update the 3-5 year work plan, which reflects requests arising from the 2023 Annual Meeting, other multi-year stock assessments and other scientific inquiries already planned for the near future. The work plan should identify what resources are necessary to successfully address these issues, gaps in current resources to meet those needs and proposed prioritization by the Scientific Council of upcoming work based on those gaps.

8. The Commission requests that any new Canadian stock assessments for Cod 2J3KL and Witch flounder 2J3KL, and any new ICES stock assessments for Pelagic *Sebastes mentella* (ICES Divisions V, XII and XIV; NAFO 1) be included as an annex to the Scientific Council's annual report.

9. The Commission requests the SC to monitor and provide regular updates on relevant research related to the potential impacts of activities other than fishing in the Convention Area, subject to the capacity of the Scientific Council.

10. The Commission requests that the Scientific Council at its 2024 meeting: summarize the information it currently has available regarding the current and future impacts of climate change on NAFO-managed stocks, non-target species, and associated ecosystems; and identify any consequential data gaps, research needs and opportunities for productive research.

ANNEX A: Guidance for providing advice on Stocks Assessed with an Analytical Model

The Commission request 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 Fisheries Commission to consider the balance between risks and yield levels, in determining its management of these stocks:

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

- Catch and TAC of recent years
- Catch to relative biomass
- Relative Biomass
- Relative Fishing mortality
- Stock trajectory against reference points
- And any information the Scientific Council deems appropriate.

Stochastic short-term projections (3 years) should be performed with the following constant fishing mortality levels as appropriate:

- For stocks opened to direct fishing: 2/3 F_{msy}, 3/4 F_{msy}, 85% F_{msy}, 90% F_{msy},95% F_{msy}, F_{msy} 0.75 X $F_{status\ quo}$, $F_{status\ qu}$,1.25 X Status quo, F=0; TAC Status quo, 85% TAC Status quo, 90% TAC Status quo, 95% TAC Status quo
- For stocks under a moratorium to direct fishing: $F_{status\ quo}$, F = 0.

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.

Results from stochastic short-term projection should include:

- The 10%, 50% and 90% percentiles of the yield, total biomass, spawning stock biomass and exploitable biomass for each year of the projections
- The risks of stock population parameters increasing above or falling below available biomass and fishing mortality reference points. The table indicated below should guide the Scientific Council in presenting the short-term projections.

				Limit reference points														
				$P(F>F_{lim})$			$P(B<B_{lim})$				$P(F>F_{msy})$			$P(B<B_{msy})$				$P(B2026 > B2024)$
F in 2025 and following years	Yield 2024 (50%)	Yield 2025 (50%)	Yield 2026 (50%)	2024	2025	2026	2024	2025	2026		2024	2025	2026	2024	2025	2026		
2/3 Fmsy	t	t	t	%	%	%	%	%	%		%	%	%	%	%	%		%
3/4 Fmsy	t	t	t	%	%	%	%	%	%		%	%	%	%	%	%		%
85% Fmsy	t	t	t	%	%	%	%	%	%		%	%	%	%	%	%		%
90% Fmsy	t	t	t															
95% Fmsy	t	t	t															
Fmsy	t	t	t	%	%	%	%	%	%		%	%	%	%	%	%		%
0.75 X Fstatus quo	t	t	t	%	%	%	%	%	%		%	%	%	%	%	%		%
Fstatus quo	t	t	t	%	%	%	%	%	%		%	%	%	%	%	%		%
1.25 X Status quo	t	t	t	%	%	%	%	%	%		%	%	%	%	%	%		%
F=0	t	t	t	%	%	%	%	%	%		%	%	%	%	%	%		%
TAC Status quo																		
85% TAC Status quo																		
90% TAC Status quo																		
95% TAC Status quo																		

2. 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 reference points

And any information the Scientific Council deems appropriate

Stochastic short-term projections (3 years) should be performed with the following constant fishing mortality levels as appropriate:

- For stocks opened to direct fishing: $F_{0.1}$, F_{max}, 2/3 F_{max}, 3/4 F_{max}, 85% F_{max}, 75% $F_{status\ quo}$, $F_{status\ quo}$, 125% $F_{status\ quo}$,
- For stocks under a moratorium to direct fishing: $F_{status\ quo}$, F = 0.
  The first year of the projection should assume a catch equal to the agreed TAC for that year.

Results from stochastic short-term projection should include:

- The 10%, 50% and 90% percentiles of the yield, total biomass, spawning stock biomass and exploitable biomass for each year of the projections
- The risks of stock population parameters increasing above or falling below available biomass and fishing mortality reference points. The table indicated below should guide the Scientific Council in presenting the short-term projections.

				Limit reference points													
				P(F>F_{lim})			P(B<B_{lim})			P(F>F0.1)			P(F>F_{max})			P(B2026> B2024)
F in 2025 and following years*	Yield 2024	Yield 2025	Yield 2026	2024	2025	2026	2024	2025	2026	2024	2025	2026	2024	2025	2026	
F0.1	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%
F_{max}	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%
66% F_{max}	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%
75% F_{max}	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%
85% F_{max}	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%
0.75 X F_{2018}	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%
F_{2018}	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%
1.25 X F_{2018}	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%

ANNEX B. Guidance for providing advice on Stocks Assessed without a Population Model

For those resources 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 one or several surveys, for the longest time-period possible:

a. time trends of survey abundance estimates
b. an age or size range chosen to represent the spawning population
c. an age or size-range chosen to represent the exploited population
d. recruitment proxy or index for an age or size-range chosen to represent the recruiting population.
e. fishing mortality proxy, such as the ratio of reported commercial catches to a measure of the exploited population.
f. Stock trajectory against reference points

And any information the Scientific Council deems appropriate.

ANNEX 2. DENMARK (ON BEHALF OF GREENLAND) REQUESTS FOR SCIENTIFIC ADVICE ON MANAGEMENT IN 2025 AND BEYOND OF CERTAIN STOCKS IN SUBAREA 0 AND 1

(from SCS Doc. 24/03)

Denmark (on behalf of Greenland) Coastal State Request for Scientific Advice – 2025

Denmark (on behalf of Greenland) hereby requests for scientific advice on management in 2025 of certain stocks in NAFO Subareas 0 and 1. Denmark (on behalf of Greenland) requests the Scientific Council for advice on the following species:

1. Golden Redfish and Demersal Deep-Sea Redfish

Advice on Golden redfish (*Sebastes marinus*) and demersal deep-sea redfish (*Sebastes mentella*) in Subarea 1 was in June 2023 given for 2024-2026. The Scientific Council is requested to continue its monitoring of the above stocks and provide updated advice as appropriate in the event of significant changes in stock levels.

2. Atlantic Wolffish and Spotted Wolffish

Advice on Atlantic Wolffish (*Anarhichas lupus*) and Spotted Wolffish (*Anarhichas minor*) in Subarea 1 was in June 2023 given for 2024-2026. The Scientific Council is requested to continue its monitoring of the above stocks and provide updated advice as appropriate in the event of significant changes in stock levels.

3. Greenland Halibut, Offshore

Advice on Greenland Halibut, Offshore in Subareas 0 and 1 was in 2022 given for 2023 and 2024. Denmark (on behalf of Greenland) requests the Scientific Council to provide updated advice on appropriate TAC levels for 2025 to 2026.

4. Greenland Halibut, Inshore, West Greenland

Advice on the inshore stocks of Greenland Halibut in Subarea 1 was in 2022 given for 2023-2024. Denmark (on behalf of Greenland) requests the Scientific Council to provide advice on appropriate TAC levels for 2025 to 2026. If appropriate, Denmark (on behalf of Greenland) would request the Scientific Council to use an MSY-approach.

5. Northern Shrimp, West Greenland

Subject to the concurrence of Canada as regards to Subareas 0 and 1, Denmark (on behalf of Greenland) requests the Scientific Council before December 2024 to provide advice on the scientific basis for management of Northern Shrimp (Pandalus borealis) in Subareas 0 and 1 in 2025 in line with Greenland's stated management objective of maintaining a mortality risk of no more than 35% in the first year prediction and to provide a catch option table ranging with 5,000 t increments. Future catch options should be provided for as many years as data allows for.

6. Northern Shrimp, East Greenland

Furthermore, the Scientific Council is in cooperation with ICES requested to provide advice on the scientific basis for management of Northern Shrimp (*Pandalus borealis*) in Denmark Strait and adjacent waters east of southern Greenland in 2025 and for as many years ahead as data allows for.

ANNEX 3. REQUESTS FROM CANADA FOR COASTAL STATE ADVICE IN 2025

(from SCS Doc. 24/04)

Canada would like to submit its request to the Scientific Council for advice on the following species:

1. Greenland halibut (Subarea 0 + 1 (offshore))

The Scientific Council is requested to provide an overall assessment of status and trends in the total stock area throughout its range and to specifically advise on TAC levels for 2025 and 2026. The stock status should be evaluated in the context of management requirements for long-term sustainability and the advice provided should be consistent with NAFO's Precautionary Approach Framework.

It is noted that at this time only general biological advice and/or catch data are available, and few standard criteria exist on which to base advice. Canada encourages the Scientific Council to continue to explore a model-based approach to bridge survey time series (i.e. data from the RV Paamiut and RV Tarajoq), and opportunities to develop risk-based advice in the future, noting that data conditions do not allow for such advice at this time.

2. Northern shrimp (Subarea 1 and Division 0A)

Canada requests that the Scientific Council consider the following options in assessing and projecting future stock levels for Northern shrimp (*Pandalus borealis*) in Subarea 1 and Division 0A:

The status of the stock should be determined and risk-based advice provided for catch options corresponding to Z_{msy} in 5,000t increments with forecasts for 2025 to 2027 (inclusive). These options should be evaluated in relation to Canada's Harvest Strategy (2022 revised version attached) and NAFO's Precautionary Approach Framework.

Presentation of the results should include graphs and/or tables related to the following:

- Historical and current yield, biomass relative to B_{msy}, total mortality relative to Z_{msy}, and recruitment (or proxy) levels for the longest time period possible;
- Total mortality (Z) and fishable biomass for a range of projected catch options (as noted above) for the years 2025 to 2027. Projections should include both catch options and a range of effective cod predation biomass levels considered appropriate by the Scientific Council. Results should include risk analyses of falling below: B_{msy}, 80% B_{msy} and B_{lim} (30% B_{msy}), and of being above Z_{msy} based on the 3-year projections, consistent with the Harvest Decision Rules in Canada's Harvest Strategy; and
- Total area fished for the longest time period possible.

Please provide the advice relative to Canada's Harvest Strategy as part of the formal advice (i.e., grey box in the advice summary sheet).

APPENDIX III: PROVISIONAL TIMETABLE

Scientific Council Meeting, 31 May -13 June 2024

Date	Time	Schedule
31 May (Friday)	0900	Registration, network connection
	0900-0930	SC Executive
	1000-1030	SC Opening
	1100-1200	STACFIS (Catch WG report, status of documentation, interim monitoring reports)
	1200-1300	Break
	1300-1800	STACFIS/STACFEN
01 June (Saturday)	0900-1200	STACFEN
	1300-1800	Scientific Council/STACFIS
	1830-2030	Scientific Council Reception/event
02 June (Sunday)	No meetings	
03 June (Monday)	0900-1200	STACPUB
	1300-1800	STACREC
04 June (Tuesday)	0900-1800	STACFIS/SC
05 June (Wednesday)	0900-1200	STACFIS/SC
	1300-1800	STACFIS/SC
06 June (Thursday)	0900-1800	STACFIS/SC
07 June (Friday)	0900-1800	STACFIS/SC
08 June (Saturday)	0900-1800	STACFIS Reports
09 June (Sunday)	No meetings	
10 June (Monday)	0830	Scientific Council Executive
	0900-1800	Scientific Council (Standing Committee Reports)
11 June (Tuesday)	0900-1800	Scientific Council
12 June (Wednesday)	0900-1800	Scientific Council
13 June (Thursday)	0900-1800	Scientific Council (advice and adoption of reports)

APPENDIX IV: EXPERTS FOR PRELIMINARY ASSESSMENT OF CERTAIN STOCKS

Designated Experts for 2024:

From the Science Branch, Northwest Atlantic Fisheries Centre, Department of Fisheries and Oceans, St. John's, Newfoundland & Labrador, Canada

Cod in Div. 3NO	Rick Rideout	rick.rideout@dfo-mpo.gc.ca
Redfish Div. 3O	Laura Wheeland	laura.wheeland@dfo-mpo.gc.ca
Redfish Div. 3LN	Andrea Perreault	andrea.perreault@dfo-mpo.gc.ca
American Plaice in Div. 3LNO	Laura Wheeland	laura.wheeland@dfo-mpo.gc.ca
Witch flounder in Div. 3NO	Dawn Maddock Parsons	dawn.parsons@dfo-mpo.gc.ca
Yellowtail flounder in Div. 3LNO	Dawn Maddock Parsons	dawn.parsons@dfo-mpo.gc.ca
Greenland halibut in SA 2+3KLMNO	Paul Regular	paul.regular@dfo-mpo.gc.ca
Northern shrimp in Div. 3LNO	Nicolas Le Corre	nicolas.lecorre@dfo-mpo.gc.ca
Ecosystem Designated Expert 3LNO	Robert Deering	robert.deering@dfo-mpo.gc.ca

From the Instituto Español de Oceanografia, Vigo (Pontevedra), Spain

Roughhead grenadier in SA 2+3	Fernando Gonzalez-Costas	fernando.gonzalez@ieo.csic.es
Splendid alfonsino in Subarea 6	Fernando Gonzalez-Costas	fernando.gonzalez@ieo.csic.es
Cod in Div. 3M	Irene Garrido Fernández	irene.garrido@ieo.csic.es
Northern Shrimp in Div. 3M	Jose Miguel Casas Sanchez	mikel.casas@ieo.csic.es
Ecosystem Designated Expert 3M	Diana Gonzalez-Troncoso	diana.gonzalez@ieo.csic.es

From the Instituto Nacional de Recursos Biológicos (INRB/IPMA), Lisbon, Portugal

American plaice in Div. 3M	Ricardo Alpoim	ralpoim@ipma.pt
Golden redfish in Div. 3M	Ricardo Alpoim	ralpoim@ipma.pt
Redfish in Div. 3M	Ricardo Alpoim	ralpoim@ipma.pt

From the Greenland Institute of Natural Resources, Nuuk, Greenland

Greenland halibut in SA 0+1 (offshore)	Adriana Nogueira	adno@natur.gl
Demersal Redfish in SA1	Rasmus Nygaard	rany@natur.gl
Wolfish in SA1	Rasmus Nygaard	rany@natur.gl
Greenland halibut in Div. 1 inshore	Rasmus Nygaard	rany@natur.gl
Northern shrimp in SA 0+1	AnnDorte Burmeister	anndorte@natur.gl
Northern shrimp in Denmark Strait	Tanja B. Buch	TaBb@natur.gl

From Knipovich Polar Research Institute of Marine Fisheries and Oceanography (PINRO), Russian Federation

Capelin in Div. 3NO	Konstantin Fomin	fomin@pinro.ru

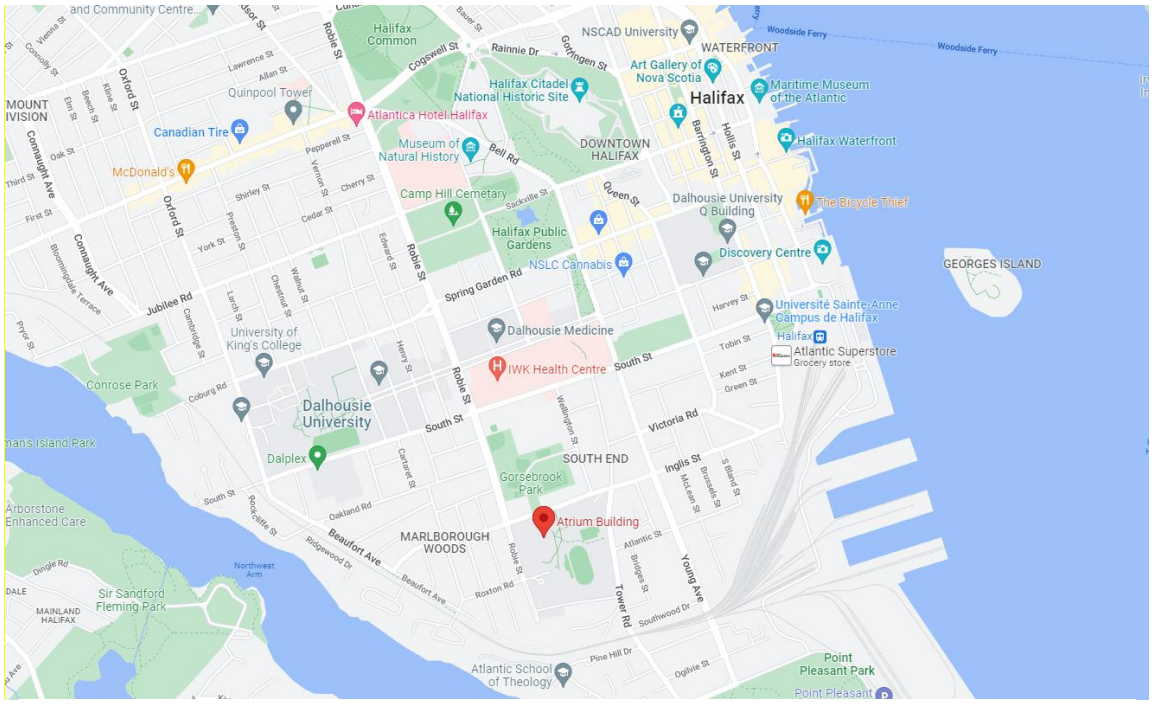
From National Marine Fisheries Service, NEFSC, Woods Hole, Massachusetts, United States of America

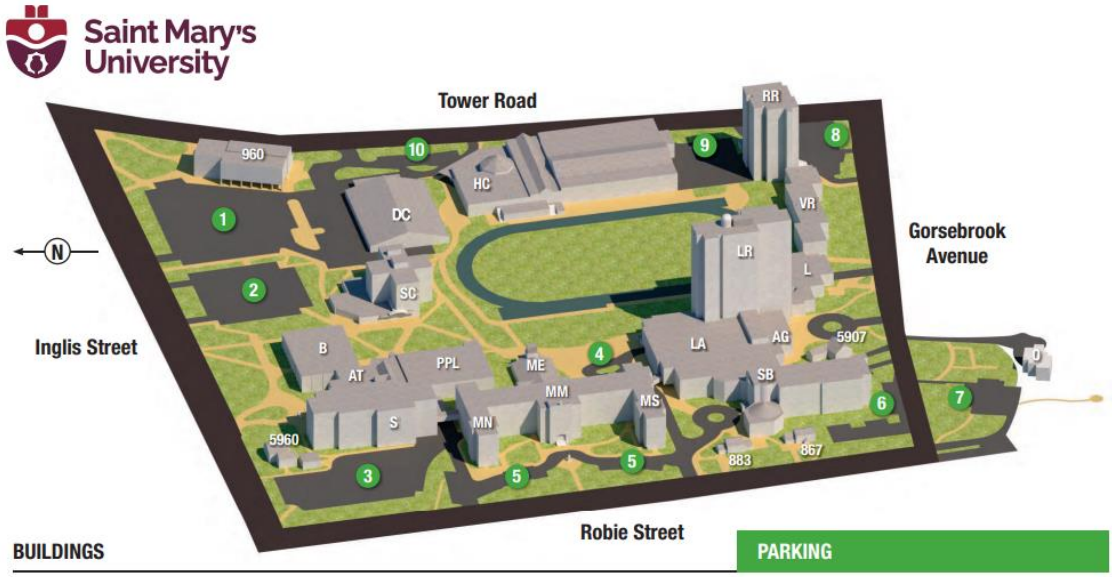
Northern Shortfin Squid in SA 3 & 4	Lisa Hendrickson	lisa.hendrickson@noaa.gov
Thorny skate in Div. 3LNO	Katherine Sosebee	katherine.sosebee@noaa.gov
White hake in Div. 3NO	Katherine Sosebee	katherine.sosebee@noaa.gov

APPENDIX V: MEETING VENUE

Map of Halifax showing Meeting Venue

CLARI Hub (AT340), Atrium Building, Saint Mary's University,
903 Robie Street, Halifax, NS, Canada, B3H 3C3





BUILDINGS

AG	Art Gallery
AT	Atrium
B	Burke Building
DC	The Dauphinee Centre
HC	Homburg Centre for Health &
L	Wellness Link Building
LA	Loyola Academic Complex
LR	Loyola Residence
ME	McNally East
MM	McNally Main
MN	McNally North
MS	McNally South
O	The Oaks
PPL	Patrick Power Library
RR	Rice Residence
S	Science Building
SB	Sobey Building
SC	O'Donnell Hennessey Student Centre
VR	Vanier Residence
867	867 Robie St.
883	883 Robie St.
960	960 Tower Rd.
5907	5907 Gorsebrook Ave.
5960	5960 Inglis St.

PARKING

1.	Arena - General, Meters, Accessible
2.	Inglis Street - General, Pay & Display
3.	Science - General, Meters, Faculty, Accessible
4.	McNally East - Meters, Accessible
5.	McNally Main - Faculty, Accessible
6.	Sobey / Gorsebrook - General, Faculty
7.	Oaks - General
8.	Rice - General, Meters, Accessible
9.	Homburg Members Parking Only
10.	Tower Rd - Meters, Accessible

APPENDIX VI. ACCOMMODATION AND TRAVEL INFORMATION

Meeting Venue
The meeting will be held at:

CLARI Hub (AT340), Atrium Building,
Saint Mary's University,
903 Robie Street,
Halifax, NS, Canada, B3H 3C3

Hotel Accommodations
Saint Mary's University provides over 700 modern, comfortable and affordable residence beds to conference delegates and tourists from May to August. Rates include taxes, daily hot buffet breakfast, parking, wireless internet and athletic passes. Please note, housekeeping and kitchenware are not provided with the units. You can find more information about SMU accommodations on the University website.

Reservations
Reservations are to be made by participants directly with the University. Reservations can be made by telephone or email; please notify them you are with NAFO when booking:

Toll-Free: 1-888-347-5555 (Canada and US only)
Email: stay@smu.ca

Alternative Accommodations
There are a variety of hotels in close vicinity to the meeting venue including:

Hotel
Atlantica Hotel Halifax - https://www.atlanticahotelhalifax.com/ 1980 Robie Street, Halifax, NS B3H 3G5 Ph: +1 (902) 423-1161
The Lord Nelson - http://www.lordnelsonhotel.ca/ 1515 South Park Street, Halifax, NS B3J 2L2 Ph: +1 (902) 423-6331
The Westin - http://www.thewestinnovascotian.com 1181 Hollis Street, Halifax, NS B3H 2P6 Ph: +1 (902) 421-1000

Many people choose to stay in the downtown core of Halifax closer to a greater selection of restaurants and entertainment. You can find a list of accommodations and visitor information on our website.

For those participants choosing not to stay at the meeting venue, Saint Mary's University is conveniently located on several major bus routes.

On-campus dining options
Saint Mary's University has a variety of dining option. A full list of on campus dining options including open times and menus can be found here.

Electronic Travel Authorization (eTA)

Most travellers need a visa or an Electronic Travel Authorization (eTA) to fly to, or transit through, a Canadian airport. The eTA can be completed online and costs CAD $7.00. You can find more information about applying for an eTA here.