

Northwest Atlantic Fisheries Organization



**Report of the NAFO Commission and its Subsidiary Bodies
(STACTIC and STACFAD)**

44th Annual Meeting of NAFO
19-23 September 2022
Porto, Portugal

NAFO
Halifax, Nova Scotia, Canada
2022

**Report of the NAFO Commission and its Subsidiary Bodies
(STACTIC and STACFAD)**

44th Annual Meeting of NAFO, 19-23 September 2022
Porto, Portugal

PART I. Report of the NAFO Commission.....	6
I. Opening Procedure.....	6
1. Opening by the Acting Chair, Deirdre Warner-Kramer (United States of America).....	6
2. Appointment of Rapporteur.....	6
3. Adoption of Agenda.....	6
4. Admission of Observers.....	6
5. Publicity.....	7
II. Supervision and Coordination of the Organizational, Administrative and Other Internal Affairs.....	7
6. Review of Membership of the Commission.....	7
7. Administrative and Activity Report by NAFO Secretariat.....	7
8. Recruitment of NAFO Executive Secretary for the 2023-2026 term.....	7
9. NAFO Headquarters Agreement.....	7
10. Review of the list of experts to serve as panelists under the NAFO Dispute Settlement provisions.....	7
11. Guidance to STACFAD.....	7
12. Guidance to STACTIC.....	7
III. Coordination of External Affairs.....	8
13. Report of Executive Secretary on External Meetings.....	8
14. International Relations.....	8
a. Relations with other International Organizations.....	8
b. NAFO Members as Observers to External Meetings.....	8
c. Areas Beyond National Jurisdiction (ABNJ) Deep-Sea Fisheries Project.....	9
d. Memorandum of Understanding (MOU) between the NAFO Secretariat and the Secretariat of the Sargasso Sea Commission.....	9
15. Oil and Gas Activities in the NAFO Regulatory Area.....	9
IV. Joint Session of Commission and Scientific Council.....	10
16. Implementation of 2018 Performance Review Panel recommendations.....	10
17. Presentation of scientific advice by the Chair of the Scientific Council.....	10
a. Response of the Scientific Council to the Commission's request for scientific advice.....	10
b. Feedback to the Scientific Council regarding the advice and its work during this meeting.....	11
c. Other issues as determined by the Chairs of the Commission and the Scientific Council.....	11
18. Meeting Reports and Recommendations of the Joint Commission-Scientific Council Working Groups.....	12
a. Joint Commission-Scientific Council Working Group on Improving Efficiency of NAFO Working Group Process (E-WG), 2021.....	12
b. Joint Commission-Scientific Council Working Group on Risk-based Management Strategies (WG-RBMS), August 2022.....	12

c.	Joint Commission–Scientific Council Working Group on Ecosystems Approach Framework to Fisheries Management (WG-EAFFM), August 2022	12
d.	Joint Commission–Scientific Council Catch Estimation Strategy Advisory Group (CESAG), April 2022	13
19.	Formulation of Request to the Scientific Council for Scientific Advice on the Management in 2024 and Beyond of Certain Stocks in Subareas 2, 3, 4, 6 and Other Matters	13
V.	Conservation of Fish Stocks in the Regulatory Area.....	13
20.	Recommendations of the Joint Commission–Scientific Council Working Group on Risk-based Management Strategies (WG-RBMS), August 2022 (if more discussion is required)	13
21.	Management and Technical Measures for Fish Stocks in the Regulatory Area, 2023	13
a.	Cod in Division 3M	13
b.	Pelagic <i>Sebastes mentella</i> (oceanic redfish) in Sub-area 2 + Divisions 1F and 3K	14
c.	Shrimp in Division 3M	14
22.	Management and Technical Measures for Fish Stocks Straddling National Jurisdictions, 2022	15
a.	Redfish in Divisions 3LN	15
b.	Redfish in Division 3O	15
c.	Witch flounder in Divisions 3NO	15
d.	Thorny skate in Divisions 3LNO	15
e.	Greenland halibut in Sub-area 2 and Divisions 3KLMNO	15
f.	Northern shortfin squid in Subareas 3+4	15
23.	Other matters pertaining to Conservation of Fish Stocks	15
VI.	Ecosystem Considerations	16
24.	Recommendations of the Joint Commission–Scientific Council Working Group on Ecosystems Approach Framework to Fisheries Management (WG-EAFFM), August 2022 (if more discussion is required) ..	16
25.	Other matters pertaining to Ecosystem Considerations.....	16
VII.	Conservation and Enforcement Measures	16
26.	Update of the Ad hoc Working Group on Bycatches, Discards, and Selectivity (WG-BDS) in the NAFO Regulatory Area, 2022	16
27.	Report of STACTIC from this Annual Meeting and Recommendations	17
28.	Other matters pertaining to Conservation and Enforcement Measures	17
VIII.	Finance and Administration	18
29.	Report of STACFAD from this Annual Meeting	18
30.	Adoption of the 2023 Budget and STACFAD recommendations.....	18
IX.	Closing Procedure	20
31.	Other Business.....	20
32.	Time and Place of Next Annual Meeting	20
33.	Press Release.....	20
34.	Adjournment	20
	Annex 1. Summary of Decisions and Actions of the Commission from 44 th Annual Meeting of NAFO ..	21
	Annex 2. Agenda	22

Annex 3. Participant List	24
Annex 4. Opening Statement by the Acting Chair of the NAFO Commission	38
Annex 5. Opening Statement by the Delegation of the Canada	39
Annex 6. Opening Statement by the Delegation of Denmark (in respect of the Faroe Islands and Greenland)	41
Annex 7. Opening Statement by the Delegation of the European Union	42
Annex 8. Opening Statement by the Delegation of Japan	43
Annex 9. Opening Statement by the Delegation of Iceland	44
Annex 10. Opening Statement by the Delegation of Norway	45
Annex 11. Opening Statement by the Delegation of the Russian Federation	46
Annex 12. Opening Statement by the Delegation of Ukraine	47
Annex 13. Opening Statement by the Delegation of the United Kingdom	48
Annex 14. Opening Statement by the Delegation of the United States of America	49
Annex 15. Opening Statement by the Ecology Action Centre	51
Annex 16. Opening Statement by Deep Sea Conservation Coalition	52
Annex 17. COMPILATION of SC Response to Feedback Questions Regarding its Scientific Advice	54
Annex 18. Recommendations of the Working Group on Improving Efficiency of NAFO Working Group Process (E-WG), 2022	64
Annex 19. Recommendations of the Joint Commission–Scientific Council Working Group on Risk-based Management Strategies (WG-RBMS), August 2022	65
Annex 20. Recommendations of the Joint Commission–Scientific Council Working Group on Ecosystems Approach Framework to Fisheries Management (WG-EAFFM), August 2022	70
Annex 21. The Commission's Request for Scientific Advice on Management in 2024 and Beyond of Certain Stocks in Subareas 2, 3 and 4 and Other Matters	72
Annex 22. 2023 Quota Table and Effort Allocation Scheme for Shrimp Fishery in the NAFO Regulatory Area Division 3M	78
Annex 23. Review of NAFO CEM Article 5.5(j)	82
Annex 24. Measure to Conserve Greenland Shark	83
Annex 25. EDG - Annex I.A (Quota Table): Alfonsinos in Subarea 6	86
Annex 26. EDG - NAFO Lost Gear Map	87
Annex 27. Inclusion of Vessels from IUU Lists of other RFMOs into the NAFO IUU List: NAFO CEM Articles 49, 52 and 53	89
Annex 28. Streamlining the Notification Process for Observer Deployments: NAFO CEM Article 30 ..	94
Annex 29. Additional Trial Tows	95
Annex 30. Catch and Effort Limitation (Article 5 of the NAFO CEM)	97
Annex 31. Control Measures for 3M Cod – Article 7 of the NAFO CEM	98
Annex 32. Review of NAFO CEM Article 30.19	99
Annex 33. Standing Committee on International Control (STACTIC) Rules of Procedure regarding Data Confidentiality and Participation in Meetings	100

Annex 34. Annual Fisheries and Compliance Review 2022 (Compliance Report for Fishing Year 2021)	103
Annex 35. Research vessels (Article 4 of the NAFO CEM)	123
Annex 36. Press Release	127
PART II. Report of the NAFO Standing Committee on Finance and Administration (STACFAD)	129
PART III. Report of the NAFO Standing Committee on International Control (STACTIC)	149

PART I.
Report of the NAFO Commission

44th Annual Meeting of NAFO, 19-23 September 2022
Porto, Portugal

I. Opening Procedure

1. Opening by the Acting Chair, Deirdre Warner-Kramer (United States of America)

Ms. Isabel Ventura, Deputy Director, Directorate-General for Natural Resources, Safety and Maritime Services, Government of Portugal, representing the host country, welcomed the delegates to Porto, Portugal.

The acting Chair of the Commission, Ms. Deirdre Warner-Kramer (United States of America), also welcomed delegates from the 13 NAFO Contracting Parties (Annex 3) to the meeting in her opening remarks (Annex 4).

The United Kingdom and Canada read brief statements to celebrate the life of Queen Elizabeth II, whose funeral was held 19 September.

Opening statements from Canada, Denmark (in respect of the Faroe Islands and Greenland), European Union, Japan, Iceland, Norway, Russian Federation, Ukraine, United Kingdom and the United States of America (USA) are attached (Annexes 5–14).

2. Appointment of Rapporteur

The NAFO Secretariat (Fred Kingston, Executive Secretary, and Ricardo Federizon, Senior Fisheries Management Coordinator) was appointed as Rapporteur.

3. Adoption of Agenda

The provisional agenda was previously circulated to all Contracting Parties in NAFO/22-193 (Rev.) on 20 July 2022 (Annex 2).

The acting Chair advised that the discussion under agenda item 14.d (Memorandum of Understanding (MOU) between the NAFO Secretariat and the Secretariat of the Sargasso Sea Commission) would take place under agenda item 18.c (Report of the Joint Commission–Scientific Council Working Group on Ecosystems Approach Framework to Fisheries Management (WG-EAFFM), August 2022). Also under agenda item 25, there would be a proposal on Greenland shark. With these clarifications, the agenda was adopted.

4. Admission of Observers

Upon the invitation of the Executive Secretary, in accordance with the NAFO Rules for Observers, the following intergovernmental organizations (IGOs) attended this meeting: Food and Agriculture Organization (FAO) of the United Nations (ABNJ Deep-Sea Fisheries Project). The Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR), the North East Atlantic Fisheries Commission (NEAFC) and the South East Atlantic Fisheries Organization (SEAFO) respectively were represented by a NAFO Contracting Party.

The non-governmental organizations (NGOs) accredited with NAFO Observer Status that attended this meeting were: the Deep Sea Conservation Coalition and the Ecology Action Centre (EAC).

The Deep Sea Conservation Coalition and Ecology Action Centre (EAC) provided opening statements for inclusion in the report (Annexes 15–16).

5. Publicity

In accordance with established practice, the acting Chair reminded Contracting Parties that they have agreed that no public statements, including social media posts, would be made until after the conclusion of the meeting, when a press release would be prepared by the Executive Secretary in consultation with the Chairs of the Commission and Scientific Council.

II. Supervision and Coordination of the Organizational, Administrative and Other Internal Affairs

6. Review of Membership of the Commission

The membership of the Commission has not changed since the 2020 Annual Meeting and is currently comprised of thirteen (13) Contracting Parties: Canada, Cuba, Denmark (in respect of the Faroe Islands and Greenland), European Union (EU), France (in respect of St. Pierre et Miquelon), Iceland, Japan, Norway, Republic of Korea, Russian Federation, Ukraine, United Kingdom and United States of America (USA).

7. Administrative and Activity Report by NAFO Secretariat

The Administrative Report and Financial Statements (COM Doc. 22-04) was referred to STACFAD for its review.

8. Recruitment of NAFO Executive Secretary for the 2023-2026 term

Ms. Brynhildur Benediktsdottir was appointed Executive Secretary for the 2023 to 2026 term.

9. NAFO Headquarters Agreement

The acting Chair noted that NAFO and Canada signed the Headquarters Agreement in June 2019, the text of which was circulated to Contracting Parties in 2019 in NAFO/19-162. Canada indicated that it expects to ratify the Headquarters Agreement by the fall of 2022 and will prepare a notice to all Contracting Parties once this process is finalized.

10. Review of the list of experts to serve as panelists under the NAFO Dispute Settlement provisions

The acting Chair referred to COM Working Paper 22-14 (Rev. 2) that listed, as of 13 September 2022, the experts nominated by Contracting Parties to serve as possible panelists in an ad hoc panel established under the dispute settlement provisions of the NAFO Convention (Article XV).

11. Guidance to STACFAD

The NAFO media policy (agenda item 5), the Administrative Report and Financial Statements (agenda item 7) and the contract of new NAFO Executive Secretary for the 2023-2026 term (agenda item 8) were referred to STACFAD for its review. The Chair of STACFAD, Robert Fagan (Canada), was invited to present its report and recommendations before the closing session. The STACFAD report and recommendations were presented under agenda item 29.

12. Guidance to STACTIC

The acting Chair recalled three issues that STACTIC intersessionally brought to the Commission for guidance:

- **STACTIC participation in meetings:** One Contracting Party indicated that a proposal addressing the issue will be tabled at this meeting (see agenda item 27).

- **Garbage disposal in the NAFO Regulatory Area (NRA):** As requested, the Commission decided it would include this as a request item to the Scientific Council (see agenda item 19). It was however later determined that, due to the heavy workload of SC, such Scientific Council request item could not be accommodated at this meeting.
- **2018 Performance Review Panel recommendation #20 and FAO Voluntary Guidelines on Flag State Performance:** The Commission encouraged continuing discussions within STACTIC.

The acting Chair also noted that there are certain recommendations arising under agenda items 18.b, 18.c and 18.d that would have to be addressed by STACTIC.

The Chair of STACTIC, Kaire Märtin (EU), was invited to present its report and recommendations before the closing session. The STACTIC report and recommendations were presented under agenda item 27.

III. Coordination of External Affairs

13. Report of Executive Secretary on External Meetings

The acting Chair referred to COM Doc. 22-04, in which the Executive Secretary reports on NAFO's participation in external activities since the 2021 Annual Meeting.

14. International Relations

a. Relations with other International Organizations

The acting Chair referred to Working Papers in which the Executive Secretary reports on developments over the past year concerning the Biological Diversity Beyond Areas of National Jurisdiction (BBNJ) negotiations in the United Nations (COM WP 22-15) and concerning NAFO's international relations with other international organizations (COM WP 22-19).

Concerning the BBNJ negotiations, Japan stated that it has been a strong advocate for maintaining the authority of existing RFMOs at these negotiations, noting the principle that the negotiations should not undermine existing relevant legal instruments and frameworks, and relevant global, regional and sectoral bodies. However, Japan is concerned about the possibility, under a potential BBNJ agreement, that "*complementary measures*" could be imposed on an RFMO, if it is deemed not to be living up to its responsibilities.

b. NAFO Members as Observers to External Meetings

At the last Annual Meeting, it was agreed that the following NAFO Contracting Parties would observe at meetings of the following organizations during 2021/2022:

- Canada would represent NAFO at the North Atlantic Salmon Conservation Organization (NASCO) and the North Pacific Fisheries Commission (NPFC).
- Denmark (in respect of the Faroe Islands and Greenland) would represent NAFO at the North East Atlantic Fisheries Commission (NEAFC).
- European Union would represent NAFO at the International Commission for the Conservation of Atlantic Tunas (ICCAT) and South Indian Ocean Fisheries Agreement (SIOFA).
- Japan would represent NAFO at the South East Atlantic Fisheries Organization (SEAFO).
- Norway would represent NAFO at the North Atlantic Marine Mammal Commission (NAMMCO).
- United States of America would represent NAFO at the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR), the North Pacific Anadromous Fish Commission (NPAFC) and the South Pacific Regional Fisheries Management Organization (SPRFMO).

The reports by these Observers were presented in the following Working Papers: NASCO (COM WP 22-33), NPFC (COM WP 22-34), NEAFC (COM WP 22-31), ICCAT (COM WP 22-25), SIOFA (COM WP 22-26), SEAFO (COM WP 22-16), NAMMCO (COM WP 22-32), CCAMLR (COM WP 22-30), NPAFC (COM WP 22-46) and SPRFMO (COM WP 22-29).

The same Contracting Parties agreed to represent NAFO at the same meetings for 2021/2022 with the exception of CCAMLR. The European Union agreed to represent NAFO at future meetings of CCAMLR and report to the Commission.

c. Areas Beyond National Jurisdiction (ABNJ) Deep-Sea Fisheries Project

The Executive Secretary recalled that at the last Annual Meeting the Commission agreed that NAFO should participate in the five-year ABNJ Deep Seas Fisheries Project with a commitment of about US\$ 3 million of in-kind contribution over this period. This in-kind contribution will largely derive from NAFO's work in further developing its ecosystem approach framework to fisheries management and reviewing its precautionary approach framework.

A representative of the FAO provided an update on the state-of-play of the Project, as part of the GEF-funded Common Oceans Program (COM WP 22-21 and COM WP 22-22), and its expected outcomes. The Common Oceans Program, which is led by the FAO, consists of four technical projects, namely the Deep Sea Fisheries Project, Tuna Fisheries Project, the Cross-Sectoral Project and the Sargasso Sea Project, and a fifth Global Coordination Project intended to ensure coordination amongst the other four Projects.

She said that the Deep Sea Fisheries Project is intended to “*ensure that deep sea fisheries in the ABNJ are managed under an ecosystem approach that maintains demersal fish stocks at levels capable of maximizing their sustainable yields and minimizing impacts on biodiversity, with a focus on data-limited stocks, deep-water sharks and vulnerable marine ecosystems.*” The Project is currently in the process of recruiting its project manager. It is hoped that the person will be in post by October 2022, and then project execution can commence. In the meantime, three activities are being planned with the NAFO Scientific Council.

d. Memorandum of Understanding (MOU) between the NAFO Secretariat and the Secretariat of the Sargasso Sea Commission

Under agenda item 18.c, the Commission adopted the recommendation of the Joint Commission–Scientific Council Working Group on the Ecosystem Approach Framework to Fisheries Management (WG-EAFFM) to support the finalization of an MOU between the NAFO and Sargasso Sea Commission Secretariats.

15. Oil and Gas Activities in the NAFO Regulatory Area

The Executive Secretary referred to COM WP 22-18 outlining the NAFO Secretariat's actions over the last year under the information exchange arrangement between NAFO and Canada related to oil and gas activities in the NAFO Regulatory Area. The Secretariat also receives industry Notices to Mariners when a drillship is expected to transit through the NAFO Regulatory Area, which are then forwarded to the Fishery Monitoring Centres (FMCs) of Contracting Parties.

The European Union expressed concern about the “Bay du Nord” offshore oil project situated in the Flemish Pass in the NAFO Regulatory Area. The Head of Delegation noted that the European Union and Canada are discussing this issue bilaterally but pointed out that there was a significant overlap within the boundaries of the project with NAFO's VME closure #10. He added that it was difficult to explain to his fishing industry why that area is closed to fishing when additional economic activities can still be taking place within it. Canada replied that oil and gas activity on Canada's continental shelf is a sovereign Canadian activity for which NAFO has no regulatory role. Nevertheless, the protection of the marine environment is a priority for Canada. Canada has voluntarily and regularly shared information on the mitigation measures established to minimize the impact of oil and gas activity on the marine environment and will continue to do so. Regarding the “Bay du

Nord” project, Canada has conducted an extensive environmental assessment, which considered all fishing activity and sensitive benthic habitats in the area, including NAFO VMEs, and determined that the proposed project is not likely to cause significant adverse impacts when mitigation measures are taken into account.

IV. Joint Session of Commission and Scientific Council

16. Implementation of 2018 Performance Review Panel recommendations

The Executive Secretary referred to COM WP 22-24, which gives an overview of the progress of the Organization in addressing the 37 recommendations of the 2018 Performance Review, as well as an update to the Action Plan agreed by the Commission that designated a proposed action, priority and lead NAFO body or bodies to address this action for each of these recommendations. The Executive Secretary noted that all the recommendations have now been addressed or are being addressed and that about a third have already been completed.

17. Presentation of scientific advice by the Chair of the Scientific Council

a. Response of the Scientific Council to the Commission’s request for scientific advice

The Chair of the Scientific Council (SC), Karen Dwyer (Canada), presented this year’s scientific advice. The advice represents the response of Scientific Council to the request from the Commission (COM Doc. 22-16). The scientific advice on fish stocks and on other topics were formulated mainly during the Scientific Council meeting in June 2022 (SCS Doc. 22/18), except for the shrimp stocks in 3M, which was formulated on 12-15 September 2022 during the NAFO Scientific Council and STACFIS Shrimp meeting (SCS Doc. 22/21) and for squid (*Illex*) in Subarea 3+4 which was formulated at this meeting.

The advice relating to risk-based management strategies (*e.g.*, 2+3KLMNO Greenland halibut and 3LN redfish management strategy evaluation (MSE) processes and revision of the Precautionary Approach Framework (PAF)) and ecosystem approach to fisheries management (*e.g.*, Vulnerable Marine Ecosystems , Significant Adverse Impact , Total Catch Indices , SC Roadmap Tier 2) was taken on by Working Groups at their subsequent meetings (see agenda items 18.b and 18.c).

A summary of the Scientific Council advice on fish stocks in which the Commission took management actions at this meeting (see agenda items 21 and 22) is presented in the table below. The detailed advice and responses to the Commission requests are contained in the above-mentioned documents.

Fish Stock	Scientific Council Advice (from SCS Doc. 22-18)
Cod in Div. 3M	Yield corresponding to F less than or equal to $3/4 F_{lim}$ in 2023 results in a very low probability ($\leq 10\%$) of SSB being below B_{lim} in 2024 and a very low probability ($\leq 10\%$) of exceeding F_{lim} . However, given the present level of the SSB and projected decline of total biomass under any fishing scenario, in order to promote growth in SSB with more than 60% probability, Scientific Council advises scenarios with F no more than $F_{statusquo}$.
Pelagic <i>Sebastes mentella</i> (oceanic redfish) in Subarea 2 + Division 1F and 3K	ICES has advised that when the precautionary approach is applied, there should be zero catch in each of the years 2022, 2023, and 2024. Scientific Council endorsed the conclusions of both the ICES assessment results and its advice.

Shrimp in Div. 3M	To be consistent with the NAFO precautionary approach, Scientific Council advises that no directed fishery should occur in 2023.
Redfish in Divisions 3LN	Scientific Council advises that catches should not exceed their current level of 11 500 tonnes (the mean of the last 5 years).
Redfish in Division 3O	The stock is below an interim survey-based proxy for B_{MSY} but above the limit reference point ($B_{lim} = 0.3 B_{MSY}$ -proxy) with a probability >99%. There is insufficient information on which to base predictions of annual yield potential. Catches have averaged about 9 000 tonnes over the period used for the MSY proxy calculation (1991 -2021). Scientific Council is unable to advise on an appropriate TAC for 2023, 2024 and 2025.
Witch Flounder in Divisions 3NO	Scientific Council recommends that F should be no higher than $2/3 F_{MSY}$.
Thorny skate in Divisions 3LNO	The stock has been stable at recent catch levels in Div. 3LNO (approximately 3 710 tonnes, 2017 - 2021) however, given the low resilience to fishing mortality and higher historic stock levels, Scientific Council advises no increase in catches.
Greenland halibut in Subarea 2 and Divisions 3KLMNO	Scientific Council advises that Exceptional Circumstances are not occurring. Therefore, the TAC for 2023 derived from the HCR is 15 156 tonnes. This is 5% lower than the 2022 TAC (15 864 t).
Northern shortfin squid in Subareas 3+4	Scientific Council advises catches between 19 000 and 34 000 tonnes per year (two proxies for F_{lim} , the potential yield which the northern stock component may be able to sustain under a low productivity regime).

b. Feedback to the Scientific Council regarding the advice and its work during this meeting

Feedback questions from Contracting Parties arising from scientific advice were vetted and forwarded to Scientific Council for further clarification at this meeting. The questions pertain to stocks Div. 3M cod, Div. 3M shrimp and Divs. 3NO witch flounder. There was also a follow-up question pertaining to the advice on Total Catch Index. Scientific Council responded to the questions at this meeting. They helped the Commission in making more informed decisions on management measures and ecosystem approach to fisheries management.

The feedback questions from the Commission and the Scientific Council responses to the questions are given in Annex 17.

c. Other issues as determined by the Chairs of the Commission and the Scientific Council

The Scientific Council Chair re-iterated the issue of the Scientific Council workload, which was previously brought up at the meetings of WG-EAFFM and WG-RBMS. The situation is not sustainable. SCS Doc. 22-20 *Scientific Council 5-year Plan 2022* was recalled highlighting the heavy workload, including among others, the work on the review of the Precautionary Approach Framework, the development of the Ecosystem Approach to Fisheries Management, identification of Vulnerable Marine Ecosystems (VMEs), the determination of Significant Adverse Impact to VMEs due to bottom fishing, Management Strategy Evaluations of certain fish stocks, and the resource gaps in completing the work.

The Commission acknowledged the heavy workload of the Scientific Council is mainly due to the increasing amount of requests for advice in the past several years. Accommodating the requests for scientific advice now requires a diverse field of expertise. Additional human resources and support from the Commission are needed.

This issue was further discussed by the Commission under agenda item 31.

18. Meeting Reports and Recommendations of the Joint Commission-Scientific Council Working Groups

a. Joint Commission-Scientific Council Working Group on Improving Efficiency of NAFO Working Group Process (E-WG), 2021

The acting Chair referred to COM-SC Working Paper 22-03, which is the recommendation from the Joint Commission-Scientific Council Efficiency Working Group. The Working Group recommended three (3) two-week periods where intersessional meetings by STACTIC and other Working Groups may be held, namely:

- 21 February to 03 March 2023,
- 24 April to 05 May 2023, and
- 17 to 28 July 2023.

Contracting Parties are not obliged to schedule meetings during these periods, but these dates may help in future planning of intersessional meetings. Canada noted that the Seafood Expo Global is scheduled for the week of 24 April 2023, which could present conflicts for some delegations.

The recommendations of the Working Group were adopted (Annex 18). The Commission also agreed that this Working Group continue in 2023 under the same terms of reference.

b. Joint Commission-Scientific Council Working Group on Risk-based Management Strategies (WG-RBMS), August 2022

The co-Chairs, Fernando González-Costas, (European Union) and Ray Walsh (Canada) presented the August 2022 meeting report (COM-SC Doc. 22-03) and the recommendations (COM-SC WP 22-05).

Key items discussed at the Working Group include, among others:

- Review of the Precautionary Approach Framework,
- MSE process and timeline for 3LN Redfish,
- MSE process and timeline for 2+3KLMNO Greenland halibut.

The recommendations of WG-RBMS were adopted (Annex 19).

c. Joint Commission-Scientific Council Working Group on Ecosystems Approach Framework to Fisheries Management (WG-EAFFM), August 2022

The co-Chair, Elizabethann Mencher (USA), presented the August 2022 meeting report (COM-SC Doc. 22-02) and the recommendations (COM-SC WP 22-06).

Key items discussed at the Working Group include, among others:

- VME Assessments
- Ecosystem Roadmap and the Total Catch Index (TCI)
- Review of Chapter II of the NAFO CEM.

Some Contracting Parties expressed concerns about three recommendations which pertained to the Ecosystem Roadmap, specifically the application of TCI to the ecosystem approach to fisheries management. Feedback

questions pertaining to TCI were forwarded to Scientific Council for further clarification (see agenda item 17.b and 24).

All recommendations, except recommendations 3, 6, and 8, were adopted (Annex 20) at this joint session. Discussions of the Commission on these recommendations continued under agenda item 24.

d. Joint Commission–Scientific Council Catch Estimation Strategy Advisory Group (CESAG), April 2022

The acting Chair, concurrently the co-Chair of this advisory group, reported that the 2021 catch estimates conducted by the Secretariat were forwarded to Scientific Council in late April 2022 following the usual timeline of catch estimates provision (COM-SC WP 22-07).

The 2021 catch estimates was reviewed by the group by correspondence, whereas in the previous years the review was conducted virtually. For the next cycle of the catch provision (2022 catch estimates), it is intended that the review will be made by correspondence unless new issues (*e.g.*, revision of the *Catch Estimation Strategy*) emerge that would warrant a virtual meeting.

19. Formulation of Request to the Scientific Council for Scientific Advice on the Management in 2024 and Beyond of Certain Stocks in Subareas 2, 3, 4, 6 and Other Matters

In accordance with the procedure outlined in FC Doc. 12-26, a steering committee was formed to assist in the drafting of the Commission Request. The committee consisted of the Scientific Council Coordinator and representatives from Canada and European Union.

The Request, developed with the assistance of the committee, was adopted (Annex 21). The Commission agreed that items 1, 2, 4 and 7 should be the priority for the June 2023 Scientific Council meeting subject to resources and COVID-related restrictions.

V. Conservation of Fish Stocks in the Regulatory Area

20. Recommendations of the Joint Commission–Scientific Council Working Group on Risk-based Management Strategies (WG-RBMS), August 2022 (if more discussion is required)

There were no matters discussed under the agenda item.

21. Management and Technical Measures for Fish Stocks in the Regulatory Area, 2023

The Quota Table and the Effort Allocation Scheme for Shrimp Fishery in NAFO Division 3M for 2023, presented in Annex 22, incorporates the Total Allowable Catches (TACs) and effort allocation scheme decisions, as well as the update of the footnotes.

a. Cod in Division 3M

To reach consensus, the Commission agreed on the TAC of 6 100 tonnes.

The TAC represents a compromise among the TAC proposals which range between 5 050 and 6 364 tonnes, corresponding to the 75% and 50% probability that $SSB_{2025} > SSB_{2022}$, respectively.

The Commission updated Article 5.5(i) of the NAFO CEM to be applicable to 2023 (Annex 23).

b. Pelagic *Sebastes mentella* (oceanic redfish) in Sub-area 2 + Divisions 1F and 3K

The Commission agreed to rollover the TAC, which is set at zero, noting that the TAC might be adjusted in accordance with footnote 3 of the Annex I.A of the NAFO CEM (Quota Table).

The Russian Federation issued a statement regarding this stock:

*The Russian Federation does not support the ICES concept that there are two stocks of pelagic *Sebastes mentella* in the Irminger Sea and adjacent waters of the NAFO Convention Area and that they are in poor condition. Russian scientists make their own assessment of the stock without separating it into shallow pelagic and deep pelagic components, and provide assessment results to ICES (ICES, 2021a). The assessment results indicate that spawning stock biomass (SSB) of pelagic *Sebastes mentella* has been increasing since 2014, and SSB is currently above B_{lim} and $MSY B_{trigger}$. These data are supported by the findings from the international trawl and acoustic survey conducted in June-August 2021. The survey results suggest a considerable increase in the stock biomass due to the strong year-classes recruited to the stock (ICES, 2021b). In this light, the Russian Federation finds the ICES decision about the zero catch of *Sebastes mentella* in the NEAFC and NAFO Convention Areas in 2022-2024 to be insufficiently substantiated. The Russian Federation reiterates its standpoint that studies of the redfish stock should be continued using all available scientific and fisheries data as a basis.*

c. Shrimp in Division 3M

It was agreed to continue the moratorium on the fishing of this stock for 2023.

On footnote 1 of Annex I.B of the NAFO CEM, Canada noted that “this footnote does not circumvent the role of the Commission pursuant to Article VI, paragraph 8 of the Convention. The Commission would still be required to take a management decision according to the Convention’s General Principles in Article III.”

It was recalled that at the intersessional meeting on 18 September 2022 to discuss a fishing regime for this stock, there was broad support on moving to a TAC-based regime in order to ensure the effective and sustainable management of this stock (see NAFO Doc 22-26). In continuing the discussions from the intersessional meeting and in the development of a TAC-based allocated scheme, European Union and Norway presented a joint proposal on the new fishing regime for this stock which attempts to incorporate the interventions of some Contracting Parties during the intersessional meeting (COM WP 22-45 Rev.).

The purpose of the proposal is to serve as a basis for further discussion and is without prejudice to other existing sharing arrangements. It consists of a three-step approach:

1. First step (in column 1) provides the initial calculated share of each Contracting Party, that results from a combination of the weighted averages of reported catches and allocated efforts. The time period used for calculation is from 1993 to 2010. The weight given to catches represent 75% of the total, while the allocated fishing days represent 25%. The time series is divided into two periods (1993-1999 and 2000-2010), giving more weight to the most recent period.
2. In the second step, adjustments have been made for three Contracting Parties with low shares (FR-SPM, JPN and UKR), in accordance with these Contracting Parties original allocated effort (0.82%), as stipulated in Annex I.B of the NAFO CEM. This adjustment is equally accounted for by “contributions” from the five Contracting Parties holding the largest shares from step 1 (EU, NOR, ICE, FRO and RUS).
3. The third step foresees an additional adjustment of the shares yet to be agreed between the Contracting Parties which could accommodate possible additional factors.

Canada stressed the Commission's obligation to take into account the factors outlined in Article VI paragraph 12 the Convention with respect to providing fishing opportunities in the Regulatory Area:

Measures adopted by the Commission for the allocation of fishing opportunities in the Regulatory Area shall take into account the interests of Contracting Parties whose vessels have traditionally fished within that area and the interests of the relevant coastal States. In the allocation of fishing opportunities from the Grand Bank and Flemish Cap, the Commission shall give special consideration to the Contracting Party whose coastal communities are primarily dependent on fishing activities for stocks related to these fishing banks and which has undertaken extensive efforts to ensure the conservation of such stocks through international action, in particular, by providing surveillance and inspection of international fishing activities on these banks under an international scheme of joint enforcement.

No agreement pertaining to a TAC-based allocation scheme was reached. The Commission will endeavour to have another intersessional meeting before the next Annual Meeting to consider the transition from a fishing effort-based management regime to a TAC-based regime.

22. Management and Technical Measures for Fish Stocks Straddling National Jurisdictions, 2022

a. Redfish in Divisions 3LN

It was agreed to set the TAC at 18 100 tonnes, applicable to 2023 and 2024.

In view of the ongoing MSE process for this stock, it was agreed to delete Article 10.bis and Annex I.H of the NAFO CEM (see agenda item 18.b).

b. Redfish in Division 3O

It was agreed to rollover the TAC of 20 000 tonnes applicable to 2023, 2024, and 2025.

c. Witch flounder in Divisions 3NO

The Commission agreed on a TAC of 1 295 applicable to 2023, and 1 367 tonnes applicable to 2024.

d. Thorny skate in Divisions 3LNO

It was agreed to rollover the TAC of 7 000 tonnes applicable 2023 and 2024.

Footnote 12 of the Quota Table was revised to read: Should catches exceed 4 500 tonnes, additional measures would be adopted to further restrain catches in 2023 and in 2024.

e. Greenland halibut in Sub-area 2 and Divisions 3KLMNO

As calculated by Scientific Council and consistent with the MSE and HCR, it was agreed to set the TAC at 15 156 tonnes in 2+3KLMNO, 11 227 tonnes of which are allocated to the fishery in 3LMNO.

f. Northern shortfin squid in Subareas 3+4

It was **agreed** to rollover the TAC of 34 000 tonnes applicable to 2023, 2024, and 2025.

23. Other matters pertaining to Conservation of Fish Stocks

There was no further matter discussed under this agenda item.

VI. Ecosystem Considerations

24. Recommendations of the Joint Commission-Scientific Council Working Group on Ecosystems Approach Framework to Fisheries Management (WG-EAFFM), August 2022 (if more discussion is required)

The Commission adopted the remaining recommendations 3, 6, and 8 under this agenda item (see agenda item 18.c). All recommendations presented in Annex 20 were considered adopted. Two Contracting Parties issued statements:

Japan:

Although Japan does not block its adoption, it wishes to raise concern about the potential application of the TCI concept into actual Conservation and Management Measures without regard to further analyses of its merit and feasibility. In this respect, Japan considers that Recommendations 6 and 8 pre-empt in a premature way the Commissions directives for the works of the Working Group.

Russian Federation:

Considering the splitting of redfish and cod into functional guilds depending on their length, lack of clear cutoff points between planktivores and piscivores for these species and differences in fish length composition among ecosystem production units;

Taking into account the absence of specific actions for catches exceeding TCI or 2xTCI that need to be developed before they are used as a management tool, which would require significant efforts both from the Commission and the Scientific Council;

Considering the lack of clear criteria for selecting a TAC to be reduced in order to avoid exceeding 2xTCI;

Noting the unclear status of widely distributed stocks in relation to the TCI, which would require an additional assessment on a case-by-case basis,

The Russian Federation is not currently in favour of endorsing the use of TCI as a measure to assess the ecosystem overfishing, even for information purposes. The robustness of this method for scientific purposes raises no doubt. However, for management it results in an overly wide range of options which may lead to different Contracting Parties pursuing entirely different goals and likely not reaching any consensus. This method needs to be further elaborated and narrowed down before taking it to the management level.

25. Other matters pertaining to Ecosystem Considerations

The proposal concerning measures to conserve Greenland sharks was adopted (Annex 24).

VII. Conservation and Enforcement Measures

26. Update of the Ad hoc Working Group on Bycatches, Discards, and Selectivity (WG-BDS) in the NAFO Regulatory Area, 2022

The acting Chair, concurrently the Chair of this Working Group, reported that it did not meet in 2022. The last meeting was held in July 2021, and it is documented in COM Doc. 21-04.

It was noted that, as of the last meeting, the first three major tasks as outlined in the *Action Plan in the Management and Minimization of Bycatch and Discards* have been completed (COM Doc. 17-26). Discussions on Task 4 – *Development of Management Options* have started but no management measures were formulated. It

was also noted that some elements of the development of management options, *e.g.* bycatch and landing obligations, have been taken on by STACTIC.

Contracting Parties were requested to reflect on whether to dissolve this ad hoc Working Group or to continue its existence. An update will be provided at the next Annual Meeting.

27. Report of STACTIC from this Annual Meeting and Recommendations

The STACTIC Chair, Kaire Märtin (European Union), presented the STACTIC Meeting Report (see Part II), and brought the following proposed amendments to the NAFO CEM to the Commission for consideration and adoption:

- STACTIC WP 22-07 (Rev.) *Inclusion of Subarea 6 in the caption of Annex I.A* (Annex 25),
- STACTIC WP 22-08 (Rev. 4) *NAFO Lost Gear Map* (Annex 26),
- STACTIC WP 22-22 (Rev. 3) *Inclusion of Vessels from IUU Lists of other RFMOs into the NAFO IUU List: NAFO CEM Articles 49, 52 and 53* (Annex 27),
- STACTIC WP 22-24 (Rev.) *Streamlining the Notification Process for Observer Deployments: NAFO CEM Article 30* (Annex 28),
- STACTIC WP 22-37 (Rev. 2) *Additional Trial Tows* (Annex 29),
- STACTIC WP 22-38 *Catch and Effort Limitation (Article 5)* (Annex 30),
- STACTIC WP 22-39 (Rev. 2) *Control Measures for 3M Cod – Article 7 of the NAFO CEM* (Annex 31),
- STACTIC WP 22-50 *Review of NAFO CEM Article 30.19* (Annex 32).

In addition, STACTIC endorsed the proposal contained in STACTIC WP 22-47 (Rev.) *STACTIC Rules of Procedure regarding Data Confidentiality and Participation in Meetings* (Annex 33) and the compliance report contained in STACTIC WP 22-03 (Rev. 4) *Annual Fisheries and Compliance Review 2022) Compliance Report for Fishing Year 2021* (Annex 34).

The Commission adopted all the recommendations and accepted the meeting report.

Regarding the adopted STACTIC WP 22-37 (Rev. 2), Japan stated that *it would continue to have bilateral contacts with the concerned Parties on the problems Japan tried to address with respect to the mesh size restriction for squid fisheries. Japan would submit its proposal in time for the next STACTIC Intersessional meeting so that STACTIC can make its recommendations for adoption by the next Commission meeting.*

Referring to the STACTIC report, Norway pointed out the important work done on identifying elements that are necessary and stated that *“in order to adopt a landing obligation in NAFO, and one of the most important aspects of this is measures to avoid unwanted catches. We need to ensure NAFO’s commitment to continue working on such measures. Norway proposes that the relevant NAFO bodies, such as the working groups on EAFFM and BDS are requested to continue work to find measures to avoid unwanted catches, with the support from STACTIC”.*

28. Other matters pertaining to Conservation and Enforcement Measures

The proposal to revise Article 4 of the NAFO CEM, which pertains to research vessels, was adopted (Annex 35).

VIII. Finance and Administration

29. Report of STACFAD from this Annual Meeting

The Chair of STACFAD, Robert Fagan (Canada), presented the Committee report and recommendations (see Part III). The report included recommendations for the adoption of the budget for 2022, the Auditor's Report for 2021, the contract of the next Executive Secretary and the implementation of certain 2018 Performance Review Panel recommendations delegated to the Standing Committee. In addition, the current Chair, Robert Fagan (Canada), was re-elected for another two-year term.

The Russian Federation mentioned that it has been experiencing problems with transferring its 2022 annual contribution to NAFO's Canadian bank and requested the assistance of the NAFO Secretariat to address this issue.

Canada noted that this would be best dealt with bilaterally and would provide the appropriate Canadian contact details for the Russian Federation delegation

30. Adoption of the 2023 Budget and STACFAD recommendations

The recommendations from STACFAD were the following:

- The 2021 Financial Statements be adopted.
- Rule 7.6 of the NAFO Financial Regulations be amended as follows:

7.6 The annual financial statements shall be prepared in conformity with these financial rules in a manner consistent with Canadian generally accepted accounting principles for not-for-profit organizations (GAAP) with the following exceptions:

 - a) *The Organization does not record the pension obligation or plan assets relating to its defined benefit pension plan. The Organization uses the pension valuation report provided by the International Fisheries Commission Pension Society (IFCPS) to determine the pension expense at a minimum on a triennial basis. The pension expense consists of the employer portion of the current service pension contribution plus any additional yearly payments required by the IFCPS (as shown in the current valuation report) that are necessary to extinguish the unfunded portion of the pension obligation;*
- The amount maintained in the accumulated surplus account be set at \$285,000 of which \$200,000 would be sufficient to finance operations during the first three months of 2023, and of which \$85,000 would be a contingency fund available to be used for unforeseen and extraordinary expenses.
- The recruitment and relocation fund be increased by \$12,000 to \$89,000 for future recruitment and relocation costs of internationally recruited staff.
- The performance review fund be increased by \$15,000 to \$60,000 for future costs associated with having an external performance review.
- The estimated balance remaining of \$420,000 shall be maintained in the Operating Fund and applied to reduce annual contributions due from each Contracting Party for the following year.
- Rule 4.2 of the NAFO Staff Rules be amended as follows:

The Organization will pay the members of the Secretariat twice a month, the reference days as pay days being the fifteenth (15th) day and the last day of each month. ~~Members of the Secretariat will be given their pay cheques two (2) banking days before the pay days.~~

- The internship period be maintained for six (6) months during 2023.
- Contracting Parties consider the three potential logo options as presented in STACFAD WP 22-08 (Rev.) and provide feedback to the Secretariat to assist in production of alternative potential logo options for consideration.
- The NAFO Secretariat, in consultation with the established focus group, work intersessionally to refine or produce alternative potential logo options for consideration of STACFAD at the next Annual Meeting.
- In terms of development of a policy regarding posting and distribution of meeting documentation publicly, a hybrid meeting documentation policy (as detailed below) be adopted by NAFO as an interim measure. This hybrid meeting documentation policy would be reviewed by STACFAD after one year (i.e., at the 2023 Annual Meeting of NAFO).
- In terms of development of guidelines for classification of working documents, an interim measure be adopted that the Contracting Party submitting a Working Paper is responsible to designate that Working Paper as “open access” and made available to the general public on the NAFO website prior to the meeting. If the Contracting Party does not make such a designation, then it will not be made available to the general public on the NAFO website prior to the meeting. These guidelines for classification would be reviewed by STACFAD after one year (i.e., at the 2023 Annual Meeting of NAFO).

A hybrid meeting documentation policy includes:

- Prior to the start of any NAFO meeting, NAFO meeting documentation that is received and deemed “open access”, such as a working paper, is made available to the general public on the NAFO website and to the meeting participants on the NAFO Meetings SharePoint.
- Prior to the start of any NAFO meeting, NAFO meeting documentation that is received and deemed “restricted”, such as a working paper, is made available only to the meeting participants on the NAFO Meetings SharePoint.
- During the meeting, NAFO meeting documentation, such as working papers and subsequent revisions, is posted on the NAFO Meetings SharePoint, but not made publicly available on the NAFO website. (This is the current practice)
- Following the Annual Meeting of NAFO in September, meeting documentation that is adopted, such as a working paper, is converted into a NAFO document and made available to the general public on the NAFO website with the exception of Working Papers deemed “restricted”. (This is also the current practice)
- STACFAD endorses the completion of the annual operational plan by the Secretariat, as detailed in STACFAD WP 22-10.
- The budget for 2023 of \$2,650,000 (Annex 3) be adopted.
- The Commission appoint the three Staff Committee nominees for September 2022–September 2023: Brian Healey (Canada), Ignacio Granell (European Union) and Deirdre Warner-Kramer (USA).
- The Commission adopt the Updated NAFO Media Policy, as contained in COM WP 22-13.
- The 2025 Annual Meeting be held 15–19 September 2025 in Halifax, Nova Scotia, Canada, unless an invitation to host is extended by a Contracting Party and accepted by the Organization.

The recommendations of STACFAD were adopted.

IX. Closing Procedure

31. Other Business

Recognizing the unsustainable workload of the Scientific Council (see agenda item 17.c), the Commission agreed to form an informal group to reflect on the problem and explore possible short- and long-term solutions. While there seems to be no simple solution, possibilities to be explored by the group include, but are not limited to, cooperation with other international organizations, additional support of Contracting Parties on science, and identification of resources. Prioritization of tasks and data sharing issues should also be considered.

It was determined that Chairs of the Commission, Scientific Council, STACFAD, WG-EAFFM and WG-RBMS would constitute this informal group. The group is expected to meet intersessionally and will report and present proposals, including budgetary implications, to the Commission and Scientific Council at the next Annual Meeting.

32. Time and Place of Next Annual Meeting

An invitation to host the next Annual Meeting was extended by the European Union (Spain) and accepted by the Organization. The 45th Annual Meeting will be held in Santiago de Compostela, Spain during 18-22 September 2023.

33. Press Release

The Press Release of the meeting was developed by the Executive Secretary, through consultations with the Chairs of the Commission and Scientific Council. The agreed Press Release (Annex 36) was circulated and posted to the NAFO website at the conclusion of the meeting on Friday, 23 September.

34. Adjournment

The meeting adjourned 11:45 hrs on Friday, 23 September 2022.

The summary of decisions and actions taken by the NAFO Commission is presented in Annex 1.

**Annex 1. Summary of Decisions and Actions of the Commission
from the 44th Annual Meeting of NAFO**

ANNEX #	NAFO WORKING PAPER #	DOCUMENT TITLE	NAFO DOCUMENT #
17	COM WP 22-55	COMPILATION of SC Response to Feedback Questions Regarding its Scientific Advice	COM Doc. 22-23
18	COM-SC WP 22-03	Recommendations of the Working Group on Improving Efficiency of NAFO Working Group Process (E-WG), 2022	COM-SC Doc. 22-06
19	COM-SC WP 22-05	Recommendations of the Joint Commission–Scientific Council Working Group on Risk-based Management Strategies (WG-RBMS), August 2022	COM-SC Doc. 22-04
20	COM-SC WP 22-06	Recommendations of the Joint Commission–Scientific Council Working Group on Ecosystems Approach Framework to Fisheries Management (WG-EAFFM), August 2022	COM-SC Doc. 22-05
21	COM WP 22-48 (Rev. 6)	The Commission's Request for Scientific Advice on Management in 2024 and Beyond of Certain Stocks in Subareas 2, 3 and 4 and Other Matters	COM Doc. 22-20
22		2023 Quota Table and the Effort Allocation Scheme for Shrimp Fishery in NAFO Division 3M	
23	COM WP 22-54	Review of NAFO CEM Article 5.5(j)	COM Doc. 22-17
24	COM WP 22-27 (Rev. 2)	Measure to Conserve Greenland Sharks	COM Doc. 22-15
25	STACTIC WP 22-07 (Rev.)	EDG - Annex I.A (Quota Table): Alfonsinos in Subarea 6	COM Doc. 22-07
26	STACTIC WP 22-08 (Rev. 4)	EDG - NAFO Lost Gear Map	COM Doc. 22-08
27	STACTIC WP 22-22 (Rev. 3)	Inclusion of Vessels from IUU Lists of other RFMOs into the NAFO IUU List: NAFO CEM Articles 49, 52 and 53	COM Doc. 22-09
28	STACTIC WP 22-24 (Rev.)	Streamlining the Notification Process for Observer Deployments: NAFO CEM Article 30	COM Doc. 22-10
29	STACTIC WP 22-37 (Rev. 2)	Additional Trial Tows	COM Doc. 22-11
30	STACTIC WP 22-38	Catch and Effort Limitation (Article 5 of the NAFO CEM)	COM Doc. 22-12
31	STACTIC WP 22-39 (Rev. 2)	Control Measures for 3M Cod – Article 7 of the NAFO CEM	COM Doc. 22-13
32	STACTIC WP 22-50	Review of NAFO CEM Article 30.19	COM Doc. 22-14
33	STACTIC WP 22-47 (Rev.)	Standing Committee on International Control (STACTIC) Rules of Procedure regarding Data Confidentiality and Participation in Meetings	COM Doc. 22-19
34	STACTIC WP 22-03 (Rev. 4)	Annual Fisheries and Compliance Review 2022 (Compliance Report for Fishing Year 2021)	COM Doc. 22-18
35	COM WP 22-52 (Rev. 3)	Research vessels (Article 4 of the NAFO CEM)	COM Doc. 22-16
	STACFAD WP 22-03 to STACFAD WP 22-16	STACFAD Recommendations including the 2023 Budget	see agenda item 30 (above)

Annex 2. Agenda

I. Opening Procedure	
1.	Opening by the Acting Chair, Deirdre Warner-Kramer (United States of America)
2.	Appointment of Rapporteur
3.	Adoption of Agenda
4.	Admission of Observers
5.	Publicity
II. Supervision and Coordination of the Organizational, Administrative and Other Internal Affairs	
6.	Review of Membership of the Commission
7.	Administrative and Activity Report by NAFO Secretariat
8.	Recruitment of NAFO Executive Secretary for the 2023–2026 term
9.	NAFO Headquarters Agreement
10.	Review of the list of experts to serve as panelists under the NAFO Dispute Settlement provisions
11.	Guidance to STACFAD
12.	Guidance to STACTIC
III. Coordination of External Affairs	
13.	Report of Executive Secretary on External Meetings
14.	International Relations <ul style="list-style-type: none"> a. Relations with other International Organizations b. NAFO Members as Observers to External Meetings c. Areas Beyond National Jurisdiction (ABNJ) Deep-Sea Fisheries Project d. Memorandum of Understanding (MOU) between the NAFO Secretariat and the Secretariat of the Sargasso Sea Commission
15.	Oil and Gas Activities in the NAFO Regulatory Area
IV. Joint Session of Commission and Scientific Council	
16.	Implementation of 2018 Performance Review Panel recommendations
17.	Presentation of scientific advice by the Chair of the Scientific Council <ul style="list-style-type: none"> a. Response of the Scientific Council to the Commission's request for scientific advice b. Feedback to the Scientific Council regarding the advice and its work during this meeting c. Other issues as determined by the Chairs of the Commission and the Scientific Council
18.	Meeting Reports and Recommendations of the Joint Commission–Scientific Council Working Groups <ul style="list-style-type: none"> a. Working Group on Improving Efficiency of NAFO Working Group Process (E-WG), 2022 b. Joint Commission–Scientific Council Working Group on Risk-based Management Strategies (WG-RBMS), August 2022 c. Joint Commission–Scientific Council Working Group on Ecosystems Approach Framework to Fisheries Management (WG-EAFFM), August 2022 d. Joint Commission–Scientific Council Catch Estimation Strategy Advisory Group (CESAG), April 2022
19.	Formulation of Request to the Scientific Council for Scientific Advice on Management in 2024 and Beyond of Certain Stocks in Subareas 2, 3, 4 and Other Matters
V. Conservation of Fish Stocks in the Regulatory Area	
20.	Recommendations of the Joint Commission–Scientific Council Working Group on Risk-based Management Strategies (WG-RBMS), August 2022 (if more discussion is required)
21.	Management and Technical Measures for Fish Stocks in the Regulatory Area, 2023 <ul style="list-style-type: none"> a. Cod in Division 3M b. Pelagic <i>Sebastes mentella</i> (oceanic redfish) in Subarea 2 + Divisions 1F and 3K c. Shrimp in Division 3M

22.	Management and Technical Measures for Fish Stocks Straddling National Jurisdictions, 2023
	a. Redfish in Divisions 3LN
	b. Redfish in Division 3O
	c. Witch flounder in Divisions 3NO
	d. Thorny skate in Divisions 3LNO
	e. Greenland halibut in Subarea 2 and Divisions 3KLMNO
	f. Northern shortfin squid in Subareas 3+4
23.	Other matters pertaining to Conservation of Fish Stocks
	VI. Ecosystem Considerations
24.	Recommendations of the Joint Commission–Scientific Council Working Group on Ecosystems Approach Framework to Fisheries Management (WG-EAFFM), August 2022 (if more discussion is required)
25.	Other matters pertaining to Ecosystem Considerations
	VII. Conservation and Enforcement Measures
26.	Update of the Ad hoc Working Group on Bycatches, Discards, and Selectivity (WG-BDS) in the NAFO Regulatory Area, 2022
27.	Report of STACTIC from this Annual Meeting and Recommendations
28.	Other matters pertaining to Conservation and Enforcement Measures
	VIII. Finance and Administration
29.	Report of STACFAD from this Annual Meeting
30.	Adoption of the 2023 Budget and STACFAD recommendations
	IX. Closing Procedure
31.	Other Business
32.	Time and Place of Next Annual Meeting
33.	Press Release
34.	Adjournment

Annex 3. Participant List

CHAIRS

NAFO Acting Chair of the Commission

Warner-Kramer. Deirdre (USA). Acting Deputy Director, Office of Marine Conservation (OES/OMC), U.S.
Department of State, Washington, DC 20520, USA
Tel +1 202 647 2883 – Email: warner-kramerm@fan.gov

Chair of Scientific Council

Dwyer, Karen (Canada). Science Branch, Fisheries and Oceans Canada, Northwest Atlantic Fisheries Centre, 80 East White Hills, St. John's, NL A1C 5X1
Tel.: +1 709-772-0573 - Email: karen.dwyer@dfo-mpo.gc.ca

CANADA

Head of Delegation

Burns, Adam. A/Assistant Deputy Minister, , Fisheries Harbour Management, Fisheries and Oceans Canada, 200 Kent Street, Ottawa, ON K1A 0E6
Tel.: +1 613-993-6853 - Email: Adam.Burns@dfo-mpo.gc.ca

Head of Delegation (Alternate)

Turple, Justin. Director, International Fisheries Policy, Fisheries and Oceans Canada, 200 Kent Street, Ottawa, ON K1A 0E6
Email: Justin.Turple@dfo-mpo.gc.ca

Advisers/Representatives

Barbour, Natasha. FMC Manager, Fisheries and Oceans Canada, Northwest Atlantic Fisheries Centre, 80 East White Hills, St. John's, NL A1C 5X1
Tel: +1 709 772-5788 – Email: Natasha.barbour@dfo-mpo.gc.ca

Bonnell, Carey. Vice President of Sustainability and Engagement. Ocean Choice International. 22 Wedgeport Road, St. John's, NL A1A 5A6
Tel: +1 902 782 6244 – Email: cbonnell@oceanchoice.com

Browne, Dion. Senior Compliance Officer, Fisheries and Oceans Canada, Northwest Atlantic Fisheries Centre, 80 East White Hills, St. John's, NL A1C 5X1
Email: Dion.Browne@dfo-mpo.gc.ca

Chapman, Bruce. President, Atlantic Groundfish Council
Tel: +1 613 692-8249 – Email: bchapman@atlanticgroundfish.ca

Dalley, Derrick. Chief Executive Officer, Ueushuk Fisheries Ltd., 6 Burnwood Drive, PO Box 1020 Station C, Happy Valley-Goose Bay, NL, A0P 1C0
Tel: +1 709 884 6219 – Email: ddalley@innudev.com

Diamond, Julie. Manager, Groundfish and International, Fisheries Management, Fisheries and Oceans Canada, Northwest Atlantic Fisheries Centre, 80 East White Hills, St John's, NL A1C 5X1
Email: Julie.Diamond@dfo-mpo.gc.ca

Dwyer, Karen (see Chairs).

Edgar, Leigh. Senior Fisheries and Aquaculture Management Officer, Fisheries and Oceans Canada, 200 Kent Street, Ottawa, ON K1A 0E6
Email: Leigh.Edgar@dfo-mpo.gc.ca



Fagan, Robert. Senior Resource Manager. Fisheries Management, Fisheries and Oceans Canada, Northwest Atlantic Fisheries Centre, 80 East White Hills Road, St. John's, NL, A1C 5X1
Tel: +1 709 772-2920 – Email: Robert.Fagan@dfo-mpo.gc.ca

Fuller, Susanna. Oceans North Canada. 1533 Barrington St, Halifax, NS B3J 1E6
Email: susannafuller@oceansnorth.ca

Her, Natalie (virtual). International Fisheries Policy, Fisheries and Oceans Canada, 200 Kent Street, Ottawa, ON K1A 0E6
Email: Natalie.Her@dfo-mpo.gc.ca

Hickey, Jenelle (virtual). FMC Administrator, Fisheries and Oceans Canada, Northwest Atlantic Fisheries Centre, 80 East White Hills, St. John's, NL A1C 5X1
Tel: +1 709 772-5743 – Email: Jenelle.Hickey@dfo-mpo.gc.ca

Hurley, Mike. Offshore Detachment Supervisor, Fisheries and Oceans Canada, Northwest Atlantic Fisheries Centre, 80 East White Hills, St. John's, NL A1C 5X1
Tel: +1 709 227-9344 – Email: mike.hurley@dfo-mpo.gc.ca

Johnson, Kate. Senior Policy Advisor, International Fisheries Policy, Fisheries and Oceans Canada, 200 Kent Street, Ottawa, ON K1A 0E6
Email: Kate.Johnson@dfo-mpo.gc.ca

Koen-Alonso, Mariano. Science Branch, Fisheries and Oceans Canada, P.O. Box 5667, St. John's, NL A1C 5X1
Email: Mariano.Koen-Alonso@dfo-mpo.gc.ca

Krohn, Martha. Manager, Fish Population Science, Fisheries and Oceans Canada, 200 Kent Street, Ottawa, ON K1A 0E6
Tel: +1 613-998-4234 – Email: martha.krohn@dfo-mpo.gc.ca

Laquerre, Patrice. Deputy Director, Global Affairs Canada, Oceans Law section, 125 Sussex Drive, Ottawa, ON K1A 0G2
Email: Patrice.Laquerre@international.gc.ca

McGrath, Miranda (virtual). Inshore Staff Representative (3L). Fish, Food and Allied Workers Union. 368 Hamilton Ave., St. John's, NL A1C 5H5
Email: mmcgrath@ffaw.ca

McNamara, Brian. Board Chairman, Newfound Resource Ltd.
Tel: +1 (709) 685-1110 – Email: brian@newfoundresources.com

Napier, Brent. Director, Enforcement Policy & Programs, Fisheries and Oceans Canada
Tel: +1 (613) 990-0108 – Email: Brent.Napier@dfo-mpo.gc.ca

O'Rielly, Alastair. NAFO Commissioner, Executive Director, Northern Coalition Corporation, P.O. Box 452 Witless Bay, NL, A0A 4K0,
Tel: +1 709 727-3290 – Email: alastairorielly@gmail.com

Rice, Jake (virtual). Price Negotiations Manager, Fish, Food and Allied Workers Union. 368 Hamilton Ave., St. John's, NL A1C 5H5
Email: jrice@ffaw.ca

Roberts, Lorelei. Assistant Deputy Minister, Fisheries, Forestry and Agriculture. Government of Newfoundland and Labrador, Confederation Building, 30 Strawberry Marsh Rd., St. John's, NL A1B 4J6
Tel: +1 709 729-3765 – Email: lroberts@gov.nl.ca

Rowsell, Nicole. Director, Fisheries, Forestry and Agriculture, Government of Newfoundland and Labrador, 30 Strawberry Marsh Rd., St. John's, NL A1B 4R4
Tel: +1 709 729-0335 – Email: nicolerowsell@gov.nl.ca

Schleit, Katie. Oceans North Canada. 1533 Barrington St, Halifax, NS B3J 1E6
Email: kschleit@oceansnorth.ca



Report of the NAFO Commission,
19-23 September 2022

Sheppard, Beverley. Manager, Harbour Grace Shrimp Co. Ltd., P. O. Box 580, Harbour Grace, NL A0A 2M0
Tel: +1 709 589-8000 – Email: bsheppard@hgsc.ca

Simpson, Greg. President, Mersey Seafood, 26 Bristol Ave., Liverpool, NS, B0T 1K0
Email: greg@merseyseafoods.com

Simpson, Mark. Science Branch, Fisheries and Oceans Canada, P.O. Box 5667, St. John's, NL A1C5X1
Tel.: +1 709-772-4841 – Email: Mark.Simpson2@dfo-mpo.gc.ca

Sullivan, Keith. President, Fish, Food and Allied Workers Union, 368 Hamilton Ave., St. John's, NL A1C 5H5
Tel.: +1 (709) 576-7276 – Email: ksullivan@ffaw.net

Sullivan, Martin. Chief Executive Officer and Co-Chairman, Ocean Choice International, 1315 Topsail Road,
St. John's, NL, Canada A1B 3N4
Email: msullivan@oceanchoice.com

Walsh, Ray. Director, Resource Management & Indigenous Fisheries, Fisheries Management, Fisheries and
Oceans Canada, Northwest Atlantic Fisheries Centre, 80 East White Hills, St. John's, NL A1C5X1
Tel: +1 709 772- 4497 – Email: ray.walsh@dfo-mpo.gc.ca

Wareham, Alberto. President & CEO, Icewater Seafoods Inc., P. O. Box 89, Arnold's Cove, NL A0B 1A0
Tel: +1 709 463 2445 – Email: awareham@icewaterseafoods.com

Warren, Genevieve (virtual). FMC Regional Staff Officer, Fisheries and Oceans Canada, Northwest Atlantic
Fisheries Centre, 80 East White Hills, St. John's, NL A1C 5X1
Tel: +1 709 772-6519 – Email: Genevieve.Warren@dfo-mpo.gc.ca

CUBA

Head of Delegation

López Acea, Lázara Mercedes. Ministry of the Food Industry, Municipio Playa, Calle 41, No. 4015 e/ 48y50, Playa
La Havana, Cuba
Tel: +53 7 207 9484 – Email: mercedes.lopez@minal.gob.cu

Head of Delegation (Alternate)

Dieppa Sanabria, Gilda María. Ministry of the Food Industry, Municipio Playa, Calle 41, No. 4015 e/ 48y50, Playa
La Havana, Cuba
Tel: +53 7 207 9484 – Email: gilda.dieppa@minal.gob.cu

Advisers/Representatives

Santos Ferreira, Andrea Do. Ministry of the Food Industry, Municipio Playa, Calle 41, No. 4015 e/ 48y50, Playa
La Havana, Cuba

DENMARK (IN RESPECT OF THE FAROE ISLANDS AND GREENLAND)

Head of Delegation

Funch Døj, Iben. Special Advisor, Government of Greenland, Ministry of Fisheries and Hunting, Imaneq 4, P.O.
Box 1015, 3900 Nuuk, Greenland
Tel: +299 34 53 93 – Email: iben@nanoq.gl

Jóansdóttir, Durita L. Senior Adviser/Chief of Protocol, Foreign Service, Ministry of Foreign Affairs and Culture,
Government of Faroe Islands, Tinghúsvegur 5-7, FO-110 Tórshavn, Faroe Islands
Tel: +298 551008 – Email: duritalj@ummr.fo



Advisers/Representatives

Cruz, Luis Ridao (virtual). Faroe Marine Research Institute (FAMRI) – Havstovan – Faroe Islands, P. O. Box 305, Nóatún 1, FO-110 Tórshavn, Faroe Islands
Tel: +298 353900 – Email: luisr@hav.fo

Gaardlykke, Meinhard. Adviser, The Faroe Islands Fisheries Inspection, Yviri við Strond 3, P. O. Box 1238, FO-110 Torshavn, Faroe Islands
Tel: +298 31 1065 – Mobile: +298 29 1006 – Email: meinhardg@vorn.fo

Gudmundsen, Hálvdan. Chairman, Faroese Long Liners Association
Email: haldan@fossa.fo

Hansen, Hugo Lamhauge. Adviser, Ministry of Foreign Affairs and Culture, Government of Faroe Islands, Tinghúsvegur 5-7, FO-110 Tórshavn, Faroe Islands
Email: hugoh@ummr.fo

Jacobsen, Petur Meinhard (virtual). Adviser, The Faroe Islands Fisheries Inspection, Yviri við Strond 3, P. O. Box 1238, FO-110 Torshavn, Faroe Islands.
Tel: +298 31 1065 – Mobile: +29 829 1001 – Email: peturmj@vorn.fo

Jeremiassen, Nikkulaat. Chairman, Fishermen and Hunters Association in Greenland (KNAPK), Postbox 386, 3900 Nuuk, Kalaallit Nunaat
Tel: +299 34 83 23 – Email: nikkulaat@knapk.gl

Levring Radoor, Sanne Rømer. Advisor, Greenland Fisheries License Control Authority, Indaleeqqap Aqqutaa 3, Postbox 501, DK-3900 Nuuk, Greenland
Email: srol@nanoq.gl

Lønberg-Jensen, Ole Ulloriaq. Ministry of Fisheries and Hunting, Imaneq 1A, P.O. Box 269 Nuuk, Greenland
Email: oulj@nanoq.gl

Qujaukitsoq, Vittus. Acting CEO, Fishermen and Hunters Association in Greenland (KNAPK) Postbox 386, 3900 Nuuk, Kalaallit Nunaat
Tel: +299 34 83 29 – Email: viq@knapk.gl

Skorini, Stefan í. Managing Director, Faroese Ship Owners' Association, PO Box 361, Odinshaedd 7, 110 Torshavn, Faroe Islands
Tel: +298 73 99 12 – Email: stefan@industry.fo

Trolle Nedergaard, Mads. Senior Advisor, Greenland Fisheries License Control Authority, Indaleeqqap Aqqutaa 3, Postbox 501, DK-3900 Nuuk, Greenland
Tel: +299 345523 – Email: mads@nanoq.gl

Wang, Ulla Svarrer. Special Adviser, Ministry of Fisheries, P. O. Box 347, FO-110 Torshavn, Faroe Islands
Tel: +298 35 30 30 – Email: ulla.svarrer.wang@fisk.fo

EUROPEAN UNION**Head of Delegation**

Jessen, Anders C. European Commission, Law of the Sea and Regional Fisheries Organisations, DG-MARE B2, Rue Joseph II, 99, B-1049, Brussels, Belgium
Tel: +32 (2) 2967224 – Email: Anders.JESSEN@ec.europa.eu

Head of Delegation (Alternate)

Granell, Ignacio. International Relations Officer, Regional Fisheries Management Organizations, European Commission, Rue Joseph II, 99, B-1049, Brussels, Belgium
Tel: +32 2 296 74 06 – Email: ignacio.granell@ec.europa.eu

Advisers/Representatives

Alpoim, Ricardo. Instituto Portugues do Mar e da Atmosfera, Rua Alfredo Magalhães Ramalho, nº6, 1495-006 Lisboa, Portugal
Tel: +351 213 02 70 00 – Email: ralpoim@ipma.pt

Arrhenius, Fredrik. Council, Presidency
Email: Fredrik.arrhenius@regeringskansliet.se

Artime, Isabel. Ministry of Agriculture, Fisheries and Food, Velázquez, 144, 28006 Madrid, Spain
Email: iartime@mapa.es

Babcionis, Genadijus. Administrator, European Fisheries Control Agency (EFCA), Apartado de Correos 771 – E-36200 – Vigo, Spain
Tel: +34 986 12 06 40 – Email: genadijus.babcionis@efca.europa.eu

Barreiro Núñez, Juan. OPPC-3, Ramiro Gordejuela Building, 36202-Vigo Pontevedra (Spain)
Email: direccion@oppc3.com

Barslund, Daniel (virtual). CEO, OCEAN PRAWNS A/S, Strandgade 10, 3730 Nexø, Denmark
Tel: +45 20 96 28 88 – Email: db@ocean-prawns.com

Błażkiewicz, Bernard. NAFO Desk Officer, European Commission, Law of the Sea and Regional Fisheries Organisations, DG-MARE B2, Rue Joseph II, 99, B-1049, Brussels, Belgium
Tel: +32-2-299.80.47 – Email: Bernard.BLAZKIEWICZ@ec.europa.eu

Bulauskis, Alenas. Head of Fisheries Control, Fisheries Service, Ministry of Agriculture of the Republic of Lithuania, J. Janonio st. 24, 92251 Klaipėda
Tel: +370 700 14 903 – Email: alenas.bulauskis@zuv.lt

Caetano, Miguel. Instituto Português do Mar e da Atmosfera (IPMA), Division of Oceanography and Marine Environment, Rua Alfredo Magalhães Ramalho, 6, 1495-165 Algés, Portugal
Tel: +351 21 302 7070 – Email: mcaetano@ipma.pt

Chamizo Catalán, Carlos. Head of Fisheries Inspection Division, Ministry of Agriculture, Fisheries and Food, Velázquez, 144, 28006 Madrid, Spain
Tel: +34 347 1949 – Email: cchamizo@mapa.es

Cortina Burgueño, Ángela. Cooperativa de Armadores de Pesca del Puerto de Vigo, Puerto Pesquero, Edificio Ramiro Gordejuela. 36202 Vigo, Spain
Tel: +0034 986 433 844 – Email: angela@arvi.org

Durán Muñoz, Pablo (virtual). Instituto Español de Oceanografía, Subida a Radio Faro 50-52, E-36390 Vigo, Spain
Email: pablo.duran@ieo.csic.es

Einarsson, Sigurður Steinn. Institute of Freshwater Fisheries
Email: sse@aldaholding.com

Ferretti, Johanna. Federal Ministry of Food and Agriculture, Wilhelmstraße 54, 10117 Berlin, Belgium
Email: Johanna.Ferretti@bmel.bund.de

Fonseca, José.
Email: josehfonseca@gmail.com

França, Francisco Diogo Teixeira Afonso Salgueiro. S.A., Av. Pedro Álvares Cabral 188, 3830-786 Gafanha da Nazaré, Portugal
Email: franciscofranca@pedrofranca.pt

França, Pedro Elias Salgueiro. CEO, S.A., Av. Pedro Álvares Cabral 188, 3830-786 Gafanha da Nazaré, Portugal
Tel: (+351) 234 390 250 – Email: pedrofranca@pedrofranca.pt

França, Pedro Teotónio Teixeira Afonso Salgueiro. S.A., Av. Pedro Álvares Cabral 188, 3830-786 Gafanha da Nazaré, Portugal
Email: peu@pedrofranca.pt

Garrido Fernández, Irene (virtual). Instituto Español de Oceanografía, Subida a Radio Faro 50-52, E-36390 Vigo, Spain
Email: irene.garrido@ieo.csic.es

González-Costas, Fernando. Instituto Español de Oceanografía (IEO), Subida a Radio Faro 50-52, E-36390 Vigo, Spain
Tel: +34 986 49 22 39 – Email: fernando.gonzalez@ieo.csic.es

González-Troncoso, Diana. Instituto Español de Oceanografía (IEO), Subida a Radio Faro 50-52, E-36390 Vigo, Spain
Tel: +34 986 49 21 11 – Email: diana.gonzalez@ieo.csic.es

Griūnienė, Vilda. Chief specialist of Fisheries Division, Ministry of Agriculture of the Republic of Lithuania, Gedimino Ave.19, LT-01103 Vilnius, Lithuania
Email: vilda.griuniene@zum.lt

Grossmann, Meit. Coordinator, European Fisheries Control Agency, Avenida Garcia Barbon 4, E-36201, Vigo, Spain
Tel: +34986120610 – Email: Meit.GROSSMANN@efca.europa.eu

Härm, Egle (virtual). Ministry of Rural Affairs of the Republic of Estonia, Lai tn 39, Lai tn 41, 15056 Tallinn, Estonia
Email: egle.harm@agri.ee

Head, François. Administrator, Council of the European Union, General Secretariat, Directorate-General Agriculture, Fisheries, Social Affairs and Health – LIFE, Directorate Fisheries - LIFE.2, JL 40-40-GH-23, Rue de la Loi/Wetstraat 175 - 1048 Brussels, Belgium.
Tel: +32 (0) 2 281 60 83 – Email: francois.head@consilium.europa.eu

Ingvarsson, Einar Bergur. Reyktal AS, Veerenni tn 39, 10138 TALLINN, Estonia
Email: enar@reyktal.is

Labanauskas, Aivaras. Director, Atlantic High Sea Fishing Company, Pylimo Str. 4, LT-91249 Klaipėda, Lithuania
Tel: +37 (0) 46 493 105 – Email: ala@pp-group.eu

Leduc, Xavier. Industry representative (Union armateurs à la pêche de France). Comptoir des Pêches d'Europe du Nord – Euronor, 13, rue Huret Lagache 62200 Boulogne sur mer, France
Tel: +33 608 78 45 25 – Email: xleduc@euronor.eu

Liria Franch, Juan Manuel. President, Confederación Española de Pesca, Dr. Fleming 7 - 2º Dcha, 28036 Madrid, Spain
Tel: +34 91 432 34 89 – Email: mliria@iies.es

Lopes, Luis. Directorate-General for Natural Resources, Safety and Maritime Services, 1449-030 Avª Brasília LISBOA, Portugal
Email: llopes@dgrm.mm.gov.pt

Lopez Van Der Veen, Iván M. Director Gerente, Pesquera Áncora S.L.U., C/Perú 1, 2ºB, 36202 Vigo, Spain
Tel: +34 986 441 012 – Email: ivan.lopez@pesqueraancora.com

Mancebo Robledo, C. Margarita. Ministry of Agriculture, Fisheries and Food, Velázquez, 144, 28006 Madrid, Spain
Tel: +34 91 347 61 29 – Email: cmancebo@mapa.es

Märtin, Kaire. Republic of Estonia, Ministry of the Environment, Narva mnt 7a, 15172 Tallinn, Estonia
Tel: +372 6260 711 – Email: kaire.martin@envir.ee

Report of the NAFO Commission,
19-23 September 2022

Merino Buisac, Adolfo. Policy Officer, Scientific advice supporting the Common Fisheries Policy, European Commission, Directorate-General for Maritime Affairs and Fisheries (DG MARE), Unit C.3 – Scientific advice and data collection, J99 03/003, B-1049 Brussels/Belgium
Tel: +32 2 29 590 46 – Email: adolfo.merino-buisac@ec.europa.eu

Molares Villa, José (virtual). Subdirector, Technological Institute for the Marine Environment Monitoring of Galicia, Peirao de Vilaxoán, s/n, 36611 Vilagarcía de Arousa (Pontevedra), Spain
Email: jmolares@intecmar.gal

Molina, Teresa. Ministry of Agriculture, Fisheries and Food, Velázquez, 144, 28006 Madrid, Spain
Email: tmolina@mapa.es

Näks, Liivika. Estonian marine institute, University of Tartu, Mäealuse 14, 12618 Tallinn, Estonia
Email: Liivika.naks@ut.ee

Nielsen, Lisbet (virtual). Ministry of Food, Agriculture and Fisheries of Denmark, the Department, Sustainable Fisheries, Slotholmsgade 12, 1216 København K, Denmark
Email: lisnie@fvm.dk

Okas, Reemet. Republic of Estonia, Environmental Board
Email: Reemet.Okas@keskkonnaamet.ee

Óttarsson, Yngvi. Reyktal AS, Veerenni tn 39, 10138 TALLINN, Estonia
Tel: 627 65 52 – Email: yngvi@reyktal.ee

Paião, Aníbal Machado. Pascoal & Filhos, S.A. Cais dos Bacalhoeiros, Apartado 12. 3834-908 Gafanha da Nazaré, Portugal
Tel: +351 234 390 290 – Email: anibal.paiao@pascoal.pt

Quintans, Miguel. European Commission–Directorate-General for Maritime Affairs and Fisheries 1049 Bruxelles/Brussel, Belgium
Email: miguel.quintans@ec.europa.eu

Remisz, Emil. (virtual). North Atlantic Producers Organization
Email: emil@paop.org.pl

Riekstiņš, Normunds. Director, Fisheries Department, Ministry of Agriculture, Republikas sq. 2, LV-1010, Riga, Latvia
Tel: +371 6709 5045 – Email: normunds.riekstins@zm.gov.lv

Sacau-Cuadrado, Mar. Instituto Español de Oceanografía (IEO), Centro Oceanográfico de Vigo. Subida a Radio Faro 50-52, E-36390 Vigo, Spain
Tel: +34 986 49 21 11 – Email: mar.sacau@ieo.csic.es

Sarevet, Mati. Managing Director, Reyktal AS, Veerenni 39, 10138 Tallinn, Estonia
Tel: +372 627 6545 – Email: reyktal@reyktal.ee

Sild, Kristi. Board Member MFU LOOTUS OU, Rävala pst 4, 10143 Tallinn
Tel: +372 640 0250 – Email: kristi.sild@lextal.ee

Szemioth, Bogusław. North Atlantic Producers Organization, ul. Parkowa 13/17/123, 00-759 Warsaw, Poland
Tel: +48 22 840 8920 – Email: szemioth@atlantex.pl

Szumlicz-Dobiesz, Justyna. Head of Unit, Long Distance Fisheries Unit, Department of International Cooperation, Ministry of Maritime Economy and Inland Navigation, 6/12 Nowy Swiat St., 00-400 Warsaw, Poland
Tel: +48 22 583 89 60 – Email: justyna.Szumlicz@minrol.gov.pl

Teixeira, Isabel. Head of External Resources Division, Directorate-General for Natural Resources, Safety and Maritime Services, 1449-030 Av^a Brasília LISBOA, Portugal
Tel: +351 21 303 5825 – Email: iteixeira@dgrm.mm.gov.pt



Tubio Rodriguez, Xosé. NAFO STACTIC representative, Fisheries Control and Inspections, Directorate-General for Maritime Affairs and Fisheries, European Commission, J-99 01/074, 1049 Brussels, Belgium
Tel: +32 2 299 77 55 – Email: xose.tubio@ec.europa.eu

Tuus, Herki. Fishery Resources Department, Republic of Estonia, Ministry of the Environment, Narva mnt 7A, 15172, Tallinn, Estonia
Tel: + 372 511 5698 – Email: herki.tuus@envir.ee

Ulloa Alonso, Edelmiro. General Manager, Producer Organization OPPC-3, Puerto Pesquero de Vigo, Apartado 1078, 36202 Vigo, Spain
Tel: +34 986 43 38 44 – Email: edelmiro@arvi.org

Vaz Pais, Luís Carlos. Shipowners PT, Av. Fernão de Magalhães, 584 - 1º E, 3000-174 Coimbra, Portugal
saojacinto.geral@sapo.pt; saojacinto.tpais@sapo.pt

Vaz Pais, Tiago. Shipowners PT, Av. Fernão de Magalhães, 584 - 1º E, 3000-174 Coimbra, Portugal
Email: saojacinto.tpais@sapo.pt

Ventura, Isabel Maria. Directorate-General for Natural Resources, Safety and Maritime Services, 1449-030 Avª Brasília LISBOA, Portugal
Tel: + 359 96 396 7535 – Email: isabelv@dgrm.mm.gov.pt

Vicente, Luis. Secretary General, (A.D.A.P.I.) (A.D.A.P.I.) Associação dos Armadores das Pescas Industriais, Avenida Santos Dumont, Edifício Mútua, N.º57 2º Dt. 1050-202 Lisboa, Portugal
Tel: + 351 933 361 051 – Email: adapi.pescas@mail.telepac.pt

FRANCE (IN RESPECT OF ST. PIERRE ET MIQUELON)

Head of Delegation

Briand, Bernard. Président du Conseil Territorial de Saint-Pierre et Miquelon Conseil, 2 place Monseigneur François Maurer, B.P. 4208, 97500 Saint-Pierre et Miquelon
Tel: 05.08.41.01.02 – Email: Bernard.Briand@ct975.fr

Head of Delegation (Alternate)

Lintanf, Philippe. Directorate General for Maritime Affairs, Fisheries and Aquaculture (DGAMPA), Sustainable Marine Fisheries and Aquaculture Service, Fisheries Resources Sub-Directorate, European and International Affairs Office, Tour Séquoia, 1, place Carpeaux, 92055 Paris-La Défense Cedex, France
Email: philippe.lintanf@agriculture.gouv.fr

Advisers/Representatives

Chiarovano, Serge. Directorate of Territories, Food and the Sea, Head of the Maritime Affairs Service, 1, Rue Gloanec BP4217 97500 Saint-Pierre
Tel: + 508 41 15 36 – Email: serge.chiarovano@equipement-agriculture.gouv.fr

Goraguer, Herlé (virtual). French Research Institute for Exploitation of the Sea (IFREMER), Quai de l'Alyse, BP 4240, 97500, St. Pierre et Miquelon
Tel: +05 08 41 30 83 – Email: herle.goraguer@ifremer.fr

Koczorowski, Pauline. Directorate General for Maritime Affairs, Fisheries and Aquaculture (DGAMPA), Sustainable Marine Fisheries and Aquaculture Service, Fisheries Resources Sub-Directorate, European and International Affairs Office, Tour Séquoia, 1, place Carpeaux, 92055 Paris-La Défense Cedex, France
Email: pauline.koczorowski@agriculture.gouv.fr

Poirier, Arnaud. Conseil Territorial de Saint-Pierre et Miquelon Conseil, 2 place Monseigneur François Maurer, B.P. 4208, 97500 Saint-Pierre et Miquelon
Email: Arnaud.Poirier@ct975.fr

ICELAND

Head of Delegation

Sigurjonsson, Johann. Special Advisor Ocean Affairs, Directorate for Bilateral and Regional Affairs, Ministry for Foreign Affairs, Rauðarárstíg 25, 105 Reykjavík, Iceland
Tel: (+354) 545 9900 – Email: johann.sigurjonsson@utn.is

Head of Delegation (Alternate)

Bragi Bragason, Agnar. Legal Advisor, Department of Fisheries, Ministry of Food, Agriculture and Fisheries, Borgartún 26, 105 Reykjavík, Iceland
Tel: (+354) 545 9700 – Email: agnar.bragi.bragason@mar.is

Advisers/Representatives

Ásmundsson, Jóhann. Directorate of Fisheries, Surveillance Department. Directorate of Fisheries. Fiskistofa, Dalshrauni 1, 220 Hafnarfjörður, Iceland
Email: johann@fiskistofa.is

Benediktsdóttir, Brynhildur. Ministry of Industries and Innovation, Department of Fisheries, Skúlagötu 4, 150 Reykjavík, Iceland
Tel: +354 545 9700 – Email: brynhildur.benediktsdottir@anr.is

Greil, Snorre. Icelandic Coast Guard, Skógarhlíð 14, 105 Reykjavík, Iceland
Email: Snorre@LHG.IS

JAPAN

Head of Delegation

Nomura, Ichiro. Special Advisor, Ministry of Agriculture, Forestry and Fisheries, Government of Japan, 1-2-1 Kasumigaseki, Chiyoda-ku, 100-8950 Tokyo, Japan
Email: inomura75@gmail.com

Head of Delegation (Alternate)

Akiyama, Masahiro. Assistant Director, International Affairs Division, Ministry of Agriculture, Forestry and Fisheries, Government of Japan, 1-2-1 Kasumigaseki, Chiyoda-ku, 100-8950 Tokyo, Japan
Email: masahiro_akiyama170@maff.go.jp

Advisers/Representatives

Fujiwara, Toshihisa. Ministry of Foreign Affairs of Japan, 2-2-1 Kasumigaseki, Chiyoda-ku, Tokyo 100-8919, Japan
Email: toshihisa.fujiwara@mofa.go.jp

Isa, Hiromi. Executive Managing Director, Japan Overseas Fishing Association, Touei Ogawamachi-Bldg., 5F, 2-6-3 Kanda Ogawa-Machi, Chiyoda-ku, Tokyo, 101-0052, Japan
Email: isa@jdsta.or.jp

Matsunaga, Satoshi. Ministry of Agriculture, Forestry and Fisheries, Government of Japan, 1-2-1 Kasumigaseki, Chiyoda-ku, 100-8950 Tokyo, Japan
Email: satoshi_matsunaga010@maff.go.jp

Minagawa, Yasuyuki. Taiyo A&F., LTD. (TAFCO), Toyomishinko Bldg., 4-5, Toyomi-cho, Chuo-ku, 104-0055 Tokyo, Japan
Email: y-minagawa@maruha-nichiro.co.jp

Okamoto, Junichiro. Advisor, Japan Overseas Fishing Association, Touei Ogawamachi-Bldg., 5F, 2-6-3 Kanda Ogawa-Machi, Chiyoda-ku, Tokyo, 101-0052, Japan
Tel: +03 3291 8508 – Email: jokamoto@jdsta.or.jp

Taki, Kenji. Principal Researcher, Japan Fisheries Research and Education Agency, 2-12-4 Fukuura, Kanazawa, Yokohama, 236-8648 Kanagawa, Japan
Email: takistan@fra.affrc.go.jp

NORWAY

Head of Delegation

Ellingsen, Caroline Lunde. Norwegian Ministry of Trade, Industry and Fisheries, Fisheries Department, P.O. Box 8090 Dep, NO-0032 Oslo, Norway
Tel: +47 92 29 13 94 – Email: cle@nfd.dep.no

Head of Delegation (Alternate)

Fagerbakke, Sara Lier. Norwegian Ministry of Trade, Industry and Fisheries, P.O. Box 8090 Dep, NO-0032 Oslo, Norway
Tel: +47 930 98 998 – Email: sfa@nfd.dep.no

Advisers/Representatives

Hvingel, Carsten. Head of Research Group, Institute of Marine Research, P.O. Box 1870 Nordnes, 5817 Bergen, Norway
Tel: +47 95 98 05 65 – Email: carsten.hvingel@hi.no

Maldonado, Alejandro Chambi. Norwegian Directorate of Fisheries, Fisheries Regulation Section in Resource Management Department, P. O. Box 185, Sentrum, 5804 Bergen, Norway
Tel: +47 920 62 145 – Email: alejandrochambi.maldonado@fiskeridir.no

Myrvang, Runa. Norwegian Directorate of Fisheries, Control Section, P. O. Box 185, Sentrum, 5804 Bergen, Norway
Tel: +47 55 23 80 00 – Email: runa.myrvang@fiskeridir.no

Ognedal, Hilde. Senior Legal Adviser, Norwegian Directorate of Fisheries, P. O. Box 185, Sentrum, 5804 Bergen, Norway
Tel: +47 92 08 95 16 – Email: Hilde.Ognedal@fiskeridir.no

Vaskinn, Tor-Are. Head of Department, Norwegian Fishermen's Association, Fiskebatredernes Forbund, Strandveien 106, 9006 Tromsø, Norway
Tel: +90 64 09 78 – Email: tor-are@fiskebat.no

REPUBLIC OF KOREA

Head of Delegation

Shim, Soobin (virtual). International Cooperation Division, Ministry of Oceans and Fisheries, Republic of Korea
Email: sbin8shim@korea.kr

Head of Delegation (Alternate)

Kim, Soomin (virtual). Korea Overseas Fisheries Cooperation Center
Email: soominkim@kofci.org

Advisers/Representatives

Cho, Seong-Ju (virtual). Korea Overseas Fisheries Association, 83, Nonhyeon-ro (Yang Jae Dong), Seo Cho-Ku, Seoul, Republic of Korea
Email: csj@kosfa.org

Choi, Sang-Jin (virtual). Korea Overseas Fisheries Association, 83, Nonhyeon-ro (Yang Jae Dong), Seo Cho-Ku, Seoul, Republic of Korea
Email: sjin@kosfa.org



Report of the NAFO Commission,
19-23 September 2022

Jin, Ho-Jeong (virtual). Korea Overseas Fisheries Association, 83, Nonhyeon-ro (Yang Jae Dong), Seo Cho-Ku,
Seoul, Republic of Korea
Email: jackiejin@kosfa.org

RUSSIAN FEDERATION

Head of Delegation

Tairov, Temur (virtual). Representative of the Federal Agency for Fisheries of the Russian Federation in Canada,
47 Windstone Close, Bedford, Nova Scotia, B4A4L4, Canada
Tel: +1 902 405 0655 – Email: temurtairov@mail.ru

Head of Delegation (Alternate)

Belyaev, Vladimir, Head of the International Cooperation Department, Russian Federal Research Institute of
Fisheries & Oceanography (VNIRO), K. 17, V. Krasnoselskaya, Moscow, 107140, Russian Federation
Email: belyaev@vniro.ru

Advisers/Representatives

Egochina, Victoria. Head of Division, Russian Research Institute for Fisheries and Oceanography, Polar branch
(PINRO),
6 Knipovich St., Murmansk 183763
Tel: +7 8113062277 – Email: egochina@pinro.ru

Fomin, Konstantin. Lead Specialist, Russian Research Institute for Fisheries and Oceanography, Polar branch
(PINRO), 6 Knipovich St., Murmansk 183763, Russian Federation
Tel: + 7 8152 47 2469 – Email: fomin@pinro.ru

Lizogub, Alexander (virtual). Head of Section for Fisheries Management and State Control at Sea Areas,
Severomorskoe Territorial Department of the Federal Agency for Fisheries, 7 Komintern St., Murmansk
183038, Russian Federation
Email: lizogub@sevtu.ru

Melnikov, Sergey (virtual). Head of division, Russian Federal Research Institute of Fisheries & Oceanography
(VNIRO)
Email: melnikov@vniro.ru

Zizin, Roman. Embassy of the Russian Federation in Portugal, R. Visc. de Santarém 57, 1000-286 Lisboa,
Portugal
Email: rustrec@mail.ru

UKRAINE

Head of Delegation

Klochak, Oleh (virtual). International Cooperation of the State Agency of Melioration and Fisheries of Ukraine,
45A Sichovykh Striltsiv str., Kiev, 04053, Ukraine
Email: klochak2003@yahoo.com

Advisers/Representatives

Bilous, Oleksandr (virtual). Chief Specialist, International Cooperation of the State Agency of Melioration and
Fisheries of Ukraine, 45A Sichovykh Striltsiv str., Kiev, 04053, Ukraine
Email: bilousom@i.ua

Paramonov, Valerii (virtual). Research Officer of the Institute of Fisheries and Marine Ecology (IFME), State
Agency of Melioration and Fisheries of Ukraine, 45A Sichovykh Striltsiv str., Kiev, 04053, Ukraine
Email: vparamonov@i.ua



Slypko, Illia (virtual). Senior Research Officer, Institute of Fisheries and Marine Ecology (IFME), State Agency of Melioration and Fisheries of Ukraine, 45A Sichovykh Striltsiv str., Kiev, 04053, Ukraine
Email: i.v.slypko@gmail.com

Zabroda, Pavlo (virtual). Acting Head of the Laboratory of Ichthyological Research of the Institute of Fisheries and Marine Ecology (IFME), State Agency of Melioration and Fisheries of Ukraine, 45A Sichovykh Striltsiv str., Kiev, 04053, Ukraine
Email: pavlo.zabroda@ukr.net

UNITED KINGDOM

Head of Delegation

Francis, Will. Department for Environment, Food and Rural Affairs (DEFRA) Seacole Building, 2 Marsham Street, London, W1P 4DF, United Kingdom
Email: will.francis@defra.gov.uk

Advisers/Representatives

Readdy, Lisa. CEFAS – Lowestoft Laboratory, Pakefield Road, Lowestoft, Suffolk NR33 0HT
Email: lisa.readdy@cefas.co.uk

Round, Jake. Department for Environment, Food and Rural Affairs (DEFRA) Seacole Building, 2 Marsham Street, London, W1P 4DF
Email: jake.round@defra.gov.uk

Ryan, Jack. Department for Environment, Food and Rural Affairs (DEFRA) Seacole Building, 2 Marsham Street, London, W1P 4DF, United Kingdom
Email: jack.ryan@defra.gov.uk

Sandell, Jane. Chief Executive, UK Fisheries Ltd, The Orangery, Hesslewood Country Business Park, Ferriby Road, Hessle, East Yorkshire HU13 0LH
Tel: +44 (0) 1482 307501 – Email: jane@ukfisheries.net

Seales, Star. Department for Environment, Food and Rural Affairs (DEFRA) Seacole Building, 2 Marsham Street, London, W1P 4DF, United Kingdom
Email: star.seales@defra.gov.uk

UNITED STATES OF AMERICA

Head of Delegation

Pentony, Michael (virtual). Regional Administrator for NOAA Fisheries Greater Atlantic Regional Fisheries Office, National Oceanic and Atmospheric Administration, (NOAA), NMFS Greater Atlantic Regional Office, Gloucester, MA 01930, USA
Tel: +1 978-281-9283 – Email: michael.pentony@noaa.gov

Head of Delegation (Alternate)

Kelly, Moira. Senior Fishery Program Specialist, Regional Recreational Fisheries Coordinator, Greater Atlantic Regional Fisheries Office, National Marine Fisheries Service, 55 Great Republic Drive, Gloucester, MA 01930 USA
Tel: +1 978-281-9218 – Email: moira.kelly@noaa.gov

Advisers/Representatives

Carlsen, Erika. U.S. Department of State
Email: CarlsenEL@state.gov

Day, LCDR Lennie. First Coast Guard District, DRE – Enforcement Team Lead, United States Coast Guard, USA
Tel: +1 617-223-5820 – Email: Lennie.R.Day@uscg.mil



Report of the NAFO Commission,
19-23 September 2022

Duggan, Sam. Attorney-Advisor, Office of General Counsel, Northeast Region, National Oceanic and Atmospheric Administration (NOAA), 1315 East-West Hwy., Silver Spring, MD 20910, USA
Tel: +1 (301) 395-3093 – Email: sam.duggan@noaa.gov

Hendrickson, Lisa. Research Fishery Biologist, National Marine Fisheries Service, Northeast Fisheries Science Center, National Oceanic and Atmospheric Administration (NOAA), 166 Water St., Woods Hole, MA 02543, USA
Tel: +1 508 495 2285 – Email: lisa.hendrickson@noaa.gov

Jaburek, Shannah. Fishery Management Specialist, Sustainable Fisheries Division, Greater Atlantic Regional Fisheries Office, National Marine Fisheries Service, National Oceanic and Atmospheric Administration (NOAA), 55 Great Republic Drive, Gloucester, MA 01930, USA
Tel: +1 978 282 8456 – Email: shannah.jaburek@noaa.gov

Mencher, Elizabethann. International Policy Advisor, Office of International Affairs and Seafood Inspection, National Marine Fisheries Service, National Oceanic and Atmospheric Administration, (NOAA), 1315 East-West Hwy., Silver Spring, MD 20910, USA
Tel: +1 301 427 8362 – Email: elizabethann.mencher@noaa.gov

Minkiewicz, Andrew. Partner, Kelley Drye, Washington, DC, USA
Tel: (202) 342-8474 – Email: aminkiewicz@kelleydrye.com

Moran, Patrick (virtual). Foreign Affairs Specialist, National Marine Fisheries Service, Office of International Affairs and Seafood Inspection, National Oceanic and Atmospheric Administration, (NOAA), 1315 East-West Hwy., Silver Spring, MD 20910, USA
Tel: +1 301 427 8370 – Email: Pat.Moran@noaa.gov

Pohl, Katherine. Attorney Advisor, Office of General Counsel for Enforcement and Litigation, Greater Atlantic Regional Office, National Oceanic and Atmospheric Administration (NOAA), 55 Great Republic Drive, Gloucester, MA 01930 USA
Tel: +1 978 281 9107 – Email: katherine.pohl@noaa.gov

Provencher, Eric (virtual). Special Agent, District 1- New England, Boston Field Office, National Marine Fisheries Service, National Oceanic and Atmospheric Administration (NOAA) USA
Tel: +1 978-281-9261 – Email: eric.provencher@noaa.gov

Raymond, Margaret. Executive Director, Associated Fisheries of Maine, P.O. Box 287, South Berwick, ME 03908 USA
Tel: +1 603-767-0922 – Email: Maggieraymond@comcast.net

Reid, Eric (virtual). General Manager, Seafreeze Shoreside, Inc., 75 State St., Narragansett, (Pt. Judith) Rhode Island 02882 USA
Tel: +1 401 267 4470 – Email: ericreidri@gmail.com

Smith, Geoffrey. Marine Program Director, The Nature Conservancy, 14 Maine Street, Suite 401, Brunswick, ME 04011
Tel: +1 207-729-5181 – Email: geoffrey_smith@tnc.org

Sosebee, Katherine. Science Advisor, National Marine Fisheries Service, Northeast Fisheries Science Center, National Oceanic and Atmospheric Administration (NOAA), 166 Water St., Woods Hole, MA 02543, USA
Tel: +1 508 495 2372 – Email: katherine.sesebee@noaa.gov

Soule, Hank. Sustainable Harvest Sector, PO Box 356. S. Berwick, ME 03908
Tel: +1 (207) 956-8497 – Email: HankSoule@gmail.com

Usher, Richard. Senior Vice President, A.I.S. Incorporated, 14 Barnabas Road, PO Box 1009, Marion, MA 02738, USA
Tel: +1 774 200 0563 – Email: ricku@aisobservers.com

Warner-Kramer. Deirdre (see Chairs).



OBSERVERS**ABNJ Deep-Sea Fisheries Project**Thompson, Anthony. Email: Anthony.Thompson@fao.orgVarga Lencses, Viktoria. Email: viktoria.vargalencses@fao.org**Deep Sea Conservation Coalition**Diz, Daniela. Email: dizdani@gmail.comGianni, Matthew (virtual). Email: matthewgianni@gmail.com**Ecology Action Centre (EAC)**Fordham, Sonja. Shark Trust. Email: sonja@sharkadvocates.orgPardo, Sebastián (Virtual). Email: sebpardo@ecologyaction.ca**Food and Agriculture Organization (FAO) of the United Nations (UN)**Reid, Keith (virtual). Email: keith.reid@rossanalytics.com.au**North East Atlantic Fisheries Commission (NEAFC)**

Delegation of Denmark (in respect of Faroe Island and Greenland)

South East Atlantic Fisheries Organisation (SEAFO)

Delegation of Japan

Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR)

Delegation of the European Union

NAFO SECRETARIAT

Summit Place, 1601 Lower Water Street, Suite 401, Halifax, Nova Scotia, Canada – Tel: +1 902 468-5590

Kingston, Fred. Executive Secretary.

Email: fkingston@nafo.int

Blasdale, Tom. Scientific Council Coordinator.

Email: tblasdale@nafo.int

Federizon, Ricardo. Senior Fisheries Management Coordinator.

Email: rfederizon@nafo.int

Goodick, Stan. Deputy Executive Secretary/

Senior Finance and Staff Administrator.

Email: sgoodick@nafo.int

Guile, Sarah. Office Administrator.

Email: sguile@nafo.int

Kendall, Matthew. IT Manager.

Email: mkendall@nafo.int

Laycock, DJ. Database Developer/Programmer Analyst.

Email: dlaycock@nafo.int

LeFort, Lisa. Senior Executive Assistant.

Email: llefors@nafo.int

Pacey, Alexis. Senior Publications/Web Manager.

Email: apacey@nafo.int

Soroka, Mikaela. Fisheries Information Administrator

Email: msoroka@nafo.int

Annex 4. Opening Statement by the Acting Chair of the NAFO Commission

Dear Deputy Director, distinguished colleagues, and friends, it is wonderful to see you all again. I am very pleased to welcome you to the 44th Annual Meeting of NAFO here in the beautiful and historic city of Porto – a UNESCO World Heritage Site. I also want to thank very much the government of Portugal and the European Union for hosting us this week in such beautiful surroundings. I am sure they will want us to take advantage of all that Porto has to offer, but we also have important work to do this week.

Before we turn to that, I did want to recognize that today is also the funeral of Her Majesty Queen Elizabeth II and offer deepest condolences, both personally and on behalf of the Commission, to the people of the United Kingdom, Canada, and the rest of the Commonwealth on this sad occasion.

Although the Organization has been able to do its business and make very good progress virtually over the last few years, despite the pandemic, it is good to return to business as usual. While we are still in a hybrid format and some of our colleagues are not able to attend in person, I am confident that we will be able to collaborate smoothly and transparently, and make great progress this week.

In addition to our annual process of determining the appropriate fisheries management measures for 2023, I want to highlight several other important issues we will take up in this meeting. As you all know, it has been a very busy year for NAFO. Since the last Annual Meeting, there have been over twenty-five intersessional meetings – over two meetings per month. The results of all this work will come before us this week for decision. In particular, you will see that there has been great progress in the revision of NAFO's Precautionary Approach Framework, as well as in the development of NAFO's ecosystem approach framework to fisheries management, building on the ground-breaking work we have already been doing over the last 15 years. We will now need to make important decisions about what is next in both of these key areas.

We will also choose a new Executive Secretary, who will help us to carry this progress over the coming years.

All of NAFO's recent achievements are based upon the work of our under-resourced and undermanned – though certainly not underappreciated – Scientific Council. Outside of its “normal work,” the SC is not only working on the revision of NAFO's precautionary approach framework and the development of the NAFO's ecosystem approach framework, it is also working on a Management Strategy Evaluation (MSE) for 3LN redfish and the review of the MSE for Greenland halibut – all at the same time. I anticipate that we will again hear the plea from the Chair of the Scientific Council for more substantive support from Contracting Parties for this work, which continues to expand in both volume and complexity. This is an issue that must be addressed if NAFO wants to continue its leadership role and its commitment to the long-term conservation and sustainable use of its fishery resources.

Internationally, the so-called BBNJ negotiations in the UN are now into overtime, the results of which may have major implications as to how NAFO conducts its business in the future. In this context, I very much appreciate the efforts the Secretariat has made to deliver the message about NAFO's achievements, particularly on the development on NAFO's ecosystem approach framework, at UN meetings and other international I, to complement the efforts of Contracting Parties.

Finally, I want to thank the Secretariat for all their work throughout the year and for their excellent preparations for this meeting. I also want to thank Contracting Parties for your incredibly positive contributions to the Organization throughout this past year, and I am confident that these will continue this week.

I now declare the 44th Annual Meeting of NAFO officially open.

Annex 5. Opening Statement by the Delegation of the Canada

On behalf of the Government of Canada, I would like to acknowledge with deep sadness the passing of Her Majesty Queen Elizabeth II. Over the last 70 years Her Majesty dedicated herself to the service of her people, and we shall all aim to take on this example in our own lives. For most Canadians, we have known no other Sovereign. Queen Elizabeth II was a constant presence in our lives. Time and again, Her Majesty marked Canada's modern history. On this national day of mourning, Canada offers our sincere condolences to the members of the Royal Family, the people of the United Kingdom and the other Realms, and all members of the Commonwealth.

As previously stated at NAFO and in other I, Canada must condemn the unjustifiable and unprovoked invasion of Ukraine. The international community must be seized of this issue. This is not just an attack on Ukraine. This is an attack on international law, including the UN Charter, as well as democracy, freedom, and human rights. In launching this war, Russia is seeking to destroy the freedom of a people and to overthrow the democratically elected government of a sovereign nation. We must act immediately with one global voice to condemn President Putin's aggressive actions. What Russia has done cannot be normalized. We must hold Russian leadership to account, call on it to abandon this path of war, and return to good-faith diplomacy. The world must reject President Putin's behaviour. Canada stands with the government of Ukraine and its brave and resilient people.

Canada is very pleased to be a part of the 44th Annual Meeting of the Northwest Atlantic Fisheries Organization (NAFO), being held for the first time in a hybrid format since the COVID-19 pandemic.

Over the last few years Contracting Parties have demonstrated exceptional commitment while continuing to make progress within each of NAFO's Standing Committees, Working Groups, and the Scientific Council virtually. While we are thankful for this effort and the accomplishments made in this virtual setting, we are delighted to be reunited with most NAFO Contracting Parties today in person, in Porto, Portugal. We are grateful to the EU, and Portugal specifically, for providing us with such a beautiful venue, and wonderful hospitality for what we are sure will be a productive meeting.

Canada notes that our discussions this week would not be possible without the comprehensive analysis and expert advice provided by the Scientific Council. This advice is critical to inform the Commission's management decisions in support of continued sustainable management of NAFO stocks. We, along with other Contracting Parties, again emphasize our concern about the continued heavy workload of the Scientific Council and urge all Contracting Parties to consider how they may be able to expand their participation and make meaningful change to the overall capacity of the Scientific Council. The Commission should also exercise restraint in its formulation of requests to SC, both in terms of the number of requests and how many are identified as priorities.

None of NAFO's success could be achieved without the unwavering professionalism and extraordinary hard work of the NAFO Secretariat. Their continued careful attention to meeting logistics (complicated with hybrid sessions) and ongoing support of the Commission, the Scientific Council and all NAFO bodies is deeply appreciated by Canada. We are particularly appreciative that our colleagues had the opportunity this year to host contracting parties at the new Headquarters, which Canada is proud to host in Halifax, Nova Scotia.

We are optimistic that our discussions this week will be productive as we continue to advance on number of key issues now before us, notably management decisions in line with Scientific Council advice for all stocks, advancing the conservation of Greenland sharks, agreement on the use of 2TCI as an ecosystem reference point, progress towards a fair and sustainable management regime for 3M Shrimp, and a commitment to advance the workplans for the revision of the Precautionary Approach Framework and the management strategy evaluations for 3LN redfish and 2+3KLMNO Greenland halibut.

Each of these elements contributes significantly to achieving NAFO's overall objectives and serves to promote and protect our ocean resources. We need to ensure that they remain healthy for future generations, while providing important economic opportunities to Canada, its coastal communities and to all Contracting Parties.

Finally, Canada would like to express its heartfelt appreciation to the Executive Secretary, Fred Kingston. Since 2014, Fred has demonstrated exceptional commitment and dedication to this organization. Fred has been instrumental in enabling NAFO's progress on important issues, in particular throughout the pandemic. While they will be big shoes to fill, we trust that the next Executive Secretary will ensure that the Secretariat continues to expertly support NAFO in its work. We wish you all the best with your future plans. Thank you once again.

**Annex 6. Opening Statement by the Delegation of Denmark
(in respect of the Faroe Islands and Greenland)**

Madame Chair, Distinguished Delegates, Observers, Ladies and Gentlemen,

The Faroe Islands and Greenland (DFG) would like to begin by thanking our Portuguese hosts for the opportunity to meet in this beautiful location of Porto. It is a true pleasure for us to finally be able to meet colleagues and partners again in a physical location. This delegation would also like to convey its appreciation and warm thanks to the Secretariat for their outstanding efforts to plan this annual meeting and for keeping us all well informed and up to date on meetings and activities this past year.

This Delegation takes note of the latest advice of the Scientific Council with respect to shrimp in 3M, recommending no directed fishery in 2023 to be consistent with the NAFO precautionary approach. The advice arrived ahead of the postponed face-to-face intersessional meeting on moving from a system of fishing days to quotas, which was a welcomed opportunity for constructive discussions among Contracting Parties. DFG is of the view that further work should consider primarily objective and quantifiable factors, specifically effort allocation and historical catches under the current management system.

One of the key issues for the Faroe Islands is the conservation and management measures with respect to the cod stock in 3M. The Faroe Islands remains committed to taking appropriate conservation and management measures and is equally committed to optimising the information underlying the determination of relevant conservation and management measures. This includes initiatives that can help guide us to broaden the perimeters of our understanding of the stock. Given existing resources, the Faroe Islands are collaborating with commercial fishing vessels in contributing to data gathering. As a hybrid approach, this summer a longliner flying the flag of the Faroe Islands conducted commercial fisheries in 3M, in line with scientific guidance provided by the Faroe Marine Research Institute. This delegation welcomes constructive discussions with the Scientific Council and contracting parties on the 2022 approach, as a possible way forward for conducting scientific surveys in collaboration with the fishing industry.

Mr Chair, the Faroe Islands and Greenland are looking forward to a productive week in these lovely surroundings, and to work constructively with all other delegations to contribute to a successful outcome of this 44th Annual Meeting of NAFO.

Thank you.

Annex 7. Opening Statement by the Delegation of the European Union

Madame Chair, Distinguished Delegates, Observers, Ladies and Gentlemen,

First of all, we would like to thank the Government of Portugal for hosting the 44th Annual Meeting of NAFO in the wonderful city of Porto, with its rich history, in particular in relation to seafaring as well as fisheries, and taking place in a historical building Palácio da Bolsa, of Associação Comercial do Porto, providing enabling spirit for our negotiations, in particular after two years of virtual meetings.

Secondly, we would like to note the excellent preparatory work carried out ahead of this meeting which should allow us to reach decisions that will contribute to the effective and sustainable management of international fisheries that this organisation has been entrusted to manage. The Commission will again have to set TACs for fish stocks under the purview of NAFO that ensure their sustainable management and exploitation for the years to come while taking into account environmental, economic and social considerations. The EU will continue to seek and support solutions based on the best available scientific advice, aiming to ensure long-term sustainability for the stocks and predictability for the industry that depend on their exploitation for their livelihoods.

The EU has carefully studied the advice emanating from the Scientific Council and will continue to support sustainable approaches for the long-term management of key stocks, such as cod, Greenland halibut and redfish, which are of particular importance to the EU. In this regard, special consideration must also be given to technical and control measures that can help us better achieve the conservation objectives of NAFO. We are aware of the difficult situation of Northern shrimp in division 3M and have taken note of the most recent recommendation from the Scientific Council. The disappointing result of the scientific assessment of the status of this stock does however not deflect from the need for a new management regime based on a TAC and quota allocation, possibly together with other management measures. It has been not possible to agree on such measures last year due in part to the inability to meet face to face to negotiate such new management measures because of the pandemic situation. The EU remains committed to devising a new and better fisheries management plan for Shrimp 3M and will engage constructively in the discussions. The EU believes that NAFO at this meeting must at a minimum at least make some progress in this process by agreeing on some of the key elements upon which a future conversion mechanism could be based.

Regarding control and enforcement, the EU will continue to promote compliance of the EU fleet with the NAFO rules in force, both at sea and in port, and measures that increase the efficiency of NAFO's control and inspection systems.

The EU delegation looks forward to working with all Parties around the table in order to achieve the best possible result for NAFO stocks and ecosystems and to make this Annual Meeting in Porto a joint success.

To conclude Madame Chair, let me express the European Union and its Member States' full solidarity with Ukraine and the Ukrainian people.

The EU condemns in the strongest possible terms Russia's unprovoked and unjustified act of aggression against Ukraine, which grossly violates international law and the United Nations Charter, and undermines international security and stability.

The EU demands that Russia immediately cease its military actions, withdraw all its troops from the entire territory of Ukraine and fully respect Ukraine's territorial integrity, sovereignty and independence within its internationally recognised borders and abide by UN General Assembly resolution titled "*Aggression against Ukraine*" supported by 141 states at the 11th emergency special session.

The EU resolutely supports Ukraine's inherent right of self-defence and the Ukrainian armed forces' efforts to defend Ukraine's territorial integrity and population in accordance with Article 51 of the UN Charter.

At all times Russia must respect its obligations under international law, including international humanitarian and human rights law, including with respect to the protection of civilians, women and children.

Russia also needs to stop its disinformation campaign and cyber-attacks.

Annex 8. Opening Statement by the Delegation of Japan

First of all, Japan would like to express its deepest gratitude to Portugal, the NAFO Chairs and Secretariat staff for the excellent preparation and arrangements to hold the 44th Annual Meeting in continuously difficult situation, which is the first in-person/hybrid annual meeting since the COVID-19 pandemic.

As expressed in the Workshop “to discuss the UN resolution on sustainable fisheries, addressing the impacts of bottom fishing on vulnerable marine ecosystems and the long-term sustainability of deep-sea fish stocks”, held from 2 to 3 August 2022 in New York, it was appreciated that RFMOs including NAFO have played important roles in sustainable management of deep-sea fish stocks. Among RFMOs, NAFO has taken the lead in actively addressing emerging issues and incorporating the advanced concepts and knowledge for the sustainable use of fishery resources based on the best available science. New and emerging concepts and issues, including ecosystem approach, and the effect of climate change and other activities than fishery, have gathered attention in international community.

Noting the importance of continuing to discuss and address emerging challenges surrounding fishery resources, Japan would like to draw attention to the need for prioritization of works of NAFO, taking into account the available but limited resources.

Although what NAFO has achieved in terms of the sustainable use should be highly appreciated, actively addressing those works entails enormous amounts of workloads to the secretariat and Contracting Parties. We are concerned that NAFO would face the difficult situation where it is not able to address all the issues, should the prioritization of its programs and works not take place. For the number of challenges which need to be addressed has increased and their areas to be covered have also expanded.

It is necessary to review and develop management strategies of Greenland Halibut and Redfish in coming years. The Scientific Council decided to postpone to 2023 the analysis of 3M Cod fishery. It is essential for NAFO as a RFMO to consider and discuss how to sustainably manage the regulated stocks including those primary species. As the available resources are limited, NAFO needs to consider the preferential allocation of the resources for the prioritized works and issues based on agreement and discussion between Contracting Parties.

In conclusion, Japanese delegation is ready to work closely and cooperatively with other delegations to find good and reasonable solutions on every issue to be discussed so that the regulated stocks continue to be sustainably managed based on the best available scientific information.

Annex 9. Opening Statement by the Delegation of Iceland

Thank you Chair.

We think it is important to underline Iceland's full solidarity with Ukraine and condemn in the strongest terms Russia's invasion, which is flagrant violation of international law and the UN Charter.

Iceland reiterates its unwavering support of the sovereignty, independence, and territorial integrity of Ukraine within its internationally recognized borders.

Annex 10. Opening Statement by the Delegation of Norway

Madame Chair, Distinguished Delegates, Observers, Ladies and Gentlemen,

Firstly, we would like to thank the Government of Portugal for hosting the 44th Annual Meeting of NAFO in the beautiful city of Porto, and to further extend our gratitude to the Secretariat for their invaluable efforts organising this year's meeting.

Good governance requires close cooperation. Norway is dedicated to work closely with other Contracting Parties to contribute to the sustainable management of the marine resources in the Convention Area, protecting its marine ecosystems based on best available scientific advice.

To this end, Norway would in particular like to highlight the necessity of ensuring a sustainable management of shrimp in 3M. The rapid decline and current poor state of the stock has prompted the need for efficient and targeted measures to manage and limit the outtake. Norway has therefore tabled a proposal for a new management regime, where we suggest a TAC and sharing arrangement based on the equal weighing of two parameters; each CPs historical catches and allocated effort. We hope our proposal can serve as a basis for discussion, in order to find a common path forward.

Finally, we wish to express Norway's full solidarity with Ukraine and the Ukrainian people.

Norway condemns Russia's attack on Ukraine in the strongest possible terms. Russia's aggressive actions are a clear violation of Ukraine's independence, sovereignty, and territorial integrity.

We must defend our world order, where relationships between states are determined not on the basis of power, but by international law. The sovereignty, political independence, and territorial integrity of Ukraine constitute the basic principles of the international community, enshrined in the UN Charter.

Annex 11. Opening Statement by the Delegation of the Russian Federation

Madame Chair, Distinguished Delegates, Observers, Ladies and Gentlemen,

The Russian Federation highly appreciates the opportunity the Annual Meeting provides for discussing the crucial issues related to management of fish stocks, protecting marine ecosystems and implementing conservation and enforcement measures.

We recognize the concerted effort made by NAFO Contracting Parties in order to achieve the goals prescribed by the NAFO Convention, “to ensure the long term conservation and sustainable use of the fishery resources in the Convention Area and, in so doing, to safeguard the marine ecosystems in which these resources are found”. However, in order to succeed in addressing the main goals of NAFO, we must not let the current geopolitical tensions derail the work of this organisation. It should be noted that according to paragraph 4.3 of the NAFO Rules of Procedure “no order of business shall be the subject of a decision, unless the subject matter has been included in the provisional agenda and explained in a memorandum, circulated by the Executive Secretary to all the representatives of the Contracting Parties, together with the corresponding provisional agenda”. Thus, the discussion of issues not related to the activities of NAFO is counterproductive and inefficient in the light of the tasks that need to be addressed by the Organization.

Russia, as before, is committed to work cooperatively with all NAFO Contracting Parties on the meeting agenda in the spirit of openness and mutual respect.

Annex 12. Opening Statement by the Delegation of Ukraine

Good day, ladies and gentlemen!

We are sincerely grateful to the Northwest Atlantic Fisheries Organization (NAFO) for the opportunity to take part in this event, which is of great importance to all the NAFO members for achieving significant progress with key decisions on sustainable management of NAFO-managed fish stocks and protection of vulnerable marine ecosystems.

At the same time, we cannot ignore the situation with the military invasion of the Russian Federation. These actions by Russia are undoubtedly an unjustified and unprovoked act of aggression against the independent and sovereign state of Ukraine, as well as a violation of all existing norms of international law, basic norms of morality and principles of human coexistence.

By using units of the armed forces, heavy ground weapons, including long-range weapons and military aircraft the Russian Federation, destroys military and civilian infrastructure, carries out regular shelling of peaceful Ukrainian cities, civilians, which has already resulted in significant casualties among both military and civilians including children.

Russian aggressive actions against Ukraine are, without exaggeration, a crime against humanity and, in general, call into question the effectiveness and efficiency of the entire world security system that humanity has developed over the years, taking into account the devastating effects of World War II.

We are convinced that the consolidated efforts of the world community and the pressure on the Russian aggressor regime can ensure peace on earth and stop the further invasion of the Russian Federation into Ukraine, which could result in thousands of unjustified casualties among the Ukrainian population.

A lot of thanks for your support, understanding and willingness to help Ukraine!

Stay together!

Thank you once again!

Annex 13. Opening Statement by the Delegation of the United Kingdom

Good morning, Chair, distinguished delegates, members of the secretariat, and observers. Thank you for the opportunity to make a short intervention on a day of great significance to the United Kingdom.

As you will be aware, today is the State Funeral of Her Majesty the Queen and I feel it appropriate to note events taking place in London and watched from around the world. The death of Her Majesty the Queen is a moment of profound grief and loss. Her Majesty has been a constant and steady presence in the life of the United Kingdom for over seven decades.

She will be remembered for her dedication at home, across the Commonwealth and around the globe. During her life she visited more than 100 countries and touched the lives of millions around the world. Her extraordinary service has fostered peace and friendship worldwide. We would like to thank all those who join us in expressing condolences to the Royal Family.

As our Prime Minister has said, 'we will come together with our friends across the world to celebrate her extraordinary lifetime of service. It is a day of great loss, but Queen Elizabeth II leaves a great legacy.'

Moving on to fisheries matters, I am pleased that the United Kingdom can participate independently in an 'in-person' Annual Meeting of the Commission for the first time. I would like to extend my sincere thanks to the Secretariat for their tireless efforts in organising this meeting, and to the EU (and member state Portugal) for hosting us this year. I would also like to thank members of Standing Committees and Working Groups for their valuable work throughout the year in at times difficult circumstances.

NAFO plays an important role in sustainable fisheries management and the sharing of best practice. The United Kingdom is keen to continue to stress the importance of agreeing measures that are consistent with advice of the Scientific Council. On the United Kingdom's primary interest, 3M cod, we are concerned with the overall health of the stock and the projection that biomass will decline in all fishing scenarios. It is crucial that for all stocks we demonstrate NAFO's commitment to the long-term sustainable management of resources.

As he has now stepped aside from co-chairing the Working Group on Ecosystems Approach Framework to Fisheries Management (WG-EAFFM) and the Working Group on Ecosystem Science and Assessment, we would like to extend thanks to Andy Kenny for his hard work and dedication to NAFO's work forward-thinking in the area over many years. Unfortunately, Andy is unable to attend this meeting, but I am sure you will all join be in thanking Andy for efforts. The UK supports the recommendations from recent WG-EAFFM meeting, including the recommendation to include information regarding Total Catch Indices in advice from the Scientific Council.

Thank you for your time. The UK looks forward to a productive week of productive discussions.

On participation of the Russian Federation

Our participation in this forum together with a delegation from the Russian Federation in no way suggests a normalisation of relations whilst the Russian Federation continues to threaten our allies.

Russia's assault on Ukraine is an unprovoked, premeditated attack against a sovereign democratic state.

The UK and our international partners stand united in condemning the Russian government's reprehensible actions, which are an egregious violation of international law and the UN Charter. As a Permanent Member of the UN Security Council, Russia has a particular responsibility to uphold international peace and security. Instead, it is violating the borders of another country and its actions are causing widespread suffering.

The Russian Government has shown that it was never serious about engaging in diplomacy – it has deliberately worked to mislead the world, in order to mask its carefully planned aggression. As the UN Secretary-General has said, such unilateral measures conflict directly with the United Nations Charter - the use of force by one country against another is the repudiation of the principles that every country has committed to uphold.

Annex 14. Opening Statement by the Delegation of the United States of America

Chair, Delegates, Ladies, and Gentlemen, the United States is honored to participate in this 44th NAFO Annual Meeting. There are many reasons for celebration at this meeting. First, it is a distinct pleasure to finally be able to look across the table and see so many of our NAFO colleagues in person. Second, we are very happy to be back in Portugal, and we would like to thank the city of Porto, Portugal, and the European Union for hosting this year's meeting. Two of our region's main ports, Gloucester and New Bedford, Massachusetts, have deep fishing connections with Portugal, so it is very special to be here for this week's discussions. We look forward to exploring the beautiful city of Porto.

The last two and a half years have been very challenging, but the United States has been pleased with the success of our many virtual and hybrid meetings. This success is a testament to the strong relationships and commitment among NAFO Contracting Parties. It is also a result of the dedication and hard work of the NAFO Secretariat in the face of a significantly increased workload, and other challenges. We thank them once again for their professionalism and efforts to NAFO and its members.

The United States remains committed to upholding the standards that we have set for ourselves for the conservation and management of NAFO species and ecosystems. Along these lines, we will continue to strongly advocate for consistency across management decisions of the Commission and the advice of the Scientific Council. It is our hope that NAFO Parties will support this basic principle and act accordingly -- even when the decisions are difficult. That said, in order to achieve this goal, we must also ensure that the Scientific Council has the tools and resources necessary to meet the increasing demands placed on it every year. Thus, the United States would again call on the Commission to closely collaborate and coordinate with the Scientific Council on priority-setting and providing the resources necessary to provide the best possible scientific advice.

The United States will also continue to advocate for the general guiding principle of transparency as the default for deliberations by all NAFO bodies and in the decisions that result from those deliberations. Although the United States recognizes that there may be rare instances where participation in certain discussions on sensitive topics must be limited, we must ensure that fair, clear and predictable procedures are in place to identify which topics and NAFO participants are afforded these special considerations. That said, it is the U.S. position that it is a basic responsibility of NAFO membership that all Contracting Parties ensure their delegations fulfill all NAFO requirements regarding data and other confidentiality rules -- and it is up to individual Contracting Parties to determine who best represents their interests in any NAFO meeting. This is the sovereign right of Contracting Parties. It is incumbent on each Contracting Party to effectively apply and implement the NAFO rules and requirements. It is our hope that we can make further progress on this issue during this meeting.

Regarding NAFO stocks, we remain committed to following Scientific Council advice for all stocks under consideration this year. We would also urge that Commission members use precaution when considering decisions relative to these stocks. We are strongly committed to upholding the principles of the NAFO convention and remain frustrated that our access to NAFO fisheries remains out of line with our position as a Coastal State, as well as the financial and in-kind support that we provide to the Organization.

We would like to note that the United States has submitted a proposal, co-sponsored with Canada, addressing Greenland sharks, which is based on the best available science, and is complementary to efforts we have in STACTIC to improve data collection from observers on catches of these and other sharks. We are hopeful that Contracting Parties will support this effort.

Additionally, we were encouraged by our 3M Shrimp discussions this Sunday. We think it is vital that we make progress this week on how NAFO will sustainably manage the stock for the long term. We remain committed to a transparent and open dialogue regarding the future of 3M shrimp and are hopeful we can leave this week having made tangible and significant progress.

Report of the NAFO Commission,
19-23 September 2022

As we meet this week, the United States cannot ignore the continued threat posed by Russia's unprovoked and unjustified war in Ukraine. This has led to severe impacts around the world, including a devastating rise in food insecurity. We call upon the Russian government to immediately cease its use of force against Ukraine and refrain from any further unlawful threat or use of force against any UN member state. We join Secretary-General Guterres's urgent plea for Russia to immediately withdraw all its military forces from the territory of Ukraine. While Russia's actions in Ukraine are a clear violation of international law, we cannot and should not allow this situation to impede the important work of NAFO.

Thank you very much and we look forward to a cooperative and productive week.

Annex 15. Opening Statement by the Ecology Action Centre

The Ecology Action Centre (EAC) thanks the Chair and NAFO Secretariat for their efforts to organize this hybrid 44th Annual Meeting of NAFO in Porto, Portugal. We appreciate the opportunity to participate as observers in the deliberations and share our perspectives.

NAFO's Scientific Council (SC) continues to undertake ground-breaking work on the development of ecosystem approaches to fisheries management. We are pleased that the external independent review concluded and corroborated that 2TCI is a scientifically sound and robust reference point of ecosystem productivity, which is an additional metric to better inform management decisions. We are also pleased that after many years of delays, the workshop on integration of the ecosystem approach took place in August. NAFO is at the global forefront of ecosystem-based fisheries management and these efforts will result in better management outcomes. We urge all Parties to:

- adopt all Working Group recommendations on the Ecosystem Roadmap;
- incorporate 2TCI as additional science information in stock and ecosystem assessments; and
- allocate capacity for the continuation of Tier 2 of the Ecosystem Roadmap.

We are concerned that the 2018 SC advice for exceptionally long-lived Greenland sharks has only been partially heeded and that requirements to report on catches and bycatch mitigation remain unfulfilled. We urge Parties to immediately safeguard Greenland sharks by:

- completely prohibiting retention, in line with SC advice; and
- continuing experts' work to improve catch reporting and develop bycatch mortality mitigation measures.

We remain concerned about the poor status and inadequate management of thorny skates. We find the current NAFO skate TAC -- set at roughly twice the level recommended by the SC -- to be highly risky and irresponsible, particularly for such inherently vulnerable species. We urge Parties to:

- set the 2023-2024 skate TAC at < 3,710t, in line with the latest SC advice; and
- prioritize the improvements needed to establish reference points for a rebuilding plan.

Finally, we note the workload and complexity of the analyses requested of the SC continue to outstrip their resources and time available. This undermines the ability of NAFO to ensure comprehensive and credible management in the Convention Area.

- We look to Parties to carefully consider all requests to SC and to provide the necessary funding, resources, and expertise to support their work.

We thank you for your consideration and look forward to this week's deliberations.

Annex 16. Opening Statement by Deep Sea Conservation Coalition

Chair, Heads of Delegation, Delegates and fellow Observers, we are pleased to be making this opening statement at this first in person Annual meeting since 2019. We also greatly appreciate the opportunity to continue to participate virtually to allow for maximum flexibility for our advisors. For our delegates attending in person, we extend our thank you to Portugal and the city of Porto for hosting.

In keeping with our mandate, the Deep Sea Conservation Coalition representing its 100+ member organizations continue to work towards the protection of vulnerable marine ecosystems and the sustainable management of deep sea fisheries across RFMOs responsible for the management of deep-sea fisheries.

We have followed the progress of NAFO since 2007, with a particular focus on protection of VMEs. The UN Bottom Fishing Workshop held in August 2022, where actions in line with the series of UNGA Sustainable Fisheries Resolutions regarding bottom fishing by RFMOs were reviewed. NAFO's progress, particularly in protecting all seamounts and related features were well noted, and sets this organization ahead of its counterparts.

We urge NAFO Contracting Parties to continue to work to fully implement scientific advice in line with full implementation of the UNGA Resolutions. The work of the WG-ESA and WG-EAFFM to this end is vital to ensuring that RFMOs are both capable and competent to protect biodiversity in areas under their jurisdiction to the greatest extent possible.

This year, we want to recognize the long road that has been traveled on the Ecosystem Roadmap and urge Contracting Parties to ensure further scientific support for this groundbreaking work and advance this approach – that represents an important and imperative progression of understanding fisheries in the context of a changing and connected ecosystem.

For the 2022 Annual meeting we provide the following recommendations, that can also be found in our annual checklist for NAFO which we have provided to all Heads of Delegation, and which are also available in hard copy at the meeting.

- RFMOs are only as strong as the sum of the parts of their Contracting Parties. To this end, we urge Contracting Parties to carry forward the commitment to protecting seamounts and related features in all other RFMOs where fishing continues to occur in these fragile ecosystems.
- While we understand the impacts of closed areas on research surveys, NAFO has done a commendable job of not trawling for research within closed areas. We urge NAFO to continue this practice, with a focus on not permitting any research surveys in VME areas. We fully understand the desire to maintain long term data on fish populations, however the recent aberrations and lack of surveys within the area by Contracting Parties are likely to have much more of an impact on these long-term data sets, than restricting surveys in VME closures.
- First proposed in 2018, NAFO is long overdue in adopting a measure to prohibit the retention and landing of Greenland Sharks. These animals are among the longest lived in the world. Fishing is the greatest threat. Failure to act on Greenland sharks is not an option.
- NAFO continues its work to improve catch reporting for all sharks, through observer programs and other mechanisms, including species, size, sex and discard disposition.
- NAFO agrees to a reduction in the Thorny Skate TAC from 7000t to 3710t given this year's science advice and low resilience to fishing pressure of this species.
- NAFO adopts quota decisions for all managed stocks in line with science advice for all NAFO managed species. We have appreciated the reporting on following science advice by NAFO in its Annual Report as it helps to hold Contracting Parties to account.
- NAFO adopts all WG EAFM recommendations on advancing the Ecosystem Approach to Fisheries Roadmap, including requesting notification from the SC when the catch has exceeded 2 times the total catch index. This work has been ongoing for more than a decade, and it is past time that NAFO make progress on the implementation of the Ecosystem Roadmap.

- NAFO Contracting Parties endeavour to provide capacity to understand and address non-fishing related activities and their potential environmental impacts, with a specific view towards advancing biodiversity protection in areas beyond national jurisdiction and upholding the intent of the ongoing negotiations for a new high seas treaty. We note NAFO's discussion at the WG EAFFM meeting to convene a group to assess NAFO's VME closures according to the Convention on Biological Diversity criteria for Other Effective Area-based Conservation Measures (OECMs). NAFO Contracting Parties authorizing or undertaking activities that negatively impact biodiversity protection should consider this authorization in light of the need for comprehensive biodiversity measures.
- Finally, NAFO Scientific Council has been requesting additional support and expertise for the ecosystem approach and impacts of activities other than fishing. Contracting Parties should identify individuals this year who can fill these gaps, to enable the Scientific Council to successfully deliver on requests approved by the Commission.

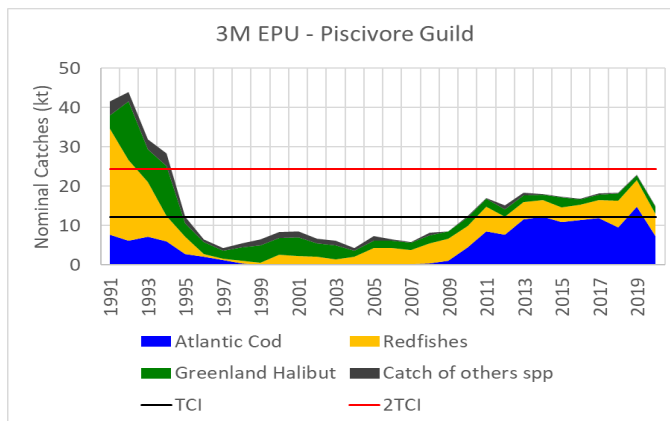
Thank you, Matt Gianni and Daniela Diz, Deep Sea Conservation Coalition

Annex 17. COMPILATION of SC Response to Feedback Questions Regarding its Scientific Advice
[COM Doc. 22-23 now COM WP 22-55]

From European Union [COM WP 22-35]	1. Regarding 3M Cod assessment, EU would like SC to inform which F would correspond with a 50% probability of SSB ₂₀₂₅ being greater than SSB ₂₀₂₂ (according to table 2 of the provided assessment).																																																																																																																																																																																																																							
Scientific Council responded [COM WP 22-38 Rev.]	<p>Two projections based on Fishing Mortality have been performed to get P(SSB₂₅>SSB₂₂)=50% and P(SSB₂₅>SSB₂₂)=75%. Results for these two projections are in Tables 1 and 2 as in the advisory sheet of the 3M cod. Table 1 includes the results for the two new projections, while Table 2 shows the risk results for the projections from the advisory sheet together with the two new ones, sorted by the P(SSB₂₅>SSB₂₂). New projections in Table 2 are bolded.</p> <p>The F that gives a P(SSB₂₅>SSB₂₂)=50% is 0.595*F_{lim}=0.099. The F that gives a P(SSB₂₅>SSB₂₂)=75% is 0.046*F_{lim}=0.076.</p> <p>Table 1. Results of the projections of 3M cod with F_{bar} = 0.595*F_{lim} = 0.099 (giving a P(SSB₂₅>SSB₂₂)=50%) and F_{bar} = 0.46F_{lim} = 0.089 (P(SSB₂₅>SSB₂₂)=75%).</p> <table><tr><th></th><th colspan="2">B</th><th colspan="2">SSB</th><th>Yield</th></tr><tr><th></th><th colspan="2"></th><th colspan="2">Median and 80% CI</th><th></th></tr><tr><td colspan="6">F_{bar} = 0.595*F_{lim} (median = 0.099)</td></tr><tr><td>2022</td><td>50511</td><td>(45475 - 56297)</td><td>25994</td><td>(23085 - 28992)</td><td>4000</td></tr><tr><td>2023</td><td>48942</td><td>(43410 - 55808)</td><td>22651</td><td>(19983 - 25601)</td><td>6364</td></tr><tr><td>2024</td><td>46841</td><td>(40525 - 54987)</td><td>23252</td><td>(20012 - 26635)</td><td>7507</td></tr><tr><td>2025</td><td>42058</td><td>(34385 - 50956)</td><td>26175</td><td>(21473 - 31560)</td><td></td></tr><tr><td colspan="6">F_{bar} = 0.46*F_{lim} (median = 0.089)</td></tr><tr><td>2022</td><td>50511</td><td>(45475 - 56297)</td><td>25994</td><td>(23085 - 28992)</td><td>4000</td></tr><tr><td>2023</td><td>48942</td><td>(43410 - 55808)</td><td>22651</td><td>(19983 - 25601)</td><td>5050</td></tr><tr><td>2024</td><td>48219</td><td>(41880 - 56341)</td><td>24447</td><td>(21252 - 27888)</td><td>6207</td></tr><tr><td>2025</td><td>44583</td><td>(36905 - 53473)</td><td>28311</td><td>(23650 - 33758)</td><td></td></tr></table> <p>Table 2. Risk of the projections presented in June together risk of the projections with F_{bar} = 0.595*F_{lim} = 0.099 (giving a P(SSB₂₅>SSB₂₂)=50%) and F_{bar} = 0.46F_{lim} = 0.089 (P(SSB₂₅>SSB₂₂)=75%). The results are sorted by P(SSB₂₅>SSB₂₂). The new projections are bolded.</p> <table><tr><th></th><th colspan="3">Yield</th><th colspan="4">P(SSB < B_{lim})</th><th colspan="3">P(F_{bar} > F_{lim})</th></tr><tr><th></th><th>2022</th><th>2023</th><th>2024</th><th>2022</th><th>2023</th><th>2024</th><th>2025</th><th>2022</th><th>2023</th><th>2024</th></tr><tr><td>F=0</td><td>4000</td><td>0</td><td>0</td><td><1%</td><td><1%</td><td><1%</td><td><1%</td><td><1%</td><td><1%</td><td><1%</td></tr><tr><td>F₂₀₂₁ = 0.022</td><td>4000</td><td>3425</td><td>4429</td><td><1%</td><td><1%</td><td><1%</td><td><1%</td><td><1%</td><td><1%</td><td><1%</td></tr><tr><td>C = 4000t</td><td>4000</td><td>4000</td><td>4000</td><td><1%</td><td><1%</td><td><1%</td><td><1%</td><td><1%</td><td><1%</td><td><1%</td></tr><tr><td>C = 5000t</td><td>4000</td><td>5000</td><td>5000</td><td><1%</td><td><1%</td><td><1%</td><td><1%</td><td><1%</td><td><1%</td><td><1%</td></tr><tr><td>0.46*F_{lim} = 0.076</td><td>4000</td><td>5050</td><td>6207</td><td><1%</td><td><1%</td><td><1%</td><td><1%</td><td><1%</td><td><1%</td><td><1%</td></tr><tr><td>1/2F_{lim} = 0.083</td><td>4000</td><td>5446</td><td>6610</td><td><1%</td><td><1%</td><td><1%</td><td><1%</td><td><1%</td><td><1%</td><td><1%</td></tr><tr><td>F_{sq} = 0.089</td><td>4000</td><td>5791</td><td>6987</td><td><1%</td><td><1%</td><td><1%</td><td><1%</td><td><1%</td><td><1%</td><td><1%</td></tr><tr><td>0.595*F_{lim} = 0.099</td><td>4000</td><td>6364</td><td>7507</td><td><1%</td><td><1%</td><td><1%</td><td><1%</td><td><1%</td><td><1%</td><td><1%</td></tr><tr><td>2/3F_{lim} = 0.111</td><td>4000</td><td>7032</td><td>8128</td><td><1%</td><td><1%</td><td>1%</td><td>1%</td><td><1%</td><td><1%</td><td><1%</td></tr><tr><td>3/4F_{lim} = 0.125</td><td>4000</td><td>7787</td><td>8790</td><td><1%</td><td><1%</td><td>1%</td><td>1%</td><td><1%</td><td><1%</td><td>3%</td></tr><tr><td>F_{lim} = 0.166</td><td>4000</td><td>9915</td><td>10431</td><td><1%</td><td><1%</td><td>3%</td><td>6%</td><td><1%</td><td>50%</td><td>50%</td></tr></table>		B		SSB		Yield				Median and 80% CI			F _{bar} = 0.595*F _{lim} (median = 0.099)						2022	50511	(45475 - 56297)	25994	(23085 - 28992)	4000	2023	48942	(43410 - 55808)	22651	(19983 - 25601)	6364	2024	46841	(40525 - 54987)	23252	(20012 - 26635)	7507	2025	42058	(34385 - 50956)	26175	(21473 - 31560)		F _{bar} = 0.46*F _{lim} (median = 0.089)						2022	50511	(45475 - 56297)	25994	(23085 - 28992)	4000	2023	48942	(43410 - 55808)	22651	(19983 - 25601)	5050	2024	48219	(41880 - 56341)	24447	(21252 - 27888)	6207	2025	44583	(36905 - 53473)	28311	(23650 - 33758)			Yield			P(SSB < B _{lim})				P(F _{bar} > F _{lim})				2022	2023	2024	2022	2023	2024	2025	2022	2023	2024	F=0	4000	0	0	<1%	<1%	<1%	<1%	<1%	<1%	<1%	F ₂₀₂₁ = 0.022	4000	3425	4429	<1%	<1%	<1%	<1%	<1%	<1%	<1%	C = 4000t	4000	4000	4000	<1%	<1%	<1%	<1%	<1%	<1%	<1%	C = 5000t	4000	5000	5000	<1%	<1%	<1%	<1%	<1%	<1%	<1%	0.46*F_{lim} = 0.076	4000	5050	6207	<1%	<1%	<1%	<1%	<1%	<1%	<1%	1/2F _{lim} = 0.083	4000	5446	6610	<1%	<1%	<1%	<1%	<1%	<1%	<1%	F _{sq} = 0.089	4000	5791	6987	<1%	<1%	<1%	<1%	<1%	<1%	<1%	0.595*F_{lim} = 0.099	4000	6364	7507	<1%	<1%	<1%	<1%	<1%	<1%	<1%	2/3F _{lim} = 0.111	4000	7032	8128	<1%	<1%	1%	1%	<1%	<1%	<1%	3/4F _{lim} = 0.125	4000	7787	8790	<1%	<1%	1%	1%	<1%	<1%	3%	F _{lim} = 0.166	4000	9915	10431	<1%	<1%	3%	6%	<1%	50%	50%
	B		SSB		Yield																																																																																																																																																																																																																			
			Median and 80% CI																																																																																																																																																																																																																					
F _{bar} = 0.595*F _{lim} (median = 0.099)																																																																																																																																																																																																																								
2022	50511	(45475 - 56297)	25994	(23085 - 28992)	4000																																																																																																																																																																																																																			
2023	48942	(43410 - 55808)	22651	(19983 - 25601)	6364																																																																																																																																																																																																																			
2024	46841	(40525 - 54987)	23252	(20012 - 26635)	7507																																																																																																																																																																																																																			
2025	42058	(34385 - 50956)	26175	(21473 - 31560)																																																																																																																																																																																																																				
F _{bar} = 0.46*F _{lim} (median = 0.089)																																																																																																																																																																																																																								
2022	50511	(45475 - 56297)	25994	(23085 - 28992)	4000																																																																																																																																																																																																																			
2023	48942	(43410 - 55808)	22651	(19983 - 25601)	5050																																																																																																																																																																																																																			
2024	48219	(41880 - 56341)	24447	(21252 - 27888)	6207																																																																																																																																																																																																																			
2025	44583	(36905 - 53473)	28311	(23650 - 33758)																																																																																																																																																																																																																				
	Yield			P(SSB < B _{lim})				P(F _{bar} > F _{lim})																																																																																																																																																																																																																
	2022	2023	2024	2022	2023	2024	2025	2022	2023	2024																																																																																																																																																																																																														
F=0	4000	0	0	<1%	<1%	<1%	<1%	<1%	<1%	<1%																																																																																																																																																																																																														
F ₂₀₂₁ = 0.022	4000	3425	4429	<1%	<1%	<1%	<1%	<1%	<1%	<1%																																																																																																																																																																																																														
C = 4000t	4000	4000	4000	<1%	<1%	<1%	<1%	<1%	<1%	<1%																																																																																																																																																																																																														
C = 5000t	4000	5000	5000	<1%	<1%	<1%	<1%	<1%	<1%	<1%																																																																																																																																																																																																														
0.46*F_{lim} = 0.076	4000	5050	6207	<1%	<1%	<1%	<1%	<1%	<1%	<1%																																																																																																																																																																																																														
1/2F _{lim} = 0.083	4000	5446	6610	<1%	<1%	<1%	<1%	<1%	<1%	<1%																																																																																																																																																																																																														
F _{sq} = 0.089	4000	5791	6987	<1%	<1%	<1%	<1%	<1%	<1%	<1%																																																																																																																																																																																																														
0.595*F_{lim} = 0.099	4000	6364	7507	<1%	<1%	<1%	<1%	<1%	<1%	<1%																																																																																																																																																																																																														
2/3F _{lim} = 0.111	4000	7032	8128	<1%	<1%	1%	1%	<1%	<1%	<1%																																																																																																																																																																																																														
3/4F _{lim} = 0.125	4000	7787	8790	<1%	<1%	1%	1%	<1%	<1%	3%																																																																																																																																																																																																														
F _{lim} = 0.166	4000	9915	10431	<1%	<1%	3%	6%	<1%	50%	50%																																																																																																																																																																																																														

From European Union [COM WP 22-35]	<p>2. EU would like to seek additional clarifications to understand the apparent difference in the approach given to managing the risks associated to the projections of Cod 3M and Witch flounder 3NO. For 3M cod, scenarios with $F_{bar2024} > F_{lim}$ achieving 3% (3/4 F_{lim}) are not recommended because the probability of having $SSB_{25} > SSB_{22}$ is not very high (27%). For Witch flounder 3NO, SC recommends F associated to 19% risks of $F_{2024} > F_{lim}$ knowing that recruitment was not determined. Furthermore, the recommendation for Witch flounder 3NO allows for scenarios where F approaches of up to $2/3 F_{msy}$ although that would entail a probability of up to 9% of B being below B_{lim}. In the case of Cod 3M the recommended scenario entails a risk of $SSB < B_{lim}$ of up to 1%.</p>
Scientific Council responded [COM WP 22-42]	<p>Advice is not based entirely on risk tables. The key difference between these stock assessments is that in the case of 3M Cod, the predicted decline in total biomass is under all scenarios except for $F=0$, as well as poor recruitment in recent years. This prompted the additional consideration of the trends in total biomass to formulate the advice, whereas for 3NO witch flounder total biomass was predicted to increase under all scenarios. Note that these two stocks are assessed with different models and available data sources.</p> <p>SC consistently applies the NAFO precautionary framework which effectively includes conducting F projections up to F_{lim}, and considers an acceptable exploitation scenario to be those that have a very low (less than 10%) chance of being below B_{lim} and a low chance (less than 20%) of $F > F_{lim}$. Therefore, the advice for both stocks is consistent under those metrics.</p>
From Russian Federation [COM WP 22-36]	<p>Regarding response by SC to the Commission's request 5.b</p> <p>The TCI (Total Catch Index) is proposed by the Scientific Council as a supplementary control measure in addition to the existing TAC and quota system. Having reviewed the proposal, the Russian Federation has several questions:</p> <ol style="list-style-type: none"> 1. TCI approach implies the aggregation of fish stocks into the following trophic guilds: benthivores, planktivores, piscivores, etc. Can the SC provide a clarification on the distribution of stocks according to that approach, i.e., which stock (as outlined in the quota table) goes to which guild? 2. The SC is requested to clarify if there are separate TCI values for different guilds within the same ecosystem. 3. The TACs within an ecosystem are supposed to be reduced to prevent the exceeding of $2 \times TCI$ if their sum exceeds the $2 \times TCI$ when compared. Can the SC give an example of such comparison for a known ecosystem and stocks inhabiting it? 4. The SC is requested to give an explanation on a situation when the sum of TACs for several stocks within an ecosystem exceeds the $2 \times TCI$ for that ecosystem. Are there any principles for selecting a stock for which TAC should be reduced to prevent the $2 \times TCI$ exceeding? 5. Some stocks (e.g., 3LMNO Greenland halibut) are distributed over a large area encompassing several ecosystems.

	<p>The SC is requested to explain if there are any principles for assigning the TACs of such stocks, in whole or in part, to different ecosystems to compare the TACs with the ecosystems' 2xTCI values?</p>																						
<p>Scientific Council responded: [COM WP 22-41]</p>	<p>The TCI-framework and related 2TCI ecosystem reference point are intended to implement the Tier 1 component of the Roadmap, and as such, complement existing management measures by providing information relevant to ecosystem overfishing.</p> <ol style="list-style-type: none"> Mapping stocks to functional guilds is dependent on the trophic level at which production takes place. In most cases this mapping directly assigns species to functional guilds, but for some commercial species (i.e. those that contribute the most to the catches), the consideration of their life history and general diet composition has allowed splitting their production into different guilds. With this in mind, NAFO managed species within currently delineated Ecosystem Production Units (EPUs) are mapped to functional guilds as follow: <table border="1"> <thead> <tr> <th>Species</th><th>Functional guild</th></tr> </thead> <tbody> <tr> <td>Atlantic cod</td><td>Planktivore (small fish) and Piscivore (large fish)</td></tr> <tr> <td>Redfish</td><td>Planktivore (small fish) and Piscivore (large fish)</td></tr> <tr> <td>Greenland halibut</td><td>Piscivore</td></tr> <tr> <td>White hake</td><td>Piscivore</td></tr> <tr> <td>American plaice</td><td>Benthivore</td></tr> <tr> <td>Witch flounder</td><td>Benthivore</td></tr> <tr> <td>Thorny Skate</td><td>Benthivore</td></tr> <tr> <td>Shrimp</td><td>Benthivore</td></tr> <tr> <td>Capelin</td><td>Planktivore</td></tr> <tr> <td>Squid</td><td>Planktivore</td></tr> </tbody> </table> Yes. There is a TCI value per functional guild within an EPU. The implementation of the TCI framework and 2TCI ecosystem reference point provides information to the Commission regarding how aggregated catches relate to ecosystem productivity and the risk of ecosystem overfishing, but the proposed framework does not prescribe any specific action in the case that catches are approaching or exceeding 2TCI. How this information is used in the process of setting TACs is a matter for the Commission to consider as part of its discussions. <p>Catches exceeding 2TCI are a rare occurrence in recent times, but in occasions, cumulative TACs could have allowed catches to exceed 2TCI if the TACs had been fully taken. One example of this situation was used during the August 2022 WGEAFFM Workshop to explore how the TCI framework and 2TCI reference points could be used in practice. This example corresponds to the piscivore guild in the Flemish Cap (3M) EPU in 2019. The following figure shows the piscivore guild catches since 1991. If all TACs had been fully taken, catches would have exceeded 2TCI in 2019.</p> 	Species	Functional guild	Atlantic cod	Planktivore (small fish) and Piscivore (large fish)	Redfish	Planktivore (small fish) and Piscivore (large fish)	Greenland halibut	Piscivore	White hake	Piscivore	American plaice	Benthivore	Witch flounder	Benthivore	Thorny Skate	Benthivore	Shrimp	Benthivore	Capelin	Planktivore	Squid	Planktivore
Species	Functional guild																						
Atlantic cod	Planktivore (small fish) and Piscivore (large fish)																						
Redfish	Planktivore (small fish) and Piscivore (large fish)																						
Greenland halibut	Piscivore																						
White hake	Piscivore																						
American plaice	Benthivore																						
Witch flounder	Benthivore																						
Thorny Skate	Benthivore																						
Shrimp	Benthivore																						
Capelin	Planktivore																						
Squid	Planktivore																						



4. The proposed framework does not prescribe any specific action in the case that catches are approaching or exceeding 2TCI. How this information is used in the process of setting TACs is a matter for the Commission to consider as part of its discussions.
5. For stocks like Greenland halibut which distribute over more than one EPU the TAC can be partitioned among EPUs, for instance based on the proportion of catches actually taken from each EPU, but this will be assessed on a case-by-case basis.

Reference links:

Koen-Alonso et al., Review and Assessment of the Ecosystem Production Potential (EPP) model structure, sensitivity, and its use for fisheries advice in NAFO. NAFO SCR Doc. 22/002 .

Koen-Alonso. Supporting material for the independent scientific review of the estimation of fisheries production potential and total catch indices, and their adequacy for their proposed use within the NAFO Roadmap. NAFO SCR Doc. 22/003.

Scientific Council response to Commission Request 5: *Continue work on the sustainability of catches aspect of the Ecosystem Roadmap*. NAFO SCS Doc. 22/18.

From the USA
[COM WP 22-37]

In order to better understand how to support the growth of this stock over the long term, noting the projected total decline of total biomass under all fishing scenarios, what catch level in 2023 would result in a 75-percent probability of an increase in the spawning stock biomass for 3M cod by 2025?

Scientific Council responded
[COM WP 22-38 Rev.]

Two projections based on Fishing Mortality have been performed to get $P(SSB_{25} > SSB_{22}) = 50\%$ and $P(SSB_{25} > SSB_{22}) = 75\%$. Results for these two projections are in Tables 1 and 2 as in the advisory sheet of the 3M cod. Table 1 includes the results for the two new projections, while Table 2 shows the risk results for the projections from the advisory sheet together with the two new ones, sorted by the $P(SSB_{25} > SSB_{22})$. New projections in Table 2 are bolded.

The F that gives a $P(SSB_{25} > SSB_{22}) = 50\%$ is $0.595 * F_{lim} = 0.099$. **The F that gives a $P(SSB_{25} > SSB_{22}) = 75\%$ is $0.046 * F_{lim} = 0.076$.**

Table 1. Results of the projections of 3M cod with $F_{bar} = 0.595 \cdot F_{lim} = 0.099$ (giving a $P(SSB_{25} > SSB_{22}) = 50\%$) and $F_{bar} = 0.46 \cdot F_{lim} = 0.089$ ($P(SSB_{25} > SSB_{22}) = 75\%$).

	B		SSB		Yield
	Median and 80% CI				
F _{bar} = 0.595*Flim (median = 0.099)					
2022	50511	(45475 - 56297)	25994	(23085 - 28992)	4000
2023	48942	(43410 - 55808)	22651	(19983 - 25601)	6364
2024	46841	(40525 - 54987)	23252	(20012 - 26635)	7507
2025	42058	(34385 - 50956)	26175	(21473 - 31560)	
F _{bar} = 0.46*Flim (median = 0.089)					
2022	50511	(45475 - 56297)	25994	(23085 - 28992)	4000
2023	48942	(43410 - 55808)	22651	(19983 - 25601)	5050
2024	48219	(41880 - 56341)	24447	(21252 - 27888)	6207
2025	44583	(36905 - 53473)	28311	(23650 - 33758)	

Table 2. Risk of the projections presented in June together risk of the projections with $F_{bar} = 0.595 \cdot F_{lim} = 0.099$ (giving a $P(SSB_{25} > SSB_{22}) = 50\%$) and $F_{bar} = 0.46 \cdot F_{lim} = 0.089$ ($P(SSB_{25} > SSB_{22}) = 75\%$). The results are sorted by $P(SSB_{25} > SSB_{22})$. The new projections are bolded.

	Yield			P(SSB < B _{lim})				P($F_{bar} > F_{lim}$)			P(SSB ₂₅ > SSB ₂₂)
	2022	2023	2024	2022	2023	2024	2025	2022	2023	2024	
F=0	4000	0	0	<1%	<1%	<1%	<1%	<1%	<1%	<1%	100%
F ₂₀₂₁ = 0.022	4000	3425	4429	<1%	<1%	<1%	<1%	<1%	<1%	<1%	95%
C = 4000t	4000	4000	4000	<1%	<1%	<1%	<1%	<1%	<1%	<1%	94%
C = 5000t	4000	5000	5000	<1%	<1%	<1%	<1%	<1%	<1%	<1%	86%
0.46*F_{lim} = 0.076	4000	5050	6207	<1%	<1%	<1%	<1%	<1%	<1%	<1%	75%
1/2F _{lim} = 0.083	4000	5446	6610	<1%	<1%	<1%	<1%	<1%	<1%	<1%	67%
F _{eq} = 0.089	4000	5791	6987	<1%	<1%	<1%	<1%	<1%	<1%	<1%	60%
0.595*F_{lim} = 0.099	4000	6364	7507	<1%	<1%	<1%	<1%	<1%	<1%	<1%	50%
2/3F _{lim} = 0.111	4000	7032	8128	<1%	<1%	1%	1%	<1%	<1%	<1%	39%
3/4F _{lim} = 0.125	4000	7787	8790	<1%	<1%	1%	1%	<1%	<1%	3%	27%
F _{lim} = 0.166	4000	9915	10431	<1%	<1%	3%	6%	<1%	50%	50%	9%

From Denmark (in respect of the Faroe Islands and Greenland) [COM WP 22-39]

DFG supports the Catch and Effort Limitation outline in NAFO CEM Article 5.5(j) stating that:

5. Each Contracting Party shall:

(j) close its directed fishery for cod in Division 3M between 00:00 UTC 1 January 2022 and 24:00 UTC 31 March 2022. During this period, all Contracting Parties shall ensure that its vessels limit the catches retained on board and in any one haul of this stock in line with Article 6.3(a) and observe the move-on provisions in Article 6.6(b).

DFG appreciates and supports this temporary protective measuring in Article 5.5(j) concerning Cod in Division 3M during its spawning season.

DFG would like the Scientific Council to provide guidance on the following:

- Is it scientifically advisable for the stock during the spawning season to reduce the protective measure in Article 5.5(j) from three months (00:00 UTC 1 January 2023 and 24:00 UTC 31 March 2023) to two months (00:00 UTC 1 February 2023 and 24:00 UTC 31 March 2023)?

	<ul style="list-style-type: none">If it is not scientifically advisable to reduce the protective measuring in Article 5.5(j) from three months to two months, is it scientifically advisable to move the three-month protective measure so that its starts 00:00 UTC 1 February 2023 and 24:00 UTC 30 April 2023?																																												
Scientific Council responded: [COM WP 22-47]	<p>During its June 2020 meeting, SC studied the percentage of spawning female cod by month in Div. 3M for the 2010-2018 period (SCR Doc. 20-021, SCS Doc. 20-014Rev.), the results are presented in Table 1:</p> <p>Table 1. Percentage of spawning female cod by month in Div. 3M for the 2010-2018.</p> <table><tr><th>Month</th><th>Spawning %</th><th>Not Spawning %</th><th>n</th></tr><tr><td>Jan</td><td>88.89</td><td>11.11</td><td>90</td></tr><tr><td>Feb</td><td>72.73</td><td>27.27</td><td>33</td></tr><tr><td>Mar</td><td>60.12</td><td>39.88</td><td>1457</td></tr><tr><td>Apr</td><td>18.35</td><td>81.65</td><td>1695</td></tr><tr><td>May</td><td>1.80</td><td>98.20</td><td>557</td></tr><tr><td>Jun</td><td>0.11</td><td>99.89</td><td>950</td></tr><tr><td>Jul</td><td>8.14</td><td>91.86</td><td>921</td></tr><tr><td>Aug</td><td>0.27</td><td>99.73</td><td>728</td></tr><tr><td>Sep</td><td>0.40</td><td>99.60</td><td>506</td></tr><tr><td>Oct</td><td>0.78</td><td>99.22</td><td>257</td></tr></table> <p>Spawning of 3M cod occurs between January and April, with the highest activity being in the first three months, and January being the month with highest percentage of spawning females (Table 1.). SC concludes that, in order to protect the spawning activity, it is not scientifically advisable to change the duration or timing of the spawning closure and that it should therefore be maintained for the entire first quarter of the year (from 1st January until 31st of March).</p>	Month	Spawning %	Not Spawning %	n	Jan	88.89	11.11	90	Feb	72.73	27.27	33	Mar	60.12	39.88	1457	Apr	18.35	81.65	1695	May	1.80	98.20	557	Jun	0.11	99.89	950	Jul	8.14	91.86	921	Aug	0.27	99.73	728	Sep	0.40	99.60	506	Oct	0.78	99.22	257
Month	Spawning %	Not Spawning %	n																																										
Jan	88.89	11.11	90																																										
Feb	72.73	27.27	33																																										
Mar	60.12	39.88	1457																																										
Apr	18.35	81.65	1695																																										
May	1.80	98.20	557																																										
Jun	0.11	99.89	950																																										
Jul	8.14	91.86	921																																										
Aug	0.27	99.73	728																																										
Sep	0.40	99.60	506																																										
Oct	0.78	99.22	257																																										
From Norway [COM WP 22-43]	<p>The 3M shrimp stock is managed by fishing-days while Scientific Council provides advice in terms of catch ("TAC advice"). This creates ambiguity in using the scientific advice to inform management and promote efficient and sustainable utilization of this resource.</p> <p>SC advised that they do <i>"not consider that the management procedure initiated some 25 years ago constitutes effective means of managing the stock"</i> and that they recommend <i>"that the management of 3M shrimp be converted from the existing "effort regulation" to "catch regulation" in line with all other stocks in the NRA"</i> ((SCS 19-23, pp 4-5 and reiterated in the advice for shrimp in 3M for 2023).</p> <p>In the event of a reopening of the fishery, and the COM has not agreed on a new allocation scheme, the fishing activity will be resumed based on the current effort allocation key. Consequently, there will still be a need for advice in terms of fishing days.a</p> <p>We therefore ask SC to reflect on:</p> <ol style="list-style-type: none">the opportunities for converting "catch advice" into "fishing-day advice" e.g., by applying estimates of average catch rates (catch by fishing-day). As SC noted in SCS 19-23 such estimates																																												

	<p>may be uncertain for various reasons, nevertheless, in need of other means of providing advice in accordance with the management needs, this might still be the best we can do.</p> <p>2. whether it would be feasible to include both metrics in future advice, i.e., Total Allowable Catch (TAC) and Total Allowable Fishing-days (TAF) – the latter maybe with some indication of the associated uncertainty or range as SC finds appropriate.</p> <p>3. whether such additional information could assist COM in their reiterated aim at ensuring a sustainable management of this stock.</p>																																																																																				
Scientific Council responded: [COM WP 22-49]	<p>1. SC reiterates the advice provided in SCS 19-23:</p> <p>over the period of this fishery the overall effort allowed has always been high and has not posed much constraint on fishing activity, and it is difficult to standardize “effort units” (e.g. fishing days) in terms of pressure on the stock due to creep in fishing efficiency and the diversity of the individual vessels participating in the fishery. This increases the uncertainty of advice given in fishing days. Therefore, SC recommended that the management of 3M shrimp be converted from the existing “effort regulation” to a “catch regulation” in line with all other stocks in the NRA.</p> <p>However, when the catch/days fishing (df, Table 1) from any year from 2000-2010 (effort data from STATLANT 21B) and 2020-2021 (From SC shrimp meeting 2022) is applied to the recommended TAC from 2019, the range of total days fished to be allocated ranges from 193 to 1448 total days (Table 2). This is much lower than the 2640 allocated in 2020 and 2021.</p> <p>Given the range in days fished arising from Table 2, it would be difficult to give advice on total allowable days.</p> <p>Table 1. Calculation of tonnes per fishing day based on catches and effort used in the years 2000 to 2021.</p> <table><tr><th></th><th>NIPAG Catch (000s t)</th><th>Recommended TAC (000s mt)</th><th>Allocated Effort (days)</th><th>Effort Used (days)</th><th>tonnes/ days fishing</th></tr><tr><td>2000</td><td>50</td><td>30</td><td></td><td>3200</td><td>15.6</td></tr><tr><td>2001</td><td>54</td><td>30</td><td></td><td>5445</td><td>9.9</td></tr><tr><td>2002</td><td>49</td><td>45</td><td></td><td>4237</td><td>11.6</td></tr><tr><td>2003</td><td>63</td><td>45</td><td></td><td>5243</td><td>12.0</td></tr><tr><td>2004</td><td>45</td><td>45</td><td></td><td>4042</td><td>11.1</td></tr><tr><td>2005</td><td>32</td><td>48</td><td></td><td>2155</td><td>14.8</td></tr><tr><td>2006</td><td>18</td><td>48</td><td>10555</td><td>1049</td><td>17.2</td></tr><tr><td>2007</td><td>21</td><td>48</td><td>10555</td><td>1335</td><td>15.7</td></tr><tr><td>2008</td><td>13</td><td>17-32</td><td>10555</td><td>1069</td><td>12.2</td></tr><tr><td>2009</td><td>5</td><td>18-27</td><td>10555</td><td>447</td><td>11.2</td></tr><tr><td>2010</td><td>2</td><td>ndf</td><td>5277</td><td>71</td><td>28.2</td></tr><tr><td>2020</td><td>0.079</td><td>5.448</td><td>2640</td><td>21</td><td>3.8</td></tr><tr><td>2021</td><td>6.042</td><td>5.448</td><td>2640</td><td>440</td><td>13.7</td></tr></table>		NIPAG Catch (000s t)	Recommended TAC (000s mt)	Allocated Effort (days)	Effort Used (days)	tonnes/ days fishing	2000	50	30		3200	15.6	2001	54	30		5445	9.9	2002	49	45		4237	11.6	2003	63	45		5243	12.0	2004	45	45		4042	11.1	2005	32	48		2155	14.8	2006	18	48	10555	1049	17.2	2007	21	48	10555	1335	15.7	2008	13	17-32	10555	1069	12.2	2009	5	18-27	10555	447	11.2	2010	2	ndf	5277	71	28.2	2020	0.079	5.448	2640	21	3.8	2021	6.042	5.448	2640	440	13.7
	NIPAG Catch (000s t)	Recommended TAC (000s mt)	Allocated Effort (days)	Effort Used (days)	tonnes/ days fishing																																																																																
2000	50	30		3200	15.6																																																																																
2001	54	30		5445	9.9																																																																																
2002	49	45		4237	11.6																																																																																
2003	63	45		5243	12.0																																																																																
2004	45	45		4042	11.1																																																																																
2005	32	48		2155	14.8																																																																																
2006	18	48	10555	1049	17.2																																																																																
2007	21	48	10555	1335	15.7																																																																																
2008	13	17-32	10555	1069	12.2																																																																																
2009	5	18-27	10555	447	11.2																																																																																
2010	2	ndf	5277	71	28.2																																																																																
2020	0.079	5.448	2640	21	3.8																																																																																
2021	6.042	5.448	2640	440	13.7																																																																																

	<p>Table 2. Fishing effort that would have been advised for a TAC of 5448 tonnes using observed catch rates from table 1.</p> <table> <tr> <th data-bbox="518 302 764 331">tonnes/days fishing</th><th data-bbox="935 302 1554 331">Days fishing for a recommended catch of 5448 tonnes</th></tr> <tr><td data-bbox="613 344 669 369">15.6</td><td data-bbox="1235 344 1291 369">349</td></tr> <tr><td data-bbox="621 382 660 407">9.9</td><td data-bbox="1235 382 1291 407">549</td></tr> <tr><td data-bbox="613 420 669 445">11.6</td><td data-bbox="1235 420 1291 445">471</td></tr> <tr><td data-bbox="613 457 669 483">12.0</td><td data-bbox="1235 457 1291 483">453</td></tr> <tr><td data-bbox="613 495 669 520">11.1</td><td data-bbox="1235 495 1291 520">489</td></tr> <tr><td data-bbox="613 533 669 558">14.8</td><td data-bbox="1235 533 1291 558">367</td></tr> <tr><td data-bbox="613 571 669 596">17.2</td><td data-bbox="1235 571 1291 596">317</td></tr> <tr><td data-bbox="613 609 669 634">15.7</td><td data-bbox="1235 609 1291 634">346</td></tr> <tr><td data-bbox="613 646 669 672">12.2</td><td data-bbox="1235 646 1291 672">448</td></tr> <tr><td data-bbox="613 684 669 709">11.2</td><td data-bbox="1235 684 1291 709">487</td></tr> <tr><td data-bbox="613 722 669 747">28.2</td><td data-bbox="1235 722 1291 747">193</td></tr> <tr><td data-bbox="621 760 660 785">3.8</td><td data-bbox="1227 760 1291 785">1448</td></tr> <tr><td data-bbox="613 798 669 823">13.7</td><td data-bbox="1235 798 1291 823">397</td></tr> </table> <p>2. Scientific Council reiterates that management by TAC is the most appropriate way to manage the fishery. Nevertheless, setting the allocated days to those close to the values shown in the last column of table 2 could assist in managing this fishery better than it is currently. SC notes that these values would be a factor of 10 lower than the currently allocated days.</p>	tonnes/days fishing	Days fishing for a recommended catch of 5448 tonnes	15.6	349	9.9	549	11.6	471	12.0	453	11.1	489	14.8	367	17.2	317	15.7	346	12.2	448	11.2	487	28.2	193	3.8	1448	13.7	397
tonnes/days fishing	Days fishing for a recommended catch of 5448 tonnes																												
15.6	349																												
9.9	549																												
11.6	471																												
12.0	453																												
11.1	489																												
14.8	367																												
17.2	317																												
15.7	346																												
12.2	448																												
11.2	487																												
28.2	193																												
3.8	1448																												
13.7	397																												
<p>From Canada [COM WP 22-44]</p>	<p>Given the different interpretation by Contracting Parties of the total stock biomass trajectory for 3M cod, can the Scientific Council confirm that the total biomass is projected to decline under all fishing scenarios? Can the Scientific Council confirm that the total biomass has decreased in recent years? Can the Science Council advise the range of fishing scenario where total stock biomass is projected to increase?</p>																												

**Scientific Council
responded:
[COM WP 22-50]**

The biomass for 3M cod is projected to decline in the last year projected (2025) under all the fishing scenarios (other than $F=0$) that were performed during the June SC meeting (Figure 1):

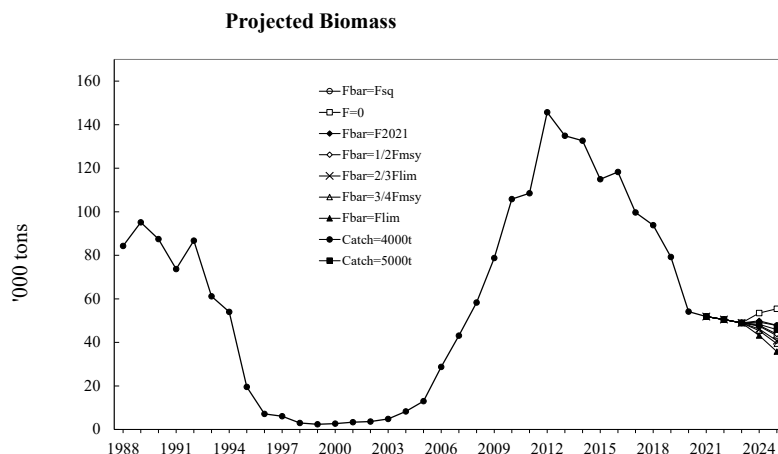


Figure 1. Projections for Total Biomass with different scenarios (STACTFIS report for 3M cod).

The results of the assessment performed for 3M cod results in the biomass decreasing starting in 2013:

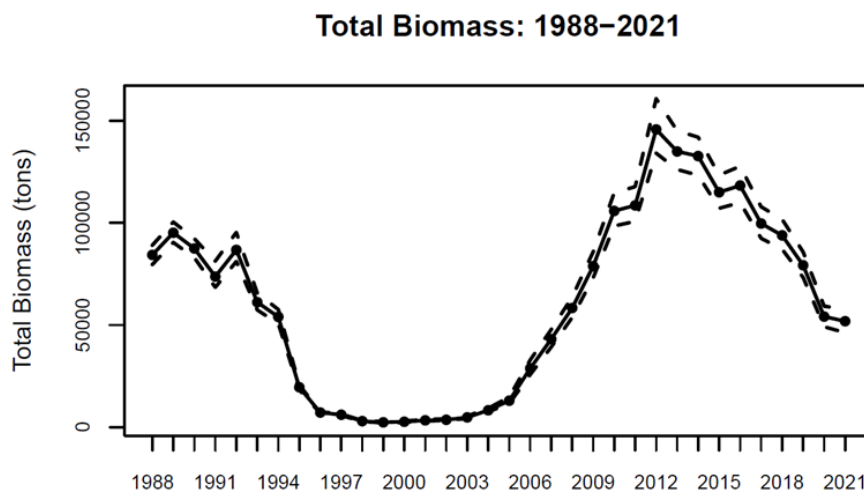


Figure 2. Estimated trends in total biomass. The solid line is the posterior median and the dashed lines show the limits of 80% posterior credible intervals (SCR 22/25).

Projecting F values show that the highest F value for which the Total Biomass of cod is projected to increase in 2025 is $F_{bar}=0.03$ (Table 1).

It has to be noted that the uncertainty in the projected years is higher than in the assessment years, and so the confidence interval for the Total Biomass for 2025 is higher than the one for 2022.

SC notes that projections of total biomass are more highly dependent on assumptions of recruitment and year classes that are poorly estimated than would be the case for SSB projections.

Table 1. Results of the projections of 3M cod with several F_{bar} .

	B		SSB		Yield
	Median and 80% CI				
F _{bar} = F _{sq} (median = 0.089)					
2022	50511	(45475 - 56297)	25994	(23085 - 28992)	4000
2023	48942	(43410 - 55808)	22651	(19983 - 25601)	5791
2024	47441	(41115 - 55572)	23797	(20536 - 27170)	6987
2025	43101	(35439 - 52003)	27046	(22345 - 32507)	
F _{bar} = 0					
2022	50511	(45475 - 56297)	25994	(23085 - 28992)	4000
2023	48942	(43410 - 55808)	22651	(19983 - 25601)	0
2024	53489	(47131 - 61613)	29062	(25841 - 32474)	0
2025	55443	(47659 - 64531)	37876	(33038 - 43336)	
F _{bar} = 0.033 (median)					
2022	50511	(45475 - 56297)	25994	(23085 - 28992)	4000
2023	48942	(43410 - 55808)	22651	(19983 - 25601)	2274
2024	51101	(44757 - 59241)	27004	(23750 - 30334)	3044
2025	50329	(42598 - 59287)	33360	(28532 - 38763)	
F _{bar} = 0.030 (median)					
2022	50511	(45475 - 56297)	25994	(23085 - 28992)	4000
2023	48942	(43410 - 55808)	22651	(19983 - 25601)	2105
2024	51280	(44938 - 59422)	27112	(23908 - 30578)	2832
2025	50695	(42952 - 59678)	33622	(28843 - 39139)	

**Annex 18. Recommendations of the Working Group on Improving Efficiency of
NAFO Working Group Process (E-WG), 2022**
[COM-SC WP 22-03 now COM-SC Doc. 22-06]

The NAFO Working Group on Improving Efficiency of NAFO Working Group Process (E-WG) met via WebEx on 22 February 2022 (COM-SC Doc. 22-01) and agreed on the following recommendations:

For that purpose, the following three two-week periods are being proposed for 2023:

The Working Group on Improving Efficiency of NAFO Working Group Process recommends that:

- **For the 2023 NAFO year, the following two-week periods, be considered for NAFO intersessional meetings:**
 - **21 February – 03 March 2023;**
 - **24 April – 05 May 2023; and**
 - **17 – 28 July 2023**

As always, these two-week periods would not require meetings of NAFO subsidiary bodies to meet during those dates nor would they preclude the scheduling of meetings of NAFO subsidiary bodies outside those dates.

Annex 19. Recommendations of the Joint Commission–Scientific Council Working Group on Risk-based Management Strategies (WG-RBMS), August 2022
[COM-SC WP 22-05 now COM-SC Doc. 22-04]

The NAFO Joint Fisheries Commission-Scientific Council Working Group on Risk-Based Management Strategies (WG-RBMS) met on 17-18 August 2022 (COM-SC Doc. 22-03) and agreed on the following conclusions and recommendations:

In regard to the review of the Precautionary Approach Framework (PAF):

1. **WG-RBMS supports the conclusions reached at the PA Workshop (Annex 1).**
2. **WG-RBMS recommends that the Commission approve the updated workplan for the revision of the NAFO Precautionary Approach Framework (Annex 2).**

In regard to ongoing MSE processes for 3LN Redfish and 2+3KLMNO Greenland halibut:

3. **WG-RBMS recognizes the Scientific Council workload and the progress that has been made to date. It recommends that both processes continue to advance in parallel, to the extent possible, including approving the 2023 workplan (Annex 3).**

In regard to 3LN Redfish:

4. **WG-RBMS recommends deleting the text of NAFO CEM Article 10 bis, Redfish Conservation Plan and Harvest Control Rule, and the associated Annex I.H., noting that a new Management Strategy for this stock is currently under development.**

Annex 1. PA Framework Workshop Conclusions (COM-SC RBMS-WP 22-05)

PA Framework Conclusions (numbering does not imply priority)

1. B_{lim} should represent seriously impaired productivity (e.g., the point of impaired recruitment), derived from stock-recruitment information if possible or proxies (e.g., 30-40% B_{msy} , $B_{recover}$; depending on available information).
 - a. Management should be based on very low risk of $B < B_{lim}$ (e.g., 5-10% risk, defined by managers).
 - b. Recent and projected stock trajectory (and other information like age structure, environmental conditions, etc.) should be considered for determining appropriate management actions to achieve low risk of $B < B_{lim}$.
2. Many PA systems have implemented the UN 1995 Straddling Stocks Agreement by defining $F_{lim} = F_{msy}$, recognizing that $F_{lim} = F_{msy}$ is not directly associated with B_{lim} or impaired productivity.
3. Uncertainty and risk need to be addressed in the PA framework, and the framework needs to be implemented with the information available (e.g., buffers require defined limit reference points and estimates of uncertainties or proxies; risk evaluation requires limit reference points and projected uncertainty).
4. F_{target} can be defined using several alternatives: a fraction of F_{msy} (~80-85% F_{msy}), risk of $F > F_{lim}$, a F lower than F_{msy} that produces nearly MSY (e.g., 90-95% MSY), $F_{40\%MSP}$, or $F_{0.1}$.
 - a. F_{eco} as a target needs more development and communication with managers.
5. B_{target} is not needed in the framework, but B_{msy} is necessary as a performance statistic to meet principle b of the NAFO Convention (“to ensure that fishery resources are maintained at or restored to levels capable of producing maximum sustainable yield”)
6. The PA framework could benefit from an intermediate biomass reference point or multiple biomass reference points that are between B_{lim} and B_{msy} so that management actions can be implemented earlier as the stock approaches B_{lim} .
 - a. Intermediate biomass reference points can be derived from uncertainty in the assessment (e.g., B_{buf}), a multiple of B_{lim} (e.g., $B_{isr} = 2B_{lim}$ proposed for 3NO cod), a fraction of B_{msy} , or impairment of ecological role.
 - b. Management action would be based on a probability of falling below the intermediate reference points, and the risk tolerance would be greater for higher biomass reference points.
7. The PA framework requires pre-agreed management actions that are conditional on stock status and fishing status.
 - a. As examples, the current NAFO PA framework has pre-agreed management actions:
 - i. in the Safe Zone, “select and set fishing mortality from a range of F values that have a low probability of exceeding F_{lim} ...”;
 - ii. in the Overfishing Zone, “reduce F to below F_{buf} ”;
 - iii. in the Cautionary Zone, “The closer stock biomass is to B_{lim} , the lower F should be below F_{buf} to ensure that there is a very low probability that biomass will decline below B_{lim} within the foreseeable future”;
 - iv. in the Danger Zone, “Reduce F to below F_{buf} . The closer stock biomass is to B_{lim} , the lower F should be below F_{buf} to ensure that there is a very low probability that biomass will decline below B_{lim} within the foreseeable future”; and
 - v. in the Collapse Zone, “ F should be set as close to zero as possible”.

- b. Prescribed management actions can be qualitative (e.g., reduce F when B approaches B_{lim}) or applying a functional harvest control rule (target F a function of B)
 - c. Performance testing of the PA framework requires formulaic management actions (e.g., a function of stock biomass)
 - d. Flexibility will be needed for implementation, because a single HCR is not expected to be appropriate for all NAFO stocks.
8. PA framework should promote rebuilding of depleted stocks.
- a. Stock recovery plans may be needed when the general PA framework is not effective, but they should not be an explicit component of the framework.
9. Flexibility will be needed to implement the PA framework for short-lived stocks or stocks with sporadic recruitment.
- a. An escapement strategy could be based on B_{lim} but might require flexibility in risk tolerance.
 - b. Effective management of long-lived stocks with sporadic recruitment needs further development.
10. Participants highlighted the need for a follow-up meeting of manager and scientists to further discuss the concepts considered at the initial workshop. The objective of the meeting would to present some additional information that could help inform the development of a proposed revision of the NAFO PA Framework.

Annex 2. NAFO Precautionary Approach Framework Revision - Revised Workplan
(COM-SC RBMS-WP 22-06)

- Review of and proposal for ToRs related to mapping objectives: ToRs 1a, 1c and 1g.
Deadline for results to SC: June 2021
- Present results to WG-RBMS after the June SC
- Review of and proposal for ToRs related to structural aspects and quantification of uncertainty and risk. Deadline for results to SC: ToRs 1b, 1d, 1e and 1f.
Deadline for results November 2021
- The work in the previous bullet points would need to cover the data continuum, so that the framework could be applied to all NAFO stocks (data rich and data poor).
- Consider broad associated implications for stocks managed using a Management Procedure (HCR) based on a MSE.
- Workshop - (including the group of scientists and managers and stakeholders), around March 2022, to address the entire ToR and make a proposal of revision of the NAFO PA framework (to be later reviewed by the WG-RBMS).
Note: Delayed until August 2022.
- WG-RBMS 2022, reviewed the latest SC progress report (June 2022) on the PAF, as well as, the conclusions from the 1st PAF workshop (August 2022); and, prepared a revised workplan.
- SC to prepare additional information to inform discussion at WG-RBMS in 2023.
- Time for Contracting Parties internal discussions and further work if required
- WG-RBMS July 2023, review additional information from SC and propose draft revised framework
- Provisional draft framework to be considered by the NAFO Commission in September 2023, for endorsement in advance of simulation testing.
- SC June 2024, complete simulation testing.
- WG-RBMS 2024, review the results of SC simulation testing and recommend revised PA Framework to Commission
- Sept 2024, Commission decision on adoption of revised PA Framework

Annex 3. 2023 Management Strategy Evaluation Workplan
(COM-SC RBMS-WP 22-07)

DATE	NAFO BODY	GHL MSE	3LN REDFISH
Early 2023	SC	Finalize data series to be used for the MSE	Finalize data series to be used for the MSE
April 2023	WG-RBMS (1)	Schedule finalized and proposed to the Commission; propose conceptual initial Candidate Management Procedures (CMPs); identify management objectives/ performance statistics	Schedule finalized and proposed to the Commission; initiate discussion on management objectives, conceptual initial CMPs, potential OM, and performance statistics.
June 2023	Scientific Council	Proposal and review and finalization of Operating Models (OMs) to be used; consensus required at this time; preliminary application of initial CMPs.	Proposal and review of OM to be used
July 2023	WG-RBMS (2)	Finalize CMPs; refinement of performance statistics including risk tolerances and constraints	Continued progress on OM, development of performance statistics; development of CMPs.,
1) Timelines are notional and subject to revision based on workload, capacity and unanticipated problems.			
2) Contracting Parties are encouraged to submit proposed initial CMPs, management objectives and performance statistics for consideration in advance of the April WG-RBMS meeting.			

Annex 20. Recommendations of the Joint Commission–Scientific Council Working Group on Ecosystems Approach Framework to Fisheries Management (WG-EAFFM), August 2022
[COM-SC WP 22-06 now COM-SC Doc. 22-05]

The NAFO Joint Fisheries Commission-Scientific Council Working Group on Ecosystem Approach Framework to Fisheries Management (WG-EAFFM) met on 11–12 August 2022 (COM-SC Doc. 22-02) and agreed on the following recommendations:

In regard to the VME Assessments,

1. In regards to the VME and SAI assessments, WG-EAFFM recommends that the Commission direct the Secretariat to develop and electronically host the relevant data sets to support the SC's work and consider providing dedicated staff for data archiving, maintenance, and management, taking into consideration available resources and any confidentiality concerns.
2. Additionally, WG-EAFFM recommends that the Commission request the Secretariat to begin consideration of how these data sets or suitable derived data products might be made public in the future, while taking into consideration any confidentiality concerns about the data.

In regard to the Ecosystem Roadmap,

3. WG-EAFFM recommends that the Commission adopt the use of TCI as a scientifically sound approach, as confirmed by the independent review, and that 2TCI can act as an ecosystem reference point to help inform managers.
4. Further, that the Commission request SC to include TCI information in its regular reporting on stock and ecosystem assessments.
5. WG-EAFFM recommends that the Commission request that WG-EAFFM explore effective methods to communicate TCI-related information to the Commission, in particular when 2TCI is, or is expected to be exceeded.
6. WG-EAFFM recommends that the Commission request SC and WG-EAFFM to explore possible underlying scientific causes and management considerations in the rare event when 2TCI is or is expected to be exceeded, similar to those when exceptional circumstances are triggered within MSE.
7. WG-EAFFM recommends that the Commission request SC to continue its efforts on the Roadmap, cognizant of capacity constraints and the need for prioritization.
8. WG-EAFFM further recommends that Commission direct WG-EAFFM to explore how NAFO might consider these management options, including the potential roles of WG-EAFFM and RBMS working groups.
9. WG-EAFFM recommends that the Commission request the SC and WG-EAFFM inform a Commission discussion on operational objectives for the protection of VMEs and biodiversity in the NRA.

In regard to the Scientific Support for the Roadmap,

10. WG-EAFFM reaffirms its recommendation to the Commission to seek scientific resources through CPs to support SC's activities, including those on the roadmap.
11. WG-EAFFM recommends that the Commission to better communicate the scientific work of the SC, to encourage greater interest in participation in SC activities.

In regard to Chapter II, NAFO CEM,

12. In relation to the review of Chapter 2, WG-EAFFM recommends that the Commission adopt the following edits to Articles 17, 23, and 24:

Article 17 - Area Restrictions for Bottom Fishing Activities

Contracting Parties are encouraged to the extent possible to record all ~~coral and sponge~~ VME indicator species catch in their annual government and/or industry research programs and to consider non-destructive means for the long-term monitoring of VME ~~coral and sponges~~ in the closed areas.

Article 23:

(1) The Commission will request the Scientific Council to

(a) identify VMEs, on the basis of best available scientific information and with the co-operation of Contracting Parties;

(b) map sites where these VMEs are known to occur or likely to occur; and

(c) provide such data and information to the Executive Secretary for circulation to all Contracting Parties;

(d) an assessment of Significant Adverse Impacts (SAI) as defined by the FAO guidelines for deep-sea fisheries; and

(e) conduct a risk assessment based on the outcome of these assessments

Article 24:

The provisions of this Chapter shall be periodically reviewed by the Commission at its Annual Meeting no later than 2022 in the year following the reassessments set out in Article 23, paragraph 2(a).

In regard to the GEF ABNJ Deep Seas Fisheries Project,

13. WG-EAFFM recommends that the Commission request the Secretariat to work with the FAO to explore the idea of a joint NAFO-FAO symposium on ecosystem production models in relation to fisheries management, as part of the ABNJ deep sea fisheries project.

In regard to the Sargasso Sea Commission,

14. WG-EAFFM recommends that the Commission support the finalization of an MOU between the NAFO and Sargasso Sea Commission Secretariats.

**Annex 21. The Commission's Request for Scientific Advice on Management in 2024 and Beyond of
Certain Stocks in Subareas 2, 3 and 4 and Other Matters**
[COM WP 22-48 (Rev. 6) now COM Doc. 22-20]

Following a request from the Scientific Council, the Commission agreed that items 1, 2, 4 and 7 should be the priority for the June 2023 Scientific Council meeting subject to resources and COVID-related restrictions.

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
Cod in Div. 3M Northern shrimp 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 in Div. 3LNO	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

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). However, for 3M shrimp supplementary advice in terms of fishing-days should also be considered to the extent feasible.

To implement this schedule of assessments, the Scientific Council is requested to conduct a full assessment of these stocks as follows:

- In 2023, advice should be provided for 2024 for Cod in Div. 3M and Northern shrimp in Div. 3M.
- With respect to Northern shrimp in Div. 3M, Scientific Council is requested to provide its advice to the Commission prior to the 2023 Annual Meeting based on the survey data up to and including 2023.
- In 2023, advice should be provided for 2024 and 2025 for: Redfish in Div. 3M, White hake in Div. 3NO, Yellowtail flounder in Div. 3LNO and Northern shrimp in Div. 3LNO.
- In 2023, advice should be provided for 2024, 2025 and 2026 for: American plaice in Div. 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 + Div 3KLMNO annually to compute the TAC using the 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 its evaluation of the impact of scientific trawl surveys on VME in closed areas and the effect of excluding surveys from these areas on stock assessments.

4. The Commission requests that Scientific Council continue to advance work on the 2+3KLMNO Greenland halibut and 3LN redfish MSE processes during 2022-2023, as per the approved 2023 workplan [COM-SC RBMS WP 22/07], in particular :
 - a. Review and finalize the data series to be used for the two MSEs;
 - b. For the Greenland Halibut MSE: (1) propose, review and finalize Operating Models (OMs) to be used; and (2) Test Candidate Management Procedures (CMPs) to support the RBMS recommendation of an HCR to the Commission; and
 - c. For the 3LN Redfish MSE: (1) Proposal of an initial review of Operating Models; and (2) work to support the development of performance statistics and CMPs.
5. The Commission requests that the Scientific Council continue to work on tiers 1 and 2 of the Roadmap, specifically to:
 - a. Include on a regular basis summary information on TCI in stock summary sheets (including indications of other NAFO managed stocks within the corresponding guild) and ecosystem summary sheets.
 - b. Work to support WG-EAFFM in exploring:
 - i. Management considerations for occasions in which the 2TCI ecosystem reference point were to be exceeded, similar to those when exceptional circumstances are triggered within MSE.
 - ii. Effective methods to communicate TCI-related information to the Commission, in particular for when 2TCI is, or expected to be exceeded.
 - c. Complete the development of the 3LNO ecosystem summary sheet (ESS), advance as much as possible the development of the 3M ESS, and continue working, if capacity allows, toward undertaking a joint Workshop with ICES (International Council for the Exploration of the Sea) on reporting on North Atlantic ecosystems.
6. In relation to the habitat impact assessment component of the Roadmap (VME and SAI analyses), the Commission requests that Scientific Council to:
 - a. Complete the re-assessment of its previously recommended closures of 7a, 11a, 14a and 14b, incorporating catch and effort data for fisheries of shrimp from 2020 and 2021 into the fishing impact assessments. This work is needed for the 2023 WG-EAFFM meeting;
 - b. Support the Secretariat in creating standardized data layers (using GIS), and products with supporting documentation (including metadata) for periodic reassessment purposes required to support the implementation of the NAFO Roadmap towards an Ecosystem Approach; and
 - c. Continue working with WG-EAFFM towards developing operational objectives for the protection of VMEs and biodiversity in the NRA.
7. 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 2022 (NAFO COM-SC Doc. 20-04), specifically:
 - a. Develop a small set of revised PA frameworks based on the conclusions of the first PA Framework workshop to inform RBMS in proposing a draft revised framework in 2023; and

- b. Apply in an illustrative way the revised PA frameworks to selected NAFO stocks, and consider how the SC advice may have differed under the revised PA Frameworks to inform RBMS in proposing a draft revised framework in 2023
8. The Commission requests Scientific Council to update the 3-5 year work plan, which reflects requests arising from the 2022 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.
9. The Commission requests that any new results from stock assessments and the scientific advice of Pelagic *Sebastes mentella* (ICES Divisions V, XII and XIV; NAFO 1) to be presented to the Scientific Council, and request the Scientific Council to prepare a summary of these assessments to be included in its annual report.
10. The Commission requests that any new Canadian stock assessments for Cod 2J3KL and Witch flounder 2J3KL be included as an annex to the Scientific Council's annual report.
11. The Commission requests Scientific Council, jointly with the Secretariat, to conduct ongoing analysis of the Flemish Cap cod fishery data by 2023 in order to:
 - a. monitor the consequences of the management decisions (including the analysis of the redistribution of the fishing effort along the year and its potential effects on ecosystems, the variation of the cod catch composition in lengths/ages, and the bycatch levels of other fish species, benthos in general, and VME taxa in particular); and
 - b. carry out any additional monitoring that would be required, including Div. 3M cod caught as bycatch in other fisheries during the closed period.
12. The Commission requests Secretariat and the Scientific Council with other international organizations, such as the FAO and ICES to inform the Scientific Council's work related to the potential impact of activities other than fishing in the Convention Area. This would be conditional on CPs providing appropriate additional expertise to Scientific Council.

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:

- 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} , $0.75 \times F_{status\ quo}$, $F_{status\ quo}$, $1.25 \times F_{status\ quo}$, $F=0$; 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.

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(B2025>B2023)	
F in 2023 and following years*	Yield 2023 (50%)	Yield 2024 (50%)	Yield 2025 (50%)	2023	2024	2025	2023	2024	2025							2023	2024	2025	2023	2024	2025		
2/3 F _{msy}	t	t	t	%	%	%	%	%	%							%	%	%	%	%	%	%	
3/4 F _{msy}	t	t	t	%	%	%	%	%	%							%	%	%	%	%	%	%	
85% F _{msy}	t	t	t	%	%	%	%	%	%							%	%	%	%	%	%	%	
90% F _{msy}																							
95% F _{msy}																							
F _{msy}	t	t	t	%	%	%	%	%	%							%	%	%	%	%	%	%	
0.75 X F _{status quo}	t	t	t	%	%	%	%	%	%							%	%	%	%	%	%	%	
F _{status quo}	t	t	t	%	%	%	%	%	%							%	%	%	%	%	%	%	
1.25 X F _{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(B2025 > B2023)	
				P(F.>F _{lim})			P(B<B _{lim})			P(F>F0.1)				P(F>F _{max})			
F in 2023 and following years*	Yield 2023	Yield 2024	Yield 2025	2023	2024	2025	2023	2024	2025	2023	2024	2025	2023	2024	2025		
F _{0.1}	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 _{status quo}	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%	
F _{status quo}	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%	
1.25 X F _{status quo}	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 22. 2023 Quota Table

CATCH LIMITATIONS 2023—Article 5. Total allowable catches (TACs) and quotas (tonnes in live weight) for 2023 of particular stocks in Subareas 1–4 and 6 of the NAFO Convention Area.

Species	Cod				Redfish					American plaice		Yellowtail
Stock Specification	COD 3L	COD 3M		COD 3NO	RED 3LN		RED 3M	RED 3O	REB 1F_2_3K (i.e. Sub-Area 2 and Divs. 1F+3K)	PLA 3LNO	PLA 3M	YEL 3LNO
% of TAC			% of 3M Cod TAC			% of 3LN Redfish TAC						
Contracting Party												
Canada		49	0.80	0	7 710	42.60	500	6 000	0 ¹	0	0	19 500
Cuba		226	3.70	-	1 774	9.80	1 750	-	0 ¹	-	-	-
Denmark (Faroe Islands & Greenland)		1363	22.35	-	-		69 ¹⁰	-	0	-	-	-
European Union		2910 ⁵	47.71	0 ⁴	3 300 ⁴	18.23	7 813 ⁴	7 000	0 0 ⁷	0	0 ⁴	-
France (St. Pierre et Miquelon)		-		-	-		69 ¹⁰	-	0 ¹	-	-	400
Iceland		-		-	-		-	-	0	-	-	-
Japan		-		-	-		400	150	0 ¹	-	-	-
Korea		-		-	-		69 ¹⁰	100	0 ¹	-	-	-
Norway		564	9.25	-	-		-	-	0	-	-	-
Russian Federation		395	6.47	0	5 207	28.77	9 137	6 500	0	-	0	-
Ukraine		-		-	-		-	150	0 ¹	-	-	-
United Kingdom		569	9.32	-	-		-	-	-	-	-	-
United States of America		-		-	-		69 ¹⁰	-	0 ¹	-	-	-
Others		24	0.40	0	109	0.60	124	100	-	0	0	100
TOTAL ALLOWABLE CATCH	*	6 100	100.0 ¹³	*	18 100 ⁸	100.0 ¹⁴	11 171	20 000 ¹¹	0 ^{3,9}	* ⁸	*	20 000



Species	Witch			White hake	Capelin	Skates	Greenland halibut	Squid (<i>Illex</i>)	Shrimp		Alfonsino
Stock Specification	WIT 3L	WIT 3NO		HKW 3NO	CAP 3NO	SKA 3LNO	GHL 3LMNO	SQI 3_4 (i.e. Sub-areas 3+4)	PRA 3L	PRA 3NO	ALF 6 (i.e. Sub-area 6)
% of TAC			% of 3NO Witch TAC								
Contracting Party											
Canada		777	60.00	294	0	1 167	1 684	N.S. ²	0		
Cuba		-		-	0	-	-	510	0		
Denmark (Faroe Islands & Greenland)		-		-	-	-	193	-	0		
European Union		172 ⁴	13.27	588	0 ⁵	4 408	6 582 ⁶	N.S. ² 611 ⁵	0 ⁶		
France (St. Pierre et Miquelon)		-		-	-	-	184	453	0		
Iceland		-		-	-	-	-	-	0		
Japan		-		-	0	-	1 151	510	0		
Korea		-		-	-	-	-	453	0		
Norway		-		-	0	-	-	-	0		
Russian Federation		333	25.73	59	0	1 167	1 433	749	0		
Ukraine		-		-	-	-	-	-	0		
United Kingdom		-		-	-	-	-	-	-		
United States of America		-		-	-	-	-	453	0		
Others		13	1.00	59	-	258		794	0		
TOTAL ALLOWABLE CATCH	*	1 295	100.00 ¹⁵	1 000	* ⁸	7 000 ^{12, 8}	11 227	34 000 ¹¹	0	*	*

Report of the NAFO Commission,
19-23 September 2022

Symbol	Definition
-	Contracting Party does not have a quota allocation
*	Ban on fishing in force
0	Contracting Party has quota, but the TAC is zero
Blank	No quota allocation defined

- ¹ Quota to be shared by vessels from Canada, Cuba, France (St. Pierre et Miquelon), Japan, Korea, Ukraine and USA.
- ² The allocations to these Contracting Parties are as yet undetermined, although their sum shall not exceed the difference between the total of allocations to other Contracting Parties and the TAC (= 29 467 tonnes).
- ³ Should NEAFC modify its level of TAC, these figures shall be adjusted accordingly by NAFO through a mail vote.
- ⁴ Including allocations to Estonia, Latvia and Lithuania in accordance with the sharing arrangement of the former USSR quota adopted by the Fisheries Commission in 2003 (FC WP 03-7), as applied by NAFO since 2005 following their accession to the European Union.
- ⁵ Including allocations to Estonia, Latvia and Lithuania in accordance with the sharing arrangement of the former USSR quota adopted by the Fisheries Commission in 2003 (FC WP 03-7), and to Poland, as applied by NAFO since 2005 following their accession to the European Union.
- ⁶ Including allocations to Estonia, Latvia, Lithuania and Poland, as applied by NAFO since 2005 following their accession to the EU.
- ⁷ Allocation of 17.85% to Lithuania and 2.15% to Latvia following their accession to the European Union.
- ⁸ Applicable to 2023 and 2024.
- ⁹ If an increase in the overall TAC as defined in footnote 3 leads to an increase in these shares, the first 500 tonnes of that increase shall be added to the quota share referred to in footnote 1.
- ¹⁰ Notwithstanding the provision of Article 5.3(b) and without prejudice to future agreements on allocations, these quotas may be fished in their entirety by these Contracting Parties.
- ¹¹ Applicable to 2023, 2024 and 2025.
- ¹² Should catches exceed 4 500 tonnes, additional measures would be adopted to further restrain catches in 2023 and in 2024.

Historical statements

- ¹³ The allocation key of this stock is based on the 1998 Quota Table. In 1999, a moratorium on cod in Division 3M was declared.
- ¹⁴ The allocation key of this stock is based on the 1997 Quota Table. In 1998, a moratorium on redfish in Division 3LN was declared.
- ¹⁵ The allocation key of this stock is based on the 1994 Quota Table. In 1995, a moratorium on witch flounder in Division 3NO was declared.

**Effort Allocation Scheme for Shrimp Fishery in the
NAFO Regulatory Area Division 3M, 2023**

Contracting Party	Number of fishing days¹
Canada	0
Cuba	0
Denmark	
– Faroe Islands	0
– Greenland	0
European Union	0
France (in respect of St. Pierre et Miquelon)	0
Iceland	N/A
Japan	0
Korea	0
Norway	0
Russia	0
Ukraine	0
United Kingdom	0
USA	0
Total	0

¹ When the scientific advice estimates that the stock shows signs of recovery, the fishery shall be re-opened in accordance with the effort allocation key in place for this fishery at the time of the closure.

Annex 23. Review of NAFO CEM Article 5.5(j)
[COM WP 22-54 now COM Doc. 22-17]

Article 5.5(j) of the NAFO CEM is time sensitive. the Commission reviewed Article 5.5(j) at the Annual Meeting of NAFO in September 2022 and agreed to update as follows:

Article 5 – Catch and Effort Limitations

Closure of Fisheries for Stocks Listed in Annex I.A and I.B Subject to Quota or Fishing Effort

....

5. Each Contracting Party shall:

- (j) close its directed fishery for cod in Division 3M between 00:00 UTC 1 January ~~2022~~2023 and 24:00 UTC 31 March ~~2022~~2023. During this period, all Contracting Parties shall ensure that its vessels limit the catches retained on board and in any one haul of this stock in line with Article 6.3(a) and observe the move-on provisions in Article 6.6(b).

Annex 24. Measure to Conserve Greenland Shark
[COM WP 22-27 (Rev. 2) now COM Doc. 22-15]

Explanatory memorandum

Reflecting the foundational commitment of NAFO to the ecosystem-based approach to fisheries management, the United States proposes a measure for the conservation of the Greenland shark (*Somniosus microcephalus*).

In 2017, the Scientific Council reported that Greenland sharks warrant precautionary consideration due to their unknown stock status in the NAFO Regulatory Area (NRA) and their long lifespan, extremely delayed maturity, and low fecundity which make them more susceptible to overfishing. The Scientific Council noted that Greenland sharks were assessed by the IUCN as “Near Threatened” on the Red List based primarily on their biological vulnerability. The level of threat has since been elevated through the 2019 reassessment as “Vulnerable” (considered “threatened” under IUCN criteria).

In NAFO regulatory waters, there are no directed fisheries on Greenland sharks but they are caught incidentally. The Scientific Council contended that “a prohibition on retention and directed fishing for Greenland sharks is advised, along with the implementation of bycatch reduction measures.” In 2018, NAFO agreed to prohibit directed fishing on Greenland sharks, as well as requiring vessels to take all reasonable efforts to minimize their incidental catch and mortality. In conjunction with this, Contracting Parties committed to “*report to WG-BDS on their efforts to minimize incidental catches and mortalities of Greenland sharks in the NAFO Convention Area, including amounts of Greenland sharks released and retained 2019-2021.*”

The Scientific Council was further requested to “*identify areas and times where bycatch and discards of Greenland sharks have a higher rate of occurrence.*” The Scientific Council provided this analysis in its 2021 report, which also cautioned that limited at-sea data could affect the ability to develop spatial or temporal fishing closures. Considering this significant limitation, the Scientific Council suggests that alternative measures could include a) live release and care in handling; b) gear modifications; c) shark bycatch limits; and/or d) reductions in fishing effort. Again, however, we are limited with at-sea observations to inform these options.

It is very difficult to identify whether a Greenland shark caught as bycatch is alive, dead or dying. These sharks can appear dead when caught but are actually alive. Further, the report of the SC meeting from June 2018 (NAFO SCS Doc. 18-19) provided insight on Greenland shark bycatch mortality, and to illustrate, Greenland shark bycatch from a 10 – 11-hour trawl tow had a 15% survival rate.

Given the immediate threat to this species, and with the limited information available to inform the development of these alternative management options, Canada and the United States are proposing a full ban on the retention and landings of Greenland shark, in line with the Scientific Council’s 2018 advice, until such time that effective management measures to address the bycatch of this species are adopted. Recognizing the difficulty of identifying whether the bycaught Greenland shark is alive or dead, and given that bycaught sharks can and do survive, the underlying assumption should be, barring clear evidence that the shark is dead (eg significant physical trauma), that the Greenland shark is still alive. We understand that some Contracting Parties have domestic landing obligation regulations for dead or dying stocks and this proposal includes provisions for those vessels. In addition, and in support of these actions, the Scientific Council has made several recommendations to increase and improve data collection of Greenland sharks that STACTIC is working towards adopting through the NAFO observer program.

Proposal

Reaffirming NAFO's commitment to ecosystem and science-based management;

Concerned that the IUCN Red List status of Greenland sharks is "Vulnerable" and therefore "threatened" and that the stock status of Greenland sharks in the NRA is unknown;

Recognizing the Scientific Council's advice on Greenland sharks, including that "*management actions should keep fishing mortality as close to zero as possible to ensure that there will be a very low probability that biomass will decline within the foreseeable future*" and specifically recommending a prohibition on retention;

Noting the SC's reiterated advice for reporting of all shark bycatch by species from all fisheries, including shark numbers, sex, total and fork length measurements (when feasible without causing undue harm), and bycatch discard disposition (*i.e.*, dead or alive) in all fisheries, and the recommendation that management measures be applied consistently across the NAFO Convention Area owing to the species' broad distribution;

Further noting that Greenland sharks can and do survive being caught as bycatch in conjunction with the extreme difficulty in determining if a Greenland shark is alive, dying or dead;

Additionally recalling that Article 12 calls upon Contracting Parties to encourage vessels to release sharks alive, especially juveniles that are not intended for use as food or subsistence, and further requires the release of living Greenland sharks in a manner that causes the least amount of harm;

Recognizing the reply from STACTIC to the request from the Commission with regard what control elements would be necessary should NAFO decide to adopt a landing obligation policy in order to encompass ongoing discussions in various NAFO bodies dealing with measures on discards.

Also recognizing the need for further work in NAFO bodies with regard to the consideration of introducing a landing obligation policy, noting in particular that one of the most important aspects of a landing obligation policy are measures to avoid or otherwise prevent unwanted catches, such as bycatches and undersized fish.

Committed to continue working towards the consideration of the feasibility of landing obligation policy, in particular with regard to measures to avoid or otherwise prevent unwanted catches, as well as monitoring, control and surveillance elements to ensure compliance.

Thereby recommends that Article 12 (1) of NAFO's Conservation and Enforcement Measures be amended to include the following:

(d) prohibit fishing vessels flying its flag from conducting a directed fishery for, retaining, transshipping, or landing part or whole of a Greenland shark (*Somniosus microcephalus*) in the Regulatory Area

- d. Bis) Notwithstanding the provisions in paragraph (d) above, Contracting Parties with applicable domestic law that requires a general discard ban or that dead fish be landed may, in accordance with their national law and provided that the fish is dead, retain on board and land incidental bycatch of Greenland sharks. Fishermen are prohibited from drawing any commercial value from such fish.

To facilitate the identification of areas and times where bycatch and discards of Greenland sharks have a higher rate of occurrence, Contracting Parties are reminded of their commitment to report on their efforts to minimize incidental catches and mortalities of Greenland sharks, including amounts released and retained. Contracting Parties with domestic laws reflected in paragraph 12(d.bis) are further encouraged to submit photo of any landed shark, in addition to the total length measurements, weight, fork length, and sex should to the Executive Secretary, who should subsequently share with the Scientific Council.

Further recommends that the Scientific Council advise the Commission, at its 2024 Annual Meeting (if possible given capacity limitations), on other appropriate management options for the bycatch of Greenland sharks in the NRA, to inform the Commission's consideration of additional measures for their conservation.

Annex 25. EDG - Annex I.A (Quota Table): Alfonsinos in Subarea 6
[STACTIC WP 22-07 (Rev.) now COM Doc. 22-07]

The Editorial Drafting Group (EDG), at its November 2021 meeting, discussed that the caption of Annex I.A (Quota Table) currently indicates stocks in subareas 1–4. With the new inclusion of alfonsinos in subarea 6 in the Quota Table, the caption may need to be revised to include this subarea and it was agreed that STACTIC should review this at the 2022 Intersessional meeting.

At the 2022 STACTIC Intersessional Meeting in May, it was agreed to amend the caption of Annex I.A to read:

CATCH LIMITATIONS – Article 5. Total allowable catches (TACs) and quotas (tonnes in live weight) for 2022 of particular stocks in Subareas 1-4 and 6 of the NAFO Convention Area.

Annex 26. EDG - NAFO Lost Gear Map
[STACTIC WP 22-08 (Rev. 4) now COM Doc. 22-08]

Preamble

At the 2021 Annual Meeting, STACTIC agreed under agenda item 12 “*Discussion of data classification and access rights*” that the map of lost or abandoned fishing gears, presented in STACTIC WP 21-39 (see below), be made available on the NAFO public website ([COM Doc. 21-21 Rev.](#)).

The Editorial Drafting Group (EDG), at its November 2021 meeting, reflected whether this can be done at the present time. It was noted that Article 13.15 of the NAFO CEM stipulates that lost gear information be posted to the **secure part of the NAFO website**. Therefore, Article 13.15 might need to be amended before the map can be posted to the NAFO public website.

The EDG agreed that STACTIC should review Article 13.15 and the lost gear map at the 2022 Intersessional meeting prior to posting it to the NAFO public website.

At the 2022 STACTIC Intersessional meeting it was agreed that if posting the lost gear map to the NAFO public website, Article 13.15 should be amended to read:

The Executive Secretary posts without delay the information provided by Contracting Parties in accordance with paragraph 14 of this Article to the secure part of the NAFO website as well as an anonymized version of the information without vessel identification information to the NAFO public website.

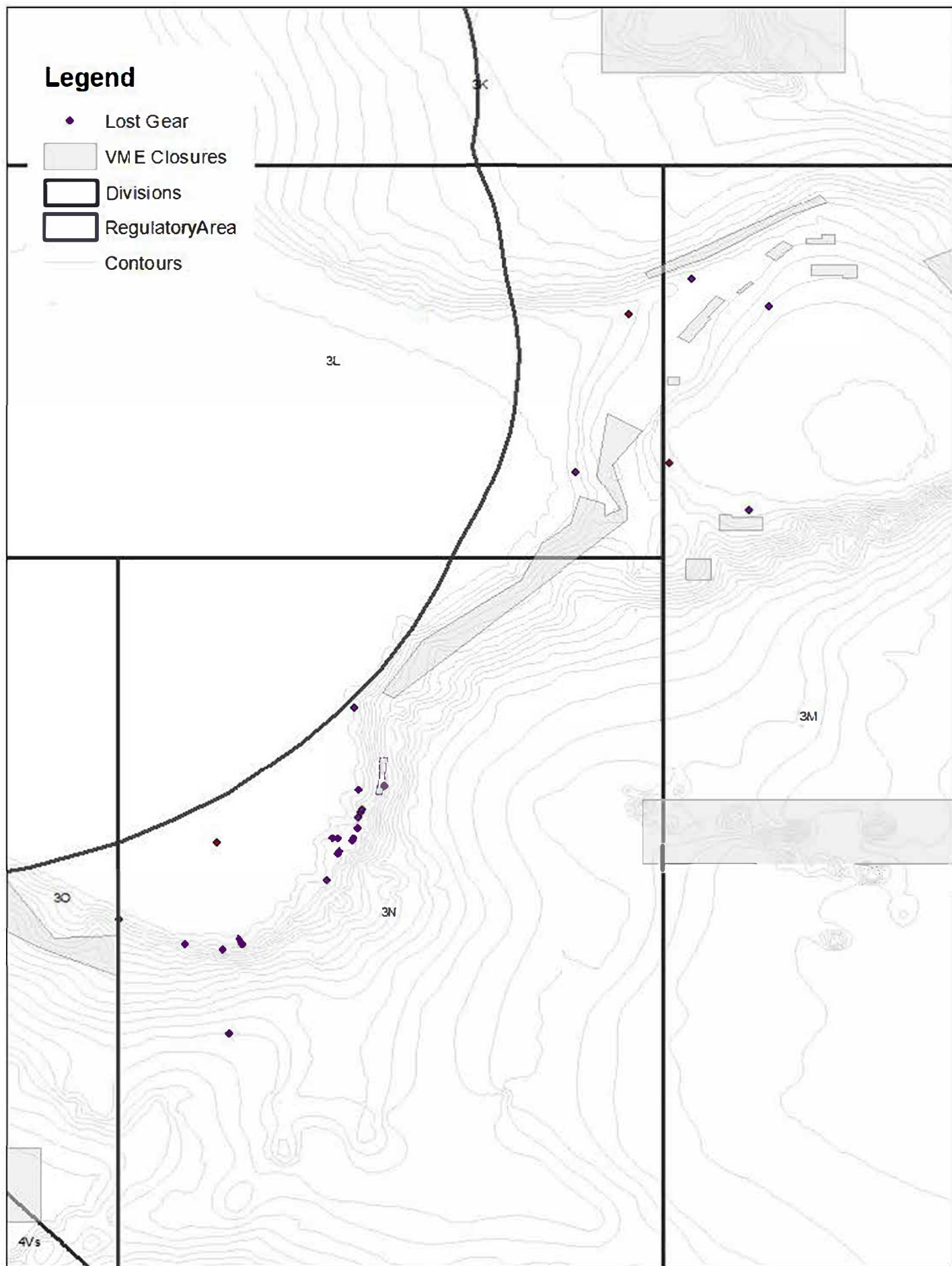
Proposal

The United States of America proposes that if posting the lost gear map to the NAFO public website, Article 13.15 should be amended to read:

The Executive Secretary posts without delay the information provided by Contracting Parties in accordance with paragraph 14 of this Article to the secure part of the NAFO website as well as an anonymized version of the information to the NAFO public website. The anonymized version shall remove all identifying information, including but not limited to the vessel name and call sign.

Legend

- Lost Gear
- VM E Closures
- Divisions
- RegulatoryArea
- Contours



Annex 27. Inclusion of Vessels from IUU Lists of other RFMOs into the NAFO IUU List: NAFO CEM Articles 49, 52 and 53

[STACTIC WP 22-22 (Rev. 3) now COM Doc. 22-09]

Background

At the STACTIC Intersessional Meeting in May 2020, Norway presented a discussion paper, STACTIC WP 20-07, regarding the inclusion of vessels from the IUU lists of other Regional Fisheries Management Organisations (RFMOs) to the NAFO IUU list. This document highlighted that NEAFC had already adopted such amendments to the NEAFC Scheme of Control and Enforcement.

The RFMOs listed in Article 44(7) of the NEAFC Scheme are: the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR), the Commission for the Conservation of Southern Bluefin Tuna (CCSBT), the Inter-American Tropical Tuna Commission (IATTC), the International Commission for the Conservation of Atlantic Tunas (ICCAT), the Indian Ocean Tuna Commission (IOTC), the General Fisheries Commission for the Mediterranean (GFCM), the Northwest Atlantic Fisheries Organization (NAFO), the North Pacific Fisheries Commission (NPFC), the South East Atlantic Fisheries Organisation (SEAFO), Southern Indian Ocean Fisheries Agreement (SIOFA), the South Pacific Regional Fisheries Management Organisation (SPRFMO) and the Western and Central Pacific Fisheries Commission (WCPFC).

At the 2020 STACTIC Intersessional Meeting, Norway expressed the opinion that NAFO should include similar amendments to the NAFO Conservation and Enforcement Measures (CEM), and the European Union supported this view. Other Contracting Parties noted that they were fully supportive of mechanisms to prevent and deter IUU fishing activities in NAFO. However, some Contracting Parties noted they needed more time, additional input and more details, such as which RFMOs would have sufficient nexus to NAFO.

In this regard, we would like to highlight that both NEAFC and NAFO have been very active in fighting IUU fishing and are including vessels from each other's IUU lists on their respective IUU lists, which have proven to be efficient tools against IUU fishing.

As IUU activities are taking place worldwide, it should be ensured that vessels which have been IUU listed by other RFMOs are also subject to the measures provided by Article 54 of the NAFO CEM in the NAFO context. Cross-referencing RFMOs IUU lists increases the effectiveness of this tool to fight IUU, and hence, IUU lists should be exchanged between relevant RFMOs to enhance their effect.

Furthermore, it should be highlighted that Article 9(4) of the FAO Agreement on Port State Measures requires its Parties to deny vessels port entry when a Party has sufficient proof that the vessel has engaged in IUU fishing or fishing related activities in support of such fishing: *"in particular the inclusion of a vessel on a list of vessels having engaged in such fishing or fishing related activities adopted by a relevant regional fisheries management organization in accordance with the rules and procedures of such organization and in conformity with international law"*.

At the 2020 STACTIC Annual Meeting, Norway and the European Union tabled a proposal to introduce the cross-referencing mechanism in the NAFO CEM. STACTIC members noted the benefit of reviewing other provisions on IUU listing in Chapter VIII of the NAFO CEM. Norway, the European Union and the United States of America agreed to work on the preparation of this revised proposal.

Proposal

To strengthen the fight against IUU activities globally, it is proposed to include similar amendments to the NAFO CEM as those that have been implemented in the NEAFC Scheme. The references to relevant provisions on IUU listing in Chapter VIII have been revised for a coherent reading.

CHAPTER VIII - NON-CONTRACTING PARTY SCHEME

[...]

Article 49 – Presumption of IUU fishing

1. An NCP vessel is presumed to have undermined the effectiveness of the CEM, and to have engaged in IUU fishing, if it has been:

(a) sighted or identified by other means as engaged in fishing activities in the Regulatory Area;

(b) involved in transshipment with another NCP vessel sighted or identified as engaged in fishing activities inside or outside the Regulatory Area; and/or

2. A vessel is presumed to have engaged in IUU fishing if it has been included in the IUU list of the following RFMOs: the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR), the Commission for the Conservation of Southern Bluefin Tuna (CCSBT), the Inter-American Tropical Tuna Commission (IATTC), the International Commission for the Conservation of Atlantic Tunas (ICCAT), the Indian Ocean Tuna Commission (IOTC), the General Fisheries Commission for the Mediterranean (GFCM), the North East Atlantic Fisheries Commission (NEAFC), the North Pacific Fisheries Commission (NPFC), the South East Atlantic Fisheries Organisation (SEAFO), the Southern Indian Ocean Fisheries Agreement (SIOFA), the South Pacific Regional Fisheries Management Organisation (SPRFMO) and the Western and Central Pacific Fisheries Commission (WCPFC).

[...]

Article 52 - Provisional IUU Vessel List

1. In addition to information submitted from Contracting Parties in accordance with **Articles 49-50** and 51, each Contracting Party may, without delay, transmit to the Executive Secretary any information that may assist in identification of any NCP vessel that might be carrying out IUU fishing in the Regulatory Area.

2. If a Contracting Party objects to a NEAFC IUU-listed vessel being incorporated into or deleted from the NAFO IUU Vessel List in accordance with Article 53, such vessel shall be placed on the Provisional IUU Vessel List.

Duties of the Executive Secretary

23. The Executive Secretary:

(a) establishes and maintains a list of **NCP** vessels presumed to have engaged in IUU fishing, **as defined in Article 49. This shall be in the Regulatory Area** referred to as the Provisional IUU Vessel List;

(b) upon receipt, records **in the Provisional IUU Vessel List:**

(i) the information received pursuant to paragraph 1;

(ii) for all vessels, including, if available, the name of the vessel, its flag State, call sign, **and** registration number, **and IMO number, photographs,** and any other identifying features, **in the Provisional IUU Vessel List; including the identification of the original listing RFMO and any other information provided to support the listing;**

(c) posts the Provisional IUU Vessel List and all updates to the secure part of the NAFO website; **and**

(d) for vessels included in the Provisional IUU Vessel List pursuant to Article 49.1(a) and (b):

(i) advises the flag State of the NCP vessel listing, including:

- (i1)** the reasons and supporting evidence;
- (i2)** a copy of the CEM and a link to its place on the NAFO website;

(eii) requests that the flag State of the NCP vessel:

- (i1)** take all measures to ensure that the vessel immediately ceases all fishing activities that undermine the effectiveness of the CEM;
- (i2)** report within 30 days from the date of the request on the measures it has taken with respect to the vessel concerned; and
- (iii3)** state any objections it may have to including the vessel in the IUU Vessel List;

(fiii) transmits to the flag State of the NCP vessel any additional information received pursuant to Articles 49-51 **and 52.1** in respect of vessels entitled to fly its flag that have already been included in the Provisional IUU Vessel List;

(giv) distributes any information received from the flag State to all Contracting Parties; **and**

(hy) advises the flag State of the NCP vessel of the dates STACTIC and the Commission will consider listing the vessel in the IUU Vessel List, and invites the flag State to attend the meeting as an observer where it will be given the opportunity to respond to the report submitted in accordance with paragraph 3(e)(ii).⁴

~~**(i) transfers the vessel from the Provisional IUU Vessel List to the IUU Vessel List in accordance with Article 53 if the flag State does not object; and (j) places all vessels included in the NEAFCIUU List on the IUU Vessel List, unless a Contracting Party objects to such inclusion, in which case it places the vessel on the Provisional IUU Vessel List. Article 53 shall not apply to vessels placed on the Provisional IUU Vessel List in accordance with this paragraph.**~~

Article 53 - IUU Vessel List

Listing a Vessel on the IUU Vessel List

1. STACTIC recommends to the Commission whether each vessel listed in the Provisional IUU Vessel List should be:

- (a) deleted from the Provisional IUU Vessel List;
- (b) retained in the Provisional IUU Vessel List, pending receipt of further information from the flag State, **or relevant RFMO, or other sources;** or
- (c) transferred to the IUU Vessel List, **which in the case of vessels included in the Provisional list pursuant to Article 49.1(a) and (b), shall only be possible** upon expiration of the period referred to in Article 52.2(d)(ii)(2)-(3)(e)(ii).

2. STACTIC may recommend that the Commission update the identifying features of vessels included in either the Provisional IUU Vessel List or the IUU Vessel List.

Deleting a Vessel from the IUU Vessel List

~~2.3.~~ STACTIC may advise that the Commission delete a vessel from either the Provisional IUU Vessel List or the IUU Vessel List **if such vessel has been de-listed by the RFMO that originally listed it, or** where it is satisfied that the flag State of a vessel concerned has provided sufficient evidence to establish that:

- (a) it has taken effective action to address the IUU fishing of such vessel, including prosecution and imposition of sanctions of adequate severity;
- (b) it has taken measures to prevent such vessel from engaging in further IUU fishing under its flag;
- (c) such vessel has changed ownership, and
 - (i) the previous owner no longer has any legal, financial or real interest in such vessel, or exercises no control over it; or
 - (ii) the new owner has no legal, financial or real interest in, nor exercises control over, another vessel listed in the IUU Vessel List or any similar IUU list maintained by any of the RFMOs listed in Article 49.2, and has not otherwise been engaged in IUU activities;
- (d) such vessel did not take part in IUU fishing; or
- (e) such vessel has sunk, been scrapped, or been permanently reassigned for purposes other than fishing activities.

~~4.3.~~ The Commission may make any changes to listings in the IUU Vessel List. The Commission determines the final composition of the IUU Vessel List.

Duties of the Executive Secretary

~~5.4.~~ The Executive Secretary:

- (a) posts the IUU Vessel List to the NAFO website, including the name and flag State and, if available, the call sign, hull number, IMO number, previous name(s) and flag(s), ~~or photographs, and~~ any other identifying features for each vessel, **including the RFMO that originally listed the vessel**;
- (b) **for vessels included in the Provisional IUU Vessel List pursuant to Article 49.1(a) and (b), notifies the flag State of the Commission's decision to list name of** each vessel entitled to fly its flag **listed in on the NAFO's** IUU Vessel List;
- (c) transmits the IUU Vessel List and any relevant information, including the reasons for listing or de-listing each vessel, to ~~the other~~ RFMOs **listed in Article 49.2; and, including, in particular, the NEAFC, the South East Atlantic Fisheries Organisation (SEAFO), and the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR)**;
- ~~(d) transmits the amendments to the NEAFC IUU list, upon receipt, to all Contracting Parties and amends the IUU Vessel List consistent with amendments to the NEAFC IUU List, within 30 days of such transmittal; unless within the 30 days the Executive Secretary receives from a Contracting Party a written submission establishing that:~~
 - (i) ~~any of the requirements in paragraph 2(a)-(d) of this Article have been met with regard to a vessel placed on the NEAFC IUU List; or~~

~~(ii) — none of the requirements in paragraph 2(a)-(d) of this Article have been met with regard to a vessel taken off the NEAFC IUU List; and~~

(d) immediately removes any vessel included in the IUU Vessel List if such vessel has been delisted by the RFMO that originally listed it and places it on the Provisional IUU Vessel List, noting the delisting; and

(e) advises STACTIC of any action taken pursuant to this Article.

Annex 28. Streamlining the Notification Process for Observer Deployments: NAFO CEM Article 30
[STACTIC WP 22-24 (Rev.) now COM Doc. 22-10]

Background

At the 2020 STACTIC Intersessional Meeting, initial discussions of the changes to Article 30 implemented in 2019 revealed that a number of Contracting Parties found the current requirement to have a vessel's Observer Deployment notification submitted 24 hours prior to NRA entry difficult to achieve. STACTIC WP 21-03Rev4 review noted continued difficulties from two Contracting Parties. Given that the notification contains only the vessel's name and call sign and the observer's name and ID (if applicable), this requirement continues to create administrative burden and challenges.

Discussions at the 2022 STACTIC Intersessional meeting suggested that, as the Observer is identified in OBR reports, the deployment notification may not be required. Based on these discussions, Canada proposes Article 30.10 be adjusted to remove the requirement for a separate notification, noting that observers' IDs are available to inspectors via the Lists of Observers posted to the MCS website annually, if applicable.

Proposed Amendments

Article 30 – Observer Program

Duties of the flag State Contracting Party

10. Each Contracting Party shall submit to the Executive Secretary:

- ~~a) no later than 24 hours in advance of an observer's deployment onboard a fishing vessel the name of the fishing vessel and International Radio Call Sign, together with the name and ID (if applicable) of the observer concerned;~~
- ~~b)~~a) without delay following its receipt, the daily OBR report referred to in paragraph 14 (e);
- ~~e)~~b) within 30 days following the arrival of the vessel in port, the observer trip report referred to in paragraph 14;
- ~~d)~~c) by 1 March each year for the previous calendar year, a report on its compliance with the obligations outlined in this Article.

Annex 29. Additional Trial Tows
[STACTIC WP 22-37 (Rev. 2) now COM Doc. 22-11]

Background

For the last several years, the United States has raised concerns that the definition of directed fishing may generate unintended consequences by attempting to account for the master's intentions through singularly focusing on the composition of one individual haul. At the 2021 STACTIC Intersessional and subsequent Bycatch and Directed Fishing Working Group meetings, the United States recommended incorporating elements of the move-along provisions (Art. 6.6(b)) into the directed fishing framework to prevent vessels that indirectly direct on a non-target species from being sent home with a serious infringement. *See* STACTIC WP 21-05.

Contracting Parties recommended exploring the possibility of providing additional opportunities for trial tows along with other alternative measures. At this time, we seek to advance a conservative approach by providing one trial tow upon the first entrance into a Division on a fishing trip. We implore STACTIC to review and evaluate the effects and implications of this limited measure as well as assess whether additional opportunities and flexibilities may be afforded in the future.

Proposed Modifications

Article 6

Exceeding Bycatch Limits in Any One Haul

6. Each Contracting Party shall ensure that its vessels:
 - a. do not conduct directed fisheries for species referred to in paragraph 2 of this Article;
 - b. observe the following, where the weight of any species subject to the bycatch limits exceeds the greater of the limits specified in paragraph 3 of this Article in any one haul:
 - i. immediately move a minimum of 10 nautical miles from any position of the previous tow/set throughout the subsequent tow/set;
 - ii. leave the Division and not return for at least 60 hours if the bycatch limits specified in paragraph 3 of this Article are again exceeded following the first tow/set after moving in accordance with paragraph 6(b)(i) of this Article;
 - iii. undertake a trial tow for a maximum duration of 3 hours before starting a new fishery following an absence of at least 60 hours. If the stocks subjected to bycatch limits form the largest percentage, by weight, of the total resultant catch in the haul, this should not be considered as a directed fishery for those stocks, and the vessel must immediately change position in accordance with provisions of paragraph 6(b)(i) and (ii); and
 - iv. identify any trial tow conducted in accordance with paragraph 6(b) and record in the fishing logbook the coordinates pertaining to the start and end locations of any trial tow conducted.
7. In a directed fishery for shrimp, the move referred to in paragraph 6 shall apply when, for any one haul, the quantity of the total groundfish stock listed in Annex I.A exceeds 5% in Division 3M or 2.5% in Division 3L.
8. When a vessel is conducting a directed fishery for skate with a legal mesh size appropriate for that fishery, the first time that catches of stocks for which bycatch limits apply, as specified in paragraph 2, comprise the largest

percentage by weight of the total catch in a haul, they shall be considered as incidental catch, but the vessel shall immediately move as specified in paragraph 6.

9. The percentage of bycatch in any one haul is calculated as the percentage, by weight, for each stock listed in Annex I.A of the total catch from that haul.

10. Upon its first entrance into a Division on a fishing trip, a vessel may undertake one trial tow for up to a maximum duration of 3 hours. If the stocks subjected to bycatch limits form the largest percentage, by weight, of the total resultant catch in the haul, this shall not be considered as a directed fishery for those stocks, and the vessel must immediately change position in accordance with provisions of paragraph 6(b). Vessels must identify any trial tow conducted in accordance with this paragraph and record in the fishing logbook the coordinates pertaining to the start and end locations of any trial tow conducted.

Annex II.A

Logbook Entries

15. Was a trial tow conducted in accordance with Article 6.6(iii) or Article 6.10 ~~conducted~~? (Y/N)

Annex 30. Catch and Effort Limitation (Article 5 of the NAFO CEM)[STACTIC WP 22-38 now COM Doc. 22-12]**Background**

Article 5.5(i) of the NAFO Control and Enforcement Measures (CEM) establishes that each Contracting Party shall ensure that, after a closure of a fishery, no more fish of the stock concerned is retained on board the vessels entitled to fly its flag.

In the case of 3M redfish, Article 5.5(e) uses a different expression by prescribing the Contracting Party's obligation to "close its direct fisheries" for that stock. While this difference is relevant in the scenario of a 50% quota uptake (Art 5.5(d)), in the case of a 100% uptake the closure is expected to be consistent with Article 5.5(i).

Proposal

To clarify that the fishery closure of 3M redfish following a 100% quota uptake is subject to the prohibition to retain on board catches of this stock, it is proposed to delete the word "directed" in Article 5.5(e):

Article 5 – Catch and Effort Limitations

[...]

5. Each Contracting Party shall:

(e) close its ~~directed redfish~~ fishery ~~for in Division~~ 3M ~~redfish~~ at 24:00 UTC of the day the accumulated reported catch is estimated to reach 100% of the 3M redfish TAC, as notified in accordance with paragraph 15 (e) of this Article;

Annex 31. Control Measures for 3M Cod – Article 7 of the NAFO CEM
[STACTIC WP 22-39 (Rev. 2) now COM Doc. 22-13]

Background

To improve the recovery of the 3M cod, several flanking measures were introduced in 2020, including a 100% port inspection benchmark for vessels with more than 1,250 kg of 3M cod catches on board. In 2021, the inspection benchmark was maintained at 50% of the landings until the TAC remains under 6 000 tonnes. STACTIC shall review these control measures and propose the necessary amendments before the Annual Meeting in 2022.

In order to maintain a dedicated focus on control until a there is a more substantial recovery of the stock, it is proposed to amend Article 7.6(c) and footnote 1 of the NAFO Control and Enforcement Measures (NAFO CEM), with a view to keep a 25% inspection benchmark when the TAC is under 12 000 tonnes, and 50% inspection benchmark if the TAC is under 6 000 tonnes.

Without prejudice to the possibility for the STACTIC or the NAFO Commission to revisit these provisions where necessary, the 2-step inspection benchmark intends to provide a more stable and predictable inspection control effort without the need to revise the measure every year.

Proposal

It is proposed to delete footnote 1, renumber footnotes accordingly, and amend Article 7.6(c) of the NAFO CEM as follows:

*(c) inspect ~~at least 50% of the~~ landings or transshipments of 3M cod in its ports and prepare an inspection report in the format prescribed in Annex IV.C, which it submits to the Executive Secretary within 14 working days from the date on which the inspection was completed. The PSC3 report shall identify and provide details of any infringement to the CEM detected during the port inspection. It shall include all relevant information available in reference to infringements detected at sea during the current trip of the inspected fishing vessel. **Inspections of landings or transshipments shall be conducted at a rate of:***

(i) at least 50% when the TAC for cod in Division 3M in Annex I.A is under 6 000 tonnes, and

(ii) at least 25% when the TAC for cod in Division 3M in Annex I.A is between 6 000 and 12 000 tonnes.

Annex 32. Review of NAFO CEM Article 30.19[STACTIC WP 22-50 now COM Doc. 22-14]

Article 30.19 of the NAFO CEM is time sensitive. STACTIC reviewed Article 30.19 at the Annual Meeting of NAFO in September 2022 and agreed to remove it:

A CHAPTER V***OBSERVER SCHEME******Article 30 – Observer Program***

...

Implementation

~~19. — This Observer Program will be reviewed by STACTIC in 2022.~~

Annex 33. Standing Committee on International Control (STACTIC) Rules of Procedure regarding Data Confidentiality and Participation in Meetings
[STACTIC WP 22-47 (Rev.) now COM Doc. 22-19]

Background

At the 2018 Annual Meeting, the opening of the STACTIC meeting was delayed as Contracting Parties could not achieve consensus on how STACTIC should proceed if Contracting Party non-governmental delegates were present at the meeting. Two emergency Heads of Delegation meetings convened to address the issue. Heads of Delegation acknowledged that each Contracting Party can make its own decision on whether or not to allow industry representatives of Contracting Party delegations to attend STACTIC. The Heads of Delegation advised that, for this meeting only, if any Contracting Party felt they were unable to address agenda items, they were asked to signal their intent not to participate or object to discussing the item with industry representatives in attendance at the start of each Agenda Item. 2018 Annual Meeting, COM DOC 18-28, Part II, page 138.

Contracting Parties discussed the matter at the 2019 STACTIC Intersessional Meeting, but attained no consensus. STACTIC returned to the Commission for further guidance on the participation by non-government representatives. 2019 STACTIC Intersessional, COM DOC 19-04.

Prior to the start of the 2019 Annual Meeting, Contracting Parties met to discuss the participation of non-governmental Contracting Party representatives in STACTIC. Recognizing the need for a productive meeting, Contracting Parties agreed as a temporary solution to walk through the agenda and the working papers to determine which items were deemed to be of a sensitive nature and were more appropriate to be discussed in an *in-camera* session. Contracting Parties agreed that all working papers and agenda items would be discussed in an open session, with the exception of Agenda Item 6 (STACTIC WP 19-59) and the Secretariats' demonstration of the updates to the NAFO MCS Website under Agenda Item 9, noting these would be discussed in an *in-camera* session restricted to government officials and NAFO Commissioners from each delegation. It was understood that after the *in-camera* discussion, the Chair would report out the results or recommendations in open session.

Contracting Parties noted that the current practice of identifying items for an *in-camera* session would work as a short-term solution, but that a more permanent solution would be required. Contracting Parties agreed to task a small working group to develop a possible long-term solution for STACTIC participation. 2019 Annual Meeting, COM Doc. 19-34 Part II, page 180.

The planned 2020 *Ad Hoc* WG on STACTIC Participation was deferred due to COVID-19, as was any discussion during the 2020 STACTIC Intersessional meeting. Only governmental delegates were present at the 2020 intersessional meeting, so no *in-camera* sessions were necessary.

STACTIC followed the procedure established at the 2019 Annual Meeting as an interim solution at the 2020 Annual Meeting.

Contracting Parties held a virtual STACTIC Participation working group meeting in August 2021. Contracting Parties still could not reach an agreeable solution. The Chair recommended that the EU, Japan, US and Canada collaborate to draft a proposal for the 2021 Annual Meeting that uses the interim ad hoc process as the basis for moving forward with some refinements. No consensus was reached.

Proposal

Recognizing that pursuant to Article VI of the Convention, each Contracting Party shall be a member of the Commission and appoint one Representative to the Commission, who may be accompanied by Alternate Representatives, experts, and advisers;

Confirming that pursuant to Rule of Procedure 5.1, within the Commission, there shall be a Standing Committee on International Control (STACTIC) consisting of one representative from each Contracting Party, who may be assisted by experts and advisers;

Noting that Rule of Procedure 5.6 calls for each subsidiary body to establish its own Rules of Procedure and that STACTIC has yet to establish its own Rules of Procedure;

Recognizing that the absence of STACTIC Rules of Procedure and the absence of clarity as to what is meant by “experts and advisers” in Rule 5.1 have given rise to uncertainty as to which extent certain topics under the remit of STACTIC require a more restricted setting to ensure open discussions of sensitive topics and confidential data;

Noting the need to safeguard data subject to confidentiality rules in the NAFO CEM;

Recognizing the need for clear procedures regarding STACTIC participation, it is important to agree on dedicated Rules of Procedure for STACTIC that, among other elements, clarify data confidentiality issues and the rules of procedure for Contracting Parties to be assisted by experts and advisers during STACTIC;

With those understandings, and pursuant to Rule of Procedure 5.6, STACTIC has approved the following:

STACTIC Rules of Procedure regarding data confidentiality and participation in STACTIC meetings

1. STACTIC discussions are open to all Contracting Party delegates.
2. Contracting Parties and their delegates must comply with NAFO CEM data confidentiality rules.
3. Contracting Parties may request that STACTIC hold *in-camera* sessions for matters that involve sensitive topics and confidential data such as enforcement strategies and operations, proprietary fishing information, and vessel-specific enforcement actions.
4. Contracting Parties will work to present data in an aggregated, anonymized manner in an effort to reserve *in-camera* discussions only when necessary.
5. STACTIC *in-camera* sessions will be limited to the participation of government officials. A Contracting Party may designate other representatives, experts, or advisers to participate in *in-camera* sessions provided that, among other obligations, the Contracting Party ensures that all representatives maintain confidentiality in respect of the content of the proceedings and working papers discussed in the *in-camera* session through enforceable means.
6. The following rules of procedure will apply to STACTIC *in-camera* sessions:
 - a. Contracting Parties shall provide to the NAFO Secretariat a list of all STACTIC attendees no less than 10 days in advance of any STACTIC meeting, noting all participants’ affiliations. Contracting Parties shall update their list of attendees as needed. The NAFO Secretariat shall circulate the list of attendees to all Contracting Parties.
 - b. At least 10 days in advance of any STACTIC meeting, the STACTIC chair calls upon Contracting Parties to submit any nominations for agenda items or working papers to be considered for *in-camera* sessions.
 - c. To the extent possible, Contracting Parties shall submit nominations for *in-camera* agenda items, at least 5 days in advance of the meeting, noting any associated documents or working papers where access should be restricted to those participating in the *in-camera* sessions. Such nominations should include an explanation of why an *in-camera* session is appropriate for the nominated agenda item(s), focusing on the sensitivity of the topic.

- d. Contracting Parties may express disagreement with any nomination for *in-camera* agenda items in writing at the earliest opportunity and, to the extent possible, no later than 2 days in advance of the meeting. The Contracting Party shall include an explanation of why an open session is appropriate for the nominated agenda item(s), focusing on the sensitivity of the topic.
- e. The Contracting Parties will try to achieve consensus on the status of each agenda item for which there is a disagreement. If there is disagreement on whether an agenda item is to be discussed *in-camera*, the Contracting Parties will engage in an expedited mail vote in advance of the meeting, or at the latest, during the adoption of the agenda in accordance with NAFO Rules of Procedure.
- f. Once agenda items, including all associated documents, have been identified for *in-camera* sessions, the Chair in coordination with the Secretariat, will work to revise the agenda so that the *in-camera* sessions are grouped together to allow as few interruptions as possible. The Chair will make clear when the *in-camera* sessions will occur.
- g. The NAFO Secretariat will make the necessary arrangements so that working papers relevant to *in-camera* sessions will be made available only to those participating in the *in-camera* sessions.
- h. Each Contracting Party, in cooperation with the NAFO Secretariat and the STACTIC Chair, shall ensure that it appropriately limits participation for all *in-camera* discussions as well as access to any associated documents.
- i. A Contracting Party may require that its confidential data, including data from the NAFO MCS website or data otherwise subject to NAFO confidentiality rules, is either not included in *in-camera* sessions working papers or presented in an anonymized or aggregated manner.
- j. With the assistance of the Secretariat, the STACTIC Chair will report to STACTIC a summary of the outcome from *in-camera* discussions as soon as practicable during the meeting in which they occur.

Annex 34. Annual Fisheries and Compliance Review 2022 (Compliance Report for Fishing Year 2021) [STACTIC WP 22-03 (Rev. 4) now COM Doc. 22-18]

1.0 Introduction

The scope of this review covers the fishing activities of NAFO-registered vessels (Article 25 of NAFO CEM) which operated in the NAFO Regulatory Area (NRA) in 2021¹ (see Figure 1.0).

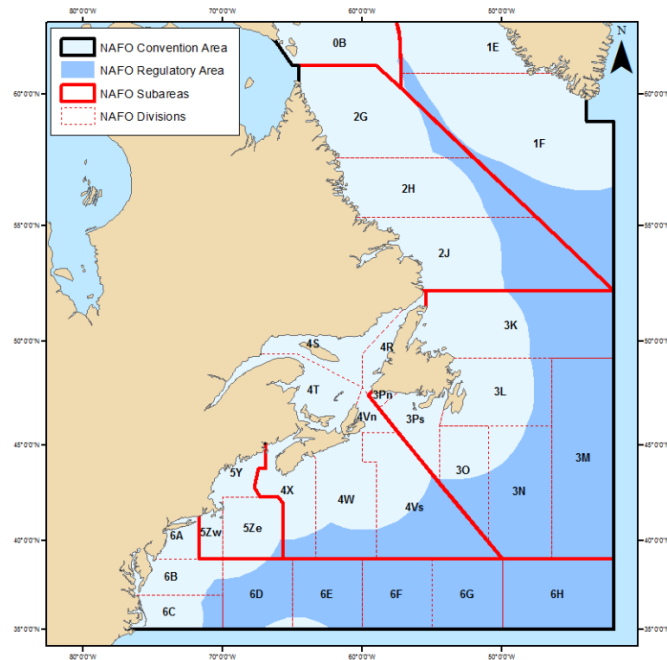


Figure 1.0. Divisions of the NAFO Convention Area and the Regulatory Area (dark blue).

This review was conducted in accordance with NAFO Rules of Procedure 5.1 and 5.2. As part of the review process, the Secretariat compiled 2021² information from the following sources: vessel monitoring system (VMS) and hail messages delivered by the vessels (Vessel Transmitted Information – VTI), electronic logbook (haul by haul) reports, Port Inspection Reports, At-sea Inspection Reports and Reports on Dispositions of Infringements provided by the Contracting Parties, and Trip Observer Reports sent to the Secretariat.

¹ According to Article 1.7 of the 2021 NAFO Conservation and Enforcement Measures (NAFO CEM), a fishing trip includes “the time from its entry into until its departure from the Regulatory Area and continues until all catch on board from the Regulatory Area is unloaded or transhipped”. All article and annex numbers mentioned in this report have reference to the 2021 NAFO CEM. Quantitative information presented in this report are summarized according to 2021 calendar year, unless otherwise indicated.

² In March 2020 the World Health Organization declared Covid-19 a pandemic. The assessment of Covid-19 impact on the compliance of the Contracting Parties (CPs) is presented as an Annex to this report.

2.0 Fisheries in the NRA

2.1 Fishing effort by gear type

NAFO traditionally identifies three main fisheries in its Regulatory Area: the groundfish (GRO - primarily in Division 3LMNO), shrimp (PRA in Division 3M) and pelagic redfish fisheries (REB - primarily in Divisions 1F and 2J). No directed fishing for pelagic redfish was conducted in 2021.

The shrimp fishery in Division 3M has been managed through an effort (in terms of fishing days) allocation scheme. In 2021, 479³ fishing days were utilized out of the total 2 640 days.

Most of the effort comes from bottom trawlers (> 500 MT), accounting for 91% of fishing effort in terms of fishing days (Table 2.1.1). The major species caught by the bottom trawlers are cod, Greenland halibut, yellowtail flounder, redfish, thorny skate and silver hake in Divisions 3LMNO (see Table 2.3.1). For longliners, the major species caught are cod and Atlantic halibut.

Table 2.1.1. *Main fishing gears and fishing effort in the NAFO Regulatory Area in 2021.*

Fishing Gear	# Fishing vessels	# Fishing trips	Fishing days in NAFO RA	Main Species (FAO 3-alpha code)	Fishing Area
Longline	5	17	169	COD, HAL	Flemish Cap (for cod); tail of the Grand Banks (for white hake and skates). Divisions 3LMNO
Bottom trawl (other than shrimp)	31	103	4247	COD, GHL, RED, SKA, YEL, HKS	Flemish Cap; Tail and Nose of the Grand Banks. Divisions 3LMNO
Shrimp trawl	6	9	479 ³	PRA	Flemish Cap. Division 3M
Total	42	129	4676		

2.2 Effort distribution by depth in demersal fisheries other than shrimp

Hourly positions of fishing vessels are required to be transmitted through the VMS. In this analysis, speeds between 0.5 and 5 knots were assumed to be fishing speeds. Figure 2.2.1 shows the distribution of fishing effort in hours of groundfish vessels is presented. About half of all groundfish effort is at depths 500 meters and shallower (longliners and trawlers catching skates, redfish and cod). Figure 2.2.1 also shows a concentration of fishing effort around 1000 meters which can be attributed to the Greenland halibut fishery.

³ NAFO Members website is source

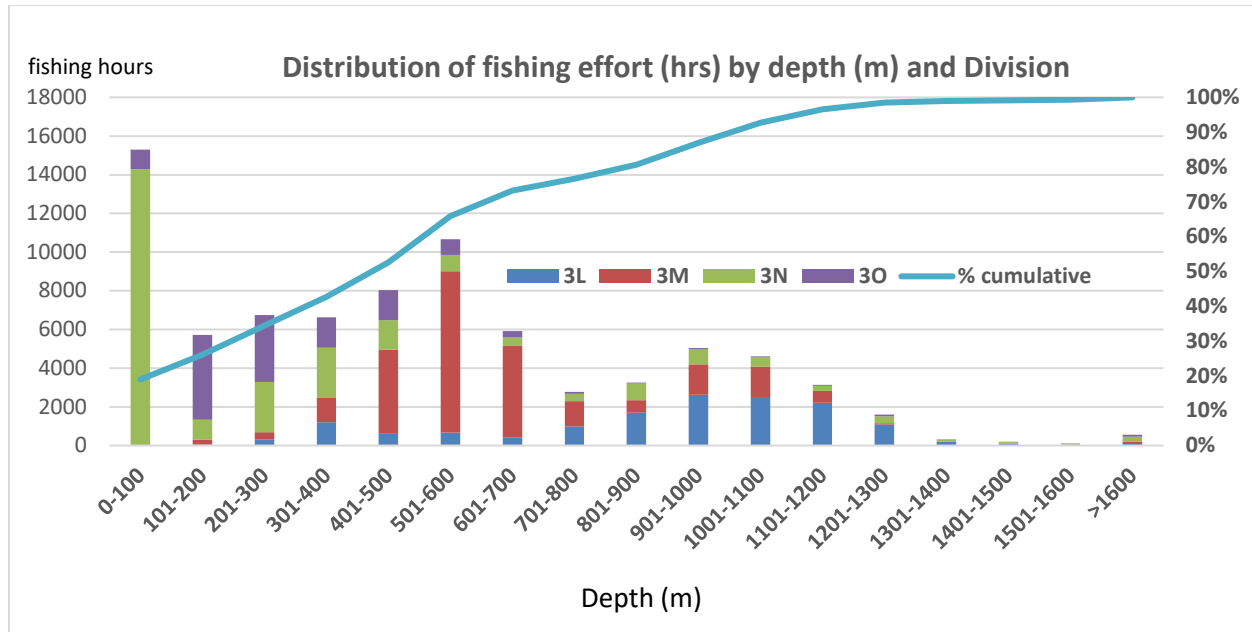


Figure 2.2.1. *Distribution of fishing effort (in hours) by depth (m) in the NRA in 2021 Vessels are assumed to be fishing at speed in the range of 0.5-5.0 knots.*

2.3 Catches in the NAFO Regulatory Area

A grand total of 71 840 t of fish (70 165.6 t retained + 1 674.9 t discarded) were caught by vessels authorized to fish in the Regulatory Area in 2021 (Tables 2.3.1). In terms of quantities caught, the stocks 3M Cod, 3LMNO Greenland halibut, 3M Redfish, 3LN Redfish, 3O Redfish, 3LNO Yellowtail flounder and 3NO Skates constitute the major groundfish fishery in the NRA.

Table 2.3.1 *Total reported retained catches (in tonnes) of species (in FAO 3-alpha code) by Division in calendar 2021 (Source: CA field of CAT Reports).*

Division	3L	3M	3N	3O	Total
<i>Species subject to catch limitations (as listed in Annex I of the NAFO CEM)</i>					
COD	76.0	1483.6	361.4	188.3	2109.3
GHL	6920.4	2568.1	902.9	4.0	10395.4
HKW		14.5	38.4	363.4	416.4
PLA	37.4	115.7	861.1	163.3	1177.5
PRA		5990.5			5990.5
RED	2234.5	8852.9	7589.6	5428.4	24105.4
SKA	54.1	59.3	2725.7	717.7	3557.0
SQI	0.5	0.2	1.2	75.4	77.4
WIT	34.8	174.4	57.3	195.4	462.0
YEL			13935.6	45.7	13981.3
<i>Selected species not listed in Annex I</i>					
ANG			5.9	26.0	31.9
CAT	2.3	4.1	1.3	0.0	7.6
GDE	7.5				7.5
GPE	3.9				3.9
HAD			2.5	13.3	15.8
HAL	57.3	51.0	402.1	123.9	634.3
HKS			528.5	6462.7	6991.1
RHG	69.3	44.2	40.6		154.1
RNG	37.7	3.6	1.3	0.8	43.5
<i>Sharks</i>					
[None]					
MZZ		3.6	0.2	0.0	3.9
TOTAL	9535.8	19365.8	27455.6	13808.3	70165.6

Table 2.3.2 *Total reported rejected catches (in tonnes) of species (in FAO 3-alpha code) by Division in calendar year 2021 (Source: RJ field of CAT Reports).*

Division	3L	3M	3N	3O	Total
<i>Species subject to catch limitations (as listed in Annex I of the NAFO CEM)</i>					
CAP			2.010	0.200	2.210
COD	0.0	5.0	3.7	0.0	8.7
GHL	1.8	2.2			4.1
HKW	1.5	0.0	4.0	5.4	10.9
PLA	0.3	1.1	14.7	2.0	18.0
PRA		20.8			20.8
RED	0.6	6.3	1.3	0.9	9.1
SKA	2.2	4.4	305.3	0.8	312.7
SQI			0.4	0.8	1.1
WIT	0.1	1.5	1.9	6.1	9.5
YEL			25.2	0.0	25.2
<i>Selected species not listed in Annex I</i>					
ANG				2.1	2.1
CAT	12.3	24.3	8.7	3.8	49.1
GDE	15.2	7.8	1.2		24.2
GPE	0.3	0.0			0.4
HAL			0.1		0.1
HKR	2.3	1.9	1.3	0.1	5.5
HKS	0.1	0.5	4.8	88.9	94.3
RHG	121.0	86.0	24.9	6.0	237.9
RNG	48.5	82.5	13.8	0.7	145.6
<i>Sharks</i>					
BSH				0.1	0.1
BSK		4.0		4.8	8.8
CFB		0.1			0.1
DGS			0.0	0.4	0.4
DGX	0.9	1.5	2.5	0.3	5.1
GSK	38.3	48.8	19.4	15.6	122.1
POR	0.1		7.5	15.1	22.7
SHX	0.3			3.4	3.7
SMA	0.2		1.7	0.7	2.5
MZZ	15.0	58.2	447.9	6.7	527.8
Total	261.2	356.8	892.3	164.7	1674.9

3.0 Inspection and Surveillance

Chapter VI of the NAFO CEM outlines the general provisions and protocol of the at-sea inspection and surveillance in the NRA. Canada and the EU deployed patrol vessels and their inspectors in the NRA. The inspectors are tasked to carry out NAFO inspection duties at sea (see Section 3.2).

3.1 Patrol Activity

In 2021, five (5) patrol vessels were deployed by the Contracting Parties with inspection presence. In all, 342 patrol-days were spent in the NRA. There were 102 days with no patrol vessel, 186 days when there was one patrol vessel, and 77 days when there was more than one patrol vessel present in the NRA. Figure 3.1 shows the time of the year the patrol vessels were present in the NRA in relation to the number of fishing vessels present.

In addition, Canada deployed surveillance aircraft, collectively flying 486 hours with 401 vessel sightings in the NRA. The European Union continued in 2021 using Remotely-Piloted Aircraft Systems deployed from patrol vessels. This program started in 2020. No non-Contracting Party vessel suspected of conducting IUU fishing activities was spotted.

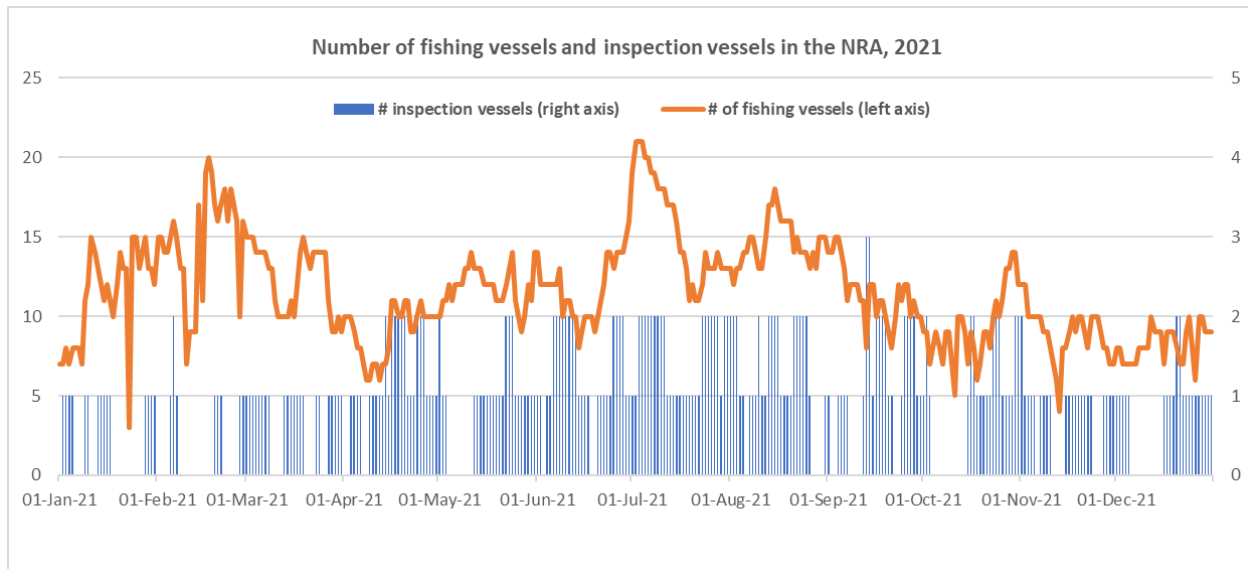


Figure 3.1 *Fishing vessel and Inspection Vessel Presence in the NRA in 2021.*

3.2 At-sea inspections

A total of 67 at-sea inspections were conducted. In seven (7) of these inspections at sea, eleven (11) Apparent Infringements (AIs) were detected – three (3) serious as per Article 38 definition and eight (8) non-serious AI. Five (5) vessels were issued with AI, two (2) were repeat offenders. Details of the apparent infringements and their disposition can be found in Section 4.2.

3.3 Port inspections

According to Article 43.10, the port State Contracting Party shall carry out inspections of at least 15% of all such landings or transshipments by vessels flagged to other Contracting Parties during each reporting year. Under Article 10.4(e), landings or transshipments of Greenland halibut from Divisions 3LMNO are subject to a 100% port inspection benchmarks. Landings or transshipments of cod from Division 3M were subject to a 100% inspection benchmark in 2021 pursuant to Article 7.6. Port inspection reports relating to these obligations are documented in PSC3 form (Annex IV.C).

In evaluating compliance for 2021 with Port State Control measures outlined in Article 10 from the NAFO CEM, 57 trips with more than 2.5 t of Greenland halibut on board were identified. PSC3s were received for all these trips, therefore there is a 100% coverage as shown in Table 3.3.1.1.

Table 3.3.1.1 *Fishing trips with Greenland halibut (GHL) catch (based on Daily Catch Reports for the trip) and percent coverage of port inspections for the identified trips, by flag State.*

Flag State CP	Number of identified trips by vessels larger than 24 m: trip with GHL catch > 0	Total amount of GHL from trips identified (t)	Number of identified trips with Port Inspection (PSC3)	Port Inspection Coverage (% based on identified trips with GHL catch)
DFG (FRO)	1	210	1	100%
EU	42	6868	42	100%
JPN	4	1 253	4	100%
RUS	10	1 564	10	100%
Overall	57	10 399	57	100%

In evaluating compliance for 2021 with Port State Control measures outlined in Article 7bis from the NAFO CEM, 28 trips with more than 1.25 t of 3M Cod on board were identified. PSC3s from 27 trips were received, a 96% coverage as shown in Table 3.3.1.2. The trip without a PSC3 had 324.3 t according to the CAT reports.

Table 3.3.1.2 *Fishing trips with 3M cod catch (based on Daily Catch Reports for the trip) and percent coverage of port inspections for the identified trips, by flag State.*

Flag State CP	Number of identified trips by vessels 3M Cod catch > 1250 kg	Total amount of 3M COD from trips identified (t)	Number of identified trips with Port Inspection (PSC3)	Port Inspection Coverage (% based on identified trips with 3M Cod catch)
DFG (FRO)	2	328	1	50%
EU	23	792	23	100%
JPN	1	5	1	100%
NOR	1	139	1	100%
RUS	1	94	1	100%
Overall	27	1356	26	96%

Table 3.3.2 *The number of PSC1s and corresponding PSC3s received by the NAFO Secretariat relating to the inspection of landings or transshipments by vessels flagged to other Contracting Party.*

Port State Contracting Party		PSC1 (prior request)	Number of PSC1's with intention to land/tranship catch	PSC3 (port inspection report)	% Coverage (#PSC3 received /#PSC1)
Canada		22	16	16	100%
DFG	GRL	1	0	0	-
	FRO	4	4	4	100%
EU		5	5	5	100%
Iceland		6	5	1	20%
Norway		1	1	1	100%

In evaluating compliance with Port State Control measures outlined in Chapter VII of the NAFO CEM, a review of the submission of Port State Control Prior Request (PSC1) and Port Inspection reports (PSC3) is presented in Table 3.3.2. The minimum coverage of 15% (Article 43.10) was met by all port State Contracting Parties.

4.0 Compliance

In this section, reporting obligations, including follow-up actions to apparent infringements (AIs) are examined.

4.1 Reporting obligations

The NAFO CEM requires fishing vessels and flag State Contracting Parties (through the Fisheries Monitoring Centre - FMC) and port State Contracting Parties to provide reports on the fisheries activity within a determined time frame. Compliance of port State Contracting Parties with reporting requirements is discussed in Section 3.3.

4.1.1 Vessel Activity Reporting

4.1.1.1 Vessel Transmitted Information (VTI) – Catch-on-Entry (COE), Daily Catch Reports (CAT), and Catch-on-Exit (COX)

The FMCs are responsible for transmitting the VTI reports to the Secretariat. The COE and COX are transmitted identifying the catches on board when entering and leaving the NRA. COE-COX information is used to estimate the fishing-days effort in a fishing trip. The CATs are daily catch (retained and rejected) quantities reported by species and by Division while on a fishing trip. CATs are used to monitor the quota uptakes by the fleet of the Contracting Parties.

In Table 4.1.1.1, the number of COE, COX, and CAT, as well as of fishing trips and fishing effort-days in the NRA, is presented. All identified 2021 fishing trips had corresponding COE and COX.

Table 4.1.1.1 *Fishing effort and VTI statistics in the NRA, 2021.*

Number of fishing trips identified	130
Fishing Days ¹	4676
Number of Daily Catch Reports (CATs) ²	4917
Number of Trips with Catch on Entry Reports (COEs) ³	179
Number of Trips with Catch on Exit Reports (COXs) ³	174

¹ Estimate based on COX-COE date of 2021 fishing year

² CATs of 2021 fishing year

³ Source is MCS website

No major technical issue was encountered in transmission and receipt of the VTI reports. All expected reports, including the Daily Catch reports (CAT), were received by the Secretariat.

The timely receipt of the CATs allowed an effective monitoring of the quota uptakes, including the attribution of catches to the right Parties of quota transfer and charter arrangement transactions.

4.1.1.2. Catch reporting on sharks

Article 28.6.g requires that all shark catches be reported at the species level, to the extent possible. When species specific reporting is not possible shark species shall be recorded as either large sharks (SHX) or dogfishes (DGX).

Greenland shark constitutes the bulk of the total shark catches by weight (see table 2.3.2). All shark catches were reported to be discarded.

4.1.1.3 Fishing logbook (haul by haul) reports

The submission of logbook data on a haul by haul (H x H) basis became mandatory in 2015 (Article 28.8.b). The fishing logbook information H x H data must be submitted to the Secretariat in the format prescribed in Annex II.N. for all hauls of the fishing trip (Article 28.8.c).

Out of the 129 fishing trips identified, H x H reports from 126 trips were received by the Secretariat. One trip reported no catch and no H x H report was expected from this trip. Thus for 2021, the H x H coverage is calculated to be 98.4 %.

4.1.1.4 Position reporting – VMS

According to Article 29, every fishing vessel operating in the NRA shall be equipped with a satellite monitoring device capable of continuous automatic transmission of position to its land-based FMC of the flag States, which in turn is transmitted to the Secretariat in real time. The transmission of position reports (POS) shall be no less frequently than once an hour.

The Secretariat can confirm that the requirement is fully complied with. Occasionally, technical problems were encountered by the fishing vessels or FMCs. During these events, the position reports were transmitted manually or queued and transmitted in bulk once the technical issues are resolved. Technical issues were usually resolved within a few days through the coordination between the Secretariat and the FMC.

4.1.1.5 Closed areas and exploratory fisheries

As of 2021, in total 21 areas in NAFO have been closed to bottom fishing including six seamounts and 14 areas with significant concentration of coral, sponges and sea pens, one coral protection zone. The measures concerning the protection of Vulnerable Marine Ecosystems (VMEs) from bottom fishing are stipulated in Chapter II of the NAFO CEM.

Based on the VMS positions, no bottom fishing was detected within the closed areas.

4.1.1.6 Chartering arrangement

Article 26 allows chartering arrangements between two Contracting Parties: the chartering CP (with quota or fishing days allocation in the case of 3M PRA) and the flag State CP of the fishing vessel. Catches by the vessel are counted against the quota of the chartering CP.

In 2021, four (4) chartering arrangements were made: three arrangements relating to fishing days for 3M shrimp, and one arrangement relating to yellowtail founder quota in 3LNO. All arrangement were implemented.

Monitoring of the implementation of the chartering arrangements are made possible through the notifications of commencement, suspension, resumption, and termination of chartered fishing and the daily catch reports of the vessel (CAT's) where chartering catches are identified. All reported catches were within the fishing possibilities stipulated in the charter arrangement.

The submission of the required documentations (Article 26.7 and 26.8) and reporting of implementation dates (Article 26.9) were complied with by both parties of the fishing charter arrangements.

4.1.1.7 Notifications on the use of Others Quota

There were 45 notifications on the use of Others Quota in 2021 relating to vessels from 4 different Contracting Parties.

The NAFO Executive Secretary have developed a webpage within the NAFO MCS website that allows visualising the use of the different Others Quota.

4.1.1.8 Research activities associated to commercial fishing in the NRA

In 2021, two Contracting Parties notified Research Plans for commercial vessels: Canada notified 2 longliners to carry out a survey on Greenland halibut in 3NO; and DFG notified 1 longliner to carry out a survey on 3M cod. These vessels marketed their catches. One vessel voluntarily transmitted VMS. These vessels were not subjected to daily catch reports.

4.1.2 Observer Reports

Flag State Contracting Parties are required to have 100% observer coverage under Article 30.5. However, they may allow their vessels to carry an observer for less than 100%, but not less than 25% of the fishing trips conducted by its fleet (Article 30.6) upon of observer withdrawal.

In evaluating the compliance to observer trip report submission (see Article 30.14.a), trips were grouped according to the implementation of Article 30.5 or 30.6 which requires 100% or >25% coverage, respectively.

Table 4.1.2 shows the observer coverage percentage, by Contracting Parties, based on the percentage of the submission of the observer trip reports.

Table 4.1.2 *Observer coverage based on the submission of observer trip reports, 2021. Three Contracting Parties invoked Article 30.6 which requires coverage no less than 25% during 2021.*

	Number of Identified Trips	Number of Trips with Trip Observer Reports	% Coverage under Art 30.5 (100% required)
CAN [1]	36	34	94%
DFG [2]	16	0	0%
EU	59	59	100%
JPN	5	5	100%
NOR [2]	1	1	100%
RUS	10	10	100%
USA	2	2	100%

[1] Invoked Article 30.6 effective 2May-7Jun2021, two trips derogated. Coverage was above the 25% minimum.

[2] Invoked Article 30.6. Required coverage is no less than 25%. DFG's derogation was due to Covid.

In 2021, DFG did not meet the minimum 25% inspection benchmark, but this was due to COVID-related reasons. DFG did not submit the report required by article 30.6(e) containing a comparison of all relevant catch and fishing activities showing the difference between the trips where the vessel had an observer on board and those where the observer was withdrawn.

4.2 Apparent Infringements detected at-sea and at-port

In 2021, a total of eleven (11) vessels were cited with AI by inspectors at sea and port authorities. Details on the nature of the AIs and their disposition are provided in Table 4.2.

Table 4.2

Details of Apparent Infringements (AI) detected by inspectors at-sea and by port authorities in 2021 and their disposition. AIs presented in bold were considered “serious” by the inspectors as per Article 38 definition.

CP	AI's detected at-sea. Serious AIs in bold.	AI's detected in port (PSC3: Section E.1.B. c.)	Follow-up to AI, as reported by flag State CP
EU		Art 21.1(c) and (e) - Product labelling [11Mar2021].	Case led by Lithuania Warning issued. Case closed
EU		Art 38.1(n) - concealing, tampering or disposing of evidence; Art - Product labelling [13May2021]	Administrative proceedings led by Estonia Criminal prosecution led by Portugal Case pending
DFG		Art 27 (b), (d) and (e) - Product labelling of PRA; Art 38 (i) - Mis-recording of catches [10Mar2021].	Fined Kr. 973 832 (130 890 euros). Case Closed
EU	Art 30.15(d) - Intimidation of the Observer [20Feb2021]	Art 28.2(a) - Fishing logbook; Art 38.1(i) - Obstruction, intimidation, or interference; Art 38.1(n) - concealing or tampering of evidence; Art 27.1 and 27.2 - Product labelling [31Mar2021]	Case led by Portugal Case Pending
EU		Art 27.1(e) - Product labelling [22Jul2021].	Case led by Spain Administrative proceedings ongoing Case pending
CAN	Art 28.6(b) - catch on exit (COX): quantity of catch onboard by species upon exit from the Regulatory Area transmitted at least six (6) hours in advance of the vessel's exit [14Jun2021].		Investigation undertaken by CAN authorities determined that the required message for catches of May 25th were sent to the CAN FMC, but were sent outside of established procedures and was not processed to NAFO as a result. The vessel licence holder and master were advised that in future they must ensure all submissions are completed and submitted to CAN FMC as prescribed. Concluded (Case closed)
EU		Art 28.5.(a)(i)(1) and (3) - stowage of catch; Art 25.10(b) - Capacity Plan [14Sept2021]	Case led by Spain Administrative proceedings are ongoing A bond was set. Case pending
EU	Art 13 - Article 13.6 Gear requirements (strengthening bag with top side chafer) Article 27.1(e) when processed, all species harvested in the Regulatory Area shall be labelled in such a way that each species and product category is identifiable. All species must be labelled using respectively the following data: the product form presentation code as listed in Annex II.K. [22Jul2021]		Case led by Lithuania Sanction of 180 euros applied Case closed
EU	Art 6.3(b) and 6.4 - Exceeding 4% bycatch limit for cod in Div 30 [14Sep2021] Art 28.6(c) Misrecorded COD bycatch in Div 30, Art 28.2 (a) and 28.6(c) - Misrecorded RED catch in Div 3N; Art 38.1 (i) - mis-recording of catches [26Sept2021].		Case led by Portugal Part of the Catches were seized. Case pending
EU		Art 6.3(b) and (d) - Exceeding bycatch limits [30Oct2021]	Case led by Portugal Case pending
CAN	Art 28 - Monitoring of Catch and Production Logbook and Stowage Plan [27Jul2021]		Written Warning issued for Articles 28.3 and 8.5 infringements. Cod bycatch exceedance Article 6.3(b), court conviction with fine of \$2500 and forfeit of the monetary value of the excess fish caught. Concluded (Case closed)
EU	Art 28.6(c) - Mis-recording COD and PLA bycatch in CAT in Div 30, Art 38.1 (i) Mis-recording of catches [26Sept2021]	Art 28.2(a)(b) - fishing logbook Art 28.3(a) Production logbook Art 6.2(b) and 3(b) Exceeding 3NO Cod bycatch limits [25Nov2021]	Case led by Portugal Case Pending
DFG		Art 28.6(c) - Catch reporting - Failure to report discards, Art 38.1(i) mis-recording of catches [3Sept2021]	Case Pending
DFG		Art 28.6(c) - Catch reporting - Failure to report discards, Art 38.1(i) mis-recording of catches [16Sept2021]	Case Pending

4.3 Follow-up to apparent infringements

Article 39 spells out obligations of a flag State Contracting Party that has been notified of an apparent infringement. It includes taking immediate judicial or administrative action in conformity with the national legislation of the flag State Contracting Party and ensuring that sanctions applicable in respect of infringements are proportional to severity.

Article 40 requires Contracting Parties to report on the disposition of the AIs. The legal resolution of AIs may take more than a year. Contracting Parties shall continue to list such infringements on each subsequent report until it reports the final disposition of the infringement. In Table 4.3, a summary of status of AI cases in the last five years (2017-2021) and their resolution are presented.

Table 4.3 *Resolution of citations (by at-sea inspectors and port authorities) against vessels fishing in the NRA by year in which the citations were issued (as of March 2022). A citation is an inspection report that lists one or more apparent infringement. Inspections carried out for confirming a previous citation are not included.*

Year	Number of Inspection Reports with AI citation/s	Number of Resolved Cases	Number of Pending Cases*	% Resolved
2017	7	7	0	100%
2018	7	6	1	86%
2019	5	4	1	80%
2020	10	3	7	30%
2021	14	5	9	36%

*still under investigation, litigation or appeal

5.0 Trends and Analysis

Five-year trends (2017-2021) on effort and catch, reporting obligations of Contracting Parties and observers, compliance by fishing vessels, and at-sea inspections and AIs are presented in this section.

5.1 Effort and Catch

Table 5.1 *Fishing days, as defined by Article 1.6, by fishing gear.*

	Longline	Mid-water Trawl	Bottom trawl	Shrimp trawl	TOTAL
2017	314	0	3558	0	3872
2018	304	82	3719	0	4105
2019	321	56	4297	0	4674
2020	250	127	4224	21	4622
2021	169	0	4247	479 ⁴	4895

⁴ NAFO Members website is source

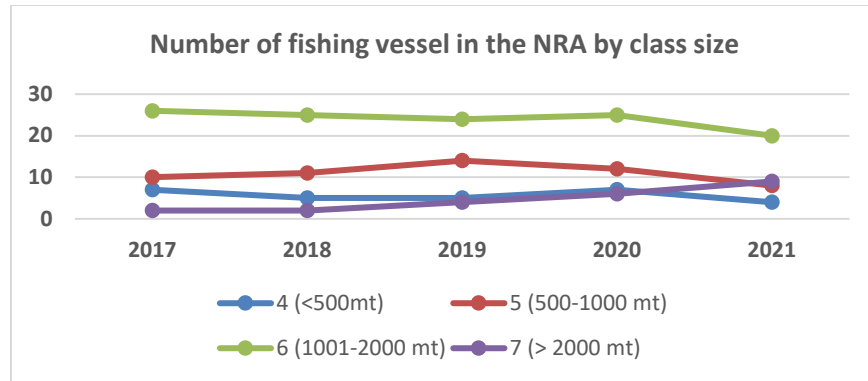


Figure 5.1.1 Number of fishing vessels in Divisions 3LMNO by class size, 2017-2021. The class sizes are based on the STATLANT classification.

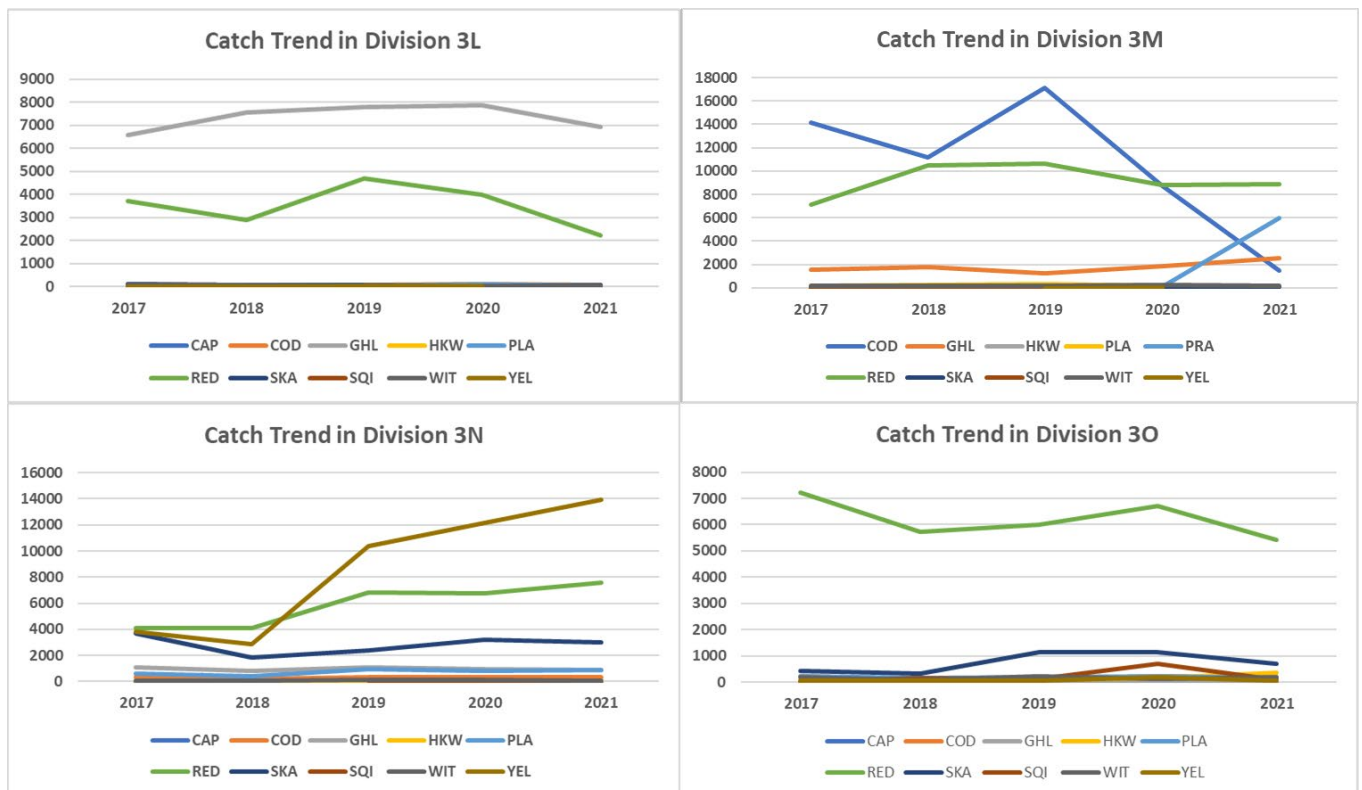


Figure 5.1.2 Catches (in tonnes) by Division of selected species managed by TAC, 2017-2021 (Source: CATs).

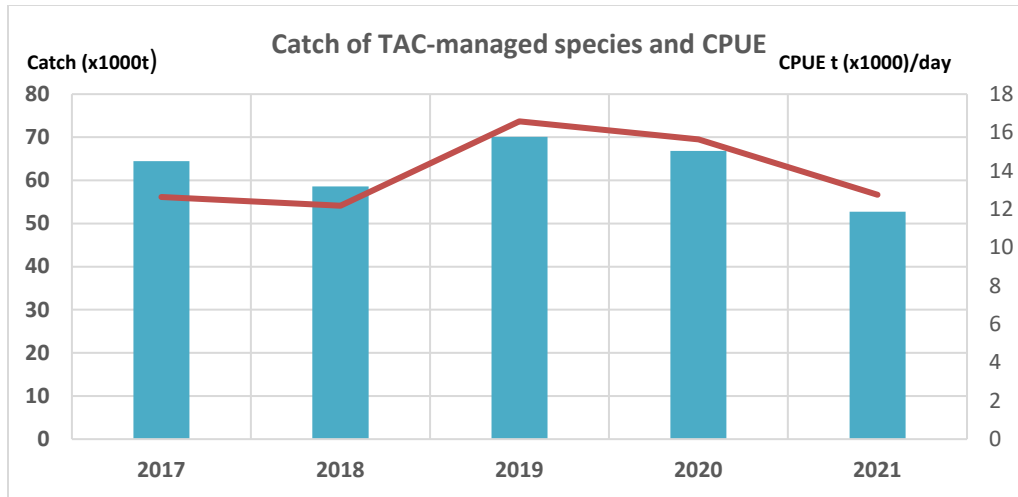


Figure 5.1.3 *Catch of TAC-managed species and CPUE in 2017-2021, expressed in total catch of TAC-managed species per fishing day. Data Source: CATs and VMS reports.*

5.2 Reporting Obligations by Contracting Parties

Compliance to reporting obligations is quantified as a percentage coverage – the ratio of the fishing trips accounted for by the reports and of the total number of relevant fishing trips. A 100% coverage would mean that all expected reports were transmitted to the Secretariat. Figure 5.2 presents the percentage coverage of port inspections reports on vessels with Greenland halibut landings (in accordance with Article 10.4), observer reports from vessels operating under Article 30.5, and electronic fishing logbook (H x H) reports in accordance with Article 28.8.b.

Figure 5.2 shows the submission rates in the period of 2017-2021. In 2021, the submission rates of electronic logbook reports (Article 28.8.b), trip observer reports (Article 30.5), and port inspections reports (Article 10.4) are 98.4%, 100%, and 100%, respectively.

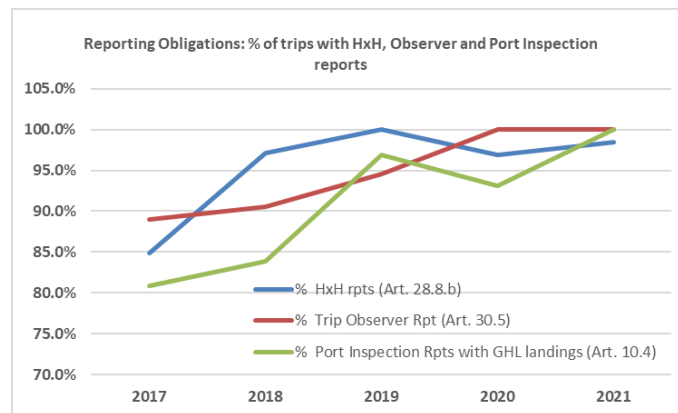


Figure 5.2 *Percentage coverage of Port Inspections reports with Greenland halibut landings reports (Article 10.4), Observer Trips Reports on fishing vessels operating under Article 30.5, and Haul by Haul reports (Article 28.8(b)), 2017-2021.*

5.3 Compliance by Fishing vessels

In the 5-year review period of 2017-2021, VMS and VTI requirements (Article 28 and 29) have been fully complied with.

Hourly position reports (POS), as well as the Daily Catch Reports by Division (CATs), were transmitted to the Secretariat while the vessels were in the NRA. The Catch-on-Entry (COE) and Catch-on-Exit (COX) reports for each fishing trip were also transmitted.

5.4 Inspections and Apparent Infringements

At-sea inspection rates, computed as a ratio of the number of at-sea inspections and the total fishing effort (fishing days), in the period 2017-2021 are presented in Figure 5.4.1. In 2021, inspection rate increased from its lowest level in 2020, from 0.9% to 1.4%, still below pre-Covid inspection rates.

With regards to AIs detected at sea and at port, mis-reporting of catches remains the most common AI (Figure 5.4.2). There is no other discernable trend with regards to the nature and frequency of the AIs.

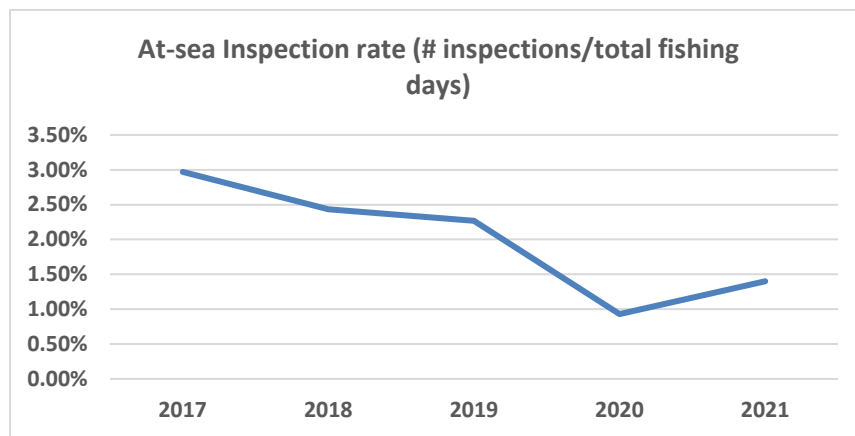


Figure 5.4.1 *Inspection rates (number of at-sea inspections/fishing days) in the NAFO Regulatory Area, 2017-2021.*

	2017	2018	2019	2020	2021
By-catch requirements	● ●			●	● ● ● ● ● ● ● ●
Catch communication violations					● ● ●
Directed fishing of moratorium stock	●				
Directed fishing of stock without quota allocation		●			
Evidence tampering				●	● ● ●
Fishing after date of closure					
Gear requirements - mesh size, illegal attachments	●			●	●
Greenland halibut control measures (Art. 10.4.d)				●	
Inspection protocol				● ●	●
Observer protocol				●	●
Production logbook requirements					● ●
Mis-recording of catches - inaccurate recording	● ● ● ●	● ● ● ●	● ●	● ● ●	● ● ● ● ● ●
Mis-recording of catches -stowage	● ● ●	●	● ● ● ● ● ●		● ●
Product labelling	●	● ●	● ●	● ● ● ●	● ● ● ● ● ●
Vessel requirements - capacity plans		● ●	●		●
Fishing without authorisation					●

Figure 5.4.2 Frequency of apparent infringement cases detected by at-sea inspectors and port authorities in 2017-2021. Black and blue dots represent apparent infringement issued at sea and at port, respectively.

6.0 Conclusions

During 2021, the main NAFO fisheries were demersal trawls for groundfish and for shrimp, and longlines for cod and Atlantic halibut. The total catches decreased slightly from around 73,000 tonnes in 2020 to approximately 70,000 tonnes in 2021. The total catch in 2021 included 6,991 tonnes of silver hake and 634 tonnes of Atlantic halibut.

In 2021, two Contracting Parties notified Research Plans for commercial vessels: Canada notified 2 longliners to carry out a survey on Greenland halibut in 3NO and DFG (Faroe Islands) notified 1 longliner to carry out a survey on 3M cod. One vessel voluntarily transmitted VMS. These vessels were not subjected to daily catch reports.

In 2021 no pelagic redfish fishery took place, unlike in previous years. The stock remains under moratorium with the objection of the Russian Federation. STACTIC notes that there was a fishery on this stock in 2022.

The 2021 CPUE for managed stocks, saw a notable decrease of approximately 4 tonnes a day or 25%, from 2020. The 2021 CPUE rose dramatically from 2020 in the 3M PRA fishery, with catches increasing to 6 011 tonnes over 479 fishing days versus the limited activity that occurred in 2020, which consisted of only 79 tonnes of catches over 21 fishing days.

The at-sea inspection rate increased in the last year. This rise in inspections is likely attributable to the loosening of COVID-19-related protective measures and protocols in 2020. Contracting Parties have reported fewer impacts from Covid-19 on their ability to carry out mandatory control elements under the NAFO CEM. However, one CP was unable to maintain minimum observer coverage requirement.

The continued timely receipt of the CATs has allowed effective monitoring of quota uptakes, including the attribution of catch to the correct Contracting Parties' quota transfer and charter arrangements. The timely submissions have also assisted inspection services carrying out risk assessments and conducting monitoring, control and surveillance activities on the compliance with the accurate reporting of catches taken in the NRA and other obligations under the NAFO CEM.

7.0 Recommendations

- STACTIC recommends that all Contracting Parties continue to explore and report back on the use of remote electronic monitoring and equivalent sensor technologies, with a view to incorporate these tools into the NAFO CEM, including considering the possibility to derogate from 100% observer coverage where justified, in order to further support accurate reporting of catches, as well as to assist monitoring, control and surveillance activities.
- STACTIC recommends that all Contracting Parties oversee their commercial fishing vessels temporary involved in research activities and ensure they do not use their Research Plans to circumvent the NAFO CEM.
- STACTIC highlights that all Contracting Parties need to comply with the NAFO Observer Program requirements, including ensuring the independence, safety, and appropriate training of the observers; the analysis and follow-up of the observer program data for risk assessment and inspection; the submission of the Contracting Party's reports required by the NAFO CEM, and that the level of observer coverage specified in the NAFO CEM is maintained on an annual basis.
- STACTIC recommends that all Contracting Parties timely provide to the NAFO Executive Secretariat their Annual Reports on Inspection, Surveillance and Infringements in accordance with Article 40 of NAFO CEM.
- STACTIC recommends Contracting Parties to support the NAFO Executive Secretary on the development and implementation of the NAFO Observer Application with a view to have the application fully operational by 2024.
- STACTIC encourages Contracting Parties to continue to maintain inspection presence in the NAFO RA and promote inspector exchanges on at-sea deployments, as well as the use of novel technologies for control such as Remotely Piloted Aircrafts Systems.
- STACTIC recommends Contracting Parties to reconvene port inspection exchanges with a view to identify best practices and harmonize inspection procedures.

- STACTIC recommends Contracting Parties to consider including a review of any infringement trends that have been observed.
- STACTIC recommends Contracting Parties to undertake a review of other RFMOs Compliance Committees to identify best practices that can be incorporated to the NAFO compliance review.
- STACTIC recommends Contracting Parties to participate and engage in the Inspector Workshop, for the purpose of sharing best practices and procedures and to promote international cooperation on control amongst Contracting Parties.
- STACTIC recommends Contracting Parties to find consensus and apply consistent methodologies for the verification of compliance with NAFO CEM provisions on catch recording and reporting.
- STACTIC recommends Contracting Parties to commit to follow up on all apparent infringements in a timely and consistent manner and, depending on the gravity of the offence and in accordance with domestic law, adopt sufficiently deterrent judicial or administrative actions.

Annex. Impact of Covid-19 on Contracting Parties Compliance to NAFO Conservation and Management Measures

The global pandemic caused by COVID-19 has brought significant focus on essential industries, such as fisheries, to confirm that no effort is being spared to contain the spread of the virus. As all aspects of fisheries are being scrutinized, many Contracting Parties have determined that certain activities associated with fishing can continue with modified procedures and protocols in place to ensure the health and safety of all persons involved. However, a number of countries have also determined that certain obligations could not be met in accordance with acceptable hygiene and distancing protocols, given that persons can sometimes frequent numerous vessels and ports over relatively short periods.

Since the declaration of the global pandemic on 11 March 2020, correspondence from many Contracting Parties has been circulated regarding potential means of addressing difficulties complying with the NAFO CEMs due to COVID-19.

At the 2020 Annual meeting (COM Doc. 20-14), *“the Commission agreed that STACTIC should compile, make a first review of, including appropriate recommendations, and report for decision-making to the Commission on the measures undertaken by Contracting Parties via the compliance review. The Annual Compliance Report for 2020 (to be produced in 2021), when indicating non-compliances by a CP with a given obligation on control, should identify as well any difficulties directly linked to the COVID pandemic to be differentiated from any other non-compliances. This first assessment role for STACTIC does not aim at revising the decision of CP to suspend a control measure, but to differentiate the reasons for the non-compliance of a measure between COVID and non-COVID-related ones.”*

The first annual review of the Covid-19 impact was undertaken in 2021 covering the 2020 fishing activities (COM Doc 21-19). The review was based on the responses to the questionnaire developed by STACTIC in May 2021 (STACTIC WP 21-12 Rev). The same questionnaire was used in this review which cover the 2021 fishing activities. Four Contracting Parties responded to the survey. Below is the summary of the responses:

What control measure(s) were suspended/impacted due to COVID-19?

One Contracting Party reported that with regard to Article 30.8 (c), the same observer was deployed in two consecutive trips in one fishing vessel because the deployment of a different observer was not practicable.

One other Contracting Party reported that the “Tasks and Power of Fisheries Observers” were impacted.

There was no other control measure identified to be impacted.

How did COVID-19 relate to the suspension/impact?

One Contracting Party reported limited deployments of observers to vessels.

What is the effective date of the suspension/impact?

One Contracting Party reported that protective protocols for inspection practices at sea were in place between 3 May and 15 June. In general, inspection procedures and the composition of the team of inspectors remained subject to some extent to protective protocols for inspections at sea and in port during 2021.

One other Contracting Party reported that their limitations for observer deployments commenced in March 2020.

What is the reason for not being able to comply?

Only one Contracting Party reported a non-compliance with NAFO CEM obligations relating to the limitations for observer deployments due to COVID-19.

What alternative actions, if any, were implemented to mitigate the impact/duration of not complying with the measures as written?

One Contracting Party reported the alternative voluntary actions undertaken:

- Remote monitoring based on cross-check and automatic validation systems of all fisheries data have been notably improved,
- Adoption a protective protocol for inspections at sea,
- To carry out three additional deployments of patrol vessels in the NRA,
- Protective protocols for inspection in port were adopted, including procedures for the verification of landing operations,
- Same observer was deployed in consecutive trips of 1 vessel to maintain the 100% observer coverage.

The Contracting Party which reported limited deployments of observers to vessels states that there were no alternatives.

What is the terminated date?

One Contracting Party reported that protective protocols for at sea and port inspections remain in place during 2021 to some extent.

One other Contracting Party reported that their limitations for observer deployments ended in October 2021.

Additional Comments

One Contracting Party commented that in 2021 there have been cases of fishing vessels operating in the NRA with confirmed cases of COVID and cases with reported symptoms, in some instances requiring medical assistance in port and quarantine on board.

Two Contracting Parties explicitly reported that in 2021, COVID-19 did not impact their ability to comply with the NAFO CEM. No derogations were needed.

Annex 35. Research vessels (Article 4 of the NAFO CEM)[COM WP 22-52 (Rev. 3) now COM Doc. 22-16]**Background**

Article 4 of the NAFO CEM indicates that unless otherwise provided, research vessels shall not be restricted by conservation and management measures pertaining to the taking of fish in the Regulatory Area, in particular, mesh size, size limits, closed areas and seasons; but it does not provide clarity on the application of quota or effort limitations.

In order to differentiate between research activities carried out by vessels with and without commercial activity, the research plan should include information on whether the research activities will be carried out by commercial vessels marketing their catches.

Where a commercial interest is also present, the research vessels should be subject to the NAFO CEM requirements. In order for the catches obtained during research activities associated to a commercial interest to be compatible with existing management measures, they should be counted against the relevant catch and fishing effort limitations.

During the NAFO 2021 Annual Meeting, the Commission considered STACTIC Working Paper 21-40 concerning regulating the use of commercial vessels in research activities by amending Article 4 of the NAFO Control and Enforcement Measures (CEM). The Commission adopted provisional catch limitations for research activities in 3M cod and shrimp fisheries for 2022 and expressed that STACTIC should continue working on this issue.

In its Intersessional Meeting held in May 2022, STACTIC agreed to forward the draft proposal (STACTIC WP 22-23) to amend Article 4 of the NAFO CEM to the NAFO Scientific Council (SC) for comments. The SC¹ expressed agreement on the need to have clarity in distinguishing research and commercial activities and noted that there are some research programs which can be executed in partnership with commercial activities on fishing vessels. The SC highlighted the following considerations to address current concerns and ensure that future activities are consistent with typical scientific practice:

- *For new proposals for survey/research activities in the NAFO Regulatory Area, the NCEM should treat such requests similar to Exploratory Bottom Fishing, including the requirement to submit advance notice of intent to conduct activities, similar to the protocols and requirements for Exploratory Bottom Fishing (NCEM Chapter II, Articles 18-21). A key element for new or proposed activities would be provision of a detailed protocol for the planned research, to be reviewed by SC during its next regularly scheduled meeting (i.e. June or September). STACREC would include an evaluation of the merits of the work in its report which would also be presented to the Commission.*
- *Retained catch from any research activity (new or existing) conducted by Contracting Parties ~~CPs~~ must be included in STATLANT 21 data, and with appropriate accounting from relevant quota(s).*

Additionally, the SC noted that “Research Plans” as referenced in NCEM I.4 are presently undefined but some minimum requirements are given in Article 4.3(b), and that these details could become a self-standing clause in Article 4:

- *“Contracting Parties ~~CPs~~ must provide the Executive Secretary [at some advance timing interval to be decided by STACTIC] a Research Plan for vessels engaging in scientific research which must include: Vessel Name, Purpose, Summary of Scientific Methods or Procedures, Location, Dates of Research*

¹ Report of the Scientific Council Meeting, 03 -16 June 2022, Halifax, Nova Scotia

Activity, and Principal Investigator. The Research Plan should also indicate the anticipated time frame for when research results would be presented to the Scientific Council."

The proposed changes should provide legal certainty for research activities in the future and therefore, the temporary measures decided for 2022 for 3M cod and shrimp should be deleted from Article 4 NAFO CEM.

The changes include an editorial revision by which the flag State Contracting Party obligations are placed together in one paragraph.

The proposal also integrates the request from the SC to assess non-recurrent new surveys and research activities.

Proposal

Considering the suggestions of the NAFO SC, it is proposed to amend Article 4 as follows:

Article 4 – Research Vessels

1. Unless otherwise provided, research vessels shall not be restricted by conservation and management measures pertaining to the taking of fish in the Regulatory Area, in particular, mesh size, size limits, closed areas and seasons.

2. A research vessel shall not:

(a) conduct fishing activities inconsistent with its research plan; ~~or~~

(b) take 3L shrimp in excess of the allocation of the flag State Contracting Party;-

(c) ~~in 2022~~ take 3M cod in excess of 15 tonnes. Should a research vessel's catch exceed this amount, the excess shall be counted against the allocation to the vessel's flag State Contracting Party. Furthermore, if the allocation to the Contracting Party for 3M cod is exhausted, it shall not authorize its vessels to undertake further research activities. Any research activities underway must be stopped as soon as 15 tonnes have been caught; or;

(d) ~~in 2022~~ take 3M shrimp in excess of 10 tonnes. ~~Given no directed fishery is authorized on 3M shrimp in 2022, a~~ Contracting Party must stop research activities on 3M shrimp once 10 tonnes have been caught.

~~3. No less than seven days prior to the commencement of a fishery research period, t~~The flag State Contracting Party shall:

(a) by electronic transmission in the format prescribed in Annex II.C and prior to the commencement of the research, notify the Executive Secretary of all research vessels entitled to fly its flag it has authorized to conduct research activities in the Regulatory Area; ~~and~~

(b) provide to the Executive Secretary a Research Plan for all vessels entitled to fly its flag it has authorized to conduct research.

(c) The Research Plan and any changes thereof shall be provided no less than thirty days in advance of the opening of the June meeting of the Scientific Council for non-recurrent new surveys and research activities or if any catches retained on board during research activities will be marketed and, otherwise, no less than seven days prior to the commencement of the research. The Research Plan shall contain at a minimum the following information: including the purpose, location and, for vessels temporarily engaged in research, the dates during which the vessel will be engaged as a research vessel.

(i) vessel identification.

(ii) purpose.

(iii) summary of scientific methods or procedures.

(iv) location and dates of the research activity.

(v) the name of the principal investigator.

(vi) whether any catches retained on board will be marketed.

(vii) total estimated research catch of the survey target species and whether an observer with sufficient scientific expertise will be on board.

(viii) information on when the research results will be presented to the Scientific Council.

(ix) where relevant, any requests to derogate from the provisions in paragraph 3(c), and

(x) where relevant, indication that the activity constitutes a non-recurrent new survey or research.

(d) unless otherwise supported by the opinion of the Scientific Council pursuant to paragraph 4, ensure that its research vessels retaining on board catches obtained during research activities with the purpose of marketing these catches:

(i) comply with the recording and reporting requirements in Chapter IV.

(ii) have observer with sufficient expertise on board.

(iii) count these catches against the Contracting Party's quota and fishing effort limitations set out in Annex I;

(e) notify the Executive Secretary immediately upon the commencement and termination of research activities of vessels temporarily employed in research, including during fishing trips in which both commercial and research activities take place; and

(f) ensure that its research vessels:

(i) keep on board a copy of the Research Plan and any changes thereof in the English language at all times; and

(ii) stow catches taken in research activities separately with netting, plywood, boxes or other means from all other catches taken in fishing trips in which both commercial and research activities are carried out. The location of the catches taken in research activities shall be indicated in the stowage plan.

4. For vessels temporarily employed in research, the flag State Contracting Party shall immediately upon termination of research activities so notify the Executive Secretary.

5. The flag State Contracting Party shall notify the Executive Secretary not less than seven days before the effective date of any changes to the research plan. The research vessel shall maintain a record of the changes on board.

Report of the NAFO Commission,
19-23 September 2022

~~6. Vessels engaged in research shall at all times keep on board a copy of the Research Plan in the English language.~~

4. The measures in paragraph 3(c), (d) and (f)(ii) shall only apply to surveys conducted in the NAFO Regulatory Area targeting stocks included in Annex I.A and Annex I.B of the NAFO CEM.

Duties of the Scientific Council

53. The Scientific Council will provide its written opinion on the research plans in the cases referred to in paragraph 3(b)(ix) and (x).

Duties of the Executive Secretary

~~67. Following notification in accordance with paragraph 3(a),~~ The Executive Secretary:

(a) following notifications in accordance with paragraph 23, without delay:

(i) posts the names of all research vessels in the vessel registry to the NAFO website and includes in such posting any supporting documents provided by the flag State Contracting Party, including the Research Plan,

(ii) submits to the Scientific Council the Research Plan and any changes thereof:

(b) promptly informs the Contracting Parties and posts on the NAFO Website the opinion provided by the Scientific Council pursuant to paragraph 53.

7. NAFO will review these measures in 2023.



Annex 36. Press Release

NAFO CONTINUES TO MAKE SIGNIFICANT PROGRESS IN FURTHER DEVELOPING ITS ECOSYSTEM APPROACH FRAMEWORK AND THE REVISION OF ITS PRECAUTIONARY APPROACH FRAMEWORK

FOR IMMEDIATE RELEASE

Porto, Portugal, 23 September 2022- The 44th Annual Meeting of the Northwest Atlantic Fisheries Organization (NAFO) took place from 19-23 September. This meeting was the first Annual Meeting held in-person since the start of the global pandemic in 2020. The meeting was conducted in a hybrid format for the first time in its history allowing participation both in-person and virtually. During the opening session, delegates from all the NAFO Contracting Parties were welcomed to the meeting by the acting Chair of the Commission, Deirdre Warner-Kramer, and Dr. Isabel Ventura, Deputy Director of the Directorate-General for Natural Resources, Safety and Maritime Services of Portugal.

During the meeting, NAFO made significant progress in further developing its groundbreaking ecosystem approach framework to fisheries management by adopting an ecosystem reference point ("total catch index" or "TCI") to complement stock assessments and to help inform management decisions regarding the potential risk of ecosystem overfishing.

NAFO also recognized that significant progress was made this year on its revision of its precautionary approach framework, which is a priority for the Organization, despite difficulties arising from the pandemic. This revision is expected to be finalized at the September 2024 Annual Meeting.

In addition, to the traditional total allowable catch (TAC)* and quota decisions, other significant decisions were made regarding the following:

- NAFO adopted a Management Strategy Evaluation Workplan for both Greenland halibut in Divisions 2J+3KLMNO and redfish in Divisions 3LN.
- NAFO adopted measures to prohibit the landing and retention of Greenland sharks in the NAFO Regulatory Area.

Additionally, NAFO selected Brynhildur Benediktsdóttir as the new Executive Secretary for a four-year term beginning in January 2023.

The 45th Annual Meeting will take place 18-22 September 2023, in Santiago de Compostela, Spain.

For further inquiries, please contact:

Dayna Bell MacCallum
Scientific Information Administrator
NAFO Secretariat Tel: +1 902
468-5590 ext. 203 E-mail:
dbell@nafo.int



PART II.
Report of the NAFO Standing Committee on Finance and Administration (STACFAD)

44th Annual Meeting of NAFO, 19-23 September 2022
Porto, Portugal

1.	Opening by the Chair, Robert Fagan, (Canada)	130
2.	Appointment of Rapporteur	130
3.	Adoption of Agenda	130
4.	Audited Financial Statements for 2021	130
5.	Administrative and Activity Report by NAFO Secretariat.....	131
6.	Financial Statements for 2022.....	131
7.	Review of Accumulated Surplus and Funds	132
8.	Personnel Matters	133
9.	Recruitment of the NAFO Executive Secretary for the 2023-2026 term.....	133
10.	Internship Program	133
11.	Report on the Annual Meeting of the International Fisheries Commissions Pension Society (IFCPS), 05-07 April 2022	133
12.	Implementation of 2018 Performance Review Panel recommendations	134
	a. Design a potential new visual identity for NAFO	134
	b. Data classification and access rights of the NAFO websites.....	134
	c. NAFO operational plan.....	135
13.	Budget Estimate for 2023	135
14.	Budget Forecast for 2024 and 2025	136
15.	Adoption of 2022/2023 Staff Committee Appointees	136
16.	Other Business.....	137
	a. Vessel Monitoring System (VMS) Support and Maintenance Agreement.....	137
	b. Media Policy.....	138
17.	Election of Chair	138
18.	Time and Place of 2023–2025 Annual Meetings	138
19.	Adjournment	139
	Annex 1. List of Participants.....	140
	Annex 2. Agenda	141
	Annex 3. Budget Estimate for 2023.....	142
	Annex 4. Preliminary Budget Forecast for 2024 and 2025	145
	Annex 5. Preliminary Calculation of Billing for Contracting Parties for 2023.....	145
	Annex 6. NAFO Media Policy (COM Working Paper 22-13)	147

Report of the NAFO Standing Committee on Finance and Administration (STACFAD) Meeting

44th Annual Meeting of NAFO, 19-23 September 2022
Porto, Portugal

1. Opening by the Chair, Robert Fagan, (Canada)

The meeting was opened by the Chair, Robert Fagan (Canada), at 14:00 hours on Monday, 19 September 2022. Representatives were welcomed from Canada, Denmark (in respect of the Faroe Islands and Greenland), European Union, France (in respect of St. Pierre et Miquelon), Japan, Norway, Russian Federation, United Kingdom, United States of America and the NAFO Secretariat (Annex 1).

STACFAD was pleased to meet in-person for the first time since 2019 while also offering a hybrid format for those unable to participate in-person.

As in the past few years, the prioritization of our agenda allowed Contracting Parties to reach agreement on routine matters in advance by correspondence. The Chair thanked delegates for their continued flexibility and cooperation to facilitate this process.

2. Appointment of Rapporteur

The NAFO Secretariat was appointed as Rapporteur.

3. Adoption of Agenda

The provisional agenda as circulated in NAFO/22-193 (Rev.) of 20 July 2022 was modified to include the following under agenda 16. "*Other Business*":

- a. Vessel Monitoring System (VMS) Support and Maintenance Agreement
- b. Media Policy

The adopted revised agenda is presented in Annex 2.

It was proposed by the Russian Federation to include a discussion item on the payment of its annual contribution under agenda item 16. Other Business. Canada noted that this would be best dealt with bilaterally and would provide the appropriate Canadian contact details for the Russian Federation delegation. It was agreed that this item would not be included in the agenda.

4. Audited Financial Statements for 2021

As agreed at the last Annual meeting, Baker Tilly Nova Scotia Inc. was appointed to perform the audit for the 2021 fiscal year, in accordance with the NAFO Financial Regulations. The draft audited financial statements for the year ended 31 December 2021 were circulated to the Heads of Delegations and STACFAD delegates in advance of the meeting. As is practice, the financial statements are presented as draft until after they are reviewed by STACFAD and approved by the Organization.

The excess of revenues over expenditures for 2021 was \$203,566 (2020 - \$79,414).

Total expenditures incurred for the fiscal period ending 2021, as shown in the draft financial statements, amounted to \$2,150,041, which was \$300,959 under the approved budget of \$2,451,000. Overall savings for the year can be attributed to the ongoing COVID-19 pandemic and the resulting reduction in travel and meeting costs with meetings being held virtually.

The operating fund had a balance of \$552,984 at year end which was used to reduce contributions from Contracting Parties in 2022. As approved at the September 2021 Annual Meeting, the contingency fund remained at \$285,000; the relocation fund was increased to its maximum level at \$100,000 and the performance review fund was increased by \$15,000 to \$45,000.

STACFAD recommends that:

- **The 2021 Financial Statements be adopted.**

The Auditors noted in their Draft Audit Committee Letter (STACFAD WP 22-16) that there is a small inconsistency with the Organization's policy not to record/recognize the pension plan assets in the NAFO Financial Regulations and the Basis of Accounting used in the financial statements.

Per Paragraph 7.6(a) of the NAFO Financial Regulations there is mention that the Organization does not record/recognize the pension obligation but no mention that the plan assets are also not recorded. This may appear to be inconsistent with Note 2 "Basis of Accounting" per the financial statements which make specific mention of the plan assets not being recorded.

Although it is clear that the organization records neither the pension obligation or plan assets, we would recommend amending the wording of the Regulations to be consistent with the Basis of Accounting used in the financial statements.

The Committee agreed with the Auditors recommendation to amend the first sentence of Rule 7.6(a) of the NAFO Financial Regulations to add the phrase "or plan assets".

STACFAD recommends that:

- **Rule 7.6 of the NAFO Financial Regulations be amended as follows:**

7.6 The annual financial statements shall be prepared in conformity with these financial rules in a manner consistent with Canadian generally accepted accounting principles for not-for-profit organizations (GAAP) with the following exceptions:

- a) **The Organization does not record the pension obligation or plan assets relating to its defined benefit pension plan. The Organization uses the pension valuation report provided by the International Fisheries Commission Pension Society (IFCPS) to determine the pension expense at a minimum on a triennial basis. The pension expense consists of the employer portion of the current service pension contribution plus any additional yearly payments required by the IFCPS (as shown in the current valuation report) that are necessary to extinguish the unfunded portion of the pension obligation;**

5. Administrative and Activity Report by NAFO Secretariat

Highlights of the Secretariat's activities for the period September 2021 to August 2022 have been summarized in the Administrative and Activity Report (COM Doc. 22-04).

6. Financial Statements for 2022

Financial Statement estimates for 2022 (projected to 31 December) have been provided by the Secretariat in COM Doc. 22-04.

Operating Expenses for 2022

The operating budget for 2022 was approved at \$2,587,000 while expenditures for the year are projected to be at \$2,466,000, or \$121,000 under the approved budget. As the global COVID-19 pandemic continued into

2022, in-person meetings did not resume until mid-year, albeit at a reduced number. Overall savings for the year can be attributed to the reduction in travel and meeting costs with meetings being held virtually.

All remaining 2022 operating expenses are anticipated to be on or near budget for the year. The above noted cost savings of \$121,000 will be returned to the accumulated surplus and will be available in part to reduce Contracting Parties contributions in 2023.

Assessed Contributions

At the beginning of 2022, the accumulated surplus was \$552,984, which was deemed to be in excess of the needs of the Organization and was allocated towards the 2022 operating budget. As the 2022 budget included a \$23,000 provision for Executive Secretary recruitment and relocation costs, funds will be transferred from the recruitment and relocation fund to offset these expenses. Therefore, in order to meet the 2022 operations budget of \$2,587,000, Contracting Parties were assessed contributions in the amount of \$2,011,016.

Balance Sheet

The Organization's cash position on 31 December 2022 is estimated to be \$942,086. The cash balance should be sufficient to finance appropriations in early 2023 pending the receipt of annual payments by Contracting Parties. Assessed contributions totalling \$204,390 for 2022 are currently outstanding from three Contracting Parties.

7. Review of Accumulated Surplus and Funds

According to the NAFO Financial Regulations, STACFAD and the Commission shall review the amount available in the accumulated surplus account during each Annual Meeting. The accumulated surplus account shall be set at a level sufficient to temporarily finance operations during the first three months of the year, plus an amount up to a maximum of 10% of the annual budget for the current financial year to be used for unforeseen and extraordinary expenses. In addition, the Organization shall also maintain a recruitment and relocation fund, up to a maximum of \$100,000, for relocation costs of internationally recruited staff. In addition, the Organization shall also maintain a performance review fund to pay costs associated with having an external performance review. The performance review fund balance shall be kept at a maximum of \$100,000.

The accumulated surplus account on 31 December 2022 is estimated to be \$854,000 as shown in STACFAD WP 22-03.

STACFAD recommends that:

- **The amount maintained in the accumulated surplus account be set at \$285,000 of which \$200,000 would be sufficient to finance operations during the first three months of 2023, and of which \$85,000 would be a contingency fund available to be used for unforeseen and extraordinary expenses.**
- **The recruitment and relocation fund be increased by \$12,000 to \$89,000 for future recruitment and relocation costs of internationally recruited staff.**
- **The performance review fund be increased by \$15,000 to \$60,000 for future costs associated with having an external performance review.**
- **The estimated balance remaining of \$420,000 shall be maintained in the Operating Fund and applied to reduce annual contributions due from each Contracting Party for the following year.**

8. Personnel Matters

The Secretariat presented a proposal to amend the NAFO Staff Rules to update its payroll deposit days (STACFAD WP 22-4).

The NAFO Staff Rules specify that Secretariat staff members are provided their pay two (2) banking days before the semi-monthly pay periods of the fifteenth (15th) day and the last day of each month. The current two (2) banking days in advance policy has been in place since the establishment of NAFO and was done to allow sufficient time for staff members to manually deposit their pay cheques and time for cheques to clear the bank. As the Secretariat is now utilizing direct deposit, this allows staff members access to their funds on the designated paydays and eliminates the need for the two (2) banking day grace period to deposit their pay cheques. The elimination of the two (2) days in advance requirement also provides better consistency as to when the semi-monthly pay dates will occur.

The Committee agreed with the Secretariat's proposal that Rule 4.2 of the NAFO Staff Rules be amended to eliminate the sentence that stated, "*Members of the Secretariat will be given their pay cheques two (2) banking days before the pay days*".

STACFAD recommends that:

- Rule 4.2 of the NAFO Staff Rules be amended as follows:

The Organization will pay the members of the Secretariat twice a month, the reference days as pay days being the fifteenth (15th) day and the last day of each month. ~~Members of the Secretariat will be given their pay cheques two (2) banking days before the pay days.~~

9. Recruitment of the NAFO Executive Secretary for the 2023-2026 term

Following the decision by the Commission at the last Annual Meeting, a recruitment process for the selection of a new Executive Secretary for the 2023-2026 term was launched in early 2022. Four candidates have been invited to the Annual Meeting for the interview and selection process by Heads of Delegations.

At the request of the Commission, STACFAD was tasked to develop a draft contract for the newly elected Executive Secretary which was provided to the Chair of the Commission.

10. Internship Program

Activities and tasks of the 2022 NAFO internship program were presented in STACFAD WP 22-06. Due to the COVID-19 pandemic, the NAFO internship continued to be postponed into 2022.

As the internship program offers considerable benefits to the Organization and to the intern themselves, it is anticipated that the internship program will resume in 2023.

STACFAD recommends that:

- The internship period be maintained for six (6) months during 2023.

11. Report on the Annual Meeting of the International Fisheries Commissions Pension Society (IFCPS), 05-07 April 2022

The annual meeting of the International Fisheries Commissions Pension Society (IFCPS) was hosted by the North Pacific Marine Science Organization (PICES) 13–15 April 2021 in Victoria, British Columbia, Canada, with an option to join by video-conference. The meeting was attended by the Executive Directors and Finance Officers of the seven International Fisheries Commissions with headquarters located in Canada and the United

States of America. NAFO was represented by Fred Kingston, Executive Secretary, and Stan Goodick, Deputy Executive Secretary/Senior Finance and Staff Administrator. Also attending the meeting were the IFCPS directors appointed by the Governments of Canada and the United States of America.

Background information on the pension plan, actuarial valuation, investment returns, electronic files, and amendments to the Society By-Laws, was presented within the information paper (STACFAD WP 22-07).

The next annual meeting of the IFCPS will be hosted by the Inter-American Tropical Tuna Commission (IATTC) during the week of 24 April 2023 in La Jolla, California, USA. It was agreed that the meeting would provide a virtual/hybrid option for those not able to attend in person.

12. Implementation of 2018 Performance Review Panel recommendations

The Secretariat provided an update on the implementation of the recommendations tasked to STACFAD in the *"Action Plan for the Implementation of the Recommendations from the 2018 Report of the NAFO Performance Review Panel"* (COM Doc. 19-32) and any other recommendations as assigned by the Commission, specifically:

a. Design a potential new visual identity for NAFO

An update was provided in STACFAD WP 22-08 (Rev.) on the work completed since the 2021 Annual Meeting to initiate a process to design a potential new visual identity for NAFO, in response to Recommendation #36.

A small focus group of NAFO Contracting Parties was established in 2021 to identify key components for the new visual identity of NAFO. The Committee considered the performance review recommendation and the work of this focus group since the last Annual Meeting.

It was believed that a new visual identity should be considered to better align with the current mandate of NAFO. While substantial work has been done, the Committee feels further modifications could be made to refine the potential logo options, however feedback from Contracting Parties would be essential to identify key design elements to be included in NAFO's new visual identity.

These modifications would be made in consultation with the established focus group and STACFAD Members using the current expertise in-house at the NAFO Secretariat, or if necessary, hire an external consultant.

STACFAD recommends that:

- **Contracting Parties consider the three potential logo options as presented in STACFAD WP 22-08 (Rev.) and provide feedback to the Secretariat to assist in production of alternative potential logo options for consideration.**
- **The NAFO Secretariat, in consultation with the established focus group, work interessionally to refine or produce alternative potential logo options for consideration of STACFAD at the next Annual Meeting.**

b. Data classification and access rights of the NAFO websites

The Secretariat presented STACFAD WP 22-09 containing an update on the work completed by the *ad Hoc virtual NAFO Website Re-Design Working Group: Data Classification* on the implementation of Recommendation #26 to develop a policy regarding the posting and distribution of meeting documentation and thereby enhance the transparency of the Organization.

The Committee endorses the meeting report and recommendations of the Ad Hoc virtual Working Group (COM Doc. 22-02).

STACFAD recommends that:

- In terms of development of a policy regarding posting and distribution of meeting documentation publicly, a hybrid meeting documentation policy (as detailed below) be adopted by NAFO as an interim measure. This hybrid meeting documentation policy would be reviewed by STACFAD after one year (i.e., at the 2023 Annual Meeting of NAFO).
- In terms of development of guidelines for classification of working documents, an interim measure be adopted that the Contracting Party submitting a Working Paper is responsible to designate that Working Paper as “open access” and made available to the general public on the NAFO website prior to the meeting. If the Contracting Party does not make such a designation, then it will not be made available to the general public on the NAFO website prior to the meeting. These guidelines for classification would be reviewed by STACFAD after one year (i.e., at the 2023 Annual Meeting of NAFO).

A hybrid meeting documentation policy includes:

- Prior to the start of any NAFO meeting, NAFO meeting documentation that is received and deemed “open access”, such as a working paper, is made available to the general public on the NAFO website and to the meeting participants on the NAFO Meetings SharePoint.
- Prior to the start of any NAFO meeting, NAFO meeting documentation that is received and deemed “restricted”, such as a working paper, is made available only to the meeting participants on the NAFO Meetings SharePoint.
- During the meeting, NAFO meeting documentation, such as working papers and subsequent revisions, is posted on the NAFO Meetings SharePoint, but not made publicly available on the NAFO website. (This is the current practice)
- Following the Annual Meeting of NAFO in September, meeting documentation that is adopted, such as a working paper, is converted into a NAFO document and made available to the general public on the NAFO website with the exception of Working Papers deemed “restricted”. (This is also the current practice)

c. NAFO operational plan

A status report on the work completed on the development of an annual operational plan for the NAFO Secretariat, Recommendation #35, was presented in STACFAD WP 22-10.

The annual operational plan will be a key tool for the Secretariat to be regularly reviewed by team members and updated throughout the year. Operational reporting is also provided at weekly coordination and monthly staff meetings.

STACFAD endorses the completion of the annual operational plan by the Secretariat, as detailed in in STACFAD WP 22-10.

13. Budget Estimate for 2023

The 2023 budget estimate, as prepared by the Secretariat, was provided in COM WP 22-05. Additional details and highlights on the 2023 budget estimate were provided in STACFAD WP 22-11.

Budget Estimate 2023	Preliminary Budget Forecast 2023	Approved Budget 2022
\$2,650,000	\$2,624,000	\$2,587,000

The 2023 budget estimate of \$2,650,000 represents an increase of \$63,000 or 2.4% over the prior years approved budget.

The personnel services budget accounts for an increase of \$23,000 or 0.9% of the total increase for 2023. NAFO follows the salary scales of similar positions held in the Public Service of Canada which provide for routine economic and salary step increases. Overall salary levels remained consistent with the prior year as new staff members start at or near the beginning of the approved salary scales. Increases to medical and insurance plans can be attributed to increases in the Government of Canada Social Security Plans. The increase in the employee benefits budget for 2023 can be attributed to benefits associated with members of the Secretariat recruited internationally and relocating to Canada.

The computer services budget increased by \$8,000. This can be attributed to ongoing security enhancements implemented to NAFO's firewall, servers, and software. It also includes a provision for a periodic firewall penetration testing to be performed by an external consultant.

The 2022 Inter-sessional Other meetings budget included a \$20,000 provision for costs associated with independent experts invited to attend the NAFO WG-EAFFM Workshop of fisheries managers and scientists to draft ecosystem objectives. The 2022 budget also included a \$25,000 provision to engage an external independent panel to conduct a scientific review of the NAFO Roadmap. No provisions for external experts to attend meetings have been budgeted for 2023. As a result, the NAFO Meetings budget decreased by \$32,000.

The recruitment process for the next NAFO ES was launched in 2022 with an appointment for the 2023–2026 term. The 2022 budget estimate includes a provision for shortlisted candidates travel costs to the NAFO Annual Meeting for interviews as well as some initial relocation costs for the incoming ES. The 2023 budget estimate includes an additional \$85,000 of relocation costs for both the incoming and outgoing ES's.

The relocation fund established in 2017 had \$100,000 available in the fund at the end of 31 December 2021. This fund will be available to offset expenses incurred in 2022, as well as a significant portion of the recruitment and relocation expenses to be incurred in 2023.

STACFAD recommends that:

- **The budget for 2023 of \$2,650,000 (Annex 3) be adopted.**

A preliminary calculation of billing for the 2023 financial year is included in Annex 5.

14. Budget Forecast for 2024 and 2025

The preliminary budget forecast for 2024 (\$2,597,000) and 2025 (\$2,693,000) (Annex 4) was provided in COM WP 22-05. The forecasts were approved in principle, and it was noted that the budget for 2024 will be reviewed in detail at the next Annual Meeting.

15. Adoption of 2022/2023 Staff Committee Appointees

The NAFO Secretariat has a mechanism in place known as the NAFO Staff Committee to help in the rare event that a conflict cannot be solved internally in which the Staff Committee may be asked to intervene and to assist

in achieving a solution through mediation. The Staff Committee has not been called on since its inception in 2005.

The Secretariat members nominated the following people to serve as members of the Staff Committee for September 2022–September 2023: Brian Healey (Canada), Ignacio Granell (European Union) and Deirdre Warner-Kramer (United States of America).

STACFAD recommends that:

- **The Commission appoint the three Staff Committee nominees for September 2022–September 2023: Brian Healey (Canada), Ignacio Granell (European Union) and Deirdre Warner-Kramer (USA).**

16. Other Business

The following other matters were discussed under this agenda item.

a. Vessel Monitoring System (VMS) Support and Maintenance Agreement

At the STACTIC Intersessional Meeting in May 2022, STACTIC discussed if the upcoming expiry of the VMS support and maintenance agreement should be renewed or to put out a call for tender.

STACTIC expressed the views that STACFAD is the relevant body to advise the NAFO Commission on financial decisions and agreed that:

The Secretariat would forward all relevant information to STACFAD in advance of the 2022 Annual Meeting so they could consider in tandem with STACTIC whether to renew the contract with VISMA for 2025 forward or to put out a call for tender.

STACFAD discussed at length STACFAD WP 22-13 that outlined the issue in detail, noting that the most recent contract renewal, which is in place until 2024, was done to allow time to evaluate and determine if a full tender is necessary.

STACFAD considered this question in two parts:

- First, it was noted that while the Secretariat does employ a multiple quote process for procurement, the NAFO Rules of Procedure and Financial Regulations do not require that a tender be issued for procurement of services.
- Second, key aspects of STACFAD WP 22-13 were discussed including the results of the survey of STACTIC participants on their preference, the feedback received from other RFMOs concerning the provision of VMS services, and the time and effort that would need to be committed to complete this tender process.

While there was a clear recognition of the need for due diligence and that the expertise on the particulars of the contract renewal resided in STACTIC, STACFAD was confident that the Working Paper provided a thorough review of the issue from a financial perspective. The Committee considered the significant initial cost of changing providers, the level of satisfaction with the current provider expressed by Contracting Parties and by the Secretariat, the unlikelihood that a change in service provider would result in a monthly savings cost over the term of the contract and the potential risk of a service interruption with a change in service provider. As a result, it was prepared to recommend that the current contract be renewed. STACFAD would continue to support STACTIC in its consideration of the contract renewal.

STACFAD provides the following guidance to STACTIC:

- **The NAFO Rules of Procedure and Financial Regulations do not require that a tender be issued for procurement of services.**
- **After a thorough review of the issue from a financial and administrative perspective, the Committee believes that the current Vessel Monitoring System (VMS) Support and Maintenance Agreement contract provides the best value and least risk to NAFO.**

b. Media Policy

The NAFO Secretariat presented COM WP 22-13 (Annex 6) containing proposed updates to the NAFO Media Policy to reflect creation of the NAFO Commission (COM) in 2017, as well as the introduction of social media.

STACFAD recommends that:

- **The Commission adopt the Updated NAFO Media Policy, as contained in COM WP 22-13.**

17. Election of Chair

According to Rule 5.4 of the NAFO Rules of Procedure: Commission *"The Committee shall elect, to serve for two years, their own Chairperson and Vice-Chairperson, who shall be allowed a vote."*

The current Chair, Robert Fagan (Canada), was elected in September 2020.

The current vice-Chair, Jake Round (United Kingdom), was elected in September 2021.

Robert Fagan (Canada) was re-elected for a second term.

18. Time and Place of 2023–2025 Annual Meetings

As previously agreed, the dates for the 2023 and 2024 Annual Meetings are as follows:

2023 - 18–22 September
2024 - 23–27 September

STACFAD reviewed and recommended the dates for the 2025 Annual Meeting as follows:

2025 - 15–19 September

The meetings will be held in Halifax, Nova Scotia, Canada, unless an invitation to host is extended by a Contracting Party and accepted by the Organization.

STACFAD recommends that:

- **The 2025 Annual Meeting be held 15–19 September 2025 in Halifax, Nova Scotia, Canada, unless an invitation to host is extended by a Contracting Party and accepted by the Organization.**

The Committee strongly reiterated that Contracting Parties strive, whenever possible, to provide more than 12 months notice of the intention to extend an invitation to host a NAFO Annual Meeting to avoid unnecessary fiscal implications of the Organization having to make a non-refundable deposit to secure conference space.

19. Adjournment

The final session of the STACFAD meeting adjourned at 15:30 hours on 19 September 2022.

Gratitude was expressed to the Committee members for their effective cooperation this week, and to the NAFO Secretariat for its excellent support.

Annex 1. List of Participants

Fagan, Robert (Canada)	Chair
Her, Natalie (virtual) Johnson, Kate Laquerre, Patrice	Canada
Lønberg-Jensen, Ole Ulloriaq	Denmark (in respect of the Faroe Islands and Greenland)
Blazkiewicz, Bernard	European Union
Koczorowski, Pauline	France (in respect of St. Pierre et Miquelon)
Fujiwara, Toshihisa	Japan
Maldonado, Alejandro Chambi	Norway
Tairov, Temur (virtual)	Russian Federation
Round, Jake	United Kingdom
Carlsen, Erika Kelly, Moira	United States of America
Goodick, Stan LeFort, Lisa	NAFO Secretariat

Annex 2. Agenda

1. Opening by the Chair, Robert Fagan, (Canada)
2. Appointment of Rapporteur
3. Adoption of Agenda
4. Audited Financial Statements for 2021
5. Administrative and Activity Report by NAFO Secretariat
6. Financial Statements for 2022
7. Review of Accumulated Surplus and Funds
8. Personnel Matters
9. Recruitment of the NAFO Executive Secretary for the 2023-2026 term
10. Internship Program
11. Report on the Annual Meeting of the International Fisheries Commissions Pension Society (IFCPS), 05-07 April 2022
12. Implementation of 2018 Performance Review Panel recommendations
 - a. Design a potential new visual identity for NAFO
 - b. Data classification and access rights of the NAFO websites
 - c. NAFO operational plan
13. Budget Estimate for 2023
14. Budget Forecast for 2024 and 2025
15. Adoption of 2022/2023 Staff Committee Appointees
16. Other Business
 - a. Vessel Monitoring System (VMS) Support and Maintenance Agreement
 - b. Media Policy
17. Election of Chair
18. Time and Place of 2023–2025 Annual Meetings
19. Adjournment

Annex 3. Budget Estimate for 2023
NORTHWEST ATLANTIC FISHERIES ORGANIZATION
 Budget Estimate for 2023
 (Canadian Dollars)

	Approved Budget 2022	Projected Expenditures 2022	Preliminary Budget Forecast 2023	Budget Estimate 2023
1 Personnel Services				
a) Salaries	\$1,272,000	\$1,271,000	\$1,273,000	\$1,269,000
b) Superannuation and Annuities	495,000	495,000	497,000	495,000
c) Medical and Insurance Plans	107,000	107,000	112,000	113,000
d) Employee Benefits	79,000	78,000	82,000	99,000
Subtotal Personnel Services	1,953,000	1,951,000	1,964,000	1,976,000
2 Additional Help	2,000	2,000	2,000	2,000
3 Communications	27,000	27,000	28,000	27,000
4 Computer Services	63,000	63,000	65,000	71,000
5 Equipment	27,000	27,000	27,000	27,000
6 Fishery Monitoring	43,000	43,000	44,000	45,000
7 Hospitality Allowance	3,000	3,000	3,000	3,000
8 Internship	14,000	7,000	14,000	14,000
9 Materials and Supplies	31,000	31,000	32,000	31,000
10 NAFO Meetings				
a) Sessional	187,000	136,000	190,000	192,000
b) Inter-sessional Scientific	30,000	20,000	30,000	30,000
c) Inter-sessional Other	85,000	44,000	40,000	48,000
Subtotal NAFO Meetings	302,000	200,000	260,000	270,000
11 Other Meetings and Travel	40,000	30,000	40,000	40,000
12 Professional Services	45,000	45,000	46,000	45,000
13 Publications	14,000	14,000	14,000	14,000
14 Recruitment and Relocation (Note 1)	23,000	23,000	85,000	85,000
	\$2,587,000	\$2,466,000	\$2,624,000	\$2,650,000

Note 1: Recruitment and relocation expenses will be paid from the available funds in the Recruitment and Relocation Fund. Balance in the fund as of 31 December 2021 was \$100,000.

Notes on Budget Estimate 2023
(Canadian Dollars)

Item 1(a)	Salaries Salaries budget estimate for 2023.		\$1,269,000
Item 1(b)	Superannuation and Annuities Employer's pension plan which includes employer's contributions, administration costs, actuarial fees and the required annual payment towards previous pension plan deficits.		\$495,000
Item 1(c)	Group Medical and Insurance Plans Employer's portion of Canada Pension Plan, Employment Insurance, Group Life Insurance, Long Term Disability Insurance and Medical Coverage.		\$113,000
Item 1(d)	Employee Benefits Employee benefits as per the NAFO Staff Rules including overtime, repatriation grant, termination benefits, vacation pay, and home leave travel for internationally recruited members of the Secretariat.		\$99,000
Item 2	Additional Support Other assistance as required.		\$2,000
Item 3	Communications Phone and internet services Postage and Courier	\$20,000 7,000	\$27,000
Item 4	Computer Services Computer hardware, software, supplies, support and website hosting.		\$71,000
Item 5	Equipment Leases (print department printer, photocopier and postage meter) Purchases Maintenance	\$14,000 10,000 3,000	\$27,000
Item 6	Fishery Monitoring Vessel Monitoring System (VMS) annual maintenance fee including programming changes as required due to changes to CEM Oracle database annual maintenance	\$42,000 3,000	\$45,000

Item 10(a)	NAFO Sessional Meetings Annual Meeting, September 2023 SC Meeting, June and October 2023		\$192,000
Item 10(b)	NAFO Inter-sessional Scientific Meetings Provision for inter-sessional meetings, symposia and a general provision for unforeseen expenses necessarily incurred by SC required for the provision of answering requests for advice from the Commission.		\$30,000
Item 10(c)	NAFO Inter-sessional Other General provision for Commission inter-sessional meetings.	\$48,000	\$48,000
Item 11	Other Meetings and Travel International Meetings regularly attended by the NAFO Secretariat which may include the following: Aquatic Sciences and Fisheries Abstracts (ASFA), Committee on Fisheries (COFI), Co-ordinating Working Party on Fishery Statistics (CWP), Fisheries Resources Monitoring Systems (FIRMS), International Fisheries Commissions Pension Society (IFCPS), Inspector Workshops, Regional Fishery Body Secretariats' Network (RSN), United Nations, etc.		\$40,000
Item 12	Professional Services Professional Services (audit, consulting, legal fees, and insurance) Professional Development and Training Public Relations	\$29,000 11,000 5,000	\$45,000
Item 13	Publications Production costs of NAFO publications, booklets, brochures, posters, etc., which may include the following: Conservation and Enforcement Measures, Convention, Inspection Forms, Journal of Northwest Atlantic Fishery Science, Meeting Proceedings, Rules of Procedure, Scientific Council Reports, Staff Rules, Secretariat Structure, etc.		\$14,000
Item 14	Recruitment and Relocation Recruitment process for the next NAFO Executive Secretary launched in 2022 with an appointment for the 2023-2026 term.		\$85,000

Annex 4. Preliminary Budget Forecast for 2024 and 2025

NORTHWEST ATLANTIC FISHERIES ORGANIZATION

Preliminary Budget Forecast for 2024 and 2025

(Canadian Dollars)

	Preliminary Budget Forecast 2024	Preliminary Budget Forecast 2025
1 Personnel Services		
a) Salaries	\$1,311,000	\$1,363,000
b) Superannuation and Annuities	500,000	507,000
c) Medical and Insurance Plans	116,000	120,000
d) Employee Benefits	79,000	102,000
Subtotal Personnel Services	2,006,000	2,092,000
2 Additional Help	2,000	2,000
3 Communications	28,000	28,000
4 Computer Services	67,000	71,000
5 Equipment	27,000	27,000
6 Fishery Monitoring	46,000	48,000
7 Hospitality Allowance	3,000	3,000
8 Internship	14,000	14,000
9 Materials and Supplies	32,000	33,000
10 NAFO Meetings		
a) Sessional	195,000	198,000
b) Inter-sessional Scientific	30,000	30,000
c) Inter-sessional Other	48,000	48,000
Subtotal NAFO Meetings	273,000	276,000
11 Other Meetings and Travel	40,000	40,000
12 Professional Services	45,000	45,000
13 Publications	14,000	14,000
14 Recruitment and Relocation	-	-
	\$2,597,000	\$2,693,000



Annex 5. Preliminary Calculation of Billing for Contracting Parties for 2023

Preliminary calculation of billing
for the 2023 financial year
(Canadian Dollars)



Budget Estimate	\$2,650,000
Deduct: Amount Allocated from Accumulated Surplus	-\$420,000
Amount Allocated from Relocation Fund	-\$85,000
Funds required to meet 2023 Administrative Budget	\$2,145,000

Part A

Contracting Parties	2020 nominal catches (metric tons)	Catch %	NAFO Convention Article IX.2.a,b,c			
			10%	30%	60%	Subtotal
Canada	144,041	32.51%	\$81,740	\$49,500	\$418,403	\$549,643
Cuba	-	-	-	\$49,500	-	\$49,500
Denmark (in respect of Faroe Islands and Greenland) (Note 2)	172,863	39.02%	\$98,096	\$49,500	\$502,187	\$649,783
European Union	45,560	10.28%	-	\$49,500	\$132,304	\$181,804
France (in respect of St. Pierre et Miquelon)	478	0.11%	\$271	\$49,500	\$1,416	\$51,187
Iceland	-	-	-	\$49,500	-	\$49,500
Japan	1,732	0.39%	-	\$49,500	\$5,019	\$54,519
Norway	4,453	1.01%	-	\$49,500	\$12,999	\$62,499
Republic of Korea	-	-	-	\$49,500	-	\$49,500
Russian Federation	13,312	3.00%	-	\$49,500	\$38,610	\$88,110
Ukraine	-	-	-	\$49,500	-	\$49,500
United Kingdom	-	-	-	\$49,500	-	\$49,500
United States of America (Note 3)	60,607	13.68%	\$34,393	\$49,500	\$176,062	\$259,955
Total	443,046	100.00%	\$214,500	\$643,500	\$1,287,000	\$2,145,000

Part B

Contracting Parties	Subtotal from Part A	NAFO Convention Article IX.2.d (Note 1)						Total contribution
		% Contribution	Catch % minus DFG	10%	30%	60%	Subtotal	
Canada	\$549,643	25.61%	53.31%	\$27,554	\$9,810	\$125,508	\$162,872	\$712,515
Cuba	\$49,500	2.31%	-	-	\$9,810	-	\$9,810	\$59,310
Denmark (in respect of Faroe Islands and Greenland) (Note 2)	\$649,783	30.29%	-	-\$39,238	-\$117,720	-\$235,435	-\$392,393	\$257,390
European Union	\$181,804	8.48%	16.86%	-	\$9,810	\$39,694	\$49,504	\$231,308
France (in respect of St. Pierre et Miquelon)	\$51,187	2.39%	0.18%	\$91	\$9,810	\$425	\$10,326	\$61,513
Iceland	\$49,500	2.31%	-	-	\$9,810	-	\$9,810	\$59,310
Japan	\$54,519	2.54%	0.64%	-	\$9,810	\$1,508	\$11,318	\$65,837
Norway	\$62,499	2.91%	1.65%	-	\$9,810	\$3,886	\$13,696	\$76,195
Republic of Korea	\$49,500	2.31%	-	-	\$9,810	-	\$9,810	\$59,310
Russian Federation	\$88,110	4.11%	4.93%	-	\$9,810	\$11,607	\$21,417	\$109,527
Ukraine	\$49,500	2.31%	-	-	\$9,810	-	\$9,810	\$59,310
United Kingdom	\$49,500	2.31%	-	-	\$9,810	-	\$9,810	\$59,310
United States of America (Note 3)	\$259,955	12.12%	22.43%	\$11,593	\$9,810	\$52,807	\$74,210	\$334,165
Total	\$2,145,000	100.00%	100.00%	\$0	\$0	\$0	\$0	\$2,145,000

Note 1

The annual contribution of any Contracting Party which has a population of less than 300,000 inhabitants shall be limited to a maximum of 12% of the total budget. When this contribution is so limited, the remaining part of the budget shall be divided among the other Contracting Parties in accordance with Article IX.2.a,b and c of the NAFO Convention.

Note 2

Faroe Islands 2,594 metric tons
Greenland 170,269 metric tons

Note 3

2019 nominal catches were not available prior to the issuance of the 2022 billing. As a result, estimated catches were used for 2022 billing calculation purposes. The subsequent reporting of USA's 2019 catches have been received and the difference between the 2019 actual vs. the estimate used in last year's billing have been applied towards the calculation of contributions for the current financial year.



Annex 6. NAFO Media Policy (COM Working Paper 22-13)

Conditions for Attendance by Media Representatives at NAFO Meetings

1. All media requests for participation at each NAFO meeting or for interviews with NAFO officers shall be directed to the Secretariat.
2. After verification of media credentials, the Executive Secretary will inform the Chairs of the relevant NAFO bodies, the host ~~country Contracting Party~~ and the ~~country Contracting Party~~ in which the media organization is based with as much advance notice as possible.
3. Media representatives shall register with the NAFO Secretariat on arrival at the meeting and provide a Press card or a letter of authorization or other documentation from the appropriate company.
4. The Executive Secretary can authorize attendance of media representatives at the public sessions of ~~the NAFO Commission, General Council, and~~ Scientific Council ~~and Fisheries Commission~~, i.e. official opening and closing of the meetings, and other sessions so designated by the bodies concerned.
5. No more than two representatives of a particular publication or company shall be allowed to attend the meeting. They are required to remain in a designated area within the meeting room. Depending on the meeting facility, the total number of media representatives attending the meeting may have to be restricted.
6. Media representatives shall not be permitted to make statements or ask questions during sessions.
7. The use of cameras and/or recording equipment can be permitted by the Executive Secretary during the public sessions of NAFO meetings provided that it is set up and operated in a non-disruptive way. One additional person per team may be allowed into the meeting room for the operation of technical equipment (e.g., cameras).
8. Media representatives must leave the meeting premises when they are not attending sessions of NAFO bodies.
9. Background and other information material pertaining to the meeting in question will be compiled specifically for media representatives by the Executive Secretary and either handed out to them during meetings or sent electronically upon request prior to the meeting.
10. a) The Executive Secretary will prepare a press release for circulation, in collaboration with the Chairs of the ~~General Council, Commission, Fisheries Commission~~ and Scientific Council, to be agreed upon at the close of the ~~General Council Annual Meeting, meeting~~.
b) At the discretion of the NAFO President and the Executive Secretary, a press conference shall be held following the close of the Annual Meeting by the Chairs of the ~~General Council, Commission~~, Scientific Council, ~~and the Fisheries Commission~~ and the Executive Secretary.
11. No media posts or content, including social media, shall be permitted by the media or meeting attendees, regarding the meeting proceedings (i.e., meeting discussions and decisions) during the closed sessions of the meeting.
12. Media representatives shall comply with these and with any other conditions determined by the ~~General Council, Commission~~ or by the Executive Secretary.

PART III.
Report of the NAFO Standing Committee on International Control (STACTIC)

44th Annual Meeting of NAFO, 19-23 September 2022
Porto, Portugal

1.	Opening by the Chair, Kaire Märtin (European Union).....	150
2.	Appointment of Rapporteur.....	150
3.	Adoption of Agenda.....	150
4.	STACTIC participation.....	150
5.	Compliance review 2021 including review of apparent infringement reports and of chartering arrangements.....	151
6.	Review of Article 30 of the NAFO CEM.....	151
7.	NAFO MCS website and application development.....	152
8.	New and pending proposals on enforcement measures: Possible revisions of the NAFO CEM.....	153
9.	Review of Article 7 of the NAFO CEM.....	156
10.	Review of current IUU list pursuant to NAFO CEM Article 53.....	156
11.	Practical application of Port State Measures in NAFO.....	156
12.	Marking of gears.....	157
13.	Report and recommendations of the Editorial Drafting Group (EDG).....	157
14.	Report and recommendations of the Joint Advisory Group on Data Management (JAGDM).....	158
15.	Bycatch and discards.....	158
16.	Review and evaluation of Practices and Procedures.....	158
17.	Implementation of the Performance Review recommendations.....	159
18.	Discussion on garbage disposal onboard vessels.....	160
19.	Visma VMS contract renewal.....	160
20.	Other business.....	160
21.	Election of Chair and vice-Chair.....	161
22.	Time and Place of next meeting.....	161
23.	Adoption of Report.....	161
24.	Adjournment.....	161
	Annex 1. List of Participants.....	162
	Annex 2. Agenda.....	164
	Annex 3. Recommendations from the Observer Program Review Working Group (WG-OPR).....	165

Report of the Standing Committee on International Control (STACTIC)

44th Annual Meeting of NAFO, 19-23 September 2022
Porto, Portugal

1. Opening by the Chair, Kaire Märtin (European Union)

The Chair opened the meeting at 02:06pm (GMT+1) on Monday, 19 September 2022 at the Palácio da Bolsa in Porto, Portugal and via WebEx. The Chair welcomed representatives from the following Contracting Parties (CPs) – Canada, Denmark (in respect of Faroe Islands and Greenland), the European Union, France (in respect of St. Pierre et Miquelon), Iceland, Japan, the Republic of Korea, Norway, the Russian Federation, the United Kingdom, and the United States of America (Annex 1).

2. Appointment of Rapporteur

NAFO Secretariat (Mikaela Soroka) was appointed as rapporteur.

3. Adoption of Agenda

The following additions were made to the agenda under agenda item 20 – *Other business*:

- Domestic haul time definitions – Discussion on domestic definitions of start and end times were in a working paper to be forwarded to WG-EAFFM for adoption.

4. STACTIC participation

The Chair opened the agenda item and presented the relevant background. STACTIC had requested the assistance of the Commission to come to a resolution of the participation at the STACTIC meetings. The Commission tasked STACTIC to resolve the issue of participation, which has been ongoing since 2018.

To ensure progress at this meeting, the Chair recommended, and STACTIC agreed, to follow the interim procedure that was agreed in 2019:

Contracting Parties agreed to follow the procedure established at the 2019 Annual Meeting as an interim solution for this meeting without prejudice to any other future possible decisions about the issue of participation, which was that Contracting Parties identify agenda items and/or working papers which they deemed to be of a sensitive nature and discussed in an in-camera (closed) session. The in-camera (closed) sessions would be restricted to government officials and NAFO Commissioners from each delegation. Following the in-camera (closed) discussions, the Chair would report out the results or recommendations in open session.

During this discussion, some Contracting Parties requested that agenda items 5, 7 and 11 be conducted in a closed session. The reasoning for the closed sessions are as follows:

Working papers under agenda item 5, STACTIC WP 22-02 and STACTIC WP 22-04 contained sensitive, confidential fishing information. Agenda item 7 involved a presentation and demonstration on the MCS website, which contains sensitive and confidential information and whereby access is restricted. Agenda item 11 involved discussions related to Contracting Parties' specific information regarding calculating percentages from PSC forms. Some Contracting Parties felt that a closed session was needed to have an open conversation about the topic.

As for resolving, the long-term participation issue, the United States of America and the European Union presented STACTIC WP 22-47 as a proposal outlining possible guidelines for rules of procedure to be adopted by STACTIC that would resolve this issue. After a first round of discussions and comments, a revision to the

document was made addressing the various comments. Because the proposed rules of procedure task the Secretariat with several obligations, STACTIC requested the Secretariat's input on the proposal. The Secretariat indicated that the proposal was reasonable.

STACTIC endorsed WP 22-47 (Rev.) as a Rules of Procedure for future STACTIC participation.

It was **agreed** that:

- **STACTIC endorsed STACTIC WP 22-47 (Rev.) as its Rules of Procedure on participation and data confidentiality.**
- **STACTIC submits STACTIC WP 22-47 (Rev.) to the NAFO Commission**

5. Compliance review 2021 including review of apparent infringement reports and of chartering arrangements

STACTIC WP 22-33 (Rev.) was presented and, after one revision, the document was closed.

STACTIC WP 22-02 (Rev. 3) and STACTIC WP 22-04 (Rev.3) were provided to the STACTIC heads to verify information in the compliance review STACTIC WP 22-03 (Rev.2). Both working papers contain confidential data subject to restricted circulation. STACTIC and the Secretariat felt it necessary to review the annual procedure pertaining to these working papers (draft compliance tables and Inspection Summary). The Secretariat explained that Contracting Parties, in accordance with Article 40, are to submit relevant information pertaining to the inspection summary. The working papers would then be created and presented at the STACTIC Intersessional Meeting, then, Contracting Parties are to submit their comments and edits by the 15 of August. The Secretariat will then incorporate the comments and edits and forward the working papers back to Contracting Parties. Lastly, at the Annual Meeting, the working papers are presented prior to the discussion on the compliance review working paper. This year, there was a delay in the incorporation of the comments, therefore the working papers were amended via email during the week of the Annual Meeting. STACTIC WP 22-02 (Rev. 3) and STACTIC WP 22-04 (Rev. 3) were endorsed by STACTIC after comments were incorporated.

STACTIC WP 22-03 (Rev. 2) was presented by the Secretariat. The changes made since the 2022 STACTIC Intersessional Meeting were highlighted, and Contracting Parties were encouraged to discuss their comments or concerns. Canada suggested making improvements to the conclusions and recommendations section of the report to include more details about compliance issues that exist for the Commission's awareness, similar to practices currently in place in other RFMOs. The need for and importance of conducting a more in depth compliance review of the Observer Program was also noted. DFG made another request that in section 5.1 Effort and Catch, a figure could demonstrate the effort made for the catch by number of vessels, tonnage and engine power. This addition would help to show if there was an increase in fishing effort but not in quota, which would lead to the potential question of why more effort is needed/occurring. A small group composed of delegates from Canada, the European Union and the United States of America drafted the conclusion and recommendations sections. After a thorough revision of the document, STACTIC endorse STACTIC WP 22-03 (Rev. 4) which will be sent to the Commission for their review of the Contracting Parties' compliance.

It was **agreed** that:

- **STACTIC WP 22-03 (Rev. 4) was endorsed by STACTIC and will be forwarded to the NAFO Commission.**

6. Review of Article 30 of the NAFO CEM

The Chair opened the agenda item and requested that the Chair of the Observer Program Review Working Group (WG-OPR) provide a summary of the meeting that took place in July 2022 and its report (COM Doc. 22-06 (Rev.)). Following the summary, the WG-OPR Chair requested that STACTIC allow for an extension for the

working group to continue its work in 2023. This was agreed by STACTIC and they will provide an updated Terms of Reference (ToR) intersessionally.

During the review of COM Doc. 22-06 (Rev.), Norway expressed concerns with a few of the recommendations as written and were hesitant to present them to the Commission from STACTIC. Canada prepared STACTIC WP 22-48 which compiled the recommendations made by the WG-OPR, including revisions to address the concerns raised by Norway. This working paper was used to determine the recommendations endorsed by STACTIC. STACTIC agreed to present STACTIC WP 22-48 (Rev. 2) (Annex III) and the WG-OPR report to the Commission, in addition to, informing them that they have completed the task outlined in Article 30.19 of the NAFO CEM.

During the discussion under this agenda point, STACTIC agreed to remove Article 30.19 of the NAFO CEM, seeing as it was a time sensitive article point which was now completed. The proposed change to the article was presented in STACTIC WP 22-50 and it was agreed to forward to the Commission for adoption.

The Chair presented STACTIC WP 22-05 (Rev. 3). It was pointed out that there was missing information from one Contracting Party that was present in the NAFO Regulatory Area in 2021, and it was requested that the missing information be sent as soon as possible. The missing Contracting Party submitted their information; therefore, the document was endorsed by STACTIC as STACTIC WP 22-05 (Rev. 4).

It was **agreed** that:

- **The Observer Program Review Working Group (WG-OPR) continues its work in 2023 to develop the recommendations from STACTIC WP 22-48 (Rev. 2).**
- **WG-OPR Terms of References will be updated via correspondence.**
- **STACTIC WP 22-50 be forwarded to the NAFO Commission for adoption.**
- **STACTIC WP 22-48 (Rev. 2) (Annex III) in addition to the WG-OPR meeting report be presented to the Commission.**

7. NAFO MCS website and application development

The Secretariat presented two requested enhancements for the MCS Website. The first enhancement was a report page requested by Canada that displays the catches transmitted in the daily observer (OBR) message. The second enhancement was the Notification of Others quota uptake summary (NAFO CEM article 5.3(e)) requested by the EU. During the demonstration, the European Union also asked the Secretariat to display the vessel catch details for the Others quota uptake. Contracting Parties thanked the Secretariat for the enhancements made to the MCS website.

It was **agreed** that:

- **The following two enhancements should be available on the MCS Website:**
 1. **Catches from Daily Observer Reports (OBR)**
 2. **Others quota uptake**
- **The Secretariat continues the work on the enhancements to the MCS Website**

Observer Application

The Secretariat provided an update on the development of the observer application's progress for many forms/screens, so they are compatible/reusable for both observer's hardware device and the Quality Control Manager's website. The Secretariat suggested that a small group meet virtually monthly to review the application development progress and an implementation plan. Canada has offered to provide a member to

support the small group. The European Union suggested that the STACTIC Observer Program Review Working Group (WG-OPR) incorporate this project under its Terms of Reference to provide feedback and updates.

It was **agreed** that:

- **The Observer Application development and its implementation plan will be added to the Terms of Reference for the STACTIC Observer Program Review Working Group (WG-OPR).**
- **To establish a small group to review the progress of the Observer Application periodically until it is fully developed.**

Electronic Port State Control (e-PSC) Application

As requested at the 2022 STACTIC intersessional Meeting, the Secretariat obtained detailed information about NEAFC's e-PSC system. The Secretariat has started to design an e-PSC system that incorporates the functionality of NEAFC's system. The European Union supports the e-PSC development but stresses the prioritization of the Observer Application. The European Union also suggested the ability to extract data from the NAFO's e-PSC system in a computer-readable format. The Secretariat suggested that a small group be developed to assist with the development of a NAFO e-PSC system.

Norway commented that it is unfortunate that NAFO is developing a separate system as NEAFC already have a well-functioning system in place, as it will require vessels and FMCs to have both systems. However, Norway acknowledged that NEAFC's system used a different network and software development technologies compared to NAFO.

As requested, the Secretariat attempted to research the integration of FAO's Global Information Exchange System (GIES) into the new e-PSC system. According to the project website (<https://psma-gies.review.fao.org>), the project is in the pilot phase and restricted only to parties already signed up for the project's agreement. Once the pilot phase is complete, the Secretariat will report to STACTIC on the potential data exchange opportunities with FAO's GIES project.

It was **agreed** that:

- **The Secretariat prioritises the development of the observer application.**
- **The Secretariat continues the work on the e-PSC system.**
- **STACTIC will establish a small group to aid in the progress of the development of the observer application and e-PSC**

STACTIC WP 22-16 (Rev. 2) was presented under this agenda item and the Chair encouraged Contracting Parties to review the information and requested that any updates or additions be sent to Secretariat. An additional Single Point of Contact (SPOC) for labor conditions was incorporated into STACTIC WP 22-16 (Rev. 3). The SPOC from this document will be posted to the MCS website.

It was **agreed** that:

- **The SPOC for labor conditions will be posted on the MCS website.**

8. New and pending proposals on enforcement measures: Possible revisions of the NAFO CEM

STACTIC WP 21-51 (Rev. 3) was presented by the United States of America. The working paper proposed to explicitly mention marine mammals, sea turtles and sea birds as part of the data collection required by observers pursuant to Article 30.14. One Contracting Party expressed concern that the addition of only certain species to Article 30.14 could end up limiting the scope of the Article point, since masters and observers are

already required to record bycatch. As an alternative, it was later proposed in STACTIC WP 21-51 (Rev. 4) to include a list of relevant marine mammals, turtles, and sea birds in Annex I.C. and that the preliminary list of the working paper be sent to Scientific Council for their guidance in finalizing a list relevant to the NAFO Regulatory Areas. All Contracting Parties were in support of the new proposal. The Russian Federation noted their concern regarding the written guidance from NAFO required for observers to properly identify species of marine mammals, turtles, and sea birds and duly perform their duties stipulated by Article 30.14 of the NAFO CEM, is to be reflected in the Report of STACTIC. The United States of America reiterated that the obligation for observers to record bycatch, including marine mammals, sea birds, and sea turtles, already exists; express references in Annex I.C. will, at the very least, assist in this endeavor.

STACTIC WP 22-08 (Rev. 4) was presented by the United States of America. The working paper proposes an amendment to Article 13.15 of the NAFO CEM in order to allow an anonymized version of a lost gear map be posted to NAFO public website. STACTIC agreed to forward the proposal to the Commission for adoption.

STACTIC WP 22-24 (Rev.) was presented by Canada. They highlighted that their proposal was aiming to resolve their logistical issue in complying with the current NAFO CEM regarding Article 30.10 (a) by deleting it. There were no objections and a few Contracting Parties explicitly said they were in full agreement with the proposal. Therefore, STACTIC agreed to forward STACTIC WP 22-24 (Rev.) to the Commission for adoption.

STACTIC WP 22-25 (Rev.) was presented by Canada. The working paper reduced the scope of the proposal originally presented at the 2022 STACTIC intersessional Meeting and proposed the addition of labelling by date of capture for 3M redfish in Article 27. Canada again emphasised the utility of this provision in support of inspection efforts in the NRA. One Contracting Party was concerned with how the practical implementation of this amendment would occur for those vessels using electronic logbooks and timestamps. Being unable to reach a consensus, on Canada's request, the working paper was deferred to the 2023 STACTIC intersessional Meeting.

STACTIC WP 22-37 (Rev.) was presented by the United States of America. A previous version of the paper merged the interests of Japan and the United States of America (STACTIC WP 22-29), but the Contracting Parties decided to separate their issues after the Intersessional. The United States of America incorporated the comments made at the 2022 STACTIC Intersessional meeting for their revised proposal. During the discussion, Contracting Parties made clear that vessels were entitled to one trial tow upon its first entrance into a Division on a fishing trip, as defined under Article 1. ('Fishing trip' for a fishing vessel includes the time from its entry into until its departure from the Regulatory Area and continues until all catch onboard from the Regulatory Area has been landed or transhipped.) This clarification ameliorated the European Union's concern of vessels attempting to "zero out" trial tows by departing a division and re-entering. STACTIC agrees that the definition of "fishing trip" includes the landing of the catches in Article I, and therefore this "zero out" scenario could not be allowed. The suggestion to incorporate a reference to the proposed additional article in Annex II.D.C was made. The United States of America clarified Annex II D.C does not currently require the documentation of trial tows. STACTIC agreed to forwards the new revision (STACTIC WP 22-37 (Rev. 2)) to the Commission for adoption. It was also agreed to evaluate the practical implementation of this revision by the next year.

STACTIC WP 22-38 was presented by the European Union. The proposal on this working paper was to eliminate the word "directed" in the NAFO CEM under Article 5.5 (e) as it does not align with Article 5.5 (i) (the word "directed" implies that by-catch would be allowed). All Contracting Parties supported the endorsement of the proposal. Norway noted that they did not support reinforcing any discard requirements, referring to their landing obligation, however, they could go along with this proposal. Denmark (in respect to Faroe Islands and Greenland) pointed out that there might be a possible issue regarding footnote 10 in Annex I.A of the NAFO CEM, however, the European Union clarified that there were no intentions to alter said footnote. STACTIC agreed to forward the proposal to the Commission for adoption.

STACTIC WP 22-41 was presented by the European Union on amendment of Article 4 of the NAFO CEM regarding research vessels. The working paper incorporated the recommendations made from the Scientific Council in reference to the first draft of the proposal, STACTIC WP 22-23, which was forwarded to them from

STACTIC after the 2022 STACTIC intersessional Meeting. After lengthy discussions, the European Union presented STACTIC WP 22-41 (Rev. 4) which was supported by all delegations but Canada, who requested more time to study it. Canada proposed the addition of a derogation for Canadian commercial research vessels for 3 stocks relating to the obligation to count the catches against relevant quotas; have separate stowage on board; recording, reporting and notification obligations; and to have a scientific observer on board: “4. Given Canada’s management of Atlantic halibut, 2J3KL cod and 2J3KL witch flounder, paragraphs 3(c), (d) and (f)(ii) shall not apply to Canadian research activities conducted on these stocks.” Several Contracting Parties strongly opposed a derogation for one Contracting Party; pointed out the straddling nature of the stocks, the existence of NAFO management measures; and that proposed additions are not related to control and depart from previous discussions. Canada disagreed and responded that it was their position that these stocks were managed by Canada, that the measures imposed constituted unacceptable restrictions to their management of and reporting on these stocks and that ultimately they were not meant to address Canadian research activities. The European Union indicated that this is not a STACTIC topic and recalled that all other STACTIC members supported the European Union proposal without this late addition and expressed concerns with the continuation of absence of measures to monitor commercial research activities in the NRA. DFG suggested to adopt the discussed WP 22-41 (Rev. 4), which was supported by the EU. The USA and the European Union asked Canada whether it had flexibility to modify its proposal. Canada suggested it may be appropriate for the Commission to reflect further on this matter.

STACTIC WP 22-44 was presented by the United States of America with the goal of standardizing the definition and collection of start and end time for hauls/tows. The United States of America proposed collecting 4 data points: when the gear enters the water; when the gear starts fishing; when the gear stops fishing; and when the gear is fully retrieved. The United States of America wanted to create consistent data streams to ensure all parties are operating under the same understanding. Additionally, the United States of America expressed that they have found all four data points helpful from an enforcement and compliance perspective. The United States of America proposes to postpone further discussion until the 2023 STACTIC intersessional Meeting, where, in the meantime, the WG-OPR will undertake the discussion intersessionally.

STACTIC WP 22-51 was prepared by Canada (see agenda item 14). The working paper proposes amendments to be made to the NAFO CEM in regard to CAT messages being used as the last catch report instead of a COX if the last catch area is different than the exiting area. Due to the working paper being submitted later on in the week of the meeting, it was decided to continue discussions on the proposal at the 2023 STACTIC Intersessional Meeting.

It was **agreed** that:

- **STACTIC WP 21-51 (Rev. 4) be forwarded to the Scientific Council for their feedback on the preliminary list of species to be added to Annex I.C.**
- **STACTIC WP 22-08 (Rev. 4) be forwarded to the NAFO Commission for adoption.**
- **Secretariat will, from now on, post an anonymized version of the Lost Gear map to the public website.**
- **STACTIC forward STACTIC WP 22-24 (Rev.) to the Commission for adoption**
- **STACTIC revisit Canada’s proposal STACTIC WP 22-25 (Rev.) in the next STACTIC meeting.**
- **STACTIC forward STACTIC WP 22-37 (Rev. 2) to the Commission for adoption.**
- **STACTIC will review the new measure proposed in STACTIC WP 22-37 (Rev. 2) at the 2023 Annual Meeting.**
- **STACTIC forward STACTIC WP 22-38 to the Commission for adoption**
- **The WG-OPR will undertake the proposal from STACTIC WP 22-44 and report back to STACTIC at the 2023 STACTIC Intersessional Meeting.**

- **STACTIC will continue discussion on STACTIC WP 22-51 at the 2023 STACTIC Intersessional Meeting.**

9. Review of Article 7 of the NAFO CEM

The European Union presented STACTIC WP 22-39 which suggests amendments to Article 7 of the NAFO CEM regarding 3M cod port inspection benchmarks. STACTIC adopted STACTIC WP 22-39 (Rev. 2) which includes an editorial revision of the proposal.

It was **agreed** that:

- **STACTIC forward STACTIC WP 22-39 (Rev. 2) to the Commission for adoption**

10. Review of current IUU list pursuant to NAFO CEM Article 53

STACTIC WP 22-22 (Rev. 2) was presented by the European Union, Norway, and the United States of America in an effort to streamline the process for RFMO IUU cross listing since NEAFC already incorporated all RFMO IUU lists into their list. Once STACTIC WP 22-22 (Rev3.) was presented, all Contracting Parties were in favor of forwarding the proposal to the Commission for adoption.

STACTIC WP 22-10 was presented to STACTIC with the goal of reaching consensus on whether or not the vessels on the IUU provisional list could be moved to NAFO's IUU list. Having no objections, STACTIC agreed to migrate the vessels from the provisional IUU list to NAFO's IUU list. The United States of America noted the importance of adopting STACTIC WP 22-22 to ensure clear guidelines for updating and removing vessels from the NAFO IUU Provisional List and the NAFO IUU Vessel List.

STACTIC WP 22-23 or the "*Draft Report – Advancing RFMO IUU Vessel List Utility*" was presented as an information paper for STACTIC. All Contracting Parties felt this was a positive way forward.

It was **agreed** that:

- **STACTIC forward STACTIC WP 22-22 (Rev. 3) to the Commission for adoption.**
- **STACTIC forwards STACTIC WP 22-10 the Commission recommending them to move the vessels currently in the provisional IUU list, to NAFO's IUU list.**

11. Practical application of Port State Measures in NAFO

During a closed session, STACTIC WP 22-35 was presented by Denmark (with respect to Faroe Islands and Greenland) identifying that currently there is no a standard way of calculating percentage on PSC reports. Denmark (with respect to Faroe Islands and Greenland) feel it is important to have consistency within our RFMO and NEAFC. Norway was of the opinion that the landed weight should be the denominator. Several Contracting parties have been using the logbook weight, which is an estimate, but were not opposed with using the landing weight, which is the actual weight going forward if that is what STACTIC decides. The European Union recalled that the provisions in the NAFO CEM relating to by-catch calculations and enhanced follow-up in case of serious infringement require the inspectors to make the calculations of the basis of the master's figures. It was also mentioned during the discussion that this may be an interesting topic to bring up at the next Inspectors Workshop. The United States of America noted that this discussion occurred in a closed session but perhaps was unwarranted.

It was **agreed** that:

- **Discussion will be further carried out in STACTIC and it is suggested to cover this topic during future NAFO Inspector's Workshop.**

12. Marking of gears

At the 2022 STACTIC Intersessional Meeting, it was agreed that Contracting Parties will submit any outstanding domestic information on the marking of gears using the template provided by the Secretariat. STACTIC WP 22-42 (Rev. 2). is the compilation of all submissions received by the Secretariat regarding the marking of gears. The Chair suggests that perhaps another mapping exercise take place similar to this but using the points from the Convention on Conduct of Fishing Operations in the North Atlantic to allow for a simpler method of comparing the relevant application of each set of guidelines in NAFO. The European Union pointed out that the replacement of the old conventions with the FAO guidelines is not an appropriate way forward and that they feel that the FAO Voluntary Guidelines and the old conventions are not comparable documents, in that one could not replace the other without the loss of certain measures. In addition, it was pointed out that some measures in the FAO document would not be applicable for NAFO. During the discussion, it was also noted that for fishing masters whom fish under multiple RFMOs, using different rules can lead to confusion and potentially, unintentional non-compliance.

It was **agreed** that:

- **Secretariat conducts the analysis /background document on the marking of gear rules currently applicable in the Convention on Conduct of Fishing Operations in the North Atlantic by types of gear used in NAFO (trawls, longlines).**

13. Report and recommendations of the Editorial Drafting Group (EDG)

The Chair of the EDG, Patrick Moran, presented STACTIC WP 22-32 which was the report from the EDG meeting that took place in July 2022. The EDG Chair also presented the July meeting report and STACTIC discussed the recommendations one by one as follows:

“STACTIC EDG WP 21-04 (Rev.) should be discussed further by STACTIC at the 2022 Annual Meeting.”

The working paper presents multiple amendments to the NAFO CEM for STACTICs consideration to return to the EDG.

“The European Union will consider a draft definition of “flag State Contracting Party” for discussion by STACTIC at the 2022 Annual Meeting.” And “The European Union explained that the definitions of flag state and contracting party are included in the NAFO Convention, therefore, they cannot be changed in the amendments of the NAFO CEM. Both definitions cover individual states and entities including all the flags of those entities.

Canada suggests using a chapeau in the definition of Contracting Party to include the countries that fall under that contracting party (for example, Denmark is the contracting party in which Faroe Islands and Greenland fall under).

“The discussion on Research Vessel information being posted to the NAFO public website be continued by STACTIC at the 2022 Annual Meeting.”

STACTIC endorses posting research vessel information onto the public cite. Canada offered to draft a proposal to adopt this change however, it was concluded that the text in the NAFO CEM currently reflects the desired message.

“The discussion on possible edits to Article 5.5(e) of the NAFO CEM be forwarded to STACTIC at the 2022 Annual Meeting.”

Addressed under agenda item 8 in STACTIC WP 22-38 and agreed by STACTIC.

“It will be recommended to STACTIC that Article 5.5(j) of the NAFO CEM be edited to use “00:01” to align it with the rest of the NAFO CEM at the 2022 Annual Meeting.”

All in agreement with this amendment to the NAFO CEM.

It was **agreed** that:

- **STACTIC continues the review of STACTIC WP 21-04 (Rev.) at the 2023 STACTIC Intersessional Meeting.**
- **Article 5.5(j) of the NAFO CEM have the time reference be “00:01” instead of “00:00”.**

14. Report and recommendations of the Joint Advisory Group on Data Management (JAGDM)

JAGDM Chair, Natasha Barbour, presented their reply to STACTIC’s letter, NAFO/22-163, requesting information on the potential IT implications of using a last CAT to report last catch instead of the COX if the last fished area differs from the area the vessel is exiting from. All Contracting Parties were in agreement with this change. Canada offered to draft a proposal that covers this topic which can be found under agenda item 8 as STACTIC WP 22-51.

15. Bycatch and discards

The Working Group on Control of Landing Obligations (WG-LO) presented STACTIC WP 22-34 and the report for their August meeting (NAFO/COM Doc. 22-05). The working paper is a reply to the Commission request for STACTIC to look into what control elements NAFO would need in order to adopt a landing obligation. STACTIC was comfortable with adopting the response articulated in STACTIC WP 22-34 and agreed to send it to the Commission. Canada reiterated its position expressed at the STACTIC Intersessional Meeting that this was strictly a hypothetical activity, as some Contracting Parties do not have mandatory landing obligations. Norway expressed their interest in continuing the work in STACTIC by looking into measures to avoid unwanted bycatch, however the rest of STACTIC felt it fell outside of their mandate. Canada noted that it would be premature at this stage to identify next steps, citing the need to await the outcome of Commission discussions on the STACTIC reply. Norway expressed that they will make the proposal to the Commission themselves.

It was **agreed** that:

- **STACTIC forward to the Commission STACTIC’s response to the request to consider what control elements are necessary for NAFO to adopt a landing obligation policy, as outlined in STACTIC WP 22-34.**

16. Review and evaluation of Practices and Procedures

STACTIC WP 22-09 (Rev. 5) was presented by the Secretariat for a final confirmation from STACTIC/Contracting Parties that the information was correct and ready to be posted to the public website.

The working paper was endorsed by STACTIC, and the Practices and Procedures in Table 2 of the paper will be uploaded to the NAFO public website.

It was **agreed** that:

- **Contents from Table 2 in STACTIC WP 22-09 (Rev. 5) will be uploaded to the NAFO public website.**

17. Implementation of the Performance Review recommendations

The Secretariat presented an update on the implementation of the 2018 Performance Review Recommendations 5, 7, 15-22, and 24, which were relevant to STACTIC (STACTIC WP 22-17 (Rev. 4)). Updates to the recommendations were as follows:

- **Recommendation 5** – status was updated to Completed as of the 2022 STACTIC Intersessional Meeting.
- **Recommendation 7** – status updated to include that a WG-LO was established and met in August 2022 and prepared a response for the Commission (STACTIC WP 22-34) that has been adopted by STACTIC at the 2022 STACTIC Annual Meeting.
- **Recommendation 16** – status updated to completed seeing as considerable work has been done in the creation of STACTIC WP 22-19 (to be sent to WG-EAFFM) which that there has been considerable improvement in quantity and quality in the reporting of VMEs observers since 2019, the year Article 30 was last overhauled by STACTIC.
- **Recommendation 17** – status updated to include that the discard aspects of the Action Plan was taken on by WG-LO
- **Recommendation 18** – status update that the Commission requested the Scientific Council on STACTIC's behalf to provide additional information on garbage disposal at sea.
- **Recommendation 19** – status updated to Completed.
- **Recommendation 20** – status update that STACTIC re-iterated its request for clarification to the Commission, however, the Commission had no further guidance to give and left STACTIC with the recommendation and proposed action as is.
- **Recommendation 21** – status update that STACTIC will continue its work on this into 2023.

With regard to Recommendation 20, Norway re-iterated that in their view, the recommendation from the Performance Review Panel that the NAFO Contracting Parties conduct a flag State evaluation and submit this to STACTIC, would be a very useful exercise, as flag State performance is key the successful implementation of the NAFO CEM. Norway was of the opinion that this item should be kept open. The European Union re-iterated that the NAFO Commission has not agreed to mandated STACTIC to carry out a flag state evaluation exercise. Norway reminded that STACTIC had asked the Commission for guidance on whether the Contracting Parties should carry out self-assessments in accordance with the Recommendation from the Performance Review Panel, or whether it should carry out a review of the FAO Guidelines. As there was no consensus in the Commission, this question had been referred back to STACTIC by the Commission.

STACTIC noted that there was no consensus from the Commission and agreed to continue the discussions at the 2023 Intersessional Meeting, in so far that the issue was referred back to STACTIC.

It was **agreed** that:

- **STACTIC will continue its discussion on the recommendations outlined in STACTIC WP 22-17 (Rev. 4) at the 2023 STACTIC Intersessional Meeting.**

18. Discussion on garbage disposal onboard vessels

All contracting parties are eagerly awaiting the reply from the Scientific Council who were requested by Commission to provide STACTIC with more (if any) information and data on garbage disposal at sea. Canada understood the value of the information from Scientific Council but stressed the need to continue to advance this issue with the NAFO CEMs. Canada provided an anonymized photographic display of what inspectors are too often encountering in the NRA, demonstrating the existence of this issue which warrants attention. Norway was of the opinion that NAFO should include a reference to MARPOL ANNEX V in the NAFO CEM. STACTIC also recommends that the WG-OPR discuss the possibility of observers collecting information on garbage disposal aboard vessels.

It was **agreed** that:

- **The WG-OPR incorporate the discussion regarding observers collection of data pertaining to garbage disposal at sea.**
- **STACTIC continues the discussion on garbage disposal after the feedback from the Scientific Council has been received.**

19. Visma VMS contract renewal

The Secretariat presented STACTIC WP 22-49 which is the draft recommendations from STACFAD. The working paper was in favor of not going to tender due mainly to the additional cost and effort involved in changing providers. STACTIC noted and supported STACFAD's recommendation to not go to tender, however, STACTIC would like the option of a tender to be considered in the future. Tender will not be needed at this time.

It was **agreed** that:

- **STACTIC noted that STACFAD recommended to the NAFO Commission that the VMS contract with VISMA will be extended.**

20. Other business

Domestic Haul time definitions

STACTIC WP 22-46 (Rev. 3) was presented as agreed at the 2022 STACTIC intersessional Meeting with the goal of forwarding the working paper to WG-EAFFM for incorporation into the Practices and Procedures. The working paper was missing some delegations that were incorporated in STACTIC WP 22-46 (Rev. 4). It was agreed that a deadline be set for 15 October 2022 for any additional or editorial information. After that deadline, the Secretariat will forward the working paper to WG-EAFFM. It was also mentioned that the WG-OPR could add this to their ToR, as mentioned under agenda item 8 for the discussion regarding STACTIC WP 22-44.

It was **agreed** that:

- **All contracting parties are invited to submit their domestic haul times to the NAFO Secretariat for incorporation into STACTIC WP 22-46 (Rev. 4) prior to 15 October 2022.**
- **After 15 October 2022, STACTIC WP 22-46 (Rev. 4) will be sent to WG-EAFFM with the goal of incorporated into the Practices and Procedures.**

21. Election of Chair and vice-Chair

In accordance with Rule 5.3 of the NAFO Rules of Procedure for the Commission, the current Chair, Kaire Martin (European Union), opened the floor for nominations of the interim STACTIC Chair to serve out the remainder of her term. With great sorrow of letting the current Chair go, all Contracting Parties agreed to nominate the current vice-Chair, Patrick Moran (United States of America), as the interim Chair for 2023. Patrick graciously accepted the nomination and will commence STACTIC Chair duties after the 2022 Annual Meeting.

It was **agreed** that:

- **Patrick Moran (United States of America) was elected the interim STACTIC Chair to commence duties after the 2022 Annual Meeting. Election of the STACTIC Chair will take place at the 2023 Annual Meeting.**

22. Time and Place of next meeting

The next STACTIC intersessional Meeting will be scheduled during the beginning of the week of 08 May 2023. If the meeting can be held in person, it will be a 3-day meeting, and if the meeting will be held virtually, it will be a 4-day meeting. If the meeting can be held in person, it will take place at the NAFO Secretariat in Halifax, Canada, unless another Contracting Party offers to host.

23. Adoption of Report

The report was adopted on 22 September 2022, prior to the adjournment of the meeting.

24. Adjournment

The meeting was adjourned at 06:40pm (GMT+1) on 22 September 2022.

Annex 1. List of Participants

Märting, Kaire (EU)	STACTIC Chair
Barbour, Natasha Browne, Dion Hickey, Jenelle (virtual) Hurley, Mike Napier, Brent Warren, Genevieve (virtual)	Canada
Jacobsen, Petur Meinhard (virtual) Levring Radoor, Sanne Rømer Nedergaard, Mads Gaardlykke, Meinhard	Denmark (in respect of the Faroe Islands and Greenland)
Bulauskis, Alenas Chamizo, Carlos Ferreira, Carlos Härm, Egle (virtual) Arrhenius, Fredrik Head, François Babcionis, Genadijus Eliassen, Jørgen Romaite, Kristina Mancebo, C. Margarita Santos, Mario Grossmann, Meit Quintans, Miguel Okas, Reemet Tubío, Xosé	European Union
Chiarovano, Serge	France (in Respect of St. Pierre et Miquelon)
Asmundsson, Johann Greil, Snorre	Iceland
Akiyama, Masahiro Matsunaga, Satoshi	Japan
Myrvang, Runa Ognedal, Hilde	Norway
Kim, Soomin (virtual)	Republic of Korea
Lizogub, Alexander (virtual)	Russian Federation
Seales, Star	United Kingdom
Day, Lennie Jaburek, Shannah Moran, Patrick (virtual) Pohl, Katherine	United States of America

Provencher, Eric (virtual) Raymond, Maggie Reid, Eric (virtual) Soule, Hank Usher, Rick	
Kendall, Matt Laycock, DJ Soroka, Mikaela	NAFO Secretariat

Annex 2. Agenda

1. Opening by the Chair, Kaire Märtin (European Union)
2. Appointment of Rapporteur
3. Adoption of Agenda
4. STACTIC participation
5. Compliance review 2022 including review of apparent infringement reports and of chartering arrangements
6. Review of Article 30 of the NAFO CEM
7. NAFO MCS website and application development
8. New and pending proposals on enforcement measures: Possible revisions of the NAFO CEM
9. Review of Article 7 of the NAFO CEM
10. Review of current IUU list pursuant to NAFO CEM Article 53
11. Practical application of Port State Measures in NAFO
12. Marking of gears
13. Report and Recommendations of the Editorial Drafting Group (EDG)
14. Report and advice of the Joint Advisory Group on Data Management (JAGDM)
15. Bycatch and discards
16. Review and evaluation of Practices and Procedures
17. Implementation of the Performance Review recommendations
18. Discussion on garbage disposal onboard vessels
19. Visma VMS contract renewal
20. Other Business
21. Election of Chair and vice-Chair
22. Time and place of next meeting
23. Adoption of report
24. Adjournment

**Annex 3. Recommendations from the Observer Program Review Working Group (WG-OPR) 2022
Meeting that have been endorsed by STACTIC
(STACTIC WP 22-48 (Rev. 2))**

The WG-OPR presented a summary of its recommendations to STACTIC. STACTIC reviewed and edited the recommendations and present their endorsed recommendation.

STACTIC Recommendations based on recommendations from WG-OPR:

#	Recommendations from the WG-OPR	Article	Recommendations Endorsed by STACTIC
1	The WG-OPR recommends a number of tasks to carry out a full update of the Observer Program by 2023 without prejudice to the possibility to amend some elements of the program in 2022, which is identified as a priority.	30	The WG-OPR recommends a number of tasks to carry out a full update of the Observer Program by 2023 without prejudice to the possibility to amend some elements of the program in 2022, which is identified as a priority.
2	The WG-OPR recommends establishing a clear mandate for the flag State Contracting Parties to adopt appropriate measures necessary to effectively comply with their responsibilities under the observer program.	30	The WG-OPR recommends establishing a clear mandate for the flag State Contracting Parties to adopt appropriate measures necessary to effectively comply with their responsibilities under the observer program.
3	The WG-OPR recommends assessing the need to update Article 38 on serious infringements when undertaking changes to the observer program.	38	The WG-OPR recommends assessing the need to update Article 38 on serious infringements when undertaking changes to the observer program.
4	The WG-OPR recommends to revise the use of the expression “trip” and “entry into port” in the wording of Art 30, in light of the definition of fishing trip in the NCEM and with a view to clarify the reporting requirements.	30	The WG-OPR recommends to revise the use of the expression “trip” and “entry into port” in the wording of Art 30, in light of the definition of fishing trip in the NCEM and with a view to clarify the reporting requirements.
5	The WG-OPR recommends to undertake an editorial revision of the program, including grouping general provisions and flag State Contracting Parties’ obligation; and to consider to move to Annex II.M the data elements to be reported by observers.	30	The WG-OPR recommends to undertake an editorial revision of the program, including grouping general provisions and flag State Contracting Parties’ obligation; and to consider to move to Annex II.M the data elements to be reported by observers.
6	The WG-OPR recommends considering derogations based only on exceptional and appropriately justified circumstances or the use of remote electronic monitoring and equivalent sensor technologies.	30.6	The WG-OPR recommends considering derogations based on appropriately justified circumstances as described in Article 30.6 a)- e) or the use of remote electronic monitoring and equivalent sensor technologies.

7	The WG-OPR recommends to consider the use of REM and equivalent sensor technologies as justification to derogate from a 100% observers' coverage. In connection with this option, the Working Group recommends to develop minimum standards for the system and to identify scientific data that the system could not provide, as well as appropriate alternatives to collect this data (e.g. by the operator).	30.6.d	The WG-OPR recommends to consider the possibility of using REM and equivalent sensor technologies as justification to derogate from a 100% observers' coverage, including questions regarding data storage and retrieval, data standards, data protection and sharing, ownership and maintenance. In connection with this option, the Working Group recommends to develop minimum standards for the system and to identify scientific data that the system could not provide, as well as appropriate alternatives to collect this data (e.g. by the operator).
8	The WG-OPR recommend to STACTIC that Contracting Parties share information on their REM and equivalent sensor technologies experiences including successes and any challenges faced.	30.6.d	The WG-OPR recommend to STACTIC that Contracting Parties share information on their REM and equivalent sensor technologies experiences including successes and any challenges faced.
9	The WG-OPR recommends the drafting of templates for Contracting Parties' reporting obligations including 30.6.e, 30.9.c, and 30.10.d.	30.6.e, 30.9.c, 30.10.d	The WG-OPR recommends the drafting of templates for Contracting Parties' reporting obligations including 30.6.e, 30.9.c, and 30.10.d.
10	The WG-OPR recommends to establish a common understanding on the meaning of the requirement to ensure that observers are equipped with an independent two-way communication device at sea", in particular whether it entails an independent data connection or only an independent device; as well as, for the latter case, to consider the introduction of an obligation of the Master to provide a data connection for the observer.	30.8.e	The WG-OPR recommends to establish a common understanding on the meaning of the requirement to ensure that observers are equipped with an independent two-way communication device at sea", in particular whether it entails an independent data connection or only an independent device; as well as, for the latter case, to consider the introduction of an obligation of the Master to provide a data connection for the observer.
11	The WG-OPR recommends compiling "international standards or guidelines"..	30.8.f	The WG-OPR recommends compiling "international standards or guidelines"..
12	The WG-OPR recommends developing common standards (e.g. training, equipment, working conditions, safety, etc) to be made part of the Observer Program. This task can be linked to the research and identification of international standards and guidelines referred to in Art 30.8(f) of the NAFO CEM.	30.8.f	The WG-OPR recommends considering developing common standards with regard to training and equipment, unless such standards or guidelines already exist.),
13	The WG-OPR recommends to simplify the 24h observer deployment notification under Article 30.10(a) of the NAFO CEM.	30.10.a	The WG-OPR recommends to simplify the 24h observer deployment notification under Article 30.10(a) of the NAFO CEM.

14	The WG-OPR recommends to undertake a revision of Annex II.M to incorporate additional elements (e.g. Greenland sharks' data) and to update the associated templates.	30.14	The WG-OPR recommends to undertake a revision of Annex II.M to incorporate additional elements (e.g. Greenland sharks' data) and to update the associated templates.
15	The WG-OPR recommends including within the observers' tasks the verification of average box weights and presentations. In adding these tasks, the frequency or scenarios for that verification must give due regard to the already many tasks of the observers.	30.14	The WG-OPR recommends including within the observers' tasks the verification of average box weights and presentations. In adding these tasks, the frequency or scenarios for that verification must give due regard to the already many tasks of the observers.
16	The WG-OPR recommends that the requirements to verify production logbook data and labelling be made more explicit in the NAFO CEMs.	30.14	The WG-OPR recommends that the requirements to verify production logbook data and labelling be made more explicit in the NAFO CEMs.
17	The WG-OPR recommends to establish the observer application as a main tool for the observers to carry out their reporting obligations and to explore the necessary steps to be undertaken including by the NAFO Secretariat to produce and maintain the observer application.	30.14	The WG-OPR recommends to establish the observer application as a main tool for the observers to carry out their reporting obligations and to explore the necessary steps to be undertaken including by the NAFO Secretariat to produce and maintain the observer application.
18	The WG-OPR recommends that STACTIC review the wording of 30.14.g.	30.14.g	The WG-OPR recommends that STACTIC review the wording of 30.14.g.
19	The WG-OPR recommends to include as part of the revision of the observers' reporting template (Annex II.M) information on maturity, disposition, pictures and fork length of Greenland sharks, and to the extent necessary, location; as well as an indication that data collection is done minimizing damage to the sampled individuals.	30.14.j	The WG-OPR recommends to include as part of the revision of the observers' reporting template (Annex II.M) information on maturity, disposition, pictures and fork length of Greenland sharks, and to the extent necessary, location; as well as an indication that data collection is done minimizing damage to the sampled individuals.
20	The WG-OPR recommends to seek the Scientific Council's input on STACTIC WP 21-49 Rev 3 as well as any resulting proposal.	30.14.j	The WG-OPR recommends to seek the Scientific Council's input on STACTIC WP 21-49 Rev 3 as well as any resulting proposal.
21	The WG-OPR recommends clarifying the wording of 30.16, linking the cost to the deployment of the observer.	30.16	The WG-OPR recommends clarifying the wording of 30.16, linking the cost to the deployment of the observer.
22	The WG-OPR recommends that the Duties of the Executive Secretary (30.18) are revised in light of the changes adopted in the observer program and that an assessment on the need to allocate appropriate resources to the Secretariat is carried out.	30.18	The WG-OPR recommends that the Duties of the Executive Secretary (30.18) are revised in light of the changes adopted in the observer program and that an assessment on the need to allocate appropriate resources to the Secretariat is carried out.

23			STACTIC recommends to further discuss how Contracting Parties ensure that observers execute their duties in an unbiased manner, free from undue influence or benefit linked to the fishing activity of the vessel, in accordance with Article 32.2 and are independent and impartial in accordance with Article 30.4
----	--	--	--