



NORTHWEST ATLANTIC
FISHERIES ORGANIZATION

Meeting Proceedings of the Commission

01 September 2022–31 August 2023

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November 2023

Foreword

This issue of the *Meeting Proceedings of the Commission* contains the meeting reports of the Commission (COM) and the joint Commission-Scientific Council (COM-SC), including their subsidiary bodies and working groups held between 01 September 2022 to 31 August 2023. This follows a NAFO cycle of meetings starting with an Annual Meeting rather than by calendar year.

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Structure of the Northwest Atlantic Fisheries Organization (NAFO)

(01 September 2022 to 31 August 2023)

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).

CONSTITUENT BODIES

Commission	<i>Acting Chair</i> – Deirdre Warner-Kramer (United States of America) – Appointed Acting Chair Feb. 2022 <i>vice-Chair</i> – Vacant since February 2022 when Deirdre Warner-Kramer was appointed acting Chair	
Scientific Council	<i>Chair</i> – Karen Dwyer (Canada) <i>vice-Chair</i> – Diana González-Troncoso (European Union)	

STANDING COMMITTEES

Commission	Standing Committee on Finance and Administration (STACFAD)	<i>Chair</i> – Robert Fagan (Canada) <i>vice-Chair</i> – Jake Round (United Kingdom) Stepped down June 2023
	Standing Committee on International Control (STACTIC)	<i>Interim Chair</i> – Patrick Moran (United States of America) <i>vice-Chair</i> - Vacant
Scientific Council	Standing Committee on Fishery Science (STACFIS)	<i>Chair</i> – Mark Simpson (Canada)
	Standing Committee on Research and Coordination (STACREC)	<i>Chair</i> – Diana González-Troncoso (European Union)
	Standing Committee on Publications (STACPUB)	<i>Chair</i> – Rick Rideout (Canada)
	Standing Committee on Fisheries Environment (STACFEN)	<i>Chair</i> – Miguel Caetano (European Union)

SECRETARIAT

Executive Secretary	Fred Kingston (until 31 December 2022)
Executive Secretary	Brynhildur Benediktsdóttir (started 01 January 2023)
Deputy Executive Secretary / Senior Finance and Staff Administrator	Stan Goodick
Fisheries Commission Coordinator	Jana Aker (started 21 February 2023)
Scientific Information Administrator	Dayna Bell MacCallum
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Northwest Atlantic Fisheries Organization



**Report of the NAFO Commission Intersessional Meeting concerning
Fishing Regime for Shrimp in Division 3M**

18 September 2022
Porto, Portugal

NAFO
Halifax, Nova Scotia, Canada
2022

Report of the NAFO Commission,
18 September 2022

**Report of the NAFO Commission Intersessional Meeting concerning
Fishing Regime for Shrimp in Division 3M**

18 September 2022
Porto, Portugal

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Report of the NAFO Commission Intersessional Meeting concerning Fishing Regime for Shrimp in Division 3M

18 September 2022
Porto, Portugal

1. Opening by the Acting Chair, Deirdre Warner-Kramer (USA)

The meeting was opened on Sunday, 18 September 2022 at 09:30 hours in Palacio do Bolsa, Porto, Portugal. The acting Chair of the Commission, Deirdre Warner-Kramer (USA) welcomed delegates from Canada, Denmark (in respect of the Faroe Islands and Greenland), European Union, France (in respect of St. Pierre et Miquelon), Iceland, Japan, Norway, Russian Federation, Ukraine and United States of America (Annex 01) to the meeting in her opening remarks.

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 previously circulated to all Contracting Parties in NAFO/22-192 on 20 July 2022 was adopted (Annex 02).

4. Proposals regarding the Allocation Regime for Shrimp in Division 3M

In advance of this meeting, the Secretariat compiled fisheries statistics pertaining to this stock covering 1993-2021. The compilation comprises two tables: 1) the nominal catches as reported by flag States in STATLANT 21, and 2) catches and effort (in terms of fishing days used) from the original reports by flag States in compliance with the reporting obligations required in the NAFO Conservation and Enforcement Measures. Contracting Parties reviewed the compilation for accuracy and provided corrections where needed. These tables serve to ensure that Contracting Parties use the same data set in the exercise of developing proposals on TAC (Total Allowable Catch)-based allocation model. The updated compilation is presented in Annex 3.

In advance of this meeting, discussion papers and proposals were sought intersessionally leading to this meeting. Contracting Parties presented their submissions. The following highlight the views and the main elements of the proposals (Annex 04):

- **Ukraine:** a minimum individual catch quota 2% of catch limit (for each Party), and the rest of the catch limit can be distributed to the Parties according to their historical catch during the last 10 years. (COM WP 22-01).
- **Norway:** The proposal is based on a model which has 1) a fifty-fifty weighing of allocated effort and realised fishing activity between 1993-2010, and 2) gives equal weighting of every year of in the 1993-2010 period of catch history (COM WP 22-06).
- **European Union:** The quota allocation is a blended formula with the following building blocks: current allocation key for effort days, 2) historical catches, 3) weighting of different fishing periods based on realized fishing patterns (COM WP 22-20).

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18 September 2022

- **France (in respect of St. Pierre et Miquelon):** change in fishing regime [from effort based to TAC-based] must lead to an economically viable situation for each Contracting Party, including those which have currently a low number of fishing days (COM WP 22-08).
- **Iceland:** supports adopting a fishing regime for 3M Shrimp that is based on TAC and quota rather than fishing effort and allocates fishing opportunities among the Contracting Parties on the basis of historical catches rather than historical fishing effort (COM WP 22-09).
- **Russian Federation:** supports a direct transition of fishing days percentage to the proportional TAC percentage (COM WP 22-10).
- **Denmark (in respect of the Faroe Islands and Greenland):** supports considering an output-based management regime based on TAC and quota allocations (COM WP 22-11).
- **Canada:** With respect to considering an allocation regime for this stock, Contracting Parties are obliged to consider Article VI (12) of the Convention, which requires taking into account the interest of the relevant coastal States and giving special consideration to the Contracting Party that has undertaken extensive efforts to ensure the conservation of NAFO stocks through international action, in particular monitoring, control, and surveillance activities to ensure the enforcement of NAFO's conservation and enforcement measures (COM WP 22-12).

5. Discussion on Future Allocation Regime for Shrimp in Division 3M

Noting the SC's recommendation to convert the management regime to catch regulation in line with all other stocks in the NAFO Regulatory Area, there was broad support on moving to a TAC-based regime in order to ensure the effective and sustainable management of this stock. The immediate challenge was how to develop the TAC-based allocation scheme. In reviewing and discussing the proposals, and noting that the Commission had previously discussed the idea of using allocated effort and historical catches as building blocks for a conversion to a TAC-based regime, the following factors to consider in a TAC allocation scheme were identified and discussed (presented here not in the order of importance nor relevance):

- Which elements of historical data – time periods, effort allocations, catch, etc. – may factor into a new allocation arrangement,
- How to weight the various components of the historical data,
- Whether to set a minimum percentage level for small harvesters,
- How to reflect the key elements for allocation decisions set out in Article VI paragraph 12 of the Convention – i.e.:
 - *“...take into account the interests of Contracting Parties whose vessels have traditionally fished within that area and the interests of the relevant coastal States...”*, and
 - *“... in the allocation of fishing opportunities from the Grand Bank and Flemish Cap, the Commission shall give special consideration to the Contracting Party whose coastal communities are primarily dependent on fishing activities for stocks related to these fishing banks and which has undertaken extensive efforts to ensure the conservation of such stocks through international action...”*

With regards to historical data, there were discussions as to whether fishing history should be divided into several periods.

The proposals of EU and Norway outline a methodology by showing simulations of different scenarios, both a step-by-step approach by starting with the data for allocated effort and historical catches. The calculated weight factors could be adjusted if additional factors, such as those mentioned above, were to be incorporated.

Contracting Parties generally supported further developing this overall approach. One Contracting Party, however, expressed concern about the sequence in the step-by-step approach noting that the consideration of other factors after the historical catch and effort data would relegate those components to secondary factors. Another Contracting Party expressed that value-judgement on the factors should be avoided as they are equally important.

Attempts to resolve the issue in assigning percentage allocation among Contracting Parties were unsuccessful despite the bilateral and multilateral consultations among the Contracting Parties during this meeting.

With this impasse, the Commission agreed to continue the deliberations and negotiations at the Annual Meeting (see agenda item 21.c of the NAFO 44th Annual Meeting report in COM Doc. 22-27). The European Union and Norway indicated that a draft joint proposal would be circulated to Contracting Parties for the continuation of the discussions (COM WP 22-45).

The Chair summarized the deliberations and proposed the following steps in order to move the process forward:

- 1) Contracting Parties coordinate with the Secretariat in providing corrections and update to the 3M shrimp fisheries data (Rapporteur's note: the fisheries data presented in Annex 4 are updated as of 19 September 2022).
- 2) Contracting Parties, especially the European Union and Norway, collaborate and continue the constructive consultations to advance the mathematical model of a TAC-based allocation scheme based on their two proposals. The Chair welcomed Canada's willingness to collaborate with the European Union and Norway in developing a common model.
- 3) Contracting Parties strike a balance among which historical data to use, i.e., the combination of catch, effort allocation, years/historic periods.
- 4) Contracting Parties figure out the weighing factors under the umbrella of the historical data, and
- 5) Contracting Parties incorporate the three elements that are called for in the Convention, namely
 - a) historical fishing levels
 - b) the interests of relevant coastal states, and
 - c) special consideration to the Contracting Party (Canada).
- 6) Contracting Parties consider how to incorporate special considerations for access by small harvesters (economic viability).

Furthermore, Contracting Parties were urged to exercise flexibility in developing the allocation scheme that reflects the balance of the interests of Contracting Parties.

6. Other business

There was no further matter discussed under this agenda item.

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18 September 2022

7. Adoption of Report

The meeting report was adopted by correspondence.

8. Adjournment

The meeting was adjourned at 16:00 hours on 18 September 2022.



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18 September 2022

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Report of the NAFO Commission,
18 September 2022

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Annex 2. Agenda

1. Opening by the Acting Chair, Deirdre Warner-Kramer (United States of America)
2. Appointment of Rapporteur
3. Adoption of Agenda
4. Proposals regarding the Allocation Regime for Shrimp in Division 3M
5. Discussion on Future Allocation Regime for Shrimp in Division 3M
6. Other business
7. Adoption of report
8. Adjournment

Report of the NAFO Commission,
18 September 2022

Annex 3. Catch and Effort Data on 3M Shrimp
(COM WP 22-02 Rev. 5)

Table 1. NAFO Catch of shrimp (t) in Division M*

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011- 2020	2021	Grand Total
CAN-M	1062	37	98	166		28	91										2				1484
CAN-N	2129	1005	870	742	784	435	383	104	295	8				10						789	7554
CAN-SF																				1116	1116
CUB							120	46	1037	1537	1462	969	964	1126	446						7707
E/DNK	514	245	190			430	236		93	359										1234	3301
E/ESP	240	187	280	198	423	912	1020	1347	855	674	857	1134	1384	877	768	374	537	506		16	12589
E/EST		1051	2380	1973	3239	5533	10835	12143	9851	13681	12851	13444	12009	5651	7466	9817	2078	254			124256
E/GBR											547										547
E/LTU		863	980	1585	1785	3107	3370	3529	2701	3321	3744	4802	3652	1246	1992	485		102		1588	38852
E/LVA		324	679	1253	997	1191	3080	3105	2961	1892	3533	3059	2212	1330	1939	1284	1194	611			30644
E/POL					824	148	894	1692	209			1158	458	224	1						5608
E/PRT			17		170	203	227	289	420	16		50						3			1395
FRA-SP								138	337	161					741		293				1670
FRO	7076	4998	5815	8429	7386	9271	9086	7207	11871	7680	12648	4952	2457	1102	2303	1189	1349	495		1162	106476
GRL	3788	2275	2400	1107	104	866	576	1734		644	809		12	769							15084
ISL	2195	2355	7481	20680	7197	6572	9148	8736	5063	5754	4715	3567	4014	2099							89576
JPN								114	130	100	117										461
NOR	7075	8625	9534	5747	1831	1339	2975	2588	12972	11833	21238	11738	223	429	1914	261					100322
RUS	54	350	3327	4444	1090		1103	7070	5687	1176	3	654	266	46	73	21	20	7			25391
UKR									348		237	315		282							1182
USA								629	758	96	762	952	1235	1258	1287						6977
Grand Total	24133	22315	34051	46324	25830	30035	43144	50471	55588	48932	63523	46794	28886	16449	18930	13431	5476	1975	0	5905	582192

* The primary data source is STATLANT 21A. There is no reported catch in years 2011-2020. Numbers in italics are charter catch submitted by the chartering CP/s.

Table 2. 3M Shrimp Catch, Fishing days used, and Fishing days allocation, 1993-2022.

	1993		1994		1995		1996			1997			1998		
	3M Catches (mt)	Reported fishing days in 3M	3M Catches (mt)	Reported fishing days in 3M	3M Catches (mt)	Reported fishing days in 3M	3M Catches (mt)	Reported fishing days in 3M	Allocated fishing days in 3M	3M Catches (mt)	Reported fishing days in 3M	Allocated fishing days in 3M	3M Catches (mt)	Reported fishing days in 3M	Allocated fishing days in 3M
CAN	3191	507	1042	333	968	319	166	311	492	608	156	443	442	82	443
CUB							-	-	100	-	-	100	-	-	100
Estonia	268	149	1051	609	2379	2153	1614	990	1852	3166	1254	1217	4803	1454	1217
EU	754	139	432	97	487	44	199	-	508	569	63	457	1482	105	457
DFG															
FRO	7333	1324	6791	1785	5993	1093	8687	1831	1785	7387	1250	1606	9179	1292	1606
GRL	3780	572	2272	482	2316	265	1099	202	572	100	31	515	861	113	515
FRA (SPM)							-	-	100	-	22	100	-	-	100
ISL	2195	279	2355	638	7481	1842	21077	5256	N/A	5671	1327	N/A	5437	980	N/A
JPN							-	-	100	-	-	100	-	-	100
KOR							-	-	100	-	-	100	-	-	100
Latvia			324	190	679	649	1253	504	544	956	439	490	1190	402	490
Lithuania			863	453	980	638	1567	918	638	1708	611	579	3106	866	579
NOR	7074	1403	8625	2206	9391	2162	5853	1549	2206	1974	329	1985	1315	211	1985
Poland							-	-	100	288	100	100	-	40	100
RUS	54	76	350	41	3327	1533	4443	2458	N/A	1067	807	2600	-	-	2600
UKR													-	-	
USA							-	-	100	-	-	100	-	-	100
Grand total	24649	4449	24105	6834	34001	10698	45958	14019	9197	23494	6389	10492	27815	5545	10492

Data Sources:

3M Catches 1993-1995: Meeting Report on Shrimp Stocks in the Regulatory Area, 27-30 March 2000, Washington DC. Table 2 of Annex 10 in GC Doc 00/3.

3M Catches 1996-2021: Monthly Provisional Catch Reports

Reported Fishing Days in 3M, 1993-1999: Meeting Report on Shrimp Stocks in the Regulatory Area, 27-30 March 2000, Washington DC. Table 2 of Annex 10 in GC Doc 00/3.

Reported Fishing Days in 3M, 2000-2021: Monthly Provisional Catch Reports

Allocated fishing Days in 3M, 1996-2003: Report of the FC Intersessional Meeting, 30 April -7 May 2008, Montreal, Quebec. Table 2 of Annex 5 in FC Doc 08/4.

Allocated fishing Days in 3M, 2004-2021: Annex I.B of NAFO CEM.

Table 2. 3M Shrimp Catch, Fishing days used, and Fishing days allocation, 1993-2022.

	1999			2000			2001			2002			2003		
	3M Catches (mt)	Reported fishing days in 3M	Allocated fishing days in 3M	3M Catches (mt)	Reported fishing days in 3M	Allocated fishing days in 3M	3M Catches (mt)	Reported fishing days in 3M	Allocated fishing days in 3M	3M Catches (mt)	Reported fishing days in 3M	Allocated fishing days in 3M	3M Catches (mt)	Reported fishing days in 3M	Allocated fishing days in 3M
CAN	385	79	456	105	261	456	294	-	380	8	-	400	0	-	456
CUB	119	33	100	46	22	100	797	72	100	153	12	100	81	10	100
Estonia	10846	1651	1667	12196	1663	1667	9638	1180	1389	13674	1594	1667	12732	1458	1667
EU	1265	268	457	1617	252	457	756	-	400	1045	151	400	161	21	457
DFG															
FRO	9189	1051	1606	7119	934	1606	12267	1433	1606	8515	1021	1606	12661	1410	1606
GRL	576	65	515	1638	223	515	0	-	515	680	65	515	873	73	515
FRA (SPM)	-	-	100	-	-	100	408	70	100	161	40	100	-	-	100
ISL	7643	1222	N/A	7731	1094	N/A	5301	-	N/A	5351	-	N/A	4588	-	N/A
JPN	-	-	100	114	69	100	130	61	100	100	38	100	116	54	100
KOR	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100
Latvia	2765	438	490	3102	489	490	2984	485	490	1885	277	490	3453	431	490
Lithuania	3370	620	579	3528	581	579	2702	550	579	3321	415	579	3744	495	579
NOR	2976	394	1985	2633	399	1985	13255	1559	1654	11225	1240	1985	22874	1774	1985
Poland	707	104	100	316	43	100	196	9	100	-	-	100	-	-	100
RUS	1126	417	2100	7078	1411	2100	5687	948	1750	1145	196	2100	3	-	2100
UKR	-	-	-	-	-	100	348	68	100	-	-	100	238	41	100
USA	-	-	100	-	-	100	411	35	100	96	10	100	628	97	100
Grand total	40967	6342	10455	47223	7441	10555	55174	6470	9463	47359	5059	10442	62152	5864	10555

Data Sources:

3M Catches 1993-1995: Meeting Report on Shrimp Stocks in the Regulatory Area, 27-30 March 2000, Washington DC. Table 2 of Annex 10 in GC Doc 00/3.

3M Catches 1996-2021: Monthly Provisional Catch Reports

Reported Fishing Days in 3M, 1993-1999: Meeting Report on Shrimp Stocks in the Regulatory Area, 27-30 March 2000, Washington DC. Table 2 of Annex 10 in GC Doc 00/3.

Reported Fishing Days in 3M, 2000-2021: Monthly Provisional Catch Reports

Allocated fishing Days in 3M, 1996-2003: Report of the FC Intersessional Meeting, 30 April -7 May 2008, Montreal, Quebec. Table 2 of Annex 5 in FC Doc 08/4.

Allocated fishing Days in 3M, 2004-2021: Annex I.B of NAFO CEM.

Table 2. 3M Shrimp Catch, Fishing days used, and Fishing days allocation, 1993-2022.

	2004			2005			2006			2007			2008		
	3M Catches (mt)	Reported fishing days in 3M	Allocated fishing days in 3M	3M Catches (mt)	Reported fishing days in 3M	Allocated fishing days in 3M	3M Catches (mt)	Reported fishing days in 3M	Allocated fishing days in 3M	3M Catches (mt)	Reported fishing days in 3M	Allocated fishing days in 3M	3M Catches (mt)	Reported fishing days in 3M	Allocated fishing days in 3M
CAN	0	0	456	0	0	456	10	3	456	0	0	456	0	0	456
CUB	969	100	100	1043	100	100			100			100		4	100
Estonia	13455	1625	1667		-	-		-	-			-			
EU	2724	16	457		1866	3293		908	3293	9458	1171	3293	8590	928	3293
DFG															
FRO	4932	600	1606	2341	217	1606	1150	108	1606	2313	144	1606	1201	86	1606
GRL	0	0	515	10	2	515	793	63	515	0	0	515		0	515
FRA (SPM)	423	58	100	487	45	100	183	17	100	741	65	100	0	62	100
ISL	3519	0	N/A	4073	0	N/A	2099	0	N/A	0	0	N/A	0	0	N/A
JPN	0	0	100	0	0	100	0	0	100	0	0	100	0	0	100
KOR	-	-	100	-	-	100	-	-	100	0		100			100
Latvia	2332	361	490		-	-		-	-			-			
Lithuania	4802	578	579		-	-		-	-			-			
NOR	10743	978	1985	184	13	1985	433	32	1985	1982	104	1985	0		1985
Poland	1124	98	100		-	-		-	-			-			
RUS	654	62	2100	268	59	2100	46	6	2100	76	13	2100	20	4	2100
UKR	314	42	100	-	-	100	277	31	100			100	0		100
USA	952	101	100	1188	99	100			100			100	0		100
Grand total	46943	4619	10555	9594	2401	10555	4991	1168	10555	14570	1497	10555	9811	1084	10555

Data Sources:

3M Catches 1993-1995: Meeting Report on Shrimp Stocks in the Regulatory Area, 27-30 March 2000, Washington DC. Table 2 of Annex 10 in GC Doc 00/3.

3M Catches 1996-2021: Monthly Provisional Catch Reports

Reported Fishing Days in 3M, 1993-1999: Meeting Report on Shrimp Stocks in the Regulatory Area, 27-30 March 2000, Washington DC. Table 2 of Annex 10 in GC Doc 00/3.

Reported Fishing Days in 3M, 2000-2021: Monthly Provisional Catch Reports

Allocated fishing Days in 3M, 1996-2003: Report of the FC Intersessional Meeting, 30 April -7 May 2008, Montreal, Quebec. Table 2 of Annex 5 in FC Doc 08/4.

Allocated fishing Days in 3M, 2004-2021: Annex I.B of NAFO CEM.

Table 2. 3M Shrimp Catch, Fishing days used, and Fishing days allocation, 1993-2022.

	2009			2010			2011-2019			2020			2021			2022		
	3M Catches (mt)	Reported fishing days in 3M	Allocated fishing days in 3M	3M Catches (mt)	Reported fishing days in 3M	Allocated fishing days in 3M	3M Catches (mt)	Reported fishing days in 3M	Allocated fishing days in 3M	3M Catches (mt)	Reported fishing days in 3M	Allocated fishing days in 3M	3M Catches (mt)	Reported fishing days in 3M	Allocated fishing days in 3M	3M Catches (mt)	Reported fishing days in 3M	Allocated fishing days in 3M
CAN	0	0	456	0	0	228	M	M	M	0.067	3	114	804.267	103	114	M	M	M
CUB	0		100	0	0	50	o	o	o	0	0	25	19.62	7	25	o	o	o
Estonia							r	r	r							r	r	r
EU	3086	360	3293	1023	165	1646	a	a	a	78.9	19	823	2623.41	218	823	a	a	a
DFG							t	t	t							t	t	t
FRO	1392	85	1606	488	33	803	o	o	o			402	1162	89	402	o	o	o
GRL	0	0	515	0	0	258	r	r	r			129			129	r	r	r
FRA (SPM)	0	16	100	0		50	i	i	i			25	94	10	25	i	i	i
ISL	0	0	N/A	0	0	N/A	u	u	u			N/A			N/A	u	u	u
JPN	0	0	100	0		50	m	m	m			25			25	m	m	m
KOR	0	0	100	0		50						25			25			
Latvia																		
Lithuania																		
NOR	0	0	1985	0	0	992	-	-	-			496			496	-	-	-
Poland																		
RUS	20	5	2100	0	0	1050	-	-	-	0.3	1	525			525	-	-	-
UKR	0	0	100			50	-	-	-			25			25	-	-	-
USA	0	0	100			50	-	-	-			25	175.247	13	25	-	-	-
Grand total	4498	466	10555	1511	198	5277	0	0	0	79.267	23	2639	4878.5	440	2639	0	0	0

Data Sources:

3M Catches 1993-1995: Meeting Report on Shrimp Stocks in the Regulatory Area, 27-30 March 2000, Washington DC. Table 2 of Annex 10 in GC Doc 00/3.

3M Catches 1996-2021: Monthly Provisional Catch Reports

Reported Fishing Days in 3M, 1993-1999: Meeting Report on Shrimp Stocks in the Regulatory Area, 27-30 March 2000, Washington DC. Table 2 of Annex 10 in GC Doc 00/3.

Reported Fishing Days in 3M, 2000-2021: Monthly Provisional Catch Reports

Allocated fishing Days in 3M, 1996-2003: Report of the FC Intersessional Meeting, 30 April -7 May 2008, Montreal, Quebec. Table 2 of Annex 5 in FC Doc 08/4.

Allocated fishing Days in 3M, 2004-2021: Annex I.B of NAFO CEM.

Annex 4. Discussion Papers and Proposals from NAFO Contracting Parties

COM WP 22-01	Fishing regime Shrimp in division 3M NAFO – Ukraine
COM WP 22-06	Fishing regime Shrimp in division 3M NAFO – Norway
COM WP 22-08	Fishing regime Shrimp in division 3M NAFO – France (in respect of St. Pierre et Miquelon) [originally COM WP 21-10]
COM WP 22-09	Fishing regime Shrimp in division 3M NAFO – Iceland [originally COM WP 21-11]
COM WP 22-10	Fishing regime Shrimp in division 3M NAFO – Russian Federation [originally COM WP 21-12]
COM WP 22-11	Fishing regime Shrimp in division 3M NAFO – Denmark (in respect of the Faroe Islands and Greenland) [originally COM WP 21-22]
COM WP 22-12	Fishing regime Shrimp in division 3M NAFO – Canada
COM WP 22-20	Fishing regime Shrimp in division 3M NAFO – European Union



NAFO FISHING REGIME FOR SHRIMP IN DIVISION 3M MEETING – 27-28 APRIL 2022

**Fishing regime Shrimp in division 3M NAFO
(Delegation of Ukraine)**

[The following was received via e-mail from the Delegation of Ukraine.]

Dear colleagues!

In response to the NAFO letter (NAFO/22-044) of 25 January 2022 concerning the draft provisional agenda of NAFO Fishing Regime for Shrimp in Division 3M meeting, 27/28 April 2022 in Halifax, Nova Scotia, Canada, the State Agency of Melioration and Fisheries of Ukraine informs.

Ukrainian party has no objections and confirms the proposed Draft Provisional Agenda NAFO Fishing Regime for Shrimp in Division 3M meeting, 27-28 April 2022 in Halifax, Nova Scotia, Canada. Fishing Regime for 3M shrimp that is based on TAC and quota better than based on fishing efforts.

But we fully agree also with the position of France on behalf of Saint-Pierre-et-Miquelon: *“It is therefore important to underline that this change in fishing regime must lead to an economically viable situation for each Contracting Party, including those which have currently a low number of fishing days”* (COM WP 21-10).

So, we suppose that it is needed to establish as a minimum individual catch quota 2% of catch limit (for each Party), and the rest of the catch limit can be distributed to the Parties according to their historical catch during the last 10 years.

Best regards

Division of International Cooperation

The State Agency of Melioration and Fisheries of Ukraine

Northwest Atlantic



Fisheries Organization

COM Working Paper 22-06

NAFO FISHING REGIME FOR SHRIMP IN DIVISION 3M MEETING - 18 SEPTEMBER 2022

**Fishing regime Shrimp in division 3M NAFO
(Delegation of Norway)**

Please see enclosed.



ROYAL NORWEGIAN MINISTRY OF
TRADE, INDUSTRY AND FISHERIES

Northwest Atlantic Fisheries Organization
Summit Place, 1601 Lower Water Street, Suite
401, Halifax, Nova Scotia - B3J 3P6
CANADA
CANADA

Your ref

Our ref

Date

21/6142-99

18 August 2022

Proposal for the management of the shrimp stock in subarea 3M

Please find attached Norway's proposal for the allocation of the shrimp stock in subarea 3M, which is due to be discussed in Porto, Portugal 18 September 2022.

Yours sincerely

Caroline Lunde Ellingsen
Head of Delegation for Norway

Sara Lier Fagerbakke
Senior Adviser

This document is signed electronically and has therefore no handwritten signature

Copy

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Proposal by Norway for a transition from effort to TAC and quota allocation for shrimp in Subarea 3M

1. Introduction

The shrimp stock in NAFO area 3M has since 1996 been managed by an effort limitation regime. Each contracting party has been allocated a number of fishing days and fishing vessels.

4. Each Contracting Party shall limit in 1997 the number of vessels fishing for shrimp in Div. 3M to the number that have participated in this fishery in the period from 1 January 1993 to 31 August 1995.
- Each Contracting Party shall, in 1997, limit the number of fishing days by its vessels fishing for shrimp in Div. 3M to 90% of the maximum number of fishing days observed for their vessels in one of the years 1993, 1994 or 1995 (until 31 August 1995). However, for Contracting Parties with a track record, a minimum level of 400 fishing days is permitted.
- Contracting Parties with no track record in the shrimp fishery may, in 1997, fish for shrimp with one vessel in 100 fishing days, and Contracting Parties with a smaller track record may in 1997 fish an equal number of days.
- Each Contracting Party shall communicate the number of fishing days to the Executive Secretary before 1 November 1996 that are available to that Contracting Party for 1997. The number of days shall be counted from the hail reports of vessels fishing for shrimp in Div. 3M and shall include the days of entry and exit from the Regulatory Area. In the case where vessels fishing for shrimp and other species on the same trip the number of days shall be counted from the day the vessel entered the shrimp fishery to the day the vessel ceased that fishery.

Figure 1: Text from Annex 4 page 64 in "NAFO annual report 1996" (NAFO FC Doc 96/5).

Since the effort regime was introduced in 1996, fishing efficiency has improved significantly, and the fleets fishing on the 3M shrimp stock are diverse. These factors make it challenging to regulate the fishery effectively under the effort regime and does not appropriately limit the outtake of the stock.

Following a continuous decline in catches, from 60 000 tonnes in 2003 to 2 000 tonnes in 2010, the 3M shrimp was placed under a moratorium in 2011-2019. The fishery was reopened in 2020 based on the previous effort allocation key, however the Commission agreed to reduce the effort (days) with 50 % of 2010 levels, and that the measures based on the existing effort regime would be applicable for 2020 only. Due to the COVID-19 pandemic, the Commission agreed to a roll-over of the current regime to 2021.

In 2022 the Commission decided to close the fishery of the shrimp stock in division 3M again.

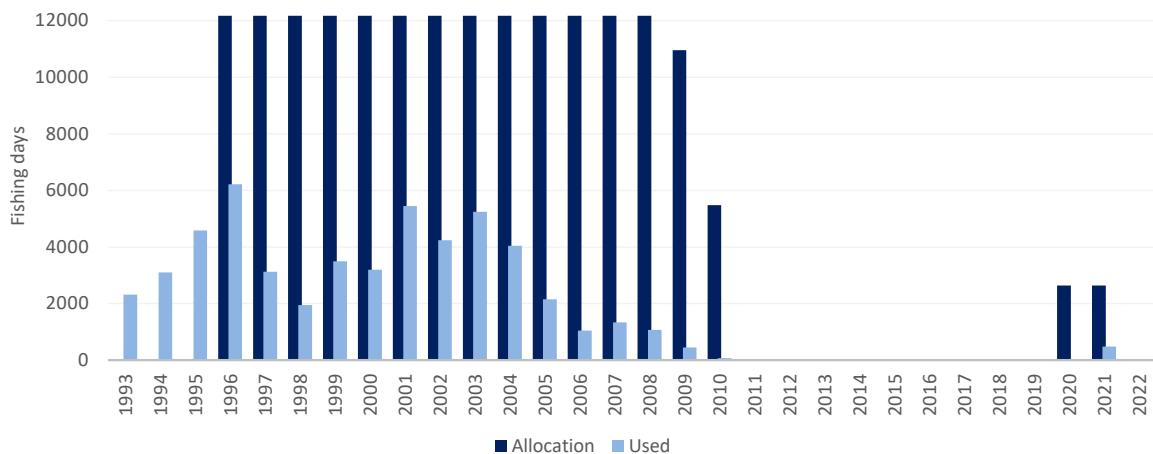


Figure 2: Total number of fishing days allocated for shrimp fishing in div. 3M, and reported fishing days

The rapid decline and current poor state of the stock has prompted the need for efficient and targeted measures to manage and limit the outtake of the 3M shrimp stock. The Scientific Council has recommended that shrimp in division 3M should be managed in line with all other stocks in the Regulatory Area (c.f. SCS Doc. 19-023), with a TAC and quota allocation rather than effort. Advice is also given in terms of total allowable catch (TAC). A conversion from effort to quota allocation was discussed between the Contracting Parties in 2008, however unable to reach consensus, the effort regime remained in place until the 2010 closure of the fishery.

With regard to the current state of the 3M shrimp stock, the obligations stipulated in the UN Convention of the Law of the Sea to ensure the sustainable use and conservation of marine living resources, to which NAFO is committed, Norway propose a conversion from effort to a TAC and quota allocation scheme based on a model below set forth in section 2 of this document. The model takes into account the Commission’s working document (COM WP 20-16) *Draft Concept Paper – Shrimp 3M “Moving from efforts scheme to a TAC and quotas”*, in which building blocks for a conversion from allocated effort to a system based on TAC and quotas have been outlined. The Norwegian proposal follows a similar approach to Norway’s proposal from 2008.

2. Proposal

Norway propose a conversion from effort to a TAC and quota regulation with the allocation presented in *table 1* below. The proposal seeks to balance the Contracting Parties' allocated effort and reported catches prior to and up until to the closure of the fishery in 2011. It furthermore ensures that the deviation from current shares is as little as possible.

The proposal is based on a model which has 1) a fifty-fifty weighing of *allocated effort* and *realised fishing activity* between 1993-2010, and 2) gives equal weighting of every year of in the 1993-2010 period of catch history.

As *table 1* expresses, the proposed allocated quota shares stemming from this model gives only minor changes to current shares in terms of effort and reported catches (1993-2010). This ensures stability for the Contracting Parties' fleets, and it furthermore avoids "big winners or losers", which in turn may be counter-productive in finding a solution that ensures sustainable management of the 3M shrimp stock, which is under pressure under the current scheme.

Contracting Party	Effort allocation		Catch		New
	Nominal	Share	1993-2010	Share	Allocation
	Days	%	tonnes	%	%
Canada	456	3.75 %	8249	1.45 %	2.60 %
Cuba	100	0.82 %	7707	1.35 %	1.09 %
Faroes	1606	13.19 %	105314	18.50 %	15.85 %
Greenland	515	4.23 %	15084	2.65 %	3.44 %
European Union	3293	27.05 %	213529	37.52 %	32.28 %
France (SPM)	100	0.82 %	1670	0.29 %	0.56 %
Iceland	1620	13.31 %	89576	15.74 %	14.52 %
Japan	100	0.82 %	461	0.08 %	0.45 %
Korea	100	0.82 %	0	0.00 %	0.41 %
Norway	1985	16.30 %	100322	17.63 %	16.97 %
Russian Federation	2100	17.25 %	25391	4.46 %	10.85 %
Ukraine	100	0.82 %	1182	0.21 %	0.51 %
USA	100	0.82 %	629	0.11 %	0.47 %
TOTALS	12175	100 %	569114	100 %	100 %

Table 1. Effort allocation (1996), realised catch and the resulting new weighted quota allocation.

Appendix.

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
CAN	3191	1042	968	908	784	463	474	104	295	8	0	0	0	10	0	0	2	0
CUB	0	0	0	0	0	0	120	46	1037	1537	1462	969	964	1126	446	0	0	0
EU	754	2670	4526	5009	6614	11524	19662	22105	17090	19943	21532	23647	19715	9328	12165	11960	3812	1473
FRA-SP	0	0	0	0	0	0	0	138	337	161	0	0	0	0	741	0	293	0
FRO	7076	4998	5815	8429	7386	9271	9086	7207	11871	7680	12648	4952	2457	1102	2303	1189	1349	495
GRL	3788	2275	2400	1107	104	866	576	1734	0	644	809	0	12	769	0	0	0	0
ISL	2195	2355	7481	20680	7197	6572	9148	8736	5063	5754	4715	3567	4014	2099	0	0	0	0
JPN	0	0	0	0	0	0	0	114	130	100	117	0	0	0	0	0	0	0
NOR	7075	8625	9534	5747	1831	1339	2975	2588	12972	11833	21238	11738	223	429	1914	261	0	0
RUS	54	350	3327	4444	1090	0	1103	7070	5687	1176	3	654	266	46	73	21	20	7
UKR	0	0	0	0	0	0	0	0	348	0	237	315	0	282	0	0	0	0
USA	0	0	0	0	0	0	0	629	0	0	0	0	0	0	0	0	0	0

Table A1. Reported catches (tonnes) of shrimp from NAFO Div. 3M (STATLANT data, downloaded from the NAFO website).

**NAFO FISHING REGIME FOR SHRIMP IN DIVISION 3M MEETING – 18 SEPTEMBER 2022****Fishing regime Shrimp in division 3M NAFO
(Delegation of France, in respect of St. Pierre et Miquelon)**

[originally circulated as COM WP 21-10]

In accordance with NAFO/21-108 correspondence, France on behalf of Saint-Pierre-et-Miquelon would like to express first views on the future management regime for shrimp in division 3M.

As it is an important and sensitive matter for all Contracting parties, it is first critical that discussions could be carried on during the 2021 annual session and in the next months. It is therefore welcome to request that the Contracting parties share their position on this issue in order to move forward in the near future.

In order to agree as soon as possible on a management regime different from the current one and due to the health crisis, France SPM will support any virtual meeting organised in intersession and any other initiative that could lead to an agreement if it turns out to be difficult to achieve an outcome by the 2021 annual session. The most recent scientific advice should also be taken into account.

In the meantime, it seems important that this decision on a new fishing regime does not prevent fishing activities to carry on early 2022.

On the new fishing regime itself, France SPM would be open to discuss a regime based on a TAC and quotas, as it seems a sustainable way to manage the stock, in line with the management chosen for the other NAFO stocks.

However, the main issue is the calculation of the allocation key on which France SPM remains open to discussion as well. It is therefore important to underline that this change in fishing regime must lead to an economically viable situation for each Contracting party, including those which have currently a low number of fishing days. This parameter was taken into account in 2019 before the reopening of the fishery and must remain an important factor in the future discussions.

Northwest Atlantic



Fisheries Organization

COM Working Paper 22-09

NAFO FISHING REGIME FOR SHRIMP IN DIVISION 3M MEETING - 18 SEPTEMBER 2022

**Fishing regime Shrimp in division 3M NAFO
(Delegation of Iceland)**

[originally circulated as COM WP 21-11]

Please see enclosed.



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Reykjavík August 20, 2021
Reference: ANR20010019/15.09.04
Your reference: NAFO/21-108

Subject: Fishing regime for Shrimp in NAFO Division 3M

Reference is made to NAFO/21-108 from 14 April 2021 where Contracting Parties are urged to submit proposals for a fishing regime for Shrimp in Division 3M by 20 August 2021.

As expressed for decades Iceland reiterates that the current fishing regime for Shrimp in 3M is neither responsible nor sustainable, it is therefore imperative that the Contracting Parties of NAFO agree upon a fishing regime that fulfills both these criteria on the Annual Meeting in September. Preliminary catch statistic for 3M Shrimp in 2021 clearly underline the urgency of the matter.

As previously expressed by Contracting Parties, a fishing regime of TAC and quota allocation scheme based on catches, is the way forward. In that situation, an allocation based on fishing effort instead of catch quantity would be a dichotomy. For those Contracting Parties that have fished under the effort allocation scheme for 3M Shrimp the fishing patterns resulting from that fishing regime should be realized in historical catches and should therefore be an undisputed basis for coming negotiations.

Iceland therefore supports adopting a fishing regime for 3M Shrimp that is based on TAC and quota rather than fishing effort and allocates fishing opportunities among the Contracting Parties on the basis of historical catches rather than historical fishing effort.

Iceland is fully committed to reaching an agreement on a sustainable and responsible fishing regime for 3M Shrimp. Recognising that it is not likely that a face-to-face meeting will be feasible in 2021, it is inevitable to endeavor to reach an agreement on the Annual Meeting, even if a virtual format poses challenges in negotiations. Iceland urges all Contracting Parties to come to the Annual Meeting fully prepared to show the necessary flexibility to reach a conclusion on this issue already there. Having NAFO regulations that explicitly allow for overexploiting this stock cannot continue into 2022.

On behalf of the Minister of Fisheries and Agriculture

Brynhildur Benediktsdóttir
Head of the Icelandic Delegation to NAFO

Northwest Atlantic



Fisheries Organization

COM Working Paper 22-10

NAFO FISHING REGIME FOR SHRIMP IN DIVISION 3M MEETING - 18 SEPTEMBER 2022

**Fishing regime Shrimp in division 3M NAFO
(Delegation of the Russian Federation)**

[originally circulated as COM WP 21-12]

Please see enclosed.

**РОССИЙСКАЯ ФЕДЕРАЦИЯ
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«25» 08 2021 г. № 7752-BC/403

To: Fred Kingston
Executive Secretary
Northwest Atlantic Fisheries Organization (NAFO)

Subject: proposals of the Contracting Parties for a fishing regime for Shrimp in Division 3M

Dear Mr. Kingston,

In accordance with the letter from the NAFO Secretariat dated 14 April 2021 № NAFO/21-108 on the issue of submitting proposals of the Contracting Parties for a fishing regime for Shrimp in Division 3M please find enclosed the proposals of the Russian Federation.

At the same time we consider it necessary to comply with the earlier decisions on discussing this issue during the meeting to be held in the format of face-to-face.

Enclosure: 2 pages.

Sincerely yours,

Vasiliy Sokolov,
Deputy Head
Federal Agency for Fisheries

A handwritten signature in black ink, appearing to read 'V. Sokolov', written over a horizontal line.

43rd ANNUAL MEETING - SEPTEMBER 2021**An approach to a possible transition from the effort based regime to a TAC for 3M
shrimp****(Presented by the Russian Federation)**

The 3M stock has been traditionally managed through an effort allocation scheme (number of fishing days and maximum number of fishing vessels allocated to Contracting Parties). As it was agreed in 2019 the fishery shall be re-opened in accordance with the effort allocation key in place for this fishery at the time of closure.

For 2021 Russia has 525 fishing days allocated for shrimp fishery in Div. 3M under the 2004 allocation key (Table 1). As agreed, the Russian Federation transferred 25 fishing days of its fishing days allocation to Cuba following the decisions taken on an ad hoc basis at the NAFO 41st and 42nd Annual Meetings. These arrangements are of an interim nature and do not affect the allocation key, i.e. they do not entitle any unconditional rights to additional fishing days every year.

Table 1

Effort Allocation Scheme for Shrimp Fishery in 3M in 2021

Contracting Party	Number of fishing days¹	% of the total number	Number of vessels¹
Canada	114	4,32	16
Cuba	25 ³	0,95	1
Denmark			
- Faroe Islands	402	15,23	8
- Greenland	129	4,89	14
European Union²	823 ³	31,17	33
France (in respect of St. Pierre et Miquelon)	25 ³	0,95	1
Iceland	N/A	-	N/A
Japan	25	0,95	1
Korea	25	0,95	1
Norway	496 ³	18,79	32
Russia	525 ³	19,89	N/A
Ukraine	25 ³	0,95	1
USA	25	0,95	1
Total	2640	100,0	109

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.

² Including fishing entitlements transferred from Poland (25 fishing days), Estonia (416 fishing days), Latvia (123 fishing days) and Lithuania (145 fishing days) following their accession to the European Union.

³ In derogation of CEM Article 5.11 and CEM Article 9.4, the European Union will transfer 25 fishing days of its fishing days allocation for 2021 to France, in respect of St Pierre et Miquelon; Norway will transfer 25 fishing days of its fishing days allocation for 2021 to Ukraine; and the Russian Federation will transfer 25 fishing days of its fishing days allocation for 2021 to Cuba. The above transfers are without prejudice to the effort allocation key and are only for the year 2021. The 2021 catches under this interim regime will not create any catch history.

The Russian Federation notes that the discussion on a possible revision and discussion of possible alternate management regimes to better align the capacity under an effort management regime with the level of total removals recommended by the SC including the possible conversion to a TAC and quota system has been going on for many years, more precisely since 2006.

The Russian Federation appreciates the effort made by all the Contracting Parties to reach a consensus on 3M Shrimp. Unfortunately, till now the Contracting Parties could not agree.

It seems that after many years of discussions it is necessary to recognize the lack of great optimism and insignificant prospects for a successful solution of this issue.

Recognizing that the effort-based regime is not sustainable and that the TAC and quotas regime should be applied, the Russian Federation believes that it would be a relatively easy and simple solution to propose a simple transition from 2019 ship-days to the proportional TAC percentage, which was proposed in 2019 at the NAFO session, but was not supported by the Parties.

As noted in 2019, finding another solution can be very difficult and we are not confident that such a solution can be found. In this regard Russia believes that «this approach would have ensured a conservation-based fishery, and an equitable one where all Contracting Parties could have benefitted from the opening of this fishery» (COM Doc. 19-34 (Rev.)).

Northwest Atlantic



Fisheries Organization

COM Working Paper 22-11

NAFO FISHING REGIME FOR SHRIMP IN DIVISION 3M MEETING - 18 SEPTEMBER 2022

**Fishing regime Shrimp in division 3M NAFO
(Delegation of Denmark, in respect of the Faroe Islands and Greenland)**

[originally circulated as COM WP 21-22]

Please see enclosed.



Fred Kingston
Executive Secretary
Northwest Atlantic Fisheries Organization

NAFO Fishing Regime for Shrimp in Division 3M Proposals for discussion at the NAFO 42nd Annual Meeting, 20-24 September 2021

With reference to the letter from the NAFO Secretariat of 14 April 2021, regarding fishery for shrimp in Division 3M, Denmark in respect of the Faroe Islands and Greenland reiterates its support to considering an output based management regime based on TAC and quota allocations.

Considering that, intersessional consultations to discuss the conversion have not been possible since reopening the fishery in 2019, DFG considers, however, that yet another roll over of the effort allocation might be necessary provided the parties are not able to agree on a quota allocation key during the 2021 Annual Meeting.

Given the need to ensure sustainable fisheries management with respect to shrimp in Division 3M, DFG encourages the parties at the 2021 Annual Meeting to further consider approving a quota allocation key.

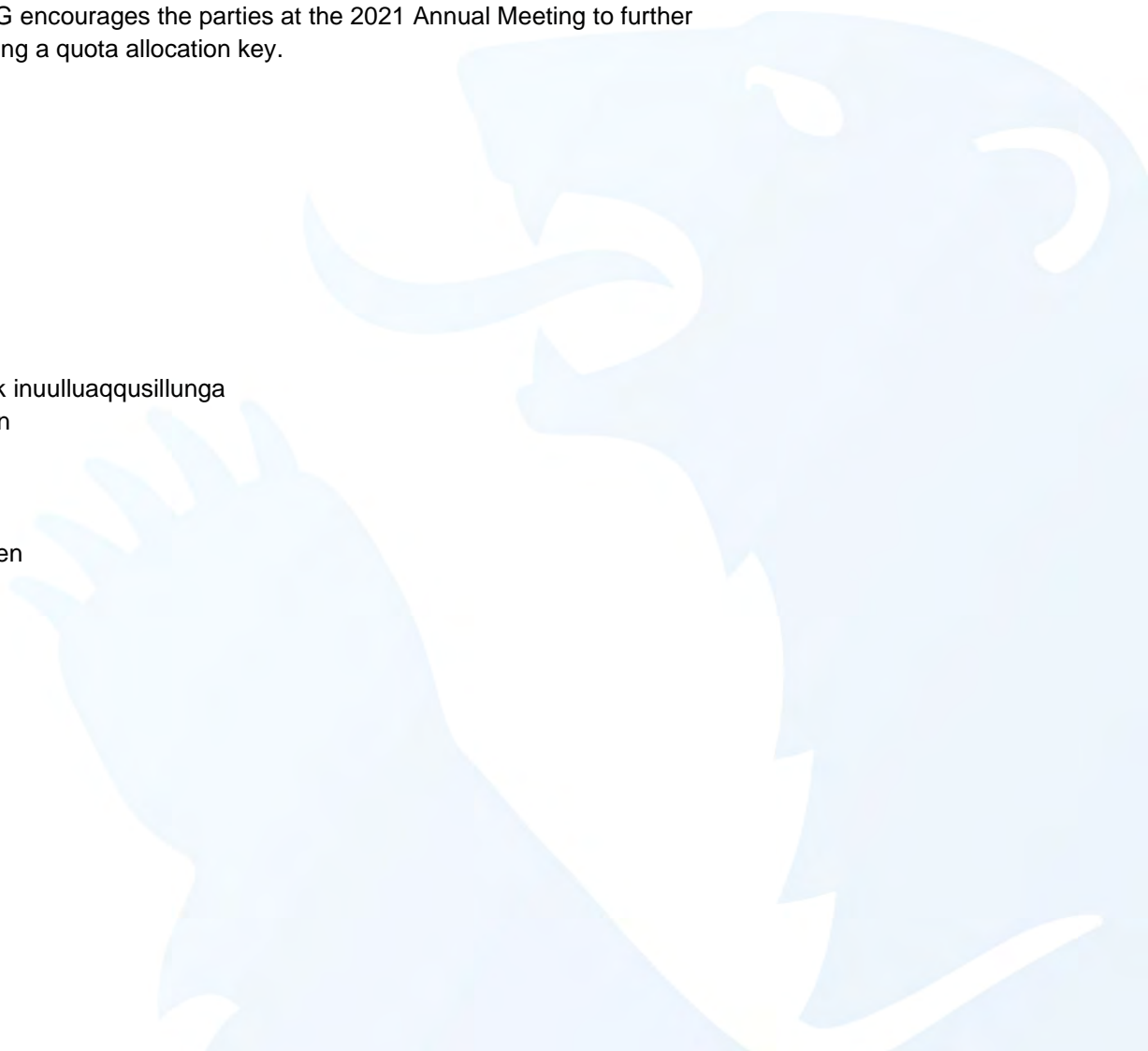
Kind regards

Inussiarnersumik inuulluaqqusillunga
Med venlig hilsen

Steen Christensen

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Northwest Atlantic



Fisheries Organization

COM Working Paper 22-12

NAFO FISHING REGIME FOR SHRIMP IN DIVISION 3M MEETING – 18 SEPTEMBER 2022

Fishing regime Shrimp in division 3M NAFO

(Delegation of Canada)

Please see enclosed.

A total allowable catch and quota regime for shrimp in Division 3M (Canada)

In accordance with NAFO/22-165 correspondence, Canada would like to express its views on the future management regime for shrimp in division 3M.

Since NAFO implemented the effort-based fishing regime for shrimp in division 3M in 1996, Canada's position has been that it is not an effective or responsible management approach for this stock. This has frequently proven to be the case, with catches well above the Scientific Council's (SC) recommended levels of removal in the early 2000s, prior to the stock's decline and eventual collapse. This occurred again in 2021, with catches ten per cent over the SC's advised level with only 18 per cent of allocated days utilized and despite SC's recommendation to convert the management regime to catch regulation in line with all other stocks in the NAFO Regulatory Area. SC has also advised that it is unable to provide advice for an effort based regime. Even if total allowable effort were reduced, an effort-based regime would not be able to account for increased fishing efficiency over time and ensure the sustainable harvest of this stock. A total allowable catch-based regime is required to ensure that future removals are in keeping with the SC's catch-based scientific advice.

The current management regime is not in line with the general principles in Article III of the *Convention on Cooperation in the Northwest Atlantic Fisheries*, which states that Contracting Parties shall a) promote the long-term sustainability of fishery resources and f) prevent or eliminate overfishing and excess fishing capacity, and ensure that levels of fishing effort do not exceed those commensurate with the sustainable use of the fishery resources. The Commission should therefore give very careful consideration to a future re-opening of the shrimp fishery in division 3M until such a time when 1) the SC advises that the stock can support a fishery, and 2) the Commission can ensure that catches will not exceed a scientifically-based total allowable catch level.

With respect to considering an allocation regime for this stock, Contracting Parties are obliged to consider Article VI (12) of the Convention, which requires taking into account the interests of relevant coastal States and giving special consideration to the Contracting Party that has undertaken extensive efforts to ensure the conservation of NAFO stocks through international action, in particular monitoring, control, and surveillance activities to ensure the enforcement of NAFO's conservation and enforcement measures:

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

Canada is the primary coastal State to NAFO. As such, it undertakes extensive efforts to ensure the conservation of NAFO stocks through a comprehensive, year-round monitoring, control, and surveillance program, including in division 3M. With respect to at-sea patrols, Canada contributed

66 per cent of total vessel patrol days by all Contracting Parties in the NAFO Regulatory Area from 2017-2020. Canada conducts 100 per cent of the air surveillance in the NAFO Regulatory Area, averaging 328 hours per year from 2017 to 2021. This tool has enabled at-sea patrols to be more strategic in their approach to undertaking boardings and inspections, contributing significantly to the effectiveness of NAFO's monitoring, control, and surveillance program as a whole.

While historical catch and effort allocations can and should be considered in such discussions, the Convention calls upon the Commission to take into account the above factors when allocating fishing opportunities in the Regulatory Area. In light of Canada's coastal State status and that of "the Contracting Party whose coastal communities are primarily dependent on fishing activities for stocks related to these fishing banks and which has undertaken extensive efforts to ensure the conservation of such stocks through international action...", a commensurate Canadian quota share would be 14 per cent.

NAFO's reputation as a global leader in fisheries management, science, and international cooperation is encouraging as we seek a path forward on this long-standing issue. Canada looks forward to working constructively with other NAFO Contracting Parties at the September 18, 2022 meeting, in view of progressing towards a responsible fishing regime for shrimp in division 3M in line with our commitments within the NAFO Convention.

Northwest Atlantic



Fisheries Organization

COM Working Paper 22-20

NAFO FISHING REGIME FOR SHRIMP IN DIVISION 3M MEETING - 18 SEPTEMBER 2022

**Fishing regime Shrimp in division 3M NAFO
(Delegation of European Union)**

Please see enclosed.



EUROPEAN COMMISSION
DIRECTORATE-GENERAL FOR MARITIME AFFAIRS AND FISHERIES

International Ocean Governance and Sustainable Fisheries
Regional Fisheries Management Organisations
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Brussels,
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Executive Secretary
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Summit Place – 1601 Lower
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Email: FKingston@nafo.int

Subject: NAFO Fishing Regime for Shrimp in Division 3M Meeting, 18 September 2022 in Porto. The European Union proposal: a quota revision of COM Working Paper 21-09.

Dear Mr. Kingston,

In preparation for the meeting concerning Shrimp in Division 3M on 18 September 2022 in Porto, I refer to the EU proposal presented at the 2021 NAFO Annual Meeting, document '*COM Working Paper 21-09*'.

In February 2022, the USA provided additional data concerning US charter catches and landings of shrimp in Division 3M for the period 2000-2007, and this data was included by the NAFO Secretariat in COM WP 22-02. Following this, we reviewed our proposal adding to STATLANT 21A this US chartering data and we slightly modified the two possible scenarios of quota allocation included in Annex I in '*COM Working Paper 21-09*'.

We also included in our revision the updates of historical catch data received from Poland in Division 3M. This information was transmitted to the NAFO Secretariat on 20 April 2020 and it refers to small discrepancies identified for the years 1997 and 2007 between the STATLANT catch data, and the catch data held by the Ministry of Fisheries of Poland (our letter *Ref. Ares (2020) 2281897 - 29/04/2020*).

The results of these updates are reflected in the attached annex for your information.

Yours faithfully,

Anders C. JESSEN

ANNEX I

Scenarios presented by EU – shrimp 3M Moving from an efforts scheme to a TAC and quota system

SCENARIO 1

This scenario is blending the following elements:

- **Weighted average catches (*)** in **two** fishing periods, namely 1993-1999 and 2000-2010, where we applied a different percentage and weight: 1/3 and 2/3 respectively. The result is called “a”.
- Fishing days (fishing effort) assigned to each NAFO Contracting Party in 1996. (called “b”).
- We combined “a” and “b” applying again a different percentage and weight: 2/3 to “a” and 1/3 to “b”.

(*): The catches in these two fishing periods were not considered as a simple average, but as a weighted average with increasing weight over time, with higher weight in most recent years. The weighting factor was computed as $1/(n(n+1)/2)$ with n = number of years in the time series.

SCENARIO 2

This scenario is blending the following elements:

- **Weighted average catches (**)** in **three** fishing periods, namely 1993-1999, 2000-2008 and 2009-2010, where we applied a different percentage and weight: 1/4, 1/2 and 1/4 respectively. The result is called “a”.
- Fishing days (fishing effort) assigned to each NAFO Contracting Party in 1996. (called “b”).
- We combined “a” and “b” applying again a different percentage and weight: 2/3 to “a” and 1/3 to “b”.

(**): The catches in these three fishing periods were not considered as a simple average, but as a weighted average with increasing weight over time, with higher weight in most recent years. The weighting factor was computed as $1/(n(n+1)/2)$ with n = number of years in the time series. It is the same consideration as under scenario 1.

SIMULATION OF ALLOCATION KEYS FOR NAFO MEMBERS:

TABLE 1 (as % of total TAC) (#)

	SCENARIO 1	SCENARIO 2
Canada	1,7%	1,7%
Cuba	1,4%	1,4%
DFG	18,9%	19,1%
EU	39,3%	40,0%
FRA-SPM	0,5%	0,6%
Iceland	14,8%	14,4%
Japan	0,3%	0,3%
Korea	0,3%	0,3%
Norway	15,3%	14,9%
Russia	6,7%	6,6%
Ukraine	0,4%	0,4%
USA	0,3%	0,3%
TOTAL TAC	100,0%	100,0%

(#) **Note:** Table 1 is the same table originally included in the EU proposal presented at the 2021 NAFO Annual Meeting (document ‘COM Working Paper 21-09’).

TABLE 2 (as % of total TAC) (##)

	SCENARIO 1	SCENARIO 2
Canada	1,94%	1,81%
Cuba	1,20%	1,36%
DFG	19,06%	18,28%
EU	37,44%	38,56%
FRA-SPM	0,54%	0,56%
Iceland	15,00 %	14,07%
Japan	0,30%	0,31%
Korea	0,27%	0,27%
Norway	14,86%	15,30%
Russia	7,75%	7,64%
Ukraine	0,41%	0,43%
USA	1,23%	1,40%
TOTAL TAC	100,0%	100,0%

(##) **Note:** Table 2 includes the additional data provided by USA concerning US charter catches and landings of shrimp in Division 3M for the period 2000-2007. Considering that this additional data was included by the NAFO Secretariat in COM WP 22-02, scenarios 1 and 2 had to be adjusted. Table 2 also includes small updates of historical catch data received from Poland in Division 3M. This information was transmitted to the NAFO Secretariat in April 2020.

Northwest Atlantic Fisheries Organization



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

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

NAFO
Halifax, Nova Scotia, Canada
2022

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

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

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PART I.
Report of the NAFO Commission

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

I. Opening Procedure

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

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

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

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

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

2. Appointment of Rapporteur

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

3. Adoption of Agenda

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

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

4. Admission of Observers

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

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

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

5. Publicity

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

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

6. Review of Membership of the Commission

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

7. Administrative and Activity Report by NAFO Secretariat

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

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

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

9. NAFO Headquarters Agreement

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

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

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

11. Guidance to STACFAD

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

12. Guidance to STACTIC

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

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

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

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

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

III. Coordination of External Affairs

13. Report of Executive Secretary on External Meetings

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

14. International Relations

a. Relations with other International Organizations

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

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

b. NAFO Members as Observers to External Meetings

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

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

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

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

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

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

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

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

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

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

15. Oil and Gas Activities in the NAFO Regulatory Area

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

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

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

IV. Joint Session of Commission and Scientific Council

16. Implementation of 2018 Performance Review Panel recommendations

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

V. Conservation of Fish Stocks in the Regulatory Area

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

There were no matters discussed under the agenda item.

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

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

a. Cod in Division 3M

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

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

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

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

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

The Russian Federation issued a statement regarding this stock:

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

c. Shrimp in Division 3M

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

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

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

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

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

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

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

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

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

a. Redfish in Divisions 3LN

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

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

b. Redfish in Division 3O

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

c. Witch flounder in Divisions 3NO

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

d. Thorny skate in Divisions 3LNO

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

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

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

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

f. Northern shortfin squid in Subareas 3+4

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

23. Other matters pertaining to Conservation of Fish Stocks

There was no further matter discussed under this agenda item.

VI. Ecosystem Considerations

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

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

Japan:

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

Russian Federation:

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

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

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

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

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

25. Other matters pertaining to Ecosystem Considerations

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

VII. Conservation and Enforcement Measures

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

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

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

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

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

27. Report of STACTIC from this Annual Meeting and Recommendations

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

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

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

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

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

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

28. Other matters pertaining to Conservation and Enforcement Measures

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

VIII. Finance and Administration

29. Report of STACFAD from this Annual Meeting

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

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

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

30. Adoption of the 2023 Budget and STACFAD recommendations

The recommendations from STACFAD were the following:

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

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

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

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

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

A hybrid meeting documentation policy includes:

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

The recommendations of STACFAD were adopted.

IX. Closing Procedure

31. Other Business

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

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

32. Time and Place of Next Annual Meeting

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

33. Press Release

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

34. Adjournment

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

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

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

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

Annex 2. Agenda

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

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

Annex 3. Participant List

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

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

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

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

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

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

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

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

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

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

Annex 5. Opening Statement by the Delegation of the Canada

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

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

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

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

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

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

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

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

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



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

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

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

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

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

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

Thank you.

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

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

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

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

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

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

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

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

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

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

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

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

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

Annex 8. Opening Statement by the Delegation of Japan

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

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

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

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

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

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

Annex 9. Opening Statement by the Delegation of Iceland

Thank you Chair.

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

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

Annex 10. Opening Statement by the Delegation of Norway

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

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

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

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

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

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

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

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

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

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

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

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

Annex 12. Opening Statement by the Delegation of Ukraine

Good day, ladies and gentlemen!

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

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

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

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

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

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

Stay together!

Thank you once again!

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

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

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

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

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

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

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

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

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

On participation of the Russian Federation

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

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

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

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

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

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

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

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

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

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

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

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

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

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



Annex 15. Opening Statement by the Ecology Action Centre

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

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

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

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

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

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

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

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

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

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

Annex 16. Opening Statement by Deep Sea Conservation Coalition

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

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

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

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

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

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

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

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

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

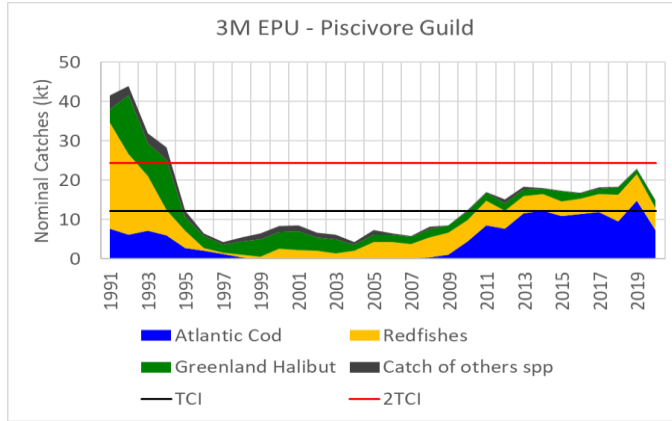
Annex 17. COMPILATION of SC Response to Feedback Questions Regarding its Scientific Advice
[COM Doc. 22-23 now COM WP 22-55]

<p>From European Union [COM WP 22-35]</p>	<p>1. Regarding 3M Cod assessment, EU would like SC to inform which F would correspond with a 50% probability of $SSB_{2025} > SSB_{2022}$ (according to table 2 of the provided assessment).</p>																																																																																																																																																																																																																						
<p>Scientific Council responded [COM WP 22-38 Rev.]</p>	<p>Two projections based on Fishing Mortality have been performed to get $P(SSB_{25} > SSB_{22}) = 50\%$ and $P(SSB_{25} > SSB_{22}) = 75\%$. Results for these two projections are in Tables 1 and 2 as in the advisory sheet of the 3M cod. Table 1 includes the results for the two new projections, while Table 2 shows the risk results for the projections from the advisory sheet together with the two new ones, sorted by the $P(SSB_{25} > SSB_{22})$. New projections in Table 2 are bolded.</p> <p>The F that gives a $P(SSB_{25} > SSB_{22}) = 50\%$ is $0.595 * F_{lim} = 0.099$. The F that gives a $P(SSB_{25} > SSB_{22}) = 75\%$ is $0.046 * F_{lim} = 0.076$.</p> <p>Table 1. Results of the projections of 3M cod with $F_{bar} = 0.595 * F_{lim} = 0.099$ (giving a $P(SSB_{25} > SSB_{22}) = 50\%$) and $F_{bar} = 0.46 * F_{lim} = 0.089$ ($P(SSB_{25} > SSB_{22}) = 75\%$).</p> <table border="1"> <thead> <tr> <th></th> <th colspan="2">B</th> <th colspan="2">SSB</th> <th>Yield</th> </tr> <tr> <th colspan="6">Median and 80% CI</th> </tr> <tr> <th colspan="6">$F_{bar} = 0.595 * F_{lim}$ (median = 0.099)</th> </tr> </thead> <tbody> <tr> <td>2022</td> <td>50511</td> <td>(45475 - 56297)</td> <td>25994</td> <td>(23085 - 28992)</td> <td>4000</td> </tr> <tr> <td>2023</td> <td>48942</td> <td>(43410 - 55808)</td> <td>22651</td> <td>(19983 - 25601)</td> <td>6364</td> </tr> <tr> <td>2024</td> <td>46841</td> <td>(40525 - 54987)</td> <td>23252</td> <td>(20012 - 26635)</td> <td>7507</td> </tr> <tr> <td>2025</td> <td>42058</td> <td>(34385 - 50956)</td> <td>26175</td> <td>(21473 - 31560)</td> <td></td> </tr> <tr> <th colspan="6">$F_{bar} = 0.46 * F_{lim}$ (median = 0.089)</th> </tr> <tr> <td>2022</td> <td>50511</td> <td>(45475 - 56297)</td> <td>25994</td> <td>(23085 - 28992)</td> <td>4000</td> </tr> <tr> <td>2023</td> <td>48942</td> <td>(43410 - 55808)</td> <td>22651</td> <td>(19983 - 25601)</td> <td>5050</td> </tr> <tr> <td>2024</td> <td>48219</td> <td>(41880 - 56341)</td> <td>24447</td> <td>(21252 - 27888)</td> <td>6207</td> </tr> <tr> <td>2025</td> <td>44583</td> <td>(36905 - 53473)</td> <td>28311</td> <td>(23650 - 33758)</td> <td></td> </tr> </tbody> </table> <p>Table 2. 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<p>From European Union [COM WP 22-35]</p>	<p>2. EU would like to seek additional clarifications to understand the apparent difference in the approach given to managing the risks associated to the projections of Cod 3M and Witch flounder 3NO. For 3M cod, scenarios with $F_{bar2024} > F_{lim}$ achieving 3% (3/4 F_{lim}) are not recommended because the probability of having $SSB_{25} > SSB_{22}$ is not very high (27%). For Witch flounder 3NO, SC recommends F associated to 19% risks of $F_{2024} > F_{lim}$ knowing that recruitment was not determined. Furthermore, the recommendation for Witch flounder 3NO allows for scenarios where F approaches of up to $2/3 F_{msy}$ although that would entail a probability of up to 9% of B being below B_{lim}. In the case of Cod 3M the recommended scenario entails a risk of $SSB < B_{lim}$ of up to 1%.</p>
<p>Scientific Council responded [COM WP 22-42]</p>	<p>Advice is not based entirely on risk tables. The key difference between these stock assessments is that in the case of 3M Cod, the predicted decline in total biomass is under all scenarios except for $F=0$, as well as poor recruitment in recent years. This prompted the additional consideration of the trends in total biomass to formulate the advice, whereas for 3NO witch flounder total biomass was predicted to increase under all scenarios. Note that these two stocks are assessed with different models and available data sources.</p> <p>SC consistently applies the NAFO precautionary framework which effectively includes conducting F projections up to F_{lim}, and considers an acceptable exploitation scenario to be those that have a very low (less than 10%) chance of being below B_{lim} and a low chance (less than 20%) of $F > F_{lim}$. Therefore, the advice for both stocks is consistent under those metrics.</p>
<p>From Russian Federation [COM WP 22-36]</p>	<p>Regarding response by SC to the Commission's request 5.b</p> <p>The TCI (Total Catch Index) is proposed by the Scientific Council as a supplementary control measure in addition to the existing TAC and quota system. Having reviewed the proposal, the Russian Federation has several questions:</p> <ol style="list-style-type: none"> 1. TCI approach implies the aggregation of fish stocks into the following trophic guilds: benthivores, planktivores, piscivores, etc. Can the SC provide a clarification on the distribution of stocks according to that approach, i.e., which stock (as outlined in the quota table) goes to which guild? 2. The SC is requested to clarify if there are separate TCI values for different guilds within the same ecosystem. 3. The TACs within an ecosystem are supposed to be reduced to prevent the exceeding of $2 \times TCI$ if their sum exceeds the $2 \times TCI$ when compared. Can the SC give an example of such comparison for a known ecosystem and stocks inhabiting it? 4. The SC is requested to give an explanation on a situation when the sum of TACs for several stocks within an ecosystem exceeds the $2 \times TCI$ for that ecosystem. Are there any principles for selecting a stock for which TAC should be reduced to prevent the $2 \times TCI$ exceeding? 5. Some stocks (e.g., 3LMNO Greenland halibut) are distributed over a large area encompassing several ecosystems.

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



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

Reference links:

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

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

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

<p>From the USA [COM WP 22-37]</p>	<p>In order to better understand how to support the growth of this stock over the long term, noting the projected total decline of total biomass under all fishing scenarios, what catch level in 2023 would result in a 75-percent probability of an increase in the spawning stock biomass for 3M cod by 2025?</p>
<p>Scientific Council responded [COM WP 22-38 Rev.]</p>	<p>Two projections based on Fishing Mortality have been performed to get $P(SSB_{25} > SSB_{22}) = 50\%$ and $P(SSB_{25} > SSB_{22}) = 75\%$. Results for these two projections are in Tables 1 and 2 as in the advisory sheet of the 3M cod. Table 1 includes the results for the two new projections, while Table 2 shows the risk results for the projections from the advisory sheet together with the two new ones, sorted by the $P(SSB_{25} > SSB_{22})$. New projections in Table 2 are bolded.</p> <p>The F that gives a $P(SSB_{25} > SSB_{22}) = 50\%$ is $0.595 * F_{lim} = 0.099$. The F that gives a $P(SSB_{25} > SSB_{22}) = 75\%$ is $0.046 * F_{lim} = 0.076$.</p>



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

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

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

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

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

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

5. Each Contracting Party shall:

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

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

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

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

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

	<p>may be uncertain for various reasons, nevertheless, in need of other means of providing advice in accordance with the management needs, this might still be the best we can do.</p> <ol style="list-style-type: none"> 2. whether it would be feasible to include both metrics in future advice, i.e., Total Allowable Catch (TAC) and Total Allowable Fishing-days (TAF) – the latter maybe with some indication of the associated uncertainty or range as SC finds appropriate. 3. whether such additional information could assist COM in their reiterated aim at ensuring a sustainable management of this stock. 																																																																																				
<p>Scientific Council responded: [COM WP 22-49]</p>	<ol style="list-style-type: none"> 1. SC reiterates the advice provided in SCS 19-23: over the period of this fishery the overall effort allowed has always been high and has not posed much constraint on fishing activity, and it is difficult to standardize “effort units” (e.g. fishing days) in terms of pressure on the stock due to creep in fishing efficiency and the diversity of the individual vessels participating in the fishery. This increases the uncertainty of advice given in fishing days. Therefore, SC recommended that the management of 3M shrimp be converted from the existing “effort regulation” to a “catch regulation” in line with all other stocks in the NRA. However, when the catch/days fishing (df, Table 1) from any year from 2000-2010 (effort data from STATLANT 21B) and 2020-2021 (From SC shrimp meeting 2022) is applied to the recommended TAC from 2019, the range of total days fished to be allocated ranges from 193 to 1448 total days (Table 2). This is much lower than the 2640 allocated in 2020 and 2021. Given the range in days fished arising from Table 2, it would be difficult to give advice on total allowable days. <p>Table 1. Calculation of tonnes per fishing day based on catches and effort used in the years 2000 to 2021.</p> <table border="1"> <thead> <tr> <th></th> <th>NIPAG Catch (000s t)</th> <th>Recommended TAC (000s mt)</th> <th>Allocated Effort (days)</th> <th>Effort Used (days)</th> <th>tonnes/ days fishing</th> </tr> </thead> <tbody> <tr><td>2000</td><td>50</td><td>30</td><td></td><td>3200</td><td>15.6</td></tr> <tr><td>2001</td><td>54</td><td>30</td><td></td><td>5445</td><td>9.9</td></tr> <tr><td>2002</td><td>49</td><td>45</td><td></td><td>4237</td><td>11.6</td></tr> <tr><td>2003</td><td>63</td><td>45</td><td></td><td>5243</td><td>12.0</td></tr> <tr><td>2004</td><td>45</td><td>45</td><td></td><td>4042</td><td>11.1</td></tr> <tr><td>2005</td><td>32</td><td>48</td><td></td><td>2155</td><td>14.8</td></tr> <tr><td>2006</td><td>18</td><td>48</td><td>10555</td><td>1049</td><td>17.2</td></tr> <tr><td>2007</td><td>21</td><td>48</td><td>10555</td><td>1335</td><td>15.7</td></tr> <tr><td>2008</td><td>13</td><td>17-32</td><td>10555</td><td>1069</td><td>12.2</td></tr> <tr><td>2009</td><td>5</td><td>18-27</td><td>10555</td><td>447</td><td>11.2</td></tr> <tr><td>2010</td><td>2</td><td>ndf</td><td>5277</td><td>71</td><td>28.2</td></tr> <tr><td>2020</td><td>0.079</td><td>5.448</td><td>2640</td><td>21</td><td>3.8</td></tr> <tr><td>2021</td><td>6.042</td><td>5.448</td><td>2640</td><td>440</td><td>13.7</td></tr> </tbody> </table>		NIPAG Catch (000s t)	Recommended TAC (000s mt)	Allocated Effort (days)	Effort Used (days)	tonnes/ days fishing	2000	50	30		3200	15.6	2001	54	30		5445	9.9	2002	49	45		4237	11.6	2003	63	45		5243	12.0	2004	45	45		4042	11.1	2005	32	48		2155	14.8	2006	18	48	10555	1049	17.2	2007	21	48	10555	1335	15.7	2008	13	17-32	10555	1069	12.2	2009	5	18-27	10555	447	11.2	2010	2	ndf	5277	71	28.2	2020	0.079	5.448	2640	21	3.8	2021	6.042	5.448	2640	440	13.7
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	<p>Table 2. Fishing effort that would have been advised for a TAC of 5448 tonnes using observed catch rates from table 1.</p> <table> <thead> <tr> <th>tonnes/days fishing</th> <th>Days fishing for a recommended catch of 5448 tonnes</th> </tr> </thead> <tbody> <tr><td>15.6</td><td>349</td></tr> <tr><td>9.9</td><td>549</td></tr> <tr><td>11.6</td><td>471</td></tr> <tr><td>12.0</td><td>453</td></tr> <tr><td>11.1</td><td>489</td></tr> <tr><td>14.8</td><td>367</td></tr> <tr><td>17.2</td><td>317</td></tr> <tr><td>15.7</td><td>346</td></tr> <tr><td>12.2</td><td>448</td></tr> <tr><td>11.2</td><td>487</td></tr> <tr><td>28.2</td><td>193</td></tr> <tr><td>3.8</td><td>1448</td></tr> <tr><td>13.7</td><td>397</td></tr> </tbody> </table> <p>2. Scientific Council reiterates that management by TAC is the most appropriate way to manage the fishery. Nevertheless, setting the allocated days to those close to the values shown in the last column of table 2 could assist in managing this fishery better than it is currently. SC notes that these values would be a factor of 10 lower than the currently allocated days.</p>	tonnes/days fishing	Days fishing for a recommended catch of 5448 tonnes	15.6	349	9.9	549	11.6	471	12.0	453	11.1	489	14.8	367	17.2	317	15.7	346	12.2	448	11.2	487	28.2	193	3.8	1448	13.7	397
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<p>From Canada [COM WP 22-44]</p>	<p>Given the different interpretation by Contracting Parties of the total stock biomass trajectory for 3M cod, can the Scientific Council confirm that the total biomass is projected to decline under all fishing scenarios? Can the Scientific Council confirm that the total biomass has decreased in recent years? Can the Science Council advise the range of fishing scenario where total stock biomass is projected to increase?</p>																												

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

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

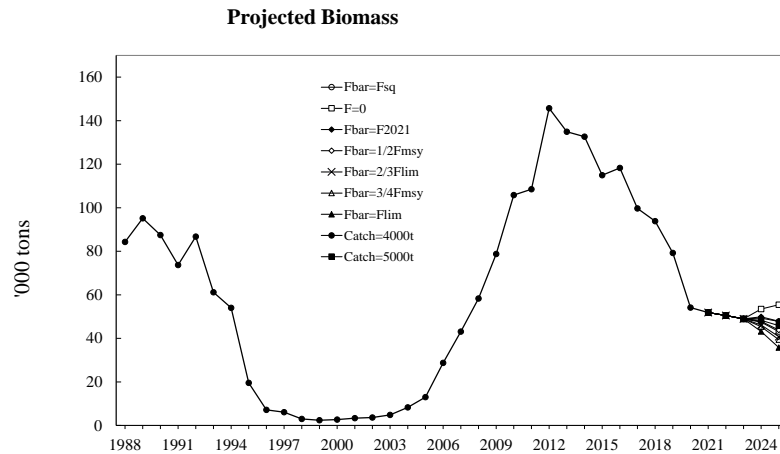


Figure 1. Projections for Total Biomass with different scenarios (STACTFIS report for 3M cod).

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

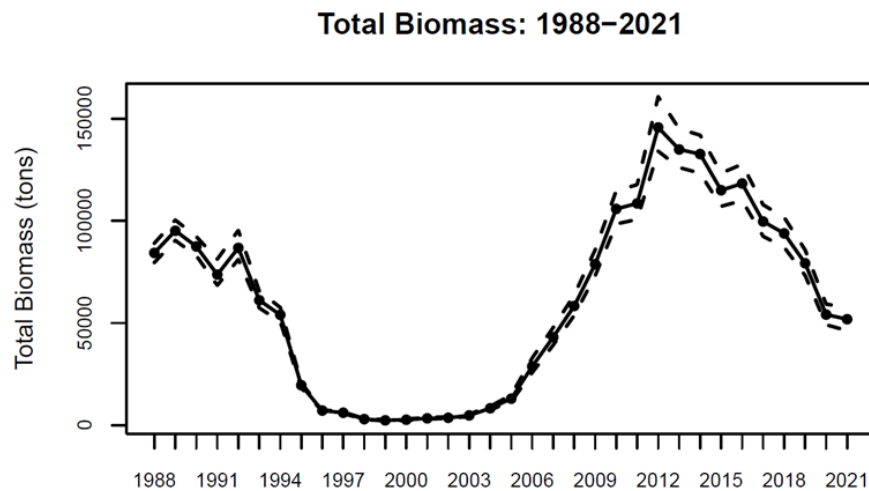


Figure 2. Estimated trends in total biomass. The solid line is the posterior median and the dashed lines show the limits of 80% posterior credible intervals (SCR 22/25).

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

In regard to 3LN Redfish:

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

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

PA Framework Conclusions (numbering does not imply priority)

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

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

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

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

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

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

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

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

In regard to the VME Assessments,

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

In regard to the Ecosystem Roadmap,

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

In regard to the Scientific Support for the Roadmap,

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

In regard to Chapter II, NAFO CEM,

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

Article 17 - Area Restrictions for Bottom Fishing Activities

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

Article 23:

(1) The Commission will request the Scientific Council to

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

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

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

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

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

Article 24:

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

In regard to the GEF ABNJ Deep Seas Fisheries Project,

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

In regard to the Sargasso Sea Commission,

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

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

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

1. The Commission requests that the Scientific Council provide advice for the management of the fish stocks below according to the assessment frequency presented below. In keeping with the NAFO Precautionary Approach Framework (FC Doc. 04/18), the advice should be provided as a range of management options and a risk analysis for each option without a single TAC recommendation. The Commission will decide upon the acceptable risk level in the context of the entirety of the SC advice for each stock guided and as foreseen by the Precautionary Approach.

Yearly basis	Two-year basis	Three-year basis
Cod in Div. 3M Northern shrimp in Div. 3M	Redfish in Div. 3M Thorny skate in Div. 3LNO Witch flounder in Div. 3NO Redfish in Div. 3LN White hake in Div. 3NO Yellowtail flounder in Div. 3LNO Northern shrimp in Div. 3LNO	American plaice in Div. 3LNO American plaice in Div. 3M Northern shortfin squid in SA 3+4 Redfish in Div. 3O Cod in Div. 3NO

Advice should be provided using the guidance provided in **Annexes A or B as appropriate**, or using the predetermined Harvest Control Rules in the cases where they exist (currently Greenland halibut 2+3KLMNO). However, for 3M shrimp supplementary advice in terms of fishing-days should also be considered to the extent feasible.

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

- In 2023, advice should be provided for 2024 for Cod in Div. 3M and Northern shrimp in Div. 3M.
- With respect to Northern shrimp in Div. 3M, Scientific Council is requested to provide its advice to the Commission prior to the 2023 Annual Meeting based on the survey data up to and including 2023.
- In 2023, advice should be provided for 2024 and 2025 for: Redfish in Div. 3M, White hake in Div. 3NO, Yellowtail flounder in Div. 3LNO and Northern shrimp in Div. 3LNO.
- In 2023, advice should be provided for 2024, 2025 and 2026 for: American plaice in Div. 3M.

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

2. The Commission requests the Scientific Council to monitor the status of Greenland halibut in Subarea 2 + Div 3KLMNO annually to compute the TAC using the agreed HCR and determine whether exceptional circumstances are occurring. If exceptional circumstances are occurring, the exceptional circumstances protocol will provide guidance on what steps should be taken.
3. The Commission requests that Scientific Council continue its evaluation of the impact of scientific trawl surveys on VME in closed areas and the effect of excluding surveys from these areas on stock assessments.

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

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

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

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

1. For stocks assessed with a production model, the advice should include updated time series of:
 - Catch and TAC of recent years
 - Catch to relative biomass
 - Relative Biomass
 - Relative Fishing mortality
 - Stock trajectory against reference points
 - And any information the Scientific Council deems appropriate.

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

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

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

Results from stochastic short-term projection should include:

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

F in 2023 and following years*	Yield 2023 (50%)	Yield 2024 (50%)	Yield 2025 (50%)	Limit reference points						P(B2026 > B2023)						
				P(F > F _{lim})			P(B < B _{lim})				P(F > F _{msy})			P(B < B _{msy})		
				2023	2024	2025	2023	2024	2025		2023	2024	2025	2023	2024	2025
$2/3 F_{msy}$	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%
$3/4 F_{msy}$	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%
$85\% F_{msy}$	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%
$90\% F_{msy}$																
$95\% F_{msy}$																
F_{msy}	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%
$0.75 \times F_{status\ quo}$	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%
$F_{status\ quo}$	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%
$1.25 \times F_{status\ quo}$	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%
$F=0$	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%
$TAC_{status\ quo}$																
$85\% TAC_{status\ quo}$																
$90\% TAC_{status\ quo}$																
$95\% TAC_{status\ quo}$																



2. For stock assessed with an age-structured model, information should be provided on stock size, spawning stock sizes, recruitment prospects, historical fishing mortality. Graphs and/or tables should be provided for all of the following for the longest time-period possible:
- historical yield and fishing mortality;
 - spawning stock biomass and recruitment levels;
 - Stock trajectory against reference points

And any information the Scientific Council deems appropriate

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

- For stocks opened to direct fishing: $F_{0.1}$, F_{max} , $2/3 F_{max}$, $3/4 F_{max}$, $85\% F_{max}$, $75\% F_{status\ quo}$, $F_{status\ quo}$, $125\% F_{status\ quo}$,
- For stocks under a moratorium to direct fishing: $F_{status\ quo}$, $F = 0$.

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

Results from stochastic short-term projection should include:

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

F in 2023 and following years*	Yield 2023	Yield 2024	Yield 2025	Limit reference points						P(B2026 > B2023)									
				P(F > F _{lim})			P(B < B _{lim})				P(F > F _{0.1})			P(F > F _{max})					
				2023	2024	2025	2023	2024	2025		2023	2024	2025	2023	2024	2025			
F _{0.1}	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
F _{max}	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
66% F _{max}	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
75% F _{max}	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
85% F _{max}	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
0.75 X F _{status quo}	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
F _{status quo}	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
1.25 X F _{status quo}	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%

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

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

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

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

And any information the Scientific Council deems appropriate.

Annex 22. 2023 Quota Table

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

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

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

Report of the NAFO Commission,
19-23 September 2022

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

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

Historical statements

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

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

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

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

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

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

Article 5 – Catch and Effort Limitations

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

....

5. Each Contracting Party shall:

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

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

Explanatory memorandum

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

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

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

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

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

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

Proposal

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Preamble

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

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

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

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

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

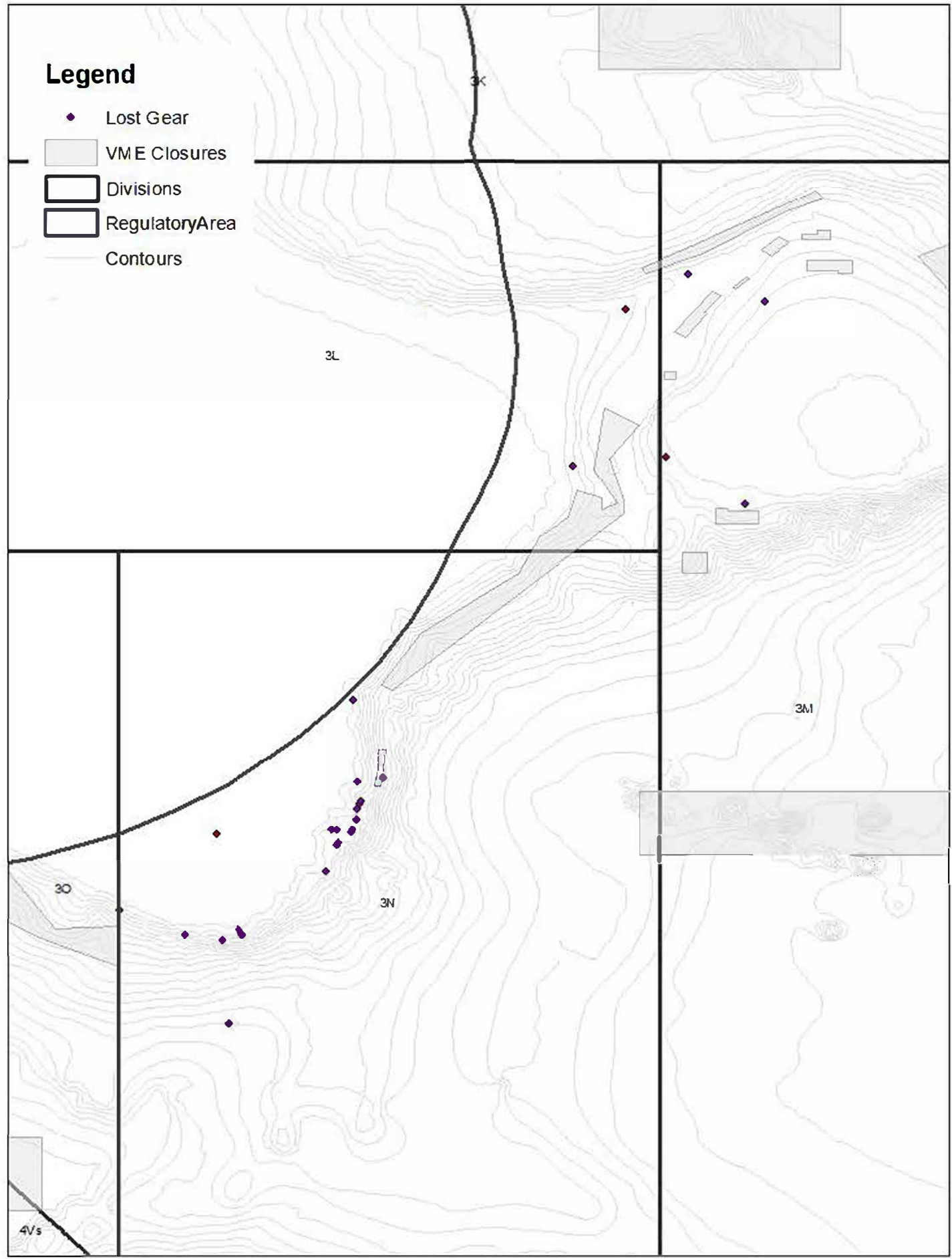
Proposal

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

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

Legend

- ◆ Lost Gear
- VME Closures
- Divisions
- RegulatoryArea
- Contours



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

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

Background

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

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

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

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

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

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

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

Proposal

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

CHAPTER VIII - NON-CONTRACTING PARTY SCHEME

[...]

Article 49 – Presumption of IUU fishing

1. An NCP vessel is presumed to have undermined the effectiveness of the CEM, and to have engaged in IUU fishing, if it has been:
 - (a) sighted or identified by other means as engaged in fishing activities in the Regulatory Area;
 - (b) involved in transshipment with another NCP vessel sighted or identified as engaged in fishing activities inside or outside the Regulatory Area; and/or

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

[...]

Article 52 - Provisional IUU Vessel List

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

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

Duties of the Executive Secretary

~~23.~~ The Executive Secretary:

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

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

(i) the information received pursuant to paragraph 1;

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

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

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

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

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

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

(i1) take all measures to ensure that the vessel immediately ceases all fishing activities that undermine the effectiveness of the CEM;

(i2) report within 30 days from the date of the request on the measures it has taken with respect to the vessel concerned; and

(iii3) state any objections it may have to including the vessel in the IUU Vessel List;

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

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

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

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

Article 53 - IUU Vessel List

Listing a Vessel on the IUU Vessel List

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

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

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

Deleting a Vessel from the IUU Vessel List

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

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

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

Duties of the Executive Secretary

5.4. The Executive Secretary:

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

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

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

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

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

Background

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

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

Proposed Amendments

Article 30 – Observer Program

Duties of the flag State Contracting Party

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

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

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

Background

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

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

Proposed Modifications

Article 6

Exceeding Bycatch Limits in Any One Haul

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

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

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

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

Annex II.A

Logbook Entries

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

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

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

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

Proposal

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

Article 5 – Catch and Effort Limitations

[...]

5. Each Contracting Party shall:

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

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

Background

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

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

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

Proposal

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

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

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

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

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

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

A CHAPTER V

OBSERVER SCHEME

Article 30 – Observer Program

...

Implementation

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

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

Background

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

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

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

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

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

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

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

Proposal

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

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

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

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

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

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

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

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

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

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

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

1.0 Introduction

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

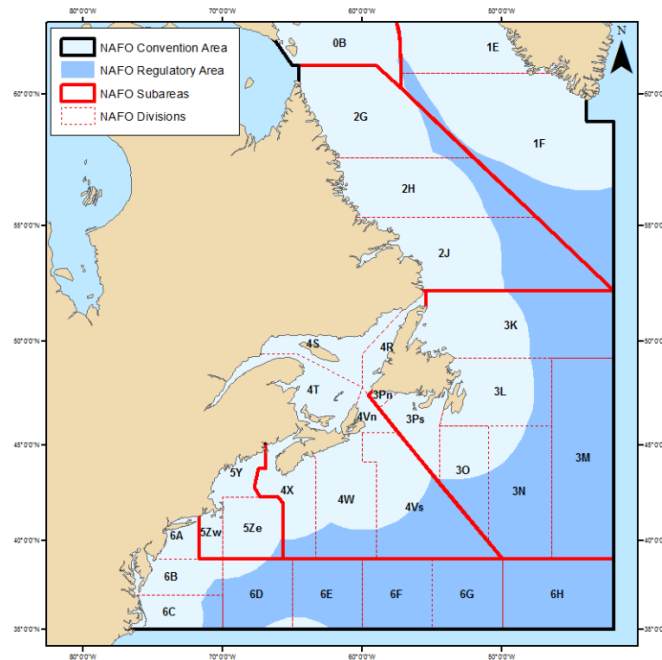


Figure 1.0. Divisions of the NAFO Convention Area and the Regulatory Area (dark blue).

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

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

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

2.0 Fisheries in the NRA

2.1 Fishing effort by gear type

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

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

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

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

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

2.2 Effort distribution by depth in demersal fisheries other than shrimp

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

³ NAFO Members website is source

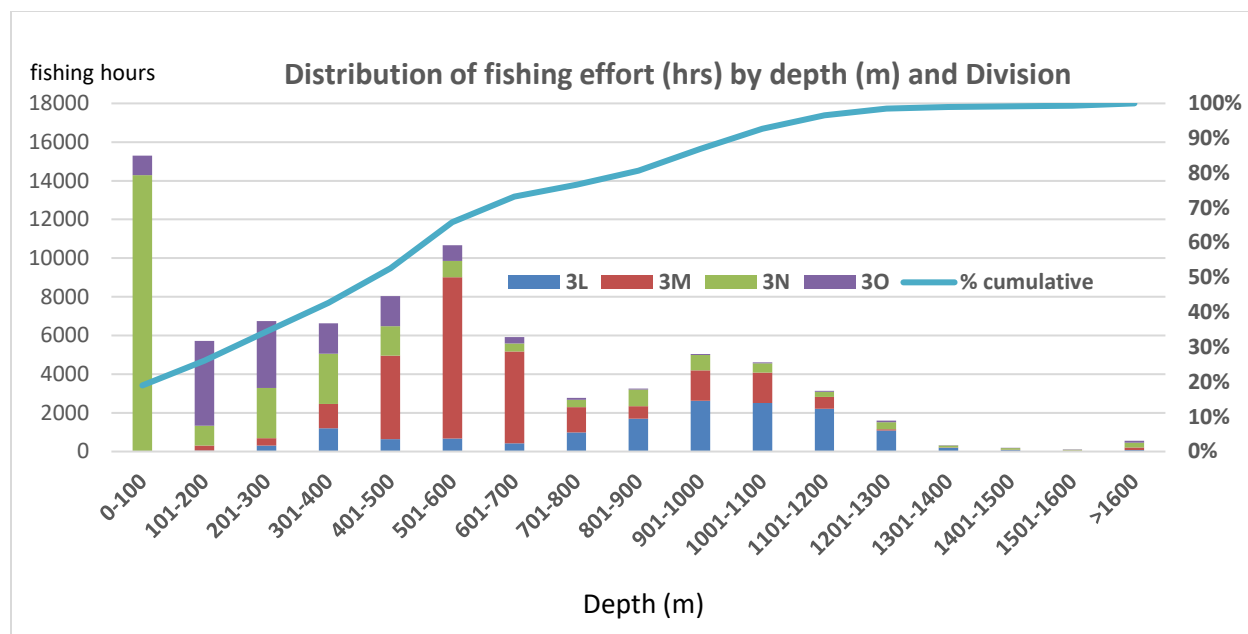


Figure 2.2.1. *Distribution of fishing effort (in hours) by depth (m) in the NRA in 2021 Vessels are assumed to be fishing at speed in the range of 0.5-5.0 knots.*

2.3 Catches in the NAFO Regulatory Area

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

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

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

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

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

3.0 Inspection and Surveillance

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

3.1 Patrol Activity

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

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

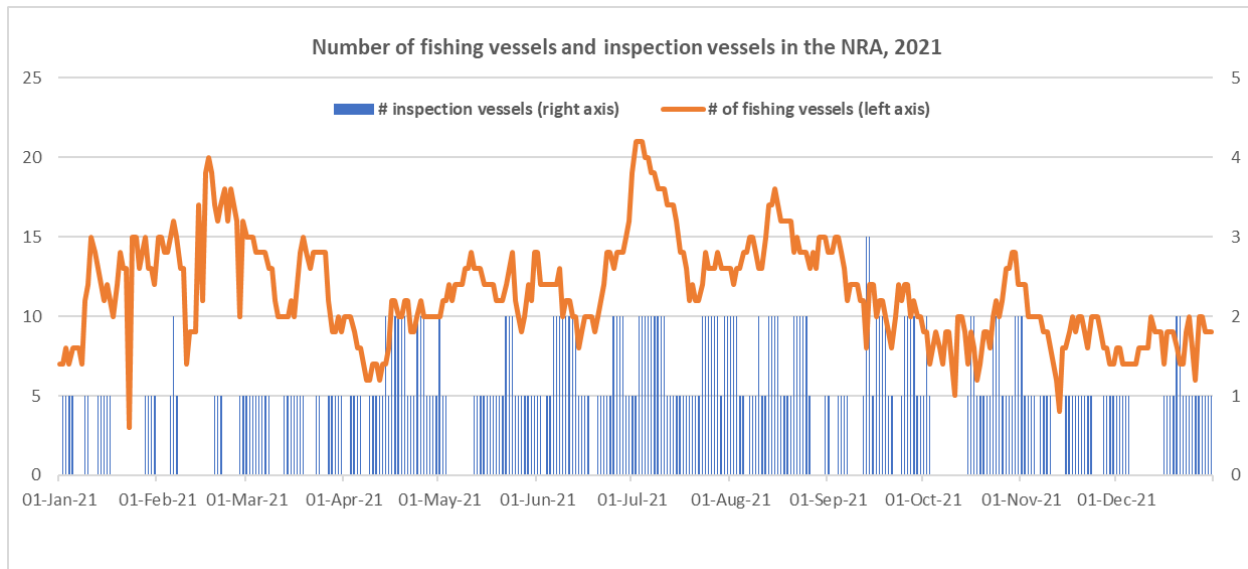


Figure 3.1 *Fishing vessel and Inspection Vessel Presence in the NRA in 2021.*

3.2 At-sea inspections

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

3.3 Port inspections

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

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

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

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

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

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

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

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

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

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

4.0 Compliance

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

4.1 Reporting obligations

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

4.1.1 Vessel Activity Reporting

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

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

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

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

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

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

² CATs of 2021 fishing year

³ Source is MCS website

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

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

4.1.1.2. Catch reporting on sharks

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

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

4.1.1.3 Fishing logbook (haul by haul) reports

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

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

4.1.1.4 Position reporting – VMS

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

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

4.1.1.5 Closed areas and exploratory fisheries

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

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

4.1.1.6 Chartering arrangement

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

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

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

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

4.1.1.7 Notifications on the use of Others Quota

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

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

4.1.1.8 Research activities associated to commercial fishing in the NRA

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

4.1.2 Observer Reports

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

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

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

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

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

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

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

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

4.2 Apparent Infringements detected at-sea and at-port

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

Table 4.2

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

CP	AI's detected at-sea. Serious AIs in bold.	AI's detected in port (PSC3: Section E.1.B. c.)	Follow-up to AI, as reported by flag State CP
EU		Art 21.1(c) and (e) - Product labelling [11Mar2021].	Case led by Lithuania Warning issued. Case closed
EU		Art 38.1(n) - concealing, tampering or disposing of evidence; Art - Product labelling [13May2021]	Administrative proceedings led by Estonia Criminal prosecution led by Portugal Case pending
DFG		Art 27 (b), (d) and (e) - Product labelling of PRA; Art 38 (i) - Mis-recording of catches [10Mar2021].	Fined Kr. 973 832 (130 890 euros). Case Closed
EU	Art 30.15(d) - Intimidation of the Observer [20Feb2021]	Art 28.2(a) - Fishing logbook; Art 38.1(l) - Obstruction, intimidation, or interference; Art 38.1(n) - concealing or tampering of evidence; Art 27.1 and 27.2 - Product labelling [31Mar2021]	Case led by Portugal Case Pending
EU		Art 27.1(e) - Product labelling [22Jul2021].	Case led by Spain Administrative proceedings ongoing Case pending
CAN	Art 28.6(b) - catch on exit (COX): quantity of catch onboard by species upon exit from the Regulatory Area transmitted at least six (6) hours in advance of the vessel's exit [14Jun2021].		Investigation undertaken by CAN authorities determined that the required message for catches of May 25th were sent to the CAN FMC, but were sent outside of established procedures and was not processed to NAFO as a result. The vessel licence holder and master were advised that in future they must ensure all submissions are completed and submitted to CAN FMC as prescribed. Concluded (Case closed)
EU		Art 28.5.(a)(i)(1) and (3) - stowage of catch; Art 25.10(b) - Capacity Plan [14Sept2021]	Case led by Spain Administrative proceedings ae ongoing A bond was set. Case pending
EU	Art 13 - Article 13.6 Gear requirements (strengthening bag with top side chafer) Article 27.1(e) when processed, all species harvested in the Regulatory Area shall be labelled in such a way that each species and product category is identifiable. All species must be labelled using respectively the following data: the product form presentation code as listed in Annex II.K. [22Jul2021]		Case led by Lithuania Sanction of 180 euros applied Case closed
EU	Art 6.3(b) and 6.4 - Exceeding 4% bycatch limit for cod in Div 30 [14Sep2021] Art 28.6(c) Misrecorded COD bycatch in Div 30, Art 28.2 (a) and 28.6(c) - Misrecorded RED catch in Div 3N; Art 38.1 (i) - mis-recording of catches [26Sept2021].		Case led by Portugal Part of the Ctches were seized. Case pending
EU		Art 6.3(b) and (d) - Exceeding bycatch limits [30Oct2021]	Case led by Portugal Case pending
CAN	Art 28 - Monitoring of Catch and Production Logbook and Stowage Plan [27UI2021]		Written Warning issued for Articles 28.3 and 8.5 infringements. Cod bycatch exceedance Article 6.3(b), court conviction with fine of \$2500 and forfeit of the monetary value of the excess fish caught. Concluded (Case closed)
EU	Art 28.6(c) - Mis-recoding COD and PLA bycatch in CAT in Div 30, Art 38.1 (i) Mis-recording of catches [26Sept2021]	Art 28.2(a)(b) - fishing logbook Art 28.3(a) Production logbook Art 6.2(b) and 3(b) Exceeding 3NO Cod bycatch limits [25Nov2021]	Case led by Portugal Case Pending
DFG		Art 28.6(c) - Catch reporting - Failure to report discards, Art 38.1(i) mis-recording of catches [3Sept2021]	Case Pending
DFG		Art 28.6(c) - Catch reporting - Failure to report discards, Art 38.1(i) mis-recording of catches [16Sept2021]	Case Pending

4.3 Follow-up to apparent infringements

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

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

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

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

*still under investigation, litigation or appeal

5.0 Trends and Analysis

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

5.1 Effort and Catch

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

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

⁴ NAFO Members website is source

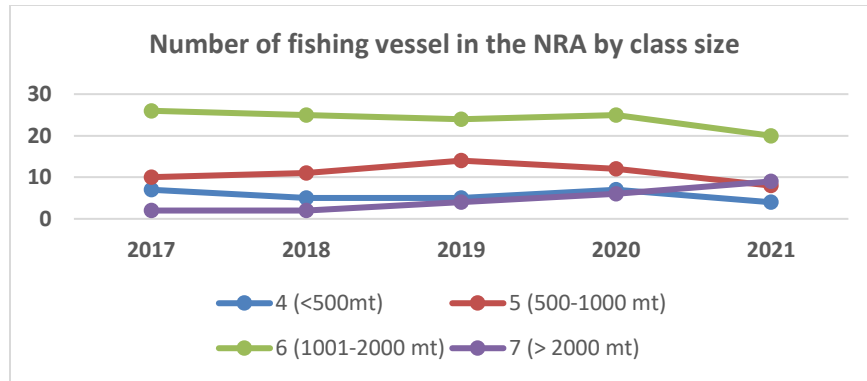


Figure 5.1.1 Number of fishing vessels in Divisions 3LMNO by class size, 2017-2021. The class sizes are based on the STATLANT classification.

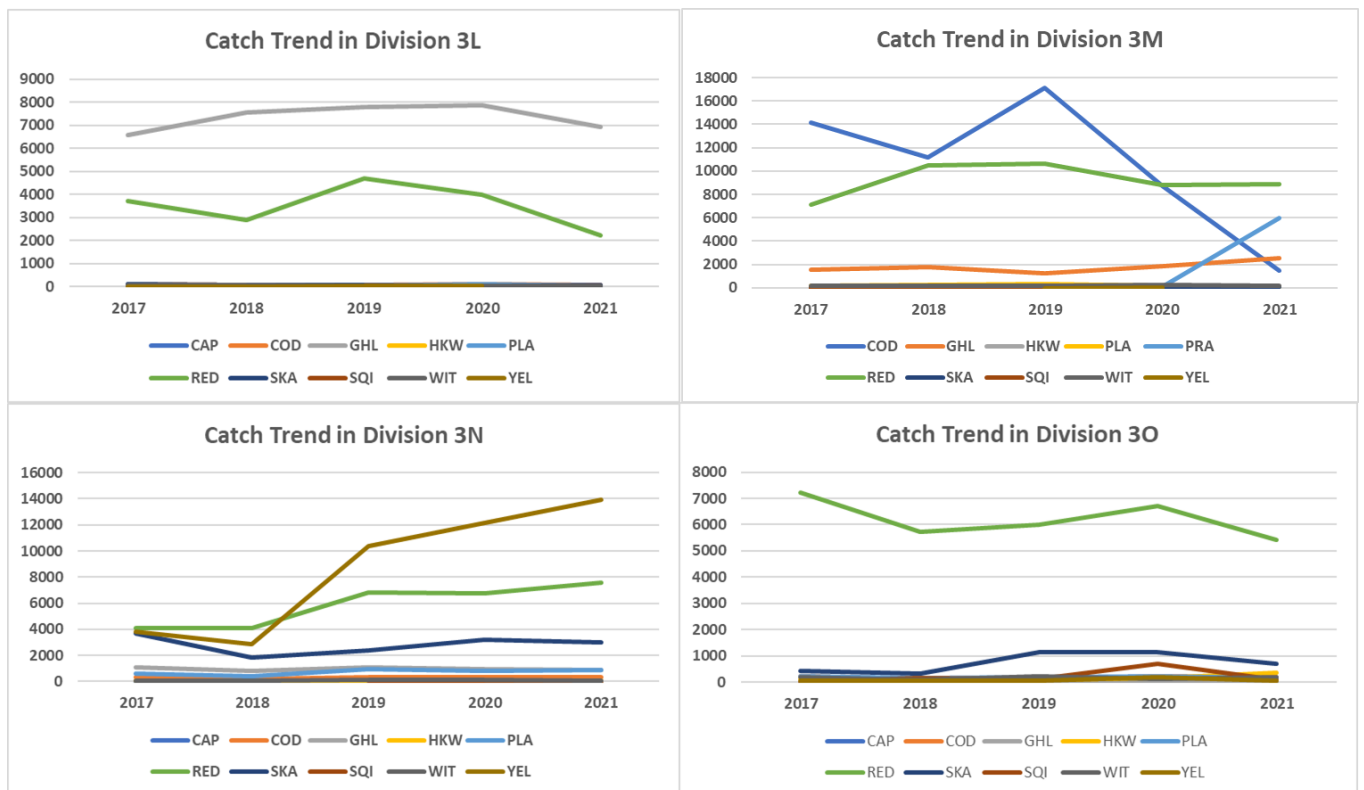


Figure 5.1.2 Catches (in tonnes) by Division of selected species managed by TAC, 2017-2021 (Source: CATs).



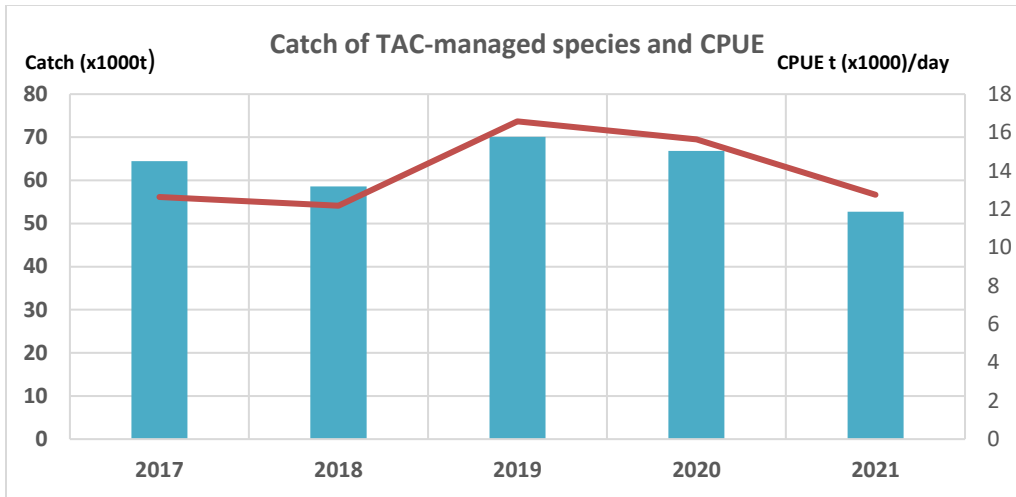


Figure 5.1.3 Catch of TAC-managed species and CPUE in 2017-2021, expressed in total catch of TAC-managed species per fishing day. Data Source: CATs and VMS reports.

5.2 Reporting Obligations by Contracting Parties

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

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

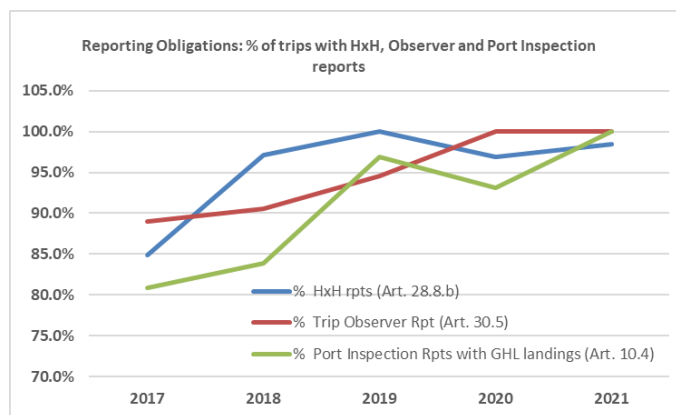


Figure 5.2 Percentage coverage of Port Inspections reports with Greenland halibut landings reports (Article 10.4), Observer Trips Reports on fishing vessels operating under Article 30.5, and Haul by Haul reports (Article 28.8(b)), 2017-2021.



5.3 Compliance by Fishing vessels

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

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

5.4 Inspections and Apparent Infringements

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

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

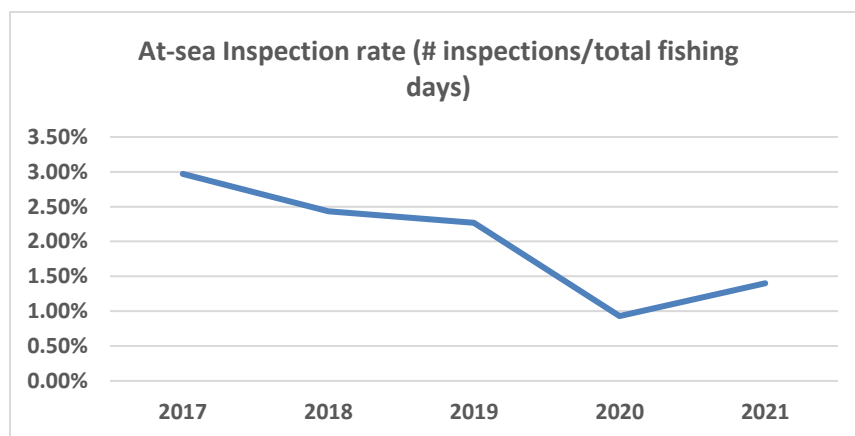


Figure 5.4.1 *Inspection rates (number of at-sea inspections/fishing days) in the NAFO Regulatory Area, 2017-2021.*

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

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

6.0 Conclusions

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

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

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

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

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

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

7.0 Recommendations

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

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

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

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

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

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

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

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

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

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

There was no other control measure identified to be impacted.

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

One Contracting Party reported limited deployments of observers to vessels.

What is the effective date of the suspension/impact?

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

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

What is the reason for not being able to comply?

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

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

One Contracting Party reported the alternative voluntary actions undertaken:

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

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

What is the terminated date?

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

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

Additional Comments

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

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

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

Background

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

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

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

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

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

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

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

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

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

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

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

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

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

Proposal

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

Article 4 – Research Vessels

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

2. *A research vessel shall not:*

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

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

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

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

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

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

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

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

(i) vessel identification.

(ii) purpose.

(iii) summary of scientific methods or procedures.

(iv) location and dates of the research activity.

(v) the name of the principal investigator.

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

(vii) total estimated research catch of the survey target species and whether an observer with sufficient scientific expertise will be on board.

(viii) information on when the research results will be presented to the Scientific Council.

(ix) where relevant, any requests to derogate from the provisions in paragraph 3(c), and

(x) where relevant, indication that the activity constitutes a non-recurrent new survey or research.

(d) unless otherwise supported by the opinion of the Scientific Council pursuant to paragraph 4, ensure that its research vessels retaining on board catches obtained during research activities with the purpose of marketing these catches:

(i) comply with the recording and reporting requirements in Chapter IV.

(ii) have observer with sufficient expertise on board.

(iii) count these catches against the Contracting Party's quota and fishing effort limitations set out in Annex I;

(e) notify the Executive Secretary immediately upon the commencement and termination of research activities of vessels temporarily employed in research, including during fishing trips in which both commercial and research activities take place; and

(f) ensure that its research vessels:

(i) keep on board a copy of the Research Plan and any changes thereof in the English language at all times; and

(ii) stow catches taken in research activities separately with netting, plywood, boxes or other means from all other catches taken in fishing trips in which both commercial and research activities are carried out. The location of the catches taken in research activities shall be indicated in the stowage plan.

4. For vessels temporarily employed in research, the flag State Contracting Party shall immediately upon termination of research activities so notify the Executive Secretary.

5. The flag State Contracting Party shall notify the Executive Secretary not less than seven days before the effective date of any changes to the research plan. The research vessel shall maintain a record of the changes on board.

~~6. Vessels engaged in research shall at all times keep on board a copy of the Research Plan in the English language.~~

4. The measures in paragraph 3(c), (d) and (f)(ii) shall only apply to surveys conducted in the NAFO Regulatory Area targeting stocks included in Annex I.A and Annex I.B of the NAFO CEM.

Duties of the Scientific Council

53. The Scientific Council will provide its written opinion on the research plans in the cases referred to in paragraph 3(b)(ix) and (x).

Duties of the Executive Secretary

~~67. Following notification in accordance with paragraph 3(a),~~ The Executive Secretary:

(a) following notifications in accordance with paragraph 23, without delay:

(i) posts the names of all research vessels in the vessel registry to the NAFO website and includes in such posting any supporting documents provided by the flag State Contracting Party, including the Research Plan,

(ii) submits to the Scientific Council the Research Plan and any changes thereof;

(b) promptly informs the Contracting Parties and posts on the NAFO Website the opinion provided by the Scientific Council pursuant to paragraph 53.

7. NAFO will review these measures in 2023.



Annex 36. Press Release

NAFO CONTINUES TO MAKE SIGNIFICANT PROGRESS IN FURTHER DEVELOPING ITS ECOSYSTEM APPROACH FRAMEWORK AND THE REVISION OF ITS PRECAUTIONARY APPROACH FRAMEWORK

FOR IMMEDIATE RELEASE

Porto, Portugal, 23 September 2022- The 44th Annual Meeting of the Northwest Atlantic Fisheries Organization (NAFO) took place from 19-23 September. This meeting was the first Annual Meeting held in-person since the start of the global pandemic in 2020. The meeting was conducted in a hybrid format for the first time in its history allowing participation both in-person and virtually. During the opening session, delegates from all the NAFO Contracting Parties were welcomed to the meeting by the acting Chair of the Commission, Deirdre Warner-Kramer, and Dr. Isabel Ventura, Deputy Director of the Directorate-General for Natural Resources, Safety and Maritime Services of Portugal.

During the meeting, NAFO made significant progress in further developing its groundbreaking ecosystem approach framework to fisheries management by adopting an ecosystem reference point (“total catch index” or “TCI”) to complement stock assessments and to help inform management decisions regarding the potential risk of ecosystem overfishing.

NAFO also recognized that significant progress was made this year on its revision of its precautionary approach framework, which is a priority for the Organization, despite difficulties arising from the pandemic. This revision is expected to be finalized at the September 2024 Annual Meeting.

In addition, to the traditional total allowable catch (TAC)* and quota decisions, other significant decisions were made regarding the following:

- NAFO adopted a Management Strategy Evaluation Workplan for both Greenland halibut in Divisions 2J+3KLMNO and redfish in Divisions 3LN.
- NAFO adopted measures to prohibit the landing and retention of Greenland sharks in the NAFO Regulatory Area.

Additionally, NAFO selected Brynhildur Benediktsdóttir as the new Executive Secretary for a four-year term beginning in January 2023.

The 45th Annual Meeting will take place 18-22 September 2023, in Santiago de Compostela, Spain.

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PART II.
Report of the NAFO Standing Committee on Finance and Administration (STACFAD)

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

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

44th Annual Meeting of NAFO, 19-23 September 2022
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1. Opening by the Chair, Robert Fagan, (Canada)

The meeting was opened by the Chair, Robert Fagan (Canada), at 14:00 hours on Monday, 19 September 2022. Representatives were welcomed from Canada, Denmark (in respect of the Faroe Islands and Greenland), European Union, France (in respect of St. Pierre et Miquelon), Japan, Norway, Russian Federation, United Kingdom, United States of America and the NAFO Secretariat (Annex 1).

STACFAD was pleased to meet in-person for the first time since 2019 while also offering a hybrid format for those unable to participate in-person.

As in the past few years, the prioritization of our agenda allowed Contracting Parties to reach agreement on routine matters in advance by correspondence. The Chair thanked delegates for their continued flexibility and cooperation to facilitate this process.

2. Appointment of Rapporteur

The NAFO Secretariat was appointed as Rapporteur.

3. Adoption of Agenda

The provisional agenda as circulated in NAFO/22-193 (Rev.) of 20 July 2022 was modified to include the following under agenda 16. "*Other Business*":

- a. Vessel Monitoring System (VMS) Support and Maintenance Agreement
- b. Media Policy

The adopted revised agenda is presented in Annex 2.

It was proposed by the Russian Federation to include a discussion item on the payment of its annual contribution under agenda item 16. Other Business. Canada noted that this would be best dealt with bilaterally and would provide the appropriate Canadian contact details for the Russian Federation delegation. It was agreed that this item would not be included in the agenda.

4. Audited Financial Statements for 2021

As agreed at the last Annual meeting, Baker Tilly Nova Scotia Inc. was appointed to perform the audit for the 2021 fiscal year, in accordance with the NAFO Financial Regulations. The draft audited financial statements for the year ended 31 December 2021 were circulated to the Heads of Delegations and STACFAD delegates in advance of the meeting. As is practice, the financial statements are presented as draft until after they are reviewed by STACFAD and approved by the Organization.

The excess of revenues over expenditures for 2021 was \$203,566 (2020 - \$79,414).

Total expenditures incurred for the fiscal period ending 2021, as shown in the draft financial statements, amounted to \$2,150,041, which was \$300,959 under the approved budget of \$2,451,000. Overall savings for the year can be attributed to the ongoing COVID-19 pandemic and the resulting reduction in travel and meeting costs with meetings being held virtually.

The operating fund had a balance of \$552,984 at year end which was used to reduce contributions from Contracting Parties in 2022. As approved at the September 2021 Annual Meeting, the contingency fund remained at \$285,000; the relocation fund was increased to its maximum level at \$100,000 and the performance review fund was increased by \$15,000 to \$45,000.

STACFAD recommends that:

- **The 2021 Financial Statements be adopted.**

The Auditors noted in their Draft Audit Committee Letter (STACFAD WP 22-16) that there is a small inconsistency with the Organization's policy not to record/recognize the pension plan assets in the NAFO Financial Regulations and the Basis of Accounting used in the financial statements.

Per Paragraph 7.6(a) of the NAFO Financial Regulations there is mention that the Organization does not record/recognize the pension obligation but no mention that the plan assets are also not recorded. This may appear to be inconsistent with Note 2 "Basis of Accounting" per the financial statements which make specific mention of the plan assets not being recorded.

Although it is clear that the organization records neither the pension obligation or plan assets, we would recommend amending the wording of the Regulations to be consistent with the Basis of Accounting used in the financial statements.

The Committee agreed with the Auditors recommendation to amend the first sentence of Rule 7.6(a) of the NAFO Financial Regulations to add the phrase "or plan assets".

STACFAD recommends that:

- **Rule 7.6 of the NAFO Financial Regulations be amended as follows:**

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

- a) The Organization does not record the pension obligation or plan assets relating to its defined benefit pension plan. The Organization uses the pension valuation report provided by the International Fisheries Commission Pension Society (IFCPS) to determine the pension expense at a minimum on a triennial basis. The pension expense consists of the employer portion of the current service pension contribution plus any additional yearly payments required by the IFCPS (as shown in the current valuation report) that are necessary to extinguish the unfunded portion of the pension obligation;***

5. Administrative and Activity Report by NAFO Secretariat

Highlights of the Secretariat's activities for the period September 2021 to August 2022 have been summarized in the Administrative and Activity Report (COM Doc. 22-04).

6. Financial Statements for 2022

Financial Statement estimates for 2022 (projected to 31 December) have been provided by the Secretariat in COM Doc. 22-04.

Operating Expenses for 2022

The operating budget for 2022 was approved at \$2,587,000 while expenditures for the year are projected to be at \$2,466,000, or \$121,000 under the approved budget. As the global COVID-19 pandemic continued into

2022, in-person meetings did not resume until mid-year, albeit at a reduced number. Overall savings for the year can be attributed to the reduction in travel and meeting costs with meetings being held virtually.

All remaining 2022 operating expenses are anticipated to be on or near budget for the year. The above noted cost savings of \$121,000 will be returned to the accumulated surplus and will be available in part to reduce Contracting Parties contributions in 2023.

Assessed Contributions

At the beginning of 2022, the accumulated surplus was \$552,984, which was deemed to be in excess of the needs of the Organization and was allocated towards the 2022 operating budget. As the 2022 budget included a \$23,000 provision for Executive Secretary recruitment and relocation costs, funds will be transferred from the recruitment and relocation fund to offset these expenses. Therefore, in order to meet the 2022 operations budget of \$2,587,000, Contracting Parties were assessed contributions in the amount of \$2,011,016.

Balance Sheet

The Organization's cash position on 31 December 2022 is estimated to be \$942,086. The cash balance should be sufficient to finance appropriations in early 2023 pending the receipt of annual payments by Contracting Parties. Assessed contributions totalling \$204,390 for 2022 are currently outstanding from three Contracting Parties.

7. Review of Accumulated Surplus and Funds

According to the NAFO Financial Regulations, STACFAD and the Commission shall review the amount available in the accumulated surplus account during each Annual Meeting. The accumulated surplus account shall be set at a level sufficient to temporarily finance operations during the first three months of the year, plus an amount up to a maximum of 10% of the annual budget for the current financial year to be used for unforeseen and extraordinary expenses. In addition, the Organization shall also maintain a recruitment and relocation fund, up to a maximum of \$100,000, for relocation costs of internationally recruited staff. In addition, the Organization shall also maintain a performance review fund to pay costs associated with having an external performance review. The performance review fund balance shall be kept at a maximum of \$100,000.

The accumulated surplus account on 31 December 2022 is estimated to be \$854,000 as shown in STACFAD WP 22-03.

STACFAD recommends that:

- **The amount maintained in the accumulated surplus account be set at \$285,000 of which \$200,000 would be sufficient to finance operations during the first three months of 2023, and of which \$85,000 would be a contingency fund available to be used for unforeseen and extraordinary expenses.**
- **The recruitment and relocation fund be increased by \$12,000 to \$89,000 for future recruitment and relocation costs of internationally recruited staff.**
- **The performance review fund be increased by \$15,000 to \$60,000 for future costs associated with having an external performance review.**
- **The estimated balance remaining of \$420,000 shall be maintained in the Operating Fund and applied to reduce annual contributions due from each Contracting Party for the following year.**

8. Personnel Matters

The Secretariat presented a proposal to amend the NAFO Staff Rules to update its payroll deposit days (STACFAD WP 22-4).

The NAFO Staff Rules specify that Secretariat staff members are provided their pay two (2) banking days before the semi-monthly pay periods of the fifteenth (15th) day and the last day of each month. The current two (2) banking days in advance policy has been in place since the establishment of NAFO and was done to allow sufficient time for staff members to manually deposit their pay cheques and time for cheques to clear the bank. As the Secretariat is now utilizing direct deposit, this allows staff members access to their funds on the designated paydays and eliminates the need for the two (2) banking day grace period to deposit their pay cheques. The elimination of the two (2) days in advance requirement also provides better consistency as to when the semi-monthly pay dates will occur.

The Committee agreed with the Secretariat's proposal that Rule 4.2 of the NAFO Staff Rules be amended to eliminate the sentence that stated, "*Members of the Secretariat will be given their pay cheques two (2) banking days before the pay days*".

STACFAD recommends that:

- Rule 4.2 of the NAFO Staff Rules be amended as follows:

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

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

Following the decision by the Commission at the last Annual Meeting, a recruitment process for the selection of a new Executive Secretary for the 2023-2026 term was launched in early 2022. Four candidates have been invited to the Annual Meeting for the interview and selection process by Heads of Delegations.

At the request of the Commission, STACFAD was tasked to develop a draft contract for the newly elected Executive Secretary which was provided to the Chair of the Commission.

10. Internship Program

Activities and tasks of the 2022 NAFO internship program were presented in STACFAD WP 22-06. Due to the COVID-19 pandemic, the NAFO internship continued to be postponed into 2022.

As the internship program offers considerable benefits to the Organization and to the intern themselves, it is anticipated that the internship program will resume in 2023.

STACFAD recommends that:

- The internship period be maintained for six (6) months during 2023.

11. Report on the Annual Meeting of the International Fisheries Commissions Pension Society (IFCPS), 05-07 April 2022

The annual meeting of the International Fisheries Commissions Pension Society (IFCPS) was hosted by the North Pacific Marine Science Organization (PICES) 13–15 April 2021 in Victoria, British Columbia, Canada, with an option to join by video-conference. The meeting was attended by the Executive Directors and Finance Officers of the seven International Fisheries Commissions with headquarters located in Canada and the United

States of America. NAFO was represented by Fred Kingston, Executive Secretary, and Stan Goodick, Deputy Executive Secretary/Senior Finance and Staff Administrator. Also attending the meeting were the IFCPS directors appointed by the Governments of Canada and the United States of America.

Background information on the pension plan, actuarial valuation, investment returns, electronic files, and amendments to the Society By-Laws, was presented within the information paper (STACFAD WP 22-07).

The next annual meeting of the IFCPS will be hosted by the Inter-American Tropical Tuna Commission (IATTC) during the week of 24 April 2023 in La Jolla, California, USA. It was agreed that the meeting would provide a virtual/hybrid option for those not able to attend in person.

12. Implementation of 2018 Performance Review Panel recommendations

The Secretariat provided an update on the implementation of the recommendations tasked to STACFAD in the *"Action Plan for the Implementation of the Recommendations from the 2018 Report of the NAFO Performance Review Panel"* (COM Doc. 19-32) and any other recommendations as assigned by the Commission, specifically:

a. Design a potential new visual identity for NAFO

An update was provided in STACFAD WP 22-08 (Rev.) on the work completed since the 2021 Annual Meeting to initiate a process to design a potential new visual identity for NAFO, in response to Recommendation #36.

A small focus group of NAFO Contracting Parties was established in 2021 to identify key components for the new visual identity of NAFO. The Committee considered the performance review recommendation and the work of this focus group since the last Annual Meeting.

It was believed that a new visual identity should be considered to better align with the current mandate of NAFO. While substantial work has been done, the Committee feels further modifications could be made to refine the potential logo options, however feedback from Contracting Parties would be essential to identify key design elements to be included in NAFO's new visual identity.

These modifications would be made in consultation with the established focus group and STACFAD Members using the current expertise in-house at the NAFO Secretariat, or if necessary, hire an external consultant.

STACFAD recommends that:

- **Contracting Parties consider the three potential logo options as presented in STACFAD WP 22-08 (Rev.) and provide feedback to the Secretariat to assist in production of alternative potential logo options for consideration.**
- **The NAFO Secretariat, in consultation with the established focus group, work intersessionally to refine or produce alternative potential logo options for consideration of STACFAD at the next Annual Meeting.**

b. Data classification and access rights of the NAFO websites

The Secretariat presented STACFAD WP 22-09 containing an update on the work completed by the *ad Hoc virtual NAFO Website Re-Design Working Group: Data Classification* on the implementation of Recommendation #26 to develop a policy regarding the posting and distribution of meeting documentation and thereby enhance the transparency of the Organization.

The Committee endorses the meeting report and recommendations of the Ad Hoc virtual Working Group (COM Doc. 22-02).

STACFAD recommends that:

- In terms of development of a policy regarding posting and distribution of meeting documentation publicly, a hybrid meeting documentation policy (as detailed below) be adopted by NAFO as an interim measure. This hybrid meeting documentation policy would be reviewed by STACFAD after one year (i.e., at the 2023 Annual Meeting of NAFO).
- In terms of development of guidelines for classification of working documents, an interim measure be adopted that the Contracting Party submitting a Working Paper is responsible to designate that Working Paper as “open access” and made available to the general public on the NAFO website prior to the meeting. If the Contracting Party does not make such a designation, then it will not be made available to the general public on the NAFO website prior to the meeting. These guidelines for classification would be reviewed by STACFAD after one year (i.e., at the 2023 Annual Meeting of NAFO).

A hybrid meeting documentation policy includes:

- Prior to the start of any NAFO meeting, NAFO meeting documentation that is received and deemed “open access”, such as a working paper, is made available to the general public on the NAFO website and to the meeting participants on the NAFO Meetings SharePoint.
- Prior to the start of any NAFO meeting, NAFO meeting documentation that is received and deemed “restricted”, such as a working paper, is made available only to the meeting participants on the NAFO Meetings SharePoint.
- During the meeting, NAFO meeting documentation, such as working papers and subsequent revisions, is posted on the NAFO Meetings SharePoint, but not made publicly available on the NAFO website. (This is the current practice)
- Following the Annual Meeting of NAFO in September, meeting documentation that is adopted, such as a working paper, is converted into a NAFO document and made available to the general public on the NAFO website with the exception of Working Papers deemed “restricted”. (This is also the current practice)

c. NAFO operational plan

A status report on the work completed on the development of an annual operational plan for the NAFO Secretariat, Recommendation #35, was presented in STACFAD WP 22-10.

The annual operational plan will be a key tool for the Secretariat to be regularly reviewed by team members and updated throughout the year. Operational reporting is also provided at weekly coordination and monthly staff meetings.

STACFAD endorses the completion of the annual operational plan by the Secretariat, as detailed in in STACFAD WP 22-10.

13. Budget Estimate for 2023

The 2023 budget estimate, as prepared by the Secretariat, was provided in COM WP 22-05. Additional details and highlights on the 2023 budget estimate were provided in STACFAD WP 22-11.

Budget Estimate 2023	Preliminary Budget Forecast 2023	Approved Budget 2022
\$2,650,000	\$2,624,000	\$2,587,000

The 2023 budget estimate of \$2,650,000 represents an increase of \$63,000 or 2.4% over the prior years approved budget.

The personnel services budget accounts for an increase of \$23,000 or 0.9% of the total increase for 2023. NAFO follows the salary scales of similar positions held in the Public Service of Canada which provide for routine economic and salary step increases. Overall salary levels remained consistent with the prior year as new staff members start at or near the beginning of the approved salary scales. Increases to medical and insurance plans can be attributed to increases in the Government of Canada Social Security Plans. The increase in the employee benefits budget for 2023 can be attributed to benefits associated with members of the Secretariat recruited internationally and relocating to Canada.

The computer services budget increased by \$8,000. This can be attributed to ongoing security enhancements implemented to NAFO's firewall, servers, and software. It also includes a provision for a periodic firewall penetration testing to be performed by an external consultant.

The 2022 Inter-sessional Other meetings budget included a \$20,000 provision for costs associated with independent experts invited to attend the NAFO WG-EAFFM Workshop of fisheries managers and scientists to draft ecosystem objectives. The 2022 budget also included a \$25,000 provision to engage an external independent panel to conduct a scientific review of the NAFO Roadmap. No provisions for external experts to attend meetings have been budgeted for 2023. As a result, the NAFO Meetings budget decreased by \$32,000.

The recruitment process for the next NAFO ES was launched in 2022 with an appointment for the 2023–2026 term. The 2022 budget estimate includes a provision for shortlisted candidates travel costs to the NAFO Annual Meeting for interviews as well as some initial relocation costs for the incoming ES. The 2023 budget estimate includes an additional \$85,000 of relocation costs for both the incoming and outgoing ES's.

The relocation fund established in 2017 had \$100,000 available in the fund at the end of 31 December 2021. This fund will be available to offset expenses incurred in 2022, as well as a significant portion of the recruitment and relocation expenses to be incurred in 2023.

STACFAD recommends that:

- **The budget for 2023 of \$2,650,000 (Annex 3) be adopted.**

A preliminary calculation of billing for the 2023 financial year is included in Annex 5.

14. Budget Forecast for 2024 and 2025

The preliminary budget forecast for 2024 (\$2,597,000) and 2025 (\$2,693,000) (Annex 4) was provided in COM WP 22-05. The forecasts were approved in principle, and it was noted that the budget for 2024 will be reviewed in detail at the next Annual Meeting.

15. Adoption of 2022/2023 Staff Committee Appointees

The NAFO Secretariat has a mechanism in place known as the NAFO Staff Committee to help in the rare event that a conflict cannot be solved internally in which the Staff Committee may be asked to intervene and to assist

in achieving a solution through mediation. The Staff Committee has not been called on since its inception in 2005.

The Secretariat members nominated the following people to serve as members of the Staff Committee for September 2022–September 2023: Brian Healey (Canada), Ignacio Granell (European Union) and Deirdre Warner-Kramer (United States of America).

STACFAD recommends that:

- **The Commission appoint the three Staff Committee nominees for September 2022–September 2023: Brian Healey (Canada), Ignacio Granell (European Union) and Deirdre Warner-Kramer (USA).**

16. Other Business

The following other matters were discussed under this agenda item.

a. Vessel Monitoring System (VMS) Support and Maintenance Agreement

At the STACTIC Intersessional Meeting in May 2022, STACTIC discussed if the upcoming expiry of the VMS support and maintenance agreement should be renewed or to put out a call for tender.

STACTIC expressed the views that STACFAD is the relevant body to advise the NAFO Commission on financial decisions and agreed that:

The Secretariat would forward all relevant information to STACFAD in advance of the 2022 Annual Meeting so they could consider in tandem with STACTIC whether to renew the contract with VISMA for 2025 forward or to put out a call for tender.

STACFAD discussed at length STACFAD WP 22-13 that outlined the issue in detail, noting that the most recent contract renewal, which is in place until 2024, was done to allow time to evaluate and determine if a full tender is necessary.

STACFAD considered this question in two parts:

- First, it was noted that while the Secretariat does employ a multiple quote process for procurement, the NAFO Rules of Procedure and Financial Regulations do not require that a tender be issued for procurement of services.
- Second, key aspects of STACFAD WP 22-13 were discussed including the results of the survey of STACTIC participants on their preference, the feedback received from other RFMOs concerning the provision of VMS services, and the time and effort that would need to be committed to complete this tender process.

While there was a clear recognition of the need for due diligence and that the expertise on the particulars of the contract renewal resided in STACTIC, STACFAD was confident that the Working Paper provided a thorough review of the issue from a financial perspective. The Committee considered the significant initial cost of changing providers, the level of satisfaction with the current provider expressed by Contracting Parties and by the Secretariat, the unlikelihood that a change in service provider would result in a monthly savings cost over the term of the contract and the potential risk of a service interruption with a change in service provider. As a result, it was prepared to recommend that the current contract be renewed. STACFAD would continue to support STACTIC in its consideration of the contract renewal.

STACFAD provides the following guidance to STACTIC:

- **The NAFO Rules of Procedure and Financial Regulations do not require that a tender be issued for procurement of services.**
- **After a thorough review of the issue from a financial and administrative perspective, the Committee believes that the current Vessel Monitoring System (VMS) Support and Maintenance Agreement contract provides the best value and least risk to NAFO.**

b. Media Policy

The NAFO Secretariat presented COM WP 22-13 (Annex 6) containing proposed updates to the NAFO Media Policy to reflect creation of the NAFO Commission (COM) in 2017, as well as the introduction of social media.

STACFAD recommends that:

- **The Commission adopt the Updated NAFO Media Policy, as contained in COM WP 22-13.**

17. Election of Chair

According to Rule 5.4 of the NAFO Rules of Procedure: Commission *“The Committee shall elect, to serve for two years, their own Chairperson and Vice-Chairperson, who shall be allowed a vote.”*

The current Chair, Robert Fagan (Canada), was elected in September 2020.

The current vice-Chair, Jake Round (United Kingdom), was elected in September 2021.

Robert Fagan (Canada) was re-elected for a second term.

18. Time and Place of 2023–2025 Annual Meetings

As previously agreed, the dates for the 2023 and 2024 Annual Meetings are as follows:

2023 - 18–22 September
2024 - 23–27 September

STACFAD reviewed and recommended the dates for the 2025 Annual Meeting as follows:

2025 - 15–19 September

The meetings will be held in Halifax, Nova Scotia, Canada, unless an invitation to host is extended by a Contracting Party and accepted by the Organization.

STACFAD recommends that:

- **The 2025 Annual Meeting be held 15–19 September 2025 in Halifax, Nova Scotia, Canada, unless an invitation to host is extended by a Contracting Party and accepted by the Organization.**

The Committee strongly reiterated that Contracting Parties strive, whenever possible, to provide more than 12 months notice of the intention to extend an invitation to host a NAFO Annual Meeting to avoid unnecessary fiscal implications of the Organization having to make a non-refundable deposit to secure conference space.

19. Adjournment

The final session of the STACFAD meeting adjourned at 15:30 hours on 19 September 2022.

Gratitude was expressed to the Committee members for their effective cooperation this week, and to the NAFO Secretariat for its excellent support.



Annex 1. List of Participants

Fagan, Robert (Canada)	Chair
Her, Natalie (virtual) Johnson, Kate Laquerre, Patrice	Canada
Lønberg-Jensen, Ole Ulloriaq	Denmark (in respect of the Faroe Islands and Greenland)
Blazkiewicz, Bernard	European Union
Koczorowski, Pauline	France (in respect of St. Pierre et Miquelon)
Fujiwara, Toshihisa	Japan
Maldonado, Alejandro Chambi	Norway
Tairov, Temur (virtual)	Russian Federation
Round, Jake	United Kingdom
Carlsen, Erika Kelly, Moira	United States of America
Goodick, Stan LeFort, Lisa	NAFO Secretariat

Annex 2. Agenda

1. Opening by the Chair, Robert Fagan, (Canada)
2. Appointment of Rapporteur
3. Adoption of Agenda
4. Audited Financial Statements for 2021
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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
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16. Other Business
 - a. Vessel Monitoring System (VMS) Support and Maintenance Agreement
 - b. Media Policy
17. Election of Chair
18. Time and Place of 2023–2025 Annual Meetings
19. Adjournment

Annex 3. Budget Estimate for 2023
NORTHWEST ATLANTIC FISHERIES ORGANIZATION
 Budget Estimate for 2023
 (Canadian Dollars)

	Approved Budget 2022	Projected Expenditures 2022	Preliminary Budget Forecast 2023	Budget Estimate 2023
1 Personnel Services				
a) Salaries	\$1,272,000	\$1,271,000	\$1,273,000	\$1,269,000
b) Superannuation and Annuities	495,000	495,000	497,000	495,000
c) Medical and Insurance Plans	107,000	107,000	112,000	113,000
d) Employee Benefits	79,000	78,000	82,000	99,000
Subtotal Personnel Services	<u>1,953,000</u>	<u>1,951,000</u>	<u>1,964,000</u>	<u>1,976,000</u>
2 Additional Help	2,000	2,000	2,000	2,000
3 Communications	27,000	27,000	28,000	27,000
4 Computer Services	63,000	63,000	65,000	71,000
5 Equipment	27,000	27,000	27,000	27,000
6 Fishery Monitoring	43,000	43,000	44,000	45,000
7 Hospitality Allowance	3,000	3,000	3,000	3,000
8 Internship	14,000	7,000	14,000	14,000
9 Materials and Supplies	31,000	31,000	32,000	31,000
10 NAFO Meetings				
a) Sessional	187,000	136,000	190,000	192,000
b) Inter-sessional Scientific	30,000	20,000	30,000	30,000
c) Inter-sessional Other	85,000	44,000	40,000	48,000
Subtotal NAFO Meetings	<u>302,000</u>	<u>200,000</u>	<u>260,000</u>	<u>270,000</u>
11 Other Meetings and Travel	40,000	30,000	40,000	40,000
12 Professional Services	45,000	45,000	46,000	45,000
13 Publications	14,000	14,000	14,000	14,000
14 Recruitment and Relocation (Note 1)	23,000	23,000	85,000	85,000
	<u>\$2,587,000</u>	<u>\$2,466,000</u>	<u>\$2,624,000</u>	<u>\$2,650,000</u>

Note 1: Recruitment and relocation expenses will be paid from the available funds in the Recruitment and Relocation Fund. Balance in the fund as of 31 December 2021 was \$100,000.

Notes on Budget Estimate 2023
(Canadian Dollars)

Item 1(a)	Salaries Salaries budget estimate for 2023.		\$1,269,000
Item 1(b)	Superannuation and Annuities Employer's pension plan which includes employer's contributions, administration costs, actuarial fees and the required annual payment towards previous pension plan deficits.		\$495,000
Item 1(c)	Group Medical and Insurance Plans Employer's portion of Canada Pension Plan, Employment Insurance, Group Life Insurance, Long Term Disability Insurance and Medical Coverage.		\$113,000
Item 1(d)	Employee Benefits Employee benefits as per the NAFO Staff Rules including overtime, repatriation grant, termination benefits, vacation pay, and home leave travel for internationally recruited members of the Secretariat.		\$99,000
Item 2	Additional Support Other assistance as required.		\$2,000
Item 3	Communications Phone and internet services Postage and Courier	\$20,000 7,000	\$27,000
Item 4	Computer Services Computer hardware, software, supplies, support and website hosting.		\$71,000
Item 5	Equipment Leases (print department printer, photocopier and postage meter) Purchases Maintenance	\$14,000 10,000 3,000	\$27,000
Item 6	Fishery Monitoring Vessel Monitoring System (VMS) annual maintenance fee including programming changes as required due to changes to CEM Oracle database annual maintenance	\$42,000 3,000	\$45,000

Report of STACFAD,
19–23 September 2022

Item 10(a)	NAFO Sessional Meetings Annual Meeting, September 2023 SC Meeting, June and October 2023	\$192,000
Item 10(b)	NAFO Inter-sessional Scientific Meetings Provision for inter-sessional meetings, symposia and a general provision for unforeseen expenses necessarily incurred by SC required for the provision of answering requests for advice from the Commission.	\$30,000
Item 10(c)	NAFO Inter-sessional Other General provision for Commission inter-sessional meetings.	\$48,000
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	\$45,000 \$29,000 11,000 5,000
Item 13	Publications Production costs of NAFO publications, booklets, brochures, posters, etc., which may include the following: Conservation and Enforcement Measures, Convention, Inspection Forms, Journal of Northwest Atlantic Fishery Science, Meeting Proceedings, Rules of Procedure, Scientific Council Reports, Staff Rules, Secretariat Structure, etc.	\$14,000
Item 14	Recruitment and Relocation Recruitment process for the next NAFO Executive Secretary launched in 2022 with an appointment for the 2023-2026 term.	\$85,000

Annex 4. Preliminary Budget Forecast for 2024 and 2025NORTHWEST ATLANTIC FISHERIES ORGANIZATION
Preliminary Budget Forecast for 2024 and 2025
(Canadian Dollars)

	Preliminary Budget Forecast 2024	Preliminary Budget Forecast 2025
1 Personnel Services		
a) Salaries	\$1,311,000	\$1,363,000
b) Superannuation and Annuities	500,000	507,000
c) Medical and Insurance Plans	116,000	120,000
d) Employee Benefits	79,000	102,000
Subtotal Personnel Services	2,006,000	2,092,000
2 Additional Help	2,000	2,000
3 Communications	28,000	28,000
4 Computer Services	67,000	71,000
5 Equipment	27,000	27,000
6 Fishery Monitoring	46,000	48,000
7 Hospitality Allowance	3,000	3,000
8 Internship	14,000	14,000
9 Materials and Supplies	32,000	33,000
10 NAFO Meetings		
a) Sessional	195,000	198,000
b) Inter-sessional Scientific	30,000	30,000
c) Inter-sessional Other	48,000	48,000
Subtotal NAFO Meetings	273,000	276,000
11 Other Meetings and Travel	40,000	40,000
12 Professional Services	45,000	45,000
13 Publications	14,000	14,000
14 Recruitment and Relocation	-	-
	\$2,597,000	\$2,693,000

Annex 5. Preliminary Calculation of Billing for Contracting Parties for 2023Preliminary calculation of billing
for the 2023 financial year
(Canadian Dollars)

Budget Estimate		\$2,650,000
Deduct:	Amount Allocated from Accumulated Surplus	-\$420,000
	Amount Allocated from Relocation Fund	-\$85,000
Funds required to meet 2023 Administrative Budget		\$2,145,000

Part A

Contracting Parties	2020 nominal catches (metric tons)	Catch %	NAFO Convention Article IX.2.a,b,c			
			10%	30%	60%	Subtotal
Canada	144,041	32.51%	\$81,740	\$49,500	\$418,403	\$549,643
Cuba	-	-	-	\$49,500	-	\$49,500
Denmark (in respect of Faroe Islands and Greenland) (Note 2)	172,863	39.02%	\$98,096	\$49,500	\$502,187	\$649,783
European Union	45,560	10.28%	-	\$49,500	\$132,304	\$181,804
France (in respect of St. Pierre et Miquelon)	478	0.11%	\$271	\$49,500	\$1,416	\$51,187
Iceland	-	-	-	\$49,500	-	\$49,500
Japan	1,732	0.39%	-	\$49,500	\$5,019	\$54,519
Norway	4,453	1.01%	-	\$49,500	\$12,999	\$62,499
Republic of Korea	-	-	-	\$49,500	-	\$49,500
Russian Federation	13,312	3.00%	-	\$49,500	\$38,610	\$88,110
Ukraine	-	-	-	\$49,500	-	\$49,500
United Kingdom	-	-	-	\$49,500	-	\$49,500
United States of America (Note 3)	60,607	13.68%	\$34,393	\$49,500	\$176,062	\$259,955
Total	443,046	100.00%	\$214,500	\$643,500	\$1,287,000	\$2,145,000

Part B

Contracting Parties	Subtotal from Part A	NAFO Convention Article IX.2.d (Note 1)					Subtotal	Total contribution
		% Contribution	Catch % minus DFG	10%	30%	60%		
Canada	\$549,643	25.61%	53.31%	\$27,554	\$9,810	\$125,508	\$162,872	\$712,515
Cuba	\$49,500	2.31%	-	-	\$9,810	-	\$9,810	\$59,310
Denmark (in respect of Faroe Islands and Greenland) (Note 2)	\$649,783	30.29%	-	-\$39,238	-\$117,720	-\$235,435	-\$392,393	\$257,390
European Union	\$181,804	8.48%	16.86%	-	\$9,810	\$39,694	\$49,504	\$231,308
France (in respect of St. Pierre et Miquelon)	\$51,187	2.39%	0.18%	\$91	\$9,810	\$425	\$10,326	\$61,513
Iceland	\$49,500	2.31%	-	-	\$9,810	-	\$9,810	\$59,310
Japan	\$54,519	2.54%	0.64%	-	\$9,810	\$1,508	\$11,318	\$65,837
Norway	\$62,499	2.91%	1.65%	-	\$9,810	\$3,886	\$13,696	\$76,195
Republic of Korea	\$49,500	2.31%	-	-	\$9,810	-	\$9,810	\$59,310
Russian Federation	\$88,110	4.11%	4.93%	-	\$9,810	\$11,607	\$21,417	\$109,527
Ukraine	\$49,500	2.31%	-	-	\$9,810	-	\$9,810	\$59,310
United Kingdom	\$49,500	2.31%	-	-	\$9,810	-	\$9,810	\$59,310
United States of America (Note 3)	\$259,955	12.12%	22.43%	\$11,593	\$9,810	\$52,807	\$74,210	\$334,165
Total	\$2,145,000	100.00%	100.00%	\$0	\$0	\$0	\$0	\$2,145,000

Note 1 The annual contribution of any Contracting Party which has a population of less than 300,000 inhabitants shall be limited to a maximum of 12% of the total budget. When this contribution is so limited, the remaining part of the budget shall be divided among the other Contracting Parties in accordance with Article IX.2.a,b and c of the NAFO Convention.

Note 2 Faroe Islands 2,594 metric tons
Greenland 170,269 metric tons

Note 3 2019 nominal catches were not available prior to the issuance of the 2022 billing. As a result, estimated catches were used for 2022 billing calculation purposes. The subsequent reporting of USA's 2019 catches have been received and the difference between the 2019 actual vs. the estimate used in last year's billing have been applied towards the calculation of contributions for the current financial year.



Annex 6. NAFO Media Policy
(COM Working Paper 22-13)

Conditions for Attendance by Media Representatives at NAFO Meetings

1. All media requests for participation at each NAFO meeting or for interviews with NAFO officers shall be directed to the Secretariat.
2. After verification of media credentials, the Executive Secretary will inform the Chairs of the relevant NAFO bodies, the host ~~country Contracting Party~~ and the ~~country Contracting Party~~ in which the media organization is based with as much advance notice as possible.
3. Media representatives shall register with the NAFO Secretariat on arrival at the meeting and provide a Press card or a letter of authorization or other documentation from the appropriate company.
4. The Executive Secretary can authorize attendance of media representatives at the public sessions of ~~the NAFO Commission, General Council, and~~ Scientific Council ~~and Fisheries Commission~~, i.e. official opening and closing of the meetings, and other sessions so designated by the bodies concerned.
5. No more than two representatives of a particular publication or company shall be allowed to attend the meeting. They are required to remain in a designated area within the meeting room. Depending on the meeting facility, the total number of media representatives attending the meeting may have to be restricted.
6. Media representatives shall not be permitted to make statements or ask questions during sessions.
7. The use of cameras and/or recording equipment can be permitted by the Executive Secretary during the public sessions of NAFO meetings provided that it is set up and operated in a non-disruptive way. One additional person per team may be allowed into the meeting room for the operation of technical equipment (e.g., cameras).
8. Media representatives must leave the meeting premises when they are not attending sessions of NAFO bodies.
9. Background and other information material pertaining to the meeting in question will be compiled specifically for media representatives by the Executive Secretary and either handed out to them during meetings or sent electronically upon request prior to the meeting.
10. a) The Executive Secretary will prepare a press release for circulation, in collaboration with the Chairs of the ~~General Council, Commission, Fisheries Commission~~ and Scientific Council, to be agreed upon at the close of the ~~General Council Annual Meeting, meeting~~.
b) At the discretion of the NAFO President and the Executive Secretary, a press conference shall be held following the close of the Annual Meeting by the Chairs of the ~~General Council, Commission~~, Scientific Council, ~~and the Fisheries Commission~~ and the Executive Secretary.
11. No media posts or content, including social media, shall be permitted by the media or meeting attendees, regarding the meeting proceedings (i.e., meeting discussions and decisions) during the closed sessions of the meeting.
12. Media representatives shall comply with these and with any other conditions determined by the ~~General Council, Commission~~ or by the Executive Secretary.

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

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

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Report of the Standing Committee on International Control (STACTIC)

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

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

The Chair opened the meeting at 02:06pm (GMT+1) on Monday, 19 September 2022 at the Palácio da Bolsa in Porto, Portugal and via WebEx. The Chair welcomed representatives from the following Contracting Parties (CPs) – Canada, Denmark (in respect of Faroe Islands and Greenland), the European Union, France (in respect of St. Pierre et Miquelon), Iceland, Japan, the Republic of Korea, Norway, the Russian Federation, the United Kingdom, and the United States of America (Annex 1).

2. Appointment of Rapporteur

NAFO Secretariat (Mikaela Soroka) was appointed as rapporteur.

3. Adoption of Agenda

The following additions were made to the agenda under agenda item 20 – *Other business*:

- Domestic haul time definitions – Discussion on domestic definitions of start and end times were in a working paper to be forwarded to WG-EAFFM for adoption.

4. STACTIC participation

The Chair opened the agenda item and presented the relevant background. STACTIC had requested the assistance of the Commission to come to a resolution of the participation at the STACTIC meetings. The Commission tasked STACTIC to resolve the issue of participation, which has been ongoing since 2018.

To ensure progress at this meeting, the Chair recommended, and STACTIC agreed, to follow the interim procedure that was agreed in 2019:

Contracting Parties agreed to follow the procedure established at the 2019 Annual Meeting as an interim solution for this meeting without prejudice to any other future possible decisions about the issue of participation, which was that Contracting Parties identify agenda items and/or working papers which they deemed to be of a sensitive nature and discussed in an in-camera (closed) session. The in-camera (closed) sessions would be restricted to government officials and NAFO Commissioners from each delegation. Following the in-camera (closed) discussions, the Chair would report out the results or recommendations in open session.

During this discussion, some Contracting Parties requested that agenda items 5, 7 and 11 be conducted in a closed session. The reasoning for the closed sessions are as follows:

Working papers under agenda item 5, STACTIC WP 22-02 and STACTIC WP 22-04 contained sensitive, confidential fishing information. Agenda item 7 involved a presentation and demonstration on the MCS website, which contains sensitive and confidential information and whereby access is restricted. Agenda item 11 involved discussions related to Contracting Parties' specific information regarding calculating percentages from PSC forms. Some Contracting Parties felt that a closed session was needed to have an open conversation about the topic.

As for resolving, the long-term participation issue, the United States of America and the European Union presented STACTIC WP 22-47 as a proposal outlining possible guidelines for rules of procedure to be adopted by STACTIC that would resolve this issue. After a first round of discussions and comments, a revision to the

document was made addressing the various comments. Because the proposed rules of procedure task the Secretariat with several obligations, STACTIC requested the Secretariat's input on the proposal. The Secretariat indicated that the proposal was reasonable.

STACTIC endorsed WP 22-47 (Rev.) as a Rules of Procedure for future STACTIC participation.

It was **agreed** that:

- **STACTIC endorsed STACTIC WP 22-47 (Rev.) as its Rules of Procedure on participation and data confidentiality.**
- **STACTIC submits STACTIC WP 22-47 (Rev.) to the NAFO Commission**

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

STACTIC WP 22-33 (Rev.) was presented and, after one revision, the document was closed.

STACTIC WP 22-02 (Rev. 3) and STACTIC WP 22-04 (Rev.3) were provided to the STACTIC heads to verify information in the compliance review STACTIC WP 22-03 (Rev.2). Both working papers contain confidential data subject to restricted circulation. STACTIC and the Secretariat felt it necessary to review the annual procedure pertaining to these working papers (draft compliance tables and Inspection Summary). The Secretariat explained that Contracting Parties, in accordance with Article 40, are to submit relevant information pertaining to the inspection summary. The working papers would then be created and presented at the STACTIC Intersessional Meeting, then, Contracting Parties are to submit their comments and edits by the 15 of August. The Secretariat will then incorporate the comments and edits and forward the working papers back to Contracting Parties. Lastly, at the Annual Meeting, the working papers are presented prior to the discussion on the compliance review working paper. This year, there was a delay in the incorporation of the comments, therefore the working papers were amended via email during the week of the Annual Meeting. STACTIC WP 22-02 (Rev. 3) and STACTIC WP 22-04 (Rev. 3) were endorsed by STACTIC after comments were incorporated.

STACTIC WP 22-03 (Rev. 2) was presented by the Secretariat. The changes made since the 2022 STACTIC Intersessional Meeting were highlighted, and Contracting Parties were encouraged to discuss their comments or concerns. Canada suggested making improvements to the conclusions and recommendations section of the report to include more details about compliance issues that exist for the Commission's awareness, similar to practices currently in place in other RFMOs. The need for and importance of conducting a more in depth compliance review of the Observer Program was also noted. DFG made another request that in section 5.1 Effort and Catch, a figure could demonstrate the effort made for the catch by number of vessels, tonnage and engine power. This addition would help to show if there was an increase in fishing effort but not in quota, which would lead to the potential question of why more effort is needed/occurring. A small group composed of delegates from Canada, the European Union and the United States of America drafted the conclusion and recommendations sections. After a thorough revision of the document, STACTIC endorse STACTIC WP 22-03 (Rev. 4) which will be sent to the Commission for their review of the Contracting Parties' compliance.

It was **agreed** that:

- **STACTIC WP 22-03 (Rev. 4) was endorsed by STACTIC and will be forwarded to the NAFO Commission.**

6. **Review of Article 30 of the NAFO CEM**

The Chair opened the agenda item and requested that the Chair of the Observer Program Review Working Group (WG-OPR) provide a summary of the meeting that took place in July 2022 and its report (COM Doc. 22-06 (Rev.)). Following the summary, the WG-OPR Chair requested that STACTIC allow for an extension for the

working group to continue its work in 2023. This was agreed by STACTIC and they will provide an updated Terms of Reference (ToR) intersessionally.

During the review of COM Doc. 22-06 (Rev.), Norway expressed concerns with a few of the recommendations as written and were hesitant to present them to the Commission from STACTIC. Canada prepared STACTIC WP 22-48 which compiled the recommendations made by the WG-OPR, including revisions to address the concerns raised by Norway. This working paper was used to determine the recommendations endorsed by STACTIC. STACTIC agreed to present STACTIC WP 22-48 (Rev. 2) (Annex III) and the WG-OPR report to the Commission, in addition to, informing them that they have completed the task outlined in Article 30.19 of the NAFO CEM.

During the discussion under this agenda point, STACTIC agreed to remove Article 30.19 of the NAFO CEM, seeing as it was a time sensitive article point which was now completed. The proposed change to the article was presented in STACTIC WP 22-50 and it was agreed to forward to the Commission for adoption.

The Chair presented STACTIC WP 22-05 (Rev. 3). It was pointed out that there was missing information from one Contracting Party that was present in the NAFO Regulatory Area in 2021, and it was requested that the missing information be sent as soon as possible. The missing Contracting Party submitted their information; therefore, the document was endorsed by STACTIC as STACTIC WP 22-05 (Rev. 4).

It was **agreed** that:

- **The Observer Program Review Working Group (WG-OPR) continues its work in 2023 to develop the recommendations from STACTIC WP 22-48 (Rev. 2).**
- **WG-OPR Terms of References will be updated via correspondence.**
- **STACTIC WP 22-50 be forwarded to the NAFO Commission for adoption.**
- **STACTIC WP 22-48 (Rev. 2) (Annex III) in addition to the WG-OPR meeting report be presented to the Commission.**

7. NAFO MCS website and application development

The Secretariat presented two requested enhancements for the MCS Website. The first enhancement was a report page requested by Canada that displays the catches transmitted in the daily observer (OBR) message. The second enhancement was the Notification of Others quota uptake summary (NAFO CEM article 5.3(e)) requested by the EU. During the demonstration, the European Union also asked the Secretariat to display the vessel catch details for the Others quota uptake. Contracting Parties thanked the Secretariat for the enhancements made to the MCS website.

It was **agreed** that:

- **The following two enhancements should be available on the MCS Website:**
 1. **Catches from Daily Observer Reports (OBR)**
 2. **Others quota uptake**
- **The Secretariat continues the work on the enhancements to the MCS Website**

Observer Application

The Secretariat provided an update on the development of the observer application's progress for many forms/screens, so they are compatible/reusable for both observer's hardware device and the Quality Control Manager's website. The Secretariat suggested that a small group meet virtually monthly to review the application development progress and an implementation plan. Canada has offered to provide a member to

support the small group. The European Union suggested that the STACTIC Observer Program Review Working Group (WG-OPR) incorporate this project under its Terms of Reference to provide feedback and updates.

It was **agreed** that:

- **The Observer Application development and its implementation plan will be added to the Terms of Reference for the STACTIC Observer Program Review Working Group (WG-OPR).**
- **To establish a small group to review the progress of the Observer Application periodically until it is fully developed.**

Electronic Port State Control (e-PSC) Application

As requested at the 2022 STACTIC intersessional Meeting, the Secretariat obtained detailed information about NEAFC's e-PSC system. The Secretariat has started to design an e-PSC system that incorporates the functionality of NEAFC's system. The European Union supports the e-PSC development but stresses the prioritization of the Observer Application. The European Union also suggested the ability to extract data from the NAFO's e-PSC system in a computer-readable format. The Secretariat suggested that a small group be developed to assist with the development of a NAFO e-PSC system.

Norway commented that it is unfortunate that NAFO is developing a separate system as NEAFC already have a well-functioning system in place, as it will require vessels and FMCs to have both systems. However, Norway acknowledged that NEAFC's system used a different network and software development technologies compared to NAFO.

As requested, the Secretariat attempted to research the integration of FAO's Global Information Exchange System (GIES) into the new e-PSC system. According to the project website (<https://psma-gies.review.fao.org>), the project is in the pilot phase and restricted only to parties already signed up for the project's agreement. Once the pilot phase is complete, the Secretariat will report to STACTIC on the potential data exchange opportunities with FAO's GIES project.

It was **agreed** that:

- **The Secretariat prioritises the development of the observer application.**
- **The Secretariat continues the work on the e-PSC system.**
- **STACTIC will establish a small group to aid in the progress of the development of the observer application and e-PSC**

STACTIC WP 22-16 (Rev. 2) was presented under this agenda item and the Chair encouraged Contracting Parties to review the information and requested that any updates or additions be sent to Secretariat. An additional Single Point of Contact (SPOC) for labor conditions was incorporated into STACTIC WP 22-16 (Rev. 3). The SPOC from this document will be posted to the MCS website.

It was **agreed** that:

- **The SPOC for labor conditions will be posted on the MCS website.**

8. New and pending proposals on enforcement measures: Possible revisions of the NAFO CEM

STACTIC WP 21-51 (Rev. 3) was presented by the United States of America. The working paper proposed to explicitly mention marine mammals, sea turtles and sea birds as part of the data collection required by observers pursuant to Article 30.14. One Contracting Party expressed concern that the addition of only certain species to Article 30.14 could end up limiting the scope of the Article point, since masters and observers are

already required to record bycatch. As an alternative, it was later proposed in STACTIC WP 21-51 (Rev. 4) to include a list of relevant marine mammals, turtles, and sea birds in Annex I.C. and that the preliminary list of the working paper be sent to Scientific Council for their guidance in finalizing a list relevant to the NAFO Regulatory Areas. All Contracting Parties were in support of the new proposal. The Russian Federation noted their concern regarding the written guidance from NAFO required for observers to properly identify species of marine mammals, turtles, and sea birds and duly perform their duties stipulated by Article 30.14 of the NAFO CEM, is to be reflected in the Report of STACTIC. The United States of America reiterated that the obligation for observers to record bycatch, including marine mammals, sea birds, and sea turtles, already exists; express references in Annex I.C. will, at the very least, assist in this endeavor.

STACTIC WP 22-08 (Rev. 4) was presented by the United States of America. The working paper proposes an amendment to Article 13.15 of the NAFO CEM in order to allow an anonymized version of a lost gear map be posted to NAFO public website. STACTIC agreed to forward the proposal to the Commission for adoption.

STACTIC WP 22-24 (Rev.) was presented by Canada. They highlighted that their proposal was aiming to resolve their logistical issue in complying with the current NAFO CEM regarding Article 30.10 (a) by deleting it. There were no objections and a few Contracting Parties explicitly said they were in full agreement with the proposal. Therefore, STACTIC agreed to forward STACTIC WP 22-24 (Rev.) to the Commission for adoption.

STACTIC WP 22-25 (Rev.) was presented by Canada. The working paper reduced the scope of the proposal originally presented at the 2022 STACTIC intersessional Meeting and proposed the addition of labelling by date of capture for 3M redfish in Article 27. Canada again emphasised the utility of this provision in support of inspection efforts in the NRA. One Contracting Party was concerned with how the practical implementation of this amendment would occur for those vessels using electronic logbooks and timestamps. Being unable to reach a consensus, on Canada's request, the working paper was deferred to the 2023 STACTIC intersessional Meeting.

STACTIC WP 22-37 (Rev.) was presented by the United States of America. A previous version of the paper merged the interests of Japan and the United States of America (STACTIC WP 22-29), but the Contracting Parties decided to separate their issues after the Intersessional. The United States of America incorporated the comments made at the 2022 STACTIC Intersessional meeting for their revised proposal. During the discussion, Contracting Parties made clear that vessels were entitled to one trial tow upon its first entrance into a Division on a fishing trip, as defined under Article 1. ('Fishing trip' for a fishing vessel includes the time from its entry into until its departure from the Regulatory Area and continues until all catch onboard from the Regulatory Area has been landed or transhipped.) This clarification ameliorated the European Union's concern of vessels attempting to "zero out" trial tows by departing a division and re-entering. STACTIC agrees that the definition of "fishing trip" includes the landing of the catches in Article I, and therefore this "zero out" scenario could not be allowed. The suggestion to incorporate a reference to the proposed additional article in Annex II.D.C was made. The United States of America clarified Annex II D.C does not currently require the documentation of trial tows. STACTIC agreed to forwards the new revision (STACTIC WP 22-37 (Rev. 2)) to the Commission for adoption. It was also agreed to evaluate the practical implementation of this revision by the next year.

STACTIC WP 22-38 was presented by the European Union. The proposal on this working paper was to eliminate the word "directed" in the NAFO CEM under Article 5.5 (e) as it does not align with Article 5.5 (i) (the word "directed" implies that by-catch would be allowed). All Contracting Parties supported the endorsement of the proposal. Norway noted that they did not support reinforcing any discard requirements, referring to their landing obligation, however, they could go along with this proposal. Denmark (in respect to Faroe Islands and Greenland) pointed out that there might be a possible issue regarding footnote 10 in Annex I.A of the NAFO CEM, however, the European Union clarified that there were no intentions to alter said footnote. STACTIC agreed to forward the proposal to the Commission for adoption.

STACTIC WP 22-41 was presented by the European Union on amendment of Article 4 of the NAFO CEM regarding research vessels. The working paper incorporated the recommendations made from the Scientific Council in reference to the first draft of the proposal, STACTIC WP 22-23, which was forwarded to them from

STACTIC after the 2022 STACTIC intersessional Meeting. After lengthy discussions, the European Union presented STACTIC WP 22-41 (Rev. 4) which was supported by all delegations but Canada, who requested more time to study it. Canada proposed the addition of a derogation for Canadian commercial research vessels for 3 stocks relating to the obligation to count the catches against relevant quotas; have separate stowage on board; recording, reporting and notification obligations; and to have a scientific observer on board: “4. Given Canada’s management of Atlantic halibut, 2J3KL cod and 2J3KL witch flounder, paragraphs 3(c), (d) and (f)(ii) shall not apply to Canadian research activities conducted on these stocks.” Several Contracting Parties strongly opposed a derogation for one Contracting Party; pointed out the straddling nature of the stocks, the existence of NAFO management measures; and that proposed additions are not related to control and depart from previous discussions. Canada disagreed and responded that it was their position that these stocks were managed by Canada, that the measures imposed constituted unacceptable restrictions to their management of and reporting on these stocks and that ultimately they were not meant to address Canadian research activities. The European Union indicated that this is not a STACTIC topic and recalled that all other STACTIC members supported the European Union proposal without this late addition and expressed concerns with the continuation of absence of measures to monitor commercial research activities in the NRA. DFG suggested to adopt the discussed WP 22-41 (Rev. 4), which was supported by the EU. The USA and the European Union asked Canada whether it had flexibility to modify its proposal. Canada suggested it may be appropriate for the Commission to reflect further on this matter.

STACTIC WP 22-44 was presented by the United States of America with the goal of standardizing the definition and collection of start and end time for hauls/tows. The United States of America proposed collecting 4 data points: when the gear enters the water; when the gear starts fishing; when the gear stops fishing; and when the gear is fully retrieved. The United States of America wanted to create consistent data streams to ensure all parties are operating under the same understanding. Additionally, the United States of America expressed that they have found all four data points helpful from an enforcement and compliance perspective. The United States of America proposes to postpone further discussion until the 2023 STACTIC intersessional Meeting, where, in the meantime, the WG-OPR will undertake the discussion intersessionally.

STACTIC WP 22-51 was prepared by Canada (see agenda item 14). The working paper proposes amendments to be made to the NAFO CEM in regard to CAT messages being used as the last catch report instead of a COX if the last catch area is different than the exiting area. Due to the working paper being submitted later on in the week of the meeting, it was decided to continue discussions on the proposal at the 2023 STACTIC Intersessional Meeting.

It was **agreed** that:

- **STACTIC WP 21-51 (Rev. 4) be forwarded to the Scientific Council for their feedback on the preliminary list of species to be added to Annex I.C.**
- **STACTIC WP 22-08 (Rev. 4) be forwarded to the NAFO Commission for adoption.**
- **Secretariat will, from now on, post an anonymized version of the Lost Gear map to the public website.**
- **STACTIC forward STACTIC WP 22-24 (Rev.) to the Commission for adoption**
- **STACTIC revisit Canada’s proposal STACTIC WP 22-25 (Rev.) in the next STACTIC meeting.**
- **STACTIC forward STACTIC WP 22-37 (Rev. 2) to the Commission for adoption.**
- **STACTIC will review the new measure proposed in STACTIC WP 22-37 (Rev. 2) at the 2023 Annual Meeting.**
- **STACTIC forward STACTIC WP 22-38 to the Commission for adoption**
- **The WG-OPR will undertake the proposal from STACTIC WP 22-44 and report back to STACTIC at the 2023 STACTIC Intersessional Meeting.**

- **STACTIC will continue discussion on STACTIC WP 22-51 at the 2023 STACTIC Intersessional Meeting.**

9. Review of Article 7 of the NAFO CEM

The European Union presented STACTIC WP 22-39 which suggests amendments to Article 7 of the NAFO CEM regarding 3M cod port inspection benchmarks. STACTIC adopted STACTIC WP 22-39 (Rev. 2) which includes an editorial revision of the proposal.

It was **agreed** that:

- **STACTIC forward STACTIC WP 22-39 (Rev. 2) to the Commission for adoption**

10. Review of current IUU list pursuant to NAFO CEM Article 53

STACTIC WP 22-22 (Rev. 2) was presented by the European Union, Norway, and the United States of America in an effort to streamline the process for RFMO IUU cross listing since NEAFC already incorporated all RFMO IUU lists into their list. Once STACTIC WP 22-22 (Rev3.) was presented, all Contracting Parties were in favor of forwarding the proposal to the Commission for adoption.

STACTIC WP 22-10 was presented to STACTIC with the goal of reaching consensus on whether or not the vessels on the IUU provisional list could be moved to NAFO's IUU list. Having no objections, STACTIC agreed to migrate the vessels from the provisional IUU list to NAFO's IUU list. The United States of America noted the importance of adopting STACTIC WP 22-22 to ensure clear guidelines for updating and removing vessels from the NAFO IUU Provisional List and the NAFO IUU Vessel List.

STACTIC WP 22-23 or the "*Draft Report – Advancing RFMO IUU Vessel List Utility*" was presented as an information paper for STACTIC. All Contracting Parties felt this was a positive way forward.

It was **agreed** that:

- **STACTIC forward STACTIC WP 22-22 (Rev. 3) to the Commission for adoption.**
- **STACTIC forwards STACTIC WP 22-10 the Commission recommending them to move the vessels currently in the provisional IUU list, to NAFO's IUU list.**

11. Practical application of Port State Measures in NAFO

During a closed session, STACTIC WP 22-35 was presented by Denmark (with respect to Faroe Islands and Greenland) identifying that currently there is no a standard way of calculating percentage on PSC reports. Denmark (with respect to Faroe Islands and Greenland) feel it is important to have consistency within our RFMO and NEAFC. Norway was of the opinion that the landed weight should be the denominator. Several Contracting parties have been using the logbook weight, which is an estimate, but were not opposed with using the landing weight, which is the actual weight going forward if that is what STACTIC decides. The European Union recalled that the provisions in the NAFO CEM relating to by-catch calculations and enhanced follow-up in case of serious infringement require the inspectors to make the calculations of the basis of the master's figures. It was also mentioned during the discussion that this may be an interesting topic to bring up at the next Inspectors Workshop. The United States of America noted that this discussion occurred in a closed session but perhaps was unwarranted.

It was **agreed** that:

- **Discussion will be further carried out in STACTIC and it is suggested to cover this topic during future NAFO Inspector's Workshop.**

12. Marking of gears

At the 2022 STACTIC Intersessional Meeting, it was agreed that Contracting Parties will submit any outstanding domestic information on the marking of gears using the template provided by the Secretariat. STACTIC WP 22-42 (Rev. 2). is the compilation of all submissions received by the Secretariat regarding the marking of gears. The Chair suggests that perhaps another mapping exercise take place similar to this but using the points from the Convention on Conduct of Fishing Operations in the North Atlantic to allow for a simpler method of comparing the relevant application of each set of guidelines in NAFO. The European Union pointed out that the replacement of the old conventions with the FAO guidelines is not an appropriate way forward and that they feel that the FAO Voluntary Guidelines and the old conventions are not comparable documents, in that one could not replace the other without the loss of certain measures. In addition, it was pointed out that some measures in the FAO document would not be applicable for NAFO. During the discussion, it was also noted that for fishing masters whom fish under multiple RFMOs, using different rules can lead to confusion and potentially, unintentional non-compliance.

It was **agreed** that:

- **Secretariat conducts the analysis /background document on the marking of gear rules currently applicable in the Convention on Conduct of Fishing Operations in the North Atlantic by types of gear used in NAFO (trawls, longlines).**

13. Report and recommendations of the Editorial Drafting Group (EDG)

The Chair of the EDG, Patrick Moran, presented STACTIC WP 22-32 which was the report from the EDG meeting that took place in July 2022. The EDG Chair also presented the July meeting report and STACTIC discussed the recommendations one by one as follows:

“STACTIC EDG WP 21-04 (Rev.) should be discussed further by STACTIC at the 2022 Annual Meeting.”

The working paper presents multiple amendments to the NAFO CEM for STACTICs consideration to return to the EDG.

“The European Union will consider a draft definition of “flag State Contracting Party” for discussion by STACTIC at the 2022 Annual Meeting.” And “The European Union explained that the definitions of flag state and contracting party are included in the NAFO Convention, therefore, they cannot be changed in the amendments of the NAFO CEM. Both definitions cover individual states and entities including all the flags of those entities.

Canada suggests using a chapeau in the definition of Contracting Party to include the countries that fall under that contracting party (for example, Denmark is the contracting party in which Faroe Islands and Greenland fall under).

“The discussion on Research Vessel information being posted to the NAFO public website be continued by STACTIC at the 2022 Annual Meeting.”

STACTIC endorses posting research vessel information onto the public cite. Canada offered to draft a proposal to adopt this change however, it was concluded that the text in the NAFO CEM currently reflects the desired message.

“The discussion on possible edits to Article 5.5(e) of the NAFO CEM be forwarded to STACTIC at the 2022 Annual Meeting.”

Addressed under agenda item 8 in STACTIC WP 22-38 and agreed by STACTIC.

“It will be recommended to STACTIC that Article 5.5(j) of the NAFO CEM be edited to use “00:01” to align it with the rest of the NAFO CEM at the 2022 Annual Meeting.”

All in agreement with this amendment to the NAFO CEM.

It was **agreed** that:

- **STACTIC continues the review of STACTIC WP 21-04 (Rev.) at the 2023 STACTIC Intersessional Meeting.**
- **Article 5.5(j) of the NAFO CEM have the time reference be “00:01” instead of “00:00”.**

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

JAGDM Chair, Natasha Barbour, presented their reply to STACTIC’s letter, NAFO/22-163, requesting information on the potential IT implications of using a last CAT to report last catch instead of the COX if the last fished area differs from the area the vessel is exiting from. All Contracting Parties were in agreement with this change. Canada offered to draft a proposal that covers this topic which can be found under agenda item 8 as STACTIC WP 22-51.

15. Bycatch and discards

The Working Group on Control of Landing Obligations (WG-LO) presented STACTIC WP 22-34 and the report for their August meeting (NAFO/COM Doc. 22-05). The working paper is a reply to the Commission request for STACTIC to look into what control elements NAFO would need in order to adopt a landing obligation. STACTIC was comfortable with adopting the response articulated in STACTIC WP 22-34 and agreed to send it to the Commission. Canada reiterated its position expressed at the STACTIC Intersessional Meeting that this was strictly a hypothetical activity, as some Contracting Parties do not have mandatory landing obligations. Norway expressed their interest in continuing the work in STACTIC by looking into measures to avoid unwanted bycatch, however the rest of STACTIC felt it fell outside of their mandate. Canada noted that it would be premature at this stage to identify next steps, citing the need to await the outcome of Commission discussions on the STACTIC reply. Norway expressed that they will make the proposal to the Commission themselves.

It was **agreed** that:

- **STACTIC forward to the Commission STACTIC’s response to the request to consider what control elements are necessary for NAFO to adopt a landing obligation policy, as outlined in STACTIC WP 22-34.**

16. Review and evaluation of Practices and Procedures

STACTIC WP 22-09 (Rev. 5) was presented by the Secretariat for a final confirmation from STACTIC/Contracting Parties that the information was correct and ready to be posted to the public website.

The working paper was endorsed by STACTIC, and the Practices and Procedures in Table 2 of the paper will be uploaded to the NAFO public website.

It was **agreed** that:

- **Contents from Table 2 in STACTIC WP 22-09 (Rev. 5) will be uploaded to the NAFO public website.**

17. Implementation of the Performance Review recommendations

The Secretariat presented an update on the implementation of the 2018 Performance Review Recommendations 5, 7, 15-22, and 24, which were relevant to STACTIC (STACTIC WP 22-17 (Rev. 4)). Updates to the recommendations were as follows:

- **Recommendation 5** – status was updated to Completed as of the 2022 STACTIC Intersessional Meeting.
- **Recommendation 7** – status updated to include that a WG-LO was established and met in August 2022 and prepared a response for the Commission (STACTIC WP 22-34) that has been adopted by STACTIC at the 2022 STACTIC Annual Meeting.
- **Recommendation 16** – status updated to completed seeing as considerable work has been done in the creation of STACTIC WP 22-19 (to be sent to WG-EAFFM) which that there has been considerable improvement in quantity and quality in the reporting of VMEs observers since 2019, the year Article 30 was last overhauled by STACTIC.
- **Recommendation 17** – status updated to include that the discard aspects of the Action Plan was taken on by WG-LO
- **Recommendation 18** – status update that the Commission requested the Scientific Council on STACTIC’s behalf to provide additional information on garbage disposal at sea.
- **Recommendation 19** – status updated to Completed.
- **Recommendation 20** – status update that STACTIC re-iterated its request for clarification to the Commission, however, the Commission had no further guidance to give and left STACTIC with the recommendation and proposed action as is.
- **Recommendation 21** – status update that STACTIC will continue its work on this into 2023.

With regard to Recommendation 20, Norway re-iterated that in their view, the recommendation from the Performance Review Panel that the NAFO Contracting Parties conduct a flag State evaluation and submit this to STACTIC, would be a very useful exercise, as flag State performance is key the successful implementation of the NAFO CEM. Norway was of the opinion that this item should be kept open. The European Union re-iterated that the NAFO Commission has not agreed to mandated STACTIC to carry out a flag state evaluation exercise. Norway reminded that STACTIC had asked the Commission for guidance on whether the Contracting Parties should carry out self-assessments in accordance with the Recommendation from the Performance Review Panel, or whether it should carry out a review of the FAO Guidelines. As there was no consensus in the Commission, this question had been referred back to STACTIC by the Commission.

STACTIC noted that there was no consensus from the Commission and agreed to continue the discussions at the 2023 Intersessional Meeting, in so far that the issue was referred back to STACTIC.

It was **agreed** that:

- **STACTIC will continue its discussion on the recommendations outlined in STACTIC WP 22-17 (Rev. 4) at the 2023 STACTIC Intersessional Meeting.**

18. Discussion on garbage disposal onboard vessels

All contracting parties are eagerly awaiting the reply from the Scientific Council who were requested by Commission to provide STACTIC with more (if any) information and data on garbage disposal at sea. Canada understood the value of the information from Scientific Council but stressed the need to continue to advance this issue with the NAFO CEMs. Canada provided an anonymized photographic display of what inspectors are too often encountering in the NRA, demonstrating the existence of this issue which warrants attention. Norway was of the opinion that NAFO should include a reference to MARPOL ANNEX V in the NAFO CEM. STACTIC also recommends that the WG-OPR discuss the possibility of observers collecting information on garbage disposal aboard vessels.

It was **agreed** that:

- **The WG-OPR incorporate the discussion regarding observers collection of data pertaining to garbage disposal at sea.**
- **STACTIC continues the discussion on garbage disposal after the feedback from the Scientific Council has been received.**

19. Visma VMS contract renewal

The Secretariat presented STACTIC WP 22-49 which is the draft recommendations from STACFAD. The working paper was in favor of not going to tender due mainly to the additional cost and effort involved in changing providers. STACTIC noted and supported STACFAD's recommendation to not go to tender, however, STACTIC would like the option of a tender to be considered in the future. Tender will not be needed at this time.

It was **agreed** that:

- **STACTIC noted that STACFAD recommended to the NAFO Commission that the VMS contract with VISMA will be extended.**

20. Other business

Domestic Haul time definitions

STACTIC WP 22-46 (Rev. 3) was presented as agreed at the 2022 STACTIC intersessional Meeting with the goal of forwarding the working paper to WG-EAFFM for incorporation into the Practices and Procedures. The working paper was missing some delegations that were incorporated in STACTIC WP 22-46 (Rev. 4). It was agreed that a deadline be set for 15 October 2022 for any additional or editorial information. After that deadline, the Secretariat will forward the working paper to WG-EAFFM. It was also mentioned that the WG-OPR could add this to their ToR, as mentioned under agenda item 8 for the discussion regarding STACTIC WP 22-44.

It was **agreed** that:

- **All contracting parties are invited to submit their domestic haul times to the NAFO Secretariat for incorporation into STACTIC WP 22-46 (Rev. 4) prior to 15 October 2022.**
- **After 15 October 2022, STACTIC WP 22-46 (Rev. 4) will be sent to WG-EAFFM with the goal of incorporated into the Practices and Procedures.**

21. Election of Chair and vice-Chair

In accordance with Rule 5.3 of the NAFO Rules of Procedure for the Commission, the current Chair, Kaire Martin (European Union), opened the floor for nominations of the interim STACTIC Chair to serve out the remainder of her term. With great sorrow of letting the current Chair go, all Contracting Parties agreed to nominate the current vice-Chair, Patrick Moran (United States of America), as the interim Chair for 2023. Patrick graciously accepted the nomination and will commence STACTIC Chair duties after the 2022 Annual Meeting.

It was **agreed** that:

- **Patrick Moran (United States of America) was elected the interim STACTIC Chair to commence duties after the 2022 Annual Meeting. Election of the STACTIC Chair will take place at the 2023 Annual Meeting.**

22. Time and Place of next meeting

The next STACTIC intersessional Meeting will be scheduled during the beginning of the week of 08 May 2023. If the meeting can be held in person, it will be a 3-day meeting, and if the meeting will be held virtually, it will be a 4-day meeting. If the meeting can be held in person, it will take place at the NAFO Secretariat in Halifax, Canada, unless another Contracting Party offers to host.

23. Adoption of Report

The report was adopted on 22 September 2022, prior to the adjournment of the meeting.

24. Adjournment

The meeting was adjourned at 06:40pm (GMT+1) on 22 September 2022.

Annex 1. List of Participants

Märtin, Kaire (EU)	STACTIC Chair
Barbour, Natasha Browne, Dion Hickey, Jenelle (virtual) Hurley, Mike Napier, Brent Warren, Genevieve (virtual)	Canada
Jacobsen, Petur Meinhard (virtual) Levring Radoor, Sanne Rømer Nedergaard, Mads Gaardlykke, Meinhard	Denmark (in respect of the Faroe Islands and Greenland)
Bulauskis, Alenas Chamizo, Carlos Ferreira, Carlos Härm, Egle (virtual) Arrhenius, Fredrik Head, François Babcionis, Genadijus Eliassen, Jørgen Romaite, Kristina Mancebo, C. Margarita Santos, Mario Grossmann, Meit Quintans, Miguel Okas, Reemet Tubío, Xosé	European Union
Chiarovano, Serge	France (in respect of St. Pierre et Miquelon)
Asmundsson, Johann Greil, Snorre	Iceland
Akiyama, Masahiro Matsunaga, Satoshi	Japan
Myrvang, Runa Ognedal, Hilde	Norway
Kim, Soomin (virtual)	Republic of Korea
Lizogub, Alexander (virtual)	Russian Federation
Seales, Star	United Kingdom
Day, Lennie Jaburek, Shannah Moran, Patrick (virtual) Pohl, Katherine	United States of America

Provencher, Eric (virtual) Raymond, Maggie Reid, Eric (virtual) Soule, Hank Usher, Rick	
Kendall, Matt Laycock, DJ Soroka, Mikaela	NAFO Secretariat

Annex 2. Agenda

1. Opening by the Chair, Kaire Märtin (European Union)
2. Appointment of Rapporteur
3. Adoption of Agenda
4. STACTIC participation
5. Compliance review 2022 including review of apparent infringement reports and of chartering arrangements
6. Review of Article 30 of the NAFO CEM
7. NAFO MCS website and application development
8. New and pending proposals on enforcement measures: Possible revisions of the NAFO CEM
9. Review of Article 7 of the NAFO CEM
10. Review of current IUU list pursuant to NAFO CEM Article 53
11. Practical application of Port State Measures in NAFO
12. Marking of gears
13. Report and Recommendations of the Editorial Drafting Group (EDG)
14. Report and advice of the Joint Advisory Group on Data Management (JAGDM)
15. Bycatch and discards
16. Review and evaluation of Practices and Procedures
17. Implementation of the Performance Review recommendations
18. Discussion on garbage disposal onboard vessels
19. Visma VMS contract renewal
20. Other Business
21. Election of Chair and vice-Chair
22. Time and place of next meeting
23. Adoption of report
24. Adjournment

Annex 3. Recommendations from the Observer Program Review Working Group (WG-OPR) 2022 Meeting that have been endorsed by STACTIC
(STACTIC WP 22-48 (Rev. 2))

The WG-OPR presented a summary of its recommendations to STACTIC. STACTIC reviewed and edited the recommendations and present their endorsed recommendation.

STACTIC Recommendations based on recommendations from WG-OPR:

#	Recommendations from the WG-OPR	Article	Recommendations Endorsed by STACTIC
1	The WG-OPR recommends a number of tasks to carry out a full update of the Observer Program by 2023 without prejudice to the possibility to amend some elements of the program in 2022, which is identified as a priority.	30	The WG-OPR recommends a number of tasks to carry out a full update of the Observer Program by 2023 without prejudice to the possibility to amend some elements of the program in 2022, which is identified as a priority.
2	The WG-OPR recommends establishing a clear mandate for the flag State Contracting Parties to adopt appropriate measures necessary to effectively comply with their responsibilities under the observer program.	30	The WG-OPR recommends establishing a clear mandate for the flag State Contracting Parties to adopt appropriate measures necessary to effectively comply with their responsibilities under the observer program.
3	The WG-OPR recommends assessing the need to update Article 38 on serious infringements when undertaking changes to the observer program.	38	The WG-OPR recommends assessing the need to update Article 38 on serious infringements when undertaking changes to the observer program.
4	The WG-OPR recommends to revise the use of the expression “trip” and “entry into port” in the wording of Art 30, in light of the definition of fishing trip in the NCEM and with a view to clarify the reporting requirements.	30	The WG-OPR recommends to revise the use of the expression “trip” and “entry into port” in the wording of Art 30, in light of the definition of fishing trip in the NCEM and with a view to clarify the reporting requirements.
5	The WG-OPR recommends to undertake an editorial revision of the program, including grouping general provisions and flag State Contracting Parties’ obligation; and to consider to move to Annex II.M the data elements to be reported by observers.	30	The WG-OPR recommends to undertake an editorial revision of the program, including grouping general provisions and flag State Contracting Parties’ obligation; and to consider to move to Annex II.M the data elements to be reported by observers.
6	The WG-OPR recommends considering derogations based only on exceptional and appropriately justified circumstances or the use of remote electronic monitoring and equivalent sensor technologies.	30.6	The WG-OPR recommends considering derogations based on appropriately justified circumstances as described in Article 30.6 a)- e) or the use of remote electronic monitoring and equivalent sensor technologies.

7	The WG-OPR recommends to consider the use of REM and equivalent sensor technologies as justification to derogate from a 100% observers' coverage. In connection with this option, the Working Group recommends to develop minimum standards for the system and to identify scientific data that the system could not provide, as well as appropriate alternatives to collect this data (e.g. by the operator).	30.6.d	The WG-OPR recommends to consider the possibility of using REM and equivalent sensor technologies as justification to derogate from a 100% observers' coverage, including questions regarding data storage and retrieval, data standards, data protection and sharing, ownership and maintenance. In connection with this option, the Working Group recommends to develop minimum standards for the system and to identify scientific data that the system could not provide, as well as appropriate alternatives to collect this data (e.g. by the operator).
8	The WG-OPR recommend to STACTIC that Contracting Parties share information on their REM and equivalent sensor technologies experiences including successes and any challenges faced.	30.6.d	The WG-OPR recommend to STACTIC that Contracting Parties share information on their REM and equivalent sensor technologies experiences including successes and any challenges faced.
9	The WG-OPR recommends the drafting of templates for Contracting Parties' reporting obligations including 30.6.e, 30.9.c, and 30.10.d.	30.6.e, 30.9.c, 30.10.d	The WG-OPR recommends the drafting of templates for Contracting Parties' reporting obligations including 30.6.e, 30.9.c, and 30.10.d.
10	The WG-OPR recommends to establish a common understanding on the meaning of the requirement to ensure that observers are equipped with an independent two-way communication device at sea", in particular whether it entails an independent data connection or only an independent device; as well as, for the latter case, to consider the introduction of an obligation of the Master to provide a data connection for the observer.	30.8.e	The WG-OPR recommends to establish a common understanding on the meaning of the requirement to ensure that observers are equipped with an independent two-way communication device at sea", in particular whether it entails an independent data connection or only an independent device; as well as, for the latter case, to consider the introduction of an obligation of the Master to provide a data connection for the observer.
11	The WG-OPR recommends compiling "international standards or guidelines"..	30.8.f	The WG-OPR recommends compiling "international standards or guidelines"..
12	The WG-OPR recommends developing common standards (e.g. training, equipment, working conditions, safety, etc) to be made part of the Observer Program. This task can be linked to the research and identification of international standards and guidelines referred to in Art 30.8(f) of the NAFO CEM.	30.8.f	The WG-OPR recommends considering developing common standards with regard to training and equipment, unless such standards or guidelines already exist.),
13	The WG-OPR recommends to simplify the 24h observer deployment notification under Article 30.10(a) of the NAFO CEM.	30.10.a	The WG-OPR recommends to simplify the 24h observer deployment notification under Article 30.10(a) of the NAFO CEM.

14	The WG-OPR recommends to undertake a revision of Annex II.M to incorporate additional elements (e.g. Greenland sharks' data) and to update the associated templates.	30.14	The WG-OPR recommends to undertake a revision of Annex II.M to incorporate additional elements (e.g. Greenland sharks' data) and to update the associated templates.
15	The WG-OPR recommends including within the observers' tasks the verification of average box weights and presentations. In adding these tasks, the frequency or scenarios for that verification must give due regard to the already many tasks of the observers.	30.14	The WG-OPR recommends including within the observers' tasks the verification of average box weights and presentations. In adding these tasks, the frequency or scenarios for that verification must give due regard to the already many tasks of the observers.
16	The WG-OPR recommends that the requirements to verify production logbook data and labelling be made more explicit in the NAFO CEMs.	30.14	The WG-OPR recommends that the requirements to verify production logbook data and labelling be made more explicit in the NAFO CEMs.
17	The WG-OPR recommends to establish the observer application as a main tool for the observers to carry out their reporting obligations and to explore the necessary steps to be undertaken including by the NAFO Secretariat to produce and maintain the observer application.	30.14	The WG-OPR recommends to establish the observer application as a main tool for the observers to carry out their reporting obligations and to explore the necessary steps to be undertaken including by the NAFO Secretariat to produce and maintain the observer application.
18	The WG-OPR recommends that STACTIC review the wording of 30.14.g.	30.14.g	The WG-OPR recommends that STACTIC review the wording of 30.14.g.
19	The WG-OPR recommends to include as part of the revision of the observers' reporting template (Annex II.M) information on maturity, disposition, pictures and fork length of Greenland sharks, and to the extent necessary, location; as well as an indication that data collection is done minimizing damage to the sampled individuals.	30.14.j	The WG-OPR recommends to include as part of the revision of the observers' reporting template (Annex II.M) information on maturity, disposition, pictures and fork length of Greenland sharks, and to the extent necessary, location; as well as an indication that data collection is done minimizing damage to the sampled individuals.
20	The WG-OPR recommends to seek the Scientific Council's input on STACTIC WP 21-49 Rev 3 as well as any resulting proposal.	30.14.j	The WG-OPR recommends to seek the Scientific Council's input on STACTIC WP 21-49 Rev 3 as well as any resulting proposal.
21	The WG-OPR recommends clarifying the wording of 30.16, linking the cost to the deployment of the observer.	30.16	The WG-OPR recommends clarifying the wording of 30.16, linking the cost to the deployment of the observer.
22	The WG-OPR recommends that the Duties of the Executive Secretary (30.18) are revised in light of the changes adopted in the observer program and that an assessment on the need to allocate appropriate resources to the Secretariat is carried out.	30.18	The WG-OPR recommends that the Duties of the Executive Secretary (30.18) are revised in light of the changes adopted in the observer program and that an assessment on the need to allocate appropriate resources to the Secretariat is carried out.

23			STACTIC recommends to further discuss how Contracting Parties ensure that observers execute their duties in an unbiased manner, free from undue influence or benefit linked to the fishing activity of the vessel, in accordance with Article 32.2 and are independent and impartial in accordance with Article 30.4
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Northwest Atlantic Fisheries Organization



**Report of the NAFO Working Group on Improving Efficiency of NAFO Working Group
Process (E-WG) Meeting**

14 December 2022
via WebEx

NAFO
Halifax, Nova Scotia, Canada
2023

Report of E-WG,
14 December 2022

**Report of the NAFO Working Group on Improving Efficiency of NAFO Working Group Process
(E-WG) Meeting**

14 December 2022
via WebEx

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Report of the NAFO Working Group on Improving Efficiency of NAFO Working Group Process (E-WG) Meeting

14 December 2022
via WebEx

1. Opening by the Chair, Fred Kingston (NAFO Secretariat)

The Chair, Fred Kingston (NAFO Secretariat) opened the meeting on Wednesday, 14 December 2022 at 10:00 hours. The Chairs and co-Chairs of the NAFO Working Groups were welcomed to the virtual meeting (Annex 1).

2. Appointment of Rapporteur

The NAFO Secretariat (Lisa LeFort) was appointed rapporteur.

3. Adoption of Agenda

The agenda was adopted as circulated (Annex 2).

4. Finalize schedule for upcoming meetings scheduled for 2023

The tentative schedule of 2023 NAFO Meetings was presented in COM-SC WP 22-11. The group focused its discussions on the NAFO Meetings still to be scheduled for 2023. It was noted that the exact date(s) and format (i.e. virtual or in-person/hybrid) and location of most of these meetings are still to be confirmed by the Secretariat, after consultation with the relevant Chairs, co-Chairs and Contracting Parties.

The 2023 NAFO Meeting Schedule was revised in COM-SC WP 22-11 (Rev. 2) to incorporate the discussions of the group (Annex 3).

5. Consider the three two-week periods during the NAFO year for scheduling of possible intersessional meetings in 2024

The proposed three two-week periods during 2024 to be recommended to the Commission and Scientific Council for possible NAFO meetings were proposed in COM-SC WP 22-12 as follows:

- **For the 2024 NAFO year, the following two-week periods, be considered for NAFO intersessional meetings:**
 - **26 February – 08 March 2024;**
 - **22 April – 03 May 2024; and**
 - **12 – 23 August 2024**

The Working Group noted that having the second two-week period earlier in April would ensure meeting outcomes may be communicated to the Scientific Council with sufficient time to consider them prior to its meeting in June.

For that reason, the following revised three two-week periods were proposed for 2024:

- **For the 2024 NAFO year, the following two-week periods, be considered for NAFO intersessional meetings:**
 - **26 February – 08 March 2024;**
 - **15 – 26 April 2024; and**
 - **12 – 23 August 2024**

Report of E-WG,
14 December 2022

The participants were requested to consider these proposed dates and contact the Secretariat if there are any concerns. The incoming Chair (Brynhildur Benediktsdóttir) will send a note to this Working Group in the future to finalize this proposed recommendation to the Commission and Scientific Council.

6. Recommendations to forward to the Commission and Scientific Council

The recommendations of this Working Group to forward to the Commission and Scientific Council at the 2023 Annual Meeting of NAFO, will be agreed on via correspondence (see agenda item 5 above).

7. Other matters

The group agreed that it was good practice each year to continue to have the first meeting of this Working Group late in the calendar year”, such as in late November or early December after the Annual Meeting. This would better enable utilization of the first meeting block if required and provide additional time to the Secretariat for planning purposes. No other matters were raised under this agenda item.

8. Date and Time of Next Meeting

The incoming Chair (Brynhildur Benediktsdóttir) will discuss with the Working Group if another virtual meeting is required before the 2023 Annual Meeting or if the recommendations may be adopted via correspondence.

9. Adjournment

The meeting was adjourned at 11:30 hours.

Annex 1. List of Participants

ACTING CHAIR OF COMMISSION	Warner-Kramer, Deirdre (USA)
CHAIR OF SCIENTIFIC COUNCIL	Dwyer, Karen (Canada)
CHAIR OF STACFAD	Fagan, Robert (Canada)
CHAIR OF STACTIC	Moran, Patrick (USA)
CO-CHAIRS OF CESAG	Sosebee, Katherine (USA) Warner-Kramer, Deirdre (USA)
CHAIR OF WG-BDS	Warner-Kramer, Deirdre (USA)
CO-CHAIR OF WG-EAFFM	Mencher, Elizabethann (USA) Sacau Cuadrado, Mar (European Union)
CO-CHAIRS OF WG-RBMS	González-Costas, Fernando (European Union) Walsh, Ray (Canada)
NAFO SECRETARIAT	Kingston, Fred Benediktsdóttir, Brynhildur (incoming Executive Secretary) Blasdale, Tom Federizon, Ricardo LeFort, Lisa

Annex 2. Agenda

1. Opening by the Chair, Fred Kingston (NAFO Secretariat)
2. Appointment of Rapporteur
3. Adoption of Agenda
4. Finalize schedule for upcoming meetings scheduled for 2023
5. Consider the three two-week periods during the NAFO year for scheduling of possible intersessional meetings in 2024
6. Recommendations to forward to the Commission and Scientific Council
7. Other matters
8. Date and Time of Next Meeting
9. Adjournment

Annex 3. 2023 NAFO Meeting Schedule
[COM-SC Working Paper 22-11 Rev. 2]

The following NAFO Meetings are scheduled, or are to be scheduled, for 2023:

Date	Title	Venue
31 Jan.	Scientific Council Meeting Focus: <i>Finalize data sources for the MSEs</i>	Webex
<i>Proposal:</i> Week of 13 Feb. To be confirmed with co-Chairs	Informal Working Group on Other Effective Area-Based Conservation Measures (OECM) Meeting <i>The NAFO Secretariat to request names from Contracting Parties for the informal Working Group</i>	Webex
21 Feb.–03 Mar.	<i>* First period for the scheduling of Working Group meetings</i> During this two-week period, it is proposed to schedule the Informal Working Group to reflect on the Scientific Council workload.	
TBD	NAFO Focus Group to design a potential new visual identity for NAFO	Webex
End of Feb. TBD	NAFO: Scientific Council/Precautionary Approach Framework Working Group (PA-WG) <i>The February meeting will discuss/determine what will be presented to WG-RBMS.</i>	Webex
TBD	NAFO Working Group on Improving Efficiency of NAFO Working Group Process (E-WG)	TBD
<i>Proposal:</i> 18–20 Apr.	NAFO Joint Commission–Scientific Council Working Group on Risk-based Management Strategies (WG-RBMS) Meeting <i>The dates of 18–20 April are proposed to allow time for outcomes to be provided for presentation at the June SC Meeting.</i>	Halifax with Webex capabilities provided
20–21 Mar.	Joint Advisory Group on Data Management (JAGDM) Meeting	TBD
24 Apr.–05 May	<i>* Second period for the scheduling of Working Group meetings</i>	
Prior to 30 Apr.	NAFO Joint Commission–Scientific Council Catch Estimation Strategy Advisory Group (CESAG) Meeting (if required)	By correspondence
<i>Proposal:</i> 03–04 May	NAFO Commission Intersessional Meeting concerning Fishing Regime for Shrimp in Division 3M <i>The Chair to consult Contracting Parties regarding the meeting.</i>	Halifax with Webex capabilities provided
Prior to STACTIC May Mtg.	NAFO STACTIC Editorial Drafting Group of the NAFO CEM (EDG) Meeting (if required)	Webex



<i>Proposal:</i> 09-11 May	NAFO Standing Committee on International Control (STACTIC) Intersessional Meeting	Halifax with Webex capabilities provided
02-15 Jun.	NAFO Scientific Council and its Standing Committees Meeting	Halifax, Nova Scotia
17-28 Jul.	<i>* Third period for the scheduling of Working Group meetings</i>	
Jul.	NAFO Commission Ad Hoc Working Group on Bycatches, Discards and Selectivity (WG-BDS) in NAFO Regulatory Area Meeting <i>The meeting is proposed to be held virtually as a half-day planning meeting.</i>	TBD
<i>Proposal:</i> 18-21 Jul.	NAFO Joint Commission-Scientific Council Working Group on Risk- based Management Strategies (WG-RBMS) Meeting <i>The NAFO Secretariat to inquire re: availability of NEAFC venue during this time period.</i>	Halifax with Webex capabilities provided
<i>Proposal:</i> 24-26 Jul.	NAFO Joint Commission-Scientific Council Working Group on Ecosystem Approach Framework to Fisheries Management (WG-EAFFM) Meeting <i>The NAFO Secretariat to inquire re: availability of NEAFC venue during this time period.</i>	Halifax with Webex capabilities provided
Sep. (TBD)	NAFO/ICES <i>Pandalus</i> Assessment Meeting Focus: <i>Assess the NAFO Div. 3M and NAFO Divs. 3LNO stocks</i>	TBD
18-22 Sep.	NAFO 45 th Annual Meeting	Santiago de Compostela, Spain
TBD Oct./Nov.	NAFO STACTIC Editorial Drafting Group (EDG) Meeting Focus: To review the 2024 NAFO CEM.	Webex
14-23 Nov.	NAFO Working Group on Ecosystem Science and Assessment (WG-ESA) Meeting	Halifax, Nova Scotia
TBD Dec.	NAFO Working Group on Improving Efficiency of NAFO Working Group Process (E-WG) Meeting	Webex

* *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.*

** *Please note, the meeting dates have not all been confirmed and may be subject to change.*



Report of the Joint Advisory Group on Data Management (JAGDM) Meeting

21 March 2023
Virtual Meeting

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Report of the Joint Advisory Group on Data Management (JAGDM) Meeting

21 March 2023
Virtual Meeting

1. Opening of the meeting

The Vice Chair, Natasha Barbour (Canada), acting as Chair, opened the meeting and welcomed participants to the virtual meeting of JAGDM. The following Contracting Parties were present: Canada, Denmark (in respect of the Faroe Islands and Greenland), the European Union, Norway and the United Kingdom. The Russian Federation was represented by the NEAFC Secretariat. The NAFO and NEAFC Secretariats were also present.

The Chair noted several new members in the group and invited them to introduce themselves.

2. Appointment of the rapporteur

The NEAFC Secretariat was appointed as rapporteur.

3. Discussion and adoption of the agenda

The agenda was adopted without changes, although it was reconfirmed the item on data exchange would be taken in JAGDM 02.

4. Election of the Chair and Vice-Chair

The acting Chair explained that there had been no Chair in post in JAGDM since early 2021. In early 2022, JAGDM heads had agreed that the European Union would provide a Chair, with Norway providing a Chair after this period – timing yet to be decided.

Suzana Vodovnik (European Union) was duly nominated and elected by general acclamation. The Contracting Parties thanked the acting Chair for her excellent chairing in the long interregnum between Chairs. Ms Vodovnik took up the Chairing for the rest of the meeting.

The NEAFC Secretary agreed that Natasha Barbour had done a great job working closely with the Secretariat as she acted as Chair at very short notice following the departure of the previous Chair (and the start of the Pandemic). As Ms. Barbour was willing to continue in the role of vice-Chair, she was re-elected by general acclamation.

5. Joint NEAFC/NAFO Issues

[JAGDM-2023-01-03 & JAGDM-2023-01-04](#)

Proposals from EU on updating maximum allowable characters in some NAF data elements (for decision).

The Format for Electronic Exchange of Fisheries Monitoring, Inspection and Surveillance Information sets down the technical specifications (data format, data type, etc.) of the data to be transmitted in NAF messages. The European Union explained that, in developing and testing its internal system on notifications and

authorisations, it had noted that the current provision of the maximum characters limitation for certain fields in Annex IX C1) of the NEAFC Scheme prevents exchanging the complete business information for certain reports. Therefore, it was proposed to extend the maximum number of characters for the relevant fields.

For NAFO the situation was similar; Part C of Annex II.D (Format for electronic exchange of fisheries monitoring information (The North Atlantic Format)) of the NAFO CEM also required amendment to allow for longer character strings to be transmitted in relevant fields in the NAF messages.

JAGDM agreed that the proposals should proceed to PECMAC and STACTIC respectively to make the necessary changes to the Scheme and CEM.

6. NEAFC issues

a. Technical implications of the implementation of recommendations

[JAGDM-2023-01-08](#)

The NEAFC Secretariat introduced its briefing on the implications of Recommendations 2023: 07, 2023:11 and 2023:13 adopted at the NEAFC 2022 Commission Meeting, which would be likely to require technical changes to implement.

Recommendation 07: 2023 had been adopted to extend the Barents Sea Existing Fishing Area under the Vulnerable Marine Ecosystem recommendation 19:2014. This recommendation meant an update was needed to the NEAFC system which alerted the Secretariat when vessels may be infringing closed or restricted areas. Specifically, the Secretariat maps and alert settings needed updating.

Recommendation 11:2023 had been adopted to improve monitoring and control of transshipment operations at sea. This created a new data type on authorisation on transshipments, the details of which required confirmation. The authorisations would also need to be displayed on the website, requiring something to be built and decisions taken on who would see the data and how errors/omissions/corrections would be handled. A new user group would need to be created if cooperating non-Contracting Parties were to have access to these data. The recommendation also required TRA and POR messages to be shared between Parties irrespective of inspection presence. This went beyond the expected sharing of POR under the ERS Scheme rules and is applicable to the current (NAF) Scheme. The Russian Federation objection to the recommendation also meant that reports needed to be identified by type and sender before sharing. The Secretariat was considering various options on such implementation to discuss with PECMAC. As a first step, it wanted to establish that FMCs will be able to accept and process such NAF messages via their https gateways.

Recommendation 13: 2023 related to the authorisation for landing/transshipping and use of port services prior to the ETA. Specific authorisation before the ETA could be given, but this would not be recorded in the PSC application. While technical changes were not implied, the Secretariat noted that the information on authorisation to land before ETA may be useful to some even though it was not recorded.

In discussion,

In relation to Recommendation 11:2023 The Secretariat explained it was not yet clear what information on authorisations for transshipment would be circulated. Given the recommendation was already adopted, PECMAC would need to clarify expectations under the Scheme. In relation to Recommendation 13:2023, a Contracting Party noted that the information as to what happened at the landing was the most important rather than the timing. **JAGDM noted the updates.**

Report of JAGDM,
21 March 2023

b. Issues Raised by PECMAC

i. EPSC catches export pilot (for information)

The Secretariat demonstrated a pilot for a new functionality for the e-PSC system whereby catch data from multiple authorised PSC forms could be viewed at the same time, filtered, and the results downloaded. All Parties had joined the pilot, but the number of accounts with permission to use the feature was kept low during that phase of development. The demonstration illustrated the filtering and how users could download data for their own analysis.

In discussion,

The Secretariat noted a suggestion by a Contracting Party to extend the export system to include PSC forms that had not yet been authorised, which could for instance be achieved via filter settings. **JAGDM noted the information.**

ii. Issues relating to Code lists

[JAGDM-2023-01-07 on management of code lists](#)

The Secretariat introduced document JAGDM-2023-01-07 on the issue of code lists. In the context of ongoing discussions at ERS Implementation Group, it reminded JAGDM that it had been earlier agreed that the source body was responsible for proposals related to the Master Data Register (MDR) and JAGDM had a role to double check these. However, for international lists for which responsibility lays outside of specific NEAFC Committees and Working Groups as a source body, it was less clear how this process would work. More specifically, the Secretariat explained that while start and end dates were used for local versions of international code lists, there remained the need to harmonise these dates between the European Union and NEAFC as well as any changes to the values of these lists. JAGDM was therefore invited to consider:

- Should there be a standing agenda item on MDR lists in JAGDM?
- Should changes be formally adopted, or could they be implemented without adoption?
- Should the start date/end dates be set when the changes had been formally adopted?
- In the case of FAO_SPECIES should NEAFC use the same data columns as EU?

On location codes similar issues arose. In addition, JAGDM and ERS Implementation Group had agreed that a truncated version of the UN LOCODE should be used with additions of non-LOCODE landing sites from Contracting Parties. However not all Parties had responded in providing such codes. Thus, the exact way in which the LOCATION list would be finalised and its management in the longer term is remained an outstanding issue prior to the launch of FLUX FA reporting. The Secretariat also reported that it had added code lists from the Scheme annexes to the MDR, indicated with a prefix of "NEAFC_", that were unrelated to ERS. JAGDM was asked whether it would be preferential to separate them from the ERS related ones in some way.

The final issue highlighted in the paper related to a Recommendation adopted at the Annual Meeting 2022 which had adopted new species to Annex 1B but had not provided species codes. There was now an issue to harmonise these between the Annex 1B and Annex V where the generic code was used for both.

In discussion,

The European Union agreed that the MDR should be a standing item. It did not think all changes needed to be formally adopted by the Commission, start dates and end dates would need consensus, but not necessarily a formal adoption. The important thing was harmonisation of the codes themselves among all contracting parties. Additional attributes could be different for each Contracting party as they see fit, as long as the relevant attributes used for validation remain harmonized and synchronized. On the use of LOCOCODES, EU noted the

additional work involved to meet the needs of both NEAFC and the UN provision. Its view remains that it was appropriate to use a location code list adapted to NEAFC and its contracting party needs (ie. including landing sites without a UN LOCODE as necessary). Norway noted that the UN List could be used with additional business rules applied to the function attribute to make irrelevant locations (e.g., airports) invalid in NEAFC context. The European Union seconded that approach.

On the mismatch in code for the Portuguese rabbit fish, there was a brief discussion on context for the new entry which did not have a specific FAO code and the difference in purposes for listing in Annex 1B or in Annex V. This was a reminder of the need to look at codes before a change was pushed through listing a stock/species. Two Contracting Parties suggested this needed to be sorted via another body such as PECMAS. The Secretariat confirmed that it could take the issue to PECMAS as needed. Canada indicated it would like to know if it was possible to add a stock code to the FAO ASFIS database.

In the context of the discussion, the European Union also noted that the NEAFC stock code list might be incomplete and might need to be updated for stock code XOS. The Secretariat explained that the NEAFC MDR was harmonised with the EU list, but an update by WG Stats had not yet been reflected in the MDR and the EU lists. This was a good example of a list owned by NEAFC, updated via a recommendation, without the information reaching all interested parties. This supported the view of having a standing item on MDR (also supported by the NAFO Secretariat) to ensure codes fed through to all.

JAGDM concluded that there would be a standing item on the JAGDM agenda to review MDR code lists at least annually and Chair invited Contracting Parties to send to the Secretariat any comments on the individual items raised in document JAGDM-2023-01-07. These comments could then be discussed more thoroughly at the JAGDM meeting planned for May.

c. NEAFC Information Security Management System (ISMS)

i. Update to data classification and website content access tables

[JAGDM-2023-01-05 Updates to NEAFC ISMS Article 11 &](#)

[JAGDM-2023-01-06 Updates to NEAFC ISMS Article 72](#)

The Secretariat introduced document JAGDM-2023-01-05 which set out changes to the ISMS related to access control and user roles. The additions related to the new export of catch function in the NEAFC EPSC application. The new user role was created for the pilot project and in due course might be finalised as a new permission for 'core' users if the function was adopted by NEAFC. This update would be sent to PECMAC for information.

JAGDM approved the changes to the ISMS for a proposal to the AM 2023. This document will be sent to PECMAC for information, as the user role pertains to PECMAC business.

The Secretariat then introduced document JAGDM-2023-01-06 which set out changes to the ISMS related to information classification. This related to Recommendation 11:2023 which foresaw the new NEAFC data type of a transshipment authorisation. The update would be sent to PECMAC for information.

The separate change mentioned by the Secretariat was to reflect a decision by WGFD to make objections to Recommendations public on the NEAFC website. Yet it was not clear what the public version should look like in terms of details, reasons etc.

JAGDM approved the changes to the ISMS for a proposal to the AM 2023. This document will be sent to PECMAC for information, as the user role pertains to PECMAC business.

Report of JAGDM,
21 March 2023

7. NAFO issues

a. Technical implications of Recommendations

None

b. Issues Raised by STATIC

None

c. Update on NAFO (JAGDM proposal to change COX messages)

The NAFO Secretariat explained that, following advice from JAGDM, Canada had made a proposal to STACTIC on catch reporting where a vessel was reporting catch on exit (COX) from a different sub area than the one it had originally fished in. The proposal was that the last catch (CAT) message would be used instead in such circumstances. STACTIC was still considering this and awaiting a revised proposal from Canada (and or the European Union).

JAGDM would await an update in due course.

d. Update on NAFO Projects

NAFO was testing a new observer application, with an at-sea trial planned. This would be the current priority before NAFO moves towards developing a similar tool to the NEAFC EPSC.

JAGDM noted the update.

8. Any other business

Nothing raised.

9. Report to the Annual Meeting

The two ISMS updates were noted for reporting to the NEAFC Annual Meeting.

10. Date and place of the next meeting

Date and place of the next meeting was planned, but to be confirmed as 24 May 2023 for the informal SSA meeting and 25 May 2023 for JAGDM.

11. Closure of the meeting

The Chair closed the meeting and thanked everyone for an efficient JAGDM meeting after the hiatus of the previous year.

Northwest Atlantic Fisheries Organization



Report of the NAFO Joint Commission-Scientific Council Working Group on Risk-Based Management Strategies (WG-RBMS) Meeting

18-19 April 2023
Halifax, Nova Scotia

NAFO
Halifax, Nova Scotia, Canada
2023

**Report of the NAFO Joint Commission-Scientific Council Working Group on Risk-Based Management
Strategies (WG-RBMS) Meeting**

18–19 April 2023
Halifax, Nova Scotia

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Report of the NAFO Joint Commission-Scientific Council Working Group on Risk-Based Management Strategies (WG-RBMS) Meeting

18–19 April 2023
Halifax, Nova Scotia

1. Opening by co-Chairs, Fernando Gonzalez-Costas (European Union) and Ray Walsh (Canada)

The meeting was opened by the co-Chairs Fernando González-Costas (European Union) and Ray Walsh (Canada) at 10:10 hours (UTC/GMT -3 hours in Halifax, Nova Scotia) on Tuesday, 18 April 2023.

The co-Chairs welcomed participants attending in person and virtually. This included representatives from Canada, European Union, Japan, Russian Federation, Ukraine, United Kingdom, United States of America, as well as the NAFO Scientific Council (SC) Chair and an invited expert on the Precautionary Approach Framework (Annex 1).

2. Appointment of Rapporteurs

The NAFO Secretariat was appointed as Rapporteur.

3. Adoption of Agenda

The provisional agenda was adopted as previously circulated (Annex 2).

4. MSE process for 2+3KLMNO Greenland halibut (from Annex 3 of COM-SC Doc. 22-03)

Paul Regular (Canada) presented on Greenland halibut in NAFO 2+3KLMNO Exceptional Circumstances for 2023 and the ongoing MSE review (COM-SC RBMS-WP 23-03), which provided background information for the discussions detailed in the sections below.

a. Identification of conceptual initial Candidate Management Procedures (CMPs)

The WG-RBMS reflected on the MSE Workplan for Greenland halibut (COM-SC RBMS-WP 22-07) and noted that it was agreed to propose conceptual initial Candidate Management Procedures (CMPs) at this meeting. The working group discussed and agreed to use the current CMP as the basis for the initial testing, noting that it is early in the process to propose other formulations.

b. Identification of management objectives and performance statistics

The WG-RBMS reflected on the MSE Workplan for Greenland halibut (COM-SC RBMS-WP 22-07) and noted that it was agreed to identify management objectives and performance statistics at this meeting. The working group agreed to use the 2017 Management Objectives and Performance Statistics (Table 2 of FC-SC Doc. 17-03) adjusting the time periods to the new calendar as a starting point for the testing. COM-SC RBMS-WP 23-08 (Revised) (Annex 3) outlines the management objectives and the performance statistics that were agreed at this meeting. It was noted that the objectives in bold have been identified as the primary required objectives and the remaining objectives are desirable secondary objectives.

c. Exceptional Circumstances for 2+3KLMNO Greenland halibut – Discussion and Considerations

The WG-RBMS noted that, due to the lack of some of the survey data, the exceptional circumstances protocol will be triggered this year, and that the Scientific Council will need to assess the severity of the exceptional circumstances and provide advice at their June 2023 meeting. It was noted that the level of severity would have an impact on whether the HCR can be used with confidence, or, if the conditions are severe enough, if consideration would need to be given on the necessity of a full assessment process at the Scientific Council meeting in June 2023. In reflecting on the possibility of the HCR not being able to be used for the 2024 TAC decision, the working group



Report of WG-RBMS,
18–19 April 2023

requested that the Scientific Council 1) advise on the risk associated with maintaining the 2023 TAC for 2024; 2) provide a 1 year projection at this level and at +/-5% using the base case model; and 3) include in the standard risk table the probabilities associated with a rollover, and +/-5%.

5. MSE process for 3LN Redfish (from Annex 3 of COM-SC Doc. 22-03).

Andrea Perreault (Canada) presented on the 3LN redfish MSE (COM-SC RBMS-WP 23-04), which provided background information for the discussions detailed in the sections below.

a. Management Objectives and Performance Statistics

Canada presented potential management objectives and initial performance statistics for 3LN Redfish in COM-SC RBMS-WP 23-01. A fifth objective relating to maximizing yield was suggested, and Canada later drafted an objective to maximize the duration of high catches in COM-SC RBMS-WP 23-01 (Revised). The working group thanked Canada for drafting the working paper and provisionally agreed on the management objectives (COM-SC RBMS-WP 23-09; Annex 4). The working group then provided feedback on the performance statistics. This will be further discussed at the Scientific Council meeting in June 2023. It was further noted that it is difficult to determine a limit reference point for redfish due to the episodic recruitment of the stock, as well as other challenges that are reflected in the background documents NAFO SCR Doc 22/016, NAFO SCR Doc. 22/013, and NAFO SCR Doc. 22/027.

b. Conceptual initial Candidate Management Procedures (CMPs)

The working group noted that it was early in the process to be defining conceptual Candidate Management Procedures (CMPs) and noted the expectation that a presentation, review, and discussion of Empirical and Model-Based MPs will take place at the July 2023 meeting.

c. Potential Operating Models (OM)

As noted in COM-SC RBMS-WP 23-04, the state-space surplus production models, and the state-space age-structured length-based models are conceptual model structures that will be reviewed by the Scientific Council at the June 2023 meeting. An update of the progress on the operating models will be discussed at the July 2023 WG-RBMS meeting.

6. Next steps in the MSE processes

A MSE workplan for 2024 outlining the timeline and target deliverables for the two MSE process was developed in COM-SC RBMS-WP 23-06 (Rev. 2) (Annex 5). The working group agreed to further review this at the July 2023 WG-RBMS meeting.

The working group acknowledged that there is additional work, specific to Greenland halibut Operating Models, that will be required prior to the start of the June 2023 Scientific Council meeting by a Scientific Council technical team / group of experts, which will be overseen by the Scientific Council Chair.

7. Precautionary Approach Review progress - Update from the Scientific Council and Discussion

The co-chairs of the *NAFO Scientific Council Precautionary Approach Working Group (PA-WG)*, Fernando González-Costas and Steve Cadrin, presented an update on the work of the *NAFO Scientific Council Precautionary Approach Working Group (PA-WG)* in COM-SC RBMS-WP 23-07. The WG-RBMS participants expressed their gratitude to the PA-WG for their work. Canada noted that Option 2 currently aligns with the current Canadian approach, and that they look forward to the case studies that will be completed by the Scientific Council at their meeting in June 2023. The WG-RBMS also noted a preference to revise the terminology of the zones from Collapse, Danger, and Safe, to Critical, Cautious, and Healthy, respectively. There was also a suggestion to change the name of the Overfishing Zone, to the Risk of Overfishing Zone, noting that there is a specific definition of overfishing that may have legal implications. The working group was in agreement to further review the zone names and the Scientific Council will take the suggestions into consideration at the June 2023 meeting.

8. Other matters

No other matters were discussed.

9. Recommendations

There were no recommendations from this meeting, but the overall conclusions were:

- The WG-RBMS agreed to start the MSE process testing the current Candidate Management Procedure (CMP) for the Greenland halibut MSE.
- The WG-RBMS agreed to use the 2017 Management Objectives and Performance Metrics as a starting point for the Greenland halibut MSE testing process (COM-SC RBMS-WP 23-08 Revised); Annex 3).
- The WG-RBMS requested that, if the Greenland halibut HCR cannot be used for the 2024 TAC decision, the Scientific Council 1) advise on the risk associated with maintaining the 2023 TAC for 2024; 2) provide a 1 year projection at this level and at +/-5% using the base case model; and 3) include in the standard risk table the probabilities associated with a rollover, and +/-5%.
- The WG-RBMS agreed on provisional management objectives (COM-SC RBMS-WP 23-09; Annex 4) for the 3LN Redfish MSE process as outlined in COM-SC RBMS-WP 23-01 (Revised) and noted that further discussion is required to conclude the performance statistics.
- The WG-RBMS agreed on an updated MSEs work plan for 2024 in COM-SC RBMS-WP 23-06 (Rev. 2) (Annex 5), which will be finalized at the July 2023 WG-RBMS meeting for recommendation to the Commission.
- The WG-RBMS suggests that SC reflect on the suggested zone names of the revised PA framework options during the June 2023 Scientific Council meeting.

10. Adoption of report

The report was adopted on 19 April 2023, prior to the adjournment of the meeting.

11. Adjournment

The meeting was adjourned at 16:52 hours on 19 April 2023.

Annex 1. List of Participants

CO-CHAIRS	González-Costas, Fernando Walsh, Ray
SC CHAIR	Dwyer, Karen
PA-WG CO-CHAIR	Cadrin, Steven
CANADA	Byrne, Vanessa Chapman, Bruce Dennis, Olivia Devine, Brynn Diamond, Julie Fagan, Robert Hatefi, Fatemeh Johnson, Kate Krohn, Martha Lee, Robyn Perreault, Andrea Regular, Paul Simpson, Mark
EUROPEAN UNION	Alpoim, Ricardo Belmonte, Luis Blazkiewick, Bernard Cortina, Ángela França, Pedro Garrido, Irene Gonzalez-Troncoso, Diana Granell, Ignacio Lopes, Luis Mancebo, C. Margarita Merino, Adolfo Teixeira, Isabel Tuvi, Aare
JAPAN	Akiyama, Masahiro Butterworth, Doug Takehara, Toya Taki, Kenji
RUSSIAN FEDERATION	Fomin, Konstantin Tairov, Temur
UKRAINE	Honcharuk, Ihor Zabarna, Yulia
UNITED KINGDOM	Readdy, Lisa
UNITED STATES OF AMERICA	Jaburek, Shannah Kelly, Moira Mencher, Elizabethann Sosebee, Kathy
NAFO SECRETARIAT	Benediktsdóttir, Brynhildur Aker, Jana Blasdale, Tom LeFort, Lisa

Annex 2. Agenda

1. Opening by co-Chairs, Fernando Gonzalez-Costas (European Union) and Ray Walsh (Canada)
2. Appointment of Rapporteurs
3. Adoption of Agenda
4. MSE process for 2+3KLMNO Greenland halibut (from Annex 3 of COM-SC Doc. 22-03)
 - a. Identification of conceptual initial Candidate Management Procedures (CMPs)
 - b. Identification of management objectives and performance statistics
 - c. Exceptional Circumstances for 2+3KLMNO Greenland halibut – Discussion and Considerations
5. MSE process for 3LN Redfish (from Annex 3 of COM-SC Doc. 22-03)

Discussions on:

 - a. Management Objectives and Performance Statistics
 - b. Conceptual initial Candidate Management Procedures (CMPs)
 - c. Potential Operating Models (OM)
6. Next steps in the MSE processes
7. Precautionary Approach Review progress - Update from the Scientific Council and Discussion
8. Other matters
9. Recommendations
10. Adoption of report
11. Adjournment

Annex 3. Management Objectives for the Greenland halibut MSE process
(COM-SC RBMS-WP 23-08 Revised)

During the discussion of the MSE process for Greenland halibut, the WG-RBMS agreed to use the 2017 Management Objectives, adjusting the time periods to the new calendar as a starting point for setting the management objectives for the Greenland halibut MSE process. The table below outlines the management objectives and the performance statistics that were agreed by Contracting Parties during the working group discussions. The objectives in bold have been identified as the primary required objectives and the remaining are desirable secondary objectives.

Management Objectives	Performance Statistics
Restore to within a prescribed period of time or maintain at B_{MSY}.	$B_{2044}^{5-9} / B_{MSY}^{5-9}$ median and 80%PI, $P(B_{2044}^{5-9} < B_{MSY}^{5-9}) \leq 0.5$, $P(B_{2030}^{5-9} < 0.8B_{MSY}^{5-9}) \leq 0.25$, $P(B_{2044}^{5-9} < 0.8B_{MSY}^{5-9}) \leq 0.25$
The risk of failure to meet the Bmsy target and interim biomass targets within a prescribed period of time should be kept moderately low.	$B_{lowest}^{5-9} / B_{MSY}^{5-9}$ median and 80%PI, $P(B_{2030}^{5-9} < B_{2025}^{5-9}) \leq 0.25$
Low risk of exceeding Fmsy.	count[$P(F_{2025-2044} > F_{MSY}) > 0.3$]
Very low risk of going below an established threshold.	$B_{2044}^{SP} / B_{2025}^{SP}$ median and 80%PI $B_{2044}^{5-9} / B_{2025}^{5-9}$ median and 80%PI count[$P(B_{2025-2044}^{5-9} < 0.3B_{MSY}^{5-9}) \geq 0.1$] $P(B_{lowest}^{5-9} / B_{MSY}^{5-9} < 0.3) \leq 0.1$
Maximize yield in the short, medium and long term.	\bar{C} : 2025-2029 median and 80%PI \bar{C} : 2025-2034 median and 80%PI \bar{C} : 2025-2044 median and 80%PI
The risk of steep decline of stock biomass should be kept moderately low.	$B_{2030}^{5-9} < 0.75B_{2025}^{5-9}$
Keep inter annual TAC variation below “an established threshold”	AAV: 2025-2029 median and 80%PI AAV: 2025-2044 median and 80%PI

Annex 4. Management Objectives for Redfish in NAFO Divisions 3LN
(COM-SC RBMS-WP 23-09)

Management Objectives
Avoid large interannual fluctuations in TACs
Mitigate steep declines in biomass
Avoid a fishery induced decline in biomass below <i>Blim</i>
If biomass declines below <i>Blim</i> , promote biomass recovery within a prescribed period of time
Maximize the duration of high annual catch

Annex 5. MSEs work plan for 2024
(COM-SC RBMS-WP 23-06 Rev. 2)**Table 1.** Tentative 3LN redfish and 2+3KLMNO Greenland halibut MSE

Expected Delivery	NAFO Body	GHL MSE	3LN REDFISH MSE
April 2023	WG-RBMS	Schedule finalized and proposed to the Commission; propose conceptual initial Candidate Management Procedures (CMPs); identify management objectives/performance statistics	Schedule finalized and proposed to the Commission; initial discussion on management objectives, conceptual initial CMPs, potential OMs, and performance statistics
June 2023	Scientific Council	Review and finalization of Operating Models (OMs) to be used; initial testing of the current CMP and possibly further CMPs performance against established management objectives;	Proposal and review of OMs to be used; continue discussions on performance statistics;
July 2023	WG-RBMS	Review CMPs; finalize performance statistics including risk tolerances and constraints	Continued progress on OMs, development of performance statistics; initial discussion of CMPs
September 2023	Commission	Update on progress on the respective MSEs and seek endorsement from the Commission on the workplan for 2024 and beyond.	
January 2024	Scientific Council	Testing CMP performance against established management objectives & exceptional circumstances protocol	Address and review any further work on OMs, performance statistics, and CMPs stemming from RBMS
Spring 2024	WG-RBMS	Discussing results of CMP testing and exceptional circumstances protocol and possible recommendation to Commission on adoption of Management Strategy, subject to progress.	Input to SC on further progress on OMs, CMPs, and finalize the performance statistics.
June 2024	Scientific Council	Consider any follow up from Spring WG-RBMS	Review and finalization of OMs to be used; selection of the CMP for testing against established management objectives
Aug 2024	WG-RBMS	Finalize and recommend Management Strategy to the Commission	Finalize CMPs; refinement of performance statistics including risk tolerances and constraints; Update the workplan for Redfish.
Sept 2024	COM	The Commission considers adoption of proposed new Management Strategy	Update on progress
<ul style="list-style-type: none"> • Timelines are notional and subject to revision based on workload, capacity, and unanticipated problems. • Target for completion for the Redfish MSE will be September 2025, and the details of the workplan will be developed at the August 2024 WG-RBMS meeting. 			

Northwest Atlantic Fisheries Organization



**Report of the NAFO Standing Committee on International Control (STACTIC)
Intersessional Meeting**

03-05 May 2023
Halifax, Nova Scotia, Canada

NAFO
Halifax, Nova Scotia, Canada
2023

**Report of the NAFO Standing Committee on International Control (STACTIC)
Intersessional Meeting**

03–05 May 2023
Halifax, Nova Scotia, Canada

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**Report of the NAFO Standing Committee on International Control (STACTIC)
Intersessional Meeting**03–05 May 2023
Halifax, Nova Scotia, Canada**1. Opening by the Interim Chair, Patrick Moran (United States of America)**

The interim Chair, Patrick Moran (United States of America), opened the meeting at 09:00 hours on Wednesday, 03 May 2023. The Chair welcomed representatives, both in person and virtually, from the following Contracting Parties (CPs): Canada, Denmark (in respect of Faroe Islands and Greenland), European Union, Iceland, Japan, Norway, Russian Federation, Ukraine, United Kingdom, and United States of America (Annex 1).

2. Appointment of Rapporteur

The NAFO Secretariat was appointed as rapporteur.

3. Adoption of Agenda

Following the rules outlined in the *Standing Committee on International Control (STACTIC) Rules of Procedure regarding data confidentiality and participation in meetings* (COM Doc. 22-19), the Chair highlighted a nomination for in-camera sessions for agenda items 4, 5, and a portion of agenda item 6. The Chair noted that the Secretariat would not be presenting information that may be subject to confidentiality measures under agenda item 6, and it was agreed that the item would be held in an open session. The Chair also noted that the United States of America objected to hold agenda item 5 in a closed session. Specifically, the United States of America pointed out that neither the agenda topic, “Review of Article 30,” nor the associated working papers contained sensitive information. The European Union noted that a portion of the working paper contained information available only on the MCS website and they wanted to discuss an open or ongoing investigation of an alleged infringement. Contracting Parties agreed that for this meeting, agenda item 4 and a small portion of the discussions under agenda item 5 would be discussed under an in-camera session.

The agenda was adopted as circulated (Annex 2).

4. Annual Compliance Review, 2022

The NAFO Secretariat presented the DRAFT Compilation of Fisheries Reports 2022 in STACTIC WP 23-01 (Revised). Contracting Parties thanked the Secretariat for the work and provided initial comments and clarifications. Contracting Parties agreed to forward any further comments on STACTIC WP 23-01 (Revised) to the NAFO Secretariat by 09 June 2023 for inclusion in the final version that will be circulated on 19 June 2023 in accordance with Rule 5.1(e) of the *NAFO Rules of Procedure and Financial Regulations*.

The NAFO Secretariat presented the Draft Annual Fisheries and Compliance Review in STACTIC WP 23-02 (Revised). Contracting Parties provided initial comments and feedback on the document and agreed to submit further comments to the Secretariat by 09 June 2023 for incorporation into the document. Representatives from Canada, European Union, and the United States of America agreed to assist the NAFO Secretariat in preparing a draft of the recommendations and conclusions sections in advance of the 2023 Annual Meeting.

The Secretariat also highlighted the addition to the draft compliance review of two graphs summarizing catch per unit effort (CPUE) by engine power and vessel class size, following a request from Denmark (in respect of the Faroe Islands and Greenland) from the 2022 Annual Meeting. Denmark (in respect of the Faroe Islands and Greenland) noted that the information is useful to get a better picture of how the fishery is developing, but that a separate, more detailed analysis by Contracting Party should be completed. The Secretariat agreed, with input from Denmark (in respect of the Faroe Islands and Greenland), to conduct further CPUE analyses for presentation at the 2024 STACTIC Intersessional Meeting.

The NAFO Secretariat also presented the Summary of Inspection Information for 2022 in STACTIC WP 23-03 (Revised). Contracting Parties provided initial comments and feedback on the document and agreed to submit further comments to the NAFO Secretariat by 09 June 2023.

Throughout the presentation of the compliance review documents, the European Union sought clarification on the way in which infringements were counted in 2022. The European Union highlighted a difference in how infringements were counted in 2022 as compared to previous years, potentially resulting in an apparent increase in the number of infringements for 2022. Canada and the European Union agreed to reflect on this issue and provide guidance to the NAFO Secretariat by the 09 June 2023 deadline.

It was **agreed** that:

- **Contracting Parties will provide written comments on the Draft Compilation of Fisheries Reports 2022 (STACTIC WP 23-01 (Revised)), the Draft Annual Fisheries and Compliance Review (STACTIC WP 23-02 (Revised)), and the Summary of Inspection Information for 2022 (STACTIC WP 23-03 (Revised)) by 09 June 2023.**
- **to facilitate consistency, Canada and the European Union will discuss the infringement counting methodology and provide guidance to the NAFO Secretariat by 09 June 2023.**
- **the NAFO Secretariat, with assistance from representatives from Canada, the European Union, and the United States of America, will prepare a draft of the recommendations and conclusions sections for STACTIC WP 23-02 (Revised) in advance of the 2023 Annual Meeting.**
- **the NAFO Secretariat, with input from Denmark (in respect of the Faroe Islands and Greenland), will conduct further analyses of the available CPUE information for presentation at the 2024 STACTIC Intersessional Meeting.**

5. Review of Article 30 of the NAFO CEM

In an in-camera session, the NAFO Secretariat presented the Summary of Observer Information for 2022 in STACTIC WP 23-04 (Revised). The European Union noted that some of the information submitted in accordance with Article 30.9(c) and included in the working paper, is intended for posting to the MCS Website. It was agreed to remove that information from the working paper and continue the related discussions in an open session. The revised working paper (STACTIC WP 23-04 (Rev. 2)) was also updated to include information received from Denmark (in respect of the Faroe Islands). It was noted that there is information missing from those Contracting Parties that applied the derogation in accordance with Article 30.6 of the NAFO CEM. Contracting Parties that utilize the derogation are required to submit a detailed report in accordance with Article 30.6(e). All Contracting Parties deploying observers should submit the report referred to in Article 30.9(c). Norway, having sent the wrong form, also indicated that it would submit the outstanding information to the NAFO Secretariat for inclusion in the working paper. Contracting Parties agreed to provide any outstanding information to (STACTIC WP 23-04 (Rev. 2)) by 09 June 2023.

The Chair of the STACTIC Observer Program Review Working Group (WG-OPR), Brent Napier (Canada), provided a status update, noting that the group had not been able to meet since the 2022 Annual Meeting. The Chair reflected on the important work already completed by the group in developing recommendations for the NAFO Observer Program in STACTIC WP 22-48 (Rev. 2), and the need for WG-OPR to reconvene. Contracting Parties agreed to a three-day WG-OPR meeting to be hosted by Canada in advance of the 2023 Annual Meeting, with virtual options to facilitate participation. The NAFO Secretariat will circulate a poll for date selection following the end of this meeting.

It was **agreed** that:

- **Contracting Parties will submit any outstanding information for inclusion into STACTIC WP 23-04 (Rev. 2) by 09 June 2023.**
- **the next meeting of the WG-OPR will be a three-day, hybrid meeting hosted by Canada.**

- **the NAFO Secretariat will circulate a poll for date selection for the next WG-OPR meeting following the conclusion of this meeting.**

6. NAFO MCS website and application development

In relation to the NAFO MCS Website, the NAFO Secretariat reported that an external cyber security vendor (Bulletproof) will conduct a security audit on the website in May 2023. The Secretariat also reported that a training session was held with members of the United States Coast Guard in April 2023, and that Contracting Parties are welcome to submit further requests for enhancements to the MCS Website.

In relation to the Observer Application, the Secretariat reported that the app was trialed during the NAFO European Union Observers Workshop in November 2022, and an at-sea trial of the app is scheduled for this summer. It was noted that there was a recommendation at the 2022 Annual Meeting for a small group of Contracting Party representatives to meet regularly to assist the NAFO Secretariat with the development of the observer application. Contracting Parties also requested that the NAFO Secretariat provide a status update on the observer application at the next WG-OPR meeting.

The NAFO Secretariat presented the latest Single Point of Contact for Contracting Parties in STACTIC WP 23-05 and requested Contracting Parties to provide any updates for inclusion in the MCS Website.

It was agreed that:

- **the NAFO Secretariat, via correspondence, request Contracting Parties to put forward representatives to aid the NAFO Secretariat on the continued development of the Observer Application.**
- **the NAFO Secretariat provide an update on the status of the observer application at the next WG-OPR meeting.**

7. New and pending proposals on enforcement measures: Possible revisions of the NAFO CEM

Japan presented a proposal for the squid fishery in STACTIC WP 23-09. Japan noted that there is a potential for a serious infringement to occur if vessels are targeting squid with a 60 mm mesh size and redfish represents the largest catch in a single haul. This resulting serious infringement would relate to targeting of redfish with an unauthorized mesh size. Japan indicated that the proposal is intended to introduce an exemption to allow vessels to target squid with a 60 mm mesh size while reducing the risk of an infringement being issued. Contracting Parties thanked Japan for the proposal and agreed with the intent of the proposal. Comments and suggestions were provided to Japan, and it was agreed that Japan would work with Contracting Parties to update the wording of the proposal for presentation at the 2023 Annual Meeting.

The European Union presented a proposal for catch reporting in Article 28.6 of the NAFO CEM in STACTIC WP 23-12, requiring the use of CAT messages to report the catches of the day in which the vessel leaves the NAFO Regulatory Area instead of using a COX message, noting that this proposal has been discussed at previous meetings. Contracting Parties thanked the European Union for their efforts on the proposal, and with a small editorial change, it was agreed to forward STACTIC WP 23-12 (Revised) to the Commission for adoption.

The European Union presented a proposal on measures for pelagic redfish and deep pelagic beaked redfish in STACTIC WP 23-13, noting that a similar proposal was adopted at the 2022 NEAFC Annual Meeting. Some Contracting Parties supported the proposal from the European Union, some supported the principle behind the proposal, one did not support the proposal, while others required more time to review it. Contracting Parties agreed to continue the discussions at the 2023 Annual Meeting. The Russian Federation stated that they cannot support the proposal due to the fact that it forces the Contracting Parties to deny landings, transshipment and other port services, which is, in their view, beyond the mandate of either STACTIC or the Commission. The European Union expressed the view that the proposal is under the remit of both the NAFO and NEAFC Conventions and noted that it has been adopted by NEAFC at its 2022 Annual Meeting. Norway remarked that

Report of STACTIC,
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it abstained from voting on the proposal presented at 2022 NEAFC Annual Meeting, and is therefore not covered by the ban.

Canada highlighted that they are continuing to work with concerned Parties on the proposal for the addition of date of capture to product labelling requirements in STACTIC WP 22-25 (Revised) and will bring a revision to the 2023 Annual Meeting. Denmark (in respect of the Faroe Islands and Greenland) will work bilateral with Canada to find a text for a joint proposal.

Canada presented a preliminary proposal to modify bycatch measures in STACTIC WP 23-14. Canada highlighted a recent issue that Canadian vessels fishing 3LNO yellowtail have faced in relation to the bycatch provisions for American plaice due to changing environmental conditions. Contracting Parties thanked Canada for the initial proposal and agreed to provide comments intersessionally for further discussion at the 2023 Annual Meeting.

It was **agreed** that:

- **Japan will incorporate feedback from Contracting Parties on the proposal for the squid fishery in STACTIC WP 23-09 for presentation at the 2023 Annual Meeting.**
- **the proposal on catch reporting (Article 28(6) NAFO CEM) outlined in STACTIC WP 23-12 (Revised) be forwarded to the Commission for adoption.**
- **discussions on the European Union proposal on measures for pelagic redfish and deep pelagic beaked redfish in STACTIC WP 23-13 continue at the 2023 Annual Meeting.**
- **Canada will bring a revised proposal for the addition of date of capture to product labelling requirements in STACTIC WP 22-25 (Revised) to the 2023 Annual Meeting.**
- **Contracting Parties will provide comments to Canada on the proposal to modify bycatch measures for greater flexibility in STACTIC WP 23-14 intersessionally and continue discussions on this proposal at the 2023 Annual Meeting.**

8. Practical application of Port State Measures in NAFO

The Chair opened this agenda item and reflected on the discussions from the 2022 Annual Meeting stemming from the working paper presented by Denmark (in respect of the Faroe Islands and Greenland) in STACTIC WP 22-53 on the calculation of the percent difference in the PSC3 reports. Contracting Parties agreed that a footnote in section B2 of the PSC3, explaining the calculation to be used, may improve consistency. Contracting Parties use different values to calculate the percent difference and the margin of tolerance for the enforcement of discrepancies between reported and verified quantities, but there was general agreement on the importance of a standard method of calculation. It was also noted that NAFO and NEAFC use the same PSC3 reports, and vessels may conduct fishing activities in both Convention Areas on the same trip. Accordingly, the Committee agreed that the Chair of STACTIC should send a letter to the Chair of PECMAC highlighting this issue and requesting feedback. The letter was drafted and endorsed by STACTIC during this meeting.

Contracting Parties also reflected on the work on the Global Information Exchange System (GIES) by the FAO Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (PSMA) Secretariat, recalling the 2022 Annual Meeting agreement that the NAFO Secretariat engage with the FAO Secretariat on the GIES project to determine the potential integration of the NAFO reporting system with the GIES system.

Contracting Parties additionally reflected on the 2022 Annual Meeting recommendation for a small group of Contracting Party representatives to assist the NAFO Secretariat with the development of the e-PSC system.

The Russian Federation informed the Contracting Parties that in accordance with the *Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing* (ratified by the Russian Federation effective from March 10, 2021) there is now determined that the Federal Agency for Fisheries shall

be the body acting as the focal point of the Russian Federation for the exchange of information within the framework of the implementation of the Agreement, and the respective rules for such exchange of information have been approved.

It was **agreed** that:

- **a letter be sent from the STACTIC Chair to the PECMAC Chair providing an update on the discussions relating to the differences in the calculation of the percentages in the PSC3 forms and requesting feedback.**
- **the NAFO Secretariat will engage with the FAO Secretariat on the GIES system to determine the data exchange opportunities between NAFO and the GIES.**
- **the NAFO Secretariat, via correspondence, request Contracting Parties to put forward representatives to aid the NAFO Secretariat on the development of the NAFO e-PSC system.**

9. Marking of gears

The NAFO Secretariat presented a summary of the measures relating to the marking of gears outlined in the *Convention on Conduct of Fishing Operations in the North Atlantic* in STACTIC WP 23-11. Contracting Parties reflected on the previous discussions relating to the marking of gear, noting they stemmed from a proposal to update the NAFO CEM reference to the *Convention on Conduct of Fishing Operations in the North Atlantic* with a reference to the *FAO Voluntary Guidelines on the Marking of Fishing Gear*, and the mapping exercise that was completed by Contracting Parties in STACTIC WP 22-42 (Rev. 2). Denmark (in respect of the Faroe Islands and Greenland) noted that the marking of fishing gear according to the Convention is a well-established standard and it would be very questionable to start changing this principle. However, it could be obvious to assess which electronic markings, such as AIS transponders on the buoys, can help to better avoid conflicts between line- and gillnetters and trawlers. In addition, there is also the question of whether NAFO wants to explore options for a better way to be able to identify the ownership of abandoned, lost or otherwise discarded fishing gear (ALDFG), which is also mentioned in FAO's guidelines on marking of fishing gear.

The European Union highlighted that the NAFO CEM contains a specific reference for marking of gears, but not for marking of vessels, and it could be prioritized to have minimum clear standards for vessels' markings. Contracting Parties agreed with this way forward noting that this was not an immediate priority for STACTIC, though if time allows, STACTIC may continue discussions of vessel marking requirements at the 2023 Annual Meeting. Contracting Parties also requested the NAFO Secretariat to investigate the vessel and gear marking requirements from other RFMOs and report back at the 2024 STACTIC Intersessional meeting.

It was **agreed** that:

- **the NAFO Secretariat research the vessel and gear marking requirements of other RFMOs and report back at the 2024 STACTIC Intersessional meeting.**
- **STACTIC may continue discussions on the vessel marking requirements in the NAFO CEM at the 2023 Annual Meeting, if time allows.**

10. Report and Recommendations of the Editorial Drafting Group (EDG)

The Chair highlighted the report of the Editorial Drafting Group (EDG) meeting that took place on 31 October 2022 in STACTIC WP 22-53 and noted the recommendation for STACTIC: *The issue of how domestic laws can be enforced, or even known, in Article 12.1(d bis) be forwarded to the 2023 STACTIC Intersessional Meeting for review.* Contracting Parties reviewed the current text of Article 12.1(d bis) of the NAFO CEM and agreed that NAFO inspection presence would require information on whether a Contracting Party requires the vessels to retain incidental catch of Greenland shark onboard their vessels under domestic legislation. Contracting Parties agreed that it would be useful to have this information from those Contracting Parties requiring the retention on board of Greenland shark, and to circulate this information to NAFO Contracting Parties in a simplified format and that a possible way of reporting this information should be looked at. Norway, recognizing the

importance of having the information available to NAFO inspectors, but expressed concerns on whether STACTIC was the appropriate body to introduce this reporting requirement. Additionally, STACTIC highlighted several editorial issues with the text of Article 12.1(d bis) and agreed to forward a review of the article to the EDG.

Contracting Parties agreed that an EDG meeting is required in advance of the 2023 Annual Meeting and reflected on the possibility of holding it back-to-back with the WG-OPR meeting. It was agreed that the NAFO Secretariat will circulate a poll for date selection with the poll for the WG-OPR meeting.

It was **agreed** that:

- **Contracting Parties requiring the retention on board of Greenland shark catches will inform the NAFO Secretariat, who will circulate this information to NAFO Contracting Parties.**
- **the EDG will review the text of Article 12.1(d bis) of the NAFO CEM.**
- **the next meeting of the EDG may take place back-to-back with the WG-OPR, in hybrid format, and that the NAFO Secretariat will circulate a poll for date selection along with the WG-OPR meeting poll.**

11. Half-year review of the implementation of new NAFO CEM measures

The NAFO Secretariat noted that there were no substantive issues to raise under this agenda item that are not already being discussed under other agenda items. Canada reflected that the streamlining of the notification for observers (adopted in COM Doc. 22-10) has been helpful in terms of administrative process.

12. Review and evaluation of Practices and Procedures

The NAFO Secretariat presented the latest list of Contracting Party practices and procedures in STACTIC WP 23-06, noting that the information has been divided between the NAFO public website and the NAFO Members' pages, as agreed at the 2022 Annual Meeting.

The European Union provided a presentation on the Post Activity Risk Assessment (PARA) procedures for port inspections of vessels that have conducted fishing operations in the NAFO Regulatory Area. The presentation outlined the information and procedures conducted by European Union Member States' control authorities and EFCA staff prior to the vessels' entry into port for each NAFO fishing trip. Contracting Parties thanked the European Union for the presentation noting it was an excellent example of best practices for risk assessments for port inspections.

13. Review of current IUU list pursuant to NAFO CEM, Article 53

The NAFO Secretariat presented the latest version of the NAFO IUU list in STACTIC WP 23-10. The Secretariat also highlighted the vessels on the provisional IUU lists for listing and de-listing for review by STACTIC. The NAFO Secretariat reflected on the difficulties in making the required updates to the IUU list, noting that several RFMOs are now cross-listing IUU lists, and that this process has led to confusion for updating the IUU list. Contracting Parties noted the concerns of the Secretariat, and that there have also been discussions on centralizing the IUU list within Contracting Party delegations, and that this is something to work toward in future.

Additionally, the Secretariat requested guidance from STACTIC on whether vessel name changes could be incorporated by the Secretariat intersessionally, or if they should be included on the provisional IUU list for review by STACTIC. Contracting Parties agreed that if a name change has been posted by the originating RFMO, then the NAFO Secretariat can make the change intersessionally. The European Union also noted that it had provided additional comments on the IUU list to the NAFO Secretariat in writing relating to duplicates, and the NAFO Secretariat agreed to provide an updated list for further discussion at the 2023 Annual Meeting.

It was **agreed** that:

- **the NAFO Secretariat will make the required edits to the NAFO IUU list for presentation at the 2023 Annual Meeting.**

14. Report and advice of the Joint Advisory Group on Data Management (JAGDM)

The NAFO Secretariat provided an update from the latest Joint Advisory Group on Data Management (JAGDM) meeting that took place on 21 March 2023, and highlighted the meeting report in JAGDM 2023-01. The European Union highlighted that the latest JAGDM meeting discussed the COX report and the number of characters in some of the NAF data elements, and that related proposals will be brought forward to STACTIC.

15. Discussion on garbage disposal onboard vessels

The NAFO Secretariat presented an update on the STACTIC request to the Scientific Council in STACTIC WP 23-07, noting the request was removed from the Commission requests to the Scientific Council due to the current workload of the Scientific Council. The Scientific Council highlighted that the most current work on the subject was completed by the Scientific Council Working Group on Ecosystem Science and Assessment (WG-ESA). Contracting Parties agreed to have the WG-OPR reflect on whether data collection on garbage disposal by the NAFO Observers is a possible first step in acquiring further information to determine the scale of the issue.

It was **agreed** that:

- **the WG-OPR will consider the possibility of adding data collection on garbage disposal at sea as a task for the NAFO Observers.**

16. Implementation of the Performance Review Recommendations

The NAFO Secretariat presented the recommendations from the WG-PR relevant to STACTIC in STACTIC WP 23-08. Contracting Parties had detailed discussions on each of the outstanding recommendations from the NAFO Performance Review. The current status of each of the items was updated during the meeting in STACTIC WP 22-08 (Rev. 2). Further discussion will take place at the 2023 Annual Meeting. Regarding the recommendation on flag State Performance Evaluation, Contracting Parties differed on the need to carry out a flag State Performance Evaluation at NAFO level. Contracting Parties agreed to review the FAO Guidelines criteria and to convey any comments to the NAFO Secretariat, in case a Contracting Party had not submitted comments yet.

It was **agreed** that:

- **Contracting Parties, who have not already done so, will review the FAO Guidelines criteria and convey any comments to the NAFO Secretariat.**

17. Preliminary Discussion on the Review of Article 4 of the NAFO CEM

The Chair noted the provisions of Article 4.7 of the NAFO CEM, and the requirement for NAFO to review the measures of Article 4 in 2023. It was highlighted that there was a research plan recently circulated by Denmark (in respect of the Faroe Islands and Greenland) for Div. 3M Cod. Contracting Parties raised questions to Denmark (in respect of the Faroe Islands and Greenland) on the provisions of the research plan, and the experience implementing the new measures that were adopted at the 2022 Annual Meeting, in particular the requirement to have an observer on board. Denmark (in respect of the Faroe Islands and Greenland) noted that all catch from the research activity will be counted against the national quota and that the new measures were taken into account when putting forward the research plan. Contracting Parties noted an observer should be on board a commercial research vessel unless otherwise supported by the opinion of the NAFO Scientific Council. Contracting Parties noted that further review of the provisions will be required at the 2023 Annual Meeting.

It was **agreed** that:

- **the review of Article 4 of the NAFO CEM will continue at the 2023 Annual Meeting.**

18. Other Business

a. Report and Recommendations of the Working Group on Control of Landing Obligations

It was noted that the reply to the request from the NAFO Commission, regarding what control elements would be necessary for NAFO to adopt a landing obligation policy, was forwarded to the Commission at the 2022 Annual Meeting in STACTIC WP 22-34, and that there was no further action required from STACTIC on this item at this time. Without prejudice to future decisions on this topic, Contracting Parties agreed that STACTIC should interact with other NAFO subsidiary bodies to understand the state of play of the discussions on a landing obligation policy and to offer support and engagement on those discussions if needed.

It was **agreed** that:

- **the STACTIC Chair will interact with relevant NAFO subsidiary bodies and provide STACTIC with an update on the state of play of the discussions on a landing obligation policy at the 2023 Annual Meeting.**

b. STACTIC Participation

Contracting Parties reflected on the success of the *STACTIC Rules of Procedure regarding data confidentiality and participation in meetings* that were adopted at the 2022 Annual Meeting in COM Doc. 22-19. The Secretariat asked for clarification on whether STACTIC would like the new Rules of Procedure to be incorporated into the broader NAFO Rules of Procedure. It was agreed to keep the document separate for now, noting that it has been adopted by the Commission and carries the same weight as the *NAFO Rules of Procedure*. It was also agreed to post the STACTIC Rules of Procedure on the same public webpage as the *NAFO Rules of Procedure*.

The NAFO Secretariat also highlighted the challenges with implementing a mail vote procedure within the two-day timeframe following Rule 6.e in advance of this meeting, particularly if interpreted to mean two calendar or working days. Contracting Parties reflected that in many cases, working papers are not available until two days before the meeting, such that the decisions to proceed in-camera may not be possible any earlier. Additionally, Contracting Parties noted that the mail vote procedure is only to be implemented if consensus is not reached, and that the discussions under the adoption of the agenda were appreciated at this meeting.

19. Time and place of next meeting

The next STACTIC meeting will be held in Vigo, Spain from 18–22 September 2023.

20. Adoption of report

The report was adopted on 05 May 2023, prior to the adjournment of the meeting.

21. Adjournment

The meeting was adjourned at 11:37 hours on 05 May 2023. Contracting Parties expressed their thanks and appreciation to the Chair for his leadership. The Chair and Contracting Parties thanked the NAFO Secretariat for hosting and providing support during the meeting.

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Annex 2. Agenda

1. Opening by the Interim Chair, Patrick Moran (United States of America)
2. Appointment of Rapporteur
3. Adoption of Agenda
4. Annual Compliance Review, 2022
5. Review of Article 30 of the NAFO CEM
6. NAFO MCS website and application development
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. Report and Recommendations of the Editorial Drafting Group (EDG)
11. Half-year review of the implementation of new NAFO CEM measures
12. Review and evaluation of Practices and Procedures
13. Review of current IUU list pursuant to NAFO CEM, Article 53
14. Report and advice of the Joint Advisory Group on Data Management (JAGDM)
15. Discussion on garbage disposal onboard vessels
16. Implementation of the Performance Review Recommendations
17. Preliminary Discussion on the Review of Article 4 of the NAFO CEM
18. Other business
 - a. Report and Recommendations of the Working Group on Control of Landing Obligations
 - b. STACTIC Participation
19. Time and place of next meeting
20. Adoption of report
21. Adjournment



Report of the Joint Advisory Group on Data Management (JAGDM) Meeting

25 May 2023
Virtual Meeting

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Report of the Joint Advisory Group on Data Management (JAGDM) Meeting

25 May 2023
Virtual Meeting

1. Opening of the meeting

- 1.1 The Chair, Suzana Vodovnik (European Union), opened the meeting and welcomed participants to the virtual meeting of JAGDM. The following Contracting Parties were present: Canada, Denmark (in respect of the Faroe Islands and Greenland), the European Union, Norway and the United Kingdom. The NAFO and NEAFC Secretariats were also present.

2. Appointment of the rapporteur

- 2.1 The NEAFC Secretariat was appointed as rapporteur.

3. Discussion and adoption of the agenda

- 3.1 The agenda that had been circulated before the meeting (document JAGDM-2023-02-01) was adopted, with additional item for AOB raised by the NEAFC Secretariat (see item 7).

4. Data Exchange Statistics

[JAGDM-2023-02-03](#), [JAGDM-2023-02-04](#), [JAGDM-2023-02-05](#) and [JAGDM-2023-02-06](#).

a. NEAFC

- 4a.1 Before opening the floor for the NEAFC Secretariat to present the NEAFC Exchange Statistics, the Chair explained this would be done in a bit different way than in previous years, after the NEAFC Secretariat had extracted some interesting information on e.g., return errors for rejected VMS positions.
- 4a.2 The NEAFC Secretariat presented its data exchange statistics overview (document JAGDM 2023-02-3, JAGDM 2023-02-04, JAGDM 2023-02-05 and JAGDM 2023-02-06), and explained the reason for the different approach, which focused more on issues and fixes. The Secretariat hoped this to be as useful as possible, hoping for good feedback about what would be most valuable for the Parties.

In discussion,

- 4a.3 The Chair further explained the background for this 'new' approach. I.e., it had previously been agreed that the Secretariat should not only present statistics in itself, but also analyse what happened; where was the problem and what kind of errors arose. Furthermore, the Chair asked participants if they had any feedback on the analysis from the NEAFC Secretariat and raised the question if Parties had any suggestions on how to follow-up the issues highlighted and presented by the NEAFC Secretariat.
- 4a.4 The NAFO Secretariat informed JAGDM that it had attempted to work with its VMS Vendor, TwoDays (formerly Vtrack/VISMA). However, the information was not logged to its database. The details were only logged about 25% of the time, and for this reason the NAFO Secretariat was not able to provide a

similar or equivalent analysis for the NAFO system. However, if this presentation was something continued going forward, the NAFO Secretariat would make sure that it would work with the Vendor and that these details being logged in the database.

- 4a.5 The Chair noted that next time the NAFO Secretariat could present their analysis (similar to what the NEAFC Secretariat presented). This would give the NAFO Secretariat a bit more time to prepare.
- 4a.6 The EU thanked the NEAFC Secretariat for the work done. For the EU, having this detailed information was very useful, because unlike the other Parties EU, does not have insight into the direct NAF communications of its Member States (MS). Therefore, EU does not have the same information as the NEAFC Secretariat and the national FMCs. For the EU, the summary gave a very good insight into what was happening and thus moving into the right direction. The EU planned to circulate the information to its Member States and request some feedback on the different issues. The EU would then try to summarise the issues, focusing on the most important first. The EU thought this being a good standing item for the JAGDM agenda. However, rather than focusing on issues that happened a long time ago, the focus should be on issues experienced in the last few months.
- 4a.7 DFG-Greenland concurred with the EU that it was very useful for the Parties to see the statistics and the errors encountered. Furthermore, DFG-Greenland noted that there was number of issues raised in the documents and one of them the operation of the system in general. For DFG-Greenland it was important to differentiate between important and less important warnings. For those errors and warnings important for the understanding of what was happening in the NEAFC Regulatory Area and beyond, it hoped this to be taken up between the NEAFC Secretariat and the relevant FMC to some extent, thus, focusing on the important issues. Another issue is how to go forward as NEAFC goes from the NAF system to the FLUX system and to provide statistics beyond this group for PECMAC to be able to get impression of compliance in general, was of most importance.
- 4a.8 Canada thanked the NEAFC Secretariat for compiling the information. It thought it was very interesting to see the different errors and messages that the NEAFC Secretariat was receiving, noting the comments made by the NAFO Secretariat, Canada would be very interested to receive a similar analysis from the NAFO site. Canada agreed with the comments raised by the other Parties.
- 4a.9 In conclusion, JAGDM noted the analysis made by the NEAFC Secretariat and agreed to review the statistics, in the same or similar way as presented by the NEAFC Secretariat, focusing on and analysing important issues reported for future meetings, with a view to improvement.**

b. NAFO

- 4.10 There were no documents under this agenda item, noting the comments made by the NAFO Secretariat above.

5. NEAFC Issues

a. Master Data Register (MDR) Code List review

- 5.1 Before opening the floor for the NEAFC Secretariat, the Chair explained that this was an agenda item already discussed in the last meeting, where it was agreed that JAGDM would continue this discussion at its next meeting.
- 5.2 The NEAFC Secretariat gave a verbal update, explaining that the priority for this meeting was to coordinate start and end date for the stock codes it currently had in its MDR with EU, prior to the launch of the FLUX fishing activity. Thus, the NEAFC Secretariat raised the question on how to determine a start and end date to be put into its code lists, as currently start and end date was not being used. In general, the NEAFC Secretariat wondered if the start date should be the day JAGDM had reviewed the

amendments to any of the code lists, if this had to go to the Annual Meeting of NEAFC or when the body responsible for the code made the amendment.

Regarding International lists discussed at the last meeting, the NEAFC Secretariat also mentioned that it was trying to find out when amendments were made to these lists, (i.e., the FAO species list (ASFIS), the UN LOCODE list and the countries and territories list), which are all managed by international bodies. To the Secretariat's understanding, the ASFIS list was updated in July and the UN LOCODE list was updated twice a year. Finally, the NEAFC Secretariat informed JAGDM that there had been 407 extra species listed on the ASFIS code list in 2022, and thus not on NEAFC's MDR. Ideally, these extra 407 species would need to be added to the MDR to harmonise with the ASFIS code list, and that this would be tackled in 2024 as part of the agreed routine review of code lists.

In discussion,

5.3 Participants noted that the NEAFC Secretariat would present this and any updated information to JAGDM in 2024, as previously agreed, as the start of routine review of code lists. However, JAGDM agreed and noted the following regarding any changes to the code lists:

- That stock code list, in regard to XOS code was missing (from FA_STOCK code list on the MDR) due to an oversight, and would use the same validity period as the other codes or start date '1989-01-01', as it is coming from the same recommendation;
- If a code list has to change following adoption of a NEAFC recommendation, the start date would be when that recommendation enters into force;
- For updating other international code lists such as on species, location and territory, a commonly agreed start and end date would be needed within NEAFC, allowing sufficient notice period so that every Contracting Party could implement it in time (note start date and end date is needed for backwards compatibility within systems, but is not currently used in the above international lists), and;
- A decision was needed on how to align with the international lists, and if this should be done once a year or in real time if possible.

b. NEAFC Information Security Management System (ISMS)

i. Update to data classification and website content access tables (proposal)

[Document JAGDM-2023-02-09](#)

5.4 The NEAFC Secretariat updated JAGDM that the documents under agenda items 'Update to data classification and website content access tables (proposal) and Data Classification (proposal), as they were discussed at JAGDM 1 2023, were forwarded to PECMAC for comments. PECMAC had no further comments on the way the data been classified or the access control roles for the data. Thus, the document would be forwarded to the NEAFC Annual Meeting in November 2023, as a proposal from JAGDM. The document now included a proper header on them in this regard.

ii. Data Classification (proposal)

[Document JAGDM-2023-02-08](#)

Please see the previous agenda item.

iii. Report from SSA meeting

The NEAFC Secretariat presented to JAGDM a verbal update from the meeting of the System Security

Administrators (SSA), that took place the day before JAGDM, including that the SSA group had reviewed the NEAFC Inventory and incident log as required in the ISMS. The report from the SSA meeting is annexed to this meeting report.

iv. Possible update to Recommendation 11:2013 (ISMS)

Document JAGDM-2023-02-08a (note, in error, two documents 'JAGDM-2023-02-08' were uploaded to the website for this meeting). To differentiate between them the draft update to the recommendation will be referred to as '8a'. JAGDM-2023-02-08 is a proposal to be tabled at the Annual Meeting this year).

The NEAFC Secretariat informed JAGDM that document JAGDM-2023-02-08a was a re-wording Recommendation 11:2013 presented to the SSA group, reflecting the actual role and responsibilities of NEAFC SSA. Recommendation 11:2013 was the original framework recommendation for ISMS in NEAFC. The adoption of this recommendation moved provision for the SSA group from the Scheme into this new information security framework. However, the wording agreed at the time was a too strong as it could be construed that the individuals in the SSA group would have ultimate responsibility for information security in NEAFC, which was in practical terms not the case. This was thus a barrier for Contracting Parties to participate in the SSA process. The re-worded document was positively received by the SSA however further internal discussion was needed. The document had already been uploaded to this JAGDM meeting.

The Secretariat presented document JAGDM-2023-02-08a and invited JAGDM to have a look and comment on the document, as realistically the final drafting would come from JAGDM rather than the SSA group. However, from the point of view from the Secretariat there were no pressure to finalise this document this year.

In discussion,

JAGDM noted document JAGDM-2023-02-08a and agreed to come back to this issue at its next meeting.

6. NAFO issues

a. Technical implications of the implementation of recommendations

The NAFO Secretariat provided update about JAGDM advice to STACTIC concerning the COX message. The advice was not to put catches into the COX, however to put catches into the CAT message. That was agreed at the last intersessional of STACTIC in May 2023 and expected to be forwarded to the NAFO Commission in September for final adoption.

JAGDM noted the update from the NAFO Secretariat.

b. Other NAFO Issues

The NAFO Secretariat noted that there were no issues raised by STACTIC to JAGDM for this meeting.

The NAFO Secretariat updated JAGDM that there was an ongoing security audit taking place for its application for monitoring and control. However, the Secretariat had not yet the results from the audit. The NAFO Secretariat would update JAGDM at its next meeting.

7. Any Other Business

[Document JAGDM-2023-02-07](#)

The NEAFC Secretariat presented document JAGDM-2023-02-07, explaining after analysing the return error log, the NEAFC Secretariat had noticed that one of the returns in the error log was 'no position available for Annex VII message'. Thus, the message had returned NAK-104, which was mandatory fields

missing. The Secretariat had not realised that this rule resulted in a rejection, or that there were checks in place against VMS position messages before accepting or rejecting messages such as 'port of landing' or 'transshipment'. Thus, the Secretariat by looking more closely at the NAF POR report realised it had a footnote saying that coordinates were only mandatory in the port of landing (POR) report, if the vessel is not subject to satellite tracking (which is sending VMS positions). The Secretariat wondered if this was a problem as VMS positions are only sent within the NEAFC Regulatory Area. However, from beginning of 2023, Parties were required to send TRA and POR messages from anywhere, if the fisheries resources had been caught inside the NEAFC Regulatory Area (in accordance with the new Article 13 of the Scheme). The Secretariat wondered if this was now a bit of a mismatch. For the NEAFC Secretariat, one possible solution to this was to make coordinates mandatory in the POR report and just remove the footnote from the Scheme. However, after coordinating with the Chair of PECMAC, the Chair suggested instead of removing the footnote a possibility was to update it to explain 'if you are reporting from outside the RA you will need to include the coordinates. The NEAFC Secretariat noted that not only was the current system quite old, but analysing exceptions and rejection was not something that the Secretariat did on a day-to-day basis. Having spotted this issue, the Secretariat thought it was important to bring this to the attention of JAGDM and flag this issue.

In discussion,

Before opening the floor for comments, the Chair of JAGDM noted, that to her knowledge, amending the footnote would be an easier solution to address this issue.

DFG-GRL noted that from a legal perspective amending the footnote would be acceptable. However, from a technical perspective, NEAFC should seek to the furthest extent possible to have rules that did not change the content of the messages depending on various other items to make the solution as simple as possible. From a technical perspective DFG-GRL preferred adding the positions to all POR messages, if it was necessary for them to be there. Even if this could be seen as double reporting if the vessel was inside the NEAFC RA (and so sending VMS POS), this was still preferable.

The EU thought from a technical perspective, there could be a practical impact for sender depending on each system. The EU raised the question if one alternative was to provide VMS positions for these vessels outside the NEAFC Regulatory Area and if that would be problematic and would cover the legal requirements.

For the DFG-GRL, it thought this addressing the legal requirements. However, this would require vessel to report positions outside of the NEAFC Regulatory Area and that would be a new requirement.

After some further discussions, JAGDM agreed that Contracting Parties would consult internally and return to this issue at its next meeting.

8. Report to the NEAFC Annual Meeting

Nothing raised.

9. Date and Place of the Next Meeting

Date and place of the next meeting was planned in the beginning of 2024. However, if some important issues needed to be addressed, the next meeting could be considered in September or October 2023. The Chair would inform participants if that would be the way forward.

10. Closure of the Meeting

The Chair closed the meeting and thanked everyone for an efficient JAGDM meeting.

Northwest Atlantic Fisheries Organization



Report of the STACTIC Observer Program Review Working Group (WG-OPR) Meeting

11-13 July 2023
Ottawa, Ontario, Canada

NAFO
Halifax, Nova Scotia, Canada
2023

Report of the STACTIC Observer Program Review Working Group (WG-OPR) Meeting

11-13 July 2023
Ottawa, Ontario, Canada

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Report of the STACTIC Observer Program Review Working Group (WG-OPR) Meeting

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1. Opening of the Meeting

The Chair (Brent Napier) opened the meeting at 09:07 (UTC/GMT -4 hours in Ottawa, Canada) on Tuesday, 11 July 2023 at the Centennial Towers in Ottawa, Ontario, Canada and via WebEx, and welcomed representatives from Canada, the European Union, Japan, the United Kingdom, the United States of America, and the Russian Federation (Annex 1).

2. Appointment of Rapporteur

The NAFO Secretariat (Mikaela Soroka) was appointed as rapporteur.

3. Adoption of Agenda

The Chair introduced the provisional agenda and asked representatives if there were any comments or additions. The European Union suggested adding an agenda item related to the identification of challenges on the implementation of the observer program. The working group supported the addition, and it was added above the “Other business” agenda item. The agenda was adopted, as amended (Annex 2).

4. Terms of Reference

The Working Group (WG-OPR) reviewed the Terms of Reference (STACTIC WP 22-30) and made updates based on feedback and tasking received at the STACTIC 2022 Annual and 2023 Intersessional Meetings. The amended Terms of Reference (STACTIC OPR-WP 23-01 Rev.2) will be presented to STACTIC at the 2023 Annual Meeting for adoption.

The Working Group further reflected on the Recommendations endorsed by STACTIC (STACTIC WP 22-48 Rev.2) and agreed to add an additional column to reflect the progress of the working group (STACTIC OPR-WP 23-08). The document is found in Annex 3 of this report.

5. NAFO CEM Article 30 Implementation

The European Union presented STACTIC OPR-WP 23-09 for consideration by the group. The document’s aim was to implement and convert into possible wording of the NAFO CEM the majority of recommendations endorsed by STACTIC in Working Paper 22-48 (Rev. 2) and some of the tasks included in the Terms of Reference of this WG (STACTIC OPR-WP 23-01 Rev.). The discussion paper included, among other elements, changes proposed in Canada’s proposals on product labelling (STACTIC OPR-WP 23-04) and adjustment to Article 30.16 (STACTIC OPR-WP 23-03), and the United States of America’s proposal on tow times (STACTIC WP 22-44). The European Union advised that in addition to amendments to various provisions, it also proposed a re-organisation of Article 30 and some additions to Article 38 in line with STACTIC editorial recommendations. The European Union noted that many article references (highlighted in red) might need to be updated based on the finalized Article.

The group reviewed STACTIC OPR-WP 23-09 in great detail and made additional revisions as well as comments regarding future action items. During the discussion of the paper, it was suggested that revisions of Chapter VII Port State Control should also be considered by the group in connection with the revision of Article 30.

When discussing the alternatives to ensure a direct connection between observers and their FMCs, the Chair encouraged Contracting Parties to do some research domestically on options for communication devices aside from satellite phones. The group agreed to propose a requirement to establish safety communication

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procedures, in addition to the communications' device requirements. The WG-OPR also agreed that STACTIC will have to discuss further this topic and take a decision on the way further.

It was agreed that the Secretariat would compile a summary of the use of the derogations on observer coverage used by the Parties in the past 5 years, for presentation to STACTIC. The WG-OPR agreed that STACTIC OPR-WP 23-09 should reflect a 25% minimum human observation covered in case of vessels with REM systems. Otherwise, unless due to exceptional circumstances (e.g., pandemic), the coverage should be 100%.

Canada expressed concerns regarding the deletion of the provision that a Contracting Party may deploy an observer to another Contracting Party's vessel, if the vessel is required to carry an observer and does not have one assigned by the Flag State Contracting Party. The European Union noted that, as there are no measures specifying that the observer's nationality must match that of the vessel, this can always be the case, rendering this provision unnecessary. The group agreed to remove this provision in STACTIC OPR-WP 23-09, while keeping this discussion open.

Lastly, the group discussed if the Secretariat is the appropriate body to monitor the receipt of daily OBR messages and follow-up when messages are not received daily. The group agreed that if this functionality can be incorporated into the observer application, the Secretariat's tasks could be maintained in the NAFO CEM.

In terms of next steps, WG agreed to consider STACTIC OPR-WP 23-09 Rev. 4 as representing the state of play of the revision of the observer program. Some of the elements, such as the REM program, require further elaboration and discussions. The European Union and other interested parties will collaborate to update the document on these aspects.

The WG-OPR agreed to have one meeting virtually prior to the 2023 STACTIC Annual Meeting, and/or to work bi-laterally to advance on the finalisation of the WP to be presented to STACTIC.

Any recommendations remaining outside of those presented to STACTIC at the 2023 Annual Meeting will be discussed further by the WG-OPR and will remain open.

It was **agreed** that:

- **The Secretariat will compile a summary of the use of the derogation from carrying an observer in the past for presentation to STACTIC at their next meeting.**
- **The WG-OPR will either meet virtually prior to the 2023 STACTIC Annual Meeting and/or work bi-laterally to update and finalize the latest version of STACTIC OPR-WP 23-09 to be presented to STACTIC.**

a. Data collection on Sharks

The WG-OPR discussed STACTIC WP 21-49 (Rev.3) and the Terms of Reference's task relating to data collection on sharks. The group agreed to consult with their domestic shark experts to aid in finalising a formal handling guide for the Scientific Council's endorsement. The group also discussed the possibility of asking observers to record how vessels handle discarding sharks. Once more information is gathered, a formal handling guide could be developed and implemented in NAFO. The Working Group agreed that the shark identification guide should be circulated to observers and posted publicly on the NAFO Website when completed. The group agreed to propose a revision of the template for Greenland shark data collection in line with STACTIC WP 21-49 (Rev.3), which is included in STACTIC WP-OPR 23-09 (Rev.4).

It was **agreed** that:

- **Contracting Parties would consult with their domestic shark experts to aid in finalizing a formal NAFO identification and handling guide that could eventually be endorsed by the Scientific Council.**

b. Data collection on garbage disposal at-Sea

The European Union pointed out that there are no concrete NAFO CEM provisions on garbage disposal, that this discussion is still open in STACTIC, and recalled it had proposed concrete measures, including obligations for observers to collect data. It was agreed to seek guidance from STACTIC on data collection by observers regarding this area.

Canada re-iterated the importance of this item and shared that they have witnessed some disturbing cases of garbage disposal practices at-sea.

It was **agreed** that:

- **The group would await further discussion on this issue at STACTIC and seek clarification from STACTIC regarding the WG-OPR's mandate related to the NAFO observer program's role, if any, in the collection of data on garbage disposal.**

6. Standardizing Reporting

a. Contracting Party reporting requirements

Canada presented STACTIC OPR-WP 23-05, which addressed Recommendation 9 in STACTIC OPR-WP 23-08, to draft a template for Contracting Parties to use for their reporting obligations including 30.6(c), 30.9(c) and 30.10.d. The group thanked Canada for the proposed templates and agreed that all reporting templates should be part of one document. Following discussions, the group endorsed the concepts presented in STACTIC OPR-WP 23-05 Rev. for the reporting template. It was agreed to circulate the document for further reflection and comments in between meetings.

The WG-OPR felt that in order to advance the discussion more information of derogation use is needed. The group asked that the Secretariat compile a summary of the use of the derogations in the past 5 years for presentation at the next meeting and/or STACTIC.

It was **agreed** that:

- **The Secretariat will compile a summary of the use of the derogations in the past to present to the WG-OPR at their next meeting.**
- **STACTIC OPR-WP 23-05 Rev. will be circulated for comments before finalization and final endorsement by the WG-OPR.**

b. Observer reporting requirements

The European Union presented STACTIC OPR-WP 23-09 (Rev. 4) to the group. Suggested changes to the observer reporting requirements can be found in this working paper. The working group reviewed the changes in the discussion paper and further updated the document.

c. Tow Times

The United States of America presented STACTIC WP 22-44 to the group, explaining that the amendment was intended to support the collection of valuable (scientific) data and standardize NAFO processes, which was incorporated into STACTIC OPR-WP 23-09 Rev.4 following discussions by the group. The United States provided suggested text to include all gears and through discussion the group agreed upon new terminology.

7. Observer Application Development

The Secretariat provided a presentation STACTIC OPR-WP 23-12 (Annex 4) and live demonstration of the current iteration of the observer application. The Secretariat stated that there are plans in place for a sea trial of the application to take place this summer and encouraged Contracting Parties to try the application for

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themselves to provide the Secretariat with additional feedback/comments/suggestions. The demo of the application can be found at observer.nafo.int.

WG-OPR welcomed the presentation and the state of play of the product shown by the Secretariat, appreciating very much the progress made. Following questions by the group, the Secretariat clarified that application would work better in screens bigger than mobile phones, that the list of species will be expanded, that the software allows to record data locally and transmit once the device is connected, that it would need to be researched if there is a possible way to gather GPS positions automatically, if this is implemented, and that it would be possible to have different validators (provider, FMC, if needed) among many other clarifications.

The group noted that the use of the observer application could simplify the observers' data transmission and avoid the use of OBR messages.

The group agreed to provide guidance and support to the Secretariat to continue the development and that parties should support the trials of the application.

It was **agreed** that:

- **Contracting Parties agreed to provide whatever support they could to the Secretariat to help advance the observer application.**
- **Once the sea trial is completed for the observer application, Contracting Parties will nominate individuals to take part in a specialized group to fine tune the application.**

8. Remote Electronic Monitoring

The European Union informed the group that it intends to present a fully-fledged document on REM technical specifications in the near future for the consideration and discussion of the group.

The working group agreed to gather more information domestically on elements of REM currently employed in each flag State Contracting Party, where they may exist, with the goal of advancing the discussion on a possible NAFO REM program/standard. The European Union invited representatives to research domestic REM initiatives and to share with the working group specifications currently in place to implement these programs.

It was **agreed** that:

- **The European Union would endeavour to complete a draft of Remote Electronic Monitoring (REM) standards to be presented to the WG-OPR as soon as possible.**
- **Contracting Party agreed to compile and share available information on domestic Remote Electronic Monitoring (REM) programs to support advancement of a NAFO REM standard.**

9. NAFO CEM Article 38 Implementations and Review

Given the linkages to several provisions within Article 30, the working group reviewed possible revisions to elements of Article 38, and included this revision in WP-OPR-WP 23-09 (Rev.4). Further changes to Article 38 may be necessary once the revision of Article 30 has taken place.

10. Challenges on the implementation of the NAFO Observer Program

The European Union summarised some of the challenges identified during the last 4 years of NAFO CEM Article 30 implementation: verbatim data, the lack of follow-up actions/measures when a discrepancy occurs, lack of submission of data comparison reports when using the derogations, failure to submit annual observer list, late

observer reports, instances where an observer appears as a master on a different vessel of the same company, and a lack of clarity regarding what a two-way communication device is. The group agreed that there is a need for the observers to be a separate presence from fishing companies and that there is a need for observer reporting to be used more for compliance, which was addressed in STACTIC OPR-WP 23-09 (Rev.4). The WG-OPR agreed that these challenges need to be basis for the proposed revision of the program.

The United States suggested potentially putting more restrictions on observer qualifications to encourage a more scientific presence, to avoid the challenges of observers being masters on other vessels and to avoid the copying of catch data by the observer. The Chair suggested Contracting Parties review and share their domestic observer qualifications to see how other Contracting Parties are dealing with this issue, with the goal of developing best practice provisions on observer qualifications. The Chair emphasised the importance of having observers be an independent body to give an unbiased report of the vessel's activities.

11. Other business

a. Cancellation of OBR messages

Canada presented STACTIC OPR-WP 23-10, which proposed changes to the NAFO CEM in regard to the cancellation of OBR messages. Canada explained that the goal of the proposal was to allow for erroneous data to be corrected, while attempting to avoid the creation of potential opportunities for non-compliance by vessels altering messages in advance of inspections. The Secretariat notified the group that currently there are no CAN messages for OBR messages and if this is endorsed, there may be associated costs with updating NAFO systems. The European Union agreed in principle with the proposal, however, they felt a portion of this proposal falls outside the scope of the WG-OPR and would be better presented to STACTIC. Discussion did occur regarding whether the observer application would resolve the concerns around the amendment of daily OBR messages.

Canada noted that it would reflect further on the points raised during the discussion and would consult on possible solutions to the issues raised in STACTIC OPR-WP 23-11.

12. Adoption of the Report

The report was adopted via correspondence.

13. Adjournment

The meeting adjourned at 14:43 (UTC/GMT -4 hours)

The Chair (Brent Napier) opened the meeting at 09:07 (UTC/GMT -4 hours in Ottawa, Ontario) on 13 July 2023.

Annex 1. List of Participants

CHAIR	In-person Napier, Brent (Canada)
CANADA	In-person Browne, Dion Her, Natalie Virtual Hickey, Jenelle Warren, Genevieve
EUROPEAN UNION	Virtual Babcionis, Genadijus Escudeiro, Joao Ferreira, Carlos Ferretti, Johanna González, Luis Belmonte Grossmann, Meit Head, Francois Mancebo Näks, Liivika Poviliūnė, Eglė Quintans, Miguel Robledo, Carmen Margarita Teresa, Moline Tubio, Xose
JAPAN	Virtual AKIYAMA, Masahiro ONODERA, Ryo TAKEHARA, Toya
RUSSIAN FEDERATION	Virtual Lizogub, Alexander
UNITED STATES OF AMERICA	In-person Jaburek, Shannah Virtual Day, Lennie Mencher, Liz Pohl, Katie
NAFO SECRETARIAT	In-person Soroka, Mikaela Virtual Aker, Jana Laycock, DJ

Annex 2. Agenda

1. Opening of the Meeting
2. Appointment of Rapporteur
3. Adoption of Agenda
4. Terms of Reference
5. NAFO CEM Article 30 Implementation
 - a. Data Collection on Sharks
 - b. Data Collection on Garbage Disposal At-Sea
6. Standardizing Reporting
 - a. Contracting Party reporting requirements
 - b. Observer reporting requirements
 - c. Tow Times
7. Observer Electronic Application
8. Remote Electronic Monitoring
9. NAFO CEM Article 38 Implications and Review
10. Challenges on the Implementation of the NAFO Observer Program
11. Other Business
 - a. Cancellation of OBR messages
12. Adoption of the Report
13. Adjournment

Annex 3. Actions and Recommendations Summary

#	Article	Recommendations Endorsed by STACTIC	Implementation approach
1	30	The WG-OPR recommends a number of tasks to carry out a full update of the Observer Program by 2023 without prejudice to the possibility to amend some elements of the program in 2022, which is identified as a priority.	No further action required
2	30	The WG-OPR recommends establishing a clear mandate for the flag State Contracting Parties to adopt appropriate measures necessary to effectively comply with their responsibilities under the observer program.	Addressed in STACTIC OPR-WP 23-09 Rev.4 Under "Duties of the flag State a Party" new Article 30.3(a)(iii)
3	38	The WG-OPR recommends assessing the need to update Article 38 on serious infringements when undertaking changes to the observer program.	Addressed in STACTIC OPR-WP 23-09 Rev.4 Under "Article 38 - Additional Procedures for Serious Infringements" with updates to new Article 38.1(l) and (r)
4	30	The WG-OPR recommends to revise the use of the expression "trip" and "entry into port" in the wording of Art 30, in light of the definition of fishing trip in the NCEM and with a view to clarify the reporting requirements.	Addressed in STACTIC OPR-WP 23-09 Rev.4 Under "Duties of the flag State Contracting Party" new Article 30.3(f) and under "Duties of the Observers" new Article 30.7(e) and (g)
5	30	The WG-OPR recommends to undertake an editorial revision of the program, including grouping general provisions and flag State Contracting Parties' obligation; and to consider to move to Annex II.M the data elements to be reported by observers.	Addressed in STACTIC OPR-WP 23-09 Rev.4 Under "Duties of the flag State Contracting Party" new Article 30.3(a)(iii)
6	30.6	The WG-OPR recommends considering derogations based on appropriately justified circumstances as described in Article 30.6 a)- e) or the use of remote electronic monitoring and equivalent sensor technologies.	Addressed in STACTIC OPR-WP 23-09 Rev.4 Under "Partial withdrawal of observers" new Article 30.4
7	30.6.d	The WG-OPR recommends to consider the possibility of using REM and equivalent sensor technologies as justification to derogate from a 100% observers' coverage, including questions regarding data storage and retrieval, data standards, data protection and sharing, ownership and maintenance. In connection with this option, the Working Group recommends to develop minimum standards for the system and to identify scientific data that the system could not provide, as well as appropriate alternatives to collect this data (e.g. by the operator).	Addressed in STACTIC OPR-WP 23-09 Rev.4 Under "Duties of the flag State Contracting Party" new Article 30.3(j)(ii). More discussion on new Article 30.3(j)(iii) is required. Addressed in STACTIC OPR-WP 23-09 Rev.4 Under "Partial withdrawal of observers" new Article 30.4

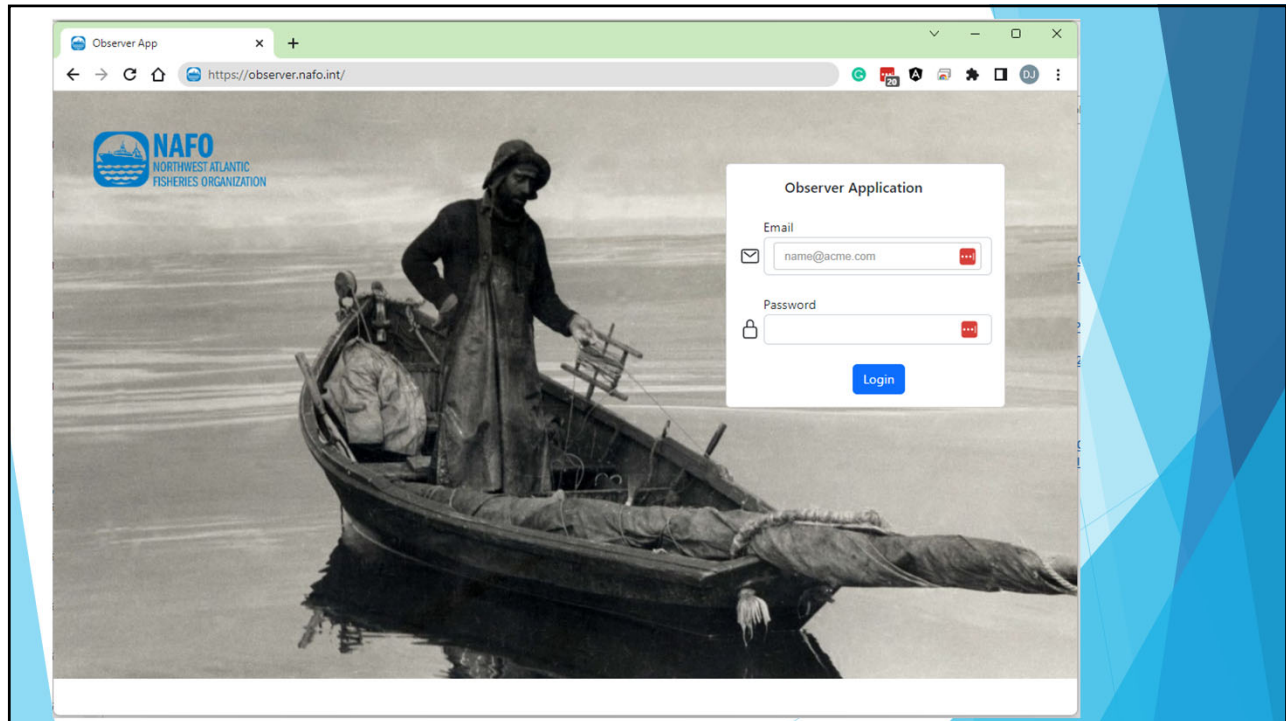
8	30.6.d	The WG-OPR recommend to STACTIC that Contracting Parties share information on their REM and equivalent sensor technologies experiences including successes and any challenges faced.	Addressed in STACTIC OPR-WP 23-09 Rev.4 Under “Partial withdrawal of observers” new Article 30.4
9	30.6.e, 30.9.c, 30.10.d	The WG-OPR recommends the drafting of templates for Contracting Parties’ reporting obligations including 30.6.e, 30.9.c, and 30.10.d.	Addressed in STACTIC OPR-WP 23-09 Rev.4 Under “Duties of the flag State Contracting Party” new Article 30.3(j)(vii) and in STACTIC OPR-WP 23-05 Rev.
10	30.8.e	The WG-OPR recommends to establish a common understanding on the meaning of the requirement to ensure that observers are equipped with an independent two-way communication device at sea”, in particular whether it entails an independent data connection or only an independent device; as well as, for the latter case, to consider the introduction of an obligation of the Master to provide a data connection for the observer.	Addressed in STACTIC OPR-WP 23-09 Rev.4 Under “Duties of the flag State Contracting Party” new Article 30.3(c)(vii)(1) and (2)
11	30.8.f	The WG-OPR recommends compiling “international standards or guidelines”.	Further discussion required
12	30.8.f	The WG-OPR recommends considering developing common standards with regard to training and equipment, unless such standards or guidelines already exist.),	Addressed in STACTIC OPR-WP 23-09 Rev.4 Under “Duties of the flag State Contracting Party” new Article 30.3(c)(vi), but further discussion still required
13	30.10.a	The WG-OPR recommends to simplify the 24h observer deployment notification under Article 30.10(a) of the NAFO CEM.	No further action required – COM doc. 22-10 addressed this recommendation
14	30.14	The WG-OPR recommends to undertake a revision of Annex II.M to incorporate additional elements (e.g. Greenland sharks’ data) and to update the associated templates.	Addressed in STACTIC OPR-WP 23-09 Rev.4 Under Annex II.M “Part 5. Data for Each Greenland Shark...” with updates to the table and footnotes
15	30.14	The WG-OPR recommends including within the observers’ tasks the verification of average box weights and presentations. In adding these tasks, the frequency or scenarios for that verification must give due regard to the already many tasks of the observers.	Addressed in STACTIC OPR-WP 23-09 Rev.4 Under “Partial withdrawal of observers” new Article 30.4 and under Annex II.M “Part 4. Effort and Catch Summary” with updates to new 4C.

16	30.14	The WG-OPR recommends that the requirements to verify production logbook data and labelling be made more explicit in the NAFO CEMs.	Addressed in STACTIC OPR-WP 23-09 Rev.4 Under “Duties of the Observers” new Article 30.7(c)
17	30.14	The WG-OPR recommends to establish the observer application as a main tool for the observers to carry out their reporting obligations and to explore the necessary steps to be undertaken including by the NAFO Secretariat to produce and maintain the observer application.	Further discussion required
18	30.14.g	The WG-OPR recommends that STACTIC review the wording of 30.14.g.	Addressed in STACTIC OPR-WP 23-09 Rev.4 Under “Duties of the Observers” new Article 30.7(e)
19	30.14.j	The WG-OPR recommends to include as part of the revision of the observers’ reporting template (Annex II.M) information on maturity, disposition, pictures and fork length of Greenland sharks, and to the extent necessary, location; as well as an indication that data collection is done minimizing damage to the sampled individuals.	Addressed in STACTIC OPR-WP 23-09 Rev.4 Under Annex II.M “Part 5. Data for Each Greenland Shark...” with updates to the table and footnotes
20	30.14.j	The WG-OPR recommends to seek the Scientific Council’s input on STACTIC WP 21-49 Rev 3 as well as any resulting proposal.	Ensure SC has received request to review recommendation to provide advice to STACTIC
21	30.16	The WG-OPR recommends clarifying the wording of 30.16, linking the cost to the deployment of the observer.	Addressed in STACTIC OPR-WP 23-09 Rev.4 Under “Duties of the flag State Contracting Party” new Article 30.3(c)(i)
22	30.18	The WG-OPR recommends that the Duties of the Executive Secretary (30.18) are revised in light of the changes adopted in the observer program and that an assessment on the need to allocate appropriate resources to the Secretariat is carried out.	Addressed in STACTIC OPR-WP 23-09 Rev.4 Under “Duties of the flag State Contracting Party” new Article 30.3(a)(iii) Further Discussion Required
23		STACTIC recommends to further discuss how Contracting Parties ensure that observers execute their duties in an unbiased manner, free from undue influence or benefit linked to the fishing activity of the vessel, in accordance with Article 32.2 and are independent and impartial in accordance with Article 30.4	Addressed in STACTIC OPR-WP 23-09 Rev.4 Under “Duties of the flag State Contracting Party” new Article 30.3(c)(i),(ii), (iii), and (iv) as well as Article 30.3(c)(g)

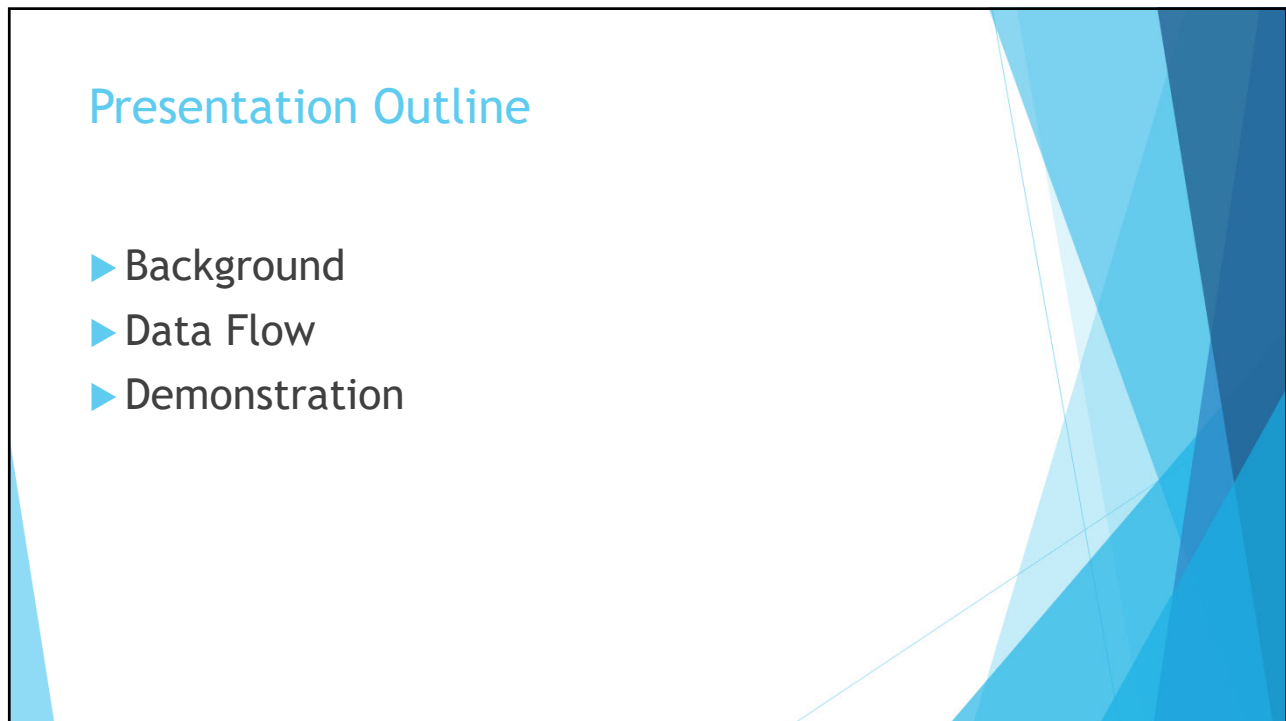
Additional Tasking from STACTIC:

		Tasking	Implementation Approach
		At the 2022 STACTIC Annual Meeting, it was agreed that the discussion on the proposal to standardize tow time recording (STACTIC WP 22-44) would continue within the WG-OPR.	Addressed in STACTIC OPR-WP 23-09 Rev.4 Under Annex II.M “Part 2. Catch and Effort Information by [tow/set]” with updates to the table and footnotes

Annex 4. Observer Application Presentation (STACTIC OPR-WP 23-12)



1



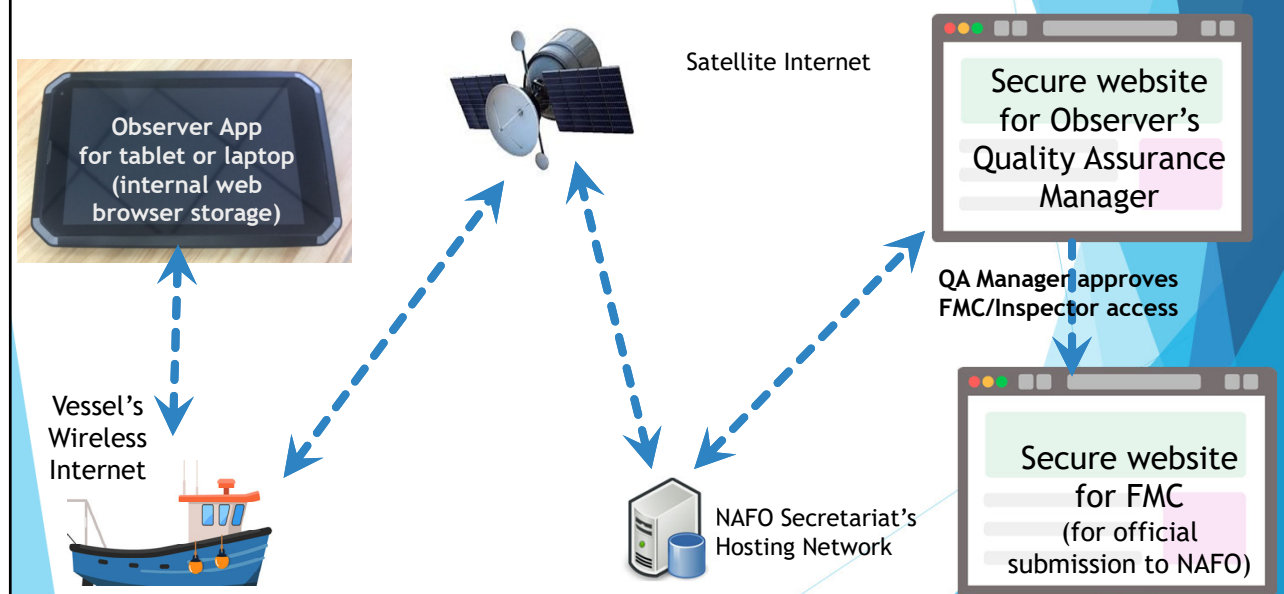
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Background

- ▶ **Main Goal of Application (App):**
Independent means to report observer information **without** the use of FMC's or vessel's software/email
- ▶ Reduce the administrative burden (Observer, Service Provider, FMC, NAFO)
- ▶ Application is designed for **offline** usage
- ▶ Data transfer with very **slow** satellite internet speed
- ▶ Install application version updates with high-speed internet

3

Observer Data / Information Flow



4

Haul by Haul

Catch and Effort Information by Haul															φ	p		
Set #	Gear #	Date (YYYYMMDD)	NAFO Division	START				FINISH				Species (FAO 3-alphaSpecies Code)	Directed Species? (yes or no)	Product Form	Conversion Factor Used	Retained (kg)	Discarded (kg)	Comments
				Latitude (decimal)	Longitude (decimal)	Depth (m)	Time (UTC) (HHMM)	Latitude (decimal)	Longitude (decimal)	Depth (m)	Time (UTC) (HHMM)							
1	1	20170112	3N	44.11	-48.99	300	1135	44.29	-49.01	341	1525	RED	yes	WHL	1	6996		
1	1	20170112	3N	44.11	-48.99	300	1135	44.29	-49.01	341	1525	PLA	no	GHT	1.2	330		
1	1	20170112	3N	44.11	-48.99	300	1135	44.29	-49.01	341	1525	COD	no	OTH-3p	1.4	70		
1	1	20170112	3N	44.11	-48.99	300	1135	44.29	-49.01	341	1525	GSK					1500	
1	1	20170112	3N	44.11	-48.99	300	1135	44.29	-49.01	341	1525	RHG					200	

Set Gear

Haul Gear

Add Catches / Discards

Northwest Atlantic Fisheries Organization



**Report of the NAFO Joint Commission-Scientific Council Working Group on
Risk-Based Management Strategies (WG-RBMS) Meeting**

17-20 July 2023
Edinburgh, United Kingdom

NAFO
Halifax, Nova Scotia, Canada
2023

**Report of the NAFO Joint Commission-Scientific Council Working Group on
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17–20 July 2023
Edinburgh, United Kingdom

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**Report of the NAFO Joint Commission-Scientific Council Working Group on
Risk-Based Management Strategies (WG-RBMS) Meeting**

17–20 July 2023
Edinburgh, United Kingdom

1. Opening by co-Chairs, Fernando Gonzalez-Costas (European Union) and Ray Walsh (Canada)

The meeting was opened by the co-Chairs Fernando González-Costas (European Union) and Ray Walsh (Canada) at 09:00 hours (UTC/GMT +1 hours in Edinburgh, United Kingdom) on Monday, 17 July 2023.

The co-Chairs welcomed participants attending in person and virtually. This included representatives from Canada, European Union, France (on behalf of St. Pierre et Miquelon), Japan, Norway, Russian Federation, United Kingdom, and United States of America, as well as the NAFO Scientific Council (SC) Chair and invited experts on Precautionary Approach Framework on Fisheries Management (Annex 1).

2. Appointment of Rapporteurs

The NAFO Secretariat was appointed as Rapporteur.

3. Adoption of Agenda

The co-Chairs highlighted that a small revision was made to the provisional agenda that was circulated on 10 July 2023. Canada requested to include an item on the WG-RBMS work plan and future priorities under other business (agenda item 10). Additionally, the working group discussed the matter of meeting formats and participation under other business.

The adopted agenda is outlined in Annex 2.

4. Application of the 2+3KLMNO Greenland halibut Management Strategy

The Chair of the Scientific Council, Karen Dwyer (Canada), presented the Scientific Council response to Commission Request #2 (from COM Doc. 22-20) relating to exceptional circumstances and application of the harvest control rule (HCR) for Greenland halibut. The Scientific Council chair noted that exceptional circumstances are occurring as a result of several missing survey values over the last five years from both high and low weighted surveys. However, following sensitivity testing, the Scientific Council concluded that the agreed management procedure, with the exclusion of the Canada 3LNO Spring series, can still be used for the total allowable catch (TAC) calculation.

The WG-RBMS thanked the Scientific Council Chair for the presentation, and the Scientific Council for their work. Consistent with the Scientific Council advice, WG-RBMS agreed to recommend to the Commission that the agreed Management Procedure be applied to set the TAC for 2024.

5. Continue progress on the MSE process for 2+3KLMNO Greenland halibut

Paul Regular (Canada), and Doug Butterworth (Japan) provided an update on the Scientific Council's progress for the management strategy evaluation (MSE) process for Greenland halibut in NAFO Subarea 2 and Divisions 3KLMNO in COM-SC RBMS-WP 23-18 and COM-SC RBMS-WP 23-14. Doug presented the statistical catch-at-age (SCAA) assessment model results (SCR Doc, 23-044) and Paul presented the results for the state space stock assessment model (SSM) in an online dashboard. The working group thanked Paul and Doug for the updates and commented that the online dashboard was a useful tool to store the results and could facilitate future traceability.

It was noted that the Scientific Council, at the June 2023 meeting and subsequent work in July, proposed to use the four primary operating models (OMs) from the previous MSE of this stock, with the addition of further robustness tests using different survey series and life history options, bringing the total number to 15 model formulations to be implemented under both SCAA and SSM. The WG-RBMS agreed to move forward with the expanded OMs, with the exception of the OM model that only uses EU data as the scenario was seen as very unlikely. It was recognized that the MSE technical team may need to make adjustments to the OMs as work continues.

The working group also reflected on the performance statistics that were agreed at the previous meeting in COM-SC RBMS-WP 23-08 (Revised), noting that some refinements were required to finalize them, particularly in relation to the statistic for low risk of exceeding F_{msy} . The objective of “*Low risk of exceeding FMSY*” was considered as desirable secondary objectives and an additional statistic assessing the risk of exceeding F_{msy} when B is below B_{msy} was added. The working group agreed to the management objectives and performance statistics outlined in COM-SC RBMS-WP 23-08 (Rev. 2) (Annex 3).

Additionally, Paul presented an alternative conceptual candidate management procedure (CMP) for consideration, noting the general steps of the probability-based rule are to calculate the probability that the stock is above target levels, calculate the probability that the stock is growing, and use both probabilities to adjust the TAC each year. The working group agreed to move forward with testing the alternative CMP starting with the SSM assessment model. Once the results of initial testing are reviewed, testing may continue with the SCAA model.

6. Progress on the MSE process for 3LN redfish

Andrea Perreault (Canada) provided a detailed presentation on the MSE for redfish in NAFO Divisions 3LN in COM-SC RBMS-WP 23-16. The presentation provided updates on the impacts of the loss of the Canadian spring survey, Canadian efforts to develop conversion factors, progress on development of OMs and performance statistics, and an initial discussion of the CMPs. Andrea noted that in general, the 3LN Redfish MSE process is on track to follow the timelines outlined in the workplan (COM-SC RBMS-WP 23-06 Rev. 3) (Annex 4). The working group thanked Andrea for the updates.

7. Next steps in the MSE processes

The working group reviewed the work plan for the Greenland halibut and redfish MSE processes that had been updated at the last meeting in COM-SC RBMS-WP 23-06 (Rev. 2). A minor revision was made related to planned Scientific Council discussions on the exceptional circumstances protocol for Greenland halibut scheduled for January 2024. It was noted that the Scientific Council will not be able to complete this item until the management procedure has been selected. The working group agreed to forward the work plan for 2024 outlined in COM-SC RBMS-WP 23-06 (Rev. 3) (Annex 4) to the Commission and the Scientific Council for endorsement.

8. Precautionary Approach Review progress

a. Update from the Scientific Council and Discussion

The co-Chair of the Precautionary Approach Working Group (PA-WG), Fernando González-Costas (European Union), presented the Scientific Council response to Commission request #7 (from COM Doc. 22-20) relating to the review of the precautionary approach framework in COM-SC RBMS-WP 23-17. It was noted that in its 14 July 2023 meeting (SCS Doc. 23-17), the Scientific Council agreed to add a case study for 3NO witch flounder, in addition to those for 3M cod, 3LNO yellowtail flounder, and 3M redfish, as only one of the initial three stocks was in the ‘danger/recovery zone’ (since agreed to as “Cautious Zone”). The presentation also highlighted three possible frameworks for consideration with Option 1 having one intermediate biomass reference point: B_{buffer} ; Option 2 having one intermediate biomass reference point: $B_{trigger}$; and Option 3 having two intermediate biomass reference points: B_{buffer} and $B_{trigger}$.

The Scientific Council agreed with the proposed zone names that were put forward by the WG-RBMS during the meeting in April 2023 (Healthy Zone, Cautious Zone, and Critical Zone). The working group agreed with the Scientific Council's suggestion that the fishing mortality zones should not be named.

b. Development of provisional draft framework

The working group thanked the PA-WG co-Chair and the Scientific Council for their work. Following the presentation and subsequent discussions of the advice, the working group agreed to move forward with Option 2, which includes the one intermediate biomass reference point: B_{trigger} (which it was agreed should be set between 0.7 and $0.8 \cdot B_{\text{msy}}$).

The working group proposed management actions for each zone, in particular for the cautious zone. The working group proposed a draft provisional framework that provides flexibility to managers to set exploitation levels within upper and lower limits bounds. This framework is set out in COM-SC RBMS-WP 23-20 (Revised) (Annex 5). The working group recognized that further refinement and /or revision of the draft provisional framework may be required.

Following the development of the draft provisional framework, the working group updated the work plan (COM-SC RBMS-WP 23-19 (Revised)) (Annex 6) and agreed to forward both the workplan and the draft provisional framework to the Commission for endorsement.

9. Review of the Terms of Reference for WG-RBMS

The working group reviewed the Terms of Reference (FC Doc. 13-18) and reflected on the discussions from the April 2023 meeting relating to the flow of information between the working group and the Scientific Council. The working group noted that its current Terms of Reference allow for the flow of information between the working group and the Scientific Council as its current work is already provided for by a Commission-approved work plan. The co-Chair of the WG-EAFFM, Elizabethann Mencher (United States of America) noted that WG-EAFFM would also be reviewing proposed edits to its Terms of Reference in the meeting scheduled for 20-22 July 2023. WG-RBMS agreed that further review of its Terms of Reference could be considered at the NAFO Annual Meeting, taking into consideration any proposed revisions to the Terms of Reference for the WG-EAFFM.

During the discussions, Scientific Council members noted that there may be a need to review its current practices within the SC related to peer review of ongoing work / input associated with multi-step initiatives. It was noted that the Scientific Council process for peer reviewed information can take a considerable amount of time, and that the Scientific Council may reflect on this at the 2023 Annual Meeting.

10. Other Business

a. Work plan and future priorities

Canada noted that, separate from the work planning on ongoing MSE processes for Greenland halibut and 3LN redbfish, WG-RBMS should reflect on its future work to develop management strategies for other NAFO-managed stocks in the next 3 to 5 years. Canada expressed the view that 3NO witch flounder and 3LNO yellowtail flounder should be the next priority stocks for WG-RBMS and that establishing management strategies for these stocks would support NAFO's primary objective of ensuring the long-term conservation and sustainable use of the fisheries resources in the Convention Area. Canada noted that it would also be in the interest of all Contracting Parties that have a desire to meet both emerging requirements of NAFO's future Precautionary Approach Framework (PAF), as well as requirements of the newest version of the Marine Stewardship Council (MSC) Standard.

With respect to timing, Canada stated that given current workplans for NAFO's reviews of the PAF and the two MSEs, initial planning of MSE processes and timelines for 3NO witch flounder and 3LNO yellowtail flounder could begin as early as the August 2024 meeting of WG-RBMS without adding to SC and WG-RBMS workload.

Canada flagged its intention to explore the possibility of a simplified version of the MSE approach (as opposed to full simulation testing), in large part to reduce demands on the Scientific Council and will report back to WG-RBMS on any outcomes of these discussions.

The working group thanked Canada for initiating the discussions on the future work of WG-RBMS and expressed interest in the results of Canada's exploration of the simplified MSE approach for 3NO witch flounder and 3LNO yellowtail flounder.

b. Meeting formats and participation

The working group discussed the new hybrid meeting format that had become standard practice following the COVID-19 pandemic. It was noted that in person participation is ideal as it better facilitates the meeting dialogue and allows better opportunities for networking and additional discussions on the margins of meetings, but that some Contracting Parties are facing travel constraints. The working group agreed to request the Commission and Scientific Council to reflect on meeting formats (in-person, hybrid, virtual) and Contracting Party participation.

11. Recommendations

The WG-RBMS agreed to the following conclusions and recommendations.

In relation to the application of the 2+3KLMNO Greenland halibut Management Strategy (agenda item 4), WG-RBMS:

1. recommends that the existing management procedure be used to set the total allowable catch for 2024.

In relation to the progress on the MSE process for 2+3KLMNO Greenland halibut (agenda item 5), WG-RBMS:

2. agrees to the management objectives and performance statistics outlined in COM-SC RBMS-WP 23-08 (Rev. 2) (Annex 3).
3. agrees to a second Candidate Management Procedure to be tested in the MP revision process.

In relation to the in the MSE processes (agenda item 7), WG-RBMS:

4. recommends that the 2024 MSE workplan outlined in COM-SC RBMS-WP 23-06 (Rev. 3) (Annex 4) be forwarded to the Commission for endorsement.

In relation to the Precautionary Approach (agenda item 8), WG-RBMS:

5. recommends that the NAFO Commission endorse the Provisional Draft Precautionary Approach (PA) framework (COM-SC RBMS-WP 23-20 (Revised) (Annex 5).
6. recommends that the updated PA workplan outlined in COM-SC RBMS-WP 23-19 (Revised) (Annex 6) be forwarded to the Commission for endorsement.

In relation to meeting participation (agenda item 10.b), WG-RBMS:

7. requests the Commission and Scientific Council reflect on meeting formats (in-person, hybrid, virtual) and Contracting Party participation with a goal of ensuring that meetings are both efficient and effective.

12. Adoption of report

The report was adopted via correspondence following the end of the meeting.

13. Adjournment

The meeting adjourned early at 15:23 hours (UTC/GMT +1 hours in Edinburgh, United Kingdom) on Wednesday, 19 July 2023.

The co-Chairs thanked meeting participants for their cooperation and input. The participants likewise expressed their thanks and appreciation to the co-Chairs for their leadership. The working group also expressed their gratitude to the United Kingdom for hosting the meeting, and the NAFO Secretariat for their support.

Annex 1. List of Participants

CO-CHAIRS	In-person González-Costas, Fernando (European Union) Walsh, Ray (Canada)
SC CHAIR	Virtual Dwyer, Karen
CANADA	In-person Burns, Adam Chapman, Bruce Johnson, Kate Koen Alonso, Mariano Regular, Paul Simpson, Mark Virtual Dennis, Olivia Diamond, Julie Fagan, Robert Hatefi, Fatemeh Her, Natalie Krohn, Martha Perreault, Andrea Lebeau, Amy Lee, Robyn Rayner, Gemma Schleit, Katie
EUROPEAN UNION	In-person Alpoim, Ricardo Belmonte Gonzalez, Luis Cortina Burgueño, Angela González-Troncoso, Diana Teixeira, Isabel Virtual Blazkiewicz, Bernard Garrido, Irene Gonçalves, Patrícia Granell, Ignacio Jansone, Santa Lopes, Luis Mancebo, C. Margarita Merino Buisac, Adolfo Tuvi, Aare
FRANCE (IN RESPECT OF ST. PIERRE ET MIQUELON)	Virtual Larrat, Clémence
JAPAN	In-person Taki, Kenji Virtual Akiyama, Masahiro Butterworth, Doug Rademeyer, Rebecca Takehara, Toya

NORWAY	Virtual Hvingel, Carsten
RUSSIAN FEDERATION	Virtual Fomin, Konstantin Tairov, Temur
UNITED KINGDOM	In-person De Oliveira, Jose Francis, Will Ryan, Jack Virtual Hutchinson, Nikki Readdy, Lisa
UNITED STATES OF AMERICA	In-person Kelly, Moira Mencher, Elizabethann Warner-Kramer, Deirdre Yanoff, Callan Virtual Jaburek, Shannah Sosebee, Kathy
INVITED EXPERTS	In-person Howell, Daniel Virtual Cadrin, Steven Horbowy, Jan
NAFO SECRETARIAT	In-person Benediktsdóttir, Brynhildur Aker, Jana Blasdale, Tom LeFort, Lisa

Annex 2. Agenda

1. Opening by co-Chairs, Fernando Gonzalez-Costas (European Union) and Ray Walsh (Canada)
2. Appointment of Rapporteurs
3. Adoption of Agenda
4. Application of the 2+3KLMNO Greenland halibut Management Strategy
5. Continue progress on the MSE process for 2+3KLMNO Greenland halibut
6. Progress on the MSE process for 3LN redfish
7. Next steps in the MSE processes
8. Precautionary Approach Review progress
 - a. Update from the Scientific Council and Discussion
 - b. Development of provisional draft framework
9. Review of the Terms of Reference for WG-RBMS
10. Other Business
 - a. Work plan and future priorities
 - b. Meeting formats and participation
11. Recommendations
12. Adoption of report
13. Adjournment

**Annex 3. Provisional management objectives and the performance statistics for the
Greenland halibut MSE**
(COM-SC RBMS-WP 23-08 (Rev. 2))

Table 1: Provisional management objectives and the performance statistics for the Greenland halibut MSE. Objectives in bold have been identified as the primary required objectives and the remaining are desirable secondary objectives.

Management Objectives	Performance Statistics	Criteria
Restore to within a prescribed period of time or maintain at B_{MSY}	$B_{2044}^{5-9}/B_{MSY}^{5-9}$	median and 80% PI
	$B_{2044}^{5-9} < B_{MSY}^{5-9}$	$P \leq 0.5$
	$B_{2030}^{5-9} < 0.8B_{MSY}^{5-9}$	$P \leq 0.25$
	$B_{2044}^{5-9} < 0.8B_{MSY}^{5-9}$	$P \leq 0.25$
The risk of failure to meet the B_{msy} target and interim biomass targets within a prescribed period of time should be kept moderately low	$B_{lowest}^{5-9}/B_{MSY}^{5-9}$	median and 80% PI
	$B_{2030}^{5-9} < B_{2025}^{5-9}$	$P \leq 0.25$
Low risk of exceeding F_{MSY}	$P(F_y^{5-9} > F_{MSY}^{5-9}) > 0.3$	count; $y = 2025 - 2044$
	$P(F_y^{5-9} > F_{MSY}^{5-9} \mid B_y^{5-9} < B_{MSY}^{5-9}) > 0.3^*$	count; $y = 2025 - 2044$
Very low risk of going below an established threshold	$B_{2044}^{sp}/B_{2025}^{sp}$	median and 80% PI
	$B_{2044}^{5-9}/B_{2025}^{5-9}$	median and 80% PI
	$P(B_y^{5-9} < 0.3B_{MSY}^{5-9}) \geq 0.1$	count; $y = 2025 - 2044$
	$B_{lowest}^{5-9}/B_{MSY}^{5-9} < 0.3$	$P \leq 0.1$
Maximize yield in the short, medium and long term	$\bar{C}_{2025-2029} = \sum_{y=2025}^{2029} C_y/5$	median and 80% PI
	$\bar{C}_{2025-2034} = \sum_{y=2025}^{2034} C_y/10$	median and 80% PI
	$\bar{C}_{2025-2044} = \sum_{y=2025}^{2044} C_y/20$	median and 80% PI
The risk of steep decline of stock biomass should be kept moderately low	$B_{2030}^{5-9} < 0.75B_{2025}^{5-9}$	$P \leq \begin{cases} 0.1, & B_{2025}^{5-9} < 0.8B_{MSY}^{5-9} \\ 0.25, & B_{2025}^{5-9} > 0.8B_{MSY}^{5-9} \end{cases}$
Keep inter-annual TAC variation below an established threshold	$AAV_{2025-2029} = \frac{1}{5} \sum_{y=2025}^{2029} \frac{ C_y - C_{y-1} }{C_{y-1}}$	median and 80% PI
	$AAV_{2025-2044} = \frac{1}{20} \sum_{y=2025}^{2044} \frac{ C_y - C_{y-1} }{C_{y-1}}$	median and 80% PI

* This statistic is considered a diagnostic. If it is triggered under the simulations, biomass trajectories must be checked carefully to ensure that resource recovery is not compromised in the longer term, and should be evident, where relevant, within the management period (20 years for GHL) under consideration in the MSE.

Annex 4. MSE Workplan
(COM-SC RBMS-WP 23-06 (Rev. 3))

Table 1. Tentative 3LN redfish and 2+3KLMNO Greenland halibut MSE

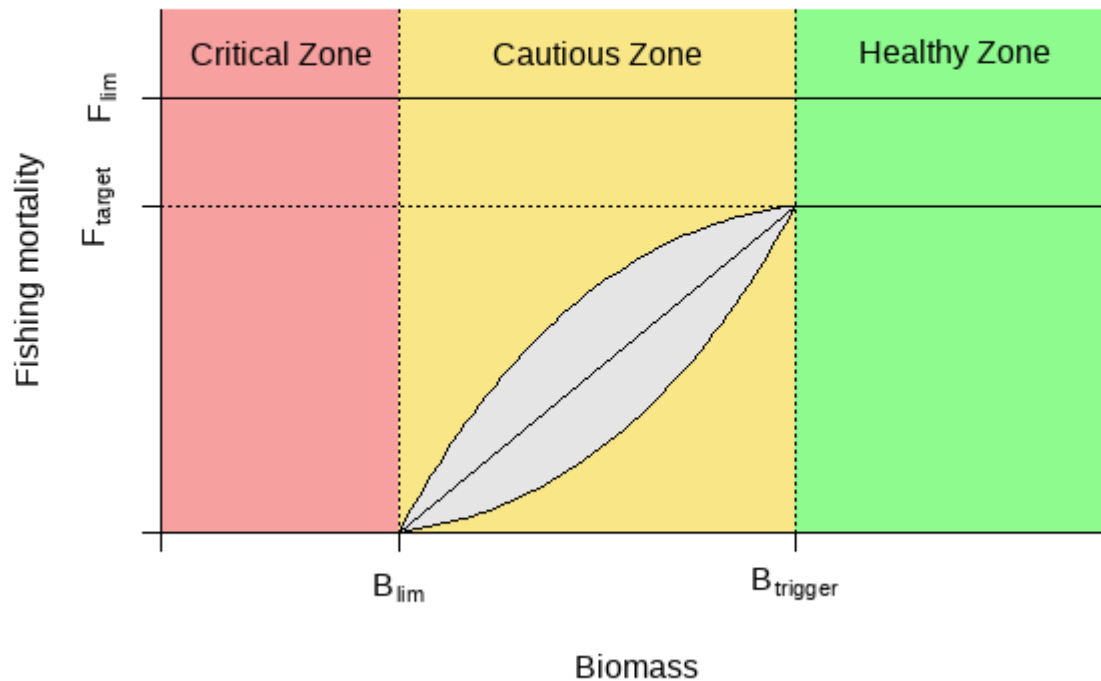
Expected Delivery	NAFO Body	GHL MSE	3LN REDFISH MSE
April 2023	WG-RBMS	Schedule finalized and proposed to the Commission; propose conceptual initial Candidate Management Procedures (CMPs); identify management objectives/performance statistics	Schedule finalized and proposed to the Commission; initial discussion on management objectives, conceptual initial CMPs, potential OMs, and performance statistics
June 2023	Scientific Council	Review and finalization of Operating Models (OMs) to be used; initial testing of the current CMP and possibly further CMPs performance against established management objectives;	Proposal and review of OMs to be used; continue discussions on performance statistics;
July 2023	WG-RBMS	Review CMPs; finalize performance statistics including risk tolerances and constraints	Continued progress on OMs, development of performance statistics; initial discussion of CMPs
September 2023	Commission	Update on progress on the respective MSEs and seek endorsement from the Commission on the workplan for 2024 and beyond.	
January 2024	Scientific Council	Testing CMP performance against established management objectives & initial discussions on exceptional circumstances protocol	Address and review any further work on OMs, performance statistics, and CMPs stemming from RBMS
Spring 2024	WG-RBMS	Discussing results of CMP testing and exceptional circumstances protocol and possible recommendation to Commission on adoption of Management Strategy, subject to progress.	Input to SC on further progress on OMs, CMPs, and finalize the performance statistics.
June 2024	Scientific Council	Consider any follow up from Spring WG-RBMS	Review and finalization of OMs to be used; selection of the CMP for testing against established management objectives
Aug 2024	WG-RBMS	Finalize and recommend Management Strategy to the Commission	Finalize CMPs; refinement of performance statistics including risk tolerances and constraints; Update the workplan for Redfish.
Sept 2024	COM	The Commission considers adoption of proposed new Management Strategy	Update on progress

1) Timelines are notional and subject to revision based on workload, capacity, and unanticipated problems.
2) Target for completion for the Redfish MSE will be September 2025, and the details of the workplan will be developed at the August 2024 WG-RBMS meeting.

Annex 5. Provisional Draft Framework
(COM-SC RBMS-WP 23-20 (Revised))

In the Healthy Zone, F should generally be F_{target} (i.e. default at 85% of F_{msy}); however, under certain circumstances (e.g. $B > B_{\text{msy}}$, etc.) the Commission may decide to set an F at a different level. In these cases, the Commission should document the rationale for such a decision.

In the cautious zone, F should be managed as represented by the figure.



To support the Commission's decision of where within the leaf (potential harvest space depicted in grey above), F should be set, SC should endeavour to provide the Commission with a risk-based table that would indicate the risks/probability at various F levels within the span of the leaf:

- Of $B > B_{\text{trigger}}$ within e.g. 1,2,3 years (depending on the stock)
- Of $B < B_{\text{lim}}$ with e.g., 1,2,3 years (depending on the stock)
- Probability of $B_{\text{future}} > B_{\text{current}}$ ($B_{\text{future}} = 1,2,3$ years depending on stock) including indication of magnitude of this growth

To support their decision, SC would also provide:

- Current stock status and confidence intervals
- Recent trajectory of the stock

Generally, the Commission should adopt an F that achieves the following policy objectives depending on stock trajectory and relative position in the cautious zone:

Focus of management action within Cautious Zone		Stock status in the Cautious Zone	
		Low level	High level
Stock trajectory in the Cautious Zone	Decreasing Trend	Reduce risk of further stock decline	Mitigate stock decline
	Increasing Trend	Promote stock growth with high certainty	Promote stock growth

These focal elements for management actions are intended to articulate an increasing risk avoidance in management actions as the stock gets closer to B_{lim} .

In the critical zone, F should be managed at as low a level as possible.

Annex 6. NAFO Precautionary Approach Framework Revision – Revised Workplan
(COM-SC RBMS-WP 23-19 (Revised))

The following is an update from COM-SC RBMS-WP 22-06.

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

Northwest Atlantic Fisheries Organization



**Report of the NAFO Joint Commission–Scientific Council Working Group on
Ecosystem Approach Framework to Fisheries Management (WG-EAFFM) Meeting**

20–22 July 2023
Edinburgh, United Kingdom

NAFO
Halifax, Nova Scotia, Canada
2023

Report of WG-EAFFM,
20–22 July 2023

**Report of the NAFO Joint Commission–Scientific Council Working Group on Ecosystem Approach
Framework to Fisheries Management (WG-EAFFM) Meeting**

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**Report of the NAFO Joint Commission–Scientific Council Working Group on Ecosystem Approach
Framework to Fisheries Management (WG-EAFFM) Meeting**

20–22 July 2023
Edinburgh, United Kingdom

1. Opening by the co-Chairs, Mar Sacau Cuadrado (European Union) and Elizabethann Mencher (United States of America)

The meeting was opened by the co-chairs, Mar Sacau Cuadrado (European Union) and Elizabethann Mencher (United States of America), at 11:02 hours (UTC/GMT +1 hours in Edinburgh, United Kingdom) on Thursday, 20 July 2023.

The co-Chairs welcomed participants attending in person and virtually. This included representatives from Canada, European Union, Iceland, Japan, Norway, Russian Federation, Ukraine, United Kingdom, and the United States of America. The Scientific Council (SC) Chair participated virtually, and an observer from the Deep Sea Conservation Coalition was present (Annex 1).

2. Appointment of Rapporteur

The NAFO Secretariat was appointed as Rapporteur.

3. Adoption of Agenda

The working group agreed to include the following items under agenda item 13 – Other Business

- updates from the NAFO Secretariat on the progress for the BBNJ (Biodiversity Beyond National Jurisdiction), the ABNJ (Areas Beyond National Jurisdiction) Deep Seas Project, and the ICES (International Council for the Exploration of the Sea) MOU (Memorandum of Understanding,
- as well as a presentation from the Scientific Council Chair on the results of Informal Group to Reflect on the Workload of the Scientific Council.

The adopted agenda is outlined in Annex 2.

4. Presentation of Scientific Council responses to Commission requests for advice (COM Doc. 22-20) relevant to WG-EAFFM

The WG-EAFFM co-Chair, Mar Sacau Cuadrado, presented the Scientific Council advice relevant to the WG-EAFFM (see SCS Doc. 23/18). The co-Chair noted that the Scientific Council advice will be discussed in detail in subsequent agenda items and presented a summarized overview of each of the responses. The working group thanked the Scientific Council for their work and the co-Chair for the presentation.

5. VME Assessments

a. Review of VME areas 7a, 11a, 14a, and 14b (COM Request #6.a)

Andrew Kenny (United Kingdom) presented a summary of the Scientific Council response to Commission request #6.a, as outlined in the Scientific Council report (SCS Doc. 23/18), and summarized in COM-SC EAFFM-WP 23-09. The Commission's request to SC was to complete the re-assessment of VME 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. The Scientific Council analysis concluded that there was no discernible overlap between the re-assessed closures and the shrimp fishery, and that the four closures would have resulted in no discernible losses in catch for the shrimp fishery during 2020 and 2021. As a result, Scientific Council recommended that

Report of WG-EAFFM,
20–22 July 2023

VME closures 7a, 11a, 14a and 14b remain closed until December 31, 2026, and be included in the reassessment along with the other VME and seamount closures. The working group agreed with the Scientific Council’s advice and to forward a recommendation to the Commission that the VME closures 7a, 11a, 14a and 14b remain closed until 31 December 2026 and be re-assessed with NAFO’s other VME and seamount closures.

The working group thanked the Scientific Council for their work and noted that the next assessment of the NAFO VME closures should, where available, take into account historical fishing activity prior to 2010, to have additional information for consideration when reviewing the VME closures in 2026. One Contracting Party noted that Article 23.2(a) of the NAFO Conservation and Enforcement Measures (NCEM) speaks to the Commission considering reassessing bottom fishing activities and NAFO’s VME closures if there is a “significant change in the fishery”. It noted that this element will be important to keep in mind when considering future re-assessments of significant adverse impacts of bottom fishing on VMEs, and that evidence of significant changes in the fishery and/or in the distribution of fisheries resources should be an element of NAFO’s VME review process, alongside updated scientific information on the distribution of VMEs.

The working group also reflected on whether the VME areas can be combined (e.g., area 7 be combined with area 7a moving forward) and noted that this would fall outside of the scope of the current Commission request, but that it could be reviewed by the Scientific Council during the re-assessment process in 2026.

b. Review of Article 17.3bis of the NAFO CEM

Reflecting the discussion under agenda 5a, the working group proposed text amendments to NAFO CEM Article 17.3 to maintain VME closures 7a, 11a, 14a, and 14b to 31 December 2026 and to incorporate these closures with the other VME and seamount closures in COM-SC EAFFM-WP 23-15 (Annex 3). The working group agreed to forward these changes to the Commission for adoption pending its decision on the extension of the four VME closures.

c. Data for VME and SAI assessments (COM Request #6.b)

Andrew Kenny presented a summary of the Scientific Council response to Commission request #6.b, summarized in COM-SC EAFFM-WP 23-10 from the Scientific Council report (SCS Doc. 23/18). It was noted that the Scientific Council established a data sub-group, which has identified standard data products and procedures developed by the Scientific Council, including VME data, VMS data, fishing effort calculations, catch data and spatial analysis methods. The Scientific Council continues to work with the NAFO Secretariat to develop a centralized data repository using ArcGIS online to host the data and data-products for scientific advice.

The working group thanked the sub-group and the Scientific Council for the progress update on this request. The working group discussed the sensitive nature of the data and highlighted that currently the data repository is only available to Scientific Council members that are undertaking the VME and SAI assessment work. The working group noted that, as the data sub-group continues progress on the repository, it should consider the issue of data access (privacy) and sensitivity, noting the existing guidelines for data confidentiality in NAFO, and reflect on potential data sharing possibilities in the future.

d. Work towards developing operational objectives for the protection of VMEs and biodiversity in the NRA (COM Request #6.c)

The co-Chair, Elizabethann Mencher, reflected on the discussions that have taken place in NAFO over the years on operational objectives in relation to the ecosystem roadmap and, more recently VMEs specifically in the re-assessment of the closures during the 2021 Annual Meeting. Andrew Kenny (United Kingdom) presented a summary of the Scientific Council response to Commission request #6.c, available in COM-SC EAFFM-WP 23-11 from the Scientific Council report (SCS Doc. 23/18).

The Scientific Council developed a draft framework for operational objectives for the protection of biodiversity and prevention of overfishing in the NAFO Regulatory Area (NRA) using internationally recognized definitions

(table 3 in COM-SC EAFFM-WP 23-11). The working group had an open and detailed discussion around the proposed framework as well as possible operational objectives, noting that any objectives must be consistent with NAFO's mandate.

Representatives from WG-EAFFM will work intersessionally to develop a draft framework document for presentation at the next WG-EAFFM meeting in August 2024, reflecting the working group's discussions. It was agreed that this work will be completed secretarially, and that interested working group members may decide to meet virtually, if required.

6. Ecosystem Roadmap

a. Inclusion of TCI information in stock summary sheets, management considerations for occasions in which the 2TCI ecosystem reference point were to be exceeded and exploration of effective methods to communicate TCI-related information (COM Request #5a and #5b)

Mariano Koen-Alonso presented a summary of the Scientific Council responses to Commission request #5.a and 5.b, summarized in COM-SC EAFFM-WP 23-06 and COM-SC EAFFM-WP 23-07, with the final advice being outlined in the Scientific Council report (SCS Doc. 23/18). In relation to the management consideration of ecosystem reference points, the Scientific Council developed a template for inclusion of Total Catch Index (TCI) information in Stock Summary Sheets (SSSs). The template included a reference to TCI in the summary table, and a new section describing sustainability of the catches for the guild and EPU to which the SSS focal stock belongs. These modifications have been implemented in SSSs of the stocks assessed in 2023. The working group thanked Mariano and the Scientific Council for their work and agreed that the inclusion of TCI information in the Stock Summary Sheets would be useful for managers. The working group requested that, going forward, Scientific Council not include a description of risk in SSSs unless assessed to be over the 2TCI Ecosystem Reference Point adopted by the Commission in 2022 (high risk). Scientific Council would continue to include the numeric value in relation to TCI in SSSs. The working group recommended that the Commission request the Scientific Council to annually provide information on ecosystem overfishing in relation to 2TCI as summarized and presented more fully in the report on sustainability of catches that SC created in 2023. It was agreed the SC should include recent cumulative catch levels and a scoping of expected cumulative catch levels as well, with associated information about the assumptions made during the calculations (e.g., assumed TAC and catch levels).

The working group also noted that it would be extremely valuable to have SSSs for all NAFO stocks. It was noted that the development of these sheets would be a lower priority item and that the Scientific Council could develop the SSSs in accordance with the schedule for full assessments. The working group recommended that the Commission request the Scientific Council to develop stock summary sheets for all NAFO managed stocks, with a priority for those that are evaluated using Harvest Control Rules (HCR) or Management Strategy Evaluation (MSE) processes, as practicable and taking into account any capacity constraints of the Scientific Council.

b. Discussion of Ecosystem summary sheets for subareas 3M and 3LNO (COM Request #5.c)

Mariano Koen-Alonso presented a summary of the Scientific Council response to Commission request #5.c, available in COM-SC EAFFM-WP 23-08 (Revised) with the final advice being outlined in the Scientific Council report (SCS Doc. 23/18). Mariano presented the Ecosystem Summary Sheets (ESSs) for the Grand Bank (3LNO) and Flemish Cap (3M) Ecosystem Production Units (EPUs). The Scientific Council will update all ESSs every five years, or more frequently if important ecosystem changes are detected. It was also noted that, in completing the ESSs, NAFO does not have a list of species of conservation concern (e.g. protected, endangered or threatened species) that can be used to focus monitoring of incidental mortality and/or other types of operational interactions. Developing such a list would be a necessary step to improve tracking, reporting, and assessment of this type of impact of fisheries operations. The working group thanked Mariano and the Scientific Council for the update and work that has gone into the development of the ESSs.

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7. Outcomes of the NAFO Informal group of WG-EAFFM on “Other Effective Area-based Conservation Measures (OECMs)”

Andrew Kenny presented the outcomes of the informal working group on “Other Effective Area-based Conservation Measures (OECMs) as outlined in COM-SC WP 23-02 and reflected on the possibility of NAFO management measures being submitted as OECMs to the Convention on Biological Diversity (CBD). The working group reflected on the work completed by ICES / IUCN-CEM FEG Workshop on Testing OECM Practices and Strategies (WKTOPS), noting that WKTOPS determined that the Corner Rise seamounts closure area and the VME sponge closures (VME closed areas 1 to 6) met the criteria for OECMs. The working group underscored that there are no management implications associated with nominating management measures as OECMs. Moreover, the CBD – or any other international governance body- will not be evaluating proposed measures; rather it is NAFO’s unilateral decision whether a management measure qualifies as OECM and if it should be submitted to the CBD’s OECM repository. The working group underscored that in submitting NAFO management measures as OECMs, it would raise awareness of the work that NAFO is doing to protect VMEs and seamounts. Moreover, it will improve awareness of protected areas in the North Atlantic, thereby informing progress towards Target 3 of the United Nations Biodiversity COP-15 to protect 30% of lands, oceans, coastal areas, inland waters by 2030.

It was noted that the informal working group focused on a subset of potential NAFO management measures that could potentially meet the OECM criteria. The working group discussed the possibility of considering other management measures in the future. The working group specifically discussed VME closure area 10, and how to take into account other human activities taking place in the area (i.e., oil and gas exploration). The working group also reflected on the other VME closed areas, as well as areas within the NRA that could qualify (e.g., areas deeper than 2000 m).

The working group agreed that, in general, the Commission should support the concept of NAFO management measures being catalogued as OECMs, and at this time, the working group recommends that the Commission request the Secretariat to submit VME sponge closures 1 to 6 and the seamount closures as OECMs to CBD in accordance with its procedures, and to the United Nations Environment Programme World Conservation Monitoring Centre (UNEP WCMC) for inclusion in the World Database on OECMs. The working group reflected that NAFO would need to update the CBD and the UNEP WCMC if the management measures are amended in the future. Finally, the working group recommended that the Commission support further consideration of additional management measures to be submitted as OECMs.

8. SC advice on potential impact of activities other than fishing in the Convention Area (COM Request #12).

The WG-EAFFM co-Chair, Mar Sacau Cuadrado and Pablo Durán Muñoz (European Union) presented the Scientific Council advice relevant to the impact of human activities other than fishing in the Convention Area in COM-SC EAFFM-WP 23-12 with the final advice being outlined in the Scientific Council report (SCS Doc. 23/18). Scientific Council again underscored a lack of expertise and capacity to fully address these issues. The working group thanked Scientific Council for their work on this issue, noting their constraints.

In relation to the oil and gas activities, Canada noted that these activities remain under the sovereign jurisdiction of Canada and that the activities are reviewed and approved through a transparent, multi-agency review process. The European Union noted their appreciation to Canada for the transparent operations and regular bilateral meetings, but stressed the importance of continuing the discussions in NAFO, noting the ongoing work of the NEREIDA project that will contribute to these discussions. The European Union stressed that NAFO should continue to consider and monitor the impacts of oil and gas activities as there is overlap with some of the VME closed areas.

The working group discussed the Commission’s request to the SC to provide advice on the impact of non-fishery related activities. The Scientific Council Chair, Karen Dwyer, reiterated that the Scientific Council continues to lack the expertise, data, and capacity to provide advice on the impacts of activities other than fishing and that

the workload of this request on SC is not commensurate with NAFO's decision making. The working group also discussed the scope of NAFO's mandate, noting that NAFO does not have the authority to regulate other activities in the NAFO Convention Area, while also reflecting the commitment to take an ecosystem approach to fisheries management. One Contracting Party suggested that, going forward, the working group not recommend that the Commission request the SC to conduct work on this issue this year, noting the capacity limitations and the need to prioritize core NAFO work. Another Contracting Party strongly supported its inclusion, noting NAFO's commitment to implementing the ecosystem roadmap. The working group also noted that this request is not only related to oil and gas activities, but also to marine litter, maritime traffic and any activities other than fishing occurring in the Convention Area. That said, it was noted that SC work in response to this request has focused primarily on oil and gas activities and marine litter in recent years.

The working group did not reach consensus on whether or not to make the recommendation to continue to request the SC to provide advice on the potential impact of activities other than fishing in the Convention Area, noting the Scientific Council's constraints in terms of data, capacity, and expertise. The working group agreed to continue to discuss the potential impacts of activities other than fishing in the Convention Area, as a regular part of its agenda. The European Union noted their preference to continue to include this item in the Commission requests to the Scientific Council, and the working group reflected that Contracting Parties may table a proposal for the Commission, at the Annual Meeting.

9. SC advice on scientific trawl surveys on VME in closed areas (COM Request #3)

The WG-EAFFM co-Chair, Mar Sacau Cuadrado, presented the Scientific Council advice relevant to the impacts of scientific trawl surveys on VME closed areas, as summarized in COM-SC EAFFM-WP 23-05 with the final advice being outlined in the Scientific Council report (SCS Doc. 23/18). The Scientific Council, following their review and analysis, recommended that the surveys can operate inside the closed areas in the NRA, but that Contracting Parties must make every effort to minimize impacts of the sampling and maximize the data collection in the hauls within those vulnerable areas.

The Scientific Council advised on potential mitigation measures to minimize harm while maintaining the integrity of the survey design. Some of these measures include: moving sets outside the VME closed areas if possible, avoiding areas of particularly high density of VMEs within the closed areas, shortening the survey time within the closed areas and/or reducing the number of sets in the strata within the closed areas.

The working group thanked Scientific Council for their efforts in providing advice on this issue, noting that it had been a long-standing discussion within NAFO. The working group agreed to recommend that the Commission request Contracting Parties to make every effort to minimize impacts of the sampling and maximize the collection of data in the survey hauls made within VME closed areas.

10. Response from STACTIC on Recommendation 4 of COM-SC Doc. 20-03

The Secretariat noted that in 2020, WG-EAFFM requested STACTIC, through the Commission, to insert a footnote into Annex II.N of the NAFO CEM to clarify the definitions of start and end times for fishing activity (see Annex 4 of COM-SC Doc. 20-03). STACTIC reviewed the request in 2021 and 2022, noting that Contracting Parties have different definitions of start and end times and agreed to forward STACTIC WP 22-46 (Rev. 5) to WG-EAFFM for information as they continue to review this request.

11. Review of the Terms of Reference for WG-EAFFM

The working groups reviewed the draft updates to the WG-EAFFM Terms of Reference put forward by the co-Chairs in COM-SC EAFFM-WP 23-14. The working group reviewed and made additional edits to the Terms of Reference, with the final version being outlined in COM-SC EAFFM-WP 23-14 (Rev. 3) (Annex 4). The co-Chairs agreed to work with the co-Chairs of the WG-RBMS intersessionally to ensure consistency of the Terms of Reference between the two working groups. The Terms of Reference will be re-circulated to working group participants for approval in advance of the NAFO Annual Meeting.

12. Implementation of the 2018 Performance Review Panel Recommendations

The NAFO Secretariat highlighted COM-SC EAFFM-WP 23-13 outlining the recommendations from the 2018 performance review panel relevant to WG-EAFFM. The working group noted the following updates in relation to the recommendations to be updated by the NAFO Secretariat following the closure of the meeting.

- **Recommendation 1:** WG-EAFFM noted that during the discussions under agenda item 5.d the working group made additional progress toward setting objectives and determining acceptable risks as outlined in the EAF Roadmap to ensure its implementation and noted that the status of this recommendation is still ongoing.
- **Recommendation 14:** WG-EAFFM noted that the status of this recommendation can be considered closed following the discussions that took place under agenda item 9.
- **Recommendation 37:** WG-EAFFM noted the discussions that took place under agenda item 8 and reflected that the status of this recommendation is still ongoing.

13. Other Business

a. Updates from the Executive Secretary

The NAFO Executive Secretary, Brynhildur Benediktsson, provided an update on the status of the BBNJ (Biodiversity Beyond National Jurisdiction), the ABNJ (Areas Beyond National Jurisdiction) Deep Seas Project, and the ICES (International Council for the Exploration of the Sea) MOU (Memorandum of Understanding) as they relate to NAFO.

b. Scientific Council Workload

The chair of the Scientific Council, Karen Dwyer, provided an update from the meeting of the NAFO Informal Group to Reflect on the Workload of the Scientific Council (COM-SC WP 23-01). The Scientific Council Chair highlighted that the number and complexity of requests to the Scientific Council from the Commission have increased, and there are positions within the Scientific Council that are currently vacant. The Scientific Council Chair also highlighted some of the options for addressing this issue that were discussed during the meeting and are outlined in COM-SC WP 23-01. The Acting Chair of the Commission, Deirdre Warner-Kramer (United States of America), highlighted that there should be better collaboration when requests are submitted to the Scientific Council, and resources should be identified at the time of the request, and that Contracting Parties need to find ways to ensure that the Scientific Council has the resources and capacity available to complete the requests. The working group thanked the Scientific Council and Commission Chairs for the update, discussed possible ways forward, and noted that discussions on this issue will continue at the Annual Meeting.

14. Recommendations

The WG-EAFFM agreed to the following recommendations to the Commission.

1. **In relation to VME areas 7a, 11a, 14a, and 14b (Agenda items 5.a and 5.b), maintain the VME closures until 31 December 2026 and adopt the proposed changes to the NAFO CEM outlined in COM-SC EAFFM-WP 23-15 (Annex 3).**
2. **In relation to the Ecosystem Roadmap (Agenda item 6):**
 - a. **requests the Scientific Council to annually provide information on ecosystem overfishing in relation to 2TCI, including recent cumulative catch levels and a scoping of expected cumulative catch levels.**
 - b. **requests the Scientific Council to develop stock summary sheets for all NAFO managed stocks, with a priority for those that are evaluated using HCR or MSE**

processes, as practicable and taking into account any capacity constraints of the Scientific Council.

- 3. In relation to Other Effective Area-based Conservation Measures (agenda item 7):**
 - a. requests the Secretariat, in consultation with the Scientific Council as required, to submit the seamount closure areas and the sponge VME fishery closures 1 to 6 to the CBD Secretariat and to the UN Environment Programme World Conservation Monitoring Centre (UNEP WCMC) for inclusion in the World Database on OECMs.**
 - b. WG-EAFFM continues to review the other NAFO area-based management measures in relation to the CBD OECM criteria.**
- 4. In relation to conducting scientific trawl surveys in areas closed to bottom fishing activities (agenda item 9), requests Contracting Parties to make every effort to minimize impacts of the sampling and maximize the collection of data in the hauls made in those areas.**

15. Adoption of the Report

The report was adopted via correspondence following the end of the meeting.

16. Adjournment

The meeting was adjourned at 12:33 hours (UTC/GMT +1 hours in Edinburgh, United Kingdom) on Saturday, 22 July 2023.

The co-Chairs thanked meeting participants for their cooperation and input. The participants likewise expressed their thanks and appreciation to the co-Chairs for their leadership. The working group also expressed their gratitude to the United Kingdom for hosting the meeting, and the NAFO Secretariat for their support.

Annex 1. List of Participants

CO-CHAIRS	In-person Sacau Cuadrado, Mar (European Union) Mencher, Elizabethann (United States of America)
SC CHAIR	Virtual Dwyer, Karen
CANADA	In-person Chapman, Bruce Johnson, Kate Koen Alonso, Mariano Simpson, Mark Virtual Dennis, Olivia Diamond, Julie Fagan, Robert Fuller, Susanna Her, Natalie Kenchington, Ellen Krohn, Martha Lee, Robyn Schleit, Katie
EUROPEAN UNION	In-person Alpoim, Ricardo Belmonte Gonzalez, Luis González-Troncoso, Diana Teixeira, Isabel Virtual Blazkiewicz, Bernard Caetano, Miguel Durán Muñoz, Pablo Garrido, Irene Gonçalves, Patrícia Granell, Ignacio Jansone, Santa Lopes, Luis Mancebo, C. Margarita Merino Buisac, Adolfo Tuvi, Aare Ziegler, Iris
ICELAND	In-person Bragason, Agnar Bragi
JAPAN	In-person Taki, Kenji
NORWAY	Virtual Bakke, Gunnstein Hvingel, Carsten
RUSSIAN FEDERATION	Virtual Fomin, Konstantin Tairov, Temur
UKRAINE	Virtual Honcharuk, Ihor Paramonov, Valerii

UNITED KINGDOM	In-person Gibbins, Imogen Hutchinson, Nikki Kenny, Andrew
UNITED STATES OF AMERICA	In-person Kelly, Moira Warner-Kramer, Deirdre Yanoff, Callan Virtual Jaburek, Shannah Sosebee, Kathy
OBSERVERS	In-person Diz, Daniela (Deep Sea Conservation Coalition)
NAFO SECRETARIAT	In-person Benediktsdóttir, Brynhildur Aker, Jana Blasdale, Tom LeFort, Lisa

Annex 2. Agenda

1. Opening by the co-Chairs, Mar Sacau Cuadrado (European Union) and Elizabethann Mencher (United States of America)
2. Appointment of Rapporteur
3. Adoption of Agenda
4. Presentation of Scientific Council responses to Commission requests for advice (COM Doc. 22-20) relevant to WG-EAFFM
5. VME Assessments
 - a. Review of VME areas 7a, 11a, 14a, and 14b (COM Request #6.a)
 - b. Review of Article 17.3bis of the NAFO CEM
 - c. Data for VME and SAI assessments (COM Request #6.b)
 - d. Work towards developing operational objectives for the protection of VMEs and biodiversity in the NRA (COM Request #6.c)
6. Ecosystem Roadmap
 - a. Management considerations for occasions in which the 2TCI ecosystem reference point were to be exceeded and effective methods to communicate TCI-related information (COM Request #5a and #5b)
 - b. Discussion of Ecosystem summary sheets for subareas 3M and 3LNO (COM Request #5.c)
7. Outcomes of the NAFO Informal group of WG-EAFFM on “Other Effective Area-based Conservation Measures (OECMs)”
8. SC advice on potential impact of activities other than fishing in the Convention Area (COM Request #12).
9. SC advice on scientific trawl surveys on VME in closed areas (COM Request #3)
10. Response from STACTIC on Recommendation 4 of COM-SC Doc. 20-03
11. Review of the Terms of Reference for WG-EAFFM
12. Implementation of the 2018 Performance Review Panel Recommendations
13. Other Business
 - a. Updates from the Executive Secretary
 - b. Scientific Council Workload
14. Recommendations
15. Adoption of the Report
16. Adjournment

Annex 3. Proposed changes to Article 17.3 of the NAFO CEM
(COM-SC EAFFM-WP 23-15)

The objective of the following edits to the NAFO CEM is to maintain VME closures 7a, 11a, 14a, and 14b to 31 December 2026 and incorporate these closures with the other VME Area closures outlined in article 17.3. and Table 7 of the NAFO CEM.

Article 17 – Area Restrictions for Bottom Fishing Activities

Vulnerable Marine Ecosystem Area Closures

3. Until 31 December 2026, no vessel shall engage in bottom fishing activities in areas 1-14b3 illustrated in Figure 5 and defined by connecting the coordinates specified in Table 7a in numerical order and back to coordinate 1.

Table 7a. Boundary Points Delineating the Vulnerable Marine Ecosystem Area Closures in the NAFO Regulatory Area Referenced in Article 17.3.

	Description	Coordinate No.	Latitude	Longitude
1	Tail of the Bank	1.1	44° 02' 53.88" N	48° 49' 09.48" W
		1.2	44° 21' 31.32" N	48° 46' 48.00" W
		1.3	44° 21' 34.56" N	48° 50' 32.64" W
		1.4	44° 11' 48.12" N	48° 50' 32.64" W
		1.5	44° 02' 54.60" N	48° 52' 52.32" W
		1.6	44° 00' 01.12" N	48° 53' 28.75" W
		1.7	43° 59' 57.52" N	48° 49' 26.47" W
2	Flemish Pass/ Eastern Canyon	2.1	44° 50' 56.40" N	48° 43' 45.48" W
		2.2	46° 18' 54.72" N	46° 47' 51.72" W
		2.3	46° 25' 28.56" N	46° 47' 51.72" W
		2.4	46° 46' 32.16" N	46° 55' 14.52" W
		2.5	47° 03' 29.16" N	46° 40' 04.44" W
		2.6	47° 11' 47.04" N	46° 57' 38.16" W
		2.7	46° 40' 40.80" N	47° 03' 04.68" W
		2.8	46° 30' 22.20" N	47° 11' 02.93" W
		2.9	46° 17' 13.30" N	47° 15' 46.64" W
		2.10	46° 07' 01.56" N	47° 30' 36.36" W
		2.11	45° 49' 06.24" N	47° 41' 17.88" W
		2.12	45° 19' 43.32" N	48° 29' 14.28" W
		2.13	44° 53' 47.40" N	48° 49' 32.52" W
3	Beothuk Knoll	3.1	45° 49' 10.20" N	46° 06' 02.52" W
		3.2	45° 59' 47.40" N	46° 06' 02.52" W
		3.3	45° 59' 47.40" N	46° 18' 08.28" W
		3.4	45° 49' 10.20" N	46° 18' 08.28" W
4	Eastern Flemish Cap	4.1	46° 44' 34.80" N	44° 03' 14.40" W
		4.2	46° 58' 19.20" N	43° 34' 16.32" W
		4.3	47° 10' 30.00" N	43° 34' 16.32" W
		4.4	47° 10' 30.00" N	43° 20' 51.72" W
		4.5	46° 48' 35.28" N	43° 20' 51.72" W
		4.6	46° 39' 36.00" N	43° 58' 08.40" W
5	Northeast Flemish Cap	5.1	47° 47' 46.00" N	43° 29' 07.00" W
		5.2	47° 40' 54.47" N	43° 27' 06.71" W
		5.3	47° 35' 57.48" N	43° 43' 09.12" W

	Description	Coordinate No.	Latitude	Longitude
		5.4	47° 51' 14.40" N	43° 48' 35.64" W
		5.5	48° 27' 19.44" N	44° 21' 07.92" W
		5.6	48° 41' 37.32" N	43° 45' 08.08" W
		5.7	48° 37' 13.00" N	43° 41' 24.00" W
		5.8	48° 30' 15.00" N	43° 41' 32.00" W
		5.9	48° 25' 08.00" N	43° 45' 20.00" W
		5.10	48° 24' 29.00" N	43° 50' 50.00" W
		5.11	48° 14' 20.00" N	43° 48' 19.00" W
		5.12	48° 09' 53.00" N	43° 49' 24.00" W
6	Sackville Spur	6.1	48° 18' 51.12" N	46° 37' 13.44" W
		6.2	48° 28' 51.24" N	46° 08' 33.72" W
		6.3	48° 49' 37.20" N	45° 27' 20.52" W
		6.4	48° 56' 30.12" N	45° 08' 59.99" W
		6.5	49° 00' 09.72" N	45° 12' 44.64" W
		6.6	48° 21' 12.24" N	46° 39' 11.16" W
7	Northern Flemish Cap	7.1	48° 25' 02.28" N	45° 17' 16.44" W
		7.2	48° 25' 02.28" N	44° 54' 38.16" W
		7.3	48° 19' 08.76" N	44° 54' 38.16" W
		7.4	48° 19' 08.76" N	45° 01' 58.56" W
		7.5	48° 20' 29.76" N	45° 01' 58.56" W
		7.6	48° 20' 29.76" N	45° 17' 16.44" W
7a	Northern Flemish Cap	7a.1	48° 25' 02.28" N	45° 17' 16.44" W
		7a.2	48° 25' 02.28" N	44° 54' 38.16" W
		7a.3	48° 19' 08.76" N	44° 54' 38.16" W
		7a.4	48° 18' 06.84" N	44° 44' 22.81" W
		7a.5	48° 08' 18.42" N	44° 23' 10.57" W
		7a.6	48° 10' 08.98" N	44° 15' 54.97" W
		7a.7	48° 19' 30.47" N	44° 26' 38.40" W
		7a.8	48° 24' 57.13" N	44° 37' 58.40" W
		7a.9	48° 26' 21.37" N	44° 54' 34.60" W
		7a.10	48° 27' 52.20" N	45° 17' 19.25" W
8	Northern Flemish Cap	8.1	48° 38' 07.95" N	45° 19' 31.92" W
		8.2	48° 38' 07.95" N	45° 11' 44.36" W
		8.3	48° 40' 09.84" N	45° 11' 44.88" W
		8.4	48° 40' 09.84" N	45° 05' 35.52" W
		8.5	48° 35' 56.40" N	45° 05' 35.52" W
		8.6	48° 35' 56.40" N	45° 19' 31.92" W
		8.7	48° 34' 23.52" N	45° 26' 18.96" W
		8.8	48° 36' 55.08" N	45° 31' 15.96" W
9	Northern Flemish Cap	9.1	48° 34' 23.52" N	45° 26' 18.96" W
		9.2	48° 36' 55.08" N	45° 31' 15.96" W
		9.3	48° 30' 18.36" N	45° 39' 42.48" W
		9.4	48° 12' 06.60" N	45° 54' 12.94" W
		9.5	48° 17' 11.82" N	45° 47' 25.36" W
		9.6	48° 16' 07.06" N	45° 45' 48.19" W
		9.7	48° 27' 30.60" N	45° 34' 40.44" W
10	Northwest Flemish Cap	10.1	47° 49' 41.51" N	46° 22' 48.18" W
		10.2	47° 47' 17.14" N	46° 17' 27.91" W
		10.3	47° 58' 42.28" N	46° 06' 43.74" W
		10.4	47° 59' 15.77" N	46° 07' 57.76" W

	Description	Coordinate No.	Latitude	Longitude
		10.5	48° 07' 48.97" N	45° 59' 58.46" W
		10.6	48° 09' 34.66" N	46° 04' 08.54" W
		10.7	48° 07' 59.70" N	46° 05' 38.22" W
		10.8	48° 09' 13.46" N	46° 09' 31.03" W
		10.9	47° 51' 30.13" N	46° 26' 15.61" W
11	Northwest Flemish Cap	11.1	47° 25' 48.00" N	46° 21' 23.76" W
		11.2	47° 30' 01.44" N	46° 21' 23.76" W
		11.3	47° 30' 01.44" N	46° 27' 33.12" W
		11.4	47° 25' 48.00" N	46° 27' 33.12" W
<u>11a</u>	<u>Northwest Flemish Cap</u>	<u>11a.1</u>	<u>47° 27' 36.29" N</u>	<u>46° 21' 23.69" W</u>
		<u>11a.2</u>	<u>47° 30' 01.44" N</u>	<u>46° 21' 23.76" W</u>
		<u>11a.3</u>	<u>47° 30' 01.44" N</u>	<u>46° 27' 33.12" W</u>
		<u>11a.4</u>	<u>47° 37' 38.86" N</u>	<u>46° 16' 31.12" W</u>
		<u>11a.5</u>	<u>47° 34' 39.61" N</u>	<u>46° 12' 03.92" W</u>
		<u>11a.6</u>	<u>47° 32' 28.90" N</u>	<u>46° 16' 26.58" W</u>
		<u>11a.7</u>	<u>47° 32' 10.00" N</u>	<u>46° 14' 29.87" W</u>
		<u>11a.8</u>	<u>47° 28' 27.80" N</u>	<u>46° 16' 05.74" W</u>
12	Northwest Flemish Cap	12.1	48° 12' 06.60" N	45° 54' 12.94" W
		12.2	48° 17' 11.82" N	45° 47' 25.36" W
		12.3	48° 16' 07.06" N	45° 45' 48.19" W
		12.4	48° 11' 03.32" N	45° 52' 40.63" W
13	Beothuk Knoll	13.1	46° 13' 58.80" N	45° 41' 13.20" W
		13.2	46° 13' 58.80" N	46° 02' 24.00" W
		13.3	46° 21' 50.40" N	46° 02' 24.00" W
		13.4	46° 21' 50.40" N	45° 56' 48.12" W
		13.5	46° 20' 14.32" N	45° 55' 43.93" W
		13.6	46° 20' 14.32" N	45° 41' 13.20" W
<u>14a</u>	<u>Eastern Flemish Cap</u>	<u>14a.1</u>	<u>47° 45' 24.44" N</u>	<u>44° 03' 06.44" W</u>
		<u>14a.2</u>	<u>47° 47' 54.35" N</u>	<u>44° 03' 06.44" W</u>
		<u>14a.3</u>	<u>47° 50' 11.33" N</u>	<u>44° 03' 34.49" W</u>
		<u>14a.4</u>	<u>47° 50' 10.86" N</u>	<u>43° 58' 28.99" W</u>
		<u>14a.5</u>	<u>47° 47' 54.35" N</u>	<u>43° 59' 23.39" W</u>
		<u>14a.6</u>	<u>47° 45' 55.19" N</u>	<u>43° 58' 08.94" W</u>
		<u>14a.7</u>	<u>47° 44' 44.59" N</u>	<u>44° 02' 41.50" W</u>
<u>14b</u>	<u>Eastern Flemish Cap</u>	<u>14b.1</u>	<u>47° 35' 21.77" N</u>	<u>43° 56' 50.10" W</u>
		<u>14b.2</u>	<u>47° 37' 33.53" N</u>	<u>43° 52' 56.50" W</u>
		<u>14b.3</u>	<u>47° 30' 04.79" N</u>	<u>43° 48' 18.54" W</u>
		<u>14b.4</u>	<u>47° 27' 34.88" N</u>	<u>43° 48' 18.54" W</u>
		<u>14b.5</u>	<u>47° 27' 34.88" N</u>	<u>43° 52' 00.34" W</u>

3 bis. Until 31 December 2023, no vessel shall engage in bottom fishing activities in the areas illustrated in Figure 5 and defined by connecting the coordinates specified in Table 7b in numerical order and back to coordinate 1.

Table 7b. Boundary Points Delineating the Vulnerable Marine Ecosystem Area Closures in the NAFO Regulatory Area Referenced in Article in Article 17.3 bis.

	Description	Coordinate No.	Latitude	Longitude
7a	Northern Flemish Cap	7a.1	48° 25' 02.28" N	45° 17' 16.44" W
		7a.2	48° 25' 02.28" N	44° 54' 38.16" W
		7a.3	48° 19' 08.76" N	44° 54' 38.16" W
		7a.4	48° 18' 06.84" N	44° 44' 22.81" W
		7a.5	48° 08' 18.42" N	44° 23' 10.57" W
		7a.6	48° 10' 08.98" N	44° 15' 54.97" W
		7a.7	48° 19' 30.47" N	44° 26' 38.40" W
		7a.8	48° 24' 57.13" N	44° 37' 58.40" W
		7a.9	48° 26' 21.37" N	44° 54' 34.60" W
		7a.10	48° 27' 52.20" N	45° 17' 19.25" W
11a	Northwest Flemish Cap	11a.1	47° 27' 36.29" N	46° 21' 23.69" W
		11a.2	47° 30' 01.44" N	46° 21' 23.76" W
		11a.3	47° 30' 01.44" N	46° 27' 33.12" W
		11a.4	47° 37' 38.86" N	46° 16' 31.12" W
		11a.5	47° 34' 39.61" N	46° 12' 03.92" W
		11a.6	47° 32' 28.90" N	46° 16' 26.58" W
		11a.7	47° 32' 10.00" N	46° 14' 29.87" W
		11a.8	47° 28' 27.80" N	46° 16' 05.74" W
14a	Eastern Flemish Cap	14a.1	47° 45' 24.44" N	44° 03' 06.44" W
		14a.2	47° 47' 54.35" N	44° 03' 06.44" W
		14a.3	47° 50' 11.33" N	44° 03' 34.49" W
		14a.4	47° 50' 10.86" N	43° 58' 28.99" W
		14a.5	47° 47' 54.35" N	43° 59' 23.39" W
		14a.6	47° 45' 55.19" N	43° 58' 08.94" W
		14a.7	47° 44' 44.59" N	44° 02' 41.50" W
14b	Eastern Flemish Cap	14b.1	47° 35' 21.77" N	43° 56' 50.10" W
		14b.2	47° 37' 33.53" N	43° 52' 56.50" W
		14b.3	47° 30' 04.79" N	43° 48' 18.54" W
		14b.4	47° 27' 34.88" N	43° 48' 18.54" W
		14b.5	47° 27' 34.88" N	43° 52' 00.34" W

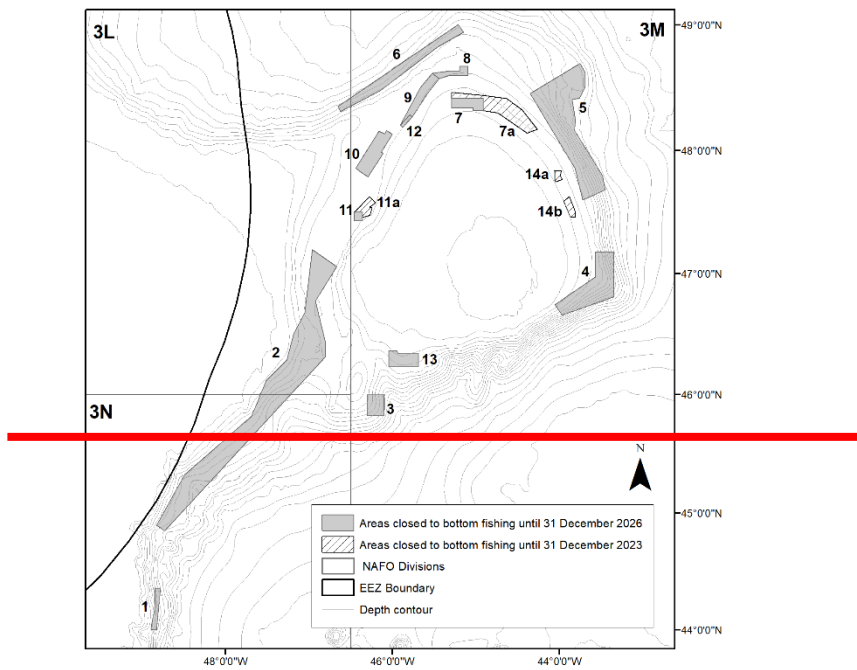
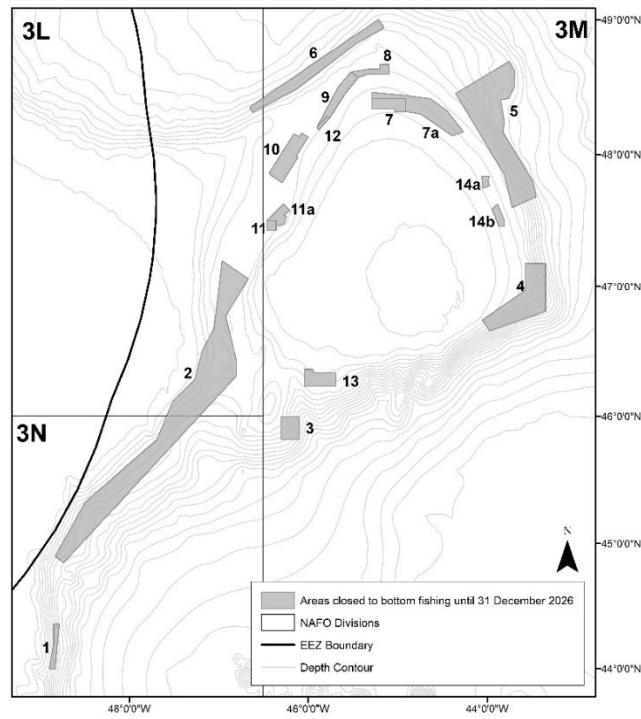


Figure 5. Polygons Delineating Vulnerable Marine Ecosystem Area Closures Referenced in Article 17.3 and Article 17.3 bis.

Report of WG-EAFFM,
20–22 July 2023

**Annex 4. REVISED Terms of Reference – Joint Commission-Scientific Council Working Group on
Ecosystem Approach Framework to Fisheries Management**
(COM-SC EAFFM-WP 23-14 (Rev. 3))

Structure:

The Working Group on Ecosystem Approach Framework to Fisheries Management reports to both the Commission (COM) and Scientific Council (SC); considers the advice of Scientific Council; and provides recommendations to the Commission.

The Working Group shall be comprised of fishery managers, scientists, and advisors from Contracting Parties, supported by observers and invited experts. The Co-chairs will consist of a fishery manager and a scientist.

Plenary discussions will be conducted in an informal, open manner, unless the Contracting Parties, decide to conduct sessions in a delegation format. Recommendations to the Commission will be developed and agreed upon through formal sessions of official delegations. When the Working Group breaks from plenary session and reverts to participation by delegation, individual scientists remain as part of their delegations and Scientific Council as a whole would be represented by the Scientific Council Chair or a designated alternate.

Accredited observers may attend meetings of the Working Group. Participation will be subject to the *NAFO Rules of Procedure*.

If a Contracting Party so requests, particular agenda items of the meeting, or parts thereof, shall be restricted to delegates representing Contracting Parties and Scientific Council.

Objective:

The main objective of the Working Group is to make recommendations to the Commission and provide feedback to Scientific Council on the development and effective implementation of ecosystems approaches to fisheries management.

Specific Duties:

In responding to requests for advice and recommendations from the Commission, considering the associated advice of Scientific Council, the Working Group shall:

- Further develop and provide recommendations on the application of the Ecosystem Approach to Fisheries (EAF) Roadmap.
- Consider ecosystem status, functioning and dynamics of NAFO marine ecosystems, including species interactions, and their productivity,
- Consider impacts of non-fisheries activities.
- Consider the impacts of climate change as an element of work on the EAF roadmap.
- Make recommendations on mitigation strategies and measures to avoid significant adverse impacts of fishing activities on vulnerable marine ecosystems, including the evaluation of associated risks.
- Review area closures periodically and other measures as outlined in the NAFO Conservation and Enforcement Measures (CEMs).
- Provide recommendations in relation to requests to conduct exploratory bottom fishing and evaluate authorized exploratory fishing activities.
- Provide recommendations for updating the CEMs in relation to EAF including the text in Chapter II (Bottom Fisheries in the NAFO Regulatory Area) and any associated Annexes (e.g, the Exploratory Protocol for New Fishing Areas - Annex I.E), as necessary.

- Provide recommendations and information, and support the Secretariat, on coordination with other regional or global organizations on activities related to the implementation of the ecosystem approach to fisheries management.

Meetings:

Meetings will be held annually, and additional meetings may be held as agreed by the Commission and the Scientific Council.

Whenever possible, the regular meeting of the Working Group should occur after the June Scientific Council meeting and prior to the NAFO annual meeting.

Reporting out

The Working Group will issue a written report to the Commission and the Scientific Council, prior to the NAFO annual meeting.