

Northwest Atlantic Fisheries Organization



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

43rd Annual Meeting of NAFO
20-24 September 2021
via WebEx

NAFO
Halifax, Nova Scotia, Canada
2021

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

43rd Annual Meeting of NAFO, 20-24 September 2021
via WebEx

PART I. Report of the NAFO Commission.....	6
I. Opening Procedure.....	6
1. Opening by the Chair, Stéphane Artano (France, in respect of St. Pierre et Miquelon)	6
2. Appointment of Rapporteur	6
3. Adoption of Agenda	6
4. Admission of Observers.....	6
5. Publicity	6
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	7
13. Report of Executive Secretary on External Meetings.....	7
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.....	8
d. Possible 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	9
16. Implementation of 2018 Performance Review Panel recommendations	9
17. Presentation of scientific advice by the Chair of the Scientific Council.....	9
a. Response of the Scientific Council to the Commission's request for scientific advice	9
b. Feedback to the Scientific Council regarding the advice and its work during this meeting.....	10
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	11
a. Joint Commission-Scientific Council Working Group on Improving Efficiency of NAFO Working Group Process (E-WG), 2021	11
b. Joint Commission-Scientific Council Working Group on Risk-based Management Strategies (WG-RBMS), August 2021	12

Report of the NAFO Commission, 20-24 September 2021

c.	Joint Commission–Scientific Council Working Group on Ecosystems Approach Framework to Fisheries Management (WG-EAFFM), July 2021	12
d.	Joint Commission–Scientific Council Catch Estimation Strategy Advisory Group (CESAG), April 2021	12
19.	Formulation of Request to the Scientific Council for Scientific Advice on the Management in 2023 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 2021 (if more discussion is required)	13
21.	Management and Technical Measures for Fish Stocks in the Regulatory Area, 2022	13
a.	Cod in Division 3M	13
b.	Redfish in Division 3M	14
c.	Pelagic <i>Sebastes mentella</i> (oceanic redfish) in Sub-area 2 + Divisions 1F and 3K	14
d.	Shrimp in Division 3M	14
e.	Splendid alfonso in Sub-Area 6	14
22.	Management and Technical Measures for Fish Stocks Straddling National Jurisdictions, 2022	15
a.	Cod in Divisions 3NO	15
b.	American plaice in Divisions 3LNO	15
c.	Yellowtail flounder in Divisions 3LNO	15
d.	Witch flounder in Divisions 3NO	15
e.	White hake in Divisions 3NO	15
f.	Capelin in Divisions 3NO	15
g.	Greenland halibut in Sub-area 2 and Divisions 3KLMNO	15
h.	Shrimp in Divisions 3LNO	15
23.	Other matters pertaining to Conservation of Fish Stocks	15
VI.	Ecosystem Considerations	15
24.	Recommendations of the Joint Commission–Scientific Council Working Group on Ecosystems Approach Framework to Fisheries Management (WG-EAFFM), July 2021 (if more discussion is required)	15
25.	Other matters pertaining to Ecosystem Considerations	16
VII.	Conservation and Enforcement Measures	16
26.	Recommendations of the Joint Commission–Scientific Council Catch Estimation Strategy Advisory Group (CESAG), April 2021 (if more discussion is required)	16
27.	Meeting Report and Recommendations of the Ad hoc Working Group on Bycatches, Discards, and Selectivity (WG-BDS) in the NAFO Regulatory Area, July 2021	16
28.	Report of STACTIC from this Annual Meeting and Recommendations	16
29.	Other matters pertaining to Conservation and Enforcement Measures	17
VIII.	Finance and Administration	17
30.	Report of STACFAD from this Annual Meeting	17
31.	Adoption of the 2022 Budget and STACFAD recommendations	18
IX.	Closing Procedure	18

32.	Other Business.....	18
33.	Election of Chair and vice-Chair.....	18
34.	Time and Place of Next Annual Meeting	18
35.	Press Release.....	19
36.	Adjournment	19
	Annex 1. Summary of Decisions and Actions of the Commission from the 43rd Annual Meeting of NAFO	20
	Annex 2. Provisional Agenda.....	21
	Annex 3. Participant List.....	23
	Annex 4. Opening Statement by the NAFO President	38
	Annex 5. Opening Statement by the Delegation of 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 the United States of America (USA)	44
	Annex 10. Opening Statement by the Deep Sea Conservation Coalition (DSCC)	45
	Annex 11. Opening Statement by the Ecology Action Centre (EAC).....	46
	Annex 12. Opening Statement by the North Pacific Anadromous Fish Commission (NPAFC).....	47
	Annex 13. SC Response to Feedback Questions Regarding its Scientific Advice – United Kingdom.....	48
	Annex 14. Scientific Council Recommendation on Research Surveys in the NRA.....	52
	Annex 15. Statement of DFG with Respect to COM-SC WP 21–15 " <i>Scientific Council recommendation on research surveys in the NRA</i> "	53
	Annex 16. Recommendations of the Joint Commission-Scientific Council Working Group on Improving Efficiency of NAFO Working Group Process (E-WG)	54
	Annex 17. Recommendations of the Joint Commission-Scientific Council Working Group on Risk-Based Management Strategies (WG-RBMS).....	55
	Annex 18. Canadian Deliverables to Advance Review of 3LN Redfish Management Strategy (Information Paper Presented by Canada).....	56
	Annex 19. Recommendations of the Joint Commission-Scientific Council Working Group on Ecosystem Approach Framework to Fisheries Management (WG-EAFFM)	57
	Annex 20. Revision of Seamounts Closures.....	63
	Annex 21. Recommendations of the Joint Commission-Scientific Council Catch Estimation Strategy Advisory Group (CESAG).....	67
	Annex 22. The Commission's Request for Scientific Advice on Management in 2023 and Beyond of Certain Stocks in Subareas 2, 3 and 4 and Other Matters	68
	Annex 23. SC Chair Update regarding the Greenland Halibut Harvest Control Rule	74
	Annex 24. 2022 Quota Table and Effort Allocation Scheme for the Shrimp Fishery in NAFO Division 3M, 2022	75

Report of the NAFO Commission, 20-24 September 2021

Annex 25. Joint Statement to notify NAFO of the TCA agreement regarding 3M cod (European Union and the United Kingdom).....	79
Annex 26. Measure to Protect Vulnerable Marine Ecosystems	80
Annex 27. Recommendations from the NAFO Ad hoc Working Group to Reflect on the Rules Governing Bycatches, Discards and Selectivity (WG-BDS).....	85
Annex 28. Change to Article 5.15.f of the NAFO CEM	86
Annex 29. Insertion of reference to Annex II.I Part B in NAFO CEM Annex IV.A	87
Annex 30. Measures Concerning Vessels Demonstrating Repeat Non-compliance of Serious Infringements in the NAFO Regulatory Area	88
Annex 31. Legend for Annex I.A of the NAFO CEM.....	90
Annex 32. List of serious infringements: use of sorting grids – NAFO CEM Article 38.1.g.....	94
Annex 33. Observer data collection.....	95
Annex 34. NAFO CEM Article 7 and Article 7 bis realignment and Extension of Port State control measures	97
Annex 35. NAFO CEM Article 10 – Greenland Halibut	101
Annex 36. Bycatch limits for the “ <i>Others</i> ” quota – NAFO CEM Article 6.3.e	102
Annex 37. Bycatch limits during Quarter 1 closure – NAFO CEM Article 5.5.j.....	103
Annex 38. Annual Fisheries and Compliance Review 2021 (Compliance Report for Fishing Year 2020)	104
Annex 39. Measure to Revise NAFO CEM Article 4 to Limit Scientific Catches of 3M Cod and 3M Shrimp in 2022	125
Annex 40. 2021 Press Release	127
 PART II. Report of the Standing Committee on International Control (STACTIC)	 129
PART III. Report of the NAFO Standing Committee on Finance and Administration (STACFAD)	145

PART I. Report of the NAFO Commission

43rd Annual Meeting of NAFO, 20-24 September 2021
via WebEx

I. Opening Procedure

1. Opening by the Chair, Stéphane Artano (France, in respect of St. Pierre et Miquelon)

The 43rd Annual Meeting of NAFO was opened on Monday, 20 September 2021 at 08:05 hrs. Due to the global pandemic, the meeting was held by videoconference. A total of 212 Delegates was present from the 13 NAFO Contracting Parties (Annex 3). The NAFO President and Chair of the Commission, Stéphane Artano (France, in respect of St. Pierre et Miquelon) welcomed delegates to the meeting in his opening remarks (Annex 4).

Opening statements from Canada, Denmark (in respect of the Faroe Islands and Greenland), European Union, Japan and the United States of America (USA) are attached (Annexes 5-9).

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 adopted as previously circulated to all Contracting Parties in NAFO/21-165 (Rev. 2) on 23 July 2021 (Annex 2).

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

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: ABNJ Deep-Sea Fisheries Project, Convention on Biological Diversity Secretariat, Food and Agriculture Organization (FAO) of the United Nations, North-East Atlantic Fisheries Commission (NEAFC), North Pacific Anadromous Fish Commission (NPAFC) and the Western Central Atlantic Fishery Commission (WECAFC).

The NPAFC provided an Opening Statement (Annex 12).

The non-governmental organizations (NGOs) accredited with NAFO Observer Status that attended the 43rd Annual Meeting were: Dalhousie – Environment Information: Use and Influence, Dalhousie University – Marine & Environmental Law Institute, Deep Sea Conservation Coalition, Ecology Action Centre (EAC) and the Shark Trust.

The Deep Sea Conservation Coalition and Ecology Action Centre (EAC) provided Opening Statements for inclusion in the report (Annexes 10 and 11).

5. Publicity

In accordance with established practice, the President reminded Contracting Parties that they have agreed that no public statements 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. 21-05 Rev.) was referred to STACFAD for its review.

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

The recruitment process for the NAFO Executive Secretary was referred to STACFAD.

9. NAFO Headquarters Agreement

Canada provided a Working Paper indicating that it expects to ratify the Headquarters Agreement by the spring of 2022 (COM WP 21-33). The President noted that the signed Headquarters Agreement was circulated to Contracting Parties in 2019 in NAFO/19-162.

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

The President referred to COM Working Paper 21-06 that listed, as of 31 August 2021, 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 Administrative Report and Financial Statements (agenda item 7) and the Recruitment of NAFO Executive Secretary for the 2023-2026 term (agenda item 8) were already referred to STACFAD for its review. The Chair of STACFAD, Robert Fagan (Canada), was invited to prepare a report before the closing session. The STACFAD report and recommendations were presented under agenda item 31.

12. Guidance to STACTIC

The President noted that a number of recommendations of Joint Commission–Scientific Council Working Groups that are up for adoption at this meeting would be referred to STACTIC. The Chair of STACTIC, Kaire Märtin (European Union), was invited to prepare a report before the closing session. The STACTIC report and recommendations, including the recommendations from the STACTIC Intersessional Meeting in May 2021, were presented under agenda item 28.

III. Coordination of External Affairs

13. Report of Executive Secretary on External Meetings

The President referred to COM Working Paper 21-29 in which the Executive Secretary reports on NAFO's participation in external activities since the 2020 Annual Meeting.

14. International Relations

a. Relations with other International Organizations

The President 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 21-14) and concerning NAFO's international relations with other international organizations (COM WP 21-13).

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 2020/2021:

- 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).
- Norway would represent NAFO at the South East Atlantic Fishery Organisation (SEAFO) and 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 21-30), NPFC (COM WP 21-31), NEAFC (COM WP 21-36), ICCAT (COM WP 21-24), SIOFA (COM WP 21-25), SEAFO (COM WP 21-26), NAMMCO (COM WP 21-27), CCAMLR (COM WP 21-34), NPAFC (COM WP 21-46) and SPRFMO (COM WP 21-35).

The same Contracting Parties agreed to represent NAFO at the same meetings for 2021/2022 with the exception of SEAFO. As Norway is withdrawing from SEAFO, it cannot be a NAFO observer to its meetings. Japan agreed to represent NAFO at future meetings of SEAFO and report to the Commission.

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

The Executive Secretary referred to COM Working Paper 21-32 concerning the NAFO Secretariat's proposal that the Organization becomes a partner to the GEF project "*Deep-sea Fisheries under the Ecosystem Approach*" that is managed by the FAO ("*ABNJ Deep Sea Fisheries Project*"). This proposal was discussed at the July 2021 meeting of the Joint Commission–Scientific Council Working Group on the Ecosystem Approach Framework to Fisheries Management (WG-EAFFM), which recommended that the Commission support the ABNJ Deep Sea Fisheries Project, including offering in-kind support from NAFO as a partner to this Project.

Following this recommendation, the Secretariat estimated that NAFO could commit only in-kind support in the amount of approximately USD 3.03 million over the 5-year term (2022–2027). Much of the in-kind support would focus on the component of the Project concerning "*strengthening effective management of deep-sea fisheries*" and would involve the work of almost all NAFO bodies, including those focused on the revision of the NAFO Precautionary Approach Framework (PAF) and the implementation of an Ecosystem Approach Framework (EAF) to fisheries management.

The Commission agreed that:

- **NAFO becomes a partner to the “Deep-sea Fisheries Project” and commit only in-kind support in the amount of approximately USD 3.03 million over the Project’s 5-year term (2022–2027).**

Following this agreement, the Executive Secretary will prepare NAFO’s letter of commitment to the Project.

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

The President referred to COM Working Paper 21-21 concerning the possibility of signing a Memorandum of Understanding (MOU) between the NAFO Secretariat and the Secretariat of the Sargasso Sea Commission (SSSC). A draft text of a possible MOU has already been discussed by the Scientific Council and the July 2021 meeting of the Joint Commission–Scientific Council Working Group on the Ecosystem Approach Framework to Fisheries Management (WG-EAFFM). The WG-EAFFM recommendation that the Commission support the development of an MOU between the SSSC and the NAFO Secretariat was presented under agenda item 18.c.

15. Oil and Gas Activities in the NAFO Regulatory Area

The President referred to COM Working Paper 21-16 prepared by the Executive Secretary 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 (NRA). The Secretariat has also relayed to Contracting Parties notifications of the Impact Assessment Agency of Canada (IAAC) concerning its assessments of proposed drilling sites in the NRA, as well as industry Notices to Mariners when a drillship is expected to transit through the NRA.

IV. Joint Session of Commission and Scientific Council

16. Implementation of 2018 Performance Review Panel recommendations

The President referred to the COM Working Paper 21-17 that outlined the status of the implementation of the recommendations of the 2018 Performance Review Panel.

As agreed at the 2019 Annual Meeting, the NAFO Secretariat will provide an annual update on progress the Organization has made in addressing the recommendations of the 2018 Performance Review Panel on the basis of the “*Action Plan for the Implementation of the Recommendations from the 2018 Report of the NAFO Performance Review Panel*” (COM Doc. 19-32).

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), Carmen Fernandez (European Union), presented this year’s scientific advice. The advice represents the response of SC to the request from the Commission (COM Doc. 20-16). The scientific advice on fish stocks and on other topics were formulated mainly during the SC meeting in June 2021 (SCS Doc. 21/14 Rev.), except for the shrimp stocks in 3M and in 3LNO, which were formulated on 08 September 2021 during the NAFO/ICES *Pandalus* Assessment Group (NIPAG) meeting (SCS Doc 21-17).

The advice relating to risk-based management strategies, ecosystem approach to fisheries management, and bycatch and discards was taken on by Working Groups at their subsequent meetings (see agenda items 18.b, 17.c, and 27). A summary of the SC 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	SC Advice
Cod in Div. 3M	Yield of less than or equal to 5 000 tonnes in 2022 results in a very low probability ($\leq 10\%$) of SSB being below B_{lim} in 2023 and a very low probability of exceeding F_{lim} . However, given the present low level of the SSB and projected decline of total biomass under any fishing scenario, in order to promote growth in SSB, SC advises catches of no more than 3 000 tonnes in 2022.
Redfish in Div. 3M	SC advises that catches do not exceed $F_{0.1}$ level, given the life history of the stock. This corresponds to a TAC of 10 933 t in 2022 and 11 171 t in 2023.
Shrimp in Div. 3M	To be consistent with the precautionary approach, SC advises that no directed fishery should occur in 2022.
Cod in Divs. 3NO	No directed fishing in 2022 to 2024 to allow for stock rebuilding.
American plaice in Divs. 3LNO	In accordance with the rebuilding plan, there should be no directed fishing on American plaice in Div. 3LNO in 2022, 2023 and 2024. Bycatch of American plaice should be kept to the lowest possible level and restricted to unavoidable bycatch in fisheries directing for other species.
Yellowtail founder in Divs. 3LNO	Fishing mortality up to 85% F_{msy} , corresponding to catches of 22 100 t, 20 800 t, and 19 900 t in 2022 to 2024 respectively, have risk of no more than 30% of exceeding F_{lim} .
White hake in Divs. 3NOPs	For 2022-2023, catches of white hake in 3NO should not increase. Average annual total catches of the most recent five years were around 400 tonnes.
Capelin in Divs. 3NO	For 2022-2024, no directed fishery.
Greenland halibut in Divs. 2+3KLMNO	The TAC for 2022 derived from the HCR is 15 864 t. This is 4% lower than the 2021 TAC (16 498 t). Exceptional Circumstances are not occurring. The disruption of the 2021 Canadian Spring 3LNO survey, in addition to the years 2020 and 2017, will trigger Exceptional Circumstances next year.
Shrimp in Divs. 3LNO	No directed fishery in 2022 and 2023 as the stock is below B_{lim} with no indication of short-term recovery.

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

A feedback question pertaining to 3M cod was forwarded to SC. Specifically, it asked about the impact of the June 2021 Faroese 3M cod survey catches on the advice provided for 2022. A total of 630.6 tonnes, equating to an additional 42% of the agreed TAC for 2021, was caught during the survey. The SC response to the question was drafted at this meeting (Annex 13 – COM WP 21-42).

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

The SC Chair brought forward two issues:

- SC noted that with the information currently available, SC considers the Faroe Islands 3M cod survey initiative conducted in June 2021 did not fulfil the requirements of a valid scientific survey and more closely resembles a commercial fishery. SC further noted that protocols from Article 4 in the Conservation and Enforcement Measures (NAFO COM Doc. 21/01) do not require review of proposed survey research plans and confirmation of their scientific validity by SC. In this regard, SC recommends that the Commission amend this procedure to include a scientific review of proposed research surveys in the NAFO Regulatory Area (NRA) to ensure scientific best practices are followed (Annex 14 – COM-SC WP 21-15).

In reaction to this recommendation, Denmark (in respect to Faroe Islands and Greenland) issued a statement (Annex 15 – COM-SC WP 21-16).

The deliberations in addressing the issue of the Faroese survey continued at the Commission. They are reflected in the agenda items 21.a, and 28 in this report.

- In presenting the SC response to the Commission request pertaining to the development of a 3–5-year work plan and recalling the discussions at the Joint Commission-Scientific Council Working Group on Risk-based Management Strategies (WG-RBMS) meeting in August 2021, the SC Chair raised concern with regards the prioritization of SC tasks. SC presented a detailed schedule and timeline outlining resource requirements in the performance of all its tasks, among which three major tasks are the PA framework review, a review and evaluation of the Greenland halibut management strategy, and the development and evaluation of a management strategy for 3LN redfish. SC noted that the PA framework review is already underway, and that it expects the Greenland halibut process to take two years and the 3LN redfish process to take three years. Given the current workload and resources available, SC indicated that it cannot perform these three major tasks simultaneously and proposed that one of the two Management Strategy Evaluations (Greenland halibut or 3LN redfish) be postponed.

Further discussions on this issue are reflected in agenda items 18.b and 20.

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 Executive Secretary referred to COM-SC Working Paper 21-06, 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 04 March 2022,
- 25 April to 06 May 2022, and
- 08 to 19 August 2022.

Contracting Parties are not obliged to schedule meetings during these periods, but these dates may help in future planning of intersessional meetings.

The recommendations of the Working Group were **adopted** (Annex 16 – COM-SC WP 21-06). The Commission also agreed that this Working Group continue in 2022 under the same terms of reference.

b. Joint Commission–Scientific Council Working Group on Risk-based Management Strategies (WG-RBMS), August 2021

The co-Chairs, Fernando Gonzalez (European Union) and Ray Walsh (Canada), presented the August 2021 meeting report (COM-SC Doc. 21-04) and the recommendations (COM-SC WP 21-07):

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

- PAF Review,
- Greenland halibut Management Strategy Evaluation (MSE),
- 3LN Redfish MSE,
- Prioritization of the three tasks above.

The recommendations of WG-RBMS were **adopted** (Annex 17 – COM-SC WP 21-07).

The co-Chairs also highlighted the issue of the prioritization among the two MSEs and the PAF review. No consensus was reached at the WG-RBMS meeting. While SC expressed that it would be extremely difficult to perform the tasks simultaneously, Canada, on the other hand, indicated that it had allocated funding for a position dedicated to the 3LN redfish MSE review, and considers that this will ease the workload on SC allowing both MSEs to proceed simultaneously.

At this session, the detailed schedule and timeline presented by SC outlining resource requirements in the performance of its tasks, including the PAF review and the simultaneously performance of the two MSEs, was further discussed. Canada informed about its planned deliverables for the coming year in advancing the review of 3LN MSE (Annex 18 – COM-SC WP 21-12). Further discussions on this issue continued again at the separate sessions of the Commission and SC (see agenda item 20).

c. Joint Commission–Scientific Council Working Group on Ecosystems Approach Framework to Fisheries Management (WG-EAFFM), July 2021

The co-Chairs, Andrew Kenny (United Kingdom) and Elizabethann Mencher (United States of America), presented the July 2021 meeting report (COM-SC Doc. 21-03) and the recommendations (COM-SC WP 21-08 Rev.).

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

- Significant Adverse Impact (SAI)
- Vulnerable Marine Ecosystem (VME) closures
- EAF Roadmap and the 2022 Workshop
- Review of Chapter II – NAFO CEM measures.

The recommendations of WG-EAFFM were **adopted** (Annex 19 – COM-SC WP 21-08 Rev.).

In addition, the proposal revising the boundaries of Fogo, Corner Rise and Newfoundland Seamount closures was **adopted** (Annex 20 – COM-SC WP 21-13).

d. Joint Commission–Scientific Council Catch Estimation Strategy Advisory Group (CESAG), April 2021

The President referred to the report of the April 2021 meeting of CESAG (COM-SC Doc. 21-02) and its recommendations (COM-SC WP 21-09).

Report of the NAFO Commission, 20-24 September 2021

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

- 2020 catch estimates conducted by the Secretariat and forwarded to SC,
- Observer program best practices.

The recommendations of CESAG were **adopted** (Annex 21 – COM-SC 21-09).

19. Formulation of Request to the Scientific Council for Scientific Advice on the Management in 2023 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 SC Coordinator and representatives from Canada and European Union.

The Request, developed with the assistance of the committee, was **adopted** (Annex 22 – COM WP 21-43 Rev. 3). Request items pertaining to fish stock assessments, 2+3KLMNO Greenland halibut and 3LN redfish MSE processes, Precautionary Approach Framework (PAF) are considered the priority items for the June 2022 SC 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 2021 (if more discussion is required)

In reference to the prioritization issue described in agenda item 17c and 18b and pertaining to the Greenland halibut Harvest Control Rule, SC expressed that short-term extension of the management regime beyond 2023 does not pose any problem from a scientific perspective (Annex 23 – COM WP 21-44).

With the SC explanation and conclusion outlined in Annex 23 (COM WP 21-44), and the Canadian input commitment to the 3LN Redfish MSE (see agenda item 17.b and Annex 18 – COM-SC WP 21-12), the Commission considered that it is possible to perform the two MSEs simultaneously under revised timelines.

21. Management and Technical Measures for Fish Stocks in the Regulatory Area, 2022

The Quota Table and the Effort Allocation Scheme for Shrimp Fishery in NAFO Division 3M for 2022, presented in Annex 24, 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 4 000 tonnes for 2022.

The TAC represents a compromise among the TAC proposals which ranged from 3 000 to 5 000 tonnes. The flanking measures, such as time-area fishing limitations, port landing inspections and use of sorting grids designed to protect the spawning stock and juvenile cod were extended to 31 December 2022 (see agenda item 28).

Japan reiterated its understanding that SC would continue to review the effectiveness of the flanking measures, as agreed at the 42nd Commission meeting.

Referring to the 3M Cod survey conducted in the Flemish Cap in June 2021 (see item 17.c), Canada issued a statement:

“Canada would like to express its profound concern over the excessive catch of 630 tonnes of cod in division 3M taken in 2021 by Denmark, in respect of the Faroe Islands, under the auspices of scientific research. This unilateral action seriously contradicts NAFO’s foundational commitments “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.”

The Scientific Council has stated that “the Faroe Islands 3M cod survey initiative does not fulfil the requirements of a valid scientific survey and more closely resembles a commercial fishery”. This harvest outside of an allocated quota puts at risk the conservation of this stock, which NAFO is charged to manage sustainably.

Canada is very disappointed by the erosion of trust that these actions have triggered, a shared trust that had been hard-fought within NAFO and had served the Commission well in recent years. Furthermore, the international credibility of NAFO and its Scientific Council as a leader among regional fisheries management organizations is something all Contracting Parties have worked for many years to achieve, is a source of pride for Contracting Parties, and should be strongly protected.

The first step to protect this trust and credibility is to ensure that this is never again permitted to occur. NAFO must take concrete steps to ensure that its conservation and enforcement measures are robust, and Canada remains committed to working with other Contracting Parties to achieve this objective.”

Norway supported the statement made by Canada.

In regard to the quota allocation and adjustments to the percentage shares of 3M Cod, the European Union and the United Kingdom issued a joint statement. It is presented in Annex 25 (COM WP 21-23).

b. Redfish in Division 3M

It was **agreed** on the TAC corresponding to the $F_{0.1}$ scenario, *i.e.*, 10 933 tonnes in 2022 and 11 171 tonnes in 2023.

c. 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 Quota Table.

d. Shrimp in Division 3M

It was **agreed** to impose a moratorium on the fishing of this stock for 2022.

The Commission will endeavour to have an in-person meeting before the next Annual Meeting to consider the transition from a fishing effort-based management scheme to a TAC-based scheme. Should the COVID-19 situation prevent an in-person meeting, a virtual one will be held.

e. Splendid alfonsino in Sub-Area 6

It was **agreed** to ban fishing of this stock indefinitely until SC could conduct full assessment of this stock and provide advice.

Report of the NAFO Commission, 20-24 September 2021

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

a. Cod in Divisions 3NO

It was **agreed** to maintain the moratorium applicable to 2022, 2023, and 2024.

b. American plaice in Divisions 3LNO

It was **agreed** to maintain the moratorium applicable to 2022, 2023, and 2024.

c. Yellowtail flounder in Divisions 3LNO

The Commission **agreed** on a TAC of 20 000 tonnes, applicable to 2022 and 2023.

d. Witch flounder in Divisions 3NO

It was **agreed** to rollover the TAC of 1 175 tonnes for 2022.

e. White hake in Divisions 3NO

It was **agreed** to rollover the TAC of 1 000 tonnes applicable to 2022 and 2023.

f. Capelin in Divisions 3NO

It was **agreed** to maintain the moratorium applicable to 2022, 2023, and 2024.

Consequently, Article 7.10 of the NAFO Conservation and Enforcement Measures (CEM) was revised to read:

“Considering the importance of capelin as a food source, the moratorium on 3NO capelin will continue until at least 31 December ~~2021~~2024.”

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

As calculated by SC and consistent with the MSE and HCR, it was **agreed** to set the TAC at 15 864 tonnes in 2+3KLMNO, 11 755 tonnes of which is allocated to the fishery in 3LMNO.

h. Shrimp in Divisions 3LNO

It was **agreed** to maintain the moratorium applicable to 2022 and 2023.

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), July 2021 (if more discussion is required)

In addition to the WG-EAFFM recommendation to extend the existing closed areas for an additional five years, which was **adopted** by the Commission under agenda item 18.c, the proposal to expand the boundaries of five (5) existing closed areas and to establish four (4) additional closures, on an interim period of two years, was **adopted** (Annex 26 – COM WP 21-41 Rev.).

Regarding the review of the EAF Roadmap, Canada expressed:

“Canada supports the independent review of the Ecosystem Roadmap under the condition that SC leads the process throughout, in selecting the reviewers and developing the Terms of Reference. The SC should select reviewers who have appropriate expertise in ecosystem and stock assessment science, and these reviewers should not work for any Contracting Party government.

As effectively the client, WG-EAFFM should have an opportunity to review the Terms of Reference developed by SC to ensure that the review will align with its expectations for this exercise.”

25. Other matters pertaining to Ecosystem Considerations

There was no further matter discussed under this agenda item.

VII. Conservation and Enforcement Measures

26. Recommendations of the Joint Commission–Scientific Council Catch Estimation Strategy Advisory Group (CESAG), April 2021 (if more discussion is required)

There was no further matter discussed under this agenda item.

27. Meeting Report and Recommendations of the Ad hoc Working Group on Bycatches, Discards, and Selectivity (WG-BDS) in the NAFO Regulatory Area, July 2021

The Chair of WG-BDS, Temur Tairov (Russian Federation), presented the meeting report (COM Doc. 21-04) and the recommendations (COM WP 21-18).

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

- Results of the re-analysis conducted by the Secretariat of the Haul by Haul data 2016-2019 (spatio-analysis) in further support of Tasks 2.1 and 2.2 of the Action Plan,
- SC response to Commission requests (in support to Tasks 2.2 and 3.1)
 - Survivability rates of discarded species,
 - Bycatch of moratoria stocks as impediment to recovery,
 - Greenland shark (*Somniosus microcephalus*) bycatch and discards
- Development of potential fishery- and time-specific management options in support of Task 4 for further discussion.

The recommendations were **adopted** (Annex 27 – COM WP 21-18).

Concerning Greenland shark, a proposal was tabled to amend NAFO CEM Article 12 (COM WP-21-40). The proposal did not gain consensus. The proponent, United States of America, indicated that it would continue working with other Contracting Parties in order to address this issue at the next Annual Meeting.

In concluding this agenda item, the Chair indicated that he is stepping down from the position. The Commission thanked Temur Tairov for his services and leadership.

28. 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 EDG-WP 20-05 “*Change to Article 5.15.f of the NAFO CEM*” (Annex 28)
- STACTIC WP 21-07 “*Insertion of reference to Annex II.I Part B in NAFO CEM Annex IV.A*” (Annex 29)
- STACTIC WP 21-13 Rev. “*Measures Concerning Vessels Demonstrating Repeat Non-compliance of Serious Infringements in the NAFO Regulatory Area*” (Annex 30)
- STACTIC WP 21-17 Rev. 2 “*Legend for Annex I.A of the NAFO CEM*” (Annex 31)
- STACTIC WP 21-20 Rev. “*List of serious infringements: use of sorting grids – NAFO CEM Article 38.1.g*” (Annex 32)
- STACTIC WP 21-22 Rev. “*Observer data collection*” (Annex 33)
- STACTIC WP 21-28 Rev. 2 “*NAFO CEM Article 7 and Article 7 bis realignment and Extension of Port State control measures*” (Annex 34)
- STACTIC WP 21-37 Rev. “*NAFO CEM Article 10 – Greenland Halibut*” (Annex 35)
- STACTIC WP 21-41 Rev. 4 “*Bycatch limits for the “Others” quota – NAFO CEM Article 6.3.e*” Annex 36
- STACTIC WP 21-50 Rev. 2 “*Bycatch limits during Quarter 1 closure – NAFO CEM Article 5.5.j*” (Annex 37)

The Commission **adopted** all the recommendations.

In addition, the Commission accepted STACTIC Working Paper 21-42 (Rev. 4) *DRAFT Annual Fisheries and Compliance Review 2021 (Compliance Report for Fishing Year 2021)* (Annex 38).

The STACTIC Chair highlighted the proposal STACTIC Working Paper 21-40 (Rev.) concerning regulating the use of commercial vessels in research activities by amending NAFO CEM Article 4. The proposal did not attain consensus because of the debate within STACTIC whether this is a control or policy issue. STACTIC sought advice from the Commission if the discussions relating to the research activities as outlined in the proposal are within the mandate of STACTIC. The Commission expressed that STACTIC should continue working on this issue, including discussions at the Intersessional Meeting. Norway further expressed: “... and where necessary consult with Scientific Council, on which requirements should apply for Contracting Parties authorizing vessels to undertake research activities in the NAFO Regulatory Area and other questions that naturally follows from this”.

The STACTIC Chair highlighted another issue and sought advice from the Commission. This pertains to the implementation of the 2018 Performance Review Panel recommendation on self-assessments of flag State performance in accordance with the criteria set out in the FAO Voluntary Guidelines for Flag State Performance. The original tasking to STACTIC was to provide a review of the criteria of the FAO Voluntary Guidelines for Flag State Performance, but it was unclear to STACTIC whether the tasking was also for Contracting Parties to move forward with completing the self assessment. The Commission had no time to elaborate its advice to STACTIC.

29. Other matters pertaining to Conservation and Enforcement Measures

The joint proposal from Canada, United States of America, United Kingdom, Norway and Iceland limiting scientific catches of Div. 3M Cod and Div. 3M Shrimp in 2022 was **adopted** (Annex 39 – COM WP 21-45 Rev.).

VIII. Finance and Administration

30. 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 2020, the recruitment process for the next Executive Secretary and the implementation of certain 2018 Performance Review Panel recommendations related to the Standing Committee. In addition, the Chair noted the election of Jake Round (United Kingdom) as the new vice-Chair.

31. Adoption of the 2022 Budget and STACFAD recommendations

The recommendations from STACFAD were the following:

STACFAD recommends that:

- The 2020 Financial Statements be adopted.
- Baker Tilly Nova Scotia be appointed to audit NAFO's records for the 2021–2025 fiscal periods.
- 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 2022, 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 \$28,000 to the maximum amount allowed of \$100,000 for future recruitment and relocation costs of internationally recruited staff.
- The performance review fund be increased by \$15,000 to \$45,000 for future costs associated with having an external performance review.
- The estimated balance remaining of \$437,000 shall be maintained in the Operating Fund and applied to reduce annual contributions due from each Contracting Party for the following year.
- The Executive Secretary recruitment procedures and timelines for the 2023-2026 term be adopted as outlined in STACFAD WP 21-11 (Rev. 2).
- The internship period be maintained for six (6) months during 2022.
- The internship stipend be increased to CDN \$2,250 per month.
- The budget for 2022 of \$2,587,000 be adopted.
- The Commission appoint the three Staff Committee nominees for September 2021–September 2022: Brian Healey (Canada), Ignacio Granell (European Union) and Deirdre Warner-Kramer (United States of America).
- The 2024 Annual Meeting be held 23–27 September 2024 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

32. Other Business

There was no further matter discussed under this agenda item.

33. Election of Chair and vice-Chair

With the completion of the President's term, the current vice-Chair Temur Tairov (Russian Federation) was elected as the incoming Chair and NAFO President for a two-year term.

Deirdre Warner-Kramer (United States of America) was elected as the incoming vice-Chair for a two-year term.

34. Time and Place of Next Annual Meeting

An invitation to host the next Annual Meeting was extended by the European Union and accepted by the Organization. The 44th Annual Meeting will be held in Portugal during 19-23 September 2022.

35. 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 40) was circulated and posted to the NAFO website at the conclusion of the meeting on Friday, 25 September.

36. Adjournment

The meeting adjourned 11:45 hrs on Friday, 24 September 2021.

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 43rd Annual Meeting of NAFO**

ANNEX #	NAFO WORKING PAPER #	DOCUMENT TITLE	NAFO DOCUMENT #
16	COM-SC WP 21-06	Recommendations from the Joint Commission-Scientific Council Working Group on Improving Efficiency of NAFO Working Group Process (E-WG)	COM-SC Doc. 21-06
17	COM-SC WP 21-07	Recommendations from the Joint Fisheries Commission-Scientific Council Working Group on Risk-Based Management Strategies (WG-RBMS)	COM-SC Doc. 21-07
19	COM-SC WP 21-08 Rev.	Recommendations from the Joint Fisheries Commission-Scientific Council Working Group on Ecosystem Approach Framework to Fisheries Management (WG-EAFFM)	COM-SC Doc. 21-08
20	COM-SC WP 21-13	Revision of Seamounts Closures	COM-SC Doc. 21-05
21	COM-SC WP 21-09	Recommendations from the Joint Commission-Scientific Council Catch Estimation Strategy Advisory Group (CESAG)	COM-SC Doc. 21-09
22	COM WP 21-43 Rev. 3	The Commission's Request for Scientific Advice on Management in 2023 and Beyond of Certain Stocks in Subareas 2, 3 and 4 and Other Matters	COM Doc. 21-20
24		2022 Quota Table and the Effort Allocation Scheme for the Shrimp Fishery in NAFO Division 3M, 2022	
26	COM WP 21-41 Rev.	Measure to Protect Vulnerable Marine Ecosystems	COM Doc. 21-16
27	COM WP 21-18	Recommendations from the Commission Ad Hoc Working Group on Bycatches, Discards and Selectivity (WG-BDS) in the NAFO Regulatory Area	COM Doc. 21-18
28	STACTIC EDG-WP 20-05	Change to Article 5.15.f of the NAFO CEM	COM Doc. 21-06
29	STACTIC WP 21-07	Insertion of reference to Annex II.I Part B in NAFO CEM Annex IV.A	COM Doc. 21-07
30	STACTIC WP 21-13 Rev.	Measures Concerning Vessels Demonstrating Repeat Non-compliance of Serious Infringements in the NAFO Regulatory Area	COM Doc. 21-08
31	STACTIC WP 21-17 Rev. 2	Legend for Annex I.A of the NAFO CEM	COM Doc. 21-09
32	STACTIC WP 21-20 Rev.	List of serious infringements: use of sorting grids – NAFO CEM Article 38.1.g	COM Doc. 21-10
33	STACTIC WP 21-22 Rev.	Observer data collection	COM Doc. 21-11
34	STACTIC WP 21-28 Rev. 2	NAFO CEM Article 7 and Article 7 bis realignment and Extension of Port State control measures	COM Doc. 21-12
35	STACTIC WP 21-37 Rev.	NAFO CEM Article 10 – Greenland Halibut	COM Doc. 21-13
36	STACTIC WP 21-41 Rev. 4	Bycatch limits for the “Others” quota – NAFO CEM Article 6.3.e	COM Doc. 21-14
37	STACTIC WP 21-50 Rev. 2	Bycatch limits during Quarter 1 closure – NAFO CEM Article 5.5.j.	COM Doc. 21-15
39	COM WP 21-45 Rev.	Measure to Revise NAFO CEM Article 4 to Limit Scientific Catches of 3M Cod and 3M Shrimp in 2022	COM Doc. 21-17
	STACFAD WP 21-01 to STACFAD WP 21-11 (Rev. 2)	STACFAD Recommendations including the 2022 Budget	see agenda item 31 (above)

Annex 2. Provisional Agenda

I. Opening Procedure	
1.	Opening by the Chair, Stéphane Artano (France, in respect of St. Pierre et Miquelon)
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
	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. Possible 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
	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
	a. Working Group on Improving Efficiency of NAFO Working Group Process (E-WG), 2021
	b. Joint Commission–Scientific Council Working Group on Risk-based Management Strategies (WG-RBMS), August 2021
	c. Joint Commission–Scientific Council Working Group on Ecosystems Approach Framework to Fisheries Management (WG-EAFFM), July 2021
	d. Joint Commission–Scientific Council Catch Estimation Strategy Advisory Group (CESAG), April 2021
19.	Formulation of Request to the Scientific Council for Scientific Advice on Management in 2023 and Beyond of Certain Stocks in Subareas 2, 3, 4, 6 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 2021 (if more discussion is required)
21.	Management and Technical Measures for Fish Stocks in the Regulatory Area, 2022
	a. Cod in Division 3M
	b. Redfish in Division 3M
	c. Pelagic <i>Sebastes mentella</i> (oceanic redfish) in Sub-area 2 + Divisions 1F and 3K
	d. Shrimp in Division 3M
	e. Splendid alfonso in Sub-Area 6
22.	Management and Technical Measures for Fish Stocks Straddling National Jurisdictions, 2022
	a. Cod in Divisions 3NO
	b. American plaice in Divisions 3LNO
	c. Yellowtail flounder in Divisions 3LNO
	d. Witch flounder in Divisions 3NO
	e. White hake in Divisions 3NO
	f. Capelin in Divisions 3NO
	g. Greenland halibut in Sub-area 2 and Divisions 3KLMNO
	h. Shrimp in Divisions 3LNO
23.	Other matters pertaining to Conservation of Fish Stocks
24.	Ecosystem Considerations
25.	Recommendations of the Joint Commission–Scientific Council Working Group on Ecosystems Approach Framework to Fisheries Management (WG-EAFFM), July 2021 (if more discussion is required)
26.	Other matters pertaining to Ecosystem Considerations
VI. Conservation and Enforcement Measures	
27.	Recommendations of the Joint Commission–Scientific Council Catch Estimation Strategy Advisory Group (CESAG), April 2021 (if more discussion is required)
28.	Meeting Report and Recommendations of the Ad hoc Working Group on Bycatches, Discards, and Selectivity (WG-BDS) in the NAFO Regulatory Area, July 2021
29.	Report of STACTIC from this Annual Meeting and Recommendations
30.	Other matters pertaining to Conservation and Enforcement Measures
VII. Finance and Administration	
31.	Report of STACFAD from this Annual Meeting
32.	Adoption of the 2022 Budget and STACFAD recommendations
VIII. Closing Procedure	
33.	Other Business
34.	Election of Chair and vice-Chair
35.	Time and Place of Next Annual Meeting
36.	Press Release
37.	Adjournment

Annex 3. Participant List

CHAIRS

NAFO President and Chair of the Commission

Artano, Stéphane (France in respect of St. Pierre et Miquelon). Sénateur de Saint-Pierre et Miquelon, Conseiller Territorial de Saint-Pierre et Miquelon
Tel: +01 42 34 47 54 – Email: s.artano@senat.fr

Chair of Scientific Council

Fernandez, Carmen (European Union). Instituto Español de Oceanografía (IEO, CSIC). Calle Corazon de Maria, 8. 28002 Madrid, Spain
Tel: + 34 91 342 11 02 – Email: carmen.fernandez@ieo.es

CANADA

Head of Delegation

Burns, Adam. Director General, Fisheries Resource 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

Barlow, Elizabeth. Manager, Marine Resources, Nova Scotia Department of Fisheries and Aquaculture
Email: Elizabeth.Barlow@novascotia.ca

Blanchard, Tony. Regional Director, 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: tony.blanchard@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

Boudreau, Cyril. Senior Fisheries Strategist, Marine and Coastal Advisory Services, Nova Scotia Department of Fisheries and Aquaculture
Email: Cyril.Boudreau@novascotia.ca

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

Burke, Brian. Executive Director, Nunavut Fisheries Association
Tel.: +1 709-351-7263 – Email: executivedirector@noaha.ca

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

Coombs, Rob. Senior Fisheries Advisor, NunatuKavut Community Council, 200 Kelland Drive, PO Box 460, Stn. C
Happy Valley-Goose Bay, NL A0P 1C0, Canada
Email: rcoombs@nunatukavut.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. 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

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

Gustafson, Leigh. Nunavut Wildlife Management Board, P.O. Box 1379, Iqaluit, Nunavut, X0A 0H0, Canada
Tel: +1 867-975-7300 – Email: leighgustafson@hotmail.com

Healey, Brian. Division Manager, Fisheries and Oceans Canada, Northwest Atlantic Fisheries Centre, 80 East
White Hills, St. John's, NL A1C5X1
Tel: +1 709 772-8674 – Email: brian.healey@dfo-mpo.gc.ca

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

Hickey, Jenelle. 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

Kenchington, Ellen. Research Scientist, Fisheries and Oceans Canada, 1 Challenger Drive, Dartmouth, NS B2Y
4A2
Email: Ellen.Kenchington@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

Lansbergen, Paul. President, Fisheries Council of Canada. 610-170 Laurier Avenue West, Ottawa, ON K1P 5V5
Tel: 613-727-7450xCLAM (2526) – Email: plansbergen@fisheriescouncil.ca



Report of the NAFO Commission, 20-24 September 2021

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

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

McCready, Heather. Director General, Conservation and Protection, Fisheries and Oceans Canada, 200 Kent Street, Ottawa, ON K1A 0E6
Tel: +1 (343) 573-0624 – Email: Heather.McCready@dfo-mpo.gc.ca

McGrath, Miranda. 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

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

Pond, Nancy. Resource Manager. Fisheries Management, Fisheries and Oceans Canada, Northwest Atlantic Fisheries Centre, 80 East White Hills Road, St. John's, NL, A1C 5X1
Email: Nancy.Pond@dfo-mpo.gc.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

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, 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. Canadian Commissioner. 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

Tilley, Anna. Analyst, Fisheries, Forestry and Agriculture, Government of Newfoundland and Labrador, Confederation Building, 30 Strawberry Marsh Rd., St. John's, NL A1B 4J6
Tel: +1 709 729-3735 – Email: AnnaTilley@gov.nl.ca

Treble, Margaret. Marine Fisheries Biologist, Fisheries and Oceans Canada, Freshwater Institute, 501 University Cres., Winnipeg, MT
Tel.: +1 204-984-0985 – Email: margaret.treble@dfo-mpo.gc.ca

Vascotto, Kris. Executive Director, Atlantic Groundfish Council
Tel: +1 902-526-4582 – Email: kvascotto@atlanticgroundfish.ca

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. 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

Wheeland, Laura. Science Branch, Fisheries and Oceans Canada, P.O. Box 5667, St. John's, NL A1C 5X1
Tel: +1 709-687-8357 – Email: Laura.Wheeland@dfo-mpo.gc.ca

Wright, Tony. Biologist Fisheries Manager, Makivik Corporation
Email: twright@makivik.org

CUBA

Head of Delegation

Yong Mena, Nora. Head of the International Relations Office, Ministry of the Food Industry, Municipio Playa, Calle 41, No. 4015 e/ 48y50, Playa la Havana, Cuba
Tel: +53 7 207 9484 – Email: nora.yong@minal.gob.cu

Head of Delegation (Alternate)

Milan Rodriguez, Marelis. International Relations Specialist, Ministry of the Food Industry, Municipio Playa, Calle 41, No. 4015 e/ 48y50, Playa La Havana, Cuba
Email: marelis.milan@geia.cu

DENMARK (IN RESPECT OF THE FAROE ISLANDS AND GREENLAND)

Head of Delegation

Christensen, Steen. Chief Advisor, Government of Greenland, Ministry of Fisheries, Hunting and Agriculture
Tel: +299 345000 / +299 345318 – Email: stch@nanoq.gl

Kunoy, Bjørn. Legal adviser, Ministry of Foreign Affairs and Culture, Ministry of Foreign Affairs and Culture, Government of the Faroe Islands, Tinganes, FO-100 Tórshavn, Faroe Islands
Email: bjornk@ummr.fo

Advisers/Representatives

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: halvdan@fossa.fo

Jóansdóttir, Durita L. Senior Adviser, Chief of Protocol, Ministry of Foreign Affairs and Culture, Government of the Faroe Islands, Tinganes, FO-100 Tórshavn, Faroe Islands
Email: duritalj@ummr.fo

Jacobsen, Petur 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: +29 829 1001 – Email: peturmj@vorn.fo

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

Pedersen, Michael Dennis. Head of Greenland Fisheries License Control Authority, Greenland Fisheries License Control Authority, Indaleeqqap Aqputaa 3, Postbox 501, DK-3900 Nuuk, Greenland
Tel: +299 345377 – Email: mdpe@nanoq.gl

Report of the NAFO Commission, 20-24 September 2021

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

Steingrund, Petur. Head of Department, Faroe Marine Research Institute.
Email: Peturs@hav.fo

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

Aas, Külli. Republic of Estonia, Ministry of Rural Affairs
Email: Kylli.Aas@agri.ee

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

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

Batista, Emília Maria. Direção Geral de Recursos Naturais, Segurança e Serviços Marítimos, Avenida Brasília, 1449-030 Lisboa, Portugal
Tel: +351 213035850 – Email: ebatista@dgrm.mm.gov.pt

Beijoco, Catarina. Ministry of the Sea, Directorate General for Natural Resources, Safety and Maritime Services (DGRM), Avenida Brasília, 1449-030 Lisbon, Portugal
Email: cbeijoco@dgrm.mm.gov.pt

Błazkiewicz, 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

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

Casas Sanchez, José Miguel. Instituto Español de Oceanografía, Subida a Radio Faro 50-52, E-36390 Vigo, Spain
Tel: +34 986 49 2111 – Email: mikel.casas@ieo.es

De Frutos Romo, Gema. Ministry of Agriculture, Fisheries and Food, Paseo Infanta Isabel, 1, 28014 Madrid
Email: gdefrutos@mapa.es

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

Einarsson, Sigurður. Deutsche Fischfang Union. Bei der Alten Liebe 5, 27472 Cuxhaven, Germany
Email: sse@aldaholding.com

Eliassen, Jørgen. Senior Consultant, Ministry of Agriculture, Food and Fisheries, Sustainable Fisheries,
Slotsholmsgade 12, 1216 København K, Denmark
Tel: +45 22 61 59 37– Email: pejoel@fvm.dk

Fernandez, Carmen (see Chairs above).

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

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

Garrido Fernández, Irene. Instituto Español de Oceanografía, Subida a Radio Faro 50-52, E-36390 Vigo, Spain
Email: irenegarridof@hotmail.com

Gillies da Mota, Deborah. Aveiro, Portugal, 3810-162
Tel: + 351 96 240-5393 – Email: dlouisegillies@gmail.com

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.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.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

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

Jansone, Santa. Head of Fisheries Strategy Division, Fisheries Department, Ministry of Agriculture, Republikas sq. 2, LV1010, Riga, Latvia
Tel: +371 29194918 – Email: Santa.Jansone@zm.gov.lv

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

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@maoa.es

Report of the NAFO Commission, 20-24 September 2021

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

Mendes, Hugo. IPMA - Instituto Português do Mar e da Atmosfera PT
Email: hmendes@ipma.pt

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. 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. Subdirectora General Adjunta de Acuerdos y Organizaciones Regionales
Email: tmolina@mapa.es

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

Neidigk, Ralph. Federal Agency for Agriculture and Food Headquarters and branch in Hamburg Haubachstrasse 86, 22765 Hamburg
Email: ralph.neidigk@ble.de

Nielsen, Lisbet. Ministry of Agriculture, Food and Fisheries, Slotsholmsgade 12, 1216 København K., Denmark
Email: lisnie@fvm.dk

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

Päadam, Ulvi. Republic of Estonia, Ministry of Foreign Affairs, Environment Attaché in Brussels
Email: ulvi.paadam@mfa.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

Radaitytė, Eglė. Head of Fisheries Monitoring and Control Division, Fisheries Service under the Ministry of Agriculture of the Republic of Lithuania, J. Janonio g. 24, 92251, Klaipėda, Lithuania
Tel: +370 700 14920 – Email: egle.radaityte@zuv.lt

Remisz, Emil. North Atlantic Producers Organization Ltd. (PAOP), 00-759 Warsaw, Ul. Parkowa 13/17/123
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

Rodriguez, Alexandre. Secretario General, Long Distance Advisory Council (LDAC), Calle de Dr. Fleming 7, 2 DCHA, 28036, Madrid, Spain
Tel: +34 914 32 3623 – Email: alexandre.rodriguez@ldac.eu

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.es

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

Sedenko, Ana. Advisor of Fisheries, Ministry of Agriculture of the Republic of Lithuania, Gedimino Ave.19, LT-01103 Vilnius, Lithuania
Email: ana.sedenko@zum.lt

Serrao, Miguel. Directorate-General for Natural Resources, Safety and Maritime Services, 1449-030 Av^a Brasília LISBOA, Portugal
Tel: +351 213035739 – Email: mserrao@dgrm.mm.gov.pt

Silva, Carlos. Head of the Division of Inspection and control, Direção de Serviços de Inspeção, Monitorização e Controlo das Atividades Marítimas, 1449-030 Av^a Brasília Lisboa, Portugal.
Tel: +35121 302 5142 – Email: csilva@dgrm.mm.gov.pt

Söntgerath, Bernd. Germany Federal Ministry of Food and Agriculture
Email: Bernd.Soentgerath@bmel.bund.de

Symons, Despina. European Bureau for Conservation & Development (EBCD), Rue de la Science 12, 1000 Brussels, Belgium
Email: Despina.Symons@ebcd.org

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

Taveira Da Mota, José Pedro. Industry representative
Email: oficinas.epa@gmail.com

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

Tuvi, Aare. Counsellor, Fishery Resources Department, Republic of Estonia, Ministry of the Environment, Narva mnt 7A, 15172, Tallinn, Estonia
Tel: + 372 6260 712 – Email: aare.tuvi@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, Tiago. Industry representative, Av. Fernão de Magalhães, 584 - 1^o E, 3000-174 Coimbra, Portugal
Email: saojacinto.tpais@sapo.pt

Ventura, Isabel Maria. Directorate-General for Natural Resources, Safety and Maritime Services, 1449-030 Av^a 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 2^o Dt. 1050-202 Lisboa, Portugal
Tel: + 351 933 361 051 – Email: adapi.pescas@mail.telepac.pt

Villar Arribi, Cora. Control and Inspection Unit, Directorate-General for Maritime Affairs and Fisheries, European Commission, J-99 01, 1049 Brussels, Belgium
Email: Cora.VILLAR-ARRIBI@ext.ec.europa.eu

Report of the NAFO Commission, 20-24 September 2021

Žundienė, Ieva. Permanent Representation of Lithuania to the European Union, Rue Belliard 41-43, 1040 Brussels, BELGIUM
Tel: +32478689908 – Email: ieva.zundiene@eu.mfa.lt

FRANCE (IN RESPECT OF ST. PIERRE ET MIQUELON)

Head of Delegation

Artano, Stéphane. (see Chairs above)

Head of Delegation (Alternate)

Claireaux, Stéphane. Député, BP 4477- 97500 St-Pierre et Miquelon
Email: sclaireaux@depute975.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

de Moncuit, Gonzague. Conseiller Pêches maritimes, élevages marins et cultures marines, Cabinet de la Ministre de la Mer, 20 avenue de Ségur, 75007 Paris
Email: gonzague.de-moncuit@mer.gouv.fr

Goragner, Herlé. 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.goragner@ifremer.fr

Monneau, Marianna. Ministry for Agriculture and Food, Maritime Fisheries and Aquaculture Directorate, Subdirectorate for Fisheries Resources, European and International Affairs Unit, Tour Séquoia, 1, place Carpeaux, 92055 Paris-La Défense Cedex, France
Tel: +33 01 40 81 90 38 – Email: marianna.monneau@agriculture.gouv.fr

Servetto, Camille. Ministry of Overseas Territories, 27, rue Oudinot, 75738 Paris SP07
Email: camille.servetto@outre-mer.gouv.fr

ICELAND

Head of Delegation

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

Advisers/Representatives

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

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

JAPAN

Head of Delegation

Iino, Kenro. Special Advisor to the Minister of Agriculture, Forestry and Fisheries on International Affairs (Fisheries) Government of Japan, 1-2-1 Kasumigaseki, Chiyoda-ku, 100-8950 Tokyo, Japan
Tel: +81 3 3502 8460 – Email: keniino@hotmail.com

Head of Delegation (Alternate)

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

Advisers/Representatives

Hosokawa, Natsuki. Technical Official, International Affairs Division, Ministry of Agriculture, Forestry and Fisheries, Government of Japan, 1-2-1 Kasumigaseki, Chiyoda-ku, 100-8950 Tokyo, Japan
Email: nastuki_hosokawa730@maff.go.jp

Kinoshita, Yuki. Technical Official, Fisheries and Resources Management Division, Ministry of Agriculture, Forestry and Fisheries, Government of Japan, 1-2-1 Kasumigaseki, Chiyoda-ku, 100-8950 Tokyo, Japan
Email: yuki_kinoshita590@maff.go.jp

Kishimoto, Riki. Deputy Director, Fishery Division, Economic Affairs Bureau, Ministry of Foreign Affairs
Email: riki.kishimoto@mofa.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

Miyagawa, Naohisa. Taiyo A&F, LTD. (TAFCO), Toyomishinko Bldg., 4-5, Toyomi-cho, Chuo-ku, 104-0055 Tokyo, Japan
Email: n-miyagawa@maruha-nichiro.co.jp

Morita, Hiroyuki. 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: hiroyuki_morita970@maff.go.jp

Muraoka, Toshiharu. Taiyo A&F, LTD. (TAFCO), Toyomishinko Bldg., 4-5, Toyomi-cho, Chuo-ku, 104-0055 Tokyo, Japan
Email: t-muraoka@maruha-nichiro.co.jp

Nakasu, Maiko. Official, International Affairs Division, Ministry of Agriculture, Forestry and Fisheries, Government of Japan, 1-2-1 Kasumigaseki, Chiyoda-ku, 100-8950 Tokyo, Japan
Email: maiko_nakasu100@maff.go.jp

Oikawa, Susumu. Taiyo A&F, LTD. (TAFCO), Toyomishinko Bldg., 4-5, Toyomi-cho, Chuo-ku, 104-0055 Tokyo, Japan
Email: s-oikawa@maruha-nichiro.co.jp

Okamoto, Junichiro. Executive Managing Director, 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

Sakino, Tomonori. Taiyo A&F, LTD. (TAFCO), Toyomishinko Bldg., 4-5, Toyomi-cho, Chuo-ku, 104-0055 Tokyo, Japan
Email: t-sakino@maruha-nichiro.co.jp

Sato, Fumiya. Taiyo A&F, LTD. (TAFCO), Toyomishinko Bldg., 4-5, Toyomi-cho, Chuo-ku, 104-0055 Tokyo, Japan
Email: f-sato@maruha-nichiro.co.jp

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

Ueki, Shogo. Taiyo A&F, LTD. (TAFCO), Toyomishinko Bldg., 4-5, Toyomi-cho, Chuo-ku, 104-0055 Tokyo, Japan
Email: s-ueki@maruha-nichiro.co.jp

Report of the NAFO Commission, 20-24 September 2021

NORWAY

Head of Delegation

Landmark, Vidar. Norwegian Ministry of Trade, Industry and Fisheries, P.O. Box 8090 Dep, NO-0032 Oslo, Norway
Email: vidar-jarle.landmark@nfd.dep.no

Advisers/Representatives

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

Hvingel, Carsten. Head of Research Group, Institute of Marine Research, P.O. Box 1870 Nordnes, 5817 Bergen, Norway
Tel: +47 95980565 – Email: carsten.hvingel@hi.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

Palmason, Snorri R. Norwegian Directorate of Fisheries, P. O. Box 185, Sentrum, 5804 Bergen, Norway
Email: snorri.palmason@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

Oh, Sungtaek Bill. Deputy Director, International Cooperation Division, Ministry of Oceans and Fisheries, Republic of Korea
Tel: +82-44-200-5333 – E-mail: republicofkorea@korea.kr

Advisers/Representatives

Choe, Donghwan. Korea Overseas Fisheries Association, 83, Nonhyeon-ro(Yang Jae Dong), Seo Cho-Ku, Seoul, Republic of Korea
Email: dhchoe@kosfa.org

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

RUSSIAN FEDERATION

Head of Delegation

Tairov, Temur. 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)

Badina, Yulia., Deputy Head of the Department of Fleet, Ports and International Cooperation, Federal Agency for Fisheries, Russian Federation
Tel: (495) 987-06-45 – Email: badina@fishcom.ru

Advisers/Representatives

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

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

Fomin, Konstantin. 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. Assistant to the Head of Severomorskoe Territorial Department of the Federal Agency for Fisheries, 7 Komintern St., Murmansk 183038, Russian Federation
Email: lizogub@sevtu.ru

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

Ridiger, Anna. Lead scientist, Russian Federal Research Institute of Fisheries & Oceanography (VNIRO), K. 17, V. Krasnoselskaya, Moscow, 107140
Email: ridiger@vniro.ru

Shulaeva, Anna. Representative of the Federal Agency for Fisheries in the Kingdom of Norway
Tel: +47 48 67 34 13 – Email: pr-norway@fishcom.ru

Skryabin, Ilya. Principal state inspector, Severomorskoe Territorial Department of the Federal Agency for Fisheries, 7 Komintern St., Murmansk 183038, Russian Federation
Tel: +7 815 279 8116 – Email: skryabin@bbtu.ru

Troshina, Elena. Chief specialist on international cooperation, Center for the Monitoring of Fisheries and Communications (CFMC), Rozhdestvensky Boulevard, 12/8, Building 1, Moscow, 107996,
Email: etroshina.vlf@cfmc.ru

UKRAINE**Head of Delegation**

Turok, Vasyl. Head of the Department of International Cooperation and Economic Analysis, State Agency of Melioration and Fisheries of Ukraine
Email: inter@darg.gov.ua

Advisers/Representatives

Demianenko, Kostiantyn. Deputy Director for Scientific Work of the Institute of Fisheries and Marine Ecology (IFME), Candidate of Biological Sciences, Senior Research Scientist of the IFME
Email: s.erinaco@gmail.com; s_erinaco@ukr.net

Ogorodnik, Artem. Deputy Head of the Department of International Cooperation and European Integration, State Agency of Fisheries of Ukraine
Email: ogorodnik89@ukr.net

Paramonov, Valerii. Research Officer of the Institute of Fisheries and Marine Ecology (IFME), State Agency of Fisheries of Ukraine
Email: vparamonov@i.ua

UNITED KINGDOM**Head of Delegation**

Keedy, Jess. Head of External Fisheries Negotiations, International Fisheries, Department for Environment, Food and Rural Affairs, Nobel House, 17 Smith Square, London, SW1P 3JR
Tel: 020 802 63350 – Email: jess.keedy@defra.gov.uk

Advisers/Representatives

Atherton, Emily. Department for Environment, Food and Rural Affairs (DEFRA)
Email: Emily.Atherton@defra.gov.uk

Kenny, Andrew. CEFAS – Lowestoft Laboratory, Pakefield Road, Lowestoft, Suffolk NR33 0HT
Email: andrew.kenny@cefas.co.uk

Muir, Sandie-Gene. Department for Environment, Food and Rural Affairs (DEFRA), Nobel House, 17 Smith Square, London, SW1P 3JR
Email: sandie-gene.muir@defra.gov.uk

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. UK Fisheries Ltd, The Orangery, Hesslewood Country Business Park, Ferriby Road, Hessle, East Yorkshire HU13 0LH
Email: jane@ukfisheries.net

Windebank, James. Department for Environment, Food and Rural Affairs (DEFRA), Nobel House, 17 Smith Square, London, SW1P 3JR
Email: james.windebank@defra.gov.uk

UNITED STATES OF AMERICA**Head of Delegation**

Pentony, Michael. 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)

Warner-Kramer, Deirdre. 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@state.gov

Advisers/Representatives

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

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

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

Lynch, Charles. Section Chief, Office of General Counsel, National Oceanic and Atmospheric Administration (NOAA), 55 Great Republic Drive, Gloucester, MA 01930, USA
Tel: +1 978-281-9211 – Email: charles.lynch@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. 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. 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. General Manager, Seafreeze Shoreside, Inc., 75 State St., Narragansett, (Pt. Judith) Rhode Island 02882 USA
Tel: +1 401 267 4470 – Email: ericreidri@gmail.com

Sissenwine, Michael. New England Fishery Management Council, 39 Mill Pond Way, East Falmouth, MA 02536 USA
Tel: +1 508 566-3144 – Email: m.sissenwine@gmail.com

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.sosebee@noaa.gov

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

OBSERVERS

ABNJ Deep-Sea Fisheries Project

Emerson, William. Email: william.emerson@fao.org

Thompson, Anthony. Email: Anthony.Thompson@fao.org



Report of the NAFO Commission, 20-24 September 2021

Convention on Biological Diversity Secretariat

Appiott, Joseph. Programme Management Officer. Email: joseph.appiott@cbd.int

Dalhousie – Environment Information: Use and Influence

McDonald, Bertrum. Email: bertrum.macdonald@dal.ca

Noël, Simon-Luc. A Master of Environmental Studies study Email: s.noel@dal.ca

Dalhousie University – Marine & Environmental Law Institute

VanderZwaag, Professor David. Email: David.VanderZwaag@Dal.Ca

Deep Sea Conservation Coalition

Gianni, Matthew. Political and Policy Advisor. Email: matthewgianni@gmail.com

Polti, Sandrine. European Liaison. Email: sandrine.polti@gmail.com

Ecology Action Centre (EAC)

Arnold, Shannon. Marine Policy Coordinator, Tel: +902 446-4840. Email: sarnold@ecologyaction.ca

Pardo, Sebastián. Email: sebpardo@ecologyaction.ca

Food and Agriculture Organization (FAO) of the United Nations (UN)

Mannini, Piero. Email: Piero.Mannini@fao.org

North-East Atlantic Fisheries Commission (NEAFC)

Steen, Christensen (see above under from Denmark, in respect of Faroe Island and Greenland)

North Pacific Anadromous Fish Commission (NPAFC)

Radchenko, Vladimir. Executive Director. Email: vlrad@npafc.org

Shark Trust

Fordham, Sonja. Email: sonja@sharkadvocates.org

Western Central Atlantic Fishery Commission (WECAFC)

DieiOuadi, Yvette. Email: Yvette.DieiOuadi@fao.org

INVITED EXPERTS

Cadrin, Steve. Department of Fisheries Oceanography, Chair School for Marine Science & Technology, 836 South

Rodney French Boulevard, New Bedford MA 02744

Tel: +508-910-6358 E-mail: scadrin@umassd.edu

Howell, Daniel. Institute of Marine Research, Norway

Email: Daniel.howell@hi.no

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

Aker, Jana. Senior Fisheries Information Administrator.

Email: jaker@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

McAllister, Fiona. Scientific Information Administrator (Interim).

Email: fmcallister@nafo.int

Pacey, Alexis. Senior Publications/Web Manager.

Email: apacey@nafo.int

Annex 4. Opening Statement by the NAFO President

Dear distinguished colleagues and friends,

I am very pleased to welcome you to the 43rd Annual Meeting of the Northwest Atlantic Fisheries Organization. Unfortunately, the continuing challenges of the current pandemic has forced us to meet virtually for the second year in a row and I regret very much that I am not able to meet with all of you in person.

Nevertheless, the Organization is becoming used to working in a virtual format. Since last year's Annual Meeting, Contracting Parties have participated in over 30 intersessional meetings and have given a lot of work for us to do this week. In particular, I want to commend the work of our Scientific Council, and its Chair, for again being able to provide the necessary scientific advice to base the decisions we will have to make this week in less-than-ideal conditions.

We have again focused the agenda for this week's meeting. Hopefully this will not only allow us to address the essential business for the 2022 fishing year, but also to make progress on matters that ensure that NAFO continues to be one of the leading regional fisheries management organizations with regard to its commitment to the long-term conservation and sustainable use of its fishery resources. In this context I would note the progress in our efforts to revise our precautionary approach framework, the work to integrate an ecosystem approach framework into fisheries management, including the upcoming review of our measures to protect Vulnerable Marine Ecosystems (VMEs) from bottom fishing activities, and the upcoming reviews of our Management Strategy Evaluations for Greenland halibut and redfish.

I also would like to acknowledge the contribution of Dean Swanson to NAFO. As many of you are aware, we lost a member of the NAFO family with Dean's passing earlier this year. He had been a member of the US delegation for almost 20 years since the USA acceded to NAFO in 1995 until his retirement in 2014. During that time, he chaired the NAFO Fisheries Commission (from 2002 to 2005) and was head of the US delegation for almost a decade, from 2006 to 2014. On behalf of NAFO, I want to express our condolences to his family and former colleagues for their loss.

I again want to thank our colleagues from Japan and Korea for sacrificing their evenings so that we can meet, not only this week, but throughout the year. I would also like to thank the Secretariat for all their work throughout the year and the preparations in the run-up to this meeting.

This is the last NAFO Annual Meeting that I will Chair. It has been an honour and privilege to be your President over the last 6 years. I am extremely grateful for the cooperation and goodwill you have given me during this time. Despite the challenges of the pandemic, I am confident this will continue throughout this week.

I now declare the 43rd Annual Meeting of NAFO officially open!

Annex 5. Opening Statement by the Delegation of Canada

Canada is pleased to be a part of the 43rd Annual Meeting of the Northwest Atlantic Fisheries Organization (NAFO), being held for the second time in a virtual setting.

The commitment of Contracting Parties to continue to make progress within each of NAFO's Standing Committees, Working Groups, and the Scientific Council is a source of pride for all of us and something we must continue to strive for at this annual meeting. While we look forward to a time when we can again meet in person, it is rewarding to see both the adaptability of the organization and the innovative approaches we have adopted to conduct our work in the most efficient way possible.

Much of the intersessional work undertaken by the Standing Committees and Working Groups is highly technical and particularly challenging in a virtual format. Again, it is the Scientific Council that continues to lead by example in completing its work. The SC's comprehensive analysis and advice is critical to inform 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 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.

Even with the commitment shown by each individual NAFO body, none of this success could be achieved without the unwavering professionalism and extraordinary hard work of the NAFO Secretariat. Their continued careful attention to meeting logistics and ongoing support of the Commission, the Scientific Council and other NAFO bodies is deeply appreciated by all Contracting Parties.

We are optimistic that our discussions this week will be productive as we continue to make progress on a number of key issues now before us.

With respect to the ongoing review of the NAFO Precautionary Approach Framework, the consideration of how to implement the General Objectives of the NAFO Convention was an important step and we look forward to continuing this review which will inform our decision making for years to come.

For the planned review of the management strategies for Greenland halibut and 3LN redfish, we are looking forward to discussions that will find a way to advance both of these critically important reviews, and we will inform Contracting Parties of Canada's intention to further support this work with additional resources.

We were pleased to see continued positive discussion on the Ecosystem Roadmap since the last annual meeting and remain supportive of planned efforts to bring together scientists and fisheries managers alike with the goal of discussing ecosystem objectives at both the open dialogue session and the planned workshop. Through these discussions, we can carefully examine the challenges and opportunities of working to implement the Roadmap into the Commission's decision-making processes.

NAFO has been a leader among regional fisheries management organizations in the protection of vulnerable marine ecosystems (VME). Collectively, we share a responsibility to protect the biodiversity under NAFO's jurisdiction, and to minimize adverse impacts of bottom fishing on VMEs. It is critically important that we maintain the protections we have established and carefully consider necessary additional protections for both VME areas and seamounts.

With the recent advice of the Scientific Council on 3M shrimp, Canada encourages all Contracting Parties to maintain our commitment to implement a new, sustainable management regime for this stock that aligns with the advice of the Scientific Council and places primary importance on conservation.

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.

In recent years, the co-operation of Contracting Parties has resulted in significant accomplishments. While engaging in a compressed and virtual meeting presents many challenges, Canada is committed to continuing to advance the work of the Commission as much as possible this week and intersessionally over the coming year.

Finally, Canada would like to express its heartfelt appreciation for the leadership that our Commission Chair, M. Stéphane Artano, has provided during the last four years. M. Artano's steady guidance to this Commission was instrumental in enabling NAFO's progress on important issues in these unprecedented times.

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

The Faroe Islands and Greenland (DFG) would like to begin by conveying our appreciation and warm thanks to the Secretariat for their outstanding efforts to keep us all well informed and up to date on meetings and activities during yet another year with many challenges.

While we are learning to adapt, again this year has brought numerous challenges due to the continued Covid-19 pandemic. It has influenced our collaborative work in NAFO and caused challenges for Contracting Parties to follow the normal procedures with respect to control and enforcement measures. The Faroe Islands and Greenland have both been affected to some degree by this situation, but not as seriously as many other countries around the world and their fisheries administrations and industries, with whom we greatly sympathize.

Once again, this year, one of the key issues for our delegation is the conservation and management measures with respect to the cod stock in 3M. This Delegation remains committed to taking appropriate conservation and management measures that are based on the applicable general principles, which includes promoting the optimum utilization and long-term sustainability of fisheries resources and applying the precautionary approach in accordance with the 1995 Agreement. This summer, a longliner flying the flag of the Faroe Islands was temporarily employed in a scientific survey in 3M. The survey was conducted under the auspices of the Faroe Marine Research Institute. The results are interesting and can guide us to broaden the perimeters to properly understanding the stock with a view to optimizing the information underlying the determination of relevant conservation and management measures.

Denmark in respect of the Faroe Islands and Greenland also welcomes the progress made in the Working group of Bycatch, Discard and Selectivity and STACTIC participation and looks forward to see the outcome of this work.

This Delegation takes note of the latest advice of the Scientific Council with respect to shrimp in 3M. In this light the continuing discussions on moving from a system of fishing days to quotas is less urgent and could be postponed preferably until face-to-face meeting could be held.

The Faroe Islands and Greenland are still looking forward to seeing the new NAFO Headquarters in Halifax and, not least, to enjoying the informal conversations with delegates that are so important for ensuring understanding and smooth collaboration. Under your able guidance Mr. Chair, this Delegation will nevertheless do its best to contribute to a constructive and successful outcome of this 43rd Annual Meeting, under these exceptional circumstances.

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

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

First of all, we would like to express our appreciation for the efforts made by the Chair, the NAFO Secretariat and the rest of NAFO Parties in order to organize the 43rd Annual Meeting of NAFO, which for the second time in a row takes place virtually via webex. Taking into account the difficult circumstances caused by the continued COVID-19 pandemic, we have all again been required to think about alternative ways for conducting the necessary business of this important organisation, so we can still discharge our mandate to ensure the long term conservation and sustainable use of the fishery resources in the Convention Area but in a format that is safe, cost efficient and which in this case also happens to be greener.

Secondly, I would like to recognise the excellent preparatory work carried out ahead of this meeting, which should allow us to reach decisions that will contribute to the effective management of international fisheries that this organisation has been entrusted to manage. This year fishable biomass shows decline in several areas and the situation for a number of important stocks remains difficult. The Commission will again have to set TACs for fish stocks under the purview of NAFO that ensure their sustainable management 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 and areas that depend on their exploitation.

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 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 result of the scientific assessment of the status of this stock does once again highlight the need for a new management regime based on a TAC and quota allocation, possibly together with other management measures, which was not possible to adopt last year due to the pandemic situation. While the EU remains committed to devising a new and better fisheries management plan for Shrimp 3M, it would appear unlikely that Contracting Parties would be able at this year's Annual Meeting to reach agreement on all the elements to allow for a transition to TAC and quota allocation for 3M shrimp, notably given that fact that the meeting will again take place in a virtual format. The EU however believes that NAFO at this meeting could and should make some progress in this process by agreeing on some of the key elements upon which a future conversion mechanism could be based.

In addition, I would like to underline the importance of the Ecosystem Approach in NAFO while at the same time recognising the challenges inherent in implementing such an approach. In this regard, I would like to recall the relevance of pursuing a global assessment of the ecosystem and its dynamics in order to allow for the best management decisions.

In the context of the 2021 re-assessment of VME closures, I reiterate the EU continuous support for a coherent and clear policy aimed at protecting VMEs, including through its support for the NEREIDA project, and welcomes the latest scientific advice that provides important information that will help in the identification of VMEs.

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 will continue to support a mandate to STACTIC to assess what elements of control would be necessary if NAFO were to adopt a landing obligation policy in order to inform ongoing discussions in various NAFO bodies dealing with measures on discards.

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

Annex 8. Opening Statement by the Delegation of Japan

First of all, Japan would like to express its deepest gratitude to the NAFO Chairs and Secretariat staff for the excellent preparation and arrangements to hold the 43rd Annual Meeting in this challenging situation.

As Japan expressed in the past meetings, NAFO has played an important role for fisheries management through development of conservation and management measures for sustainable use of fishery resources based on scientific evidence. Other RFMOs are giving close attention to NAFO in order to learn how to address challenges and issues which are common between them and NAFO.

On this occasion, Japan would like to draw the attention of Contracting Parties (CPs) on two specific issues and explain its view for this year's NAFO Annual Meeting, namely management measures for Cod (3M) and re-assessment of VME closures.

Regarding 3M Cod, Japan is pleased with the relatively optimistic advice from the Scientific Council (SC) than last year although NAFO should be cautious given the high uncertainty in the stock assessment. Japan supports increased total allowable catch for 2022 based on the advice by SC. Concerning flanking measures which have been introduced from 2021, Japan reiterates the importance of assessment by the SC on their effectiveness in order to ensure 3M Cod fishery is managed through effective and efficient measures.

Regarding re-assessment of VME closures, Japan appreciates the extensive work conducted by SC. Re-assessment of VME closures should be based on the best scientific evidence available and carried out in an objective manner. Japan is of the view that the set of the criteria established by the FAO, as reflected in CEM Article 22. 4 (c), should be duly considered in the re-assessment. Japan will collaborate with all CPs for a constructive discussion on this issue.

Once again, Japan would like to repeat that, as the historic RFMO, NAFO has been serving a leading role among RFMOs. Last year, NAFO demonstrated that RFMO can make important decision making on conservation and management of fisheries resources even without convening in-person meetings. Other RFMOs followed NAFO's success to overcome the challenges caused by the COVID-19 pandemic. NAFO is expected to make similar achievements this year too, and the Japanese delegation is ready to work closely and cooperatively with other delegations to find good and reasonable solutions on every issue to be discussed.

Annex 9. Opening Statement by the Delegation of the United States of America (USA)

Mr. Chair, Delegates, Ladies, and Gentlemen, the United States is pleased to participate in this 43rd NAFO Annual Meeting. Although we are once again disappointed that we will not be able to see our NAFO colleagues in person, we trust that our shared experiences with virtual meetings over the past 18 months and our strong relationships will help to ensure a successful meeting this week. While we are on the subject of meetings, we would like to take this opportunity to recognize and thank the NAFO Secretariat for their continuing dedication and hard work. Although the COVID pandemic has made in-person meetings such as this impossible, it has not slowed the pace or number of meetings or reduced the volume of work undertaken by the Organization – quite the opposite in fact. In these challenging times, the Secretariat has continued to demonstrate professionalism and commitment to NAFO and its members, and for this we sincerely thank them.

Although the circumstances continue to be difficult and are affecting each Contracting Party differently, the United States remains committed to maintaining the standards we have set for ourselves relative to conservation and management of NAFO and associated species. Along these lines, we will continue to strongly advocate for consistency between the management decisions of the Commission and the advice of the Scientific Council. It is here that the commitment of the Organization to the sustainability of the resources under its purview are most impactful and most visible. It is our hope that NAFO will act accordingly – even when the decisions are difficult or unwelcome.

As we have stated in previous years, we cannot achieve good management without good science, and the United States remains concerned that the increasing demands on the Scientific Council are outstripping currently available scientific expertise and resources amongst participating CPs. We must recognize the potential negative impacts of this growing imbalance and continue to closely collaborate and coordinate with the SC relative to priority-setting moving forward to ensure that the SC can function effectively now and in the future.

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 circumstances 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 appropriate for such special consideration. In doing so, we must ensure that we do not infringe upon the sovereignty of each Contracting Party to determine the representatives, experts, and advisers that make up their own delegations. We look forward to further discussion and progress on this issue during this meeting.

Relative to NAFO stocks, we were disappointed to learn of the developments reported by the Scientific Council regarding the Division 3M shrimp stock and look forward to a productive discussion on how NAFO will implement the SC advice for the stock with a focus on long-term sustainability. We remain committed to a transparent and open dialogue regarding the future management regime for 3M shrimp.

We yet again thank the Scientific Council for their groundbreaking work on both the protection of Vulnerable Marine Ecosystems and implementation of an ecosystem approach to fisheries management. NAFO has been at the forefront of this work globally, but we find ourselves again at a critical juncture this year. The United States looks forward to working with our partners in advancing the advice from the Scientific Council and ensuring we continue the necessary progress on these two key initiatives.

The United States also looks forward to further discussion during this meeting relative to the application of the CEM to fishing operations in the NRA, particularly regarding bycatch and related measures.

On a sad note, earlier this year Dean Swanson, the long-time U.S. NAFO Commissioner, passed away. Dean was passionate in his support for NAFO's mandate for science-based, sustainable fisheries management. He was also a good friend to many in this room and will be fondly remembered as a man of integrity and strong leadership. His incredible encyclopedia-like knowledge of all things NAFO was always a treasured resource. Dean left an indelible mark on this organization, strengthening its mission and its mandate in ways we are still benefiting from today. He will be missed.

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

Annex 10. Opening Statement by the Deep Sea Conservation Coalition (DSCC)

Chair, Heads of Delegation, Delegates and fellow Observers, we are pleased to be making this opening statement on behalf of Oceans North and the Deep Sea Conservation Coalition during this second meeting held virtually. We greatly miss in person meetings and being able to interact with all of you.

The Deep Sea Conservation Coalition and its 90+ member organizations continue to work towards the protection of vulnerable marine ecosystems (VME) and the sustainable management of deep sea fisheries across RFMOs responsible for the management of deep-sea fisheries. We have followed the progress at NAFO closely and look forward to this year's meeting as there are significant decisions to be taken to fulfill commitments to protect deep sea biodiversity based on the commitments of all Contracting Parties to implement United Nations General Assembly Resolution 61/105 and subsequent resolutions. It is not lost on us that this week, as NAFO convenes online, countries are also convening at the UN in New York City to focus on the protection of nature. We also recognize many of the commitments Contracting Parties are working towards in other fora, including the Convention on Biological Diversity and the ongoing negotiations of a new high seas treaty. Real tangible measures to protect biodiversity can be taken this week at NAFO.

To achieve meaningful action on protecting deep sea ecosystems, VME areas identified by the Scientific Council should be closed to bottom trawl fishing to prevent further damage to these ecosystems. However, we urge Contracting Parties to NAFO to, at a minimum, follow science advice and close those areas recommended by the Scientific Council. We have placed a priority on the following measures:

On VMEs:

- Agree to the Scientific Council advice on protecting seamounts and related features in the NAFO Regulatory Area, which will result in a significant increase in protection for these vulnerable marine ecosystem elements.
- Agree to the Scientific Council Advice on additions to the current set of VME closures, which have resulted from the full assessment of significant adverse impacts on VMEs. Together with maintaining all existing VME closures, these new measures will significantly increase the protection of known VME biomass. Some VME indicator species – notably black corals, tunicates and bryozoans – remain either completely or largely unprotected.

On the Ecosystem Approach to Fisheries Management:

- Commit to moving forward on the NAFO Ecosystem Roadmap, including agreeing to Scientific Council advice, which has now been tabled for the second year in a row, including being notified when NAFO catches have exceeded twice the total catch index.

On Deep Sea Fisheries:

- Follow Science Advice for all NAFO regulated species and take additional measures to protect Greenland shark caught in the NAFO Convention Area, including no retention of catch.

We have provided a “*checklist*” of measures that is available in the Observer folder in the NAFO SharePoint and we encourage you consider this list as you deliberate and take your decisions.

Thank you, Matt Gianni and Sandrine Polti, Deep Sea Conservation Coalition.

Annex 11. Opening Statement by the Ecology Action Centre (EAC)

The Ecology Action Centre (EAC) thanks the Chair and NAFO Secretariat for their efforts to organize this virtual 43rd Annual Meeting of NAFO. We appreciate the opportunity to participate as observers in the deliberations and share our perspectives and we note the continuing difficult circumstances all participants are working under.

NAFO's Scientific Council (SC) continues to undertake ground breaking work on the development of ecosystem approaches to fisheries management. We are pleased the Commission has agreed to move forward with the upcoming Open Dialogue and subsequent WG-EAFFM Workshop to undertake discussion on how to further integrate ecosystem information into management decisions.

- **We urge all Parties to participate fully in the upcoming Dialogue and Workshop with an eye to identify ecosystem level objectives for management and to ensure observer access to participate**
- **We also look to the Commission to support an external independent review of the Roadmap that is timely so as not to hinder progress towards implementation of the ecosystem approach to management**

The SC has also done extensive work to advise on the best available options to improve VME protection and fulfill NAFO's commitment to UNGA Resolution 61/105 while limiting potential losses to fishing fleets. If their recommendations on closures are adopted, no VME's would be classified as having 'Poor' protection with most moving to 'Good' and only one remaining 'Limited' while less than 1% of fishing activity would be impacted.

- **We urge adoption of recommended VME new closures, additions, and modifications and would commend NAFO on fulfilling UNGA Res 61/105**

We are concerned that planned work to consider additional conservation measures for Greenland sharks was slowed, not only due to restricted workloads in virtual settings over the last two years, but because NAFO Parties have largely failed to report thorough and timely bycatch data as well as their mortality reduction efforts as required by the current NCEM. The SC has highlighted the extreme longevity and low fecundity of this intriguing species and has noted the need to protect it across its large geographic range and reiterated the recommendation that no retention be allowed.

- **We encourage the adoption of no retention for Greenland shark and continued work to standardize and improve data collection from across the NCA as well as the identification of bycatch hotspots**
- **We also ask Parties to fulfill their requirement to report on mortality reduction efforts and to consider the SC advice that management of Greenland shark be consistent across its range**

We note with concern the assessment of 3M Northern Shrimp that indicates the stock is again below B_{lim} . The stock was opened with only slim indications of improvement and under an effort-regulation scheme, yet at this point with only 16% of effort expended the SC advised catch level has already been exceeded.

- **We look to the Commission to act swiftly to close the fishery on 3M Northern Shrimp for 2022 and focus on work towards a TAC and quota allocation scheme before considering any reopening**

Finally, we note the workload and complexity of the analyses requested of the Scientific Council 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 provide the necessary funding, resources, and expertise to support their work**

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

Annex 12. Opening Statement by the North Pacific Anadromous Fish Commission (NPAFC)

Dear Mr. Chair, distinguished delegates, observers, ladies and gentlemen:

I am Vladimir Radchenko, Executive Director of the North Pacific Anadromous Fish Commission (NPAFC).

I am honoured to attend the NAFO 43rd Annual Meeting on behalf of the NPAFC in an observer capacity. I would like to extend the Commission's appreciation to the Honorable President Stéphane Artano, Vice-Chair Temur Tairov, members of the NAFO, including delegates from the NPAFC member countries, and Executive Secretary Fred Kingston for the invitation.

The 29th NPAFC Annual Meeting was held from May 10–20, 2021, also in a videoconferencing format. Since NAFO did not observe this meeting, I would like to brief you on major issues under consideration and meetings outcome. NPAFC members discussed coordinated enforcement efforts in 2020, which covered the Convention Area with 390 hours of aircraft patrols and 136 ship-days to deter and interrupt IUU fishing activity. Combined multilateral efforts identified multiple violations of Conservation and Management Measures established by RFMOs in the North Pacific; however, none involved high-seas driftnet activity or illegal retention of salmon.

Salmon researchers reviewed commercial catch statistics compiled from information provided by member countries. The total preliminary salmon catch in 2020 was 606.7 thousand metric tonnes (322.3 million fish) that is the lowest recorded since 1982. Many Pacific salmon stock conditions are of particular concern after 2020 fishery season. Therefore, NPAFC member countries highly support a large-scale survey throughout salmon wintering area in the framework of the 2022 Pan-Pacific Winter High Seas Expedition.

The International Year of the Salmon (IYS) has maintained a robust presence as it continues to strengthen its partnerships throughout the Northern Hemisphere. The 2021 Conference on the Winter Ecology of Pacific Salmon took place in April 2021 with presenters who had participated in the International Gulf of Alaska Expeditions in 2019-2020, as well as a panel of experts who discussed the upcoming 2022 Pan-Pacific High Seas Expedition. As the IYS approaches its final year in 2022, the Symposium Steering Committee, which includes members from the North Atlantic Salmon Conservation Organization (NASCO), starts planning the IYS Synthesis Symposium, which will take place in the Westin Bayshore Hotel in Vancouver, Canada from October 4–6, 2022. To continue the IYS legacy, the joint NPAFC/PICES proposal – Basin Events to Coastal Impacts: An Ocean Intelligence System for Fish and People (BECI) – was submitted for the UN Decade of Ocean Science.

NPAFC welcomed the incoming officers for two-year terms: President Doug Mecum (USA), Vice-President Vladimir Belyaev (Russia), and three committee chairpersons, Takumi Fukuda (Japan), Ju Kyoung Kim (Korea), and John Holmes (Canada). 2021 NPAFC Annual Meeting closed with an invitation from Japan to the Parties to hold the 2022 Annual Meeting in Hakodate, Japan. Because the NAFO Commission will consider an appointment of NAFO members as observers to external meetings, I would like to take this opportunity to confirm that NPAFC looks forward to seeing the NAFO representative at the NPAFC 30th Annual Meeting in Japan in May 2022.

Wishing the best of success and spirit of good cooperation to the NAFO Annual Meeting.

**Annex 13. SC Response to Feedback Questions Regarding its Scientific Advice –
United Kingdom
(COM WP 21-42)**

From United Kingdom regarding 3M cod [from COM WP 21-37]:

Scientific surveys normally harvest relatively small quantities of fish to derive information about stock status. In the case of the 2021 Faroese longline survey on Flemish Cap, the survey catches amount to 630.6t, equating to an additional 42% of the agreed TAC for 2021 of 1,500t. In order to take account of the impact of this catch on the advice provided for 2022, the UK proposes the following request to the SC:

Feedback Request

The Commission requests that the SC run additional projections assuming a total catch level of 2,130.6t in 2021, to be made available to CPs as soon as possible during the Annual Meeting.

Scientific Council responded [SC WP 21/013]:

In June 2021, projections with a catch in 2021 equal to the approved TAC = 1500t were run, given the results in Tables 1a and 2a as in the advisory sheet of the 3M cod. New projections incorporating the catches in the Faroese survey during June 2021 (630.6t), so with a catch in 2021 = 2130.6t, were performed with the same scenarios as in June 2021, given the results shown in Tables 1b and 2b.

Increasing the catches in 2021, the Yield in 2022 onwards declines slightly in all the scenarios with projecting F_s , the risk of SSB being below B_{lim} is slightly higher and the probability of the SSB in 2024 being above SSB in 2021 is lower.

While risks of the stock declining below B_{lim} in the next 2 years remain similar with the two levels of catch, the additional catches increase the probability that the stock will decline.

Table 1a. Results with a catch in 2021 of 1500t.

	B		SSB		Yield
	Median and 80% CI				
F _{bar} = F _{sq} (median = 0.131)					
2021	45787	(40635 - 51559)	27058	(23458 - 31446)	1500
2022	42969	(37884 - 48389)	24420	(21335 - 27970)	6525
2023	34733	(29703 - 40345)	18598	(15605 - 21773)	5291
2024	29999	(24718 - 36318)	19822	(16344 - 23723)	
F _{bar} = 0					
2021	45787	(40635 - 51559)	27058	(23458 - 31446)	1500
2022	42969	(37884 - 48389)	24420	(21335 - 27970)	0
2023	41143	(36076 - 46765)	24071	(21037 - 27322)	0
2024	42102	(36620 - 48376)	30514	(27027 - 34628)	
F _{bar} = 3/4F _{lim} (median = 0.147)					
2021	45787	(40635 - 51559)	27058	(23458 - 31446)	1500
2022	42969	(37884 - 48389)	24420	(21335 - 27970)	7160
2023	34111	(29091 - 39726)	18092	(15086 - 21246)	5694
2024	28966	(23642 - 35277)	18923	(15516 - 22770)	
F _{bar} = 1/2F _{lim} (median = 0.098)					
2021	45787	(40635 - 51559)	27058	(23458 - 31446)	1500
2022	42969	(37884 - 48389)	24420	(21335 - 27970)	5000
2023	36238	(31192 - 41834)	19854	(16887 - 23067)	4254
2024	32578	(27213 - 38900)	22092	(18612 - 25996)	
Catch = 1500 tons					
2021	45787	(40635 - 51559)	27058	(23458 - 31446)	1500
2022	42969	(37884 - 48389)	24420	(21335 - 27970)	1500
2023	39661	(34603 - 45288)	22807	(19826 - 26087)	1500
2024	38994	(33591 - 45246)	27691	(24211 - 31752)	
Catch = 1875 tons					
2021	45787	(40635 - 51559)	27058	(23458 - 31446)	1500
2022	42969	(37884 - 48389)	24420	(21335 - 27970)	1875
2023	39291	(34238 - 44913)	22482	(19454 - 25735)	1875
2024	38216	(32795 - 44488)	27028	(23511 - 31085)	
Catch = 2250 tons					
2021	45787	(40635 - 51559)	27058	(23458 - 31446)	1500
2022	42969	(37884 - 48389)	24420	(21335 - 27970)	2250
2023	38923	(33871 - 44544)	22151	(19150 - 25412)	2250
2024	37438	(32028 - 43736)	26354	(22862 - 30373)	
Catch = 3000 tons					
2021	45787	(40635 - 51559)	27058	(23458 - 31446)	1500
2022	42969	(37884 - 48389)	24420	(21335 - 27970)	3000
2023	38196	(33139 - 43808)	21520	(18528 - 24739)	3000
2024	35865	(30453 - 42155)	24986	(21477 - 28888)	

Table 1b. Results with a catch in 2021 of 2130.6t (=1500 + 630.6).

	B		SSB		Yield
	Median and 80% CI				
F _{bar} = Fsq (median = 0.131)					
2021	45786	(40483 - 51538)	27071	(23429 - 31417)	2131
2022	42271	(37161 - 47408)	23874	(20789 - 27401)	6390
2023	34327	(29418 - 39829)	18272	(15306 - 21461)	5218
2024	29732	(24494 - 35909)	19570	(16108 - 23461)	
F _{bar} = 0					
2021	45786	(40483 - 51538)	27071	(23429 - 31417)	2131
2022	42271	(37161 - 47408)	23874	(20789 - 27401)	0
2023	40614	(35672 - 46166)	23620	(20612 - 26889)	0
2024	41588	(36298 - 47813)	30092	(26522 - 34166)	
F _{bar} = 3/4F _{lim} (median = 0.147)					
2021	45786	(40483 - 51538)	27071	(23429 - 31417)	2131
2022	42271	(37161 - 47408)	23874	(20789 - 27401)	7015
2023	33716	(28813 - 39207)	17754	(14808 - 20916)	5630
2024	28653	(23481 - 34842)	18644	(15219 - 22524)	
F _{bar} = 1/2F _{lim} (median = 0.098)					
2021	45786	(40483 - 51538)	27071	(23429 - 31417)	2131
2022	42271	(37161 - 47408)	23874	(20789 - 27401)	4901
2023	35791	(30868 - 41296)	19511	(16496 - 22691)	4205
2024	32279	(26951 - 38463)	21792	(18255 - 25694)	
Catch = 1500 tons					
2021	45786	(40483 - 51538)	27071	(23429 - 31417)	2131
2022	42271	(37161 - 47408)	23874	(20789 - 27401)	1500
2023	39131	(34196 - 44679)	22355	(19318 - 25569)	1500
2024	38516	(33179 - 44695)	27308	(23764 - 31342)	
Catch = 1875 tons					
2021	45786	(40483 - 51538)	27071	(23429 - 31417)	2131
2022	42271	(37161 - 47408)	23874	(20789 - 27401)	1875
2023	38764	(33827 - 44305)	22065	(18991 - 25288)	1875
2024	37749	(32396 - 43904)	26607	(23104 - 30608)	
Catch = 2250 tons					
2021	45786	(40483 - 51538)	27071	(23429 - 31417)	2131
2022	42271	(37161 - 47408)	23874	(20789 - 27401)	2250
2023	38399	(33459 - 43930)	21723	(18688 - 24960)	2250
2024	36966	(31635 - 43121)	25919	(22429 - 29956)	
Catch = 3000 tons					
2021	45786	(40483 - 51538)	27071	(23429 - 31417)	2131
2022	42271	(37161 - 47408)	23874	(20789 - 27401)	3000
2023	37665	(32721 - 43186)	21095	(18085 - 24336)	3000
2024	35411	(30063 - 41567)	24536	(21050 - 28527)	

Table 2a. Risk with a catch in 2021 of 1500t.

	Yield			P(SSB < B _{lim})				P(F _{bar} > F _{lim})			P(SSB ₂₄ > SSB ₂₁)
	2021	2022	2023	2021	2022	2023	2024	2021	2022	2023	
F _{bar} = F _{sq} = 0.131	1500	6525	5291	<1%	<1%	13%	8%	<1%	<1%	<1%	1%
F _{bar} = 0	1500	0	0	<1%	<1%	<1%	<1%	<1%	<1%	<1%	90%
F _{bar} = 3/4F _{lim} = 0.147	1500	7160	5694	<1%	<1%	17%	13%	<1%	1%	2%	<1%
F _{bar} = 1/2F _{lim} = 0.098	1500	5000	4254	<1%	<1%	5%	1%	<1%	<1%	<1%	4%
Catch = 1500 tons	1500	1500	1500	<1%	<1%	1%	<1%	<1%	<1%	<1%	58%
Catch = 1875 tons	1500	1875	1875	<1%	<1%	1%	<1%	<1%	<1%	<1%	48%
Catch = 2250 tons	1500	2250	2250	<1%	<1%	1%	<1%	<1%	<1%	<1%	36%
Catch = 3000 tons	1500	3000	3000	<1%	<1%	2%	<1%	<1%	<1%	<1%	20%

Table 2b. Risk with a catch in 2021 of 2130.6t (=1500t + 630.6t).

	Yield			P(SSB < B _{lim})				P(F _{bar} > F _{lim})			P(SSB ₂₄ > SSB ₂₁)
	2021	2022	2023	2021	2022	2023	2024	2021	2022	2023	
F _{bar} = F _{sq} = 0.131	2131	6390	5218	<1%	<1%	15%	9%	<1%	<1%	<1%	<1%
F _{bar} = 0	2131	0	0	<1%	<1%	<1%	<1%	<1%	<1%	<1%	87%
F _{bar} = 3/4F _{lim} = 0.147	2131	7015	5630	<1%	<1%	20%	15%	<1%	1%	2%	<1%
F _{bar} = 1/2F _{lim} = 0.098	2131	4901	4205	<1%	<1%	6%	2%	<1%	<1%	<1%	3%
Catch = 1500 tons	2131	1500	1500	<1%	<1%	1%	<1%	<1%	<1%	<1%	52%
Catch = 1875 tons	2131	1875	1875	<1%	<1%	1%	<1%	<1%	<1%	<1%	41%
C=2250	2131	2250	2250	<1%	<1%	1%	<1%	<1%	<1%	<1%	32%
Catch = 3000 tons	2131	3000	3000	<1%	<1%	2%	<1%	<1%	<1%	<1%	16%

Annex 14. Scientific Council Recommendation on Research Surveys in the NRA (COM-SC WP 21-15)

Scientific Council recommendation on research surveys in the NRA

With the information currently available, SC considers that the Faroe Islands 3M cod survey initiative does not fulfil the requirements of a valid scientific survey and more closely resembles a commercial fishery

SC notes that protocols from Article 4 in the Conservation and Enforcement Measures (NAFO COM Doc. 21/01) do not require review of proposed survey research plans and confirmation of their scientific validity by SC. **SC recommends** that the Commission amend this procedure to include a scientific review of proposed research surveys in the NRA to ensure scientific best practices are followed.

During the June 2021 SC meeting, a letter from the Faroe Marine Research Institute was forwarded by the NAFO secretariat to CPs and NAFO officials, indicating that this institute would be conducting a scientific survey in NAFO division 3M during June/July 2021. This prompted SC to request, via STACREC, a presentation about this planned survey. A presentation was given to STACREC describing this longline survey. This survey was presented by the Faeroe Islands as a complement to the EU Div. 3M bottom trawl research survey. It is a longline survey in waters less than 600 m, with approximately 100 sets with 6000 hooks each. The survey is conducted by a commercial fishing vessel without scientific personnel on board, and where catch will be recorded, identified, and sampled (length, weight and otoliths) by the fishing crew. This is primarily a cod survey, however Atlantic Halibut and other bycatch (including VME species) would be expected to be caught.

In principle, a longline survey may provide additional information on the ecosystem in 3M. However, STACREC noted that the proposed survey design was insufficient (e.g., lack of proper consideration of number of hooks, stratification, catchability) to consider this as a valid scientific survey; an appropriate survey design, together with objectives and detailed survey protocols, is required to properly assess the potential scientific value of the data collected.

Moreover, in September 2021, SC was made aware that the catch from this survey totaled 630 t, accounting for removals equal to roughly 42% of the TAC of 1500 t. For context, the EU bottom trawl survey of Div. 3M which constitutes the most important fishery independent data for the assessment, takes about 7 t in total of cod. This indicates that the Faroe Islands longline survey is not optimized for the collection of information with minimum impact, as would be the case for a typical scientific survey.

With the information currently available, SC considers that this initiative does not fulfil the requirements of a valid scientific survey and more closely resembles a commercial fishery

SC notes that protocols from Article 4 in the Conservation and Enforcement Measures (NAFO COM Doc 21/01) do not require review of proposed survey research plans and confirmation of their scientific validity by SC. **SC recommends** that the Commission amend this procedure to include a scientific review of proposed research surveys in the NRA to ensure scientific best practices are followed.

Annex 15. Statement of DFG with respect to COM-SC WP 21-15 "*Scientific Council recommendation on research surveys in the NRA*"
(COM-SC WP 21-16)

On 1 June 2021 the Faroese Marine Research Institute notified (hereafter "Notification") the Executive Secretary of the North Atlantic Fisheries Organization (hereafter "NAFO") that a Faroese Scientific Longline Survey (hereafter "Survey") would be conducted in 3M in Flemish Cap with tentative dates for 9 June to 9 July 2021. Consistent with Article 4(7) of the NAFO Conservation and Enforcement Measures, the Notification was made public on the NAFO Member's page on the day of its receipt.

The legal basis for the Survey is Article 4 of NAFO CEM. The Notification conforms with the legal requirements in that provision. A preliminary analysis from the Survey was submitted to NAFO on 14 September 2021. Consistent with the Notification, a complete analysis will in due course be submitted to NAFO.

The Scientific Council observes in the Scientific Council Working Paper 21 – 15 (hereafter "Working Paper"), issued on 23 September 2021, that Article 4 of the NAFO CEM does not require review of proposed survey research plans, nor any confirmation by the Scientific Council. Yet, it appears notwithstanding from the Working Paper that the Standing Committee on Research Coordination (hereafter "STACREC") did not consider that the standards in the Faroese Survey was in conformity with its perceptions of valid scientific surveys. Further, from this background the Scientific Council considers the survey to resemble a commercial fishery. Such conclusions go beyond the mandate entrusted to the Scientific Council and also the STACREC.

This Delegation deems it important to stress that the Notification was compiled and prepared in identical terms to similar surveys conducted in waters under the jurisdiction of the Faroe Islands. While there is no requirement to seek approval from STACREC, this Delegation would without any doubt have sought to adjust the Survey in order to take into account views on best practice that may have been expressed by STACREC - had these been received in due course. It is noted that this Delegation has not been informed of the reservations expressed by STACREC until the production of the Working Paper. The report from the June meeting of the Scientific Council, issued on 13 July 2021, does not contain any information on these discussions. Further, while the Working Paper refers to the discussions in the STACREC meeting, convened during the May/June meeting of the Scientific Council, the report from the STACREC meeting was, according to Appendix III to the Scientific Council report meeting, deferred until September and is still not made available (24 September 2021).

This Delegation expresses reservations to the above-mentioned observations in the Working Paper, which appear biased and one-sided. Further, it is the view of this Delegation that the observations in question go beyond the terms of reference of the Scientific Council, and also STACREC, from which it follows, are to be attributed no legal effect.

This Delegation notes the recommendation of the Scientific Council to provide for a scientific review of proposed research surveys and welcomes this opportunity to agree on appropriate procedures.

**Annex 16. Recommendations of the Joint Commission-Scientific Council
Working Group on Improving Efficiency of NAFO Working Group Process (E-WG)**
(COM-SC WP 21-06 now COM-SC Doc. 21-06)

The Working Group on Improving Efficiency of NAFO Working Group Process (E-WG) met via WebEx on 18 March 2021 (COM-SC Doc. 21-01) and agreed on the following recommendation.

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

- **For the 2022 NAFO year, the following two-week periods, be considered for NAFO intersessional meetings:**
 - **21 February – 04 March 2022;**
 - **25 April – 06 May 2022; and**
 - **08 – 19 August 2022.**

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 17. Recommendations of the Joint Commission-Scientific Council
Working Group on Risk-Based Management Strategies (WG-RBMS)**
(COM-SC WP 21-07 ~~now~~ COM-SC Doc. 21-07)

The NAFO Joint Fisheries Commission-Scientific Council Working Group on Risk-Based Management Strategies (WG-RBMS) met via WebEx on 20-21 August (COM-SC Doc. 21-04) and agreed on the following recommendations:

In regard to Greenland halibut Management Strategy Evaluation,

- 1. WG-RBMS endorses the continued application of the HCR to derive the TAC for 2022.**
- 2. Regarding the Exceptional Circumstances for Greenland halibut in 2022 (COM-SC RBMS-WP 21-02) and conditional on the absence of other reasons for Exceptional Circumstances arising; WG-RBMS recommends that the Commission request the SC to calculate in 2022 the HCR adjusting the TAC advised for 2022 using four survey indices (Canadian fall 2J3K, Canadian fall 3LNO, EU 3M 0-1400m, and EU-Spain 3NO surveys) to provide TAC advice for 2023.**

In regard to 3LN Redfish,

- 3. Noting that a review and update of the existing Management Strategy is required; WG-RBMS recommends that the Commission request SC, at its meeting in June 2022, to provide a full assessment and advice (based on an approach to be determined by the Commission in September 2021) on a TAC for 3LN Redfish for the years 2023 and 2024.**

In regard to Precautionary Approach Framework (PAF),

- 4. WG-RBMS shares the interpretation that the SC/PA-WG has made of how to implement the General Objectives of the NAFO Convention within the PAF and its preliminary conclusions and recommends the work to continue according to the schedule approved last year.**

**Annex 18. Canadian Deliverables to Advance Review of 3LN Redfish Management Strategy
(Information Paper Presented by Canada)
(COM-SC WP 21-12)**

At the August 2021 meeting of the Working Group on Risk-Based Management Strategies (WG-RBMS), Canada agreed to identify tasks and/or deliverables to advance the planned review of the 3LN Redfish Management Strategy that could be made available for Scientific Council (SC) and WG-RBMS review/consideration in 2022. Canada recognizes the significant amount of work that is continually being requested of the SC, which implicates many of the same SC members.

The Canadian domestic 3LN Redfish Working Group (Canadian WG), comprised of fishery managers, scientists and industry representatives, continued to meet in 2021, with its discussions centered on new objectives that consider the episodic recruitment of redfish. Further to the recent advice of the SC, work will continue on potential new objectives that consider these sporadic recruitment events and the declining trend in the stock with a potentially long period of low recruitment, as well as on potential Harvest Control Rules (performance metrics).

Canada has dedicated science funding to support a new staff position that will be focused on the 3LN Redfish Management Strategy Evaluation (MSE) review, particularly the required modelling work. This will support the work of the SC in this respect and is expected to reduce the associated workload for this key component of the review.

The work of the Canadian WG will continue to be guided by the direction of the SC and WG-RBMS, and Canada will continue to provide updates to both groups.

A full assessment of 3LN redfish is scheduled for June 2022. As part of the assessment, a review of the data and existing models will occur, which will contribute to the work currently being done by the Canadian WG.

The SC conducted a scoping exercise to provide guidance to the WG-RBMS on the process of conducting a full review/evaluation of the management strategy of Div. 3LN redfish (NAFO SCS Doc. 21/14 – pages 102-103). The review of the 3LN redfish management strategy will follow the steps provided in the scoping exercise undertaken by SC, with focus on the first three steps as the deliverables to June 2022.

Canada will undertake the following tasks in advance of the June 2022 meeting of SC and will prepare working papers on the data review and the review of previous models for potential review by the SC at that time.

1. A data review – to ensure that the best data available are being used.

Review of the available biological, commercial and survey data and its possible use in the MSE process.

2. Decision on the models to apply to the data.

Revision and discussion of the problems with the current Operating Models (OM), as well as the development of new models that are required to cover any uncertainties that are identified (for example: sporadic recruitment events, stock mixing, modelling a mixed stock, etc.)

3. Initiate discussion on the OMs to be used.

The original MSE had six different operating models. SC Canadian delegation have recently updated the OMs from the original MSE. The results of these updates may provide information for the development of a new MSE. It will also assist in the review of the different models and discussions regarding any new models. Final selection on operating models will likely be made later, after further developments as may be appropriate.

**Annex 19. Recommendations of the Joint Commission-Scientific Council
Working Group on Ecosystem Approach Framework to Fisheries Management (WG-EAFFM)**
(COM WP 21-08 Rev. now COM Doc. 21-08)

The NAFO Joint Fisheries Commission-Scientific Council Working Group on Ecosystem Approach Framework to Fisheries Management (WG-EAFFM) met via WebEx on 14–16 July 2021 and 20-21 July 2021 (COM-SC Doc. 21-03) and agreed on the following recommendations:

The WG-EAFFM:

In regards to SAI work,

1. Recommends that the Commission direct the Secretariat to share its work on bottom fishing impacts along with any potential up-date of the SAI outcome with the UNGA VME review in 2022.

In regards to Seamounts,

2. Welcomes the recommendation from the SC on the proposal on revision boundaries of seamount closures and recommend the proposal be forwarded to the Commission for consideration, noting that some Contracting Parties need additional time for consultation on the revision with scientists and stakeholders.

In regards to Taxa Changes,

3. Recommends that the Commission adopt the Scientific Council recommended changes to Annex I.E.6 “*VME Indicator Species*” of the NAFO CEM (Annex 6).

In regards to Roadmap/Workshop

4. Recommends, given the long-term importance and ground-breaking nature of this work, that the Commission request Scientific Council, in consultation with WG-EAFFM, engage an external independent panel to conduct a scientific review of the NAFO Roadmap as it applies to estimating fisheries production and total catches (Tier 1) whilst considering a full range of species interactions (Tier 2). The outcomes of this would be available in advance of the planned workshop in 2022.
5. Recommends that the Commission strongly encourage participation by Contracting Parties and observers at both the open dialogue meeting and the subsequent WG-EAFFM Workshop.
6. Recommends that the Commission request the participation of WG-RBMS representatives and co-Chairs at both the open dialogue meeting and the subsequent WG-EAFFM Workshop, including potentially co-chairing the meetings, as many of these issues could overlap with its work, particularly the review of the PA Framework.

In regards to the review of NAFO CEM Chapter 2,

7. Re-iterates its prior recommendation that the Commission request the Scientific Council to review the effectiveness of NAFO CEM, Chapter 2 from a scientific and technical perspective and to report back at 2022 WG-EAFFM meeting.
8. Recommends that the Commission request STACTIC and the Secretariat to work with NAFO fishery observers to determine if, and how, the current VME identification guides can be improved to assist in VME species identification.
9. Recommends that the Commission request STACTIC, for WG-EAFFM’s 2022 meeting, to develop NAFO CEM text requiring the Secretariat to inform those Contracting Parties with an inspection presence when vessels are operating in closed areas at speeds indicating fishing may be occurring.

In regards to VMEs,

10. Recommends that the Commission extend the current closures in Chapter 2 of the NAFO CEM for five (5) years. Consequently,
 - a. Article 17.1 of the NAFO CEM should read: Until 31 December ~~2024~~ 2026, no vessel shall engage in bottom fishing activities in any of the areas illustrated in Figure 3 and defined by connecting the following coordinates specified in Table 5 in numerical order and back to coordinate 1.
 - b. Article 17.2 of the NAFO CEM should read: Until 31 December ~~2024~~ 2026, no vessel shall engage in bottom fishing activities in the area of Division 3O illustrated in Figure 4 and defined by connecting the coordinates specified in Table 6 in numerical order and back to coordinate 1.
 - c. Article 17.3 of the NAFO CEM should read: Until 31 December ~~2024~~ 2026, no vessel shall engage in bottom fishing activities in the areas 1-13 illustrated in Figure 5 and defined by connecting the coordinates specified in Table 7 in numerical order and back to coordinate 1.
11. Additional VME protections are needed, therefore, recommends that the Commission consider the SC's advice regarding additional area-based management measures to protect VMEs from SAI, and consider adopting additional measures if proposed at the 2021 Annual Meeting.

In regards to ABNJ Deep Sea Fisheries Project,

12. Recommends the Commission support the ABNJ Deep Sea Fisheries Project, including offering in-kind support from NAFO.

In regards to Sargasso Sea Commission,

13. Recommends the Commission support the development of an MOU between the Sargasso Sea Commission Secretariat and NAFO Secretariat.

Annex 6. Updated List of VME Indicator Species for inclusion in Part. VI, Annex I.E of the NAFO CEM

List of VME Indicator Species

Common Name and FAO ASFIS 3- ALPHA CODE	Taxon	Family	FAO ASFIS 3-ALPHA CODE
Large-Sized Sponges (PFR - Porifera)	<i>Asconema foliatum</i>	Rossellidae	ZBA
	<i>Aphrocallistes beatrix</i>	Aphrocallistidae	
	<i>Asbestopluma (Asbestopluma) ruetzleri</i>	Cladorhizidae	ZAB (Asbestopluma)
	<i>Axinella</i> sp.	Axinellidae	
	<i>Chondrocladia grandis</i>	Cladorhizidae	ZHD (Chondrocladia)
	<i>Cladorhiza abyssicola</i>	Cladorhizidae	ZCH (Cladorhiza)
	<i>Cladorhiza kenchingtonae</i>	Cladorhizidae	ZCH (Cladorhiza)
	<i>Craniella</i> spp.	Tetillidae	ZCS (Craniella spp.)
	<i>Dictyaulus romani</i>	Euplectellidae	ZDY (Dictyaulus)
	<i>Esperiopsis villosa</i>	Esperiopsidae	ZEW
	<i>Forcepia</i> spp.	Coelosphaeridae	ZFR
	<i>Geodia barretti</i>	Geodiidae	
	<i>Geodia macandrewii</i>	Geodiidae	
	<i>Geodia parva</i>	Geodiidae	
	<i>Geodia phlegraei</i>	Geodiidae	
	<i>Haliclona</i> sp.	Chalinidae	ZHL
	<i>Iophon piceum</i>	Acarnidae	WJP
	<i>Isodictya palmata</i>	Isodictyidae	
	<i>Lissodendoryx (Lissodendoryx) complicata</i>	Coelosphaeridae	ZDD
	<i>Mycale (Mycale) lingua</i>	Mycalidae	YHL (Mycale lingua)
	<i>Mycale (Mycale) loveni</i>	Mycalidae	
	<i>Phakellia</i> sp.	Axinellidae	
	<i>Polymastia</i> spp.	Polymastiidae	ZPY
	<i>Stelletta normani</i>	Ancorinidae	WSX (Stelletta)
	<i>Stelletta tuberosa</i>	Ancorinidae	WSX (Stelletta)
	<i>Stryphnus fortis</i>	Ancorinidae	WPH
	<i>Thenea muricata</i>	Pachastrellidae	ZTH (Thenea)
	<i>Thenea valdiviae</i>	Pachastrellidae	ZTH (Thenea)
	<i>Weberella bursa</i>	Polymastiidae	ZWB (Weberella spp.)

Common Name and FAO ASFIS 3- ALPHA CODE	Taxon	Family	FAO ASFIS 3-ALPHA CODE
Stony Corals (CSS - Scleractinia)	<i>Enallopsammia rostrata</i>	Dendrophylliidae	FEY
	<i>Lophelia pertusa</i>	Caryophylliidae	LWS
	<i>Madrepora oculata</i>	Oculinidae	MVI
	<i>Solenosmilia variabilis</i>	Caryophylliidae	RZT
Black corals (AQZ- Antipatharia)	<i>Stichopathes</i> sp.	Antipathidae	QYX
	<i>Leiopathes</i> cf. <i>expansa</i>	Leiopathidae	
	<i>Leiopathes</i> sp.	Leiopathidae	
	<i>Plumapathes</i> sp.	Myriopathidae	
	<i>Bathypathes</i> cf. <i>patula</i>	Schizopathidae	
	<i>Parantipathes</i> sp.	Schizopathidae	
	<i>Stauropathes arctica</i>	Schizopathidae	SQW
	<i>Stauropathes</i> cf. <i>punctata</i>	Schizopathidae	
	<i>Telopathes magnus</i>	Schizopathidae	
Small Gorgonians (GGW)	<i>Acanella arbuscula</i>	Isididae	KQL (Acanella)
	<i>Anthothela grandiflora</i>	Anthothelidae	WAG
	<i>Chrysogorgia</i> sp.	Chrysogorgiidae	FHX
	<i>Metallogorgia melanotrichos</i>	Chrysogorgiidae	QFY (Chrysogorgiidae)
	<i>Narella laxa</i>	Primnoidae	QON (Primnoidae)
	<i>Radicipes gracilis</i>	Chrysogorgiidae	CZN
	<i>Swiftia</i> sp.	Plexauridae	
Large Gorgonians (GGW)	<i>Acanthogorgia armata</i>	Acanthogorgiidae	AZC
	<i>Calyptraphora</i> sp.	Primnoidae	QON (Primnoidae)
	<i>Hemicorallium bathyrubrum</i>	Coralliidae	COR (Corallium)
	<i>Hemicorallium bayer</i>	Coralliidae	COR (Corallium)
	<i>Iridogorgia</i> sp.	Chrysogorgiidae	QFY (Chrysogorgiidae)
	<i>Keratoisis</i> cf. <i>siemensii</i>	Isididae	IQO (Isididae)
	<i>Keratoisis grayi</i>	Isididae	IQO (Isididae)
	<i>Lepidisis</i> sp.	Isididae	QFX (Lepidisis)
	<i>Paragorgia arborea</i>	Paragorgiidae	BFU
	<i>Paragorgia johnsoni</i>	Paragorgiidae	BFV

Common Name and FAO ASFIS 3- ALPHA CODE	Taxon	Family	FAO ASFIS 3-ALPHA CODE
Sea Pens (NTW – Pennatulacea)	<i>Paramuricea grandis</i>	Plexauridae	PZL (Paramuricea)
	<i>Paramuricea placomus</i>	Plexauridae	PZL (Paramuricea)
	<i>Paramuricea</i> spp.	Plexauridae	PZL (Paramuricea)
	<i>Parastenella atlantica</i>	Primnoidae	QON (Primnoidae)
	<i>Placogorgia</i> sp.	Plexauridae	
	<i>Placogorgia terceira</i>	Plexauridae	
	<i>Primnoa resedaeformis</i>	Primnoidae	QOE
	<i>Thouarella (Euthouarella) grasshoffi</i>	Primnoidae	QON (Primnoidae)
	<i>Anthoptilum grandiflorum</i>	Anthoptilidae	AJG (Anthoptilum)
	<i>Distichoptilum gracile</i>	Protoptilidae	WDG
	<i>Funiculina quadrangularis</i>	Funiculinidae	FQJ
	<i>Halipterus</i> cf. <i>christii</i>	Halipteridae	ZHX (Halipterus)
	<i>Halipterus finmarchica</i>	Halipteridae	HFM
	<i>Halipterus</i> sp.	Halipteridae	ZHX (Halipterus)
	<i>Kophobelemnnon stelliferum</i>	Kophobelemnidae	KVF
	<i>Pennatula aculeata</i>	Pennatulidae	QAC
	<i>Ptilella</i> spp.	Pennatulidae	
	<i>Pennatula</i> sp.	Pennatulidae	
	<i>Protoptilum carpenteri</i>	Protoptilidae	
	<i>Umbellula lindahli</i>	Umbellulidae	OJZ (Umbellula spp)
	<i>Virgularia mirabilis</i>	Virgulariidae	
Tube-Dwelling Anemones	<i>Pachycerianthus borealis</i>	Cerianthidae	WQB
Erect Bryozoans (BZN – Bryozoa)	<i>Eucratea loricata</i>	Eucrateidae	WEL
Sea Lilies (CWD – Crinoidea)	<i>Conocrinus lofotensis</i>	Bourgueticrinidae	WCF
	<i>Gephyrocrinus grimaldii</i>	Hyocrinidae	
	<i>Trichometra cubensis</i>	Antedonidae	
	<i>Boltenia ovifera</i>	Pyuridae	WBO

Common Name and FAO ASFIS 3- ALPHA CODE	Taxon	Family	FAO ASFIS 3-ALPHA CODE
Sea Squirts (SSX – Asciadiacea)	<i>Halocynthia aurantium</i>	Pyuridae	

Unlikely to be observed in trawls; *in situ* observations only:

Large xenophyophores	<i>Syringamina</i> sp.	Syringamminidae
-------------------------	------------------------	-----------------

Annex 20. Revision of Seamounts Closures

(COM-SC WP 21-13 now COM-SC Doc. 21-05)

Explanatory Memorandum

The 2017 amendments to the NAFO Convention were designed to modernize NAFO, including incorporating an ecosystem approach to fisheries management. NAFO Contracting Parties have committed to conserving the marine biodiversity within the NAFO Regulatory Area, which has been reflected in NAFO's ongoing efforts to protect vulnerable marine ecosystem elements, such as seamounts.

In 2020, the Scientific Council recommended that the Commission revise the Newfoundland and Corner Rise Seamount protection zones to better protect seamount chains in the NAFO Regulatory Area (SCS Doc. 20/19). Due to the limited nature of the virtual NAFO meetings that year, a decision on this matter was deferred.

In 2021, the Scientific Council made additional recommendations with the aim of applying a consistent approach to NAFO's protection of seamounts. Recommendations include completing the protection of seamounts on the Fogo Seamount Chain and the Newfoundland Seamount Chain through revised boundaries; and, the implementation of seven seamount closures in the NAFO Convention Area in areas beyond national jurisdiction north of Orphan Knoll. These additional seven closures are targeted in scope. All proposed closures fall outside of NAFO's fishing footprint and will therefore have no impact on existing fishing activities (SCS 21/14).

On this basis, Canada and the United States of America propose adopting the SC's recommended revisions to the boundaries of the Fogo, Corner Rise and Newfoundland Seamount closures, as well as the implementation of seven additional closed areas north of Orphan Knoll.

Proposal

Reaffirming NAFO's commitment to incorporating an ecosystem approach to fisheries management, and to protecting biodiversity within the Northwest Atlantic;

Recalling the Scientific Council advice from 2021 which "recommends changes to the existing boundaries for the Fogo, Newfoundland and Corner Rise Seamount closures, as well as the implementation of seven new individual seamount closures in the NAFO Regulatory Area north of Orphan Knoll";

Thereby recommends that Article 17 of the CEM is amended, inclusive of revisions to Table 5 (referenced in para 17.1), in order to refine the closures for the Newfoundland, Corner Rise and Fogo Seamount chains, including the expansion to previously unprotected seamounts, as well as implement seven new closed areas to protect seamounts north of Orphan Knoll, as described by the geographical coordinates below:

Description	Coordinate No.	Latitude	Longitude
Fogo Seamount <u>Chains-1</u> Fogo Seamounts <u>2</u>	<u>11</u>	<u>42° 31' 33" N</u> <u>42°31'33"N</u>	<u>53° 23' 17" W</u> <u>53°23'17"W</u>
	<u>22</u>	<u>42° 31' 33" N</u> <u>42°31'33"N</u>	<u>52° 33' 37" W</u> <u>52°33'37"W</u>
	<u>33</u>	<u>41° 51' 00" N</u> <u>41°55'48"N</u>	<u>52° 07' 00" W</u> <u>53°23'17"W</u>
	<u>44</u>	<u>41° 51' 00" N</u> <u>41°55'48"N</u>	<u>51° 26' 00" W</u> <u>52°33'37"W</u>
	<u>51</u>	<u>42° 18' 00" N</u> <u>41°07'22"N</u>	<u>51° 26' 00" W</u> <u>52°27'49"W</u>
	<u>62</u>	<u>42° 18' 00" N</u> <u>41°07'22"N</u>	<u>51° 00' 00" W</u> <u>51°38'10"W</u>

Description	Coordinate No.	Latitude	Longitude
	73	41° 33' 00" N 40° 31' 37" N	51° 00' 00" W 52° 27' 49" W
	84	41° 33' 00" N 40° 31' 37" N	49° 42' 00" W 51° 38' 10" W
	9	42° 32' 00" N	49° 42' 00" W
	10	42° 32' 00" N	48° 45' 00" W
	11	41° 24' 00" N	48° 45' 00" W
	12	41° 24' 00" N	47° 55' 00" W
	13	40° 30' 00" N	47° 55' 00" W
	14	40° 30' 00" N	50° 15' 00" W
	15	40° 05' 00" N	50° 55' 00" W
	16	40° 05' 00" N	52° 00' 00" W
	17	40° 31' 37" N	52° 00' 00" W
	18	40° 31' 37" N	52° 27' 49" W
	19	41° 55' 48" N	53° 23' 17" W
Orphan Knoll	1	50°00'30"N	45°00'30"W
	2	51°00'30"N	45°00'30"W
	3	51°00'30"N	47°00'30"W
	4	50°00'30"N	47°00'30"W
Corner Rise Seamounts	1	36° 33' 00" N 35° 00' 00" N	52° 27' 00" W 48° 00' 00" W
	2	36° 33' 00" N 36° 00' 00" N	51° 00' 00" W 48° 00' 00" W
	3	36° 00' 00" N 36° 00' 00" N	50° 30' 00" W 52° 00' 00" W
	4	35° 33' 00" N 35° 00' 00" N	50° 30' 00" W 52° 00' 00" W
	5	35° 33' 00" N	48° 00' 00" W
	6	36° 00' 00" N	48° 00' 00" W
	7	36° 00' 00" N	47° 06' 00" W
	8	35° 33' 00" N	47° 06' 00" W
	9	35° 33' 00" N	42° 30' 00" W
	10	35° 00' 00" N	42° 30' 00" W
	11	35° 00' 00" N	52° 27' 00" W
Newfoundland Seamounts	11	44° 06' 00" N 43° 29' 00" N	46° 45' 00" W 43° 20' 00" W
	22	44° 06' 00" N 44° 00' 00" N	46° 18' 00" W 43° 20' 00" W
	33	43° 57' 00" N 44° 00' 00" N	46° 18' 00" W 46° 40' 00" W
	44	43° 57' 00" N 43° 29' 00" N	43° 24' 00" W 46° 40' 00" W
	5	43° 36' 00" N	43° 24' 00" W
	6	43° 36' 00" N	44° 42' 00" W
	7	43° 18' 00" N	44° 42' 00" W
	8	43° 18' 00" N	45° 00' 00" W
	9	42° 45' 00" N	45° 00' 00" W
	10	42° 45' 00" N	45° 15' 00" W
	11	43° 18' 00" N	45° 15' 00" W
	12	43° 18' 00" N	45° 25' 00" W
	13	43° 29' 00" N	45° 25' 00" W

Description	Coordinate No.	Latitude	Longitude
	<u>14</u>	<u>43° 29' 00" N</u>	<u>46° 00' 00" W</u>
	<u>15</u>	<u>43° 36' 00" N</u>	<u>46° 00' 00" W</u>
	<u>16</u>	<u>43° 36' 00" N</u>	<u>46° 40' 00" W</u>
	<u>17</u>	<u>43° 52' 00" N</u>	<u>46° 40' 00" W</u>
	<u>18</u>	<u>43° 52' 00" N</u>	<u>46° 45' 00" W</u>
New England Seamounts*	1	38°51'54.000" N	66°55'51.600" W
	2	37° 12' 0.000" N	60° 48' 0.000" W
	3	35° 0' 0.000" N	59°00'0.000" W
	4	35° 0' 0.000" N	56°30'0.000" W
	5	36° 48' 0.000" N	57° 48' 0.000" W
	6	39° 0' 0.000" N	60° 0' 0.000" W
	7	39° 18' 0.000" N	61° 30' 0.000" W
	8	39°56'20.400" N	65°56'34.800" W
<u>2H East</u>	<u>1</u>	<u>56° 00' 00" N</u>	<u>49° 00' 00" W</u>
	<u>2</u>	<u>56° 00' 00" N</u>	<u>48° 35' 00" W</u>
	<u>3</u>	<u>55° 44' 00" N</u>	<u>48° 35' 00" W</u>
	<u>4</u>	<u>55° 44' 00" N</u>	<u>49° 00' 00" W</u>
<u>2J East 1</u>	<u>1</u>	<u>55° 00' 00" N</u>	<u>47° 42' 00" W</u>
	<u>2</u>	<u>55° 00' 00" N</u>	<u>47° 29' 00" W</u>
	<u>3</u>	<u>54° 50' 00" N</u>	<u>47° 29' 00" W</u>
	<u>4</u>	<u>54° 50' 00" N</u>	<u>47° 42' 00" W</u>
<u>2J East 2</u>	<u>1</u>	<u>54° 14' 00" N</u>	<u>47° 54' 00" W</u>
	<u>2</u>	<u>54° 14' 00" N</u>	<u>47° 45' 00" W</u>
	<u>3</u>	<u>54° 06' 00" N</u>	<u>47° 45' 00" W</u>
	<u>4</u>	<u>54° 06' 00" N</u>	<u>47° 54' 00" W</u>
<u>1F West</u>	<u>1</u>	<u>55° 12' 00" N</u>	<u>46° 45' 00" W</u>
	<u>2</u>	<u>55° 12' 00" N</u>	<u>46° 35' 00" W</u>
	<u>3</u>	<u>55° 02' 00" N</u>	<u>46° 35' 00" W</u>
	<u>4</u>	<u>55° 02' 00" N</u>	<u>46° 45' 00" W</u>
<u>3K North</u>	<u>1</u>	<u>52° 07' 00" N</u>	<u>45° 46' 00" W</u>
	<u>2</u>	<u>52° 07' 00" N</u>	<u>45° 33' 00" W</u>
	<u>3</u>	<u>51° 58' 00" N</u>	<u>45° 33' 00" W</u>
	<u>4</u>	<u>51° 58' 00" N</u>	<u>45° 46' 00" W</u>
<u>1F East 1</u>	<u>1</u>	<u>56° 04' 00" N</u>	<u>42° 42' 00" W</u>
	<u>2</u>	<u>56° 04' 00" N</u>	<u>42° 30' 00" W</u>
	<u>3</u>	<u>55° 57' 00" N</u>	<u>42° 30' 00" W</u>
	<u>4</u>	<u>55° 57' 00" N</u>	<u>42° 42' 00" W</u>
<u>1F East 2</u>	<u>1</u>	<u>56° 23' 00" N</u>	<u>42° 08' 00" W</u>
	<u>2</u>	<u>56° 23' 00" N</u>	<u>42° 00' 00" W</u>
	<u>3</u>	<u>56° 10' 00" N</u>	<u>42° 00' 00" W</u>
	<u>4</u>	<u>56° 10' 00" N</u>	<u>42° 08' 00" W</u>

*From point 8 back to point 1, following the outer boundary of the US EEZ.

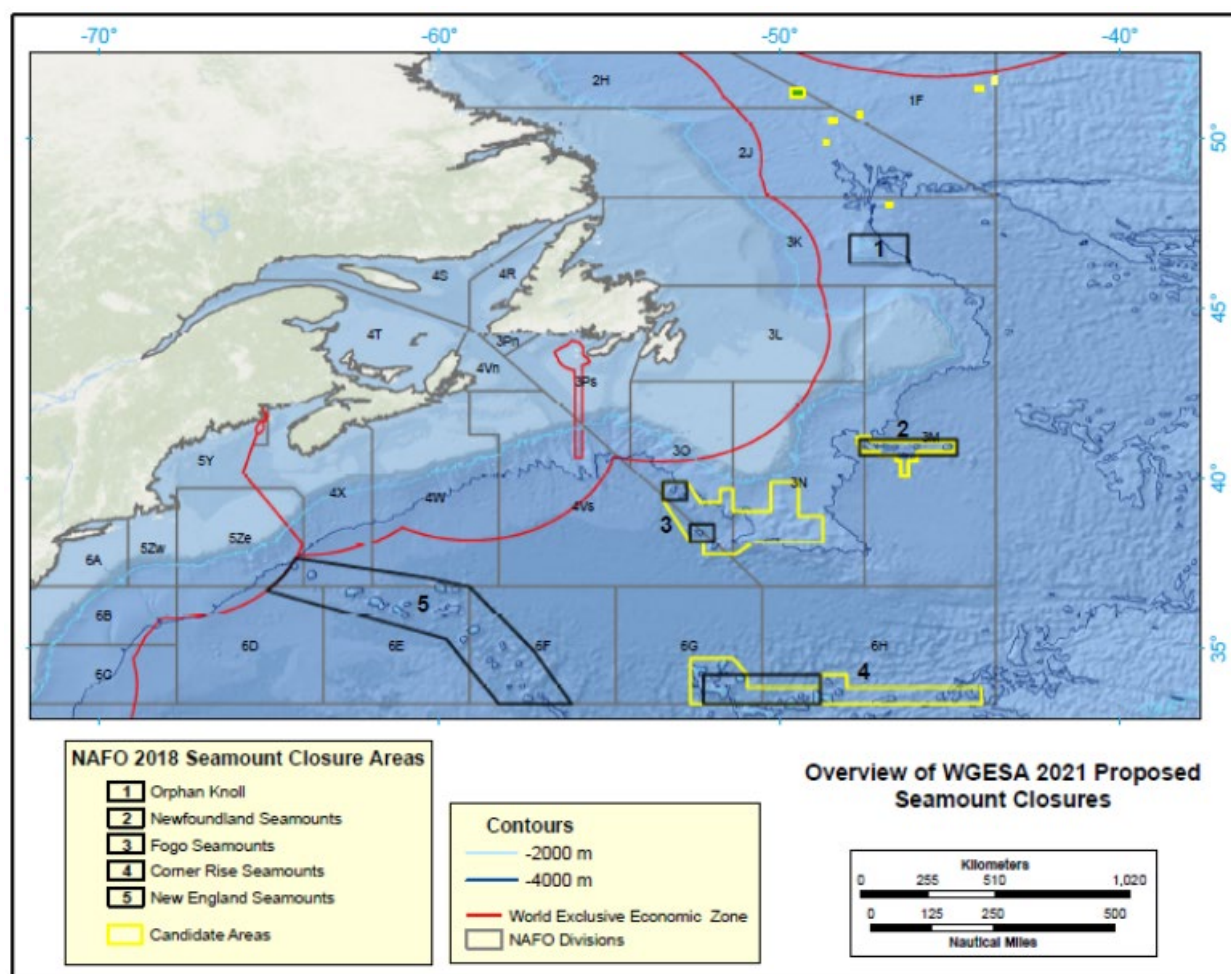


Figure 1. Location of the seamount areas in the NAFO Regulatory Area with current closures indicated in black outline and proposed changes and new closures indicated by yellow line.

**Annex 21. Recommendations of the Joint Commission-Scientific Council
Catch Estimation Strategy Advisory Group (CESAG)**
(COM-SC 21-09 now COM-SC Doc. 21-09)

The NAFO Joint Commission-Scientific Council Catch Estimation Strategy Advisory Group (CESAG) met via WebEx on 13 April 2021 (COM-SC Doc. 21-02) and agreed on the following recommendations:

The CESAG recommends that:

- 1. The Secretariat revise the 2020 catch estimates contained in COM-SC CESAG-WP 20-05 to include the remaining data and forward it (COM-SC CESAG-WP 20-05 Revised) to the Scientific Council by the 01 May deadline.**
- 2. The Commission request STACTIC review best practices outlined in COM-SC CESAG-WP 21-01 Revised to identify the possible application of these best practices to improve tow catch estimates in the NAFO Regulatory Area and consider the specific guidance on the International Observer Program as part of its planned review of the NAFO Observer Program scheduled for 2022.**

Annex 22. The Commission's Request for Scientific Advice on Management in 2023 and Beyond of Certain Stocks in Subareas 2, 3 and 4 and Other Matters

(COM WP 21-43 Rev. 3 **now** COM Doc. 21-20)

Following a request from the Scientific Council, the Commission agreed that items 1, 2, 4, 7, and 9 should be the priority for the June 2022 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 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

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

- In 2022, advice should be provided for 2023 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 2022, advice should be provided for 2023 and 2024 for: Thorny skate in Div. 3LNO, Redfish in Div. 3LN, Witch flounder in Div. 3NO.
- In 2022, advice should be provided for 2023, 2024 and 2025 for: SA 3+4 Northern shortfin squid, Redfish in Div. 3O.

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).

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. Conditional on the absence of other reasons for Exceptional Circumstances arising (other than the missing Canadian spring 3LNO survey), to calculate in 2022 the HCR adjusting the TAC advised for 2022 using four survey indices (Canadian fall 2J3K, Canadian fall 3LNO, EU 3M 0-1400m, and EU-Spain 3NO surveys) to provide TAC advice for 2023. If other reasons for exceptional circumstances are occurring, the EC protocol will provide guidance on what steps should be taken.

Report of the NAFO Commission, 20-24 September 2021

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. Scientific Council initiate the first steps in both the 2+3KLMNO Greenland halibut and 3LN redfish MSE processes during 2021-2022, namely:
 - a. Compile catch and survey data and any additional sources of information used in the current models;
 - b. Review and finalize the data inputs for review at the June 2022 Scientific Council meeting when conducting both the 3LN redfish assessment and the assessment of Greenland Halibut Exceptional Circumstances/ Provision of TAC advice
 - c. Time permitting, further work on the respective MSE work plans by the SC-GHL and SC-Redfish subgroups for presentation to WG-RBMS or SC.
5. The Commission requests that Scientific Council continue work on the sustainability of catches aspect of the Ecosystem Roadmap, including:
 - a. In consultation with WG-EAFFM via co-Chairs, convene independent experts to do a scientific review of; a) the estimation of fisheries production potential and total catch indices, and b) the adequacy of this analysis for their proposed use within the NAFO roadmap (Tier 1), while considering how species interactions are expected to be addressed in the future (Tier 2) within the overall Roadmap structure. The outcomes of this review would need to be tabled in June at Scientific Council to be available in advance of the planned workshop in 2022.
 - b. Work to support the WG-EAFFM workshop in 2022, which will explore ecosystem objectives and further develop how the Roadmap may apply to management decision making.
 - c. Continue its work to develop models that support implementation of Tier 2 of the EAFM Roadmap.
6. The Commission requests that Scientific Council, in relation to VME analyses:
 - a. Conduct a 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 to be completed by the 2023 Scientific Council meeting.
 - b. Review the effectiveness of NAFO CEM, Chapter 2 from a scientific and technical perspective and report back to the WG-EAFFM. WG-EAFFM would subsequently in 2022 consider whether any modifications to this Chapter should be recommended.
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 (NAFO COM-SC Doc. 20-04).
8. The Commission requests Scientific Council to continue to develop a 3-5 year work plan, which reflects requests arising from the 2021 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 Scientific Council do a full assessment for Div. 3LN redfish and provide advice based on the projection for various harvest levels for two-years (2023 and 2024) to evaluate the impacts according to the performance statistics from NAFO CEM Annex I.H.

10. The Commission requests that any new results from stock assessments and the scientific advice of Cod 2J3KL (Canada), Witch 2J3KL (Canada) and 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.
11. The Commission requests Scientific Council, jointly with the Secretariat, to conduct ongoing analysis of the Flemish Cap cod fishery data by 2022 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.
13. The Commission request that Scientific Council proceed with developing the ecosystem summary sheets for 3M and 3LNO move toward undertaking a joint Workshop with ICES (International Council for the Exploration of the Sea) as part of a peer review of North Atlantic ecosystems.

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:

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

- The first year of the projection should assume a catch equal to the agreed TAC for that year.

- 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.

[illegible]

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(B2024 > B2021)
				P(F.>F _{lim})			P(B<B _{lim})									P(F>F _{max})			
F in 2022 and following years*	Yield 2022	Yield 2023	Yield 2024	2022	2023	2024	2022	2023	2024	2022 2023 2024			2022 2023 2024						
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 ₂₀₁₈	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	
F ₂₀₁₈	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	
1.25 X F ₂₀₁₈	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	

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

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

The following graphs should be presented, for one or several surveys, for the longest time-period possible:

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

And any information the Scientific Council deems appropriate.

Annex 23. SC Chair Update regarding the Greenland Halibut Harvest Control Rule
(COM WP 21-44)

- 1) The Greenland halibut Harvest Control Rule in the current NAFO CEM (COM. Doc. 21-01) was scientifically tested through an MSE process extending beyond 2023 (until 2037).
- 2) The management regime includes the HCR plus a protocol to deal with exceptional circumstances which is applied annually. In addition, update assessments based on the base-case SCAA and SSM models are done every 3 years. These update assessments were last conducted in 2020 and therefore would be repeated in 2023.

Therefore, the SC concludes a short-term extension of this management regime beyond 2023 does not pose any problem from a scientific perspective, and can be reliably applied, but is not recommended to extend for more than 3 years before a full review of the MSE is conducted.

Annex 24. 2022 Quota Table and Effort Allocation Scheme for the Shrimp Fishery in NAFO Division 3M, 2022

CATCH LIMITATIONS 2022—Article 5. Total allowable catches (TACs) and quotas (metric tons in live weight) for 2022 of particular stocks in Subareas 1–4 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		32	0.80	0	7 710	42.60	500	6 000	0 ¹	0	0	19 500
Cuba		148	3.70	-	1 774	9.80	1 750	-	0 ¹	-	-	-
Denmark (Faroe Islands & Greenland)		894	22.35	-	-		69 ¹⁰	-	0	-	-	-
European Union		1 908 ⁵	47.71	0 ⁴	3 300 ⁴	18.23	7 813 ⁴	7 000	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		370	9.25	-	-		-	-	0	-	-	-
Russian Federation		259	6.47	0	5 207	28.77	9 137	6 500	0	-	0	-
Ukraine		-		-	-		-	150	0 ¹	-	-	-
United Kingdom		373	9.32	-	-		-	-	-	-	-	-
United States of America		-		-	-		69 ¹⁰	-	0 ¹	-	-	-
Others		16	0.40	0	109	0.60	124	100	-	0	0	100
TOTAL ALLOWABLE CATCH	*	4 000	100.0 ¹³	*	18 100	100.0 ¹⁴	10 933	20 000	0 ^{3,9}	* ¹¹	* ⁸	20 000 ⁸

Annex I.A (2022)

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		705	60.00	294	0	1 167	1 763	N.S. ²	0		
Cuba		-		-	0	-	-	510	0		
Denmark (Faroe Islands & Greenland)		-		-	-	-	202	-	0		
European Union		156 ⁴	13.27	588	0 ⁵	4 408	6 892 ⁶	<u>N.S.²</u> 611 ⁵	0 ⁶		
France (St. Pierre et Miquelon)		-		-	-	-	193	453	0		
Iceland		-		-	-	-	-	-	0		
Japan		-		-	0	-	1 205	510	0		
Korea		-		-	-	-	-	453	0		
Norway		-		-	0	-	-	-	0		
Russian Federation		302	25.73	59	0	1 167	1 500	749	0		
Ukraine		-		-	-	-	-	-	0		
United Kingdom		-		-	-	-	-	-	-		
United States of America		-		-	-	-	-	453	0		
Others		12	1.00	59	-	258		794	0		
TOTAL ALLOWABLE CATCH	*	1 175	100.00 ¹⁵	1 000 ⁸	* ¹¹	7 000 ¹²	11 755	34 000	0 ⁸	*	*



Report of the NAFO Commission, 20-24 September 2021

Annex I.A (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 2022 and 2023.
- 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 2022, 2023, and 2024.
- ¹² Should catches exceed 5 000 tonnes, additional measures would be adopted to further restrain catches in 2022.

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, 2022**

CONTRACTING PARTY	NUMBER OF FISHING DAYS ¹
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.

Report of the NAFO Commission, 20-24 September 2021

**Annex 25. Joint Statement to notify NAFO of the TCA agreement regarding 3M cod
(European Union and the United Kingdom)
(COM WP 21-23)**

The Trade and Cooperation Agreement between the UK and the EU¹ (“the TCA”) was provisionally applied from 1 January 2021 and entered into force on 1 May 2021.

The TCA sets out at Annexes 35 and 36 agreed splits, between the UK and EU, of what were previously EU shares in various fisheries. This includes shares in the cod fishery in NAFO Division 3M (see Table D in Annex 36), for which it was agreed that the EU would retain 83.66% of its previous quota allocation for the stock and the UK would be allocated 16.34% of the same. This results in a UK share of the Total Allowable Catch of 9.32% and an EU share of 47.71%.

These shares were reflected in the provisional arrangement for splitting the EU quota for 2021 that was communicated to the NAFO Annual Meeting in September 2020 via a joint statement made by the UK and the EU, and subsequently reflected in the 2021 Annual Quota Table (see Annex I.A of the Conservation and Enforcement Measures 2021). No concerns were raised by Contracting Parties.

This further joint statement by the UK and the EU notifies NAFO Contracting Parties that this arrangement has now been confirmed, and as such will remain in place for 2022 onwards. This arrangement between the UK and the EU has no effect on the quota shares of this stock for other Contracting Parties.

The UK and EU respectfully request that the NAFO Secretariat duly notes and records this arrangement in the Annual Quota Tables for 2022 onwards.

[¹] Trade and Cooperation Agreement between the European Union and the European Atomic Energy Community, of the one part, and the United Kingdom of Great Britain and Northern Ireland, of the other part.

Annex 26. Measure to Protect Vulnerable Marine Ecosystems (COM WP 21-41 (Rev.) now COM Doc. 21-16)

Explanatory Memorandum

In 2021, the Scientific Council completed its five-year re-assessment of the risk of Significant Adverse Impacts (SAIs) from bottom fishing activities on VMEs in the NRA, taking into account all 6 FAO criteria and with greater spatial resolution than previous reviews (from 5km to 1km). The SC noted that this greater spatial resolution from this assessment resulted in more precise and generally larger estimates of the area and biomass protected by the current VME closures, relative to the 2020 review of VME closures. The SC concluded that small gorgonian, black coral, erect bryozoan, and sea squirt VMEs have a high overall risk of SAI, whereas the large-sized sponges and large gorgonian coral VMEs have a low overall risk of SAI with the current VME closures. The sea pen VME was assessed as having an intermediate risk of SAI. To note, at last year's Annual Meeting, NAFO contracting parties agreed by consensus to add black coral to the list of VMEs in need of protection. The SC subsequently recommended improving the protection of VMEs, including extension of existing closed areas and closure of new areas.

This proposal reflects the WG-EAFFM recommendation (NAFO/COM-SC Doc. 21-04) to maintain the existing closed areas for an additional five years, through 2026. The proposal further recommends closure of five new areas (1a, 2a, 8a, 9a, and 10a), and that these areas be reviewed in 5 years' time, as part of the 2026 VME/SAI assessment. Additionally, this proposal recommends the closure of four new areas (7a, 11a, 14a, and 14b) for an interim period of 2 years; during that time, the SC is requested to re-examine the boundaries of these areas, taking into account any bottom fishing activity from the 2020 and 2021 3M shrimp fisheries.

The proposal also recommends amended the sub-chapter heading, "*High Sponge and Coral Concentration Area Closures*" to "*Vulnerable Marine Ecosystem Area Closures*" to better reflect the range of VMEs NAFO is managing.

The co- proposers take note of the important work that NAFO has done since 2008 to protect vulnerable habitats from threats from bottom fishing. These efforts have been acknowledged by the United Nations' General Assembly thru its bottom fishing review process, which is scheduled to meet again in August 2022. In closing these proposed areas, NAFO is greatly increasing protection for black corals and sea pens while maintaining protections for large gorgonians and sponges, thereby supporting NAFO's commitment to conserving marine biodiversity and minimizing the risk of long term or irreversible adverse effects of fishing activities.

Proposal

Re-affirming NAFO's commitment to the precautionary approach and to implementing an ecosystem approach to fisheries management as well as adaptive approach to management, and

Noting the work of the Scientific Council to address the FAO International Guidelines for the Management of Deep-Sea Fisheries in the High Seas.

Thereby recommends that Chapter II, Article 17 "*Area Restrictions for Bottom Fishing for Activities*", paragraph 3 "*High Sponge and Coral Concentration Area Closures*", be amended as follows:

~~"High Sponge and Coral Concentration Area Closures"~~ **"Vulnerable Marine Ecosystem Area Closures"**

3. *"Until 31 December ~~2024~~ 2026, no vessel shall engage in bottom fishing activities in areas 1-13 illustrated in Figure 5 and defined by connecting the coordinates specified in Table 7 in numerical order and back to coordinate 1"*


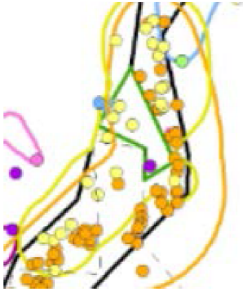

(Secretariat to update Table 7 and Figure 5 with coordinates from closed area 1a, 2a, 8a, 9a, and 10a. Existing area 1 should be amended to include the new coordinates from Area 1a, Area 2 with the new coordinates from 2a, etc. Coordinates for these new additional areas are listed in Annex 1)

"3.bis. Until 31 December 2023, no vessel shall engage in bottom fishing activities in the areas illustrated in Figure xx and defined by connecting the coordinates specified in Table XX in numerical order and back to coordinate 1.


(Secretariat to develop new table and figure to reflect closures for areas 7a, 11a, 14a, and 14b. Coordinates for these areas are listed in Annex 2)

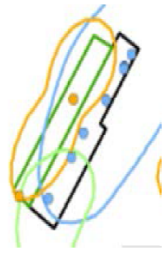
The Scientific Council will be requested to conduct a re-assessment of its previously recommended closures of 7a, 11a, 14a and 14b, incorporating catch and effort data for fisheries of shrimp from 2020 and 2021 into the fishing impact assessments. This work is to be completed by the 2023 Scientific Council meeting. Additionally, the Scientific Council will take into consideration proposed areas 2b, 4a, 15a, 16, 17, and 18 as part of its next five-year VME/SAI reassessment, scheduled for 2026. CPs will provide any relevant information to that process.

Annex 1. Maps and coordinates to be included in revised Chapter II, Article 17, paragraph 3 (1a, 2a, 8a, 9a, and 10a)

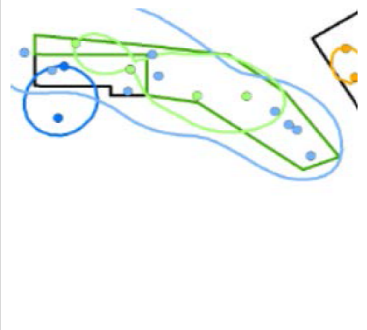
<p style="text-align: center;">Area 1a</p> 	<table> <tr> <th>Latitude</th><th>Longitude</th></tr> <tr> <td>44.04850 N</td><td>48.88119 W</td></tr> <tr> <td>44.04828 N</td><td>48.81930 W</td></tr> <tr> <td>43.99931 N</td><td>48.82402 W</td></tr> <tr> <td>44.00031 N</td><td>48.89132 W</td></tr> <tr> <td>44.04850 N</td><td>48.88119 W</td></tr> </table>	Latitude	Longitude	44.04850 N	48.88119 W	44.04828 N	48.81930 W	43.99931 N	48.82402 W	44.00031 N	48.89132 W	44.04850 N	48.88119 W		
Latitude	Longitude														
44.04850 N	48.88119 W														
44.04828 N	48.81930 W														
43.99931 N	48.82402 W														
44.00031 N	48.89132 W														
44.04850 N	48.88119 W														
<p style="text-align: center;">Area 2a</p> 	<table> <tr> <th>Latitude</th><th>Longitude</th></tr> <tr> <td>46.50617 N</td><td>47.18415 W</td></tr> <tr> <td>46.67800 N</td><td>47.05130 W</td></tr> <tr> <td>46.40669 N</td><td>46.85639 W</td></tr> <tr> <td>46.35133 N</td><td>46.98139 W</td></tr> <tr> <td>46.44222 N</td><td>46.98139 W</td></tr> <tr> <td>46.50617 N</td><td>47.18415 W</td></tr> </table>	Latitude	Longitude	46.50617 N	47.18415 W	46.67800 N	47.05130 W	46.40669 N	46.85639 W	46.35133 N	46.98139 W	46.44222 N	46.98139 W	46.50617 N	47.18415 W
Latitude	Longitude														
46.50617 N	47.18415 W														
46.67800 N	47.05130 W														
46.40669 N	46.85639 W														
46.35133 N	46.98139 W														
46.44222 N	46.98139 W														
46.50617 N	47.18415 W														
<p style="text-align: center;">Area 8a</p> 	<table> <tr> <th>Latitude</th><th>Longitude</th></tr> <tr> <td>48.61528 N</td><td>45.52108 W</td></tr> <tr> <td>48.63553 N</td><td>45.32553 W</td></tr> <tr> <td>48.59900 N</td><td>45.32553 W</td></tr> <tr> <td>48.57319 N</td><td>45.43858 W</td></tr> <tr> <td>48.61528 N</td><td>45.52108 W</td></tr> </table>	Latitude	Longitude	48.61528 N	45.52108 W	48.63553 N	45.32553 W	48.59900 N	45.32553 W	48.57319 N	45.43858 W	48.61528 N	45.52108 W		
Latitude	Longitude														
48.61528 N	45.52108 W														
48.63553 N	45.32553 W														
48.59900 N	45.32553 W														
48.57319 N	45.43858 W														
48.61528 N	45.52108 W														


Report of the NAFO Commission, 20-24 September 2021


Area 9a	
	<div>Latitude</div> <div>Longitude</div>
	48.45850 N 45.57789 W
	48.26863 N 45.76336 W
	48.28661 N 45.79036 W
	48.20183 N 45.90358 W
	48.50508 N 45.66178 W
	48.45850 N 45.57789 W

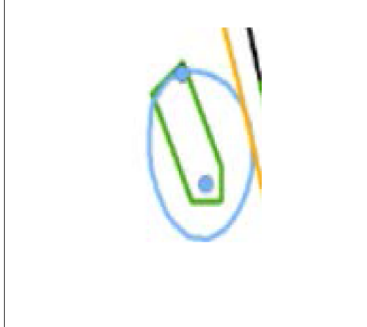
Area 10a	
	<div>Latitude</div> <div>Longitude</div>
	47.82819 N 46.38003 W
	47.85837 N 46.43767 W
	48.15374 N 46.15862 W
	48.13325 N 46.09395 W
	47.82819 N 46.38003 W

Annex 2. Maps and coordinates to be included in new Chapter II, Article 17 paragraph 3.bis (7a, 11a, 14a, and 14b)

Area 7a	Latitude	Longitude
	48.16916 N	44.26527 W
	48.13845 N	44.38627 W
	48.30190 N	44.73967 W
	48.31908 N	44.91058 W
	48.41728 N	44.91058 W
	48.41728 N	45.28789 W
	48.46450 N	45.28868 W
	48.43927 N	44.90961 W
	48.41587 N	44.63289 W
	48.32513 N	44.44400 W
	48.16916 N	44.26527 W

Area 11a	Latitude	Longitude
	47.50040 N	46.45919 W
	47.62746 N	46.27531 W
	47.57767 N	46.20109 W
	47.54136 N	46.27405 W
	47.53611 N	46.24163 W
	47.47439 N	46.26826 W
	47.46008 N	46.35658 W
	47.50040 N	46.35658 W
	47.50040 N	46.45919 W

Area 14a	Latitude	Longitude
	47.75679 N	44.05179 W
	47.79843 N	44.05179 W
	47.83648 N	44.05958 W
	47.83635 N	43.97472 W
	47.79843 N	43.98983 W
	47.76533 N	43.96915 W
	47.74572 N	44.04486 W
	47.75679 N	44.05179 W

Area 14b	Latitude	Longitude
	47.58938 N	43.94725 W
	47.62598 N	43.88236 W
	47.50133 N	43.80515 W
	47.45969 N	43.80515 W
	47.45969 N	43.86676 W
	47.58938 N	43.94725 W

Annex 27. Recommendations from the Ad hoc Working Group to Reflect on the Rules Governing Bycatches, Discards and Selectivity (WG-BDS)

(COM WP 21-18 now COM Doc. 21-18)

The NAFO Commission Ad hoc Working Group to Reflect on the Rules Governing Bycatches, Discards and Selectivity (WG-BDS) in the NAFO Regulatory Area met via WebEx from 12–13 July 2021 (COM Doc. 21-04) and agreed on the following recommendations:

In relation to the development of management options in support of Tasks 4 of the Action Plan, the WG-BDS recommends that:

1. The Working Group creates a smaller group which will coordinate with STACTIC and SC in furthering Task 4 of the Action Plan and may consider a pilot case to examine bycatch of 3LNO American plaice and others in the development of potential fisheries-specific management options for further discussion by the full Working Group.

In relation to bycatch and discard information, the WG-BDS recommends that:

2. The Commission request STACTIC to provide a single interpretation of the application of the term bycatch for the purpose of the spatial temporal analysis undertaken by the Secretariat according to the agreed methodology.
3. The Secretariat monitor the discard data in the Haul by Haul reports and in observers reports, continue working with Contracting Parties to ensure that the discard information are reported in the Haul by Haul reports in accordance with Annex II.N and in the observer reports in accordance with Annex II.M, and report to this WG on the progress in resolving this discard data issue.

In relation to discards in NAFO, the WG-BDS recommends that:

4. The Secretariat gather the updated domestic policies of Contracting Parties on discards and share them to STACTIC in support of STACTIC's mandate in discussing landing obligations of a discard ban policy.

Annex 28. Change to Article 5.15.f of the NAFO CEM
(STACTIC EDG-WP 20-05 now COM Doc. 21-06)

At the 2020 Annual Meeting, the EDG presented a proposed change to Article 5.15.f, and STACTIC requested the EDG further review this change. The EDG has reviewed and discussed the following potential change to clarify Article 5.15.f. However, EDG questions whether the 15 days in (ii) should also apply to (i), and requests that STACTIC provide advice.

15. The Executive Secretary:

reports without delay to the Commission when the Contracting Party referred to under paragraph 5(d) of this Article failed to either:

(i) _____ cease fishing on that stock or

(ii) _____ demonstrate that the quota has not been taken within 15 days in accordance with Article 5.6;

Annex 29. Insertion of reference to Annex II.I Part B in NAFO CEM Annex IV.A(STACTIC WP 21-07 **now** COM Doc. 21-07)

At the 2020 NAFO Annual Meeting, STACTIC requested that the EDG review the NAFO CEM for the possible insertion of a reference to Annex II.I Part B in Article 33 or as a footnote to the Surveillance Report in Annex IV.A. Following the review, the EDG proposes the following footnote insertion in Annex IV.A.

3. VESSEL SIGHTED

Flag State	
Vessel Name, International Radio Call Sign (IRCS), Side Number, IMO Number	
Other Identification Features (Type of vessel, Color of hull, Superstructure, etc.)	
Vessel Activity¹	
Fishing Gear used	
Course and Speed	

¹ [Reported as free text or using the codes outlined in Annex II.I Part B.](#)

Annex 30. Measures Concerning Vessels Demonstrating Repeat Non-compliance of Serious Infringements in the NAFO Regulatory Area (STACTIC WP 21-13 Rev. now COM Doc. 21-08)

Background

At the 2016 Annual Meeting, STACTIC launched discussions to find a mechanism to address the issue of vessels repeatedly being issued citations for serious breaches of the NAFO CEM.

At the following Annual Meeting, STACTIC WPs 17-37 and 17-43 were tabled, with WP 17-37 outlining the domestic legislation which could be applied to address the issue of repeat non-compliance as submitted by various Contracting Parties. STACTIC WP 17-43 proposed that vessels infringing the CEMs as per the infringements identified under then-Article 38.8 (as of 2019, Article 38.3.c.i) be listed in the compliance review in a “*Contracting Party IUU list*”. Upon discussion, 17-43 was withdrawn.

At the 2018 Intersessional Meeting, Canada provided an update to WP 17-37, incorporating submissions from other Contracting Parties. It was agreed that Canada would continue its review with the aim of developing a proposal for the 2018 Annual Meeting. Discussion was deferred from the 2018 Annual Meeting to the 2019 Intersessional, beyond Canada providing an update that there is no common mechanism across all Contracting Parties’ domestic legislation to address repeat non-compliance of serious infringements. At the 2019 Intersessional, Canada agreed to continue work on a proposal for addressing repeat non-compliance of serious infringements in the NAFO Regulatory Area and present it at the 2019 Annual Meeting. Canada presented STACTIC WP 19-59, a discussion paper, at the 2019 Annual Meeting and accepted comments from Contracting Parties.

At the 2020 Intersessional Meeting, Canada presented discussion paper STACTIC WP 20-04, proposing a definition of repeated non-compliance to be added to the vessel. Some Contracting Parties raised concerns regarding the definition being linked to issuance rather than confirmation of infringements, and regarding repeated non-compliance being linked to repetition of any serious infringement.

At the 2020 Annual Meeting, Canada presented STACTIC WP 20-29 for discussion. It was subsequently agreed that further revisions were needed to address Contracting Parties concerns, and that a revision would be brought to this meeting after reflection upon any comments provided.

In addition to the ongoing discussion within STACTIC, the NAFO Performance Review Panel 2018 included the recommendation that “*NAFO [evaluate and adopt] appropriate measures to deter repeat serious non-compliance.*”

Discussion

In light of Contracting Parties differing legislative mechanisms, and the expressed desire to link measures concerning repeated non-compliance with confirmation of infringements, and a more limited list of infringements, Canada presents for discussion the following concepts:

Article 39 – Follow-up to Infringements

Duties of the Flag State Contracting Party

1. In the case of an infringement by a vessel flying its flag, the flag State Contracting Party shall:
 - (a) investigate fully, including as appropriate, by physically inspecting the fishing vessel at the earliest opportunity;

(b) cooperate with the inspecting Contracting Party to preserve the evidence and the chain of custody in a form that will facilitate proceedings in accordance with its laws;

(c) take immediate judicial or administrative action in conformity with its national legislation against the persons responsible for the vessel; ~~and~~

(d) ensure that sanctions applicable in respect of infringements are adequate in severity to be effective in securing compliance, deterring further infringements or their repetition and depriving the offenders of the benefits accruing from the infringement; ~~and~~

(e) to the extent possible within domestic legislation, ensure that sanctions applicable in respect of repeated serious infringements, particularly those identified under Article 38.3.c.i.31-4, are adequate in severity to be effective in securing compliance, deterring further infringements or their repetition and depriving the offenders of the benefits accruing from the infringement.

2. The judicial or administrative action and sanctions referred to in paragraph 1(c), ~~and~~ (d) ~~and~~ (e) may include, but ~~is-are~~ not limited to, the following, depending on the gravity of the offence and in accordance with domestic law:

(a) fines;

(b) seizure of the vessel, illegal fishing gear and catches;

(c) suspension or withdrawal of authorization to conduct fishing activities; ~~and~~

(d) reduction or cancellation of any fishing allocations;

(e) increased or additional reporting requirements; inter alia, enhanced reporting frequency or additional data to be reported; and

(f) increased or additional monitoring requirements inter alia, deployment of an observer or an inspector on board or remote electronic monitoring.

Annex 31. Legend for Annex I.A of the NAFO CEM
(STACTIC WP 21-17 Rev. 2 **now** COM Doc. 21-09)

At the November meeting of the Editorial Drafting Group (EDG), the Secretariat highlighted the use of the dashes, blanks, and zeros in the quota table (Annex I.A), noting there was no consistency. The EDG agreed that the use of the dashes / blanks should be consistent but also defined with a legend. The EDG agreed that:

STACTIC review the use of dashes, blanks, and zeros in Annex I.A of the quota table and create a legend that defines the meaning of each.

To facilitate this review, the Secretariat drafted a potential legend for review by STACTIC.

At the 2021 STACTIC Intersessional Meeting, it was agreed that:

STACTIC continue discussions on the draft legend for Annex I.A of the NAFO CEM outlined in STACTIC WP 21-17 at the 2021 Annual Meeting.

Following the 2021 STACTIC Intersessional meeting, comments were received from the European Union to include dashes under RED 30, HKW 3NO, and SKA 3LNO, and they have been added in the table below in track changes.

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

Please find below the illustration of the application of the legends:

ANNEX I – FISHERIES MANAGEMENT

Annex I.A – Annual Quota Table

CATCH LIMITATIONS – Article 5. Total allowable catches (TACs) and quotas (metric tons in live weight) for 2021 of particular stocks in Subareas 1-4 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		12	0.80	0	7 710	42.60	500	6 000	0 ¹	0	0	16 575
Cuba		56	3.70	-	1 774	9.80	1 750	-	0 ¹	-	-	-
Denmark (Faroe Islands and Greenland)		335	22.35	-	-		69 ¹⁰	-	0	-	-	-
European Union		716 ⁵	47.71	0 ⁴	3 300 ⁴	18.23	7 813 ⁴	7 000	0 ⁰⁷	0	0 ⁴	-
France (St. Pierre et Miquelon)		-		-	-		69 ¹⁰	-	0 ¹	-	-	340
Iceland		-		-	-		-	-	0	-	-	-
Japan		-		-	-		400	150	0 ¹	-	-	-
Korea		-		-	-		69 ¹⁰	100	0 ¹	-	-	-
Norway		139	9.25	-	-		-	-	0	-	-	-
Russian Federation		97	6.47	0	5 207	28.77	9 137	6 500	0	-	0	-
Ukraine		-		-	-		-	150	0 ¹	-	-	-
United Kingdom		140	9.32	-	-		-	-	-	-	-	-
United States of America		-		-	-		69 ¹⁰	-	0 ¹	-	-	-
Others		6	0.40	0	109	0.60	124	100	-	0	0	85
TOTAL ALLOWABLE CATCH	*	1 500	100.0 ¹³	*	18 100 ⁸	100.0 ¹⁴	8 448	20 000 ⁸	0 ^{3,9}	*	* ¹¹	17 000

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		705	60.00	294	0	1 167	1 834	N.S. ²	0		
Cuba		-		-	0	-	-	510	0		
Denmark (Faroe Islands and Greenland)		-		-	-	-	210	-	0		
European Union		156 ⁴	13.27	588	0 ⁵	4 408	7 168 ⁶	<u>N.S.²</u> 611 ⁵	0 ⁶		
France (St. Pierre et Miquelon)		-		-	-	-	200	453	0		
Iceland		-		-	-	-	-	-	0		
Japan		-		-	0	-	1 253	510	0		
Korea		-		-	-	-	-	453	0		
Norway		-		-	0	-	-	-	0		
Russian Federation		302	25.73	59	0	1 167	1 560	749	0		
Ukraine		-		-	-	-	-	-	0		
United Kingdom		-		-	-	-	-	-	-		
United States of America		-		-	-	-	-	453	0		
Others		12	1.00	59	-	258		794	0		
TOTAL ALLOWABLE CATCH	* ⁸	1 175	100.00 ¹⁵	1 000	*	7 000 ^{8, 12}	12 225	34 000 ⁸	0	*	*

Report of the NAFO Commission, 20-24 September 2021

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

- 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 2021 and 2022.
- 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 2021, 2022, and 2023.
- ¹² Should catches exceed 5 000 tonnes, additional measures would be adopted to further restrain catches in 2021.

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.

Annex 32. List of serious infringements: use of sorting grids – NAFO CEM Article 38.1.g
(STACTIC WP 21-20 Rev. now COM Doc. 21-10)

Background

Article 13.9 of the NAFO Control and Enforcement Measures (CEM) requires vessels conducting a direct fishery for COD 3M with trawl gear to use a sorting grid placed on the top-side panel of the trawl and with a minimum bar spacing of 55mm.

Article 38.1(g) of the NAFO CEM includes within the list of serious infringements using an unauthorized grid size. However, the grid size is not a parameter currently regulated. At the same time, the list does not include the lack of use of the grid where is mandatory or the use of a grid with a bar spacing contrary to Article 13. In order to address these issues, it is proposed to amend the wording in Article 38.1 (g).

Proposal

In CEM Article 38.1 (g), to amend the text as follows:

List of Serious Infringements

1. *Each of the following violations constitutes a serious infringement:*

[...]

*(g) **fishing with an** unauthorized mesh ~~or grid~~ size, **grid or grate bar spacing, or without the of use of grid or grate**, contrary Article 13;*

Annex 33. Observer data collection
(STACTIC WP 21-22 Rev. now COM Doc. 21-11)

Article 30.14(j) requires NAFO observers to “*record the number, estimated weight, length (estimated if measured length is not possible) sex, and catch disposition (alive, dead, unknown) for each individual Greenland shark per haul or set.*” Modifications to Annex II.M, Standardized Observer Report Template, were made at the 2019 NAFO Annual Meeting to accurately collect this required information on Greenland shark. Com. Doc. 19-19.

Currently, extensive auditing is required to allow Scientific Council members to use the Greenland shark catch data collected by NAFO observers due to incorrect reporting, including not reporting the data in English. To improve the quality of these data and to expedite the use of such data by the NAFO Scientific Council, we propose the following modifications to Article 30 and Annex II.M. An example of correct data reporting of individual Greenland shark catches is shown below for three hauls/sets.

Article 30 – Observer Program

Duties of the Observer

14. Each Contracting Party shall ensure that observers assigned to their vessels shall, at a minimum, perform the duties listed below:

(a) record for each haul/set, in the format indicated in Annex II.M, hereafter referred to as the observer trip report:

Annex II.M Standardized Observer Report Template**Part 5. ~~Catch of Greenland Shark Information by Haul~~ Data for Each Greenland Shark Caught per Haul**

Tow/Set Number	Total Number of Greenland Sharks <i>in Haul</i> <u>Tow/Set</u>	Shark Number	Estimated Weight (kg live weight)	<i>Total Length (cm, from tip of snout to tip of tail fin)</i>	Length Measured (M) or Estimated (E)?	Sex (M if male, F if female, U if unknown)	Catch Disposition (A if alive, D if dead, U if unknown)	Comments (in English to the extent possible)
1	3	1	200	152	M	M	D	calcified claspers
1	3	2	400	170	E	U	U	not brought onboard vessel
1	3	3	600	286	M	F	D	
2	1	1	1,000	317	M	F	D	
3	1	2	600	291	M	M	A	
3	2	2	700	299	M	M	D	badly entangled in net

**Annex 34. NAFO CEM Article 7 and Article 7 bis realignment and
Extension of Port State control measures**
(STACTIC WP 21-28 Rev. 2 **now** COM Doc. 21-12)

Background

The Editorial Drafting Group (EDG), at its November 2020 meeting, reviewed the placement of Article 7 bis under Article 7-Cod Recovery Plans following the request from STACTIC at the 2020 Annual Meeting. The EDG noted that consideration may need to be given to the title of Article 7, as 3M Cod is not currently under a recovery plan, and that having the text placed under Article 7 bis for 3M Cod may cause some confusion. The EDG agreed that STACTIC should further review the text and placement of Article 7 bis at the 2021 STACTIC Intersessional meeting.

Based on discussion at the 2021 STACTIC Intersessional meeting, Canada volunteered to draft a proposal to realign to Article 7 and Article 7.bis. The revised text of Article 7 and Article 7 bis can be found below to facilitate the review by STACTIC.

Following conversation at the 2021 STACTIC Annual meeting, Contracting Parties agreed that Canada's proposal should be merged with the EU proposal on Port State control measures (Article 7.bis) of STACTIC WP 21-47. This revision incorporates the changes proposed by the EU in that paper.

Proposal

Article 7 – Cod ~~Recovery Plans~~

~~Cod in~~ Divisions 2J3KL

1. The Commission shall obtain annually the decision of Canada on the limit it has established for catches by Canadian fishers. This limit shall be 95% of the TAC for this stock.
2. The Commission shall establish a catch limit in the Regulatory Area that shall apply to the other Contracting Parties. This limit shall be 5% of the TAC for this stock.
3. The total of the catch limits set in accordance with paragraphs 1 and 2 shall constitute the TAC for 2J3KL cod.
4. The distribution key that shall apply for the 5% figure when the fishery in the Regulatory Area is resumed shall be 65.4% for the EU and 34.6% for the other Contracting Parties.
5. The measures in this Article shall apply when a decision is taken to allow the resumption of fishing for cod in the Regulatory Area, and shall not serve as a precedent in future years for establishing catch limits of criteria for quota allocations of other stocks.

~~Article 7 bis – 3M Cod~~⁶

Division 3M Control Measures¹

¹ STACTIC shall review these Division 3M Control Measures ~~this Article~~ and propose amendments as appropriate to the Commission at its Annual Meeting in 2024. These Division 3M Control Measures are ~~This Article is~~ only applicable when the TAC for cod in Division 3M in Annex I.A is under ~~36~~000 tonnes.

6. Each Contracting Party shall apply the following control measures for vessels with more than 1,250 kg of 3M cod catches on board²:
 - (a) prohibit its vessels from landing or transshipping 3M cod catches in ports other than those designated in accordance with Article 43.
 - (b) require that at least 48 hours before its estimated time of arrival in port, a vessel or its representative on its behalf, advises the competent port authority of its estimated time of arrival, the estimated quantity of 3M cod retained on board, and information on the division or divisions where any other cod catches retained on board were taken.
 - (c) inspect ~~each~~ 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.

Duties of the Executive Secretary

7. The Executive Secretary posts without delay the port inspection report submitted in accordance with paragraph ~~46~~(c) to the NAFO MCS Website and ensures that it is made available to all Contracting Parties.

Division ~~Interim~~ 3NO - Interim Cod Conservation Plan and Rebuilding Strategy

8. Objective(s):

- (a) **Long-term Objective:** The long-term objective of this Conservation Plan and Rebuilding Strategy is to achieve and to maintain the 3NO Cod Spawning Stock Biomass (SSB) in the 'safe zone', as defined by the NAFO Precautionary Approach framework, and at or near B_{msy} .
- (b) **Interim Milestone:** As an interim milestone, increase the 3NO Cod Spawning Stock Biomass (SSB) to a level above the Limit Reference Point (B_{lim}). It may reasonably be expected that B_{lim} will not be reached until after 2015.

9. Reference Points:

- (a) Limit reference point for spawning stock biomass (B_{lim}) – 60 000 tonnes³
- (b) An intermediate stock reference point or security margin B_{isr} ⁴ – [120 000 tonnes]
- (c) Limit reference point for fishing mortality ($F_{lim} = F_{msy}$) – 0.30

² Each Contracting Party shall inspect vessels with less than 1250 kg of 3M cod onboard on a risk-based approach.

³ The Commission shall request the Scientific Council to review in detail the limit reference point when the Spawning Stock Biomass has reached 30 000 tonnes.

⁴ A 'buffer zone' (B_{buf}) is not required under the NAFO PA given the availability of risk analysis related to current and projected biomass values; however, SC has advised that an additional zone(s) between B_{lim} and B_{msy} could be considered. An intermediate stock reference point (B_{isr}) is proposed to delineate this zone. The proposed value is set at a level equivalent to twice B_{lim} . Should the SC review of the limit reference point (B_{lim}) result in a change to that value then the intermediate stock reference point (B_{isr}) should also be re-evaluated.

- (d) Interim B_{target} – 185 000 tonnes and interim F_{target} of $F_{0.1}$ – $0.192F^5$

10. Re-opening to Directed Fishing:

- (a) A re-opening of a directed fishery should only occur when the estimated SSB, in the year projected for opening the fishery, has a very low⁶ probability of actually being below B_{lim} .
- (b) An annual TAC should be established at a level which is projected to result in:
- (i) continued growth in SSB
 - (ii) low⁴ F^7 probability of SSB declining below B_{lim} throughout the subsequent 3-year period, and
 - (iii) fishing mortality $< F_{0.1}$

11. Harvest Control Rules:

Noting the desire for relative TAC stability, the projections referred to in items (a) through (d) below should consider the effect of maintaining the proposed annual TAC over 3 years. Further, in its application of the Harvest Control Rules, Commission may, based on Scientific Council analysis, consider scenarios which either mitigate decline in SSB or limit increases in TACs as a means to balance stability and growth objectives.

- (a) When SSB is below B_{lim} :

- (i) no directed fishing, and
- (ii) bycatch should be restricted to unavoidable bycatch in fisheries directing for other species

Before SSB increases above B_{lim} , additional or alternative harvest control rules should be developed, following the Precautionary Approach, to ensure the long-term objective is met, such as:

- (b) When SSB is between B_{lim} and B_{isr} :

- (i) TACs should be set at a level(s) to allow for continued growth in SSB consistent with established rebuilding objective(s)
- (ii) TACs should result in a low probability of SSB declining below B_{lim} throughout the subsequent 3-year period, and
- (iii) Biomass projections should apply a low risk tolerance

- (c) When SSB is above B_{isr} :

⁵ B_{target} is a proxy of B_{msy} . The level of F has very low probability of being higher than F_{lim} . The B_{target} is the equilibrium SSB that results from F_{target} . These are interim targets until more stock recruitment and productivity regime information is available to better estimate MSY-based reference points.

⁶ 'very low' means 10% or less

⁷ 'low' means 20% or less

- (i) TACs should be set at a level(s) to allow for growth in SSB consistent with the long term objective, and
 - (ii) Biomass projections should apply a risk neutral approach (i.e. mean probabilities)
- (d) When SSB is above B_{target} :
- (i) TACs should be set at a level of F that has a low probability of exceeding F_{msy} , and
 - (ii) Biomass projections should apply a risk neutral approach (i.e. mean probabilities)

12. **Ecosystem Considerations:**

Considering the importance of capelin as a food source, consistent with the ecosystem approach, the moratorium on 3NO capelin will continue until at least 31 December ~~2021~~2024.

13. **Bycatch Provisions:**

The bycatch provisions in the CEM for 3NO cod should be reviewed periodically, to coincide with scheduled assessments of the stock by Scientific Council, and adjusted to reflect the overall trend in spawning stock biomass.

Annex 35. NAFO CEM Article 10 – Greenland Halibut
(STACTIC WP 21-37 Rev. now COM Doc. 21-13)

Background

Article 10 Paragraph 4 (e) have a wording “*shall inspect each landing of Greenland halibut*” there have been different view of the understanding of the word “*each*” did it mean each single or the main quantity

Therefore DFG (Denmark in respect of Faroe Islands and Greenland) want to use the same principal as used in Article 7 bis - 3M Cod. and proposed a change language

Proposal: Article 10 – Greenland Halibut**Control Measures 4 (e)**

- (e) Each Contracting Party shall inspect each landing of Greenland halibut, ~~if the quantity onboard, is more than 5% of the total catch, or more than 5.000 kilo,~~ if the quantity of this stock on board represents either more than 5% of the total catch or more than 2,500 kg, 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.

Annex 36. Bycatch limits for the “Others” quota – NAFO CEM Article 6.3.e

(STACTIC WP 21-41 Rev. 4 **now** COM Doc. 21-14)

Background

Article 6.2(c) of the NAFO Control and Enforcement Measures (CEM) includes within the definition of bycatch the species listed in Annex I.A where the “Others” quota for a particular stock has been fully utilized.

Article 6.3(c) requires each Contracting Party to ensure that its vessels limit the bycatch for stocks listed in Annex I.A where not specific quota has been allocated to the flag Contracting Party, to a maxima of 2500 kg or 10%, whichever the greater.

In accordance with Article 6.3(e) the bycatch limit of the “Others” quota is 1250 kg or 5%, whichever the greater, when the “Others” quota opened for that stock has been fully utilized.

The application of Article 6.3(e) has been that only the vessels of the Contracting Party notifying the use of the “Others” quota for directed fishery need to reduce the bycatch limit to 1250 kg or 5% once the “Others” quota has been fully utilized; while the vessels of other Contracting Parties without a quota for that stock remain subject to the limit of 2500 kg or 10% under Article 6.2(c).

In order to clarify this application, it is proposed to amend the wording in Article 6.3(e).

Proposal

In CEM Article 6.3(e), to amend the text as follows:

Limits for Species Listed in Annex I.A Retained on Board as Bycatch

3. *Each Contracting Party shall ensure that its vessels, including vessels chartered in accordance with Article 26, shall limit the retention of on board species classified as bycatch to the maxima specified below:*

[...]

*(e) when the “Others” quota opened for that stock has been fully utilized: 1250 kg or 5%, whichever is the greater, ~~for all the vessels of each~~ **those** Contracting Parties ~~that notified the use of the “Others” quota in accordance with Article 5;~~*

Annex 37. Bycatch limits during Quarter 1 closure – NAFO CEM Article 5.5.j.
(STACTIC WP 21-50 Rev. 2 **now** COM Doc. 21-15)

Background

The Total Allowable Catch for cod in Division 3M established for 2021 by the NAFO Scientific Council represented a sharp decline compared to 2020. In view of the status of the stock, measures in addition to the TAC were put in place, including a Quarter 1 closure, the use of size-selective sorting grid in directed fishery to reduce the fishing mortality of juveniles and a 100% port inspection benchmarks for vessels with more than 1,250 kg of 3M cod catches on board.

The Q1 closure under Article 5(5)(j) of the NAFO Control and Enforcement Measures (CEM) was a temporal measure for 2021. In view of the status of the stock this measure should apply during Q1 2022 and it should ensure a homogeneous application of the permitted level of bycatches.

Proposal

It is proposed to amend Article 5(5)(j) to change the wording of the closure for Q1 2022 so that it is clear that all Contracting Parties shall limit their bycatches in line with Article 6(3)(a) and observe the move-on provisions in Article 6.6(b):

- (j) close its directed fishery for cod in Division 3M between ~~2400:00 UTC 31 December~~January 2022~~0~~ and 24:00 UTC 31 March 2022~~1~~. **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 38. Annual Fisheries and Compliance Review 2021
(Compliance Report for Fishing Year 2020)
 (STACTIC WP 21-42 Rev. 4 **now** COM Doc. 21-19)

1.0 Introduction

The scope of this review covers the fishing activities of NAFO-registered vessels which operated in the NAFO Regulatory Area in 2020¹ (see Figure 1.0).

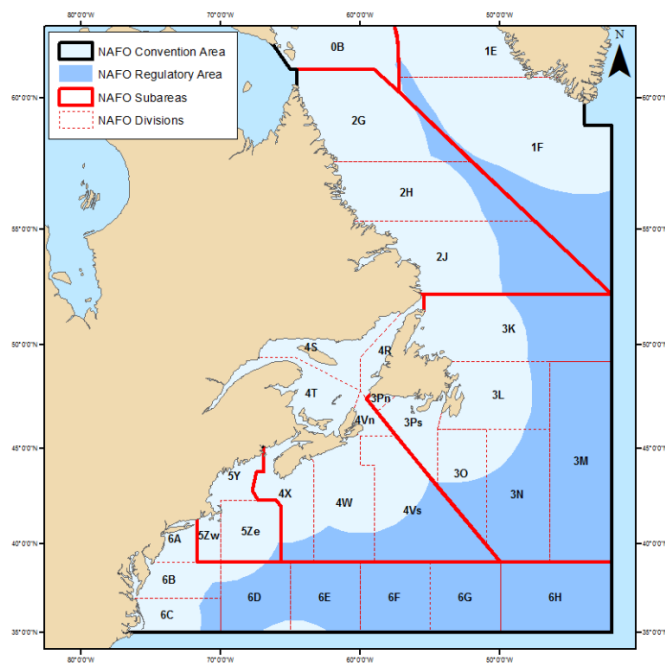


Figure 1.0. Divisions of the NAFO Convention Area and the Regulatory Area (dark blue).

This review is being undertaken in accordance with NAFO Rules of Procedure 5.1 and 5.2. As part of the review process, the Secretariat compiled 2020² 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 2020 NAFO Conservation and Enforcement Measures (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 2020 NAFO CEM. Quantitative information presented in this report are summarized according to 2020 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 Contracting Parties (CPs) is presented as an Annex to this report..

2.0 Fisheries in the NAFO Regulatory Area

2.1 Fishing effort by gear type

NAFO traditionally identifies three main fisheries in its Regulatory Area: the groundfish (GRO - primarily in Div. 3LMNO), shrimp (PRA - primarily in Div. 3L and Div. M) and pelagic redfish fisheries (REB - primarily in Div. 1F and Div. 2J).

In 2020, the shrimp fishery in Div. 3M was re-opened after nine years of moratorium. This stock has been managed through an effort (in terms of fishing days) allocation scheme. In the first year of the re-opened fishery, only 21 fishing days were utilized out of the total 2 640 days.

The pelagic redfish (*Sebastes mentella*) fishery in NAFO (REB in Subarea 2 and Divs. 1F+3K) has been under moratoria since 2012. Four (4) fishing vessels collectively spent 127 days fishing for this stock under the quota unilaterally declared by the Russian Federation.

Most of the effort comes from bottom trawlers (> 500 MT), accounting for 92% of fishing effort in terms of fishing days. The major species caught by the bottom trawlers are cod, Greenland halibut, yellowtail flounder, redfish, and thorny skate in Divisions 3LMNO (see Table 2.3.1).

Table 2.1.1. *Main fishing gears and fishing effort in the NAFO Regulatory Area in 2020.*

Fishing Gear	# Fishing vessels	# Fishing trips	Fishing days in NAFO RA	Main Species	Fishing Area
Longline	11	16	250	COD, HAL	Flemish Cap (for cod); Tail of the Grand Banks (for Atlantic halibut). Divs. 3LMNO
Bottom trawl	33	106	4224	COD, GHL, RED, SKA, YEL	Flemish Cap; Tail and Nose of the Grand Banks. Divs 3LMNO
Shrimp trawl	1	1	21	PRA	Flemish Cap. Div. 3M
Midwater trawl	4	5	127	REB	Div. 1F
Total	49	128	4622		

2.2 Effort Distribution by depth of groundfish vessel

Hourly positions of fishing vessels are required to be transmitted through the Vessel Monitoring System (VMS). However, activities whether steaming or fishing, are not indicated in the position reports. 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 400 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 and this can be attributed to the Greenland halibut fishery.

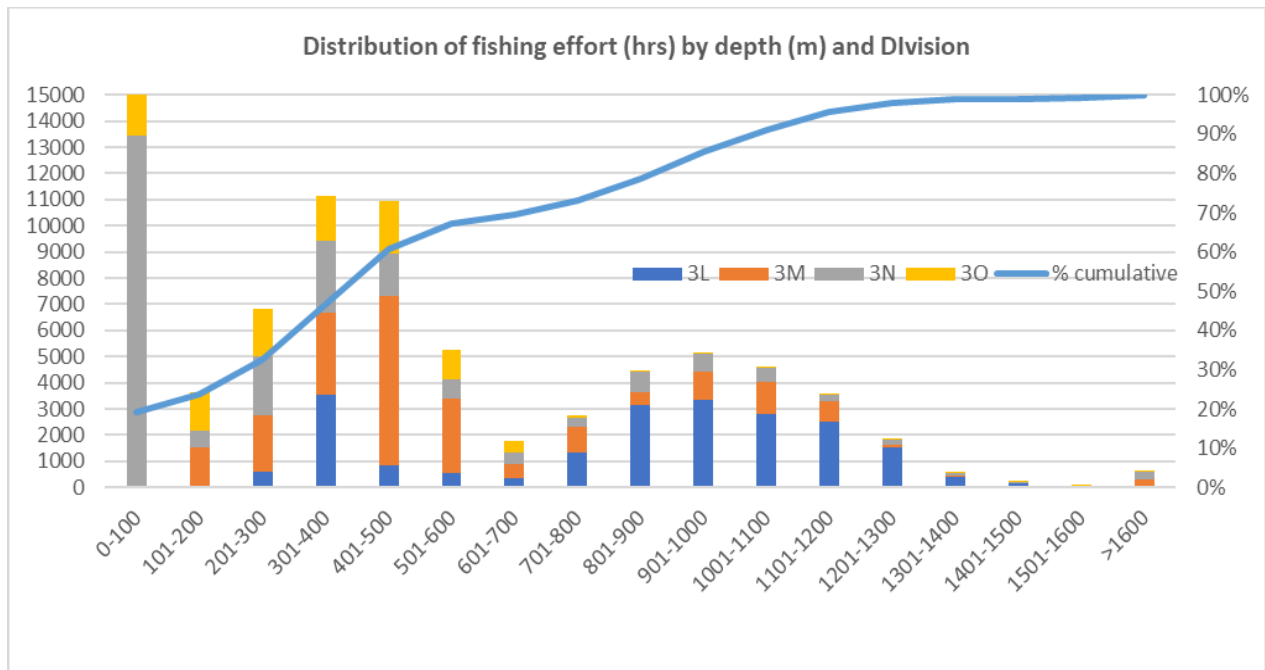


Figure 2.2.1. *Distribution of fishing effort (in hours) by depth (m) in the NRA in 2020. Vessels are assumed to be fishing at speed in the range of 0.5-5.0 knots.*

2.3 Catches in the NAFO Regulatory Area

A grand total of 73 473 t of fish (72 476.6 t retained + 996.2 t rejected) were caught by vessels authorized to fish in the Regulatory Area in 2020 (Tables 2.3.1 and 2.3.2). 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 2020 (Source: CA field of CAT Reports).*

Division	1F	3L	3M	3N	3O	Total
<i>Species subject to catch limitations (as listed in the Quota Table)</i>						
CAP						
COD		110.5	8720.9	348.0	218.8	9398.2
GHL		7887.3	1886.8	979.2	2.5	10755.8
HKW				85.0	164.1	249.1
PLA		78.7	187.1	775.8	225.9	1267.4
PRA			79.1			79.1
REB	3609.1					3609.1
RED		3978.6	8778.9	6830.6	6759.9	26348.0
SKA		23.7	26.2	2967.3	1130.5	4147.7
SQI				77.6	693.9	771.5
WIT		35.3	225.4	106.7	140.2	507.6
YEL		0.3	0.0	12264.5	192.3	12457.1
Subtotal	3609.1	12114.3	19904.4	24434.7	9528.2	69590.7
<i>Selected species not listed in the Quota Table</i>						
ANG				0.6	3.7	4.3
CAT		2.0	55.6	0.3	0.2	58.0
GDE		1.7	0.0			1.7
GPE		3.2	0.2			3.4
HAD				2.8	9.6	12.3
HAL		84.3	101.1	373.7	200.5	759.5
HKS				205.4	1580.9	1786.3
RHG		42.6	33.0	36.1	0.2	111.8
RNG		20.9	115.0	0.4		136.3
Subtotal		154.7	304.8	619.2	1795.0	2873.7
<i>Sharks</i>						
BSH			0.0	0.1		0.1
DGX				0.1		0.1
Subtotal			0.0	0.2		0.2
MZZ		0.4	10.5	1.0	0.0	12.0
Grand Total	3609.1	12269.4	20219.7	25055.1	11323.3	72476.6

Table 2.3.2 *Total reported rejected catches (in tonnes) of species (in FAO 3-alpha code) by Division in calendar year 2020 (Source: RJ field of CAT Reports).*

Division	3L	3M	3N	3O	Total
<i>Species subject to catch limitations (as listed in the Quota Table)</i>					
CAP			1.4	0.2	1.6
COD	2.9	0.8	4.5		8.2
GHL	0.1		0.0		0.1
HKW			0.2	0.6	0.8
PLA	1.6	5.5	14.1	0.6	21.8
PRA		0.1			0.1
REB	0.1	1.3			1.4
RED	0.3	2.5	0.3	1.3	4.3
SKA	2.4	1.5	233.5	0.6	238.0
SQI			0.0	0.5	0.5
WIT	0.5	0.4	1.9	1.1	3.9
YEL			12.7	0.1	12.8
Subtotal	7.8	12.2	268.5	5.0	293.5
<i>Selected species not listed in the Quota Table</i>					
ANG			0.0		0.0
CAT	27.9	10.7	8.0	1.3	48.0
GDE	14.0	8.9	1.8		24.7
HAL	0.0	0.2	0.1		0.3
HKR	0.6	0.4	0.4		1.4
HKS			1.9	29.9	31.8
RHG	152.6	65.7	17.9		236.3
RNG	49.1	27.3	6.5	0.1	82.9
Subtotal	244.3	113.2	36.6	31.3	425.4
<i>Sharks</i>					
BSH					
CAR		0.1			0.1
CFB			0.3		0.3
DGS			0.0		0.0
DGX	5.4	0.7	0.3		6.4
DUS	0.2		0.6		0.7
GSK	56.0	45.7	37.7	17.4	156.8
POR	0.7		6.4	3.1	10.2
SHX				0.5	0.5
SMA	0.5		2.4	1.0	3.9
Subtotal	62.7	46.5	47.6	22.1	178.9
MZZ	17.9	10.4	66.9	3.1	98.3
Grand Tot	332.7	182.3	419.6	61.5	996.2

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. The CPs with inspection presence, Canada and the EU deploy their inspectors onboard of patrol vessels. The inspectors are tasked to carry out NAFO inspection duties at sea (see Section 3.2).

3.1 Patrol Activity

Four (4) patrol vessels were deployed by the CPs with inspection presence. In all, 327 patrol-days were spent in the NRA. The length of time the patrol vessels exercised their duties in 2020 ranged between 27 days and 151 days. However, there were 121 days with no patrol vessel, 171 days when there was one patrol vessel, and 74 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.

During the 1st quarter leading to mid-April of 2020, there was only one (1) or no patrol vessel in the NRA.

In addition, in 2020, Canada deployed surveillance aircraft, collectively flying 367 hours with 1378 vessel sightings in the NRA. No non-Contracting Party vessel suspected of conducting IUU fishing activities was spotted.

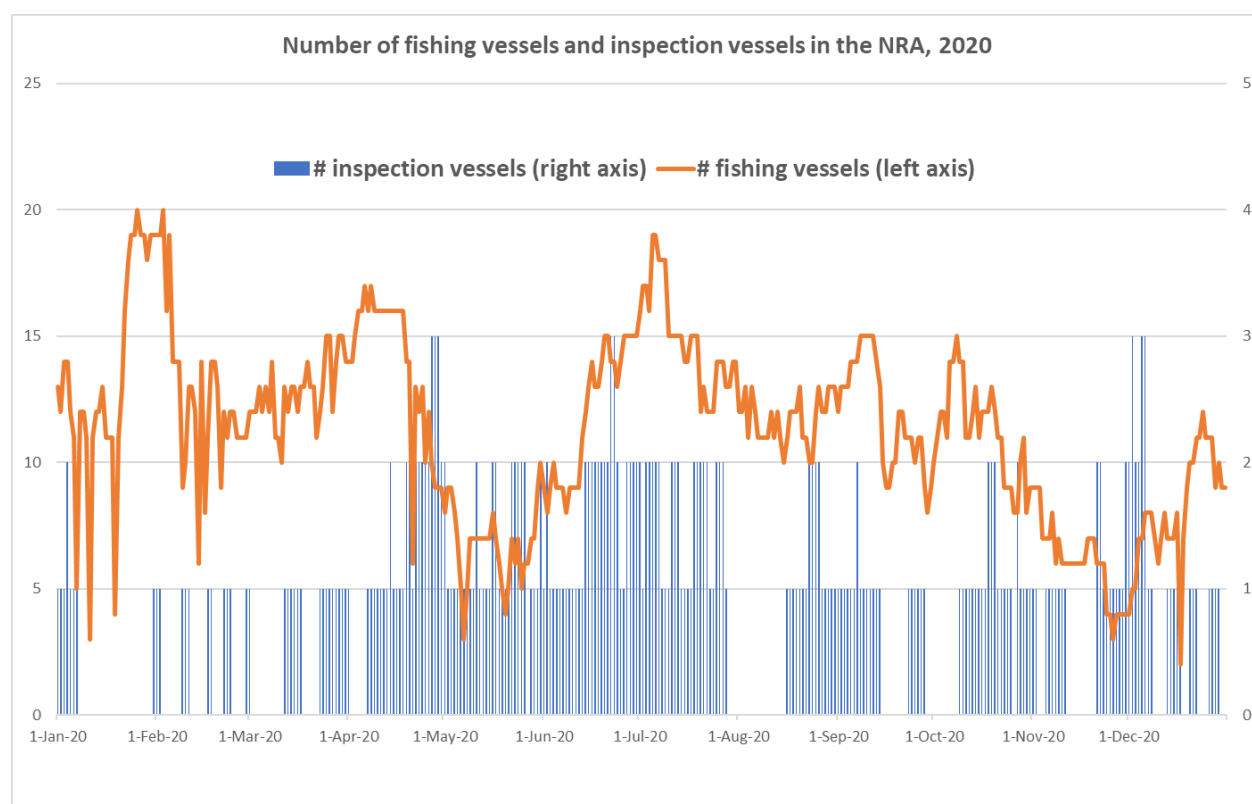


Figure 3.1 *Fishing vessel and Inspection Vessel Presence in the NRA in 2020.*

3.2 At-sea inspections

A total of 43 at-sea inspections were conducted. In four of these inspections at sea, five (5) Apparent Infringements (AI) were detected – three (3) serious as per Article 38 definition and two (2) non-serious AI. 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 during each reporting year, unless otherwise required in a recovery plan in which case 100% coverage is required. Greenland halibut (GHL) is the only species where presence in the landing would require a port inspection (see Article 10). Port inspection reports are accomplished by port States using a PSC3 form (Annex IV.C).

In evaluating the compliance of port State authorities to Article 10, only trips with GHL onboard were considered. Table 3.3.1 shows the coverage levels (based on the number of trips) of port inspections for vessels that had GHL (caught either as directed fishery or bycatch) onboard.

Table 3.3.1 *Fishing trips with Greenland halibut (GHL) catches (based on Daily Catch Reports for the trip) and percent coverage of port inspections for the identified trips, by port State*

Port 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)
CAN	8	1219.71	8	100%
DFG*	7	985.458	3	43%
EU**	56	8409.174	56	100%
FRA (St. Pierre et Miquelon)	1	0.378	1	100%
NOR*	1	488.584	0	0%
RUS	1	.378	0	0%
Overall	73	11103.3	68	69%

*Inspection not completed due to COVID-19

** One inspection did not include physical verification due to COVID-19

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 is 15% (Article 43.10).

Table 3.3.2 *The number of PSC1s and corresponding PSC3s received by the NAFO Secretariat.*

Port State	PSC1 (prior request made by flag State)	Number of PSC1's with intention to land/tranship catch	PSC3 (port inspection report from port State authority)	% Coverage (#PSC3 received /#PSC1 with intention to land/tranship catch received)
Canada	15	7	7	100%
DFG (Faroe Islands)	6	4	1	25%
EU	5	5	5	100%
FRA (St. Pierre et Miquelon)	1	1	1	100%
Iceland	5	5	0	0%*
Norway	1	1	0	0%*

*Inspection not completed due to COVID-19

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) and port State Contracting Parties to provide reports on the fisheries activity within a determined time frame. Compliance of port State Contracting Parties to 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 Fisheries Monitoring Centres (FMCs) of flag States 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 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 2020 fishing trips had corresponding COE and COX.

Table 4.1.1.1 *Fishing effort and VTI statistics in the NRA, 2020.*

Number of fishing trips identified	128
Fishing Days	4622
Number of Daily Catch Reports (CATs)	4385
Number of Trips with Catch on Entry Reports (COEs)	128
Number of Trips with Catch on Exit Reports (COXs)	128

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 4.1.1.2). Most shark catches are discarded.

Table 4.1.1.2. *Amount of shark catches (t) as reported in CATs in 2020.*

3-Alpha Code	Scientific name	Common Name	Retained (t)	Rejected (t)	Total (t)
BSH	<i>Prionace glauca</i>	Great blue shark	0.1		0.1
CAR	<i>Chondrichthyes</i>	Cartilaginous fishes		0.1	0.1
CFB	<i>Centroscyllium fabricii</i>	Black dogfish		0.3	0.3
DGS	<i>Squalus acantias</i>	Spiny dogfish		0.0	0.0
DGX	<i>Squalidae</i>	Dogfishes	0.1	6.4	6.5
DUS	<i>Carcharhinus obscurus</i>	Dusky shark		0.7	0.7
GSK	<i>Somniosus microcephalus</i>	Boreal (Greenland) shark		156.8	156.8
POR	<i>Lamna nasus</i>	Porbeagle		10.2	10.2
SHX	<i>Squaliformes</i>	Large sharks (NS)		0.5	0.5
SMA	<i>Isurus oxyrinchus</i>	Shortfin mako shark		3.9	3.9
Total			0.2	178.9	179.1

4.1.1.3 Electronic Fishing logbook (haul by haul) Reports

The submission of logbook data on a haul by haul basis became mandatory in 2015 (Article 28.8.b). The electronic fishing logbook information (haul by haul 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). The Secretariat has received haul by haul reports for all but four of the 128 trips that were completed in 2020. The Secretariat is coordinating with the CP concerned in locating the 4 missing reports.

4.1.1.4 Position reporting – Vessel Monitoring System (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 Fisheries Monitoring Centre (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. In 2020, a total of 140 690 POS reports were received. Occasionally, technical problems were encountered by the fishing vessels or FMCs. During these occasions, the POS's were transmitted manually. 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 2020, in total 20 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, and six seamounts. 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. The Secretariat did not receive a notification from a Contracting Party concerning its intention to conduct exploratory fisheries (as defined in Article 18) in 2020.

4.1.1.6 Chartering arrangement

Article 26 allows chartering arrangements between two CPs – the chartering CP (with quota or fishing days allocation in the case of 3M PRA) and the flag State CP (with fishing vessel). Catches by the vessel are counted against the quota of the chartering CP. In 2020, three (3) chartering arrangements were made --- two arrangements with the fishing possibility for shrimp (3M PRA), and one arrangement with a fishing possibility of yellowtail founder (3LNO YEL).

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. The two charter arrangements for shrimp were not implemented. With regards to the 3LNO YEL arrangement, reported catches of this stock were within the fishing possibility 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.

4.1.2 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.

In 2020, there were 84 fishing trips identified under Article 30.5, all of which have corresponding observer reports.

Three CPs invoked Article 30.6 which allows their vessels to carry an observer for less than 100% but not less than 25% of the fishing trips. All but one CP exceeded the minimum coverage requirement (see table below).

CP under Art. 30.6	# of identified trips	# of trips with Observer Trip Reports	%-coverage
CAN	33	28	85%
DFG	9	2	22%
NOR	2	2	100%*

** The Secretariat was advised that during the two trips, the vessels were carrying an observer for 66% and 70% of the days present in the NRA.*

4.2 Apparent Infringements detected at-sea and at-port

In 2020, a total of nine (9) 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 2020 and their disposition. AIs presented in bold were considered “serious” by the inspectors as per Article 38 definition.*

CP	Vessel code	Start Date of Inspection	AI's detected at-sea (Art. 37). Serious AIs in bold (Art.38)	AI's detected in port (PSC3: Section E.1.B. c). Serious AIs in bold (Art. 38)	Follow-up to AI, as reported by CP (Art 40)
EU	11	15-Jan-20		-Art 28.2.a,b, Art 28.3.a - Fishing and Production logbook Art 38.1.i - Mis-recording of catches Art. 38.1.n - Concealing, tampering evidence Art. 38.1.j - Interfering with inspectors and observers	Case pending Case under criminal investigation
EU	24	04-Mar-20		-Art. 27 - Product labelling	Case pending Precautionary order (seizure of relevant catches)
EU	11	04-Jun-20		- Art. 27.1.b - Product labelling '- Art 28.3.a.(i), (iv) - Production logbook	Case pending Precautionary order (seizure of relevant catches)
EU	49	11-Jul-20	Boxes of catches not labelled according to Division (Art. 27.1.d)	NAFO CEM Art. 38.1.n -- Area sealed by inspector had been entered.	Case pending Mis-labelling sanctioned with 520€. Prosecution is ongoing with regard to the infringement on gaining access to a sealed area
EU	164	24-Jun-20	Failure to maintain an accurate fishing logbook consistent with Annex II.A (Art. 28.2.a and Art. 38.1.i)	Fishing logbook (Art. 28.2 and 38.1.i) Production logbook (Art. 28.3) Interference with inspectors (Art. 38.1.I)	Case pending Precautionary order (rerouting to port + seizure of relevant catches)
EU	1	26-Aug-20		- Art.6.3.b - 3NO Cod bycatch threshold	Case Pending Precautionary order (seizure of relevant catches)
EU	41	04-Sep-20		-Art. 27 - Product labelling	Case Pending Precautionary order (seizure of relevant catches)
DFG	81	05-Sep-20	1) Directed fishing for Cod in 3N which is under moratorium (Art. 6.6.a and Art. 38.1.c) 2) Failure to carry out observer (Art. 30.5 and Art. 38.1.r)		Case closed. Vessel given warning.
EU	159	18-Oct-20	Use of inappropriate product code as listed in Annex II.K (art.27.1 (e))		Case closed Case dropped. Labelling considered correct.
EU	43	24-Nov-20		-Art. 10.4.d.- Greenland halibut control measure -Art. 28.2, Annex II.A - Fishing logbook, recording of catch - Art. 13.2.d - Gear requirements mesh size for ground fish.	Case pending

4.3 Follow-up to apparent infringements

NAFO CEM 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 adequate in 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 (2016-2020) and their resolution are presented.

Table 4.3 *Resolution of citations (by at-sea inspectors and port authorities) against vessels fishing in the NAFO Regulatory Area by year in which the citations were issued (as of May 2021). 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
2016	11	8	3	73%
2017	7	7	0	100%
2018	6	5	1	83%
2019	5	3	2	60%
2020	10	2	8	20%

*still under investigation, litigation, or appeal.

5.0 Trends and Analysis

Five-year trends (2016-2020) on effort and catch, reporting obligations of CPs 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	Midwater-trawl	Bottom-Trawl	TOTAL
2016	260	181	3873	4314
2017	314	0	3558	3872
2018	304	82	3719	4105
2019	321	56	4297	4674
2020	250	127	4245*	4622

*21 days TBS + 4224 days OTB

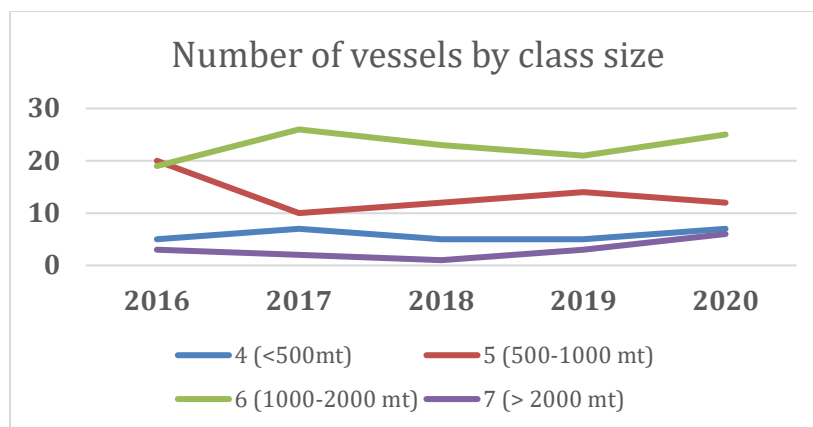


Figure 5.1.1 Number of fishing vessels in Divisions 3LMNO by class size, 2016-2020. The class sizes are based on the STATLANT classification.

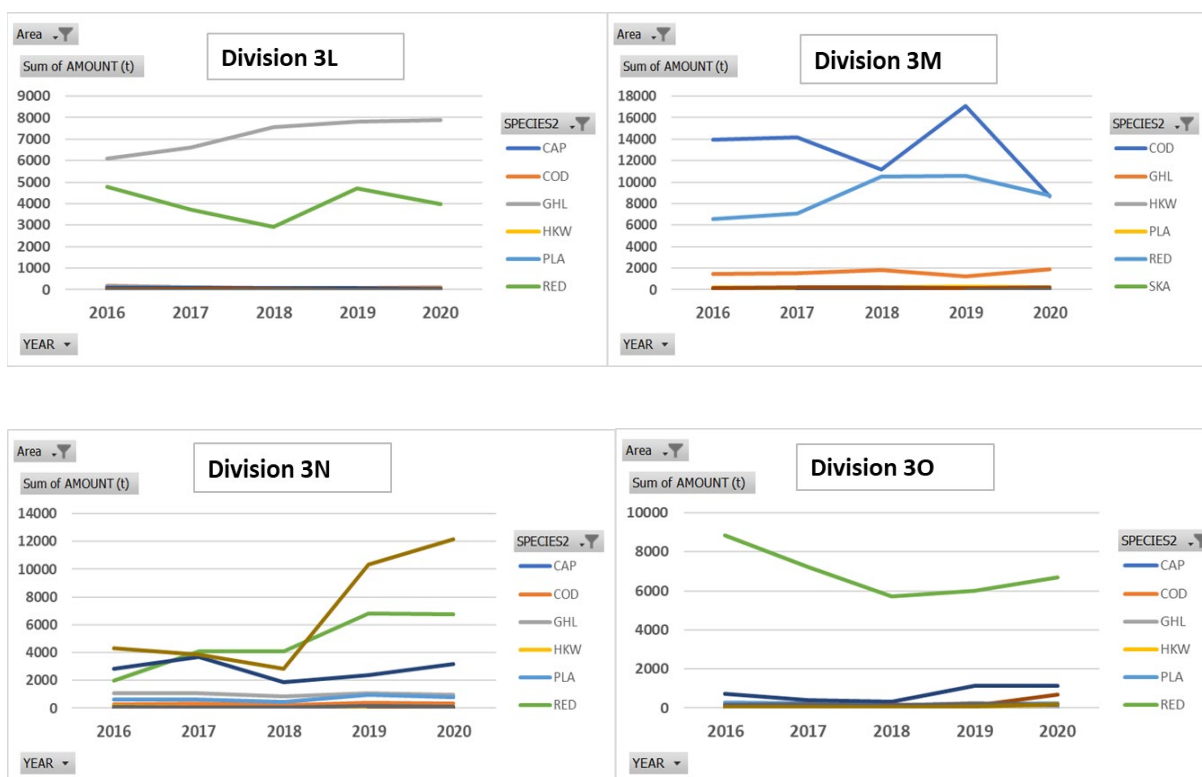


Figure 5.1.2 Catches (in tonnes) by Division of selected species managed by TAC, 2015-2020 (Source: CATs).

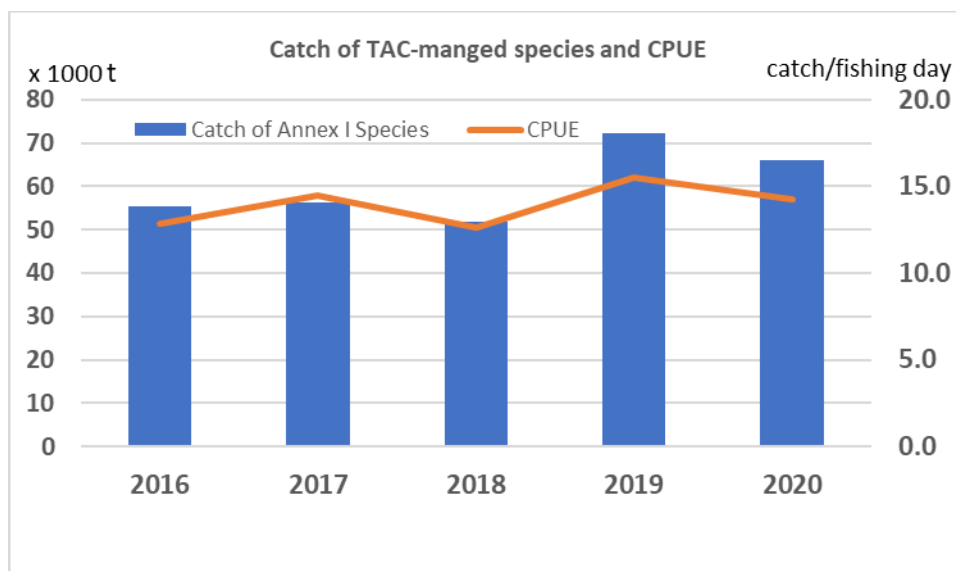


Figure 5.1.3 *Catch of TAC-managed species and CPUE in 2016 -2020, expressed in total catch of TAC-managed species per fishing day. Data Source: CATs and VMS reports.*

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 (Haul by Haul) reports in accordance with Article 28.8.b.

Figure 5.2 shows the submission rates in the period of 2016-2020. In 2020, 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 96.9%, 100%, and 93.2%, respectively.

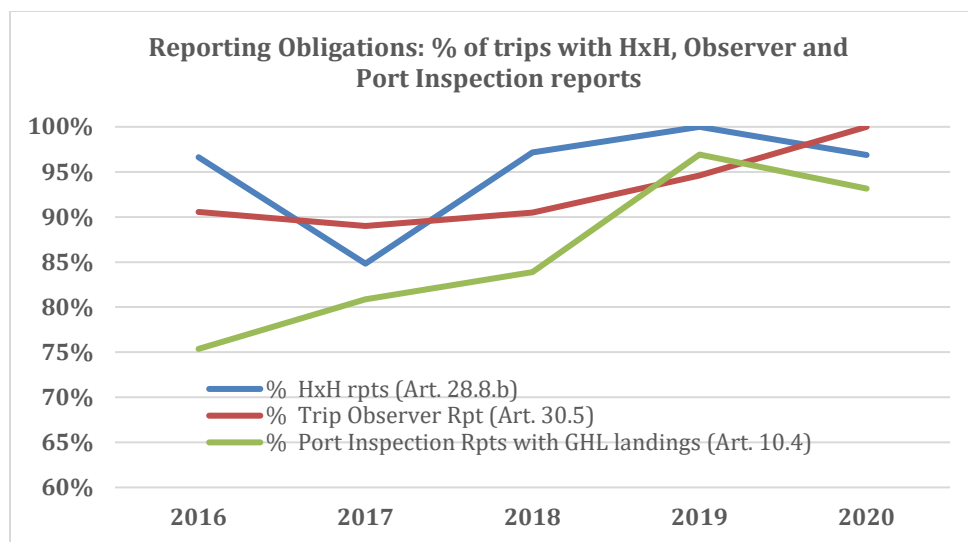


Figure 5.2 *Percentage coverage of Port Inspections reports with Greenland halibut landings reports (Arts. 10.4 and 42.10), Observer Trips Reports on fishing vessels operating under Article 30.5 (flag State CPs did not apply Article 30.6), and Haul by Haul reports (Article 28.8.b and Annex II.N), 2016-2020.*

5.3 Compliance by Fishing vessels

In the 5-year review period of 2016-2020, 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 2016-2020 are presented in Figure 5.4.1. In 2020, inspection rate dipped to its lowest level (at 0.9% compared to 2.27% in 2019). Inspection rates of the 4 previous years had remained steady with less than 1% inter-annual difference. Frequency of AI cases in the same period is presented in Figure 5.4.2.

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.

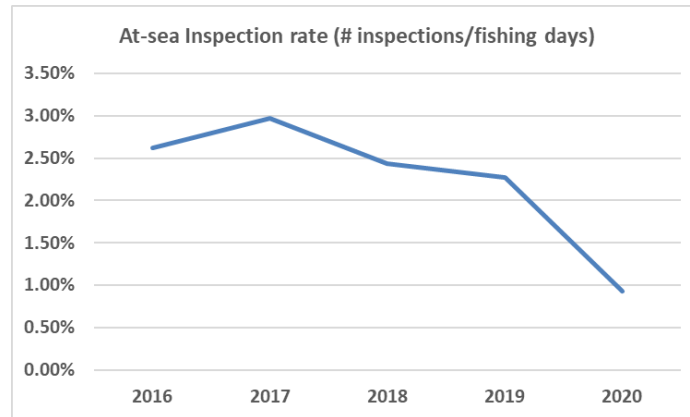


Figure 5.4.1 *Inspection rates (number of at-sea inspections/fishing days) in the NAFO Regulatory Area, 2016-2020.*

	2016	2017	2018	2019	2020
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 requirements					•
Mis-recording of catches - inaccurate recording	••••••••	••••	••••	••	•••
Mis-recording of catches -stowage	•	••	•	••••••	
Product labelling		•	••	••	•••••
Quota requirements	••				
Vessel requirements - capacity plans	•		••	•	
Production logbook requirements					••
Other non-serious infringement					•

Figure 5.4.2 *Frequency of apparent infringement cases detected by at-sea inspectors and port authorities in 2016-2020. Black and blue dots represent apparent infringement issued at sea and at port, respectively.*

6.0 Conclusions

In NAFO, there are three main fisheries conducted mainly with trawl gear and a limited presence of longline gear. The total catches increased slightly from around 72,000 tonnes in 2019 to approximately 73,000 tonnes in 2020, including 3,609 tonnes of pelagic redfish under moratorium.

The at-sea inspection rate is lower in 2020 due to COVID-19. (Fig 5.4.1).

COVID-related impacts on control activities required the adoption of protective protocols both at-sea and in port and to some extent changes in inspection practices.

Contracting Parties have reported a certain impact on their ability to carry out control elements which are mandatory under the NAFO CEM, in particular for port inspection benchmarks.

Three CPs invoked Article 30.6 NAFO CEM which allows their vessels to carry an observer for less than 100% but not less than 25% of the fishing trips. All but one CP exceeded the minimum coverage requirement.

The 2020 CPUE is consistent with trends remaining steady (Fig 5.1.3)

2020 saw the reopening of the 3M PRA fishery with a limited activity consisting only on 79 tonnes of catches in 21 fishing days.

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.

7.0 Recommendations

STACTIC recommends that all Contracting Parties continue to strive for coordination and collaboration.

STACTIC recommends that all Contracting Parties maintain and continue efforts to protect stocks that are subject to moratorium.

STACTIC recommends Contracting Parties to continue to urge masters to improve recording of sharks at species level (Section 4.1.1.2).

STACTIC recommends Contracting Parties continue to strive towards 100% submission of Observer Trip reports, the electronic logbook data reports (haul by haul) and Port Inspection reports, as the catch information contained in these reports are utilized by the Scientific Council and other working groups (*e.g.* CESAG, WG-BDS) in their fish stock assessment work (Section 5.2 and Figure 5.2).

STACTIC recommends Contracting Parties continue to strive towards 100% submission of reports on the partial withdrawal of observers and continue efforts to standardize the information in those reports.

STACTIC encourages Contracting Parties to continue to maintain inspection presence in the NRA (Section 3.1) and to continue to cooperate among them for at-sea deployments.

STACTIC recommends Contracting Parties to continue cooperation and discussions on best practices for both at sea and port inspections.

STACTIC recommends Contracting Parties ensure the application of the follow-up procedures in cases of serious infringements.

STACTIC recommends Contracting Parties ensure that research activities are conducted in a manner consistent with research plans and notification requirements.

STACTIC recommends Contracting Parties continue to ensure the protection of Vulnerable Marine Ecosystems.

STACTIC recommends Contracting Parties continue to ensure safe working procedures related to COVID-19 and to report the on the difficulties to comply with obligation on control directly linked to the COVID pandemic.

STACTIC recommends Contracting Parties continue to support at-sea observers during deployments in the NRA.

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.”*

At the May 2021 Intersessional Meeting (COM Doc. 11-02), STACTIC developed a questionnaire-survey for the purpose of evaluating COVID-19's impact on compliance (STACTIC WP 21-12 Rev.). As of September 2021, four Contracting Parties (CPs) responded to the survey. The control measures impacted were the requirements pertaining to deployment of on-board observers (Article 30.5 and 30.6), Greenland halibut port inspection (Article 10.4 (e)), and port state measures (Article 43.10).

One Contracting Party did not report the details of the difficulties directly linked to the COVID-19 pandemic relating to the non-compliances with obligations on control in the agreed format and no preliminary STACTIC assessment is provided for this Contracting Party on whether the reasons for the non-compliance with control obligations relates to COVID-19.

All other Contracting Parties reported no instances of non-compliance with the obligations on control.

These are the summaries of the four reporting Contracting Parties:

One Contracting Party reported that due to safety concerns related to COVID-19, it suspended its national observer program, also applicable to the NRA, between 3 April and 5 August 2020. This relates to the obligation to deploy observers under Article 30 NAFO CEM. Subsequently, the CP used the derogation on the observer coverage in NAFO. The FMC and the NAFO inspectors of the CP concerned closely monitored the activity of its derogated fishing vessels to ensure adherence to the CEM. By the end of 2020, vessels from the one CP concerned had completed sufficient observed trips that the year's derogated trips were in compliance with the percentage outlined in Article 30.6 NAFO CEM.

One Contracting Party reported difficulties on complying with the 100% port inspection benchmarks for landings/transhipments of Greenland halibut set out in Article 10.4.(e) NAFO CEM and with the obligation to inspect at least 15% of third-country landings under Article 43.10 NAFO CEM. Based on risk and vulnerability assessments, the Contracting Party implemented strict disease control measures, including the non-inspection of foreign vessels between 12 March and June 2020. Port inspections were gradually resumed from June, although between June and September 2020, port inspectors were not allowed to go on board foreign vessels and only landed quantities were inspected during that period. Electronic and on-site surveillance presence as

well as document controls of PSC1 including flag State confirmation were used as alternative actions mitigate the impact of those measures.

Another Contracting Party reported similar difficulties relating to the port inspection benchmarks for landings/transhipments of Greenland halibut set out in Article 10.4.(e) NAFO CEM and the obligation to inspect at least 15% of third-country landings under Article 43.10 NAFO CEM, between 12 March and February 2021. This was also due to the strict disease control measures, including the non-inspection of foreign vessels between. Electronic and on-site surveillance presence as well as document controls of PSC1 including flag State confirmation were used as alternative actions to mitigate the impact of those measures.

One Contracting Party reported that one mandatory port inspection under Article 10.4.(e) NAFO CEM was carried without physical verification between 24 and 30 March 2020. This took place during the lockdown and under a temporal prohibition of physical inspections due to the risk of spreading the infection in the absence of protective equipment for inspectors and protective protocols allowing physical verification of the cargo. Alternative actions to mitigate the impact of this restriction included a thoughtful documental verification and cross-check of available fisheries data, but without physical verification. Protective protocols for port (and at-sea) inspections and protective equipment were soon adopted afterwards, including procedures for the verification of landing operations. In addition, remote monitoring based on cross-check and automatic validation systems of fisheries data have been improved.

The first assessment by STACTIC on the difficulties reported by these four Contracting Parties to comply with control obligations under the NAFO CEM is that the reported non-compliances are directly linked to the measures adopted in relation to the COVID-19 pandemic.

Annex 39. Measure to Revise NAFO CEM Article 4 to Limit Scientific Catches of 3M Cod and 3M Shrimp in 2022

(COM WP 21-45 (Rev.) now COM Doc. 21-17)

Explanatory memorandum

In order to pursue NAFO's primary objective of conservation and sustainable use, a fundamental requirement is that removals by all Contracting Parties remain within agreed limits. This obligation is especially critical in the context of stocks that are on a declining trajectory and are at risk of falling below B_{lim} . In 2020, the Commission agreed to a TAC of 1500t for 3M cod for 2021, a sharp reduction from the previous year in the face of biomass declines.

In 2021, Denmark (in respect of the Faroe Islands and Greenland, or DFG) initiated a longline survey using a commercial vessel in division 3M to provide information on cod and other species. At the 2021 NAFO Annual Meeting, DFG reported in NAFO SCR Doc. 21/039 that this survey had caught 630.6t of 3M cod, which is almost double, and in addition to, its quota for 2021 of 335t.

This significant overharvest is deeply troubling in its implications for the sustainability of the stock. However, it also points more broadly to a gap in Article 4 of NAFO's Conservation and Enforcement Measures (CEM), which does not provide adequate mechanisms to ensure that harvests taken in the context of scientific surveys are in fact taken for scientific purposes, that they are no larger than generally required for those purposes, and that they do not undermine other management measures aimed at ensuring sustainable harvests.

Developing mechanisms to manage scientific catches will require care to ensure they provide ample space for legitimate scientific work to be conducted, while at the same time ensuring that science needs cannot be confused with large harvests that may have a more commercial motivation. While work to develop such mechanisms is undertaken over the coming year, an interim measure is required to ensure that any 3M cod survey undertaken in 2022 is aligned with the agreed TAC for the stock and with sound fisheries management principles more generally.

Since the Commission agreed in 2021 to a moratorium for 3M Shrimp in 2022 given the stock's decline to a level below B_{lim} , similar caution is required for scientific work relating to the 3M Shrimp stock. This interim measure therefore covers both 3M cod and 3M shrimp.

Proposal

Recognizing that the NAFO Convention's objective includes "to ensure the long-term conservation and sustainable use of the fishery resources in the Convention Area;"

Concerned that a scientific survey conducted in NAFO Division 3M took an amount of cod disproportionate to what would be reasonably required or expected for purely scientific purposes;

Noting the Commission's wish to prevent excessive scientific catches while a permanent mechanism to manage these catches is developed;

Thereby recommend that Article 4 be amended to include new subparagraphs c and d in Paragraph 2:

2. A research vessel shall not:

[...]

c. in 2022 take 3M cod in excess of 15 metric 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 15t have been caught.

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



NAFO Northwest Atlantic
Fisheries Organization

PRESS RELEASE

Committed to **Conservation** and **Management** of **Fisheries** and **Ecosystems** in the Northwest Atlantic

Annex 40. 2021 Press Release

NAFO AGREES TO FURTHER MEASURES TO PROTECT VULNERABLE MARINE ECOSYSTEMS (VMEs) AT ITS 43RD ANNUAL MEETING

FOR IMMEDIATE RELEASE

Halifax, Canada, 25 September 2021 – The Northwest Atlantic Fisheries Organization (NAFO) achieved significant progress with key decisions on the sustainable management of NAFO-managed fish stocks, the protection of vulnerable marine ecosystems (VME) and its review of its Precautionary Approach Framework.

Notably, a number of measures were adopted to enhance its protection for Vulnerable Marine Ecosystems (VMEs), in particular to safeguard black coral and sea pens. These measures include:

3. Through the addition of seven (7) new closed areas, as well as revisions to the boundaries of existing closures, all seamounts at fishable depths within the NAFO Regulatory Area now protected,
4. In addition to a five (5) year rollover of the current closures to protect VMEs in the NAFO Regulatory Area, five (5) further areas will be closed for this same duration,
5. As a precautionary measure, an additional four (4) VMEs closed areas were adopted for two (2) years to allow the Scientific Council to conduct additional analysis incorporating the most recent fishery data.

This demonstrates NAFO's commitment to the ecosystem approach to fisheries management and, specifically, to the protection of VMEs, which has been an obligation for regional fisheries management organizations (RFMOs) since 2008, following United Nations General Assembly (UNGA) Resolutions.

In addition, significant decisions were made regarding the following:

6. Progress achieved to review NAFO's Precautionary Approach Framework.
7. Continued additional conservation measures for cod in Div. 3M, including maintaining a port inspection effort and limiting bycatches during the first quarter closure of 2022.

NAFO elected Temur Tairov (Russian Federation) as NAFO's new President and Chair of the Commission and Deirdre Warner Kramer (USA) as Vice Chair of the Commission. Karen Dwyer (Canada) was elected Chair of the Scientific Council and Diana González Troncoso (EU) was elected as Vice Chair of the Scientific Council.

NAFO agreed on the closure of the shrimp fishery in Div. 3M for 2022, and will continue to work intersessionally to review the current management approach this stock.

The 44th Annual Meeting will take place 19–23 September 2022, in Portugal.

For further inquiries, please contact:

NAFO Secretariat
Tel: +902 468-5590 ext. 203
E-mail: info@nafo.int



PART II.
Report of the Standing Committee on International Control (STACTIC)

43rd Annual Meeting of NAFO, 20-24 September 2021

1.	Opening by the Chair, Kaire Märtin (European Union).....	130
2.	Appointment of Rapporteur.....	130
3.	Adoption of Agenda.....	130
4.	Compliance review 2021 including review of apparent infringement reports and chartering arrangements.....	130
	a. Compliance Review	130
	b. Analysis of at-Sea inspection rates.....	131
5.	Review of Article 30 of the NAFO CEM	131
6.	STACTIC Participation.....	131
7.	New and Pending Proposals on Enforcement Measures: Possible revisions of the NAFO CEM	132
8.	Practical application of Port State Measures in NAFO	134
9.	Marking of gears	135
10.	Review of Current IUU list Pursuant to NAFO CEM, Article 53.....	135
11.	Bycatches and Discards	136
12.	Discussion of data classification and access rights	136
13.	Report and recommendations of the Joint Advisory Group on Data Management (JAGDM).....	137
14.	Recommendations from NAFO working groups	137
15.	Discussion on garbage disposal onboard vessels	138
16.	Discussion of the reporting of shark catches in the NAFO Regulatory Area.....	138
17.	Implementation of the Performance Review Recommendations.....	139
18.	Issues relating to the impacts of COVID-19	139
19.	Other business	140
	a. VISMA Contract Renewal	140
20.	Election of Chair and vice-Chair.....	140
21.	Time and Place of next meeting.....	140
22.	Adoption of Report.....	140
23.	Adjournment	140
	Annex 1. List of Participants.....	141
	Annex 2. Agenda	143

Report of the Standing Committee on International Control (STACTIC)

43rd Annual Meeting of NAFO, 20-24 September 2021

1. Opening by the Chair, Kaire Märtin (European Union)

The Chair opened the meeting at 08:30ADT on Monday, 20 September 2021 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, Norway, the Russian Federation, Ukraine, the United Kingdom, and the United States of America (Annex 1).

2. Appointment of Rapporteur

Jana Aker (NAFO Secretariat) was appointed as rapporteur.

3. Adoption of Agenda

The following additions were made to the agenda under agenda Item 19 – Other Business:

a. VISMA Contract Renewal

The agenda was adopted, as amended (Annex 2).

The Chair noted that the work of the NAFO ad hoc Working Group on STACTIC Participation (WG-SP) is still ongoing. Contracting Parties agreed to follow the procedure established at the 2019 Annual Meeting as an interim solution for this meeting, which was that Contracting Parties identify agenda items and/or working papers to determine which items were deemed to be of a sensitive nature and were agreed to be 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. For this meeting, Contracting Parties agreed to discuss agenda items 4, 5, 12, and 18 in an in-camera (closed) session.

4. Compliance review 2021 including review of apparent infringement reports and of chartering arrangements

a. Compliance Review

The Chair highlighted the Draft 2020 Compilation of Fisheries Reports table in STACTIC WP 21-01 (Rev. 6) and noted that comments received following the STACTIC Intersessional meeting had been incorporated. Contracting Parties did note a few additional issues and flagged those to the Secretariat, and they were included in STACTIC WP 21-01 (Rev. 7). The European Union encouraged Contracting Parties to review their figures where discrepancies between the different sources of data are present.

The Chair highlighted STACTIC WP 21-02 (Rev. 3), the summary of inspections for 2020, and noted that the comments received following the intersessional meeting had been incorporated. The European Union requested further information on the availability of Canadian inspection reports for Canadian vessels on the MCS Website, and Canada noted that they are working internally to get these reports uploaded to the MCS Website going forward. The European Union noted the importance of having consistent sanctions and follow-up procedures for all Contracting Parties for infringements.

The Chair highlighted the overview of chartering arrangements and compliance document outlined in STACTIC WP 21-29 (Revised) for information.

The Chair highlighted the draft Annual Fisheries and Compliance Review for 2020 in STACTIC WP 21-42 (Revised). Contracting Parties offered some clarifications throughout the draft Compliance Review and representatives from Canada, the European Union, and the United States of America volunteered to continue

work on the conclusions and recommendations sections and summarize the submissions for the annex on compliance issues related to the impact of COVID-19. The final version of the draft Compliance Review is outlined in STACTIC WP 21-42 (Rev. 4).

It was agreed that:

- **The draft Annual Compliance Review outlined in STACTIC WP 21-42 (Rev. 4) be forwarded to the Commission for adoption.**

b. Analysis of at-Sea inspection rates

The NAFO Secretariat presented the at-sea inspection information outlined in STACTIC WP 21-52 in response to the recommendation from the 2021 STACTIC Intersessional meeting for the Secretariat to conduct an analysis on inspection rates in the NAFO Regulatory Area. Contracting Parties thanked the Secretariat for the work and noted that the information provided a general overview of the inspection activity, but more information would be required before any conclusions could be drawn, such as the risk assessment procedure, availability of inspection platforms, etc. Contracting Parties agreed that the information was useful and requested the Secretariat repeat the analysis for the 2023 Annual Meeting.

It was agreed that:

- **The NAFO Secretariat will provide an updated version of the information presented in STACTIC WP 21-52 for the 2023 STACTIC Annual Meeting.**

5. Review of Article 30 of the NAFO CEM

The Chair highlighted the summary of observer information for 2020 in STACTIC WP 21-03 (Rev. 3) and noted that almost all of the required information has been submitted, with the exception of the report on the partial withdrawal of observers from one Contracting Party. Contracting Parties provided the relevant updates and the final version is outlined in STACTIC WP 21-03 (Rev. 4). Contracting Parties agreed on the need for a standardized reporting template for the information required to be submitted to the NAFO Secretariat in accordance with Article 30.6.e of the NAFO CEM.

It was agreed that:

- **STACTIC will develop a reporting template for the data submission requirements under Article 30.6.e at the 2022 STACTIC Intersessional Meeting.**

6. STACTIC Participation

The Chair presented the meeting report from the NAFO ad hoc Working Group on STACTIC Participation (WG-SP) in STACTIC WP 21-45 and highlighted the recommendation that a small group consisting of Canada, the European Union, Japan, and the United States of America agreed to work on drafting a Rules of Procedure for presentation at this meeting, using the current procedure established at the 2019 Annual Meeting as a basis for agreement. The small group noted that they did not have enough time to reach consensus on the draft document and that more discussions will be required to complete this work. Particularly, the United States expressed concern that Contracting Parties were not operating from the same starting point, and requested that the Secretariat provide all Contracting Parties with the relevant documents that form the basis of understanding for the current ad-hoc procedure to ensure there is a common starting place for these discussions. It was agreed that Canada, the European Union, Japan, and the United States of America and any other interested Contracting Parties will continue work with the aim to present a proposal to STACTIC at the 2022 STACTIC Intersessional Meeting.

It was agreed that:

- **Canada, the European Union, Japan, and the United States of America and any other interested Contracting Parties will continue working on the draft proposal for a Rules of Procedure for STACTIC Participation for presentation at the 2022 STACTIC Intersessional Meeting.**
- **The Secretariat will compile and circulate, as soon as practicable, all relevant NAFO texts that form the basis of the current, ad-hoc procedure regarding STACTIC participation.**

7. New and Pending Proposals on Enforcement Measures: Possible revisions of the NAFO CEM

The Chair highlighted STACTIC WP 21-17 (Rev. 2) outlining the draft legend for Annex I.A of the NAFO CEM, noting that the proposal was discussed at the 2021 Intersessional meeting, and comments were received and incorporated since that meeting. Contracting Parties agreed to forward the proposed legend for Annex I.A to the Commission for adoption.

The NAFO Secretariat presented STACTIC WP 21-36 highlighting a possible clarification that may be required in the description of the RA field in the COX message. The Secretariat noted that there are some issues with vessels including CA and RJ amounts in the COX message but exiting from a different NAFO division than the catch was taken, resulting in the catch (in the CA and RJ fields) being associated with the division of exit. The European Union requested that before the proposal is adopted, the issue be flagged to JAGDM to ensure there are no technical issues with the proposed change and to also request JAGDM review the consistency of the COX messages between NEAFC and NAFO.

Denmark (in respect of the Faroe Islands and Greenland) presented a proposal relating to the port inspection of Greenland halibut outlined in STACTIC WP 21-37 and noted the purpose of the proposal was to clarify the intention of Article 10.4.e of the NAFO CEM. Contracting Parties thanked Denmark (in respect of the Faroe Islands and Greenland) for their proposal and offered some comments to clarify the proposal, outlined in STACTIC WP 21-37 (Revised). Contracting Parties agreed to forward the proposal to the Commission for adoption.

The European Union presented a proposal in STACTIC WP 21-40 amending Article 4 of the NAFO CEM to better regulate the use of commercial vessels for research activities. Contracting Parties thanked the European Union for the proposal and provided comments on the inclusion of a 2% threshold and suggested the inclusion of a definition of “*marketed*” to allow for further clarity in the provisions. During the discussion, Norway also suggested that STACTIC have discussions on the utility of having the Scientific Council review and approve research activities in the NAFO Regulatory Area. The European Union thanked Contracting Parties for the feedback, and the comments were incorporated into STACTIC WP 21-40 (Revised) by removing the 2% threshold and introducing the possibility for the NAFO Scientific Council to approve exceptions to the reporting requirements and quota limitations for research activities by commercial vessels. Some Contracting Parties expressed concerns with the discussions of the Research Vessel requirements being held in STACTIC and felt it may be more appropriate for the Commission, while indicating support to the underlying principles. A Contracting Party indicated a lack of mandate to endorse this proposal in STACTIC and that it should be sent to the NAFO Commission for decision. The European Union noted that the issue of reporting and notification requirements for research vessels is a matter of control. The European Union referred the importance of the subject and explained that in 2021 the survey by a commercial fishing vessel from a NAFO Contracting Party resulted in overall catches overshooting the Contracting Party’s quota and that this information had only been available in the second day of the STACTIC Annual Meeting because the vessel had not reported catches to NAFO. The European Union noted that it was not possible to board the vessel at the time of the activity due to bad weather and recalled that in accordance with Article 31(6) of the NAFO CEM, where the activities are not carried out in accordance with a research plan, the NAFO CEM apply in full. Contracting Parties agreed to request advice from the Commission if STACTIC can continue the discussions, and if so, that the discussion of the proposal will continue at the 2022 STACTIC Intersessional Meeting.

The European Union presented a proposal amending Article 6.3.e of the NAFO CEM to clarify the application of the bycatch provisions for Contracting Parties utilizing the “*Others*” quota outlined in STACTIC WP 21-41 (Revised). Contracting Parties thanked the European Union for the proposal and offered comments to the text to further clarify the proposal, which was presented in STACTIC WP 21-41 (Rev. 4). Contracting Parties agreed to forward the proposal to the Commission for adoption.

The European Union presented a proposal in STACTIC WP 21-47 relating to the port inspection of 3M Cod in Article 7 bis of the NAFO CEM and noted that the TAC for 3M cod was yet to be determined by the Commission, but that the provisions of Article 7 bis were only relevant when the TAC was below 3000 metric tonnes. The European Union proposed that the Article should be relevant when the TAC is below 6000 metric tonnes, and that the port inspection requirements would be 50% of the landings. Denmark (in respect of the Faroe Islands and Greenland) noted that they were not able to guarantee 50% inspection if all cod quota was caught on one fishing trip, and STACTIC agreed that the 50% provision would be relevant if there was more than one landing with 3M cod onboard. Japan expressed a reservation on the proposal, noting they could support the proposal at the STACTIC level, but there may be further discussions on the proposal when presented to the Commission.

Canada highlighted their proposal for editorial changes to the text of Article 7 bis of the NAFO CEM outlined in STACTIC WP 21-28 (Revised). Contracting Parties thanked Canada for the proposal and agreed that the proposals in this working paper can be combined with the text in STACTIC WP 21-47. The proposals from STACTIC WP 21-28 (Revised) and STACTIC WP 21-47 were combined into STACTIC WP 21-28 (Rev. 2), and it was agreed to forward the proposal to the Commission for adoption.

The European Union presented a proposal on the bycatch limits for 3M cod in quarter 1 (Article 5.5.j of the NAFO CEM) in STACTIC WP 21-50 and noted that this proposal was on the wording of the provision pending an agreement from the Commission to continue the quarter 1 closure in 2022. Contracting Parties thanked the European Union for the proposal but raised some concerns, including the use of the phrase “*ban the fishing*” and suggested alternate language. The European Union thanked Contracting Parties for the feedback and presented a revised proposal in STACTIC WP 21-50 (Rev. 2). Denmark (in respect of the Faroe Islands and Greenland) noted that they expect that moving forward, NAFO will endeavor to remove the discard obligations in the NAFO CEM. Norway expressed that they remain concerned with the number of discard obligations in the NAFO CEM, and would prefer not to add new measures requiring discards. Nevertheless, taking into account the problems described by EU, and in the spirit of compromise, they could go along with the proposal for now. However, Norway highlighted that in their opinion there was a need for a derogation from the discard obligations in the NAFO CEM for Contracting Parties with a landing obligation.

The United States of America presented a proposal to improve data collection of the bycatch of sea turtles, sea birds, and marine mammals in STACTIC WP 21-51 (Revised). Highlighting the commitment to apply an ecosystem-based approach to fisheries management in the 2017 NAFO Convention, the United States called for increased data collection by NAFO Observers of the bycatch of sea turtles, sea birds, and marine mammals. Contracting Parties thanked the United States of America for their proposal and noted their support for the principle of the proposal but offered some comments and clarifications on the proposed text, specifically in relation to the use of the phrase “*landings and discards*” as well as a reference to “*records in logbooks*”. The United States of America thanked Contracting Parties for their comments and presented a revised proposal in STACTIC WP 21-51 (Rev. 3). Contracting Parties supported the revised proposal and agreed on the importance of the data collection for sea turtles, sea birds, and marine mammals by NAFO Observers. One Contracting Party requested more time to deliberate on the proposal and that it be deferred to the 2022 STACTIC Intersessional Meeting.

The United States of America presented a proposal for additional trial tow opportunities outlined in STACTIC WP 21-54 and noted that the proposal was based on the discussions at the 2021 STACTIC intersessional meeting and the meeting of the STACTIC Working Group on Bycatch Discussions. Contracting Parties thanked the United States of America for the proposal and offered suggestions to strengthen and clarify the proposal. The United States of America thanked Contracting Parties for their feedback and presented the revision in STACTIC WP 21-54 (Rev. 2). Contracting Parties supported the revised proposal. One Contracting Party requested more time to understand the practical implications for this new measure, despite another

Contracting Party's intervention requesting that there be a compliance review and assessment of the proposed article at the 2022 Intersessional Meeting. Discussions on this proposal will be continued at the 2022 STACTIC Intersessional Meeting.

Japan presented a proposal for a trial tow in the squid fishery outlined in STACTIC WP 21-56 for discussion and noted that the approach is similar to the approach from the United States of America to address the gear requirements for the squid fishery. Japan noted that the working paper served as a starting point for the discussions, and that discussions can continue at the 2022 STACTIC Intersessional Meeting.

It was agreed that:

- The proposal for a legend for Annex I.A of the NAFO CEM outlined in STACTIC WP 21-17 (Rev. 2) be forwarded to the Commission for adoption.
- The clarification of the RA field in the COX message outlined in STACTIC WP 21-36 be forwarded to JAGDM to ensure there are not technical issues with the proposal.
- The consistency of the COX messages between NEAFC and NAFO be reviewed by JAGDM.
- The proposal clarifying the text in Article 10.4.e of the NAFO CEM outlined in STACTIC WP 21-37 (Revised) be forwarded to the Commission for adoption.
- STACTIC request advice from the Commission if the discussions relating to the regulation of the research activities as outlined in STACTIC WP 21-40 (Revised) are within the mandate of STACTIC and can continue at the 2022 STACTIC Intersessional Meeting.
- The proposal amending Article 6.3.e of the NAFO CEM to clarify the application of the bycatch provisions for Contracting Parties utilizing the “*Others*” quota outlined in STACTIC WP 21-41 (Rev. 4) be forwarded to the Commission for adoption.
- The proposal for revisions to Article 7 bis of the NAFO CEM outlined in STACTIC WP 21-28 (Rev. 2) be forwarded to the Commission for adoption.
- The proposal to clarify the text of Article 5.5.j of the NAFO CEM outlined in STACTIC WP 21-50 (Rev. 2) be forwarded to the Commission for adoption, pending the Commission decision to maintain the quarter 1 closure for 3M cod.
- The discussions on the proposal to improve data collection of the bycatch of sea turtles, sea birds, and marine mammals in STACTIC WP 21-51 (Rev. 3) continue at the 2022 STACTIC Intersessional Meeting.
- The discussions on the proposal for additional trial tow opportunities outlined in STACTIC WP 21-54 (Revised) continue at the 2022 STACTIC Intersessional Meeting.
- The discussions on the proposal for trial tow and the squid fishery outlined in STACTIC WP 21-56 continue at the 2022 STACTIC Intersessional Meeting.

8. Practical application of Port State Measures in NAFO

The Chair opened this agenda item and reflected on the discussions at the 2019 Annual Meeting requesting that these discussions on the practical application of port State measures in NAFO be held, noting the discussions have been deferred because of the COVID-19 pandemic. Contracting Parties agreed that there was limited time at this meeting to have full discussions on this topic and suggested that STACTIC continue the discussions at the 2022 STACTIC Intersessional Meeting, including an update from the NAFO Secretariat on the progress made for the electronic PSC process in NAFO. The European Union also highlighted the relevance of these discussions for the NAFO Inspectors Workshop.

It was agreed that:

- **The discussions on the practical application of the port state measures be continued at the 2022 STACTIC Intersessional Meeting.**
- **The NAFO Secretariat provide an update on the electronic PSC process in NAFO at the 2022 STACTIC Intersessional Meeting.**

9. Marking of gears

The Chair opened this agenda item and reflected on the discussion at the 2019 Annual Meeting relating to the insertion of a reference to the *FAO Guidelines on the Marking of Gears* under Article 13.10 of the NAFO CEM as outlined in STACTIC WP 19-11. The Chair noted that these discussions have been deferred because of the COVID-19 pandemic. Contracting Parties agreed that there was limited time at this meeting to have these discussions, and that Contracting Parties will submit information relating to their domestic use of the *FAO Guidelines on the Marking of Gears* in advance of the 2022 STACTIC Intersessional Meeting to facilitate discussions.

It was agreed that:

- **Discussions on the marking of gears continue at the 2022 STACTIC Intersessional Meeting.**
- **Contracting Parties will provide information on their domestic implementation of the *FAO Guidelines on the Marking of Gears* to the NAFO Secretariat in advance of the 2022 STACTIC Intersessional Meeting.**

10. Review of Current IUU list Pursuant to NAFO CEM, Article 53

The Chair highlighted the current NAFO IUU list outlined in STACTIC WP 21-30 and noted that there have been no changes to the list since it was last reviewed. The European Union noted that the vessel *Eros Dos* is under the process of being de-listed in NEAFC as the vessel has been scrapped, but the final decision will be made at the upcoming NEAFC Annual Meeting.

The Chair also highlighted the discussion paper in STACTIC WP 21-31 outlining the NEAFC IUU B-list that includes IUU vessels from other RFMOs and reflected on the current NAFO procedure to include NEAFC IUU listed vessels on the NAFO IUU list as prescribed in Article 49.1.c of the NAFO CEM. One Contracting Party expressed concern around the lack of procedures surrounding the listing and de-listing processes, they felt it was premature to do a wholesale inclusion of all RFMOs from NEAFC's IUU list and objected to the inclusion of the NEAFC IUU-B list onto the NAFO IUU list under the procedure outlined in Article 52.2 of the NAFO CEM. As a result, STACTIC agreed that the NEAFC IUU-B list outlined in STACTIC 21-31 will be included in the NAFO Provisional IUU Vessel List.

The European Union, Norway, and the United States of America presented an information paper in STACTIC WP 21-55 on the progress of the work on the proposal for the inclusion of other RFMO IUU vessel lists on the NAFO IUU list. Contracting Parties agreed to provide comments on the draft of the proposal in advance of the 2022 STACTIC Intersessional Meeting.

It was agreed that:

- **The vessels on the NEAFC IUU B-list outlined in STACTIC WP 21-31 be included in the NAFO Provisional IUU Vessel List.**
- **Contracting Parties will provide comments on the draft proposal for the inclusion of other RFMO IUU vessel lists on the NAFO IUU list outlined in STACTIC WP 21-55 in advance of the 2022 STACTIC Intersessional Meeting.**

11. Bycatches and Discards

The Chair of the STACTIC Working Group on Bycatch Discussions, Patrick Moran (United States of America), presented the report from the working group meeting held 08-09 September 2021 in STACTIC WP 21-34. The Chair of the working group highlighted the recommendations from the working group under agenda item 8.

STACTIC reflected on the first recommendation from the WG-BDS that STACTIC provide a single interpretation of the application of the term bycatch for the purpose of the spatial temporal analysis. STACTIC noted that the definition of bycatch is outlined in Article 6.2 of the NAFO CEM, and that the specific provisions outline the various scenarios that make up bycatch. The scenarios where a given stock is defined as bycatch are dependent on the quota allocation of a particular flag State Contracting Party (Article 6.2.a), whether a stock is under moratorium (Article 6.2.b), or if the others quota has been utilized (Article 6.3.c). STACTIC noted the possibility of different definitions of bycatch for the purposes of data analysis, while from a control point of view, the legal definition in Article 6.2 of the NAFO CEM is the relevant one.

The Chair highlighted the second and third recommendations from the working group in STACTIC WP 21-34 and noted that the discussions of the proposals are continuing under the fourth recommendation, and that the Secretariat has made the relevant documentation available on the SharePoint.

In relation to the fourth recommendation, the European Union presented the [Draft] Reply to the request from the NAFO Commission on what control elements would be necessary for NAFO to adopt a landing obligation policy in order to encompass ongoing discussions in various NAFO bodies dealing with measures on discards that was commented by the European Union, Canada, Norway, and Denmark (in respect of the Faroe Islands and Greenland). The European Union highlighted that the draft document was prepared with the intention to respond to the Commission request from the 2020 Annual Meeting. Contracting Parties expressed their gratitude for the work that has been completed to date but noted that there was not enough time to complete the document at this meeting for presentation to the Commission. STACTIC agreed that Contracting Parties will continue work on STACTIC WP 21-53 in advance of the 2022 STACTIC Intersessional Meeting.

During the discussions, Japan sought advice on the specific sorting grids that would be practical for use in the squid fishery, and the Chair encouraged Contracting Parties to share any relevant information with Japan in advance of the 2022 STACTIC Intersessional Meeting.

It was agreed that:

- **Contracting Parties will continue to work on the draft response to the Commission outlined in STACTIC WP 21-53 in advance of the 2022 STACTIC Intersessional Meeting.**

12. Discussion of data classification and access rights

The NAFO Secretariat presented a map of lost fishing gears in STACTIC WP 21-39 and noted the relevant information for the map is submitted in accordance with Articles 13.11-13.14 of the NAFO CEM and is still available on the NAFO Members Pages. Contracting Parties thanked the Secretariat for the map and agreed that it can be made available on the NAFO public website.

The Chair highlighted STACTIC WP 21-43 relating to the location of the practices and procedures website information. The Secretariat noted that the NAFO ad hoc Virtual NAFO Website Re-design Working Group requested STACTIC to review the information to see which items could be posted to the NAFO public website, and that in 2019, STACTIC noted that some of the information may be more appropriate to include on the MCS Website. Contracting Parties agreed to provide feedback to the NAFO Secretariat in advance of the 2022 STACTIC Intersessional Meeting to facilitate the discussions.

The Chair highlighted STACTIC WP 21-46 relating to the location of the research vessel information on the NAFO Websites. The NAFO Secretariat noted that the information is currently posted to the NAFO Members Pages and the MCS Website, and that the ad hoc Virtual NAFO Website Re-design Working Group requested STACTIC to review whether this information can be made available on the NAFO public website. STACTIC requested that the NAFO Secretariat follow up with the Scientific Council to determine if they had any concerns with making the information publicly available, but they were not able to provide a response in time for discussion at this meeting, so the discussions on STACTIC WP 21-46 will continue at the 2022 STACTIC Intersessional Meeting.

It was agreed that:

- **The lost gear map in STACTIC WP 21-39 be made available on the NAFO Public Website.**
- **Contracting Parties will provide feedback on their Practices and Procedures documents in advance of the 2022 STACTIC Intersessional Meeting to determine which documents are relevant for the NAFO Public Website and which should remain on the Members Pages and/or the NAFO MCS Website.**
- **The discussions on STACTIC WP 21-46 relating to the location of the research vessel information on the NAFO Websites continue at the 2022 STACTIC Intersessional Meeting.**

13. Report and recommendations of the Joint Advisory Group on Data Management (JAGDM)

The vice-Chair of JAGDM (Natasha Barbour, Canada) presented an update from the JAGDM meeting that was held on 26 May 2021 (COM Doc. 21-03) and noted no specific issues were forwarded from STACTIC at this meeting. The vice-Chair also flagged to STACTIC that JAGDM is still in search of a Chair. STACTIC thanked the vice-Chair of JAGDM for the report and updates.

14. Recommendations from NAFO working groups

The Chair highlighted a recommendation from the Joint Commission-Scientific Council Working Group on the Ecosystem Approach Framework to Fisheries Management (WG-EAFFM) in STACTIC WP 21-25 (Revised) relating to the proposed addition of a footnote into Annex II.N. The Chair also reflected on the discussions at the intersessional meeting that Contracting Parties would provide information on their start and end of haul times. Contracting Parties noted the divergent operations definitions of start and end of tow and reflected on the importance of having a consistent definition of these terms. It was agreed that Contracting Parties will provide their definitions for start and end of tow to the NAFO Secretariat to facilitate further discussion on the issue at the 2022 STACTIC Intersessional Meeting.

The Chair highlighted the recommendation from the Catch Estimation Strategy Advisory Group (CESAG) in STACTIC WP 21-27 relating to the inclusion of codend (minimum) mesh size and hook size in the Annex II.N template. Contracting Parties noted that this information is available in the Observer Reports submitted in accordance with Annex II.M, and CESAG could use the observer reports as a source of data for that information. Contracting Parties also recognized the value of this information and agreed to continue the discussions at the 2022 STACTIC Intersessional Meeting.

The Chair also highlighted that there were additional recommendations forwarded to STACTIC from the various working groups at this Annual Meeting, but they will be discussed at the 2022 STACTIC Intersessional Meeting.

It was agreed that:

- **Contracting Parties will provide their definitions of the start and end of a haul for trawlers in advance of the 2022 STACTIC Intersessional Meeting to facilitate further discussion on the proposal from the WG-EAFFM outlined in STACTIC WP 21-25 (Revised).**
- **The discussions on the CESAG request in STACTIC WP 21-27 relating to the inclusion of codend (minimum) mesh size and hook size in the Annex II.N continue at the 2022 STACTIC Intersessional meeting.**

15. Discussion on garbage disposal onboard vessels

The United States of America and Norway presented a proposal on marine pollution in STACTIC WP 21-48 and highlighted that the proposal is the result of ongoing discussions on the issue of marine pollution. Contracting Parties supported the principle of the proposal, highlighting the importance of the issues of marine pollution. The European Union reiterated their comments from previous discussions noting their preference for concrete provisions within the NAFO CEM rather than the inclusion of a reference to MARPOL Annex V, which is already mandatory for all NAFO Contracting Parties, and offered to work on a merged proposal including substantive measures on marine pollution by fishing vessels previously tabled by the European Union. The United States reminded Contracting Parties of their commitment under the 2017 NAFO Convention to minimize marine pollution in the NRA and saw this proposal as an opportunity to create a mandate for this important work. The European Union, Norway, and the United States of America agreed to continue work on the proposal in advance of the 2022 STACTIC Intersessional Meeting.

It was agreed that:

- **The European Union, Norway, and the United States of America agreed to continue work on a proposal relating to marine pollution provisions in the NAFO CEM in advance of the 2022 STACTIC Intersessional Meeting.**

16. Discussion of the reporting of shark catches in the NAFO Regulatory Area

Canada presented the review of Greenland shark data collection and methodologies outlined in STACTIC WP 21-49 (Rev. 3) that was completed by a small working group consisting of Denmark (in respect of the Faroe Islands and Greenland), the United States of America, Canada and the European Union. The working paper was compiled in response to the recommendations from the 2019 STACTIC Annual Meeting to exchange information with the goal of identifying a single methodology, where possible, for observers to collect information as required by Article 30.14(j) and Annex II.M of the NAFO Control and Enforcement Measures (CEM) for Greenland sharks. The working group invited STACTIC to consider the reporting elements and methodologies flagged in the document and their potential inclusion in the NAFO CEM and if some of the elements could be further consulted with other NAFO bodies; the possibility of circulating the safe release and handling methods to operators and observers that is included in the species guide in Annex III; the further development of the proposed guide in Annex III and the desired scope of its contents; and whether or not the group has completed the original mandate, or if there was further work required. Contracting Parties thanked the group for the excellent work in compiling the document and requested to continue the detailed discussions of this document at the 2022 STACTIC Intersessional Meeting.

It was agreed that:

- **The discussions on the review of Greenland shark data collection and methodologies outlined in STACTIC WP 21-49 (Rev. 3) continue at the 2022 STACTIC Intersessional Meeting.**

17. Implementation of the Performance Review Recommendations

The NAFO Secretariat highlighted STACTIC WP 21-35 outlining the Contracting Party reporting deadlines in the NAFO CEM in response to recommendation 19 of the 2018 Performance Review. Discussions on this working paper were deferred to the 2022 STACTIC Intersessional Meeting.

The Chair highlighted the Contracting Party comments on the FAO Voluntary Guidelines for Flag State Performance outlined in STACTIC WP 21-38 and noted that two responses were received in relation to recommendation 20 of the 2018 Performance Review. Contracting Parties were supportive of the exercise but noted confusions with the original tasking from the Commission on this item outlined in STACTIC WP 21-10 (Revised). The original tasking to STACTIC was to provide a review of the criteria of the FAO Voluntary Guidelines for Flag State Performance, but STACTIC was unclear if the tasking was also for Contracting Parties to move forward with completing the self assessment. Contracting Parties agreed to seek clear guidance from the Commission on how to move forward with Recommendation 20 of the 2018 Performance review, specifically if the Commission is tasking Contracting Parties to complete the self-assessments, and if so, to provide clear deadlines for when this work should be completed, and to also to provide clarity on if the Commission expects Contracting Parties to complete the self-assessments for NAFO specifically, or if the self-assessment completed for other RFMOs (*e.g.*, NEAFC) would be sufficient.

The Secretariat presented the preliminary VME data analysis in response to Recommendation 16 of the 2018 Performance Review in STACTIC WP 21-44. Contracting Parties thanked the Secretariat for the analysis and agreed to continue discussions at the 2022 STACTIC Intersessional Meeting.

It was agreed that:

- **The discussions on the Contracting Party reporting deadlines in the NAFO CEM in response to Recommendation 19 of the 2018 Performance Review outlined in STACTIC WP 21-35 continue at the 2022 STACTIC Intersessional Meeting.**
- **STACTIC request the following guidance from the Commission relative to Recommendation 20 of the 2018 Performance Review: 1) is the Commission tasking Contracting Parties to complete the self-assessments based on the FAO guidelines; 2) what is the deadline for completion of such CP self assessments; 3) Should Contracting Parties complete self-assessments for NAFO specifically, or are self-assessments completed for other RFMOs (*e.g.*, NEAFC) sufficient.**
- **The discussions on the VME data analysis in response to Recommendation 16 of the 2018 Performance Review in STACTIC WP 21-44 continue at the 2022 STACTIC Intersessional Meeting.**

18. Issues relating to the impacts of COVID-19

Contracting Parties shared their current experiences with the impacts related to the COVID-19 pandemic under this agenda item. The Chair thanked Contracting Parties for sharing the information and noted that there are still some issues complying with the NAFO CEM, but overall things are improving compared to this time last year.

19. Other business

a. VISMA Contract Renewal

The Secretariat presented STACTIC WP 21-32 noting that the current contract with the VMS service provider (Visma) is set to expire on 31 December 2022 and sought guidance from STACTIC on whether the Secretariat can seek a renewal of the contract or to seek another service provider. The European Union requested that more information be made available, including the details of the service, and options on other possible service providers before making a final decision. Contracting Parties agreed that the Secretariat will compile information on the existing contract and other possible service providers and provide this information to STACTIC in order for them to make a decision on this point via correspondence, with a 30-day period to provide feedback.

It was agreed that:

- **The NAFO Secretariat will provide further information on the details of the existing service provided by Visma as well as information on other possible service providers in order for STACTIC to make an informed decision on the contract renewal outlined in STACTIC WP 21-32.**
- **STACTIC will review the information provided by the Secretariat on the VMS service providers and make a decision via correspondence on the contract renewal with a 30-day deadline.**

20. Election of Chair and vice-Chair

At the 2019 Annual Meeting, Kaire Märtin (European Union) was elected as Chair and Patrick Moran (United States of America) was elected as vice-Chair. The Chair noted that the two-year period has ended and offered to extend the terms for a 1-year period. Contracting Parties thanked the Chair and vice-Chair for their service and agreed that Kaire Märtin (European Union) and Patrick Moran (United States of America) remain as Chair and vice-Chair respectively for one year.

It was agreed that:

- **Kaire Märtin (European Union) would remain as STACTIC Chair and Patrick Moran (United States of America) remain as vice-Chair for one year.**

21. Time and Place of next meeting

The next STACTIC Intersessional meeting will be scheduled during the beginning of the week of 09 May 2022. 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.

22. Adoption of Report

The report was adopted on 24 September 2021, prior to the adjournment of the meeting.

23. Adjournment

The meeting was adjourned at 09:30 ADT on 24 September 2021.

Annex 1. List of Participants

Kaire Märtin (EU)	STACTIC Chair
Heather McCready Dion Browne Genevieve Warren Jenelle Hickey Mike Hurley Natasha Barbour	Canada
Michael D. Pedersen Meinhard Gaardlykke Petur Jacobsen	Denmark (in respect of the Faroe Islands and Greenland)
Xosé Tubio Miguel Quintans Cora Villar Arribi Carlos Silva Jørgen Eliassen Carlos Chamizo Eglė Radaitytė Küllli Aas Miguel Serrao Ralph Neidigk Genadijus Babcionis Meit Grossmann	European Union
Serge Chiarovano	France (in Respect of St. Pierre et Miquelon)
Johann Asmundsson Snorre Greil	Iceland
Hiryoki MORITA Yuki KINOSHITA	Japan
Hilde Ognedal	Norway
Anna Shulaeva Elena Troshina Alexandr Lizogub Ilya Skryabin	Russian Federation
Artem Ohorodnik	Ukraine
James Windebank Sandie-Gene Muir Emily Atherton	United Kingdom
Katherine Pohl Charles Lynch Elizabethann Mencher Eric Provencher Margaret Raymond	United States of America

Patrick Moran Richard Usher Shannah Jaburek	
Jana Aker Matt Kendall DJ Laycock	NAFO Secretariat

Annex 2. Agenda

1. Opening by the Chair, Kaire Märtin (European Union)
2. Appointment of Rapporteur
3. Adoption of Agenda
 - a. Compliance review 2021 including review of apparent infringement reports and of chartering arrangements
 - b. Compliance Review
4. Analysis of at-Sea inspection rates
5. Review of Article 30 of the NAFO CEM
6. STACTIC Participation
7. New and Pending Proposals on Enforcement Measures: Possible revisions of the NAFO CEM
8. Practical application of Port State Measures in NAFO
9. Marking of gears
10. Review of Current IUU list Pursuant to NAFO CEM, Article 53
11. Bycatches and Discards
12. Discussion of data classification and access rights
13. Report and recommendations of the Joint Advisory Group on Data Management (JAGDM)
14. Recommendations from NAFO working groups
15. Discussion on garbage disposal onboard vessels
16. Discussion of the reporting of shark catches in the NAFO Regulatory Area
17. Implementation of the Performance Review Recommendations
18. Issues relating to the impacts of COVID-19
19. Other business
 - a. VISMA Contract Renewal
20. Election of Chair and vice-Chair
21. Time and Place of next meeting
22. Adoption of Report
23. Adjournment

PART III.
Report of the NAFO Standing Committee on Finance and Administration (STACFAD)
43rd Annual Meeting of NAFO, 20-24 September 2021

1.	Opening by the Chair, Robert Fagan, (Canada)	146
2.	Appointment of Rapporteur	146
3.	Adoption of Agenda	146
4.	Audited Financial Statements for 2020	146
5.	Administrative and Activity Report by NAFO Secretariat.....	147
6.	Financial Statements for 2021.....	147
7.	Review of Accumulated Surplus and Funds	147
8.	Personnel Matters	148
9.	Review of the Recruitment Process for the NAFO Executive Secretary.....	148
10.	Internship Program.....	148
11.	Report on the Annual Meeting of International Fisheries Commissions Pension Society (IFCPS).....	149
12.	Implementation of 2018 Performance Review Panel recommendations	149
	a. Design a potential new visual identity for NAFO	149
	b. Data classification and access rights of the NAFO websites.....	150
	c. NAFO operational plan.....	150
13.	Budget Estimate for 2022	150
14.	Budget Forecast for 2023 and 2024	151
15.	Adoption of 2021/2022 Staff Committee Appointees	151
16.	Other Business.....	152
17.	Election of vice-Chair	152
18.	Time and Place of 2022–2024 Annual Meetings	152
19.	Adjournment	152
	Annex 1. List of Participants.....	153
	Annex 2. Agenda	154
	Annex 3. Recruitment Process for the NAFO Executive Secretary for the 2023–2026 term	155
	Annex 4. Budget Estimate for 2022.....	160
	Annex 5. Preliminary Budget Forecast for 2023 and 2024	163
	Annex 6. Preliminary Calculation of Billing for Contracting Parties for 2022	164

Report of the NAFO Standing Committee on Finance and Administration (STACFAD) Meeting

43rd Annual Meeting of NAFO, 20–24 September 2021

1. Opening by the Chair, Robert Fagan, (Canada)

The meeting was opened by the Chair, Robert Fagan (Canada), on Tuesday, 21 September 2021. 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, Russian Federation, Ukraine, United Kingdom, United States of America and the NAFO Secretariat (Annex 1).

For the second year in history, the Annual Meeting of NAFO was held virtually. To maximize the efficiency of STACFAD's work in the abbreviated virtual meeting format, many routine agenda items were agreed by correspondence. The Chair thanked delegates for their continued flexibility and cooperation in advance of the meeting to facilitate this process.

2. Appointment of Rapporteur

The NAFO Secretariat was appointed as Rapporteur.

3. Adoption of Agenda

The agenda was adopted as circulated in NAFO/21-165 (Rev. 2) of 23 July 2021. (Annex 2).

4. Audited Financial Statements for 2020

Grant Thornton LLP performed the audit for the 2020 fiscal year, in accordance with the NAFO Financial Regulations. The draft audited financial statements for the year ended 31 December 2020 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 2020 was \$79,414 (2019 - \$58,862)

Total expenditures incurred for the fiscal period ending 2020, as shown in the draft financial statements, amounted to \$2,250,443, which was \$118,557 under the approved budget of \$2,369,000. Overall savings for the year can be attributed to the reduction in travel and meeting costs with meetings being held virtually, although, some cost overages were incurred in computer and professional services as a result of the Secretariat's servers being compromised by a cyberattack.

The operating fund had a balance of \$392,418 at year end which was used to reduce 2021 Contributions from Contracting Parties. As approved at the September 2020 Annual Meeting, the contingency fund remained at \$285,000; the relocation fund was increased to \$72,000 and the performance review fund was set at \$30,000.

STACFAD recommends that:

- **The 2020 Financial Statements be adopted.**

Rule 9.10 of the NAFO Financial Regulations states that the Auditors shall serve for a maximum of five years. The audit of the 2020 financial records was the fifth year for Grant Thornton having served as auditors of the Organization.

The Secretariat solicited proposals from three auditing firms to complete the annual audit of NAFO's financial records for the 2021–2025 fiscal periods. Proposals were received from Baker Tilly Nova Scotia and MNP Halifax/Dartmouth. PWC Atlantic declined to submit an audit proposal. A summary of the proposals received, along with the detailed proposals, were distributed to the Committee in STACFAD WP 21-02. Both firms that

submitted proposals are considered highly qualified, and with the necessary resources and experience to provide audit services in accordance with Canadian generally accepted auditing standards on the financial statements of NAFO. These statements are prepared in accordance with Canadian generally accepted accounting standards for not-for-profit organizations, and in accordance with NAFO's Financial Regulations.

STACFAD recommends that:

- **Baker Tilly Nova Scotia be appointed to audit NAFO's records for the 2021–2025 fiscal periods.**

5. Administrative and Activity Report by NAFO Secretariat

Highlights of the Secretariat's activities for the period September 2020 to August 2021 have been summarized in the Administrative and Activity Report (COM Doc. 21-05 (Revised)).

6. Financial Statements for 2021

Financial Statements projected to 31 December 2021 have been provided by the Secretariat in COM Doc. 21-05 (Revised).

Operating Expenses for 2021

The operating budget for 2021 was approved at \$2,451,000 while expenditures for the year are projected to be at \$2,258,000, or \$193,000 under the approved budget. As the global COVID-19 pandemic continued into 2021, in-person meetings are not expected to resume until late in the year, or possibly not until early 2022. Overall savings for the year can be attributed to the reduction in travel and meeting costs with meetings being held virtually.

All remaining 2021 operating expenses are anticipated to be on or near budget for the year. The above noted cost savings of \$193,000 will be returned to the accumulated surplus and may be used to reduce Contracting Parties contributions in 2022.

Assessed Contributions

At the beginning of 2021, the accumulated surplus had \$392,418, which was deemed to be in excess of the needs of the Organization and was allocated towards the 2021 operating budget. Therefore, in order to meet the 2021 operations budget of \$2,451,000, Contracting Parties were assessed contributions in the amount of \$2,058,582.

Balance Sheet

The Organization's cash position on 31 December 2021 is estimated to be \$1,215,635. The cash balance will be sufficient to finance appropriations in early 2022 pending the receipt of annual payments by Contracting Parties. Assessed contributions for 2021 are currently outstanding from Ukraine.

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 2021 is estimated to be \$867,000.

Reduced travel and meeting costs during the pandemic resulted in a higher than usual surplus for 2021. The Committee discussed whether it would be prudent to maximize contributions to funds held in the accumulated surplus. It was agreed to increase the recruitment and relocation fund to its maximum level as it is anticipated that related expenses will be incurred in 2022/2023.

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 2022, 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 \$28,000 to the maximum amount allowed of \$100,000 for future recruitment and relocation costs of internationally recruited staff.**
- **The performance review fund be increased by \$15,000 to \$45,000 for future costs associated with having an external performance review.**
- **The estimated balance remaining of \$437,000 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

No personnel matters were presented this year.

9. Review of the Recruitment Process for the NAFO Executive Secretary

The second and final term of the current Executive Secretary's (ES) contract concludes at the end of 2021. Due to the unprecedented circumstances of the COVID-19 pandemic, the ES accepted a one-year extension of the current contract following a decision taken by the Heads of Delegations at last years Annual Meeting.

The recruitment process of the next ES for the 2023–2026 term is anticipated to begin in early 2022, with the selection of the next ES being performed by the Heads of Delegations at the September 2022 Annual Meeting.

STACFAD was tasked to develop the ES recruitment procedures and timelines for approval by the Commission (Annex 3).

STACFAD recommends that:

- **The Executive Secretary recruitment procedures and timelines for the 2023-2026 term be adopted as outlined in STACFAD WP 21-11 (Rev. 2).**

10. Internship Program

Activities and tasks of the 2021 NAFO internship program were presented in STACFAD WP 21-03. Due to the COVID-19 pandemic, the NAFO internship was postponed for the second half of 2020 and for 2021.

The Committee recognized the considerable benefits of the internship program to the Organization and the intern themselves. It is hoped that the internship program may resume in 2022.

STACFAD recommends that:

- **The internship period be maintained for six (6) months during 2022.**

NAFO Interns are responsible for their travel costs to and from their place of residence and the NAFO Secretariat and for the cost of travel/medical insurance. The internship program established in 2012 provides a stipend of CDN \$1,750 per month to support living expenses (accommodations, food, transportation, etc.) while in Halifax. The cost of living in Halifax has increased significantly since the inception of the program and the accommodation vacancy rate in Halifax is at near record lows making it challenging to find reasonably priced short-term housing. The current stipend is also below minimum wage standards in Nova Scotia when compared to hourly rate.

STACFAD recommends that:

- **The internship stipend be increased to CDN \$2,250 per month.**

11. Report on the Annual Meeting of the International Fisheries Commissions Pension Society (IFCPS)

The annual meeting of the International Fisheries Commissions Pension Society (IFCPS) was scheduled to be hosted by the North Pacific Marine Science Organization (PICES) 13–15 April 2021 in Victoria, British Columbia, Canada. As a result of travel restrictions due to COVID-19, the meeting was held 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 21-04).

The next annual meeting of the IFCPS will be hosted by the North Pacific Marine Science Organization (PICES) during the week of 04 April 2022 in Victoria, British Columbia, Canada.

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:

Recommendation 26, Chapter V.3.2 *“Recommends NAFO makes all working documents publicly available, unless otherwise requested by a Contracting Party or subject to confidentiality rules.”* [pg. 36]

Recommendation 35, Chapter VII.1 *“Recommends NAFO develops an annual operational plan for the NAFO Secretariat outlining key objectives and specifying resources required to meet these objectives.”* [pg. 48]

Recommendation 36, Chapter VII.2 *“Recommends NAFO initiates a process to design a new visual identity for NAFO that reflects the role and responsibilities of the Organization.”* [pg. 48].

a. Design a potential new visual identity for NAFO

An update was provided in STACFAD WP 21-05 on the work completed since the 2020 Annual Meeting to initiate a process to design a potential new visual identity for NAFO, in response to Recommendation #36.

While substantial work has been done, the NAFO Secretariat believes additional work is needed before appropriate options can be presented to STACFAD for consideration. Using the information received from the focus group, the NAFO Secretariat will continue to work intersessionally on the development of options for a potential new NAFO logo for presentation to STACFAD at the 2022 Annual Meeting. The NAFO Secretariat will also prepare potential budgetary implications for presentation in the event that a new NAFO logo is considered.

b. Data classification and access rights of the NAFO websites

At the last Annual Meeting, it was agreed that before a formal classification policy could be developed that feedback would be sought from NAFO Bodies, Standing Committees, and Working Groups during the upcoming meeting year.

The Secretariat presented STACFAD WP 21-06 containing an update on the work completed on the implementation of Recommendation #26, including the challenges during the ongoing global pandemic presented in collecting this feedback. For that reason, the NAFO Secretariat will continue to seek feedback during upcoming meetings in 2021/2022. Using the information gathered, the *ad Hoc virtual NAFO Website Re-Design Working Group: Data Classification* will continue to work intersessionally on the development of a formal policy regarding the posting and distribution of meeting documentation.

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 21-07.

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.

An updated plan will be presented to STACFAD at the 2022 Annual Meeting, incorporating feedback from Canada.

13. Budget Estimate for 2022

The 2022 budget estimate, as prepared by the Secretariat, was provided in COM WP 21-05 (Revised). Additional details and highlights on the 2022 budget estimate were provided in STACFAD WP 21-08.

Approved Budget 2021	Preliminary Budget Forecast 2022	Budget Estimate 2022
\$2,451,000	\$2,460,000	\$2,587,000

The 2022 budget estimate of \$2,587,000 represents an increase of \$136,000 or 5.6% over the prior years approved budget.

The personnel services budget accounts for an increase of \$61,000 or 2.5% of the total increase for 2022. NAFO follows the salary scales of similar positions held in the Public Service of Canada which provide for routine economic and salary step increases. The increase in salaries, medical and insurance plans for 2022 can be attributed to higher than budgeted increases included in the recently released salary tables for the Program and Administrative Services and Computer Services Group. The Scientific Information Administrator (SIA) began a one-year maternity/parental leave in April 2021 which continues until April 2022. In accordance with the NAFO Staff Rules, a maternity/parental leave will be paid during this time. During the maternity/parental leave, a term SIA has been hired.

Report of STACFAD, 20–24 September 2021

The computer services budget increased by \$2,000. This can be attributed to security enhancements implemented to NAFO's firewall, servers, and software.

The internship budget increased by \$3,000. This can be attributed to an increase to the monthly stipend.

The inter-sessional other meetings budget increased by \$20,000 as it includes a provision for travel costs associated with independent experts invited to attend the NAFO WG-EAFFM Workshop of fisheries managers and scientists to draft ecosystem objectives.

In addition, the Commission adopted the WG-EAFFM recommendation to engage an external independent panel to conduct a scientific review of the NAFO Roadmap resulting in an increase to the proposed 2022 budget. While the terms of the external panel will be finalized at an upcoming meeting, an additional \$25,000 was added to accommodate travel costs for up to four independent experts.

The recruitment process for the next NAFO ES is expected to be launched in 2022 with an appointment for the 2023–2026 term. The 2022 budget estimate includes a provision for recruitment costs of the incoming ES (travel costs for shortlisted candidates to NAFO Annual Meeting for interviews) as well as some initial relocation costs. An additional \$85,000 of relocation costs for both the incoming and outgoing ES's is projected to be incurred in 2023.

The relocation fund established in 2017 will have \$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 incurred in 2023.

STACFAD recommends that:

- **The budget for 2022 of \$2,587,000 (Annex 4) be adopted.**

A preliminary calculation of billing for the 2022 financial year is included in Annex 6.

14. Budget Forecast for 2023 and 2024

The preliminary budget forecast for 2023 (\$2,624,000) and 2024 (\$2,594,000) (Annex 5) was provided in COM WP 21-05 (Revised). The forecasts were approved in principle, and it was noted that the budget for 2023 will be reviewed in detail at the next Annual Meeting.

15. Adoption of 2021/2022 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 2021–September 2022: 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 2021–September 2022: Brian Healey (Canada), Ignacio Granell (European Union) and Deirdre Warner-Kramer (United States of America).**

16. Other Business

No other matters were discussed under this agenda item.

17. Election of vice-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 vice-Chair position is currently vacant as Fiona MacKichan (United Kingdom), elected in September 2020, stepped down intersessionally.

Jake Round (United Kingdom) was nominated and elected as vice-Chair for a two-year term.

18. Time and Place of 2022–2024 Annual Meetings

As previously agreed, the dates for the 2022 and 2023 Annual Meetings are as follows:

2022 - 19–23 September

2023 - 18–22 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 2024 Annual Meeting be held 23–27 September 2024 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 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 11:45 hours on 20 September 2021. The report was adopted by correspondence.

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 (Chair) Her, Natalie Marsden, Dale	Canada
Ulloriaq Lønberg-Jensen, Ole	Denmark (in respect of the Faroe Islands and Greenland)
Blazkiewicz, Bernard	European Union
Monneau, Marianna Servetto, Camille	France (in respect of St. Pierre et Miquelon)
Nakasu, Maiko	Japan
Badina, Julia	Russian Federation
Ohorodnik, Artem	Ukraine
Round, Jake	United Kingdom
Warner-Kramer, Deirdre	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 2020
5. Administrative and Activity Report by NAFO Secretariat
6. Financial Statements for 2021
7. Review of Accumulated Surplus and Funds
8. Personnel Matters
9. Review of the Recruitment Process for the NAFO Executive Secretary
10. Internship Program
11. Report of the Annual Meeting of the International Fisheries Commissions Pension Society (IFCPS)
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 2022
14. Budget Forecast for 2023 and 2024
15. Adoption of 2021/2022 Staff Committee Appointees
16. Other Business
17. Election of vice-Chair
18. Time and Place of 2022–2024 Annual Meetings
19. Adjournment

Annex 3. Recruitment Process for the NAFO Executive Secretary for the 2023–2026 term (STACFAD WP 21-11 Rev. 2)

Procedure, timetable, and selection criteria for the recruitment of a new NAFO Executive Secretary for the 2023-2026 term

Budget

	2022 Budget Estimate	2023 Budget Estimate
Recruitment and relocation costs of incoming ES		
1. Travel and per diem for shortlisted applicants	14,000	
2. Airfares for relocation of incoming ES and family	6,000	
3. Subsistence allowance		\$9,000
4. Relocation costs		22,000
5. Installation allowance		34,000
Relocation costs of outgoing ES		
6. Airfares for relocation of outgoing ES and family	3,000	
7. Relocation costs		20,000
Total recruitment and relocation costs	\$23,000	\$85,000

Relocation costs of incoming and outgoing Executive Secretaries have been calculated on the applicable provisions of NAFO Staff Rules 8.6 and 9.6.

Advertisement

- Contracting Parties shall agree on the text of a Vacancy Announcement for the post of Executive Secretary. The Vacancy Announcement shall be placed on a recruitment page on the NAFO website together with relevant supplementary information.
- The Executive Secretary shall circulate the announcement via email to all NAFO Contracting Parties, NAFO's emailing list and to all relevant organizations. Contracting Parties may place the announcement in national publications and websites they consider appropriate.

Availability of applications

Following the verification of eligibility criteria by the NAFO Executive Secretary, approved by the Chair of STACFAD, each application shall be posted on a password protected section of the NAFO website to be assessed by the Heads of Delegation of the Commission. Passwords will only be provided to the Chair of the Commission, the Heads of Delegations and the Chair of STACFAD.

Ranking of Applicants

Each Head of Delegation shall notify the NAFO Secretariat its 10 preferred candidates in order of preference out of all the applications received. Each preference list is to be considered confidential and is not to be disclosed. Upon receipt of all preference lists, the Chair of STACFAD shall, together with the current Executive Secretary, aggregate individual applicants' rankings, applying the awarding of 10 points for the first preference, 9 points for the second preference, etc.

Short list

The candidates with the four highest aggregate scores will be shortlisted for interview. Should the application of one such candidate be withdrawn, the next ranking candidate shall then be shortlisted. This process shall be followed as appropriate with the goal of interviewing four candidates (*i.e.*, in the event that multiple candidates withdraw).

Interview process

The shortlisted candidates will be notified to the Heads of Delegation of all Contracting Parties by the Executive Secretary and will be invited to the Annual Meeting for interviews. Some degree of standardization should be built into the interview process to ensure fairness. The interviews and the selection of the new Executive Secretary shall take place during meetings of the Heads of Delegation of the Commission. Ample time should be allocated for the interview and decision process, and it should be performed as early as possible during the week of the Annual Meeting, as free time later in the week is non-existent.

(Note: In 2013, interviews were conducted on Sunday evening with the election taking place on Monday or Tuesday. This allowed additional time for consultation amongst CPs.)

Travel (economy class), hotel accommodation and per diem expenses of candidates invited for interviews shall be reimbursed. CPs are encouraged to assume costs for candidates who are members of their delegations.

Recruitment timetable

Advertisement of the position by NAFO	January or February 2022
Deadline for the receipt of applications	15 May 2022
Eligibility criteria verification	Within 5 working days from 15 May 2022
Applications to be posted on a password protected page of the NAFO homepage	Within 7 working days from 15 May 2022
Submission of 10 preferred candidates, in order of preference, by Heads of Delegation	Before 30 June 2022
STACFAD Chair and ES to aggregate individual applicants' rankings	Between 1-14 July 2022
Notification of shortlist by Executive Secretary to Heads of Delegation	By 15 July 2022
Notification and communication by Executive Secretary with shortlisted candidates	Between 16 July and 15 August 2022
Interviews and selection	2022 Annual Meeting

**Vacancy Announcement
for the position of Executive Secretary
in the Northwest Atlantic Fisheries Organization (NAFO)**

The Northwest Atlantic Fisheries Organization (NAFO) invites applications for the position of Executive Secretary. The appointment will be for a term of four years with the possibility of an additional four-year appointment.

NAFO is an international organization with Headquarters in Halifax, Nova Scotia, Canada. It is responsible for giving effect to the objectives and principles of the Convention on Co-operation in the Northwest Atlantic Fisheries (NAFO Convention), the main of which is *“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”*.

Summary description of the position

The Executive Secretary is NAFO's chief administrative officer and must be impartial and objective in promoting and coordinating the interests of all Contracting Parties. The Executive Secretary is appointed by and subject to the general supervision of the Commission and is responsible for the effective running of NAFO's Secretariat and administration of NAFO's appropriations and budget (currently at the level of CDN \$2.4 million). The salary classification for this position is equivalent to the Government of Canada Chief Executive Officers of Crown Corporations, Group 3. The Executive Secretary's functions include in particular the following:

- Supervise and coordinate all the Secretariat's activities; manage and administer the annual budget of the Secretariat; appoint and supervise the staff of the Secretariat;
- Manage communications with NAFO members regarding all official correspondence, voting procedures and assessments;
- Manage relations with the public;
- Manage NAFO meetings by way of preparing draft/provisional agendas and relevant working papers and documents; acting as official rapporteur at meetings as required, providing organizational arrangements and reviewing, correcting and disseminating all NAFO documents and reports of the Organization's constituent bodies; receive the credentials of the representatives and of observers at annual and special meetings;
- Fulfill duties regarding the NAFO Conservation and Enforcement Measures (CEM) including publication of the CEM, monitoring fishing activities of Contracting Party vessels in the Regulatory Area, presenting charter and quota arrangements between Contracting Parties and reviewing and reporting on fishery statistics and relevant information to Contracting Parties;
- Manage NAFO Publications by way of preparing Annual Meeting Proceedings, Annual Report and other publications and/or periodicals as requested;
- Liaise with governments and international organizations, manage official correspondence and preparation of relevant papers, receive international visitors to the NAFO Headquarters and represent NAFO at meetings of other international organizations, as required;
- Perform such other functions as may be assigned to him/her by the Commission, its Chairperson, or the Chairperson of any NAFO body.

Members of the Secretariat enjoy the privileges and immunities to which they are deemed to be entitled as a consequence of the NAFO Convention and pursuant to the Northwest Atlantic Fisheries Organization Privileges and Immunities Order (Order-in-Council P.C. 1980-132, 11 January 1980), or under any agreement signed between the Organization and the Contracting Party concerned.

The NAFO Staff Rules set the conditions and principles of employment and the responsibilities of the NAFO Secretariat Staff.

Eligibility Criteria

- University degree or equivalent, preferably in a field related to NAFO's activities;
- Experience in fisheries management and/or fisheries policy formulation, preferably including international relations;
- Professional experience planning, organizing, and coordinating work programmes relevant to the activities of the NAFO Commission, including management and provision of budgetary oversight for programme delivery;
- Excellent working knowledge of English language.

Selection Criteria

- Demonstrated expertise in the operations and activities of international, regional and/or intergovernmental organizations, preferably those focused on fisheries governance.
- Leadership experience managing people, resources, and processes with a high level of demonstrated competence in areas such as:
 - Management of administrative and technical staff;
 - Preparation of reports, financial budgets and management of expenditures;
 - Organization and the provision of secretariat support for international meetings;
 - Oversight and management of computer services and information technology;
 - Public Relations.
- Demonstrated expertise in issues related to international fisheries conservation and management, particularly in the Northwest Atlantic Ocean.
- Excellent communications skills including a spoken and written command of the English language, and other language skills an asset.
- Demonstrated ability to work effectively with people of different national and cultural backgrounds in an international setting.

Applicants must be citizens of a Contracting Party of NAFO.

Other information

NAFO offers a competitive salary and benefits package. For additional information please address your inquiries to Mr. Fred Kingston, Executive Secretary; Email: fkings@nafo.int; Phone: +1 902 468 5590; Fax: +1 902 468 5538.

NAFO is committed to promoting diversity and ensuring employment equity within the Secretariat.

Please consult the NAFO website at www.nafo.int for further information on NAFO.

Availability

It is expected that the short-listed candidates will be interviewed at the 44th Annual Meeting of NAFO to be held in Halifax, Nova Scotia, Canada during 19-23 September 2022.

The candidate chosen would be expected to assume the position on 3 January 2023.

Applications shall be in English, the official language of the Organization, and should include the following:

- Cover Letter;
- Curriculum Vitae;
- List of publications, if available;
- Copies of academic and other relevant professional certificates (please provide English translation if applicable); and

Report of STACFAD, 20–24 September 2021

- Three references from persons with a recent knowledge of the applicant's character, qualifications and experience.

The short-listed candidates will be required to submit a certificate of health.

Location: Northwest Atlantic Fisheries Organization
1601 Lower Water Street, Suite 401, Halifax, Nova Scotia, B3J 3P6, CANADA
Phone: +1 902 468 5590 Fax: +1 902 468 5538 Web: www.nafo.int

Please send your application to:

Mr. Fred Kingston, Executive Secretary
Email: recruit@nafo.int

We thank all respondents; however, only candidates under consideration will be contacted.

Deadline for Application: 15 May 2022



Annex 4. Budget Estimate for 2022**NORTHWEST ATLANTIC FISHERIES ORGANIZATION****Budget Estimate for 2022****(Canadian Dollars)**

	Approved Budget 2021	Projected Expenditures 2021	Preliminary Budget Forecast 2022	Budget Estimate 2022
1 Personnel Services				
a) Salaries	\$1,221,000	\$1,241,000	\$1,221,000	\$1,272,000
b) Superannuation and Annuities	489,000	489,000	490,000	495,000
c) Medical and Insurance Plans	102,000	104,000	108,000	107,000
d) Employee Benefits	80,000	80,000	75,000	79,000
Subtotal Personnel Services	1,892,000	1,914,000	1,894,000	1,953,000
2 Additional Help	2,000	2,000	2,000	2,000
3 Communications	27,000	27,000	27,000	27,000
4 Computer Services	61,000	61,000	62,000	63,000
5 Equipment	27,000	27,000	27,000	27,000
6 Fishery Monitoring	42,000	42,000	43,000	43,000
7 Hospitality Allowance	3,000	3,000	3,000	3,000
8 Internship	11,000	6,000	11,000	14,000
9 Materials and Supplies	31,000	31,000	32,000	31,000
10 NAFO Meetings				
a) Sessional	186,000	26,000	189,000	187,000
b) Inter-sessional Scientific	30,000	30,000	30,000	30,000
c) Inter-sessional Other	40,000	20,000	40,000	85,000
Subtotal NAFO Meetings	256,000	76,000	259,000	302,000
11 Other Meetings and Travel	40,000	10,000	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	-	-	-	23,000
	\$2,451,000	\$2,258,000	\$2,460,000	\$2,587,000

Notes on Budget Estimate 2022
(Canadian Dollars)

Item 1(a)	Salaries Salaries budget estimate for 2022.		\$1,272,000
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.		\$107,000
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.		\$79,000
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.		\$63,000
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	\$40,000 3,000	\$43,000

Item 10(a)	NAFO Sessional Meetings Annual Meeting, September 2022, Halifax, Canada SC Meeting, June 2022, Halifax, Canada SC Meeting, October 2022		\$187,000
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. NAFO WG-EAFFM Workshop of fisheries managers and scientists to draft ecosystem objectives. NAFO WG-EAFFM Review of the NAFO Roadmap	\$40,000 20,000 25,000	\$85,000
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 to be launched in 2022 with an appointment for the 2023-2026 term.		\$23,000

Annex 5. Preliminary Budget Forecast for 2023 and 2024

NORTHWEST ATLANTIC FISHERIES ORGANIZATION

Preliminary Budget Forecast for 2023 and 2024

(Canadian Dollars)

	Preliminary Budget Forecast 2023	Preliminary Budget Forecast 2024
1 Personnel Services		
a) Salaries	\$1,273,000	\$1,318,000
b) Superannuation and Annuities	497,000	502,000
c) Medical and Insurance Plans	112,000	114,000
d) Employee Benefits	82,000	80,000
Subtotal Personnel Services	1,964,000	2,014,000
2 Additional Help	2,000	2,000
3 Communications	28,000	28,000
4 Computer Services	65,000	65,000
5 Equipment	27,000	27,000
6 Fishery Monitoring	44,000	45,000
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	190,000	192,000
b) Inter-sessional Scientific	30,000	30,000
c) Inter-sessional Other	40,000	40,000
Subtotal NAFO Meetings	260,000	262,000
11 Other Meetings and Travel	40,000	40,000
12 Professional Services	46,000	47,000
13 Publications	14,000	14,000
14 Recruitment and Relocation	85,000	-
	\$2,624,000	\$2,594,000

Annex 6. Preliminary Calculation of Billing for Contracting Parties for 2022



Preliminary calculation of billing for the 2022 financial year (Canadian Dollars)

Budget Estimate	\$2,587,000
Deduct: Amount Allocated from Accumulated Surplus	-\$437,000
Amount Allocated from Relocation Fund	-\$23,000
Funds required to meet 2022 Administrative Budget	\$2,127,000

Part A

Contracting Parties	2019 nominal catches (metric tons)	Catch %	NAFO Convention Article IX.2.a,b,c			
			10%	30%	60%	Subtotal
Canada	159,852	36.51%	\$91,239	\$49,085	\$465,940	\$606,264
Cuba	-	-	-	\$49,085	-	\$49,085
Denmark (in respect of Faroe Islands and Greenland) (Note 2)	166,809	38.10%	\$95,210	\$49,085	\$486,231	\$630,526
European Union	47,671	10.89%	-	\$49,085	\$138,977	\$188,062
France (in respect of St. Pierre et Miquelon)	673	0.15%	\$384	\$49,085	\$1,913	\$51,382
Iceland	-	-	-	\$49,085	-	\$49,085
Japan	2,748	0.63%	-	\$49,085	\$8,039	\$57,124
Norway	3,210	0.73%	-	\$49,085	\$9,317	\$58,402
Republic of Korea	-	-	-	\$49,085	-	\$49,085
Russian Federation	11,574	2.64%	-	\$49,085	\$33,691	\$82,776
Ukraine	-	-	-	\$49,085	-	\$49,085
United Kingdom	-	-	-	\$49,085	-	\$49,085
United States of America (Note 3)	45,318	10.35%	\$25,867	\$49,085	\$132,087	\$207,039
Total	437,855	100.00%	\$212,700	\$638,105	\$1,276,195	\$2,127,000

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	\$606,264	28.49%	58.98%	\$29,144	\$9,382	\$132,807	\$171,333	\$777,597
Cuba	\$49,085	2.31%	-	-	\$9,382	-	\$9,382	\$58,467
Denmark (in respect of Faroe Islands and Greenland) (Note 2)	\$630,526	29.64%	-	-\$37,529	-\$112,584	-\$225,177	-\$375,290	\$255,236
European Union	\$188,062	8.84%	17.59%	-	\$9,382	\$39,609	\$48,991	\$237,053
France (in respect of St. Pierre et Miquelon)	\$51,382	2.42%	0.25%	\$123	\$9,382	\$564	\$10,069	\$61,451
Iceland	\$49,085	2.31%	-	-	\$9,382	-	\$9,382	\$58,467
Japan	\$57,124	2.69%	1.01%	-	\$9,382	\$2,275	\$11,657	\$68,781
Norway	\$58,402	2.75%	1.18%	-	\$9,382	\$2,658	\$12,040	\$70,442
Republic of Korea	\$49,085	2.31%	-	-	\$9,382	-	\$9,382	\$58,467
Russian Federation	\$82,776	3.89%	4.27%	-	\$9,382	\$9,615	\$18,997	\$101,773
Ukraine	\$49,085	2.31%	-	-	\$9,382	-	\$9,382	\$58,467
United Kingdom	\$49,085	2.31%	-	-	\$9,382	-	\$9,382	\$58,467
United States of America (Note 3)	\$207,039	9.73%	16.72%	\$8,262	\$9,382	\$37,649	\$55,293	\$262,332
Total	\$2,127,000	100.00%	100.00%	\$0	\$0	\$0	\$0	\$2,127,000

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 4,692 metric tons
Greenland 162,117 metric tons

Note 3

2019 nominal catches are not currently available. 2018 catches have been used for preliminary billing calculation purposes.